STAR WARS MILLENNIUM FALCON

BUILD THE MODEL – EXPLORE THE GALAXY



F219FS0001



THE FASTEST HUNK OF JUNK IN THE GALAXY



THE *FALCON'S* QUAD LASER CANNONS

FANHOME

DeAgostini COLLECTIBLES

Disney · LUCASFILM

© & ™ 2023 LUCASFILM LTD.

STAR WARS MILLENNIUM FALCON

USA Published by De Agostini
Publishing USA, Inc.
299 Park Avenue, New York,
New York 10171

UK Published by De Agostini UK Ltd
c/o Royds Withy King, 69 Carter Lane,
London EC4V 5EQ

DE, AT, NL, PL, CZ, SK, LT, SE
Published by De Agostini
Publishing, S.p.A, Via G. da Verrazano 15,
28100 Novara,
Italy

All Rights Reserved.

Printed in Italy

ISSN: 2976-6990 (Print)
ISBN (EE Countries): 979-12-209-0809-2

Pictures and © & TM 2023 LUCASFILM LTD.

© & ™ 2023 LUCASFILM LTD.

The price of this issue includes the magazine and the attached assembly parts.

TO OUR READERS
The publisher reserves the right to modify any components as required during the course of the collection. Not suitable for children under the age of 14 (12 for USA). This product is not a toy and is not designed or intended for use in play. The model is complete in 100 issues.

CUSTOMER SERVICES

USA
email: support@usa.fanhome.com

UNITED KINGDOM
email: support@uk.fanhome.com

DEUTSCHLAND
email: support@de.fanhome.com

AUSTRIA
email: support@at.fanhome.com

NETHERLANDS
email: support@nl.fanhome.com

POLAND
Kontakt z biurem obsługi klienta:
tel: 22 307 64 59
e-mail: bok@deagostini.pl

CZECH REPUBLIC
Kontakt na zákaznické centrum ČR:
tel: 246 017 120
e-mail: zakaznicke.centrum@deagostini.cz

SLOVAKIA
Kontakt na zákaznické centrum SR:
tel: 0220 839 090
e-mail: zakaznicke.centrum@deagostini.sk

WARNING
Any reproduction, even partial, of the contents of the magazine is prohibited without permission from the Publisher. The assembly parts and the magazine that accompanies it are strictly for private use, and within the family, in accordance with Article L122–5 10 of the Code of Intellectual Property. Any reproduction other than that provided for in Article L122–5 20 of the Intellectual Property Code is prohibited. The magazine and/or elements of the collection may not be distributed, loaned, resold, rented or exploited for commercial purposes.

FANHOME

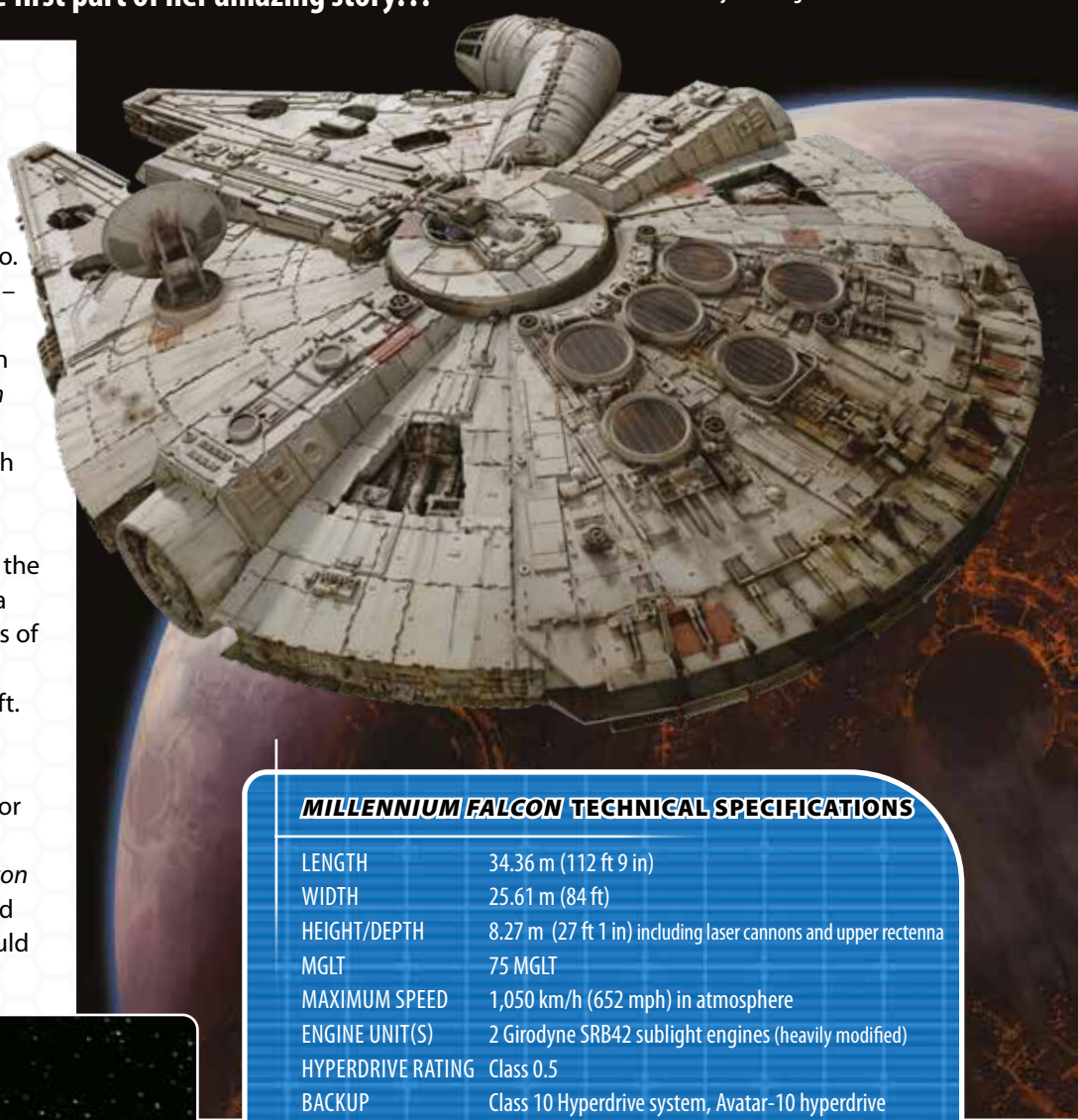
DeAgostini COLLECTIBLES

More information at
fanhome.com
deagostini.com

THE LEGENDARY *MILLENNIUM FALCON*

THE FASTEST HUNK OF JUNK IN THE GALAXY

Of all the amazing ships that have appeared in *Star Wars*, none has captured the imagination quite so much as the iconic *Millennium Falcon*. This is the first part of her amazing story…



Under her battered, battle-scarred and rusting armor plates, the *Falcon* boasted a host of upgrades to her engines, her weaponry and her defensive systems. As her proud and prickly owner boasted, the 'piece of junk' had got it where it counted.

Never underestimate the *Millennium Falcon*. Lurking beneath all that rust is a souped-up fighting machine, ready to run smuggled goods across the galaxy for its fearless pilot, Han Solo. Of course, this isn't all about crime – the *Falcon* also fought in two momentous *Star Wars* battles, Yavin and Endor. At Yavin, the *Millennium Falcon*'s involvement was brief, although Han Solo's attack on Darth Vader's wingman played a decisive role in the outcome of the battle. However, four years later, at Endor, the battered YT-1300 freighter played a central role, leading the starfighters of the Rebel Alliance against vast numbers of Imperial TIE fighter craft.

GOT IT WHERE IT COUNTS

As news of the death of the Emperor spread across the galaxy, many wondered what had made the *Falcon* so special that the very experienced Rebel Alliance High Command would place such trust in the ship and its



After the *Falcon* covered Luke Skywalker's shot at the Death Star's exhaust port, Han Solo's super-fast pirate ship led the surviving Rebel fighters in a race towards the distant planet Yavin before the battle station exploded.

MILLENNIUM FALCON TECHNICAL SPECIFICATIONS

LENGTH	34.36 m (112 ft 9 in)
WIDTH	25.61 m (84 ft)
HEIGHT/DEPTH	8.27 m (27 ft 1 in) including laser cannons and upper rectenna
MGLT	75 MGLT
MAXIMUM SPEED	1,050 km/h (652 mph) in atmosphere
ENGINE UNIT(S)	2 Girodyne SRB42 sublight engines (heavily modified)
HYPERDRIVE RATING	Class 0.5
BACKUP	Class 10 Hyperdrive system, Avatar-10 hyperdrive (original), Isu-Sim SSP05 hyperdrive generator (heavily modified), later upgraded to a Series 401 hyperdrive motivator
POWER PLANT	Quadex power core Incom N2I-4 power converter Koensayr TLB power converter CEC emergency power generator Cryogenic reserve power cells



THE YT-1300 LIGHT FREIGHTER

The YT-series ships developed by the Corellian Engineering Corporation (CEC) were the most popular space transports of their era. The YT-1300 built on the success of the YT-1000, YT-1200 and YT-1210, with a circular main corridor around the central core of its saucer-shaped hull. Modular compartments could be mounted round the rim, radiating outwards to make a ship that was convenient and economic to build and operate. However, the real appeal of the YT-1300 was how easily it could be adapted to any purpose. It soon gained a reputation for being tough, reliable, and simple to modify.

pilots. After all, there was no less than the freedom of the galaxy at stake. Even before the Galactic Civil War, the *Millennium Falcon* was already infamous in many circles – envied by smugglers and both despised and feared by the authorities. There was little to explain why this particular ship would prove to be so special. After all, the *Falcon* had begun life as a YT-1300 light freighter – among the most common workhorses of the galaxy – and 492727ZED was one of many thousands of similar vessels built that standard year by the famous Corellian Engineering Corporation (CEC).

To understand why this particular YT-1300 became such an iconic and historically significant starship, it is important to recognise that there is no such thing as a stock light freighter in the entire galaxy. By the time the *Falcon* passed to Han Solo, the venerable freighter had already passed through the hands of numerous owners, all of whom refitted her in various ways. As her owners included all kinds of shady characters and outright criminals who needed to be able to outshoot or outrun the opposition, the *Falcon* was already very special, even before Han and his Wookiee co-pilot Chewbacca began modifications of their own.

SMUGGLING SHIP

The most famous owner of the *Falcon*, Han Solo won his ship from Lando Calrissian during a game of sabacc in Numidian Prime – much to Calrissian's annoyance. Lando didn't miss the irony, as he himself had won the ship



HAN SOLO

This Corellian adventurer once lived on his wits as a mercenary and smuggler, but is also a fine pilot and engineer. When he was lucky enough to beat gambler Lando Calrissian and won the choice of any ship from Lando's used starship lot, Han recognized the *Falcon* was something special. Though she has her issues, Han wouldn't trade the *Falcon* for any other ship.



Before falling in with the Rebel Alliance, Han Solo was one of the best smugglers in the business, and he expertly converted the *Millennium Falcon* to suit the needs of his freebooting lifestyle.

THE BATTLE OF ENDOR

'GOLD LEADER'

During the Rebel Alliance's desperate struggle to destroy the second Death Star at the Battle of Endor, the *Millennium Falcon* led and coordinated the fighter assault on the Imperial battle station. The Rebel commanders appreciated that the *Falcon* was the one vessel in their fleet which was fast and agile enough to keep up with the nimble starfighters, while also packing the necessary punch to destroy the Death Star's main reactor. Her former owner Lando Calrissian, now a rebel general, volunteered to lead the fighter attack. Designated 'Gold Leader', Lando had the assistance of Sullustan co-pilot Nien Nunb, while every vital system in the ship was assigned a rebel crewman to help the *Falcon* to operate at full efficiency.



After firing her missiles at the Death Star's main reactor, Lando raced out of the rapidly collapsing battle station.

in a game on Bespin a few short years before. It was Solo who had then taught Calrissian how best to fly the *Falcon*, which is one reason why the wily smuggler knew the scruffy-looking vessel's true worth.

In the shadier parts of the galaxy, many beings soon knew (sometimes from painful experience) that wherever Han and the *Falcon* were, the mighty Chewbacca was unlikely to be far behind. And as everyone knows, it's not wise to upset a Wookiee… Solo's tall and powerful co-pilot had sworn a life-debt to the Corellian ever since he was rescued by Han on Mimban. Fiercely protective of his friend, if occasionally frustrated by his more mercenary tendencies, Chewbacca is one of the very few beings who Han has ever entirely trusted with his pride and joy.

HEROES OF THE REBELLION

Chewbacca is almost as good at flying the ship as Solo, and is at least as good an engineer as his human companion. Together, they upgraded the ship more than its builders could ever have imagined. By the time Han had his first fateful meeting with Luke Skywalker, he was fully justified in boasting that "She may not look like much, but she's got it where it counts." Under the battered armour plating – a useful enhancement in itself – the ship carried upgraded weapons, engines, sensors, and sensor jammers.

Since the ship and her owner fell in with the Rebel Alliance, the *Millennium Falcon* has been flown by some of the best pilots and carried some of the most important people in the galaxy.



Chartered by an old Jedi and a young farm boy, the *Millennium Falcon* was on her way to becoming a legend of the Galactic Civil War.

BEHIND THE SCENES

SIZE MATTERS NOT

On *Star Wars* film sets, *Millennium Falcon* models came in many different sizes. The largest model built for *Star Wars: A New Hope* was 173 cm (29 in) long by 122 cm (48 in) wide. For Star Wars: *The Empire Strikes Back*, the largest model was 76 cm (30 in) long by 61 cm (24 in) wide, while a tiny version was made for the shot where the *Falcon* attaches to the side of a Star Destroyer command tower to escape detection. At other times, a glass painting of the ship was composited over the live action shots to make it appear as though the whole ship was there. For the *A New Hope*, only half a set had been created, but for *Empire*, a near full-size replica of the exterior of the ship was built, measuring over 18 m (59 ft) long. No new models or sets were made for *Return of the Jedi*, although matte paintings were used in some scenes. When the Special Editions were made, digital images replaced some of the older effects.



The smallest filming model of the *Millennium Falcon* (which was used for sequences that were shot together with the 2.4m (7ft 8 in) long Star Destroyer), compared to the large original.

THE *FALCON'S* QUAD LASER CANNONS



When the *Falcon* fled the first Death Star, she was attacked by the Imperial sentry ships. Han Solo immediately charged up the main laser cannons and headed for the ship's dorsal turret, sending Luke Skywalker down to the matching battery of guns on the lower side of the ship.



The *Millennium Falcon*'s upgraded quad laser cannons and the skill of her gunners were often essential to survival, especially when her crew attempted to escape the Death Star.

During Lando Calrissian's and Han Solo's ownership of the *Millennium Falcon*, they often had to shoot their way out of tight spots or "Imperial entanglements When a stock YT-1300 freighter left the shipyard, its only armament was a twin-gun laser cannon in the dorsal turret, fitted mainly as a defense against hazards such as asteroids – although it was also a useful deterrent against pirates. Lando soon found it necessary to upgrade the *Falcon*'s defensive capability. When he acquired the ship, he replaced the standard weapon with a more powerful AG-2G quad laser, also made by CEC.

MANUAL GUN CONTROLS

The AG-2G quad laser is a powerful weapon, with a tight beam giving long-range accuracy. Its four barrels fire one at a time, at intervals of 1.32 seconds, but the gunner can choose their order of rotation. The turret mounting is renowned for its rapid traversing on a ball swivel, which is controlled by horizontal pedals to rotate left or right, while a pair of control sticks are used to angle the gun barrels up or down.

Calrissian's co-pilot, the droid Vuffi Raa, was a pacifist, which meant that Lando had to do all the fighting. For times when he could not leave the cockpit to operate the main quad lasers, he installed a pair of smaller laser cannons on the upper hull, linked to two pedals under the control console. In case he had to leave the ship, Lando fitted a remote control that allowed him to operate all the weapons remotely. He also took the precaution of carrying a transponder that prevented the *Falcon* from shooting anywhere near the person wearing the device.

COMPUTER-AIDED TARGETING

The main turret rotation is also controlled by the tactical targeting computer. The purpose of this is to compensate for the slight delay between a skilled gunner centering a target in the sights and the laser actually firing – a combination of reaction time and the brief moment it takes for the barrel to energize. The targeting computer compensates for any delay by assessing the speed and direction of the target. It then rapidly calculates the offset needed to fire slightly ahead of where the gunner has aimed.



The *Falcon*'s lasers fired in turn, pulsing each barrel at intervals of 1.32 seconds.

GUN CONTROLS (DORSAL)

The access tube leading to the dorsal cannon is located in the *Falcon*'s main corridor, near Han Solo's secret smuggling compartments. From there a ladder leads up to the gunner's seat. The laser cannon's main controls are in the twin firing grips in front of the gunner, but the turret also moves with the seat, which is mounted on a rotating platform, operated by directional control pedals on the floor. Ahead of the gunner is a large transparisteel viewport, which gives a clear line of sight along the cannon's four laser barrels. These are carried on a horizontal support arm, with a swivel mount near the base of the weapon. The top of the turret is fitted with tracking servos connected to the tactical targeting computer, which is mounted slightly beyond the main controls, with its systems status indicators to the gunner's left.

The advanced targeting computer fitted to the *Falcon* is accurate up to the maximum range of its weapons, and will lock onto any target over 4m (13 ft) in length. Unfortunately, it can only do this if the target vessel stays within scanner range for 1.5 seconds (a so-called "one-point-five-lock"), and the fastest ships – including Imperial TIE fighters – are fast enough to avoid this. In such circumstances, the AG-2G gunner has to override the computer and rely on his or her hand-eye coordination to judge the correct offset.

After Han Solo won the *Falcon* from Lando, he installed a matching AG-2G turret on the underside of the hull. To prevent the lasers from destroying the ship's landing gear or boarding ramp if they had to be fired while the ship was grounded, Solo fitted interrupter gear that stopped the guns firing at the critical angles. The upper lasers are

FIELD OF FIRE

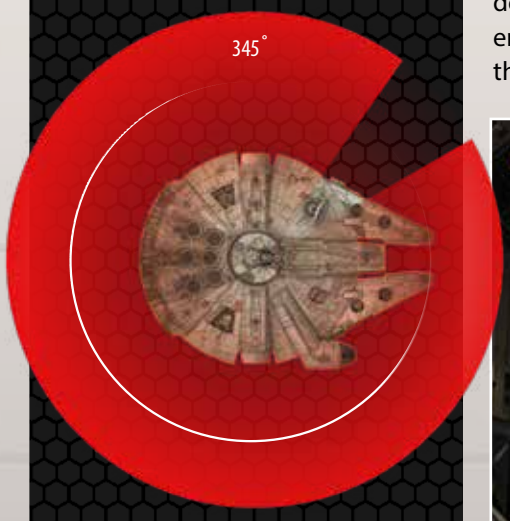
The *Millennium Falcon*'s turrets offer a gunner an excellent field of view through the transparisteel windows. However, in some areas where the curve of the hull slopes away from the turret, it is possible for a skilled gunner to cover a field of fire extending to around 200°. The most extreme "over the shoulder" shots are very tricky to achieve, as there is no direct line of sight, but Han Solo and Chewbacca pride themselves on their ability to target an enemy approaching in line with the mid-section. As there is a wedge-shaped area extending around the ship that is in range of both quad laser cannons, the pair call this the "Money Lane" because it allows them to take bets on whose shot will strike home first.





SHADOW AREAS

As some hull-mounted equipment is in the direct line of fire from the quad laser cannons, the *Falcon*'s turrets have interrupter templates to prevent them from firing when pointing at the rectenna or the lowered landing gear. This creates small gaps in the field of fire, but experienced gunners soon learn to anticipate and compensate.



similarly rigged to avoid the rectenna, but apart from these essential gaps, both turrets command a field of fire all around the ship, forming a half-sphere extending above them.

PICKING A TARGET

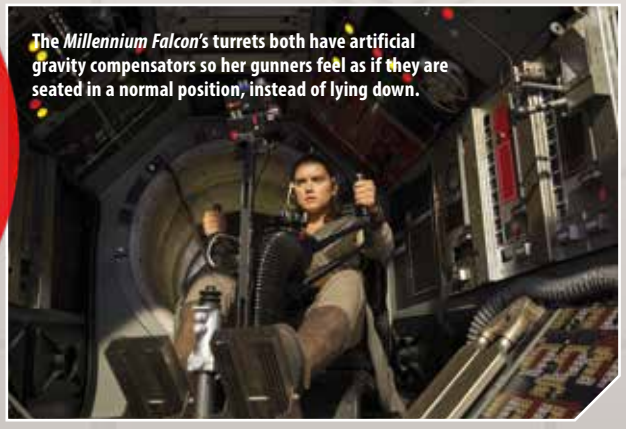
With one gunner lying on his back relative to the ship, and the other lying on his front, the *Falcon* has two artificial gravity compensators to help the crew to orient themselves. Inexperienced gunners may take some time to adjust to these, suffering dizziness and a condition known as Ferresha's Syndrome.

The guns' positions at the highest and lowest extremities of the curved hull mean that they can even be depressed far enough to target an enemy ship approaching from below the waist of the *Falcon*. An enemy in line with the mid-section of the ship can thus be targeted by either quad laser cannon when it comes within an overlapping area stretching far out beyond the *Falcon* (see *Field of Fire*, above left).

The lasers' energy beam is slightly dispersed by the unusual splitter coupling. This forces the target's shields to deflect the energy of two simultaneous hits, which increases the likelihood of causing the shields to overload and inflicting greater damage. Power for the cannons comes directly from the *Falcon*'s Quadex power core, and Solo fitted enhanced cooling packs and compressors to permit prolonged use without overheating. He upgraded the already powerful cannons by adding custom-modified laser actuators with larger energization crystals, high-volume gas feeds, and enhanced power cyclers. These highly illegal modifications transformed the weapons into military-grade blasters, increasing the beam intensity enough to destroy a smaller opposing ship (such as a TIE fighter) with a single shot.

REMOTE CONTROL

Han removed the auxiliary pedals that Lando had fitted. He was never comfortable with using them to operate the cannons, and Chewbacca needed the extra legroom. But as Solo still wanted to be able to fire the quad lasers from the cockpit, he installed two trackball controllers on the left of the central display console, with matching setups at the engineering stations. While any of these could be used to operate the cannons remotely in an emergency, this came at the cost of decreased accuracy. However, the *Falcon*'s awesome firepower was usually enough of a deterrent to buy her crew time to evade any enemy.



The *Millennium Falcon*'s turrets both have artificial gravity compensators so her gunners feel as if they are seated in a normal position, instead of lying down.

YOUR FIRST PARTS

Your *Millennium Falcon* is easy to put together (even if you have no previous modelling experience), following the simple step-by-step instructions.

The pieces include metal castings, ABS plastic moldings, self-adhesive panels, and electronic components – so this issue's parts give you a great idea of the variety of assemblies you will be working on. The pieces provided include the upper quad laser cannon (cast in solid metal), parts of the cockpit and its instrument panels, and the first pieces of the hull frame and armor plating. This issue, you can get the build under way by assembling the cockpit bulkhead and taking a look at the assembly of the *Falcon*'s quad laser cannon. We'll be giving you more instructions on using your first parts very soon, so be sure to keep all the components you don't use at once safely until they are needed.

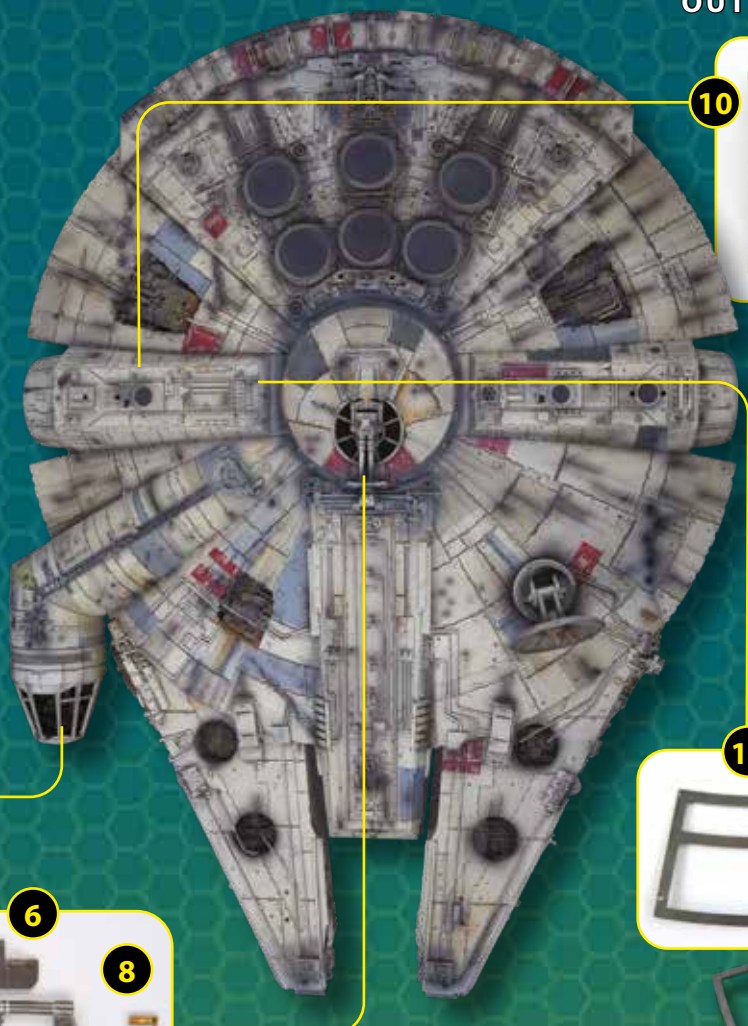
COMPONENTS CHECKLIST

1 Rear cockpit instrument panel
2 Cockpit bulkhead
3 Cockpit base
4 Laser cannon barrels (upper pair)
5 Laser cannon barrels (lower pair)
6 Left mounting plate
7 Right mounting plate
8 Mounting yoke
9 Fixing screws (x 3, plus 1 spare)
10 Hull plating TP-1
11 Hull frame TF-1
12 Hull frame TF-2

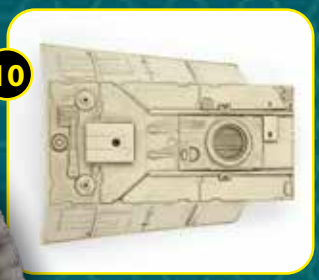
WHERE THE PARTS FIT

INTERIOR ELEMENTS





OUTER HULL PLATING



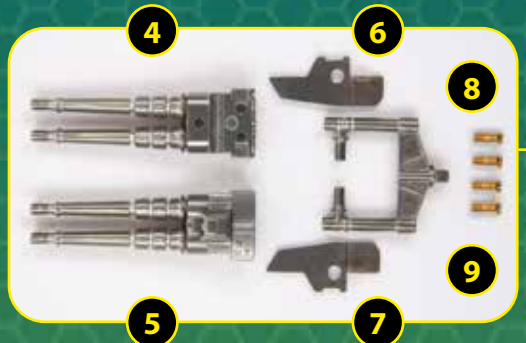
All the hull plating (such as Part 10) is screwed to the *Falcon*'s internal metal framework, which is made from sections like Parts 11/12. The code numbers (e.g. TP-1) in the Components Checklist identify exactly where each part fits.

INTERNAL FRAMEWORK





This shows a small area of the hull structure, which you start to build in Issue 2.



METAL DETAILING

Cast in metal for durability, the quad laser cannon parts fit together as shown overleaf. Their turret mounting is provided with Issue 2.

ASSEMBLING THE COCKPIT BULKHEAD

If you wish, you can fit the instrument panel to the bulkhead, but you may prefer to wait until Issue 3, when you receive the communicating door that fits in the center.



Part 1, the rear cockpit instrument panel, has a self-adhesive backing. It has translucent areas matching the holes in the bulkhead (Part 2). In your finished model, this part will have an LED backlight to create the instruments' glow.

01



The cockpit instrumentation is printed on a translucent, self-adhesive sheet. Carefully peel off the backing paper.

02



Line up the instrument panel with the side of the cockpit bulkhead which has a smooth, flat surface.

03



Make sure that the doorway and two small slots match up exactly, and then smooth the sticker into place.

04



You can test-fit the tabs on the cockpit base into the two slots at the bottom, but do not be tempted to glue them.

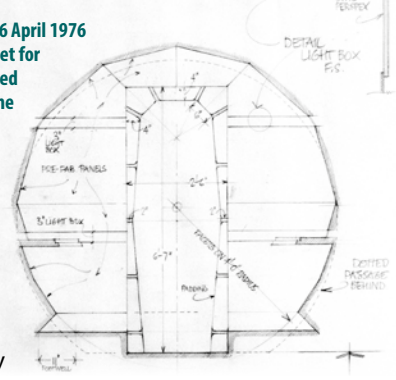
BEHIND THE SCENES

INSTRUMENT "GREEBLIES"

Movie special-effects departments commonly use the term "greeblies" for all the details added to a model or prop to make it appear more complicated and visually interesting. The word is believed to have been dreamed up by the team working on *Star Wars*, and when *A New Hope* was being filmed in Tunisia, customs officials found that parts of C-3PO's costume were described as "assorted greebles." When the officials asked what this meant, Lucasfilm's explanation was reported to have been "something that looks cool but doesn't actually do anything."



The interior of the *Falcon*'s cockpit is packed with instrumentation, switches and glowing lights, which are reproduced in miniature in your model.



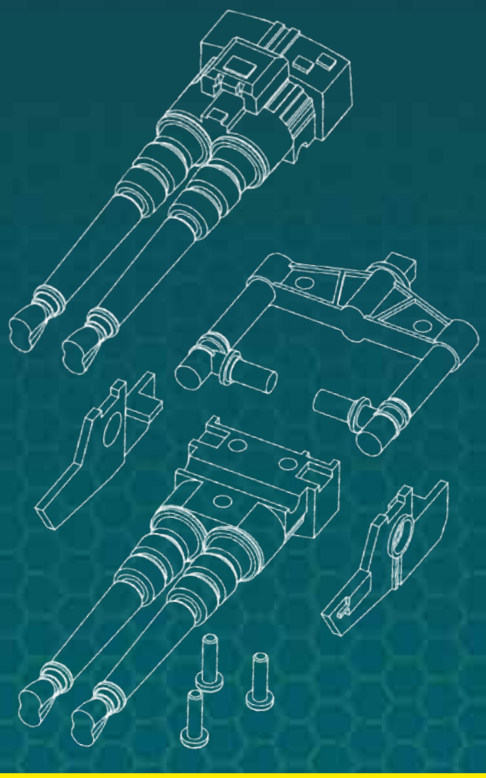
This drawing from 6 April 1976 shows part of the set for what was then called the "pirate ship". The structure is wood with built-in lightboxes, and details were added by sticking on greeblies.

MODEL AND SET-BUILDING

Greeblies appeared all over the models and sets built for the *Star Wars* trilogy. To give a sense of scale, the modelers who were making the filming miniatures used very detailed pieces from plastic models (a technique they dubbed "kit-bashing"). Meanwhile, the team building the full-size *Falcon* cockpit sourced real switches and instrument panels from component suppliers and scrapyards to give a convincing impression of working systems – although this was often far from the case. On the 30th anniversary of *The Empire Strikes Back*, Harrison Ford gave an interview in which he revealed how he had to fake some of Han Solo's interaction with the machinery: "They purchased all of these toggle switches. Because we made the film on a budget, they hadn't bought the ones with springs. So if in a scene you would flip up some switches, if you didn't get out of the frame quickly enough they would go back down…"

QUAD LASER CANNON ASSEMBLY DETAILS

The upper and lower halves of the quad laser cannon fit together over the mounting plates and mounting yokes as shown, held together by three screws inserted from the underside. A screwdriver is provided free with Issue 2, but if you already have a suitable one, you may want to test-fit the parts together now. We will be showing you how to finish off the cannon later.



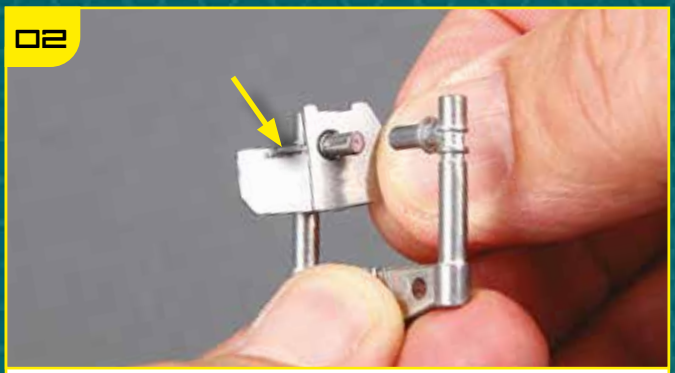
The cannons are delivered in several pieces, as you can see. To assemble them for now, just press the parts together. If one comes loose or loosens, push it back into place. You will assemble them permanently later on.

01



Following the checklist on page 7, take the two halves of the metal laser cannon and the three parts of its mount (Parts 4, 5, 6 , 7 and 8), plus the screws provided.

02



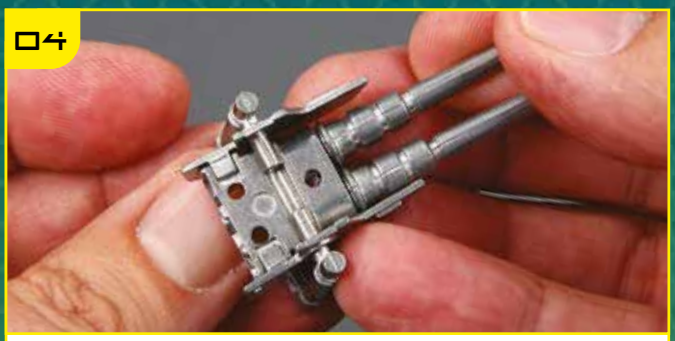
Holding the mounting yoke as shown, carefully fit the left mounting plate over the gun pivot. Note the locating tab (arrowed), which needs to be uppermost on the inside.

03



Fit the right mounting plate over the other pivot. It is a mirror image of the first, and once again the locating tab needs to be uppermost on the inside.

04



Carefully holding the parts together, take the lower laser cannon barrels and fit the mounting yoke over it, with the pivots in the groove between the screw holes and the two locating tabs in the recesses beside the two rearmost holes.

05



Take the upper laser cannon barrels and fit it over the mounting yoke, lining up the pivots in the mounting yoke with the groove under the barrel assembly.

06



Make sure the upper cannon barrels line up with the lower ones and that the mounting fits snugly together.

07



Carefully turn the assembly over to expose the single screw hole just behind the barrels.

08



Insert one of the fixing screws into the hole. Use a screwdriver to tighten it enough to keep the parts together, but do not tighten it fully yet.

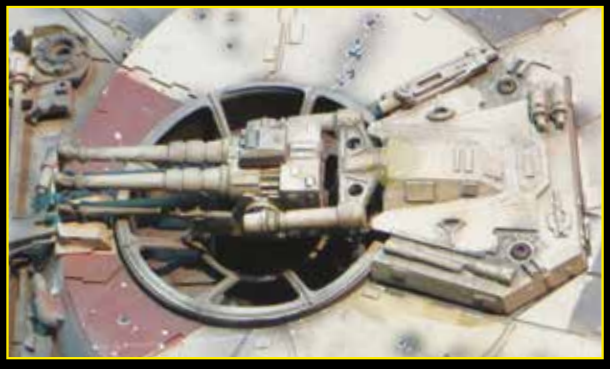
09



Repeat the process with two more fixing screws. Leave a little slack in all three so that the mounting yoke is free to pivot. You will tighten this up later.

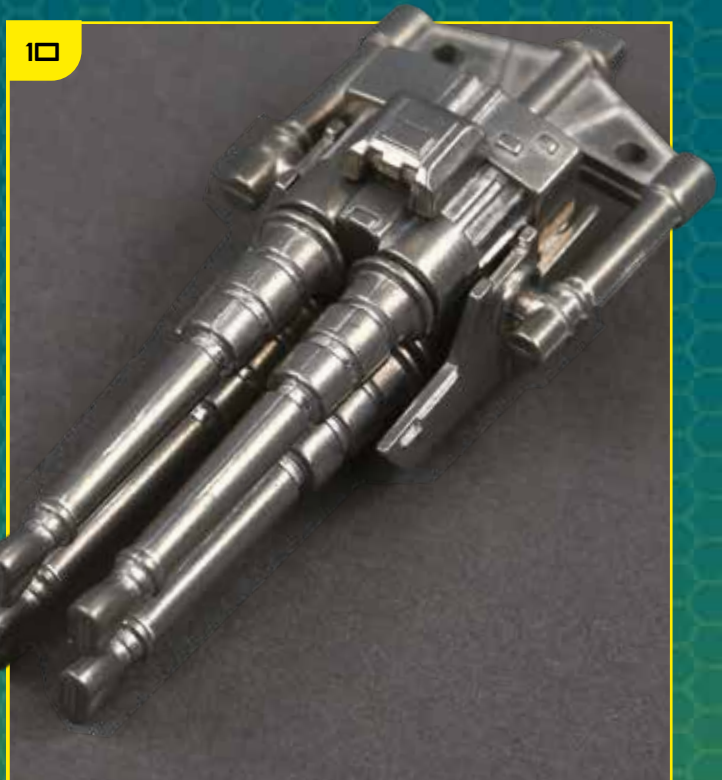
AUTHENTIC DETAILS

Central to George Lucas's vision of *Star Wars* was what he called a "used universe". In place of the sleek look seen in most previous sci-fi movies, he wanted his ships to appear dirty, rusty, and worn, like machinery does in the real world. The parts of the model have been molded and finished so that you can assemble an authentic replica *Falcon* with the minimum of previous modeling expertise. However, you may wish to add your own extra scorch marks, oil smears, battle damage, and wear and tear to personalize the *Falcon* and bring it to life. As your model progresses, we will provide hints and tips on how to achieve the "used universe" look.



A detail of the cannon on the original filming miniature in the Lucasfilm archive. Like the other props, the model was painted and then distressed to match George Lucas's vision of a world in which the equipment looked used.

10



That completes the assembly of the quad laser cannon for the present. The end result should look like this. Store the assembly carefully until you are ready to fit it.

STAR WARS MILLENNIUM FALCON

FANHOME

Disney · LUCASFILM
© & ™ 2023 LUCASFILM LTD.