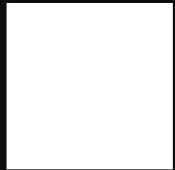




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Livret disponible en français sur  
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## A SPACEFLIGHT ICON

● Five Space Shuttle Orbiters made up NASA's Space Transportation System (STS) fleet – *Columbia*, *Challenger*, *Discovery*, *Atlantis* and *Endeavour*. Combined, they flew 135 missions carrying 355 people into space. Discovery flew the most missions, carrying the highest number of passengers, while traveling further and higher than the other orbiters. It also was Discovery's assignment to launch and deploy the Hubble Space Telescope in April 1990 as part of the STS-31 mission. In 2021, the 40<sup>th</sup> Anniversary of the Space Shuttle Program, we take the opportunity to revisit this famous mission.

## UN EMBLÈME DU VOL SPATIAL

● La flotte du système de transport spatial (STS) de la NASA a compté cinq orbiteurs de navette spatiale : *Columbia*, *Challenger*, *Discovery*, *Atlantis* et *Endeavour*. En tout, ces orbiteurs ont effectué 135 missions et transporté 355 personnes dans l'espace. Discovery a effectué le plus grand nombre de missions, transporté le plus grand nombre de passagers et voyagé plus loin et plus haut que les autres orbiteurs. L'équipage de Discovery a également été chargé de lancer et de déployer le télescope spatial Hubble en avril 1990 dans le cadre de la mission STS-31. Puisque 2021 marque le 40<sup>e</sup> anniversaire du programme de la navette spatiale, nous profitons de l'occasion pour revisiter cette célèbre mission.

## UN ÍCONO DE LOS VUELOS ESPACIALES

● Columbia, Challenger, Discovery, Atlantis y Endeavour. Así se llamaban los cinco orbitadores de los transbordadores espaciales que formaban la flota creada por la NASA en su programa Sistema de Transporte Espacial (STS, por sus siglas en inglés). En conjunto, realizaron 135 misiones y transportaron al espacio a 355 personas. El Discovery tiene el récord de misiones y pasajeros, y ha viajado más lejos y más alto que los demás orbitadores. También le correspondió al Discovery lanzar y desplegar el telescopio espacial Hubble en abril de 1990, encargo que recibió en la misión STS-31. En 2021, año en el que se conmemora el 40 aniversario del Programa de Transbordadores Espaciales, aprovechamos la oportunidad para reencontrarnos con esta famosa misión.

## THE MISSION

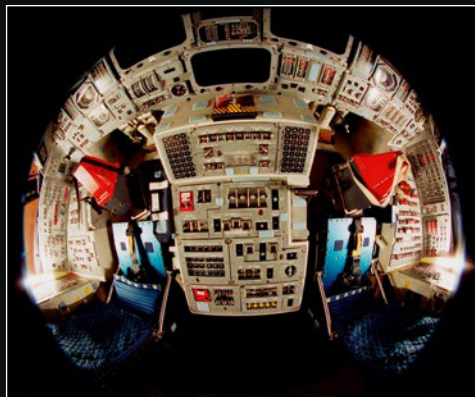
● The launch and deployment of the Hubble Space Telescope in April 1990 marked the most significant advancement in astronomy since Galileo's telescope. It was the first major optical telescope to be placed in space, the ultimate mountaintop. Above Earth's atmospheric distortion, rain clouds and light pollution, Hubble had an unobstructed view of the universe. Scientists have used Hubble to observe the most distant stars and galaxies, as well as the planets in our solar system.

## LA MISIÓN

● Le lancement et le déploiement du télescope spatial Hubble en avril 1990 ont marqué l'avancée en astronomie la plus significative depuis le télescope de Galilée. C'était le premier grand télescope optique à être placé dans l'espace, le sommet ultime. Au-delà de la distorsion atmosphérique de la Terre, des nuages de pluie et de la pollution lumineuse, Hubble profitait d'une vue imprenable sur l'univers. Les scientifiques ont utilisé Hubble pour observer les étoiles et les galaxies les plus lointaines, ainsi que les planètes de notre système solaire.

## LA MISIÓN

● El lanzamiento y despliegue del telescopio espacial Hubble en abril de 1990 representó el avance más significativo en el campo de la astronomía desde el telescopio de Galileo. Fue el primer gran telescopio óptico puesto en órbita en el espacio, la *cumbre* por excelencia. Por encima y más allá de la distorsión atmosférica, las nubes de lluvia y la contaminación lumínica de la Tierra, el Hubble tenía una vista panorámica del universo completamente despejada. Los científicos han usado el Hubble para observar las estrellas y las galaxias más distantes, así como los planetas de nuestro sistema solar.



## FROM THE DESIGN TEAM

● *The Space Shuttle is one of the most complex vehicles ever made, so translating this into a LEGO® set was a little daunting. We needed to create a smooth exterior and an interior capable of holding the payload, but the biggest challenge was adding functional landing gear. Trying to couple the front and main landing gear without removing any space from the payload bay and without compromising the structure of the model was a real puzzle! It's easy to be blown away by the complex engineering and sheer power of these vehicles, but for me the most fascinating thing about space flight is the human element. That's why my favorite part of this model are the tiny blue seats that carried 5 human beings on this special mission. I spent hours as a kid building my own versions of the Lunar Lander and Discovery Orbiter in LEGO bricks, so to be asked to work on this project was so exciting and such a privilege.*

LEGO® Designer, Milan Madge

## UN MOT DE L'ÉQUIPE DE CONCEPTION

● *La navette spatiale est l'un des véhicules les plus complexes jamais fabriqués, donc traduire un tel engin en un ensemble LEGO® était un peu intimidant. Nous devons créer un extérieur lisse et un intérieur capable de contenir la charge utile, mais le plus grand défi a été d'ajouter un train d'atterrissage fonctionnel. Essayer de coupler les trains d'atterrissage avant et principal sans pour autant diminuer l'espace de la soute et compromettre la structure du modèle a été un vrai casse-tête ! L'ingénierie complexe et la puissance de ces véhicules sont époustouflantes, mais selon moi, la chose la plus fascinante du vol spatial est l'élément humain. C'est pourquoi les sièges bleus minuscules qui ont transporté 5 êtres humains vers cette mission spéciale sont ma partie préférée de ce modèle. Enfant, j'ai passé des heures à construire mes propres versions de l'atterrisseur lunaire et de l'orbiteur Discovery en briques LEGO, alors d'être invité à travailler sur ce projet est à la fois excitant et un grand privilège.*

Concepteur LEGO®, Milan Madge



## IMPRESIONES DEL EQUIPO DE DISEÑO

● *El transbordador espacial es uno de los vehículos más complejos que se hayan construido; por ese motivo, convertirlo en un set LEGO® fue una tarea abrumadora. Teníamos que crear un exterior liso y un interior con capacidad para contener la carga útil, pero el principal desafío fue equiparlo con un tren de aterrizaje funcional. ¡Intentar conectar el tren de aterrizaje principal y el frontal sin sacrificar espacio en la bodega de carga ni comprometer la estructura del modelo fue un verdadero rompecabezas! Es fácil dejarse impresionar por la compleja ingeniería y la potencia pura de estos vehículos, pero, para mí, si hay algo fascinante en los vuelos espaciales es el componente humano. Por eso mi parte favorita de este modelo son los minúsculos asientos azules que ocuparon 5 seres humanos en esta misión especial. De pequeño, pasé horas construyendo mis propias versiones del módulo lunar y del orbitador Discovery con bricks LEGO. Imagina qué emocionante y qué privilegio fue que me pidieran participar en este proyecto.*

Milan Madge, diseñador de LEGO®



## FUTURE ENDEAVOURS

● Since retiring the space shuttle in 2011, NASA has created public-private partnerships with the companies Boeing and SpaceX to develop and operate a new generation of spacecraft and launch systems, capable of carrying crews to low-Earth orbit and the International Space Station. Encouraging industry to provide human transportation services to and from low-Earth orbit allows NASA to expand its focus on building spacecraft and rockets for the next giant leap, with space missions to the Moon and Mars.

## LA SUCCESSION D'ENDEAVOUR

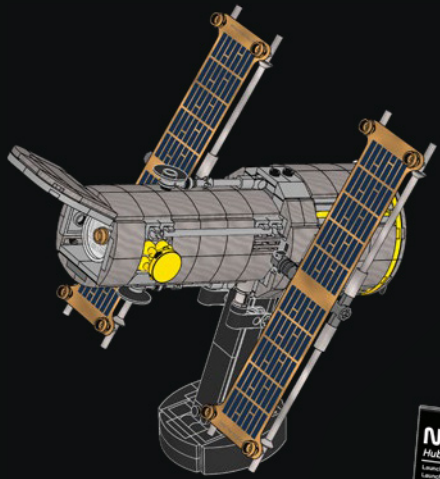
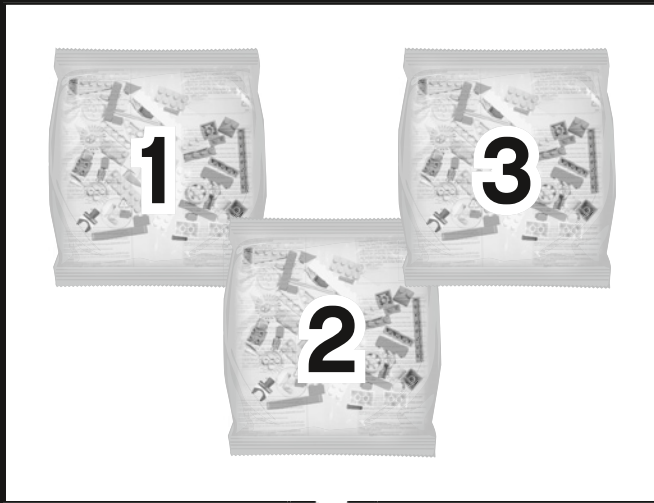
● Depuis qu'elle a retiré la navette spatiale en 2011, la NASA a établi des partenariats public-privé avec les sociétés Boeing et SpaceX pour développer et exploiter une nouvelle génération de vaisseaux spatiaux et de systèmes de lancement, capables de transporter des équipages vers l'orbite terrestre basse et vers la Station spatiale internationale. Encourager l'industrie à fournir des services de transport humain à destination et en provenance de l'orbite terrestre basse permet à la NASA de se préparer à faire passer la construction d'engins spatiaux et de fusées au niveau supérieur, avec des missions spatiales orientées vers la Lune et Mars.

## FUTURAS INICIATIVAS

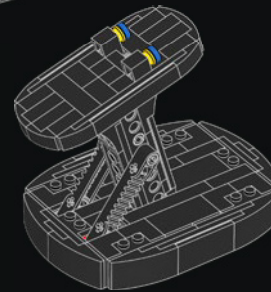
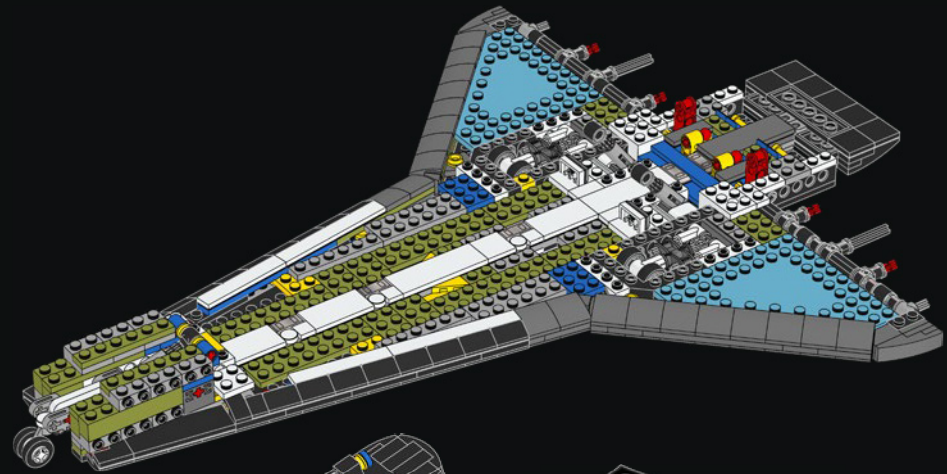
● Desde la retirada del transbordador espacial en 2011, la NASA ha establecido alianzas público-privadas con las empresas Boeing y SpaceX para desarrollar y operar una nueva generación de naves espaciales y sistemas de lanzamiento capaces de transportar a tripulaciones a la órbita terrestre baja y a la Estación Espacial Internacional. Al alentar a las empresas comerciales a proporcionar servicios de transporte de personas hacia y desde la órbita terrestre baja, la NASA puede enfocarse en ampliar sus operaciones a la construcción de naves espaciales y cohetes para misiones a la Luna y Marte, el siguiente *gran paso*.



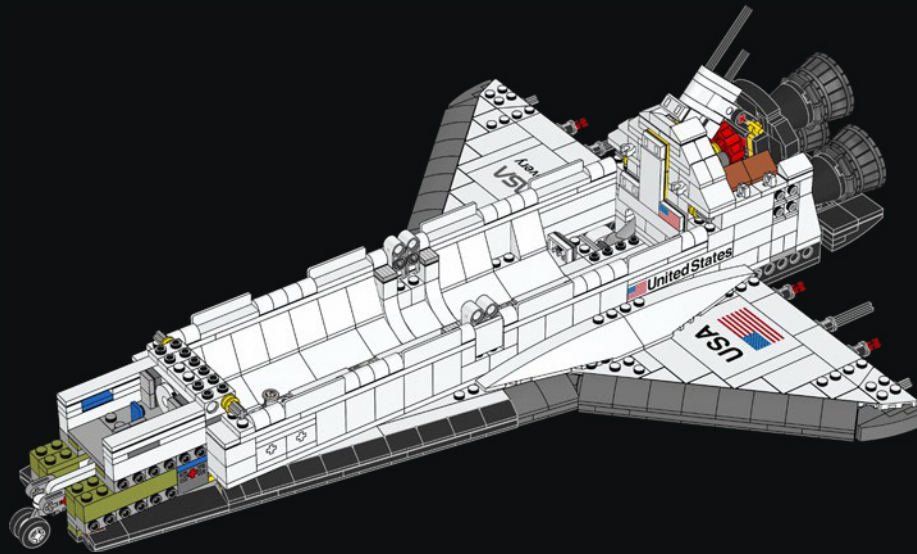
[LEGO.com/brickseparator](https://LEGO.com/brickseparator)



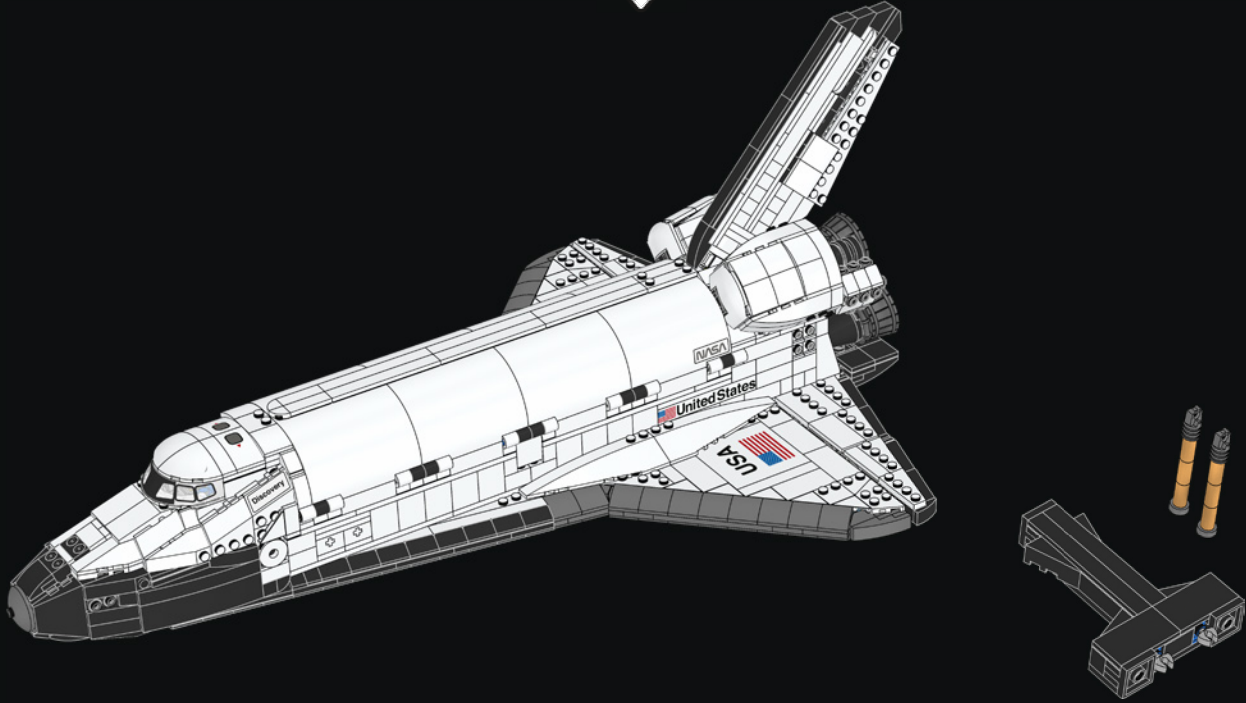
**NASA** **esa**  
**Hubble Space Telescope**  
Launch: April 24, 1990  
Launch Weight: 12,400 lbs  
Orbiting Altitude: 354 miles



**NASA**  
**Space Shuttle Discovery STS-31**  
Launch: February 24, 1984  
Launch Weight: 24,000 lbs  
Orbiting Altitude: 200 miles







## HUBBLE SPACE TELESCOPE

● The Hubble Space Telescope was created in a collaboration between NASA and its European partner – the European Space Agency (ESA). From its vantage point approximately 342 miles (550 km) above the Earth, the 43.5 ft. (13.2 m) long and 14 ft. (4.2 m) wide telescope can detect light with 'eyes' currently over 20 times sharper than the best ground-based telescopes.

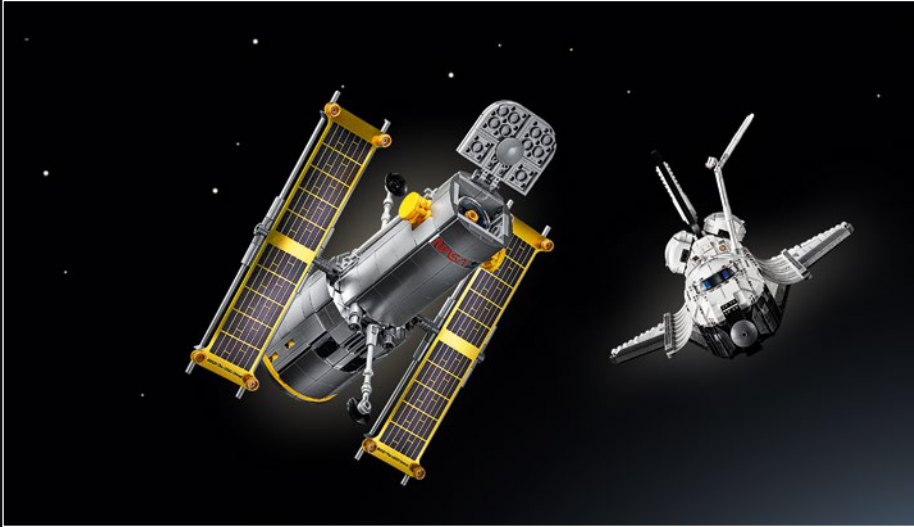
## LE TÉLÉSCOPE SPATIAL HUBBLE

● Le télescope spatial Hubble a été créé dans le cadre d'une collaboration entre la NASA et son partenaire européen, l'Agence spatiale européenne (ASE). De sa position à environ 550 km (342 milles) au-dessus de la Terre, le télescope de 13,2 m (43,5 pi) de long et de 4,2 m (14 pi) de large peut détecter la lumière avec des « yeux » présentement plus de 20 fois plus puissants que ceux des meilleurs télescopes stationnés au sol.

## TELESCOPIO ESPACIAL HUBBLE

● El telescopio espacial Hubble fue producto de la colaboración entre la NASA y su socio europeo, la Agencia Espacial Europea (ESA, por sus siglas en inglés). Desde su estratégica posición a aproximadamente 550 km sobre la Tierra, el telescopio de 13,2 m de longitud y 4,2 m de anchura puede detectar luz con unos ojos que superan ahora en más de 20 veces la definición de los mejores telescopios instalados en la superficie terrestre.





## THE FIRST MAJOR OBSERVATORY IN SPACE

● Hubble's mission was to spend at least 15 years probing the farthest and faintest reaches of the cosmos. Thanks to five Space Shuttle servicing missions that took place between 1993 and 2009, it has far exceeded this goal, operating and observing the universe for over 30 years. During its time in orbit, the telescope has taken more than 1.4 million observations, and astronomers have used that data to publish more than 17,000 scientific publications on a broad range of topics.

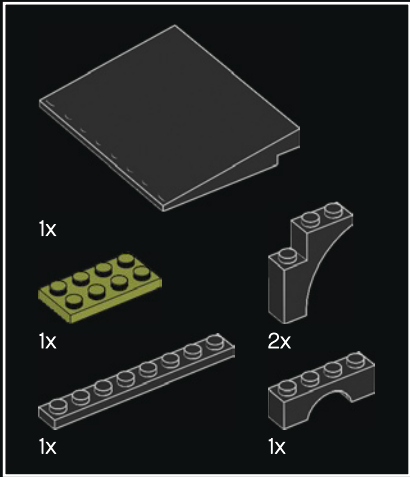
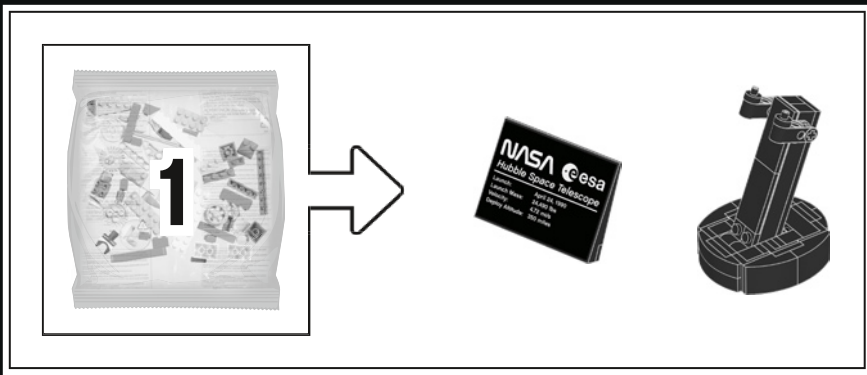
## LE PREMIER GRAND OBSERVATOIRE DE L'ESPACE

● La mission de Hubble était de passer au moins 15 ans à sonder les confins du cosmos, des plus près aux plus éloignés. Grâce à cinq missions de maintenance de la navette spatiale qui ont eu lieu entre 1993 et 2009, il a largement dépassé cet objectif, restant en fonction et observant l'univers pendant plus de 30 ans. Pendant sa vie en orbite, le télescope a accumulé plus de 1,4 million d'observations, et les astronomes ont utilisé ces données pour publier plus de 17 000 publications scientifiques traitant d'un large éventail de sujets.

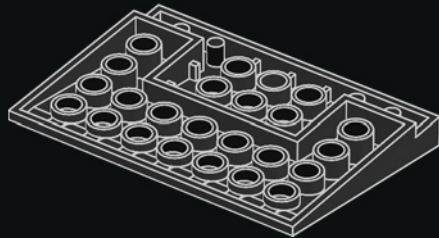


## EL PRIMER GRAN OBSERVATORIO EN EL ESPACIO

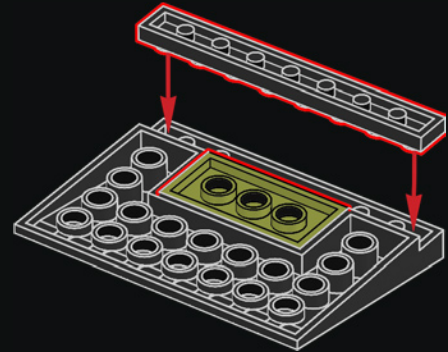
● El Hubble se proyectó para pasar al menos 15 años explorando los confines más lejanos y apenas visibles del cosmos. Gracias a las cinco misiones de mantenimiento del transbordador espacial, que tuvieron lugar entre 1993 y 2009, ha rebasado con creces ese objetivo: lleva funcionando y observando el universo más de 30 años. Durante el tiempo que ha permanecido en órbita, el telescopio ha realizado más de 1,4 millones de observaciones y los astrónomos han usado esos datos para publicar más de 17.000 investigaciones científicas sobre una amplia gama de temas.



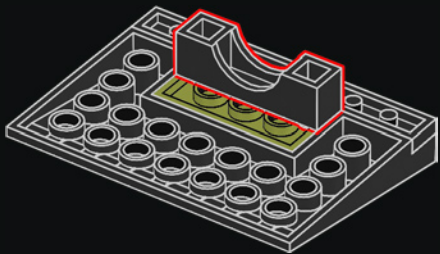
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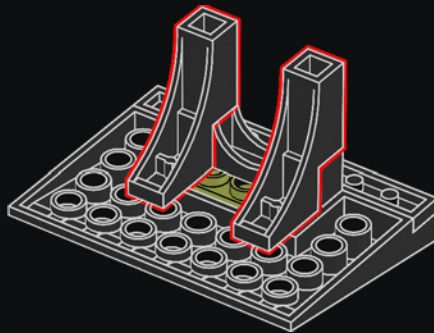
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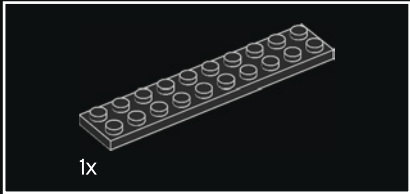
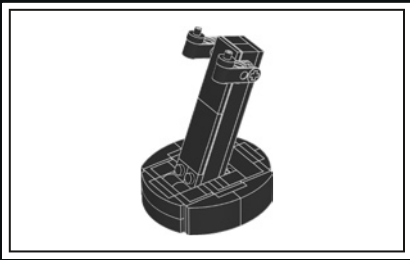


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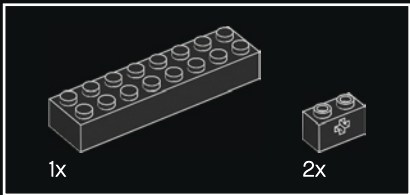
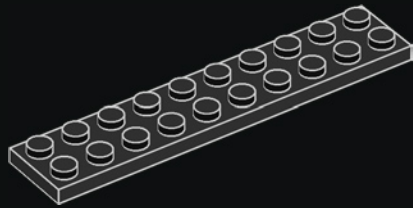
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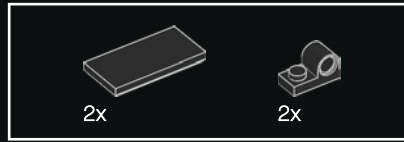
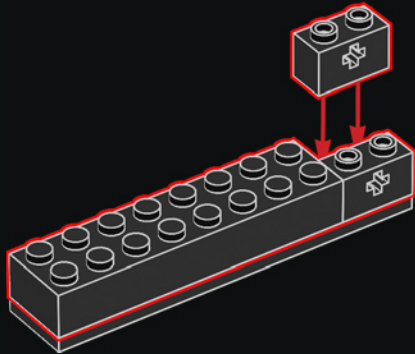
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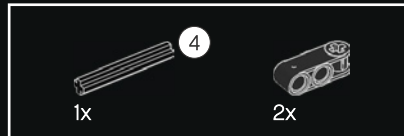
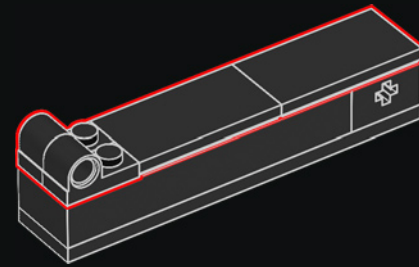


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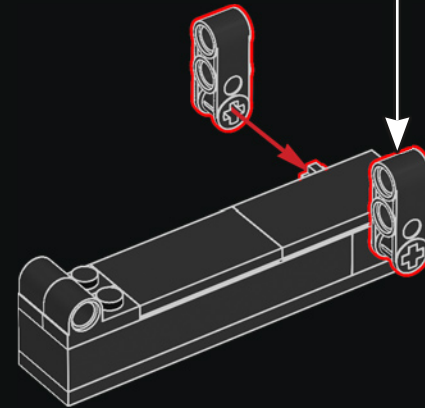
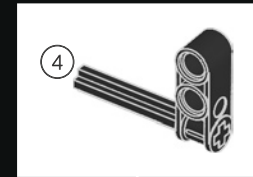
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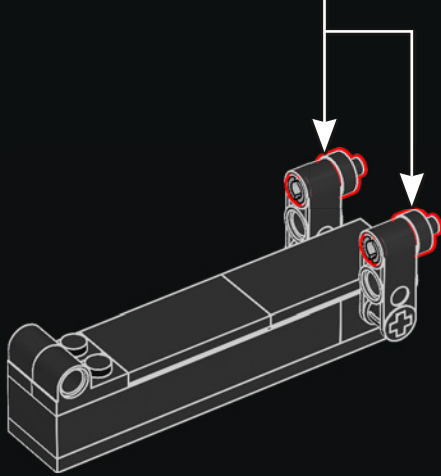
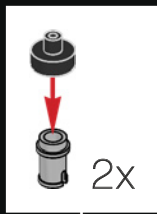
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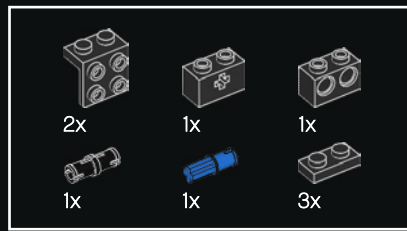
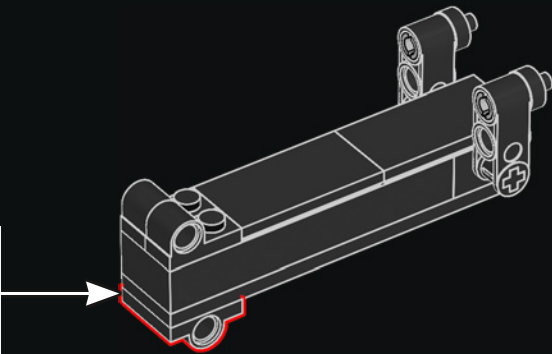




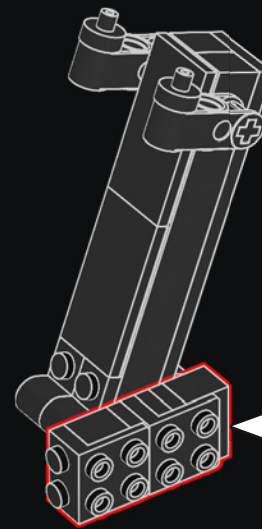
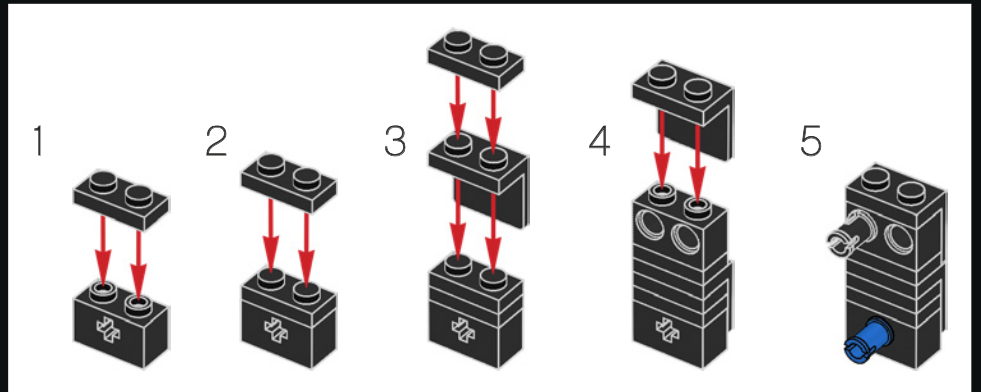
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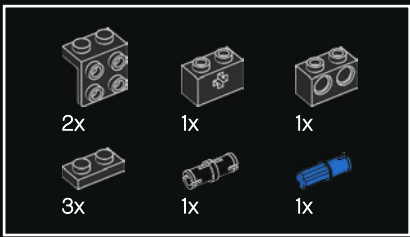


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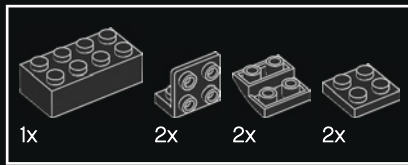
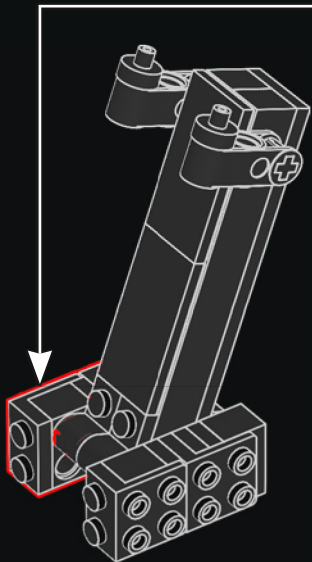
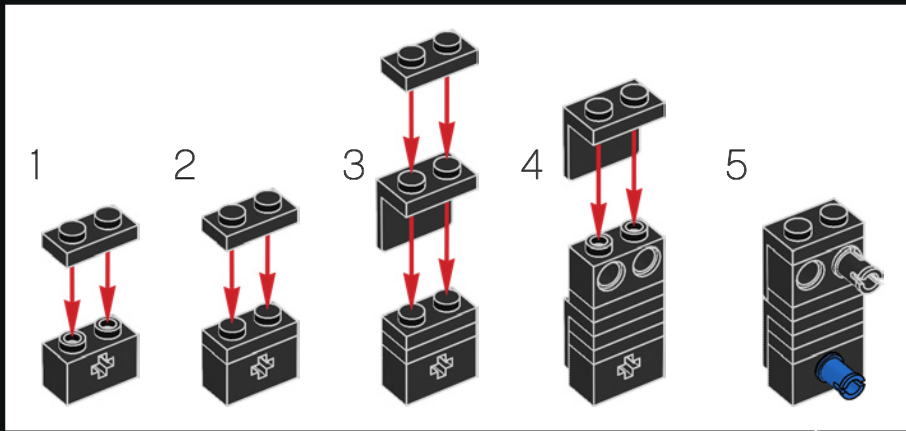


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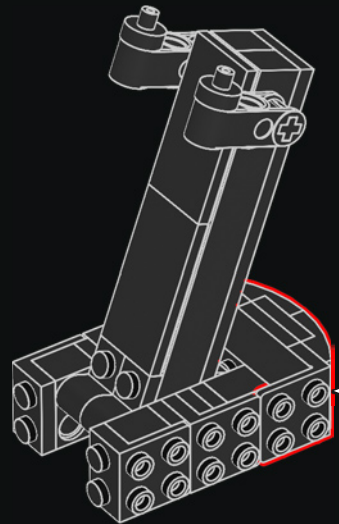
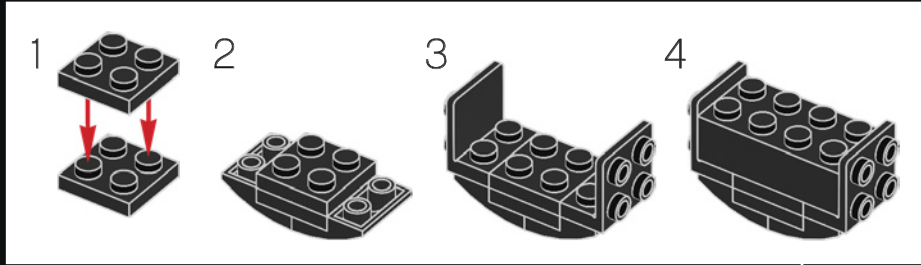




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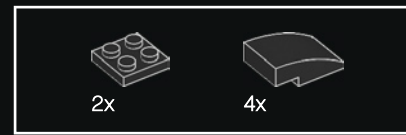
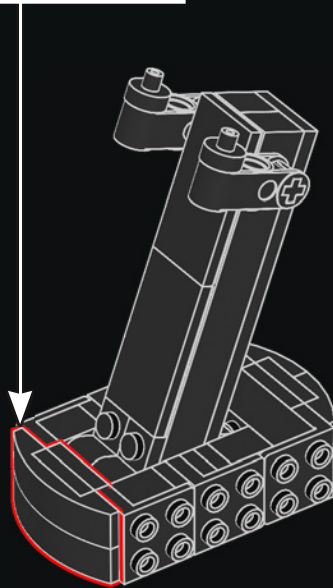
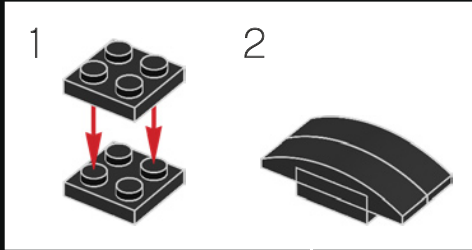
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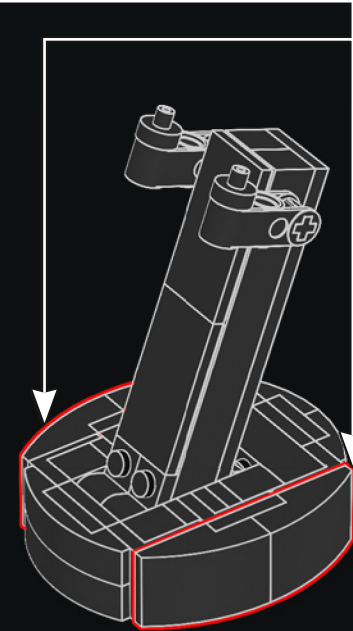
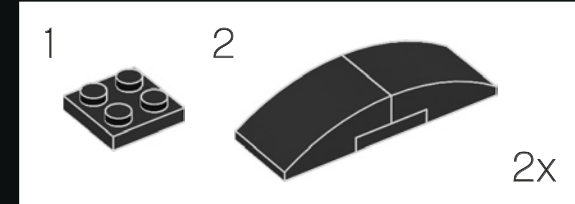




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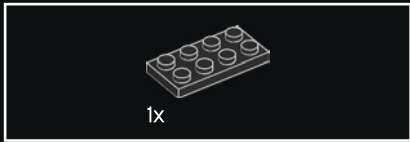
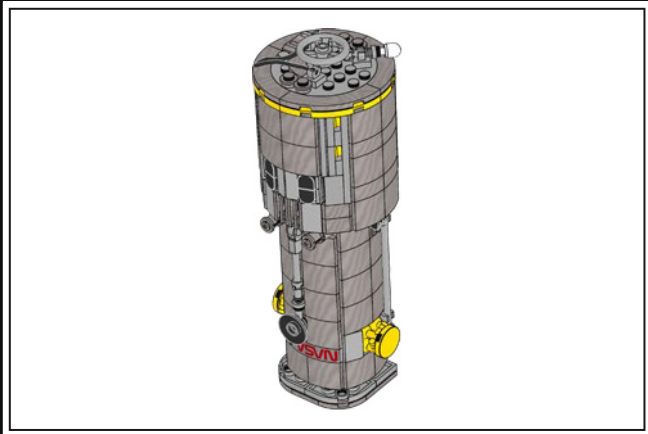
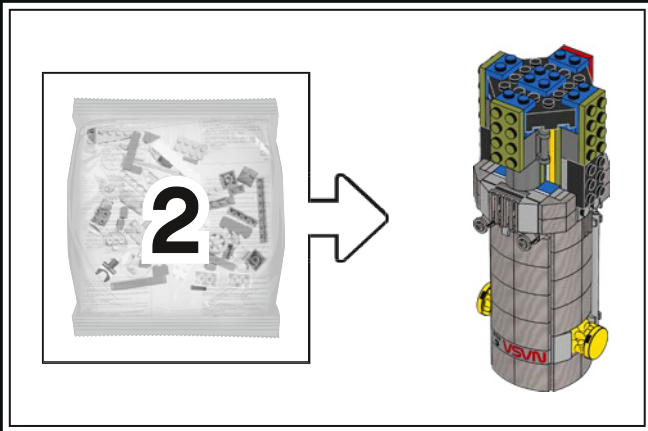


### DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

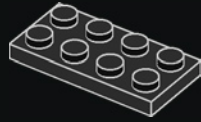
● First conceived in the 1940s, the Hubble Space Telescope took decades of planning before its launch in 1990.

● Conçu dans les années 1940, le télescope spatial Hubble a nécessité des décennies de préparation avant son lancement en 1990.

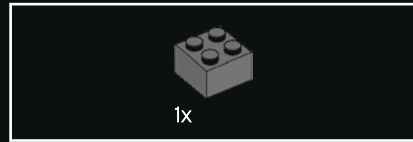
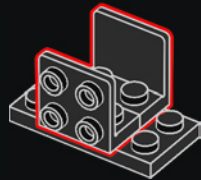
● Aunque la idea original del telescopio espacial Hubble se remonta a los años 40 del siglo pasado, transcurrirían décadas dedicadas a la planificación hasta su lanzamiento en 1990.



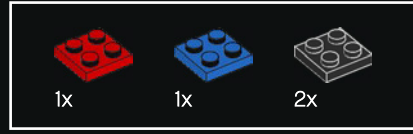
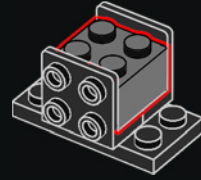
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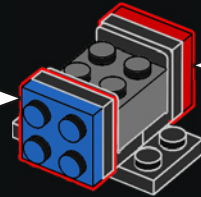
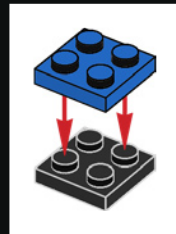
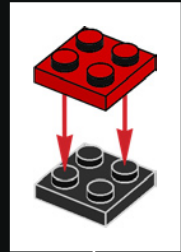
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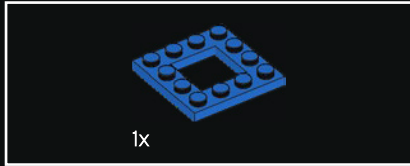
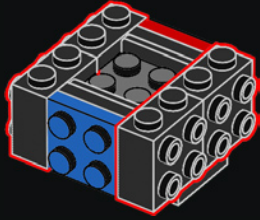


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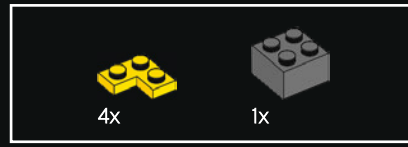
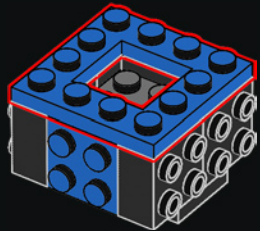




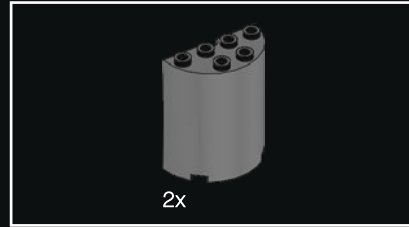
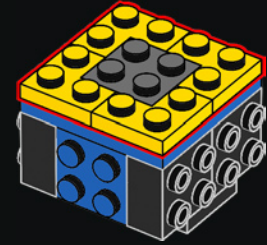
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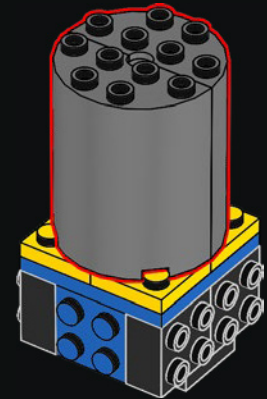
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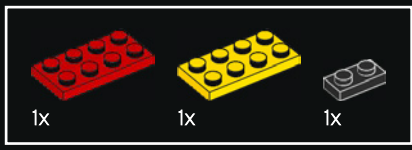


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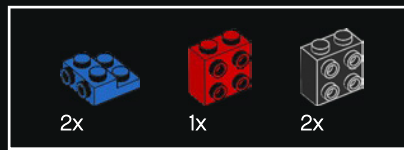
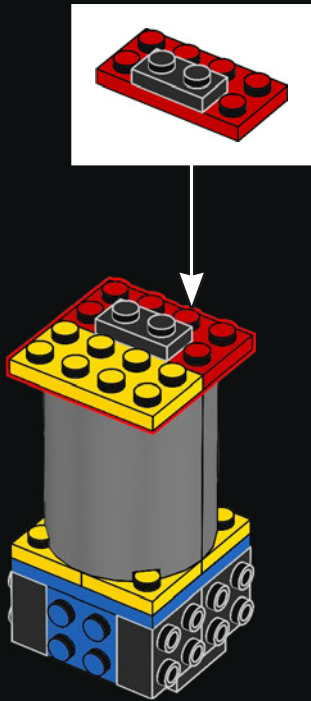


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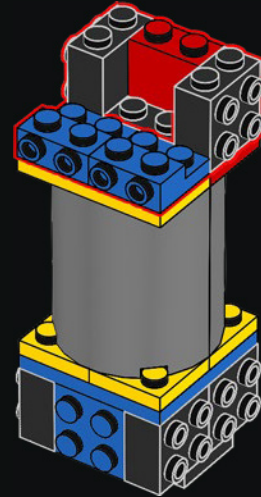




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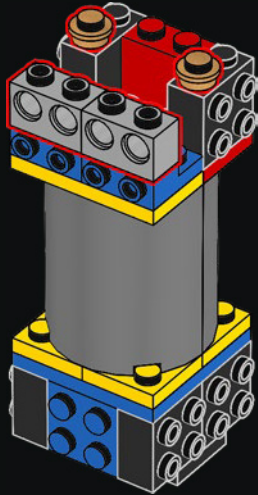


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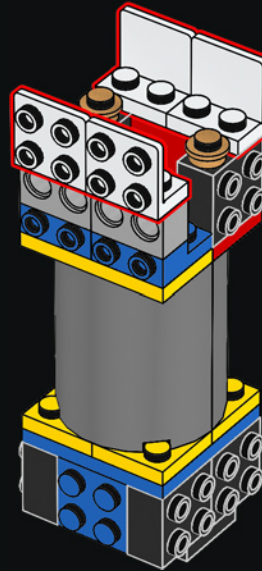


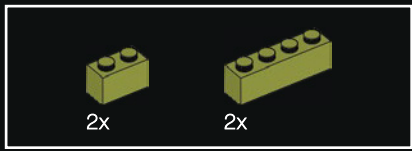


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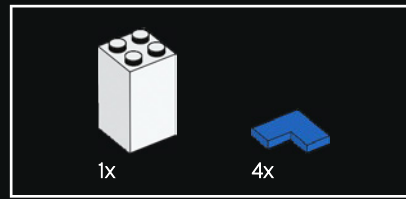
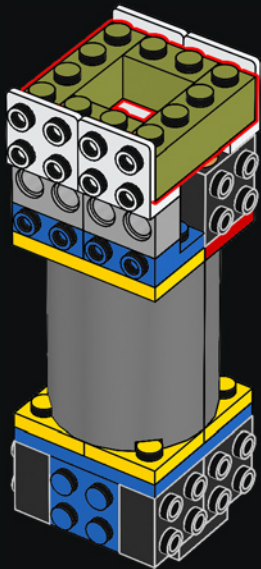


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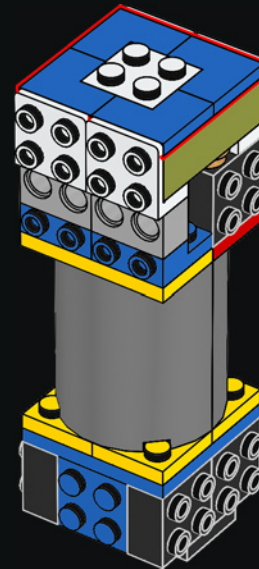


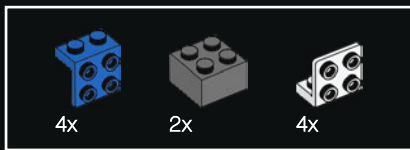


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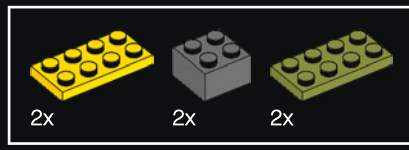
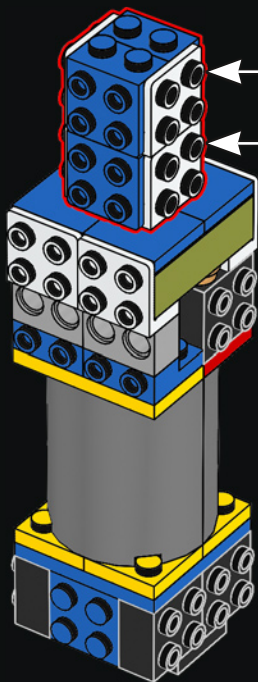
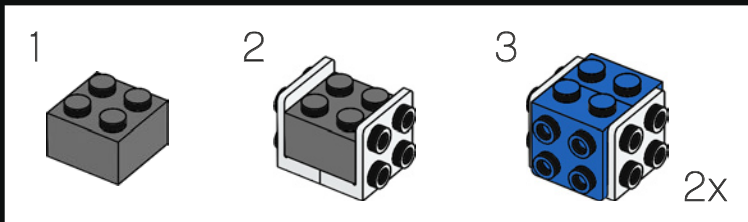


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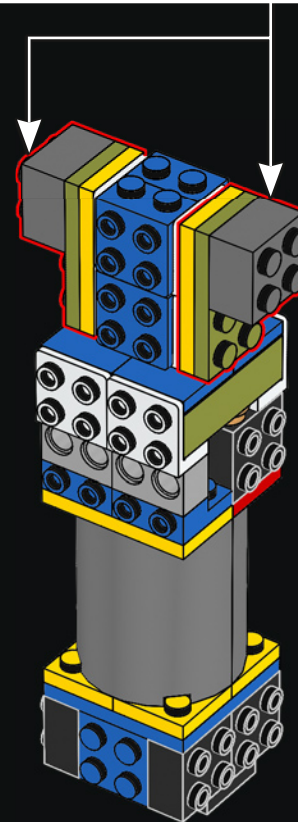
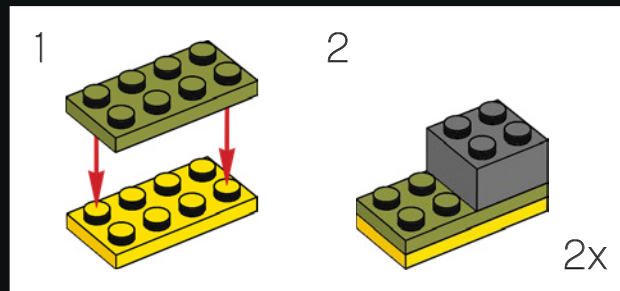


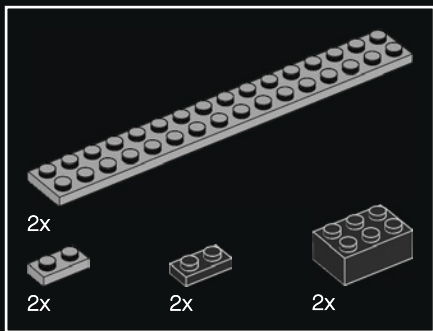


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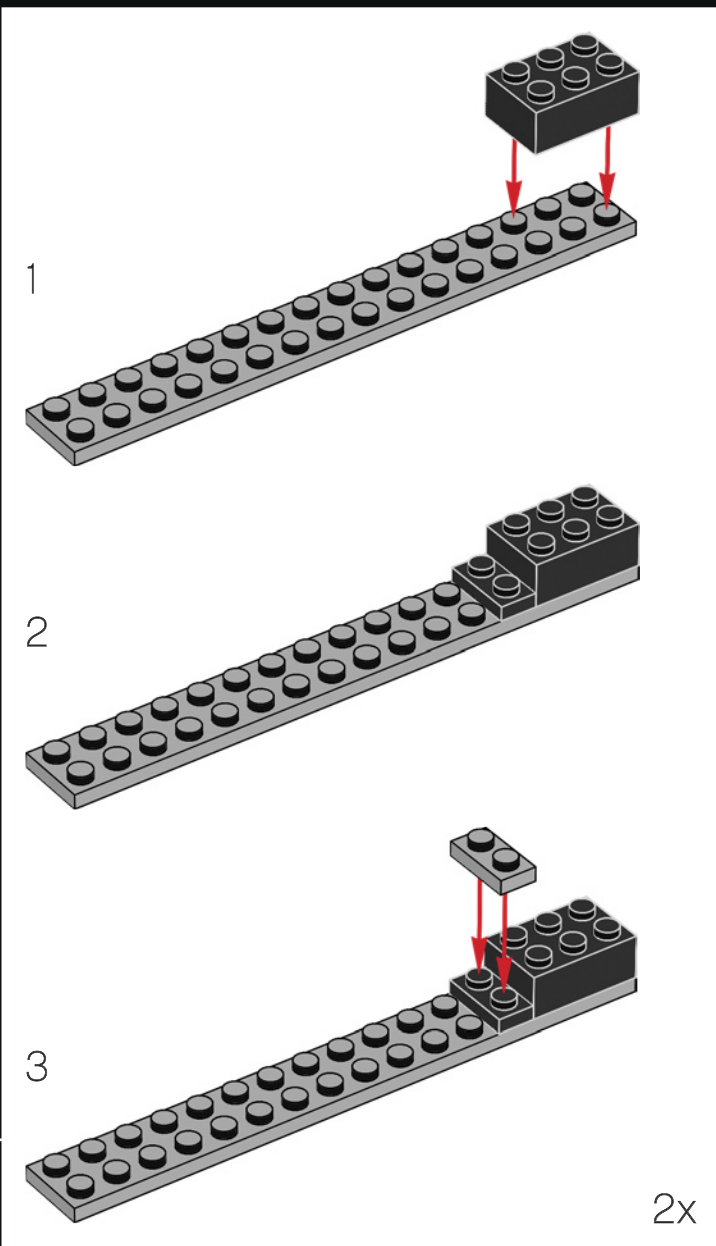
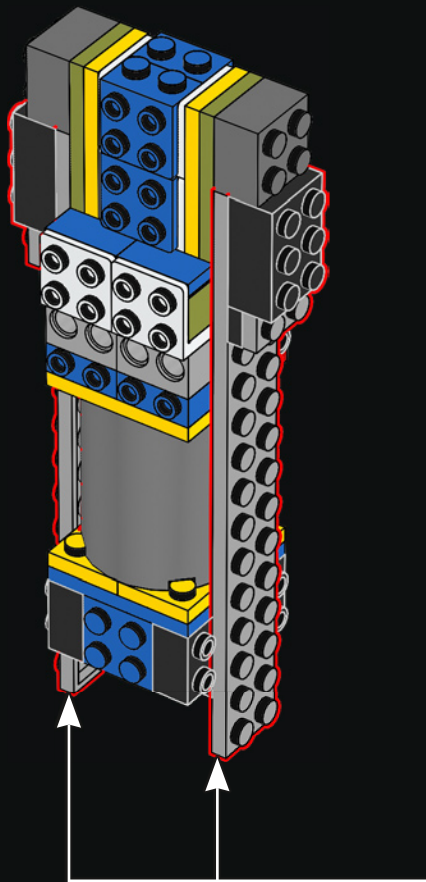


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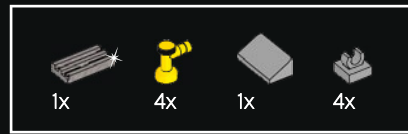
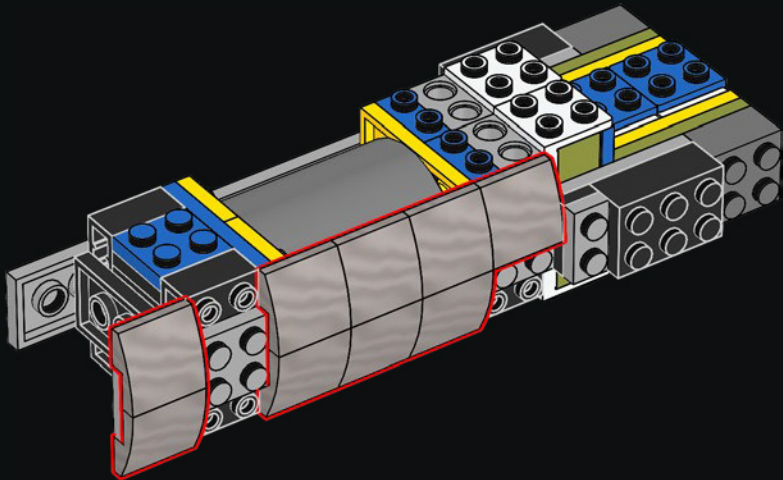
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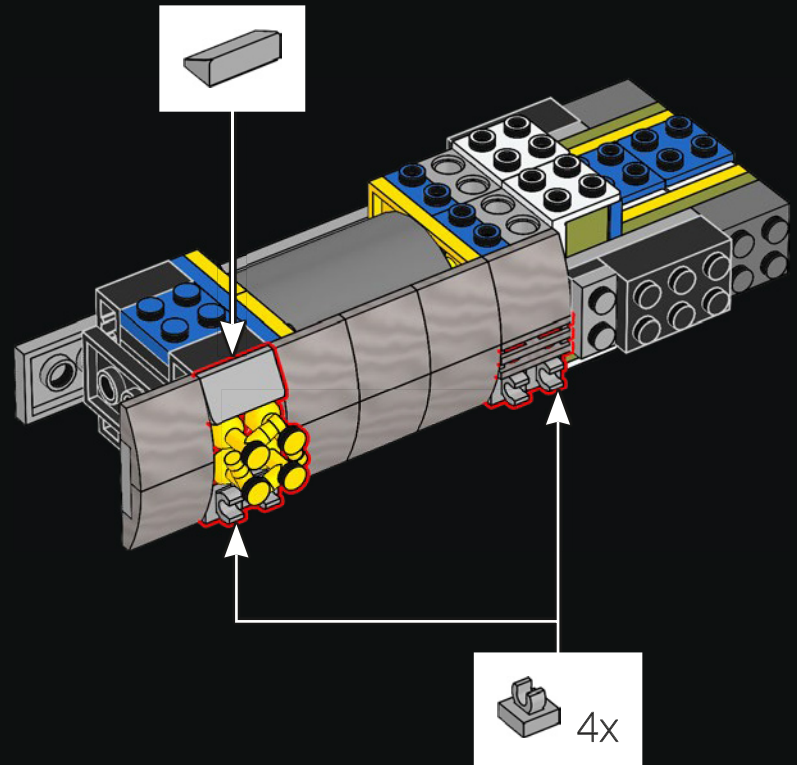




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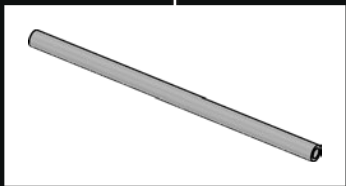
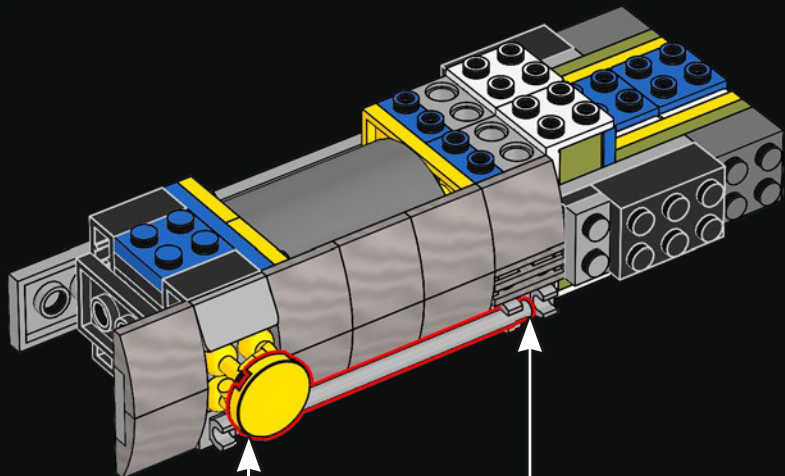


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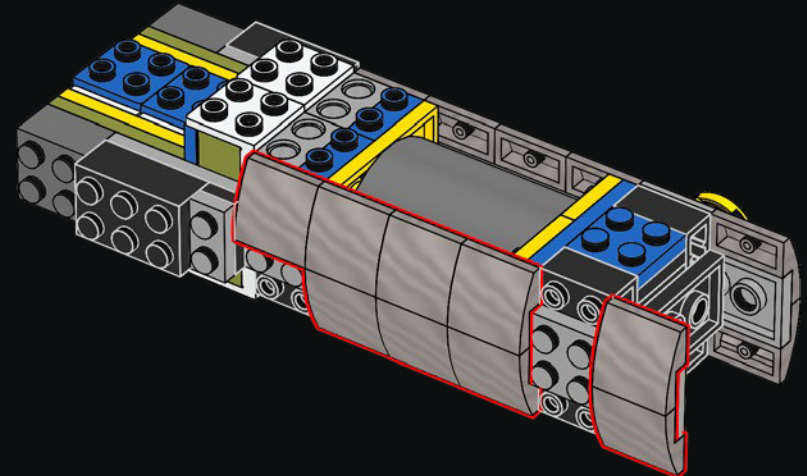


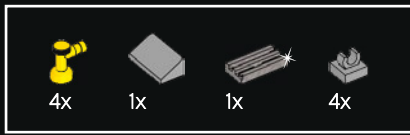


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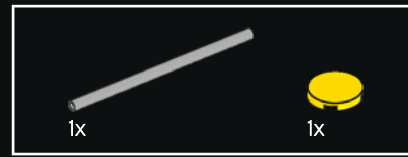
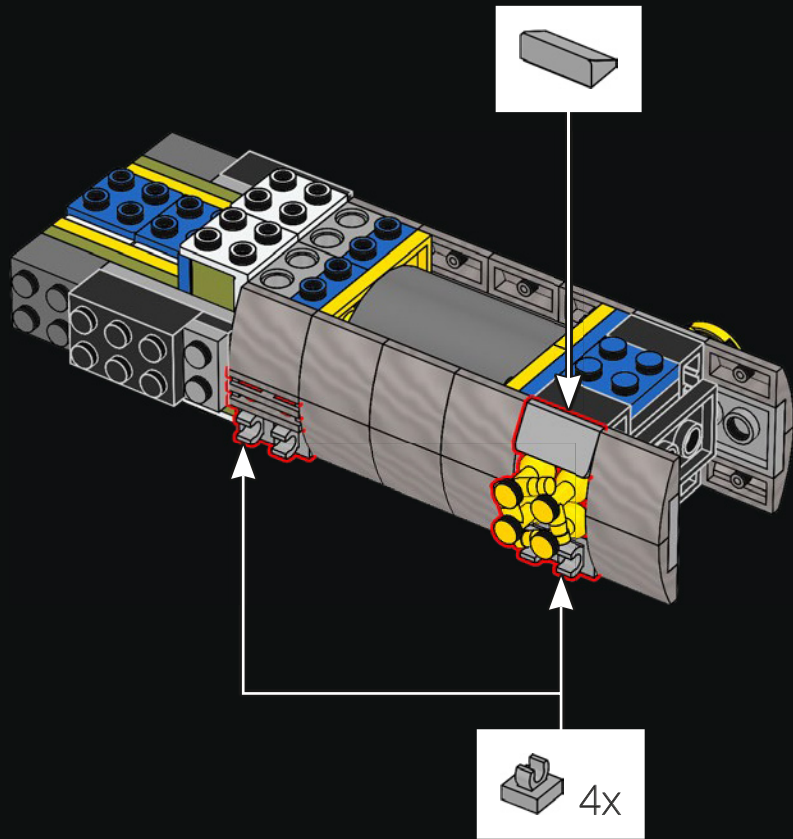


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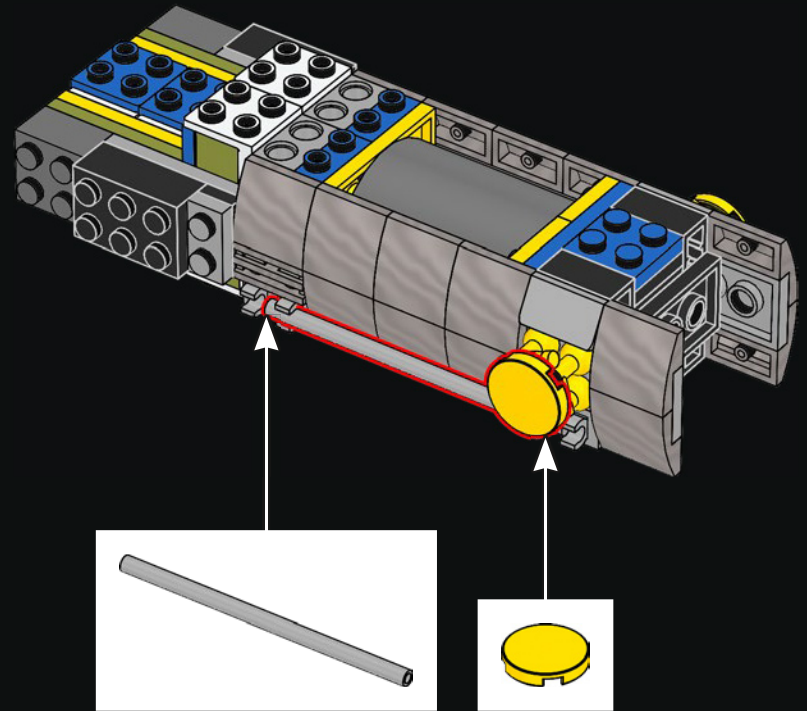


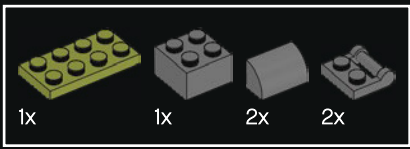


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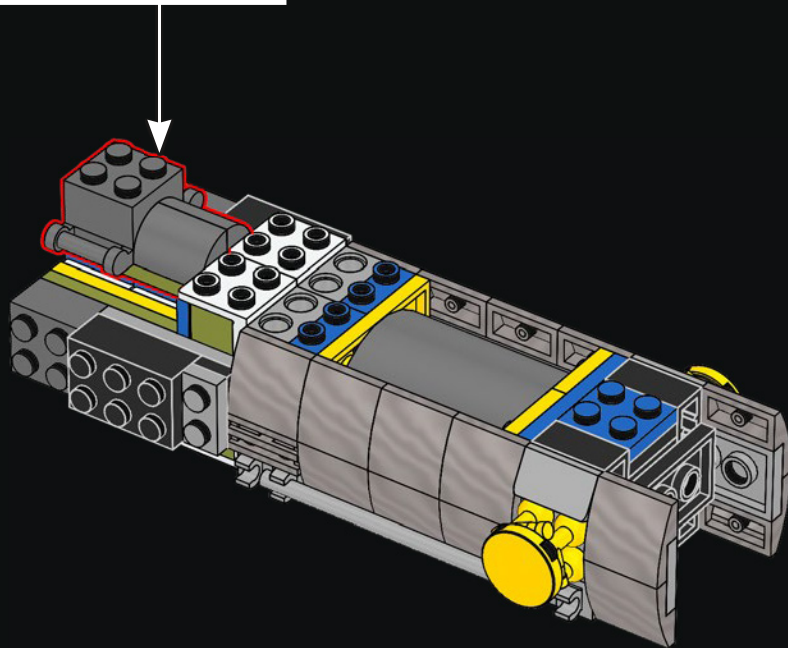
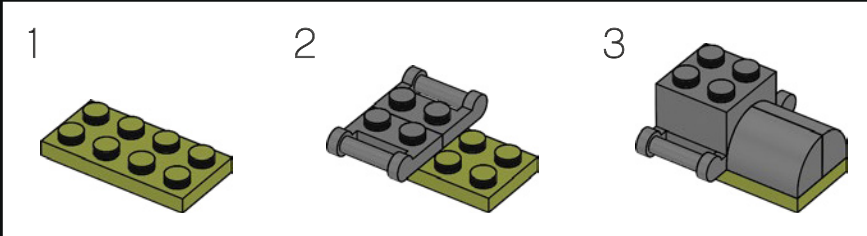


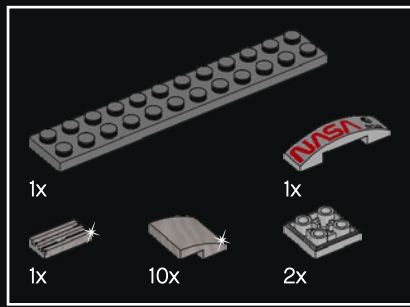
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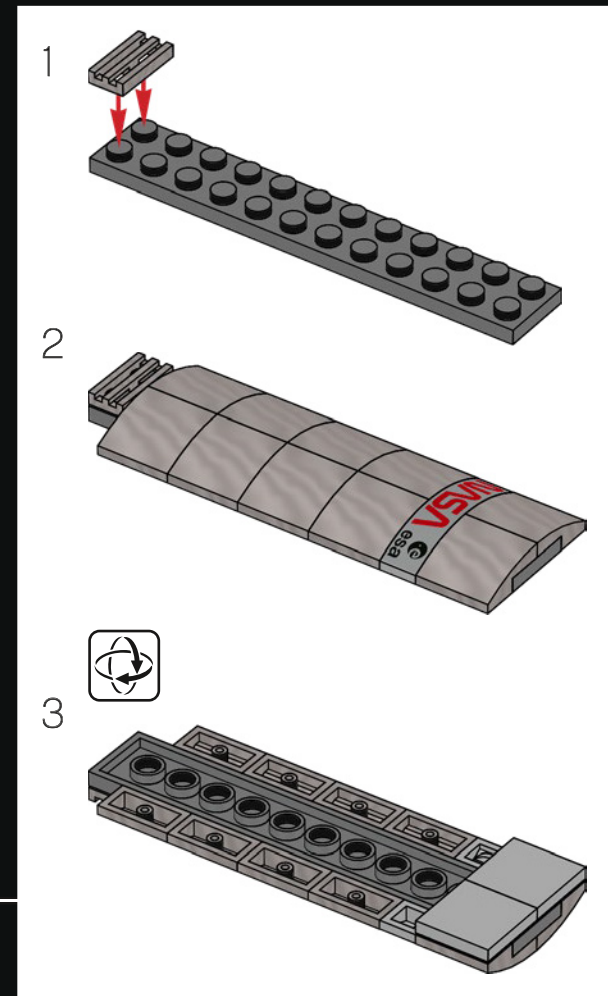
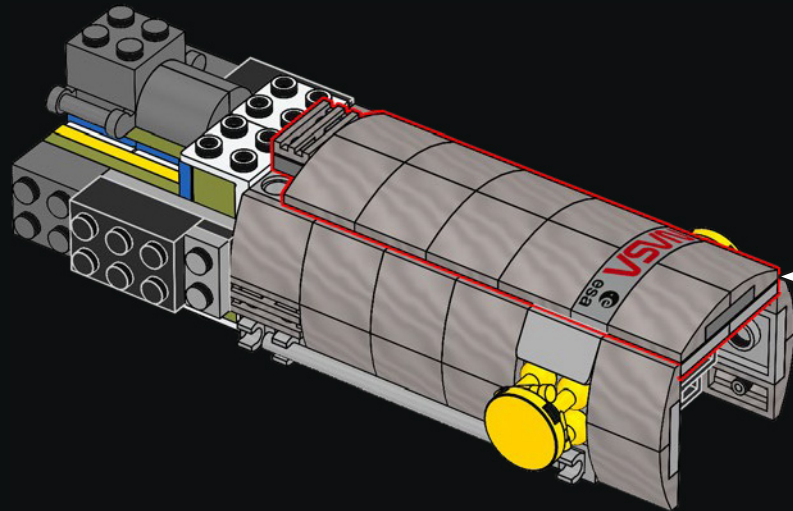


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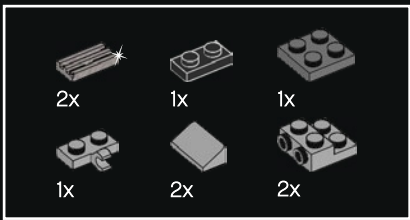


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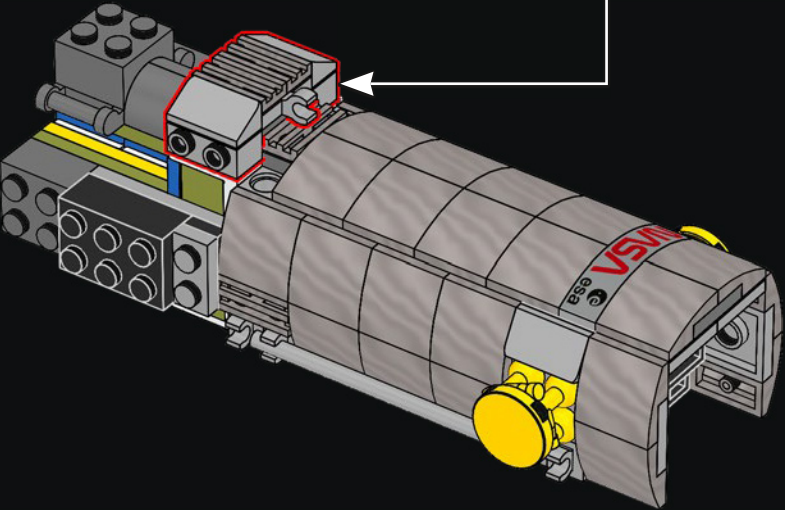
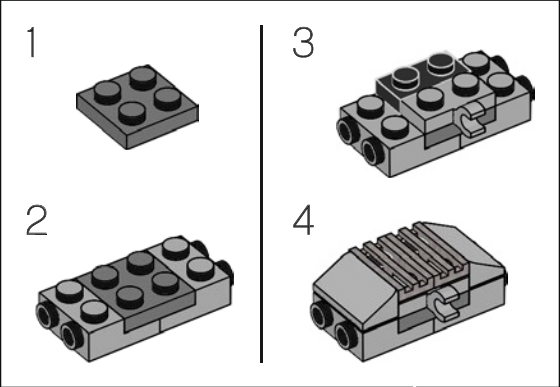


### DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

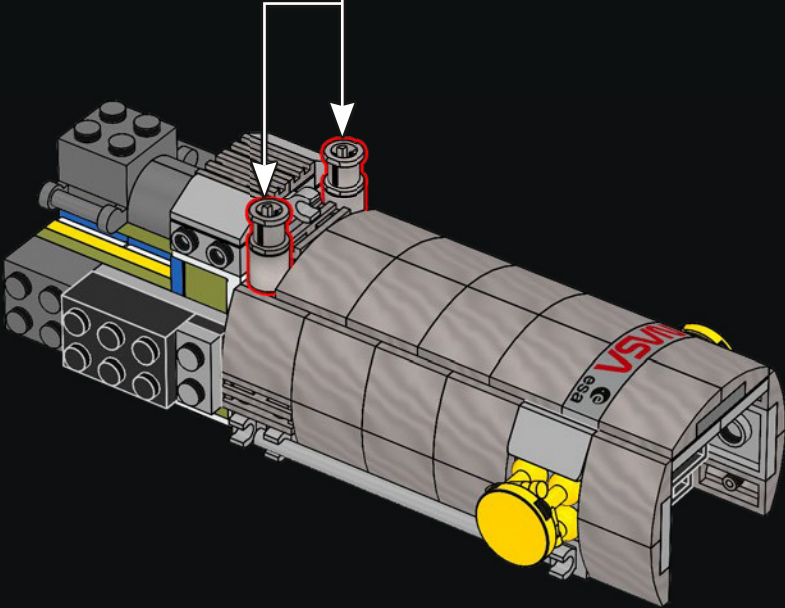
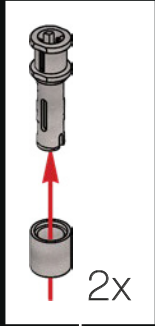
- The space telescope was named after American astronomer Edwin Hubble (1889-1953).
- Le télescope spatial a été nommé d'après l'astronome américain Edwin Hubble (1889-1953).
- El telescopio espacial se llama así en honor del astrónomo norteamericano Edwin Hubble (1889-1953).

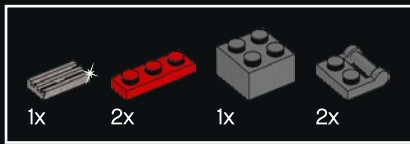


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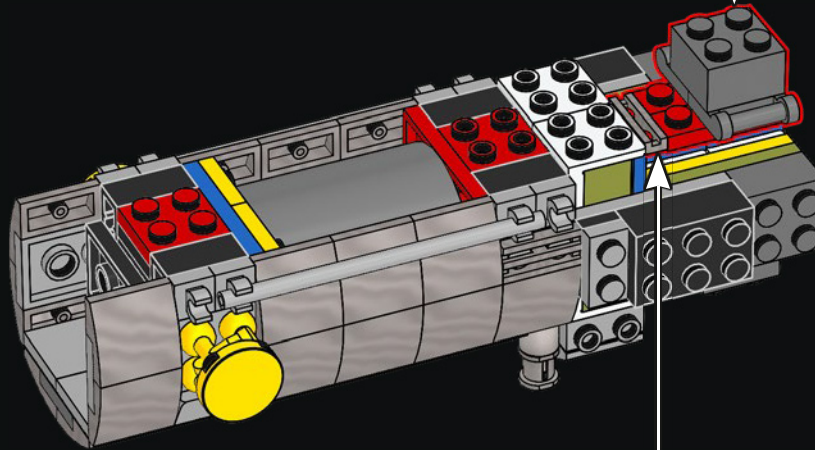
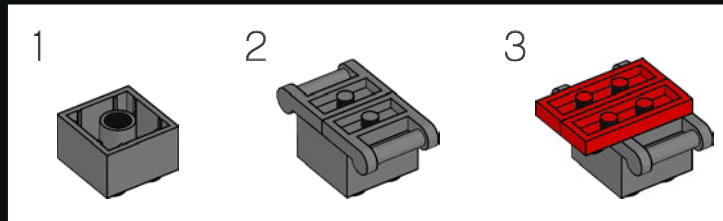


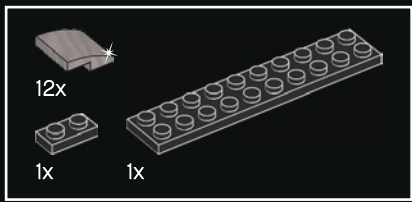
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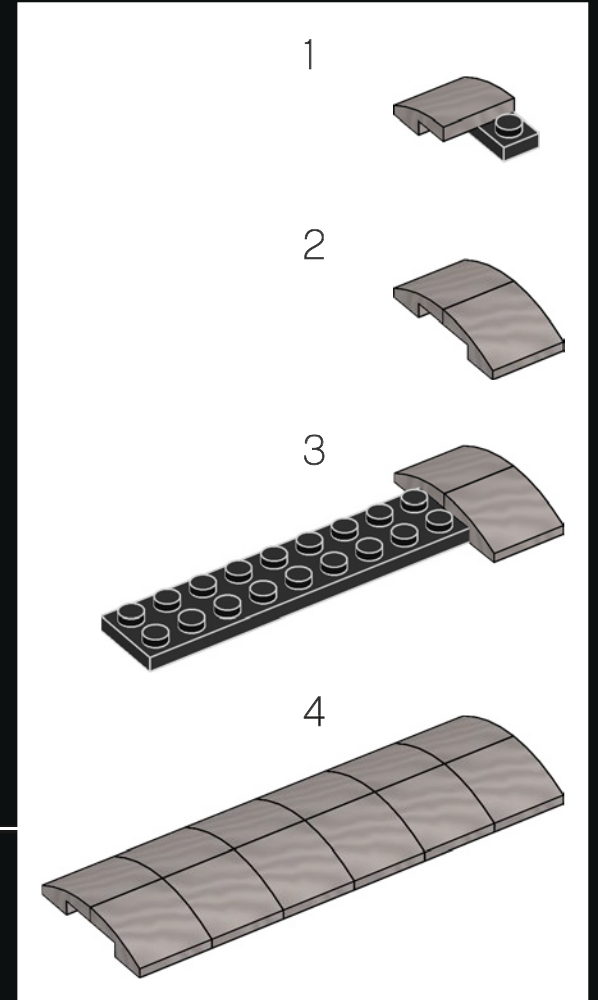
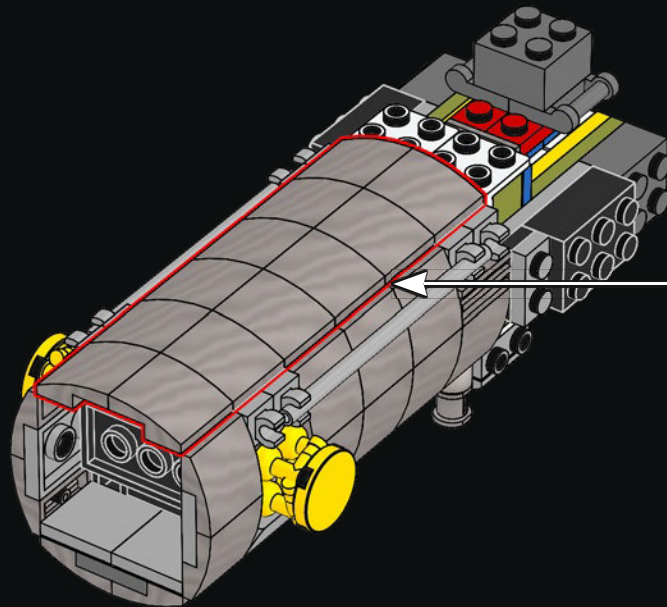


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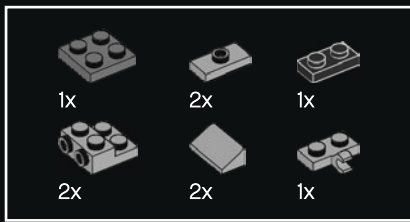




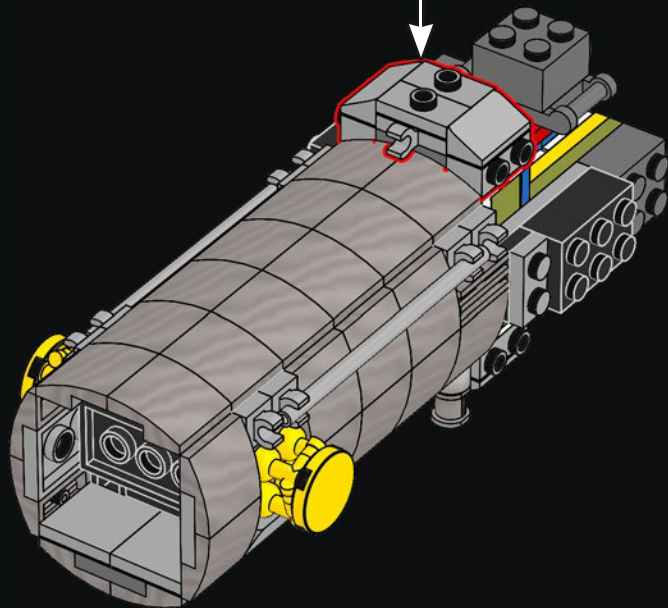
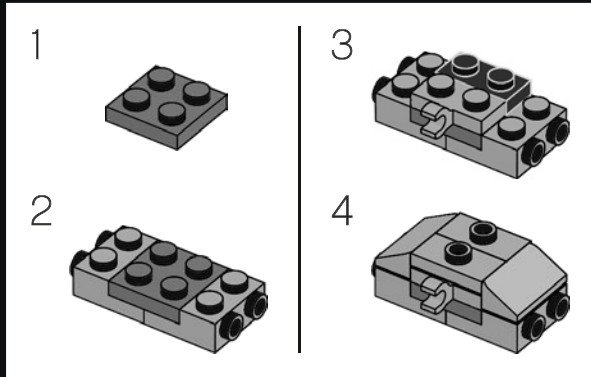
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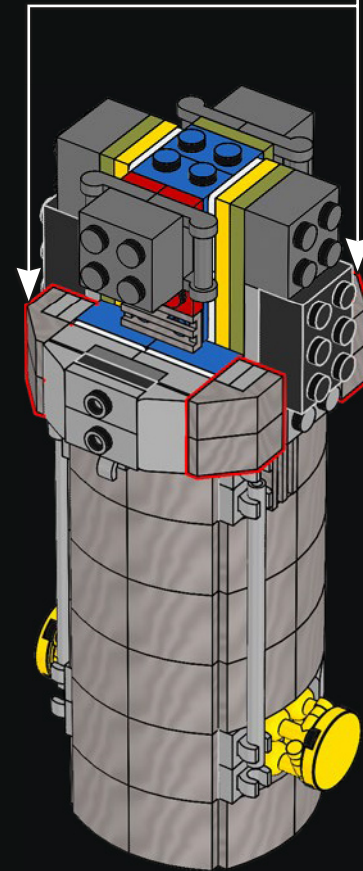
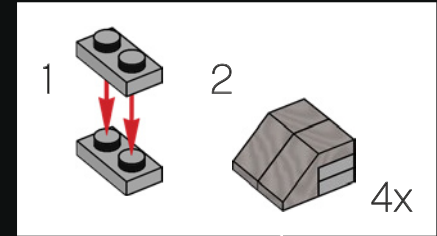


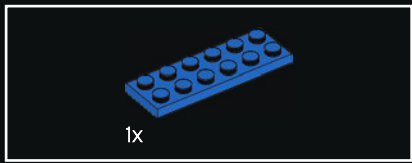


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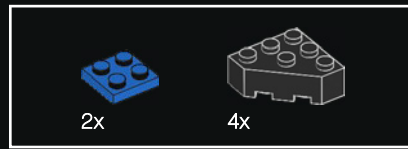
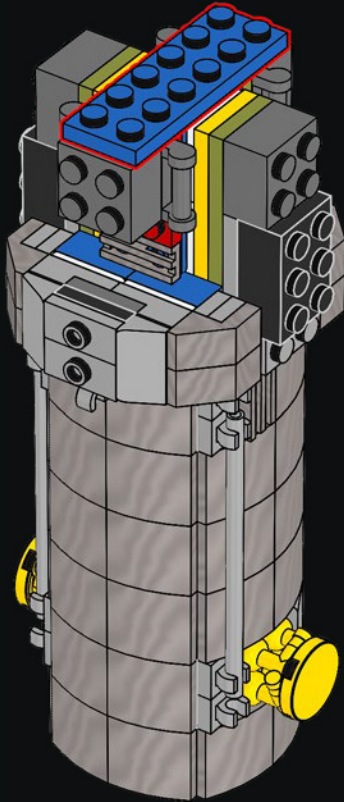


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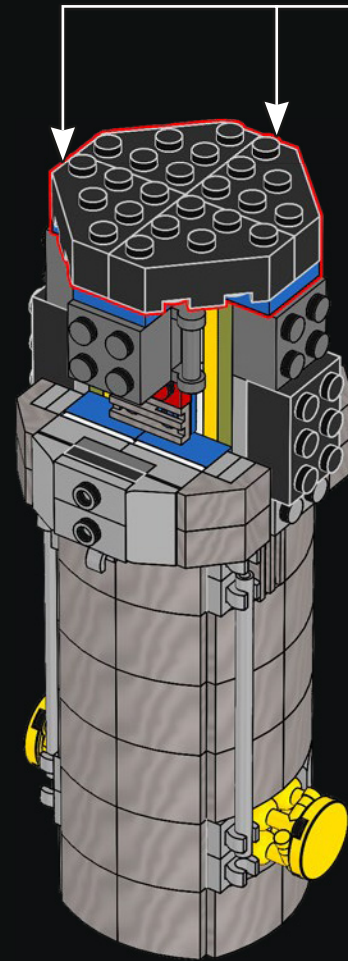
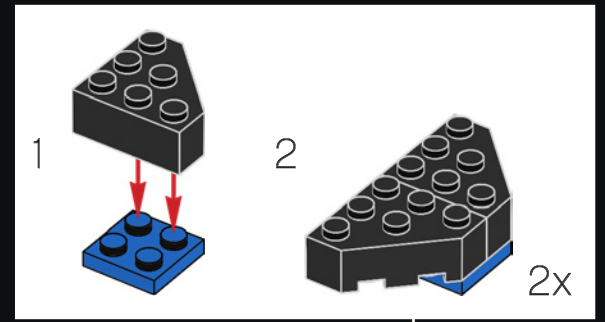


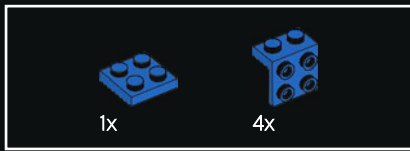


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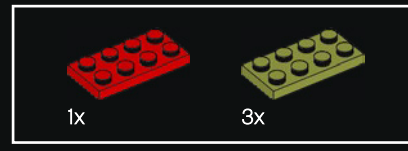
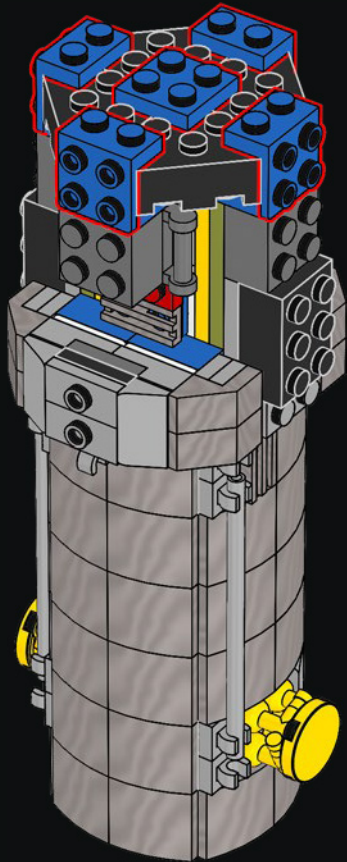


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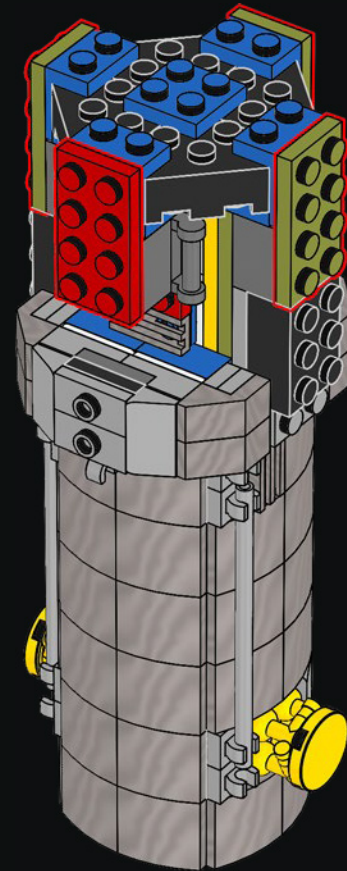




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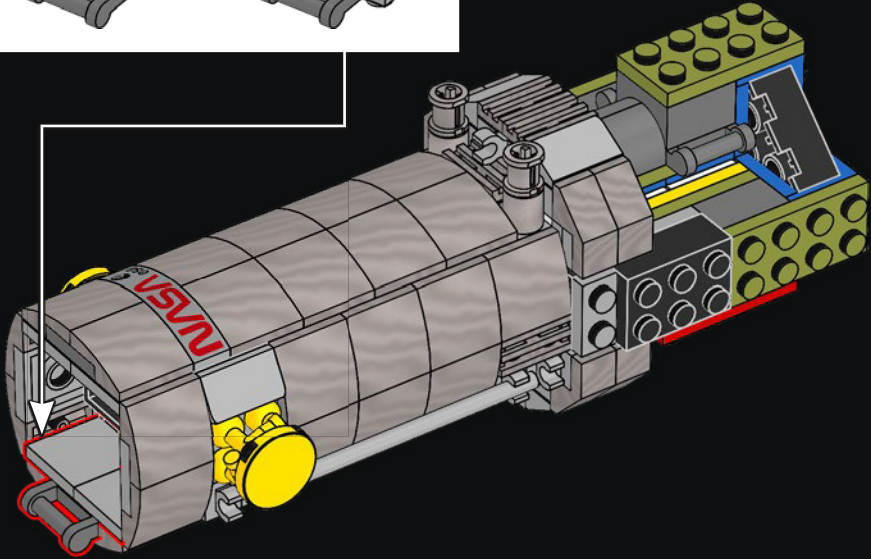
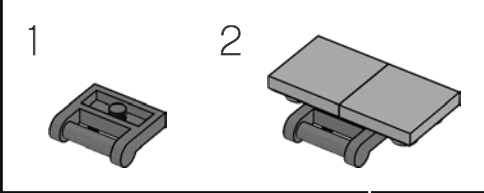


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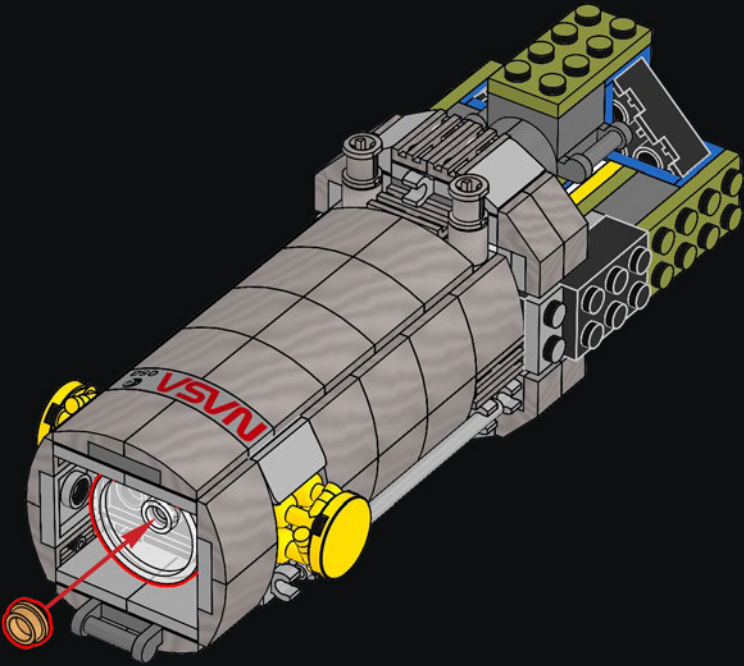


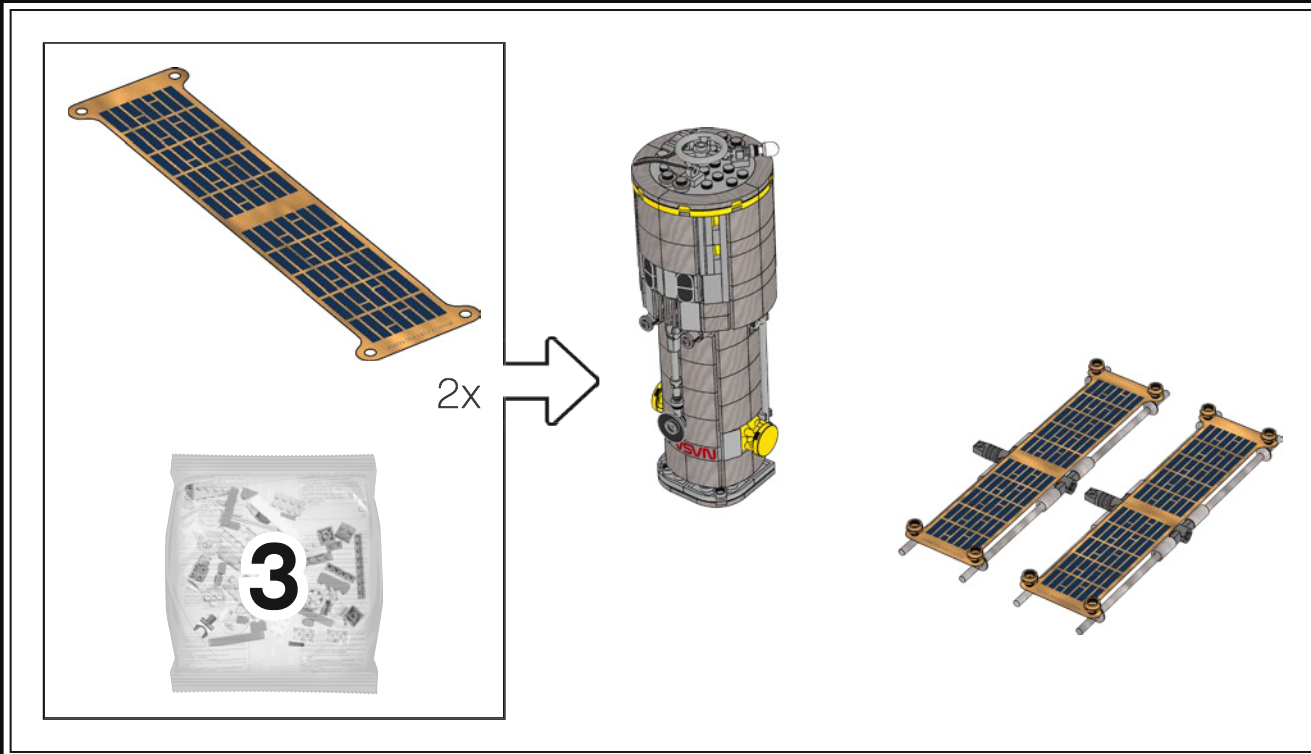


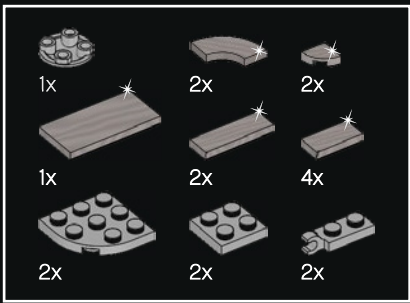
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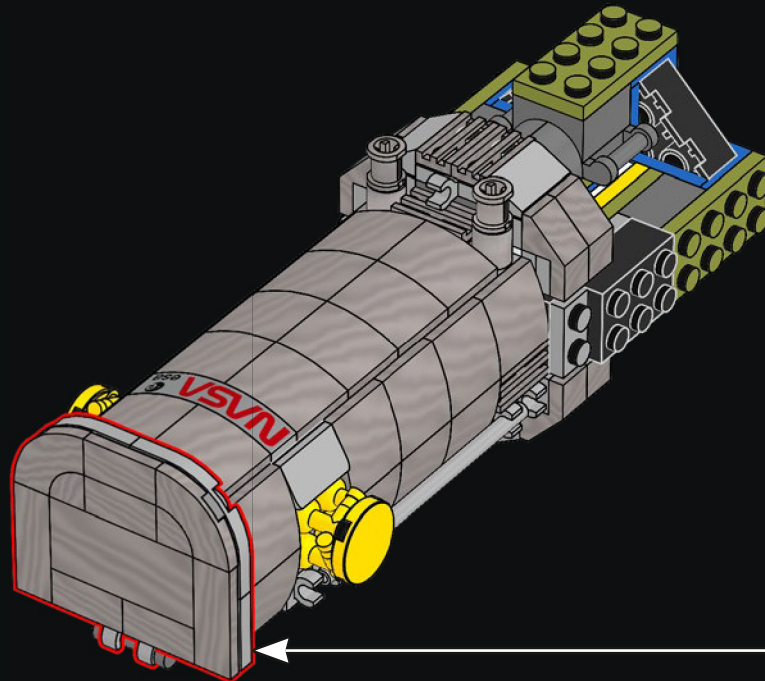
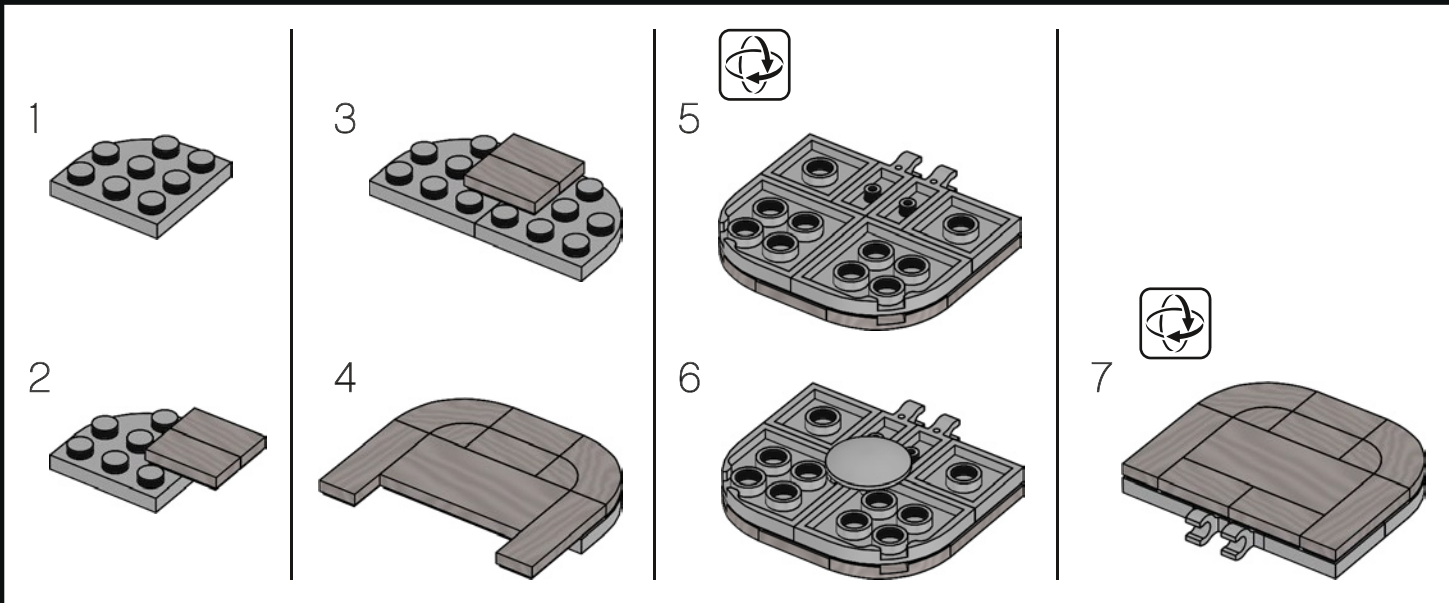
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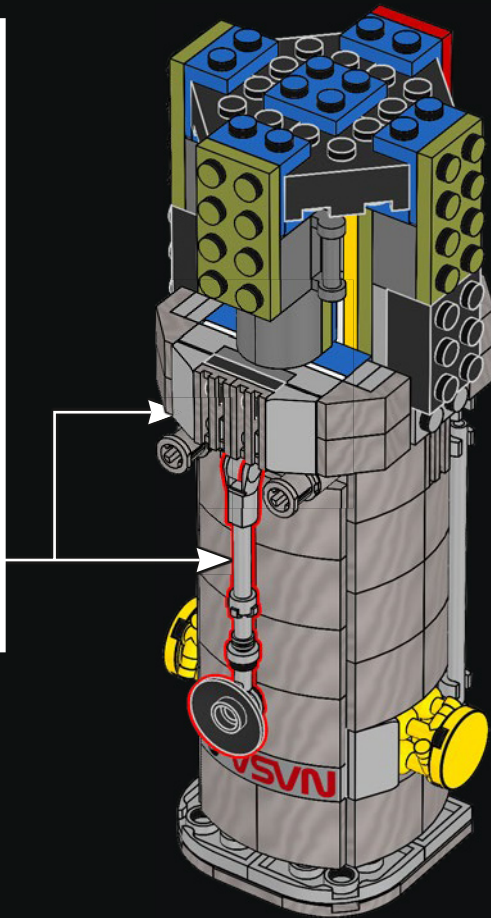
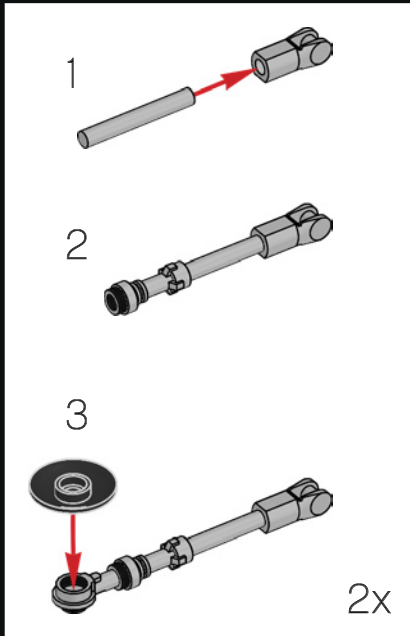


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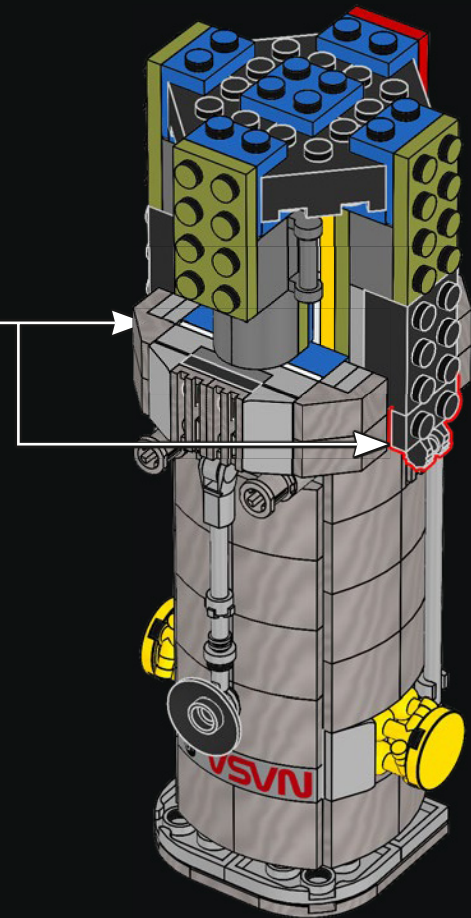
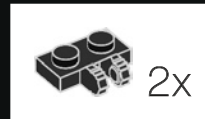


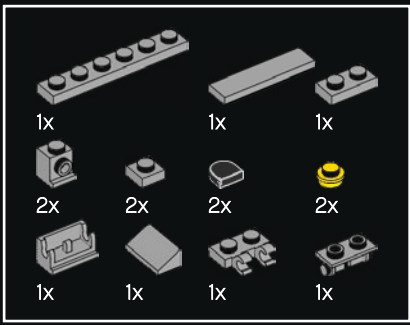


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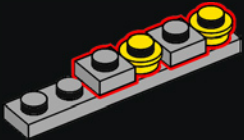


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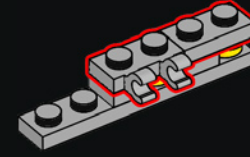
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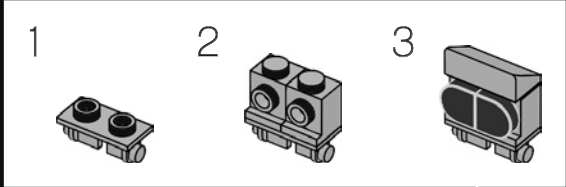
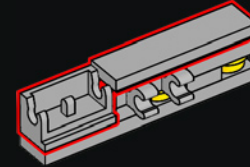
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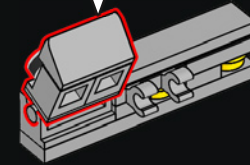
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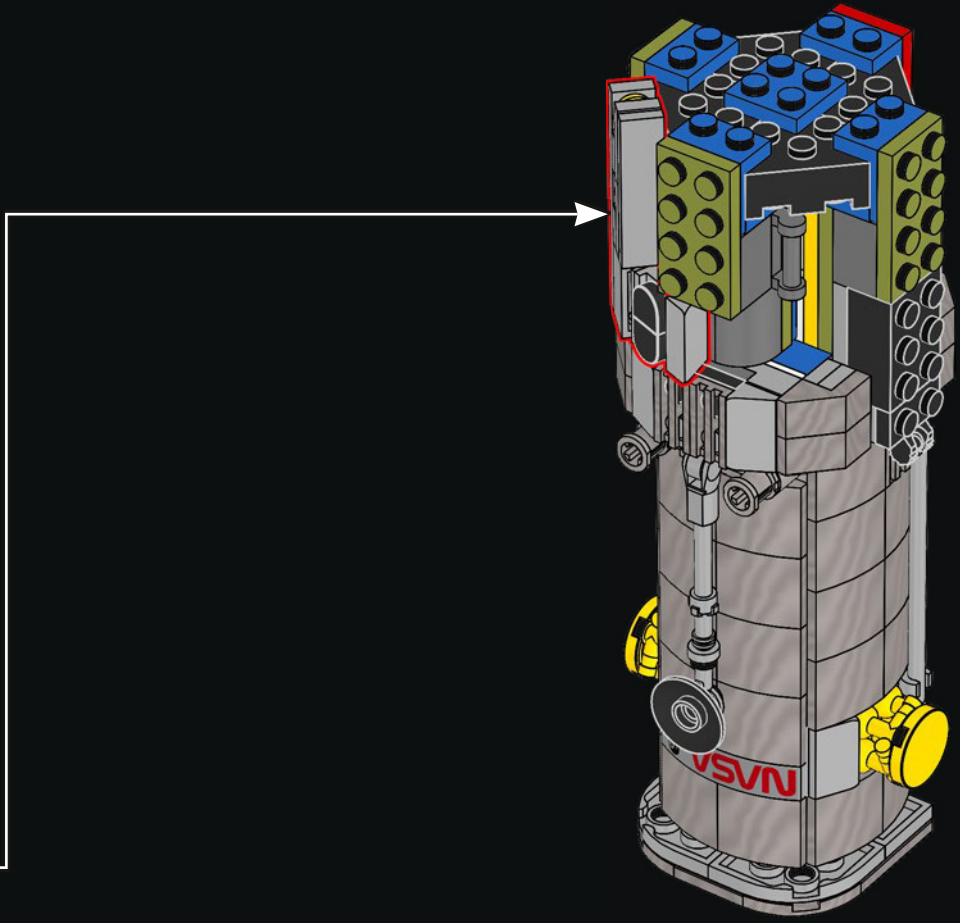
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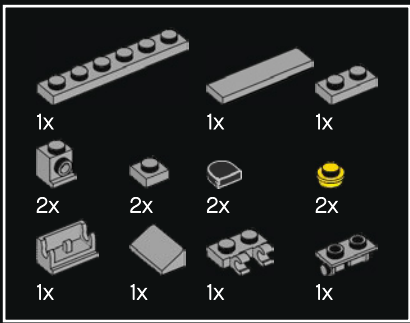


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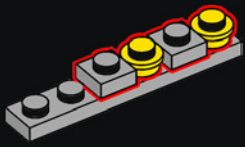


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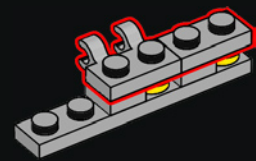
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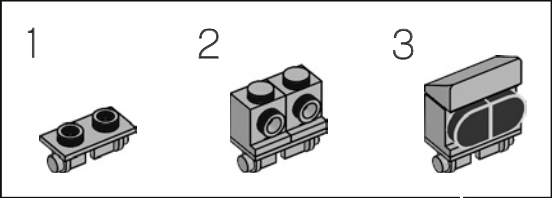
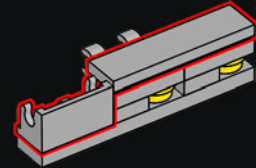
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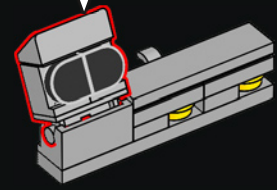
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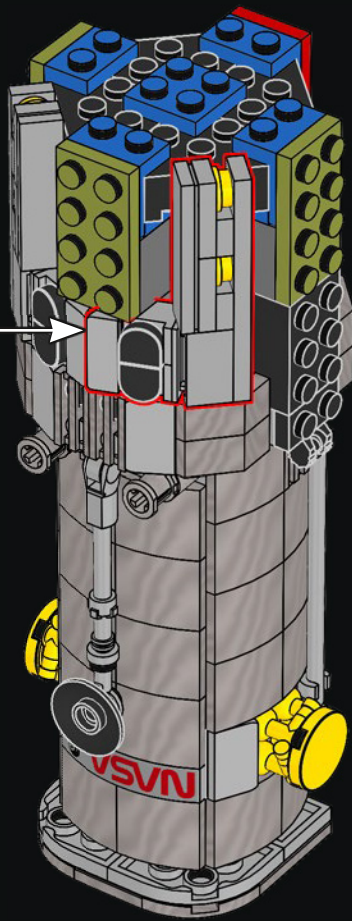


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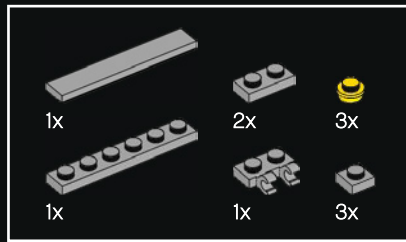
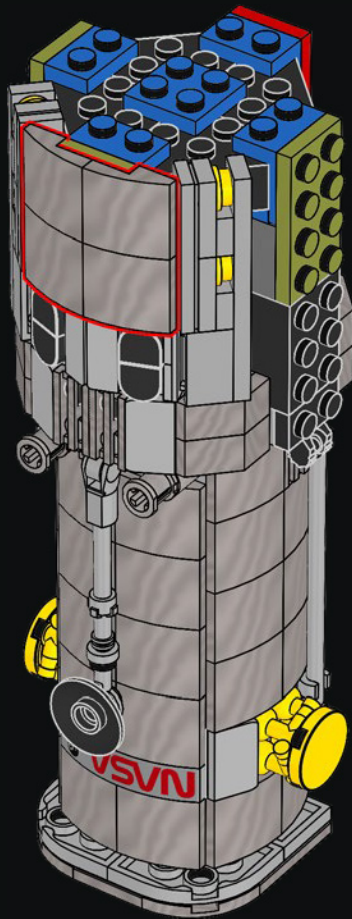
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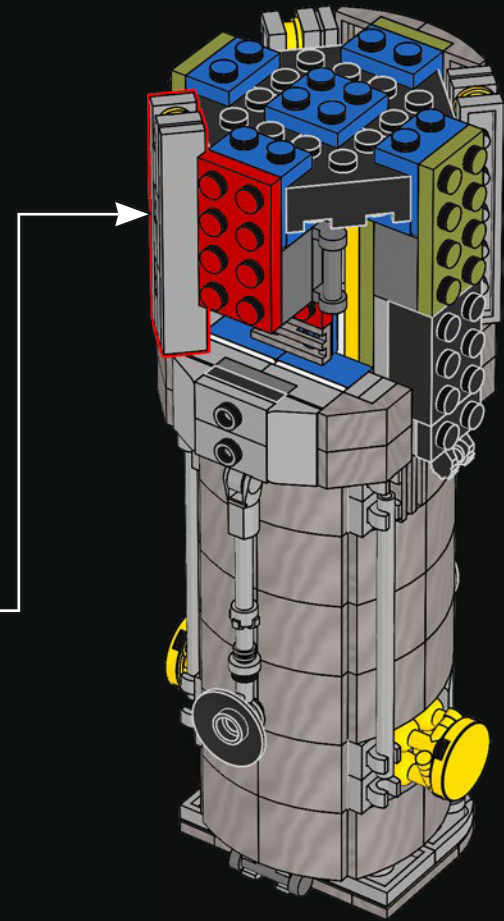
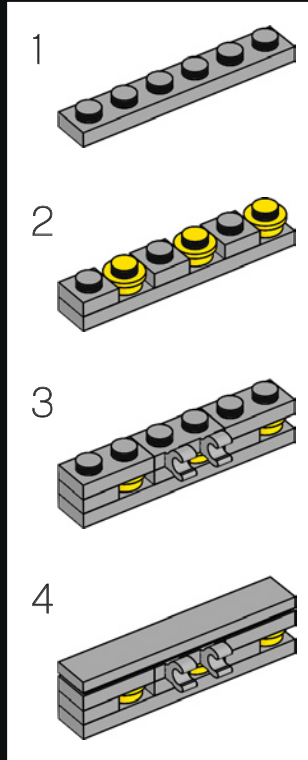


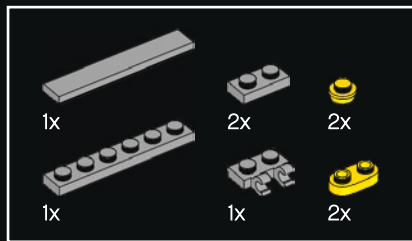


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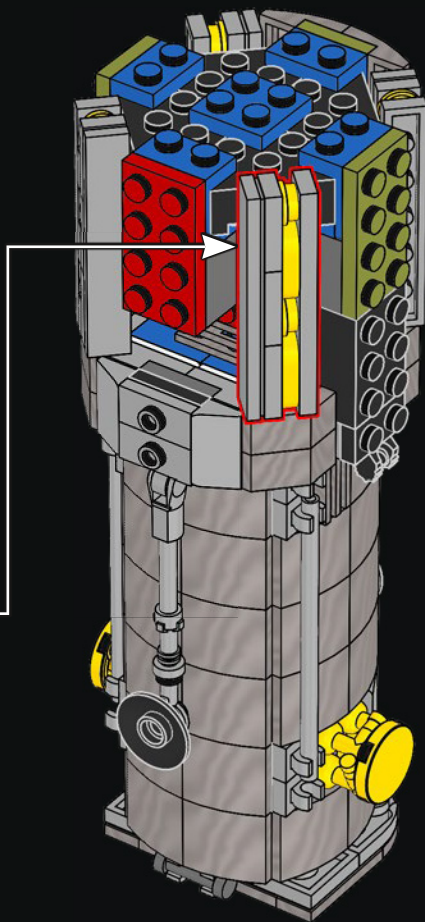
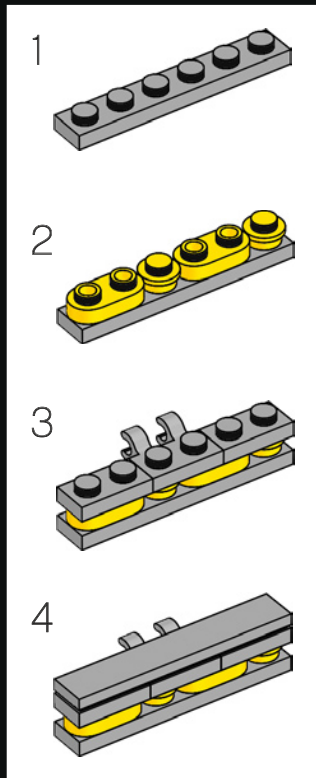


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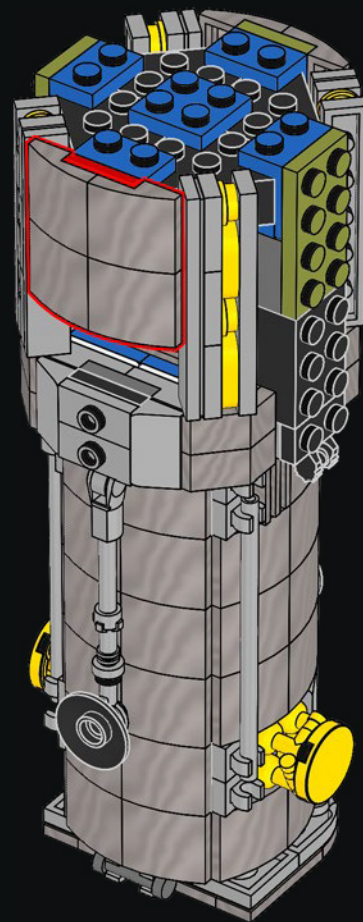


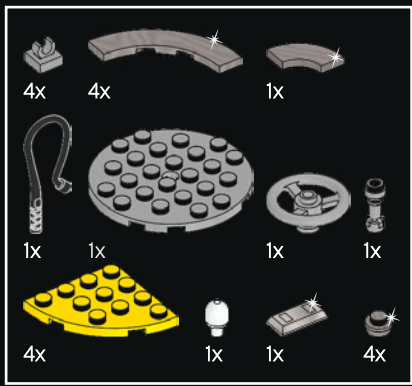


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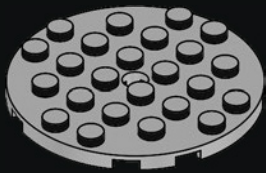
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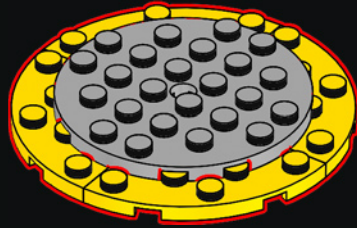


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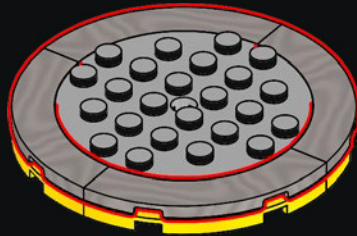
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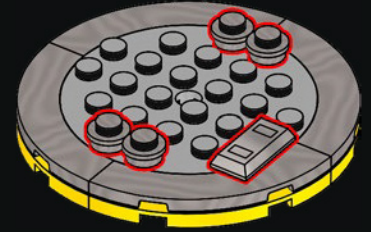
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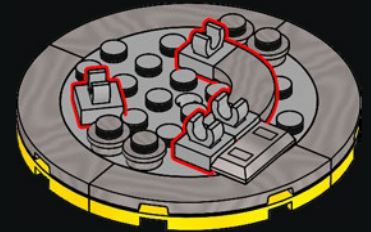
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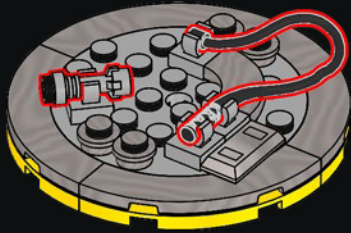
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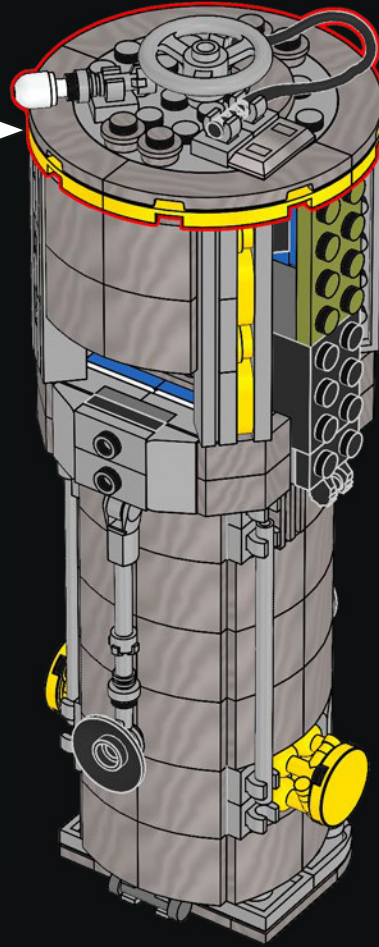
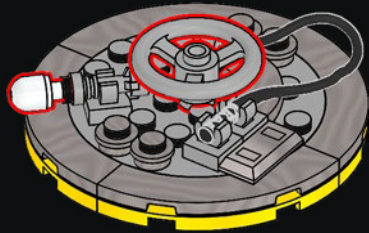
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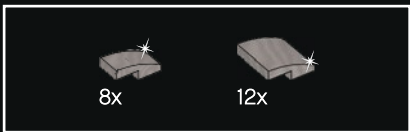


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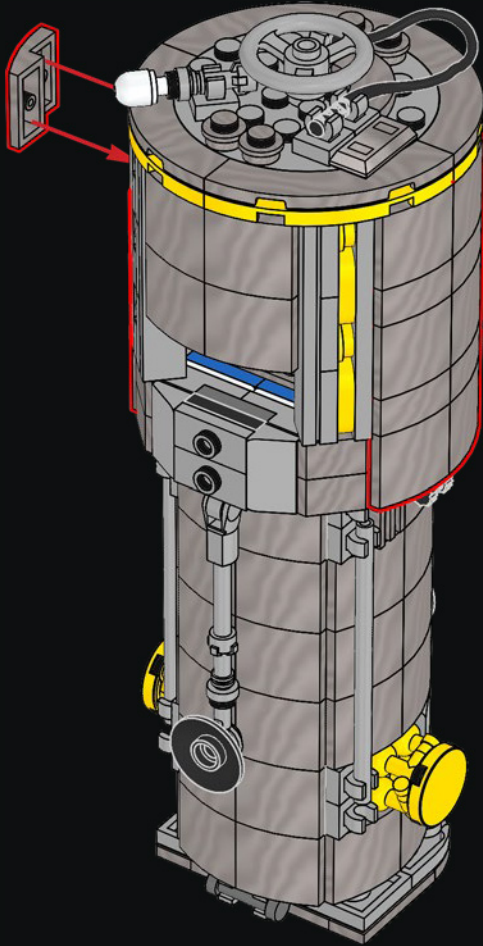


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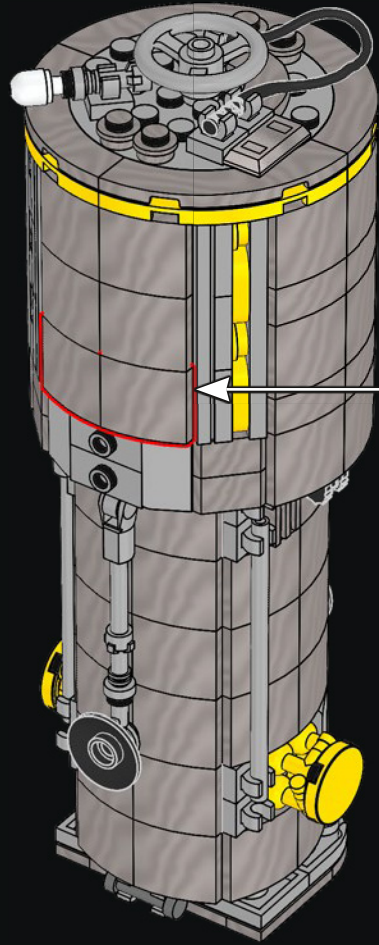
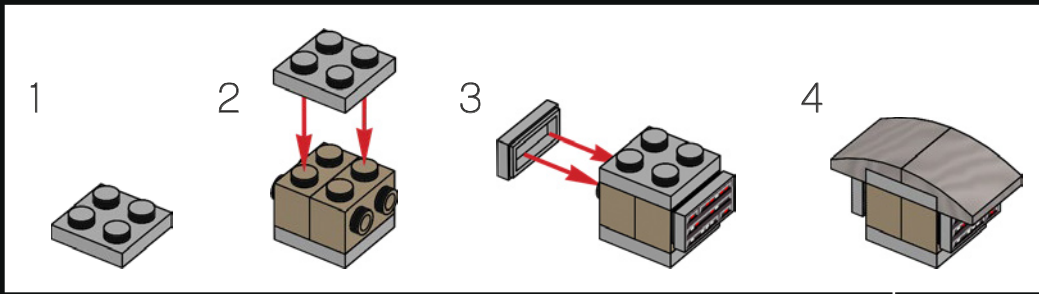
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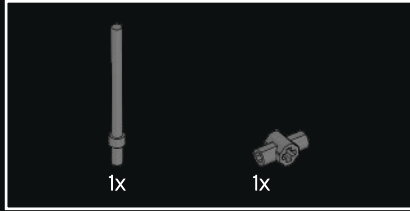
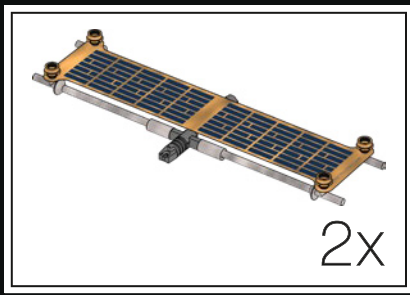




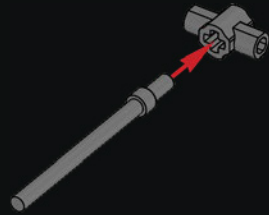


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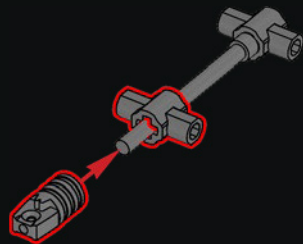




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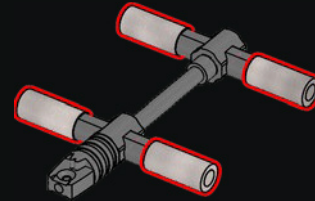
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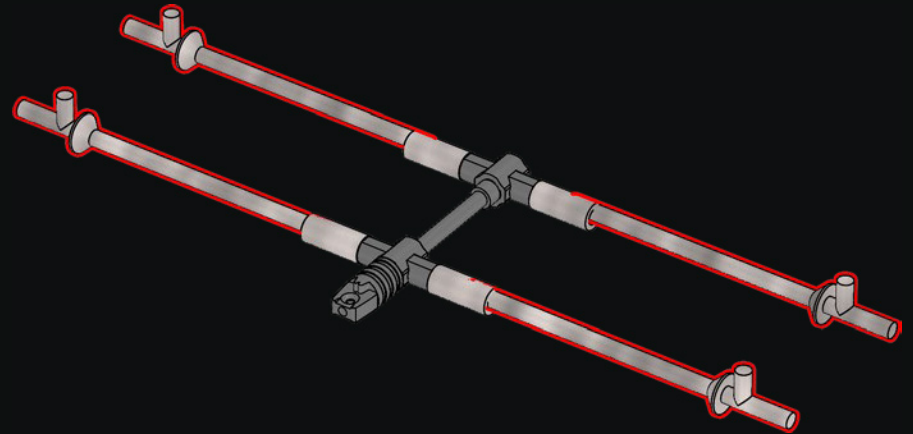
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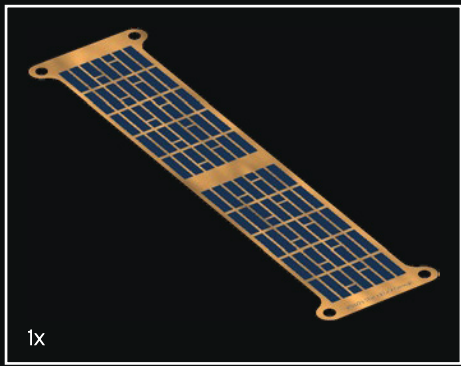


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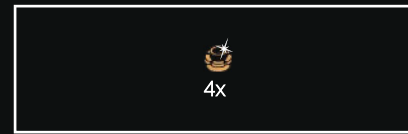
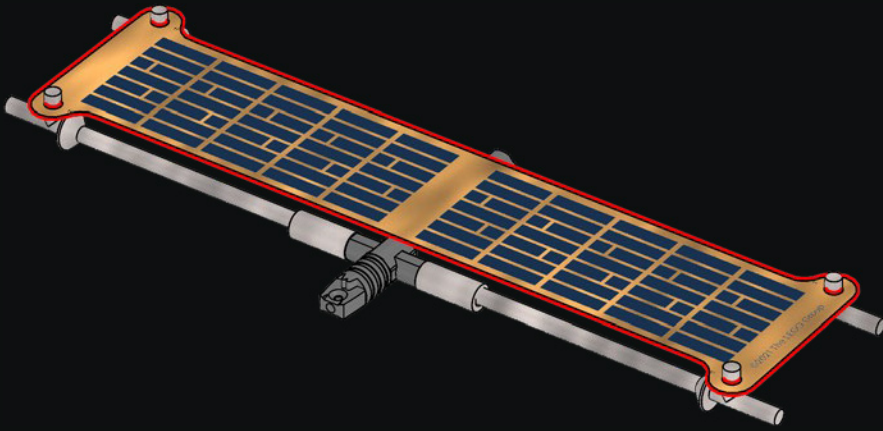


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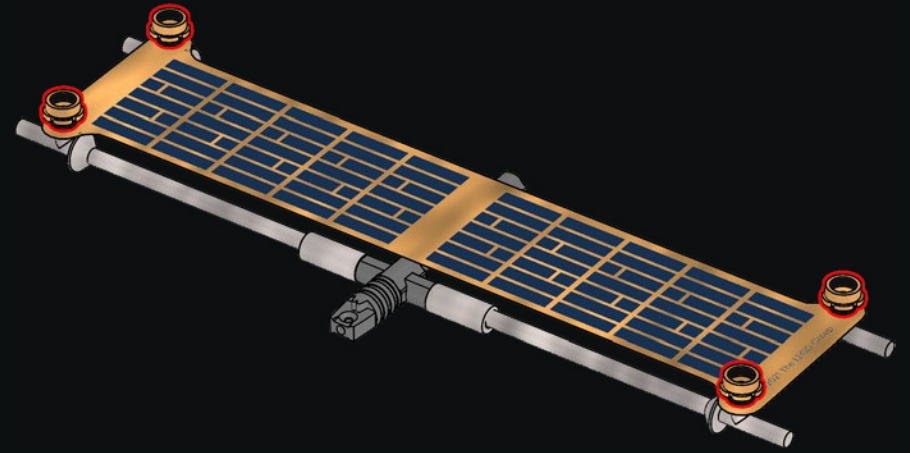




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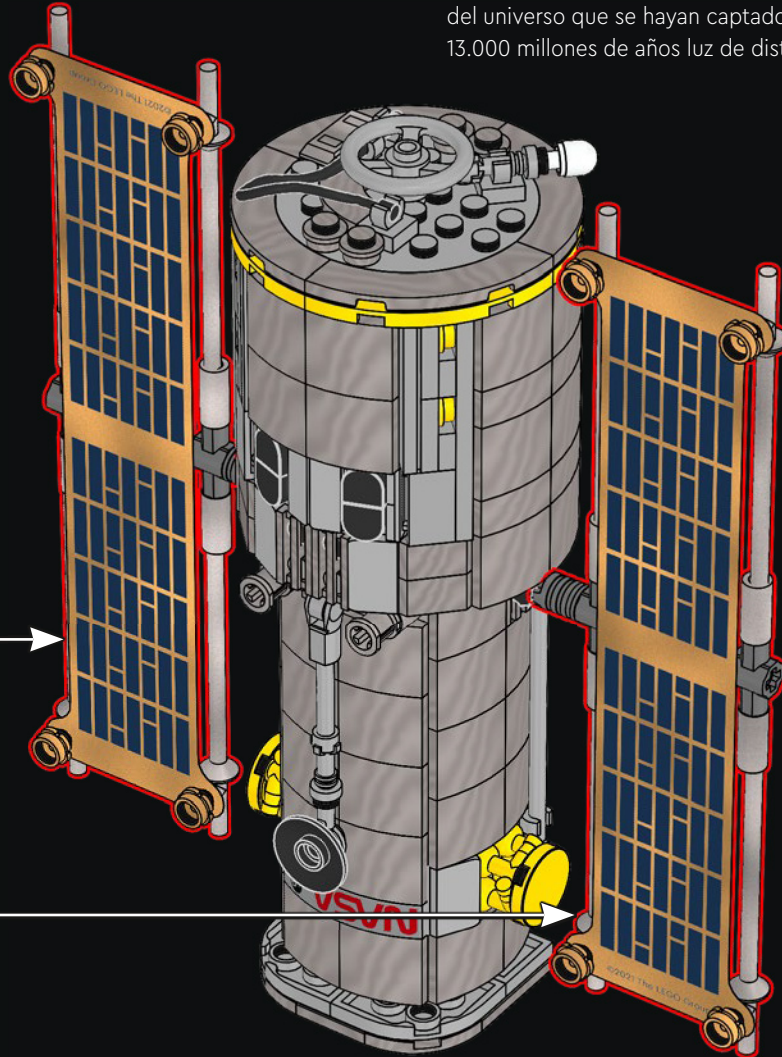
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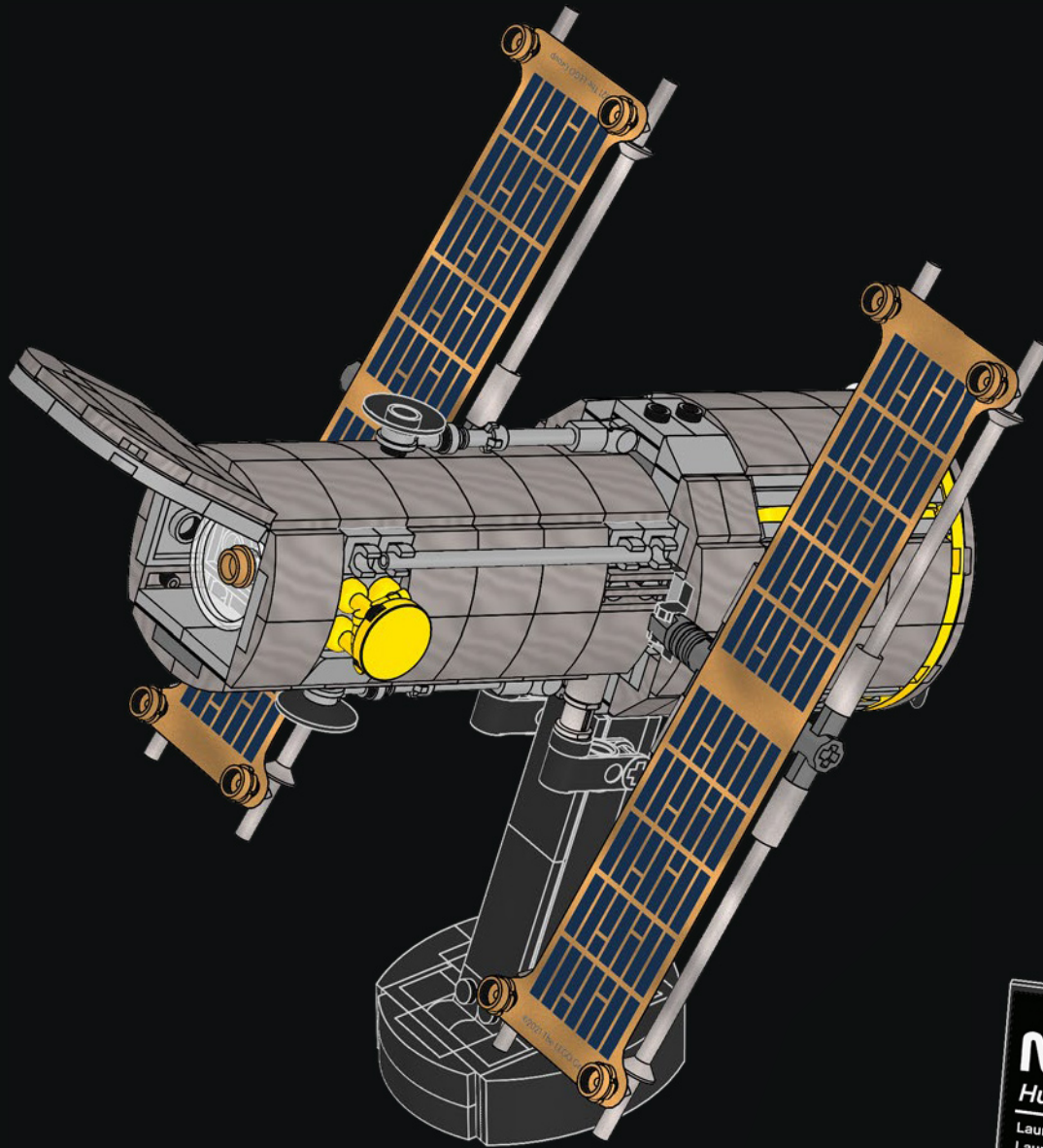


2x

**DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?**

- The Hubble Space Telescope is responsible for the deepest images of the universe ever recorded, which contain some galaxies over 13 billion light years away.
- Le télescope spatial Hubble est la source des images les plus lointaines de l'univers jamais enregistrées, dont des images de certaines galaxies à plus de 13 milliards d'années-lumière.
- El telescopio espacial Hubble es responsable de tomar las imágenes de mayor profundidad del universo que se hayan captado, mismas que contienen algunas galaxias a más de 13.000 millones de años luz de distancia.





**NASA**  **esa**  
**Hubble Space Telescope**

Launch: April 24, 1990  
Launch Mass: 24,490 lbs  
Velocity: 4.72 mi/s  
Deploy Altitude: 350 miles

## SPACE SHUTTLE DISCOVERY

● The Space Shuttle program was driven by the need for reusable spacecraft that could carry large payloads into orbit. Discovery (OV-103) was NASA's third "Orbital Vehicle" in the fleet, joining in November 1983. It would go on to complete 39 missions, fly 149 million miles (238 kilometers), complete 5,830 orbits of Earth and spend almost 365 days in space throughout its 27 years of service. The 5-day mission to deploy Hubble launched from NASA's Kennedy Space Center on April 24, 1990. The designers created the telescope to fit snugly inside the shuttle's cargo bay.

## LA NAVETTE SPATIALE DISCOVERY

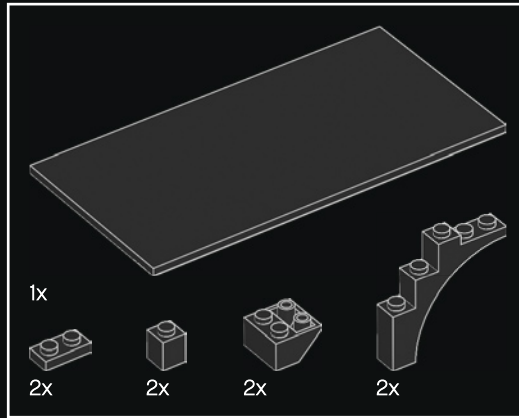
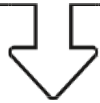
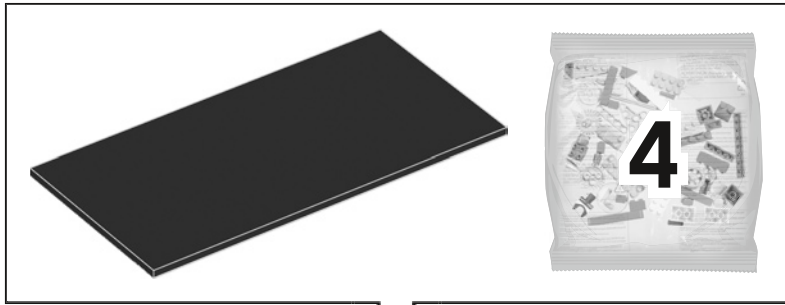
● Le programme de la navette spatiale était motivé par le besoin d'acquérir des engins spatiaux réutilisables pouvant emporter de grandes charges utiles en orbite. Discovery (OV-103) a rejoint la flotte de la NASA en novembre 1983 et en est ainsi devenu le troisième « véhicule orbital ». La navette a effectué 39 missions, parcouru 238 millions de kilomètres (149 millions de milles), effectué 5 830 orbites autour de la Terre et passé près de 365 jours dans l'espace au cours de ses 27 années de service. La mission de 5 jours pour déployer Hubble a été lancée depuis le Centre spatial Kennedy de la NASA le 24 avril 1990. Les concepteurs ont créé le télescope pour qu'il se loge parfaitement à l'intérieur de la soute de la navette.

## TRANSBORDADOR ESPACIAL DISCOVERY

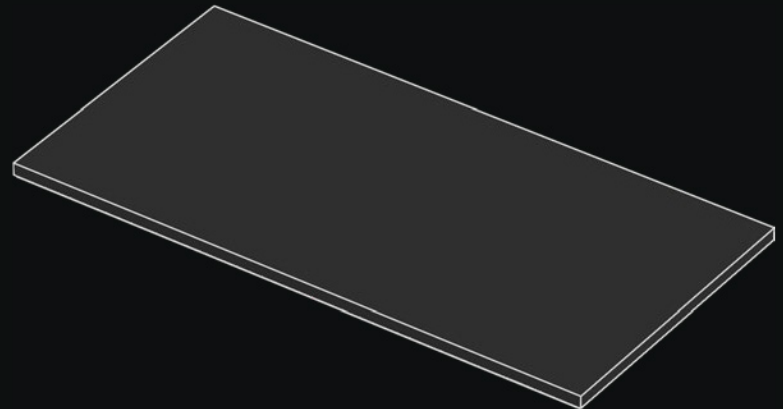
● El Programa de Transbordadores Espaciales surge por la necesidad de contar con una nave espacial reutilizable que pudiera transportar y poner en órbita grandes cargas útiles. El Discovery (OV-103) fue el tercer vehículo orbital de la flota de la NASA, a la que se incorporó en noviembre de 1983. Llegó a realizar 39 misiones, recorrió 238 millones de kilómetros, completó 5830 órbitas alrededor de la Tierra y pasó casi 365 días en el espacio a lo largo de sus 27 años de servicio. La misión de 5 días encargada de desplegar el Hubble partió del Centro Espacial Kennedy de la NASA el 24 de abril de 1990. Los diseñadores crearon el telescopio para que se ajustara con precisión a las dimensiones de la bodega de carga del transbordador.







1

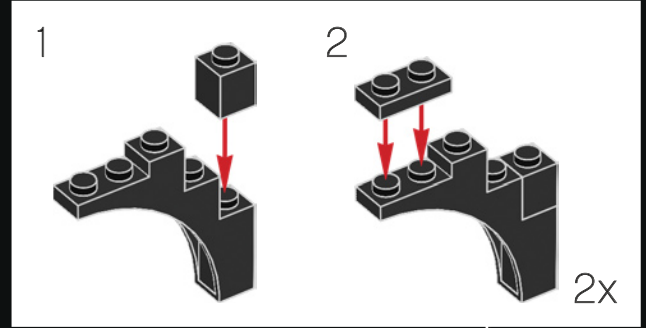
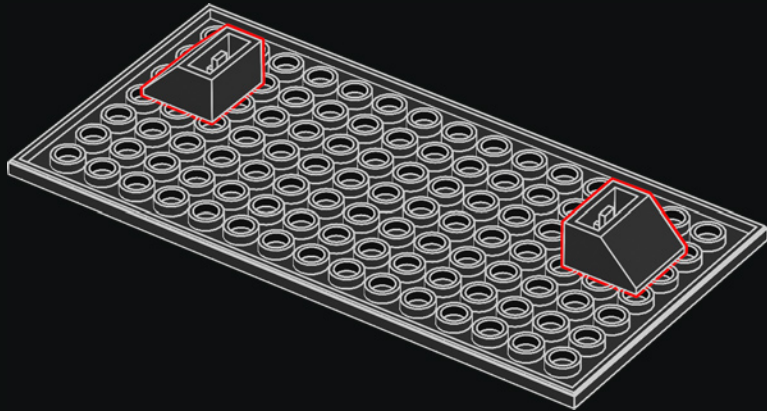




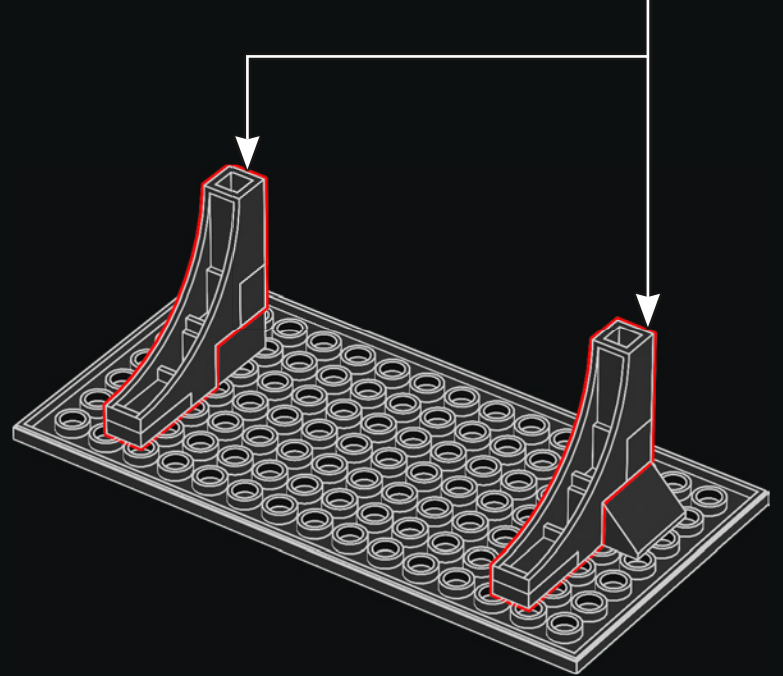
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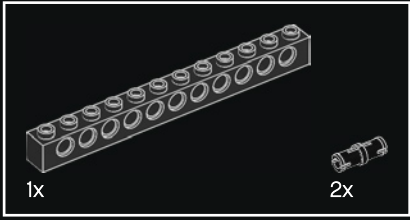
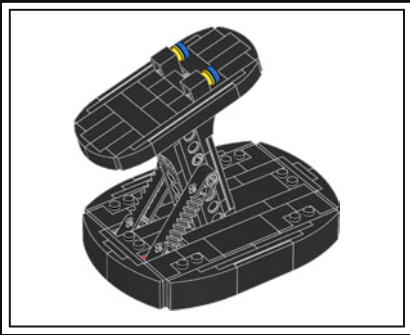


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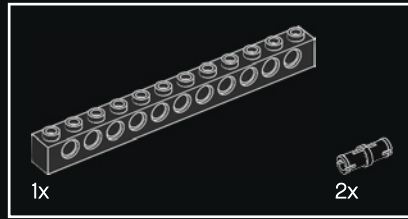
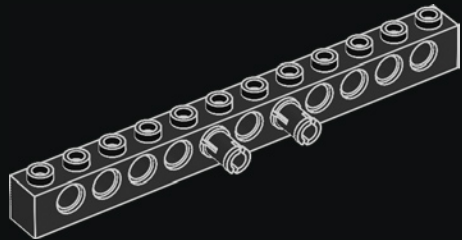


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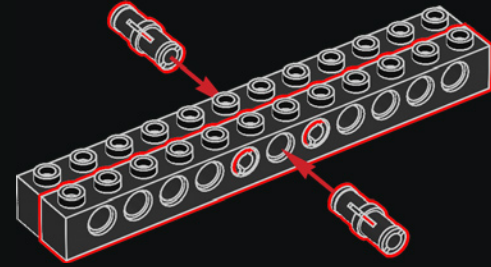




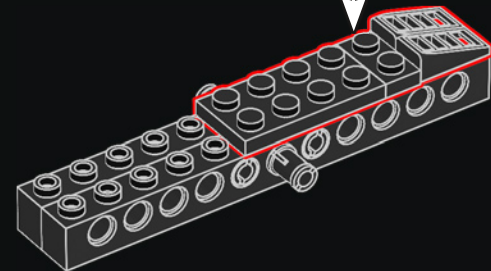
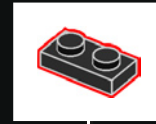
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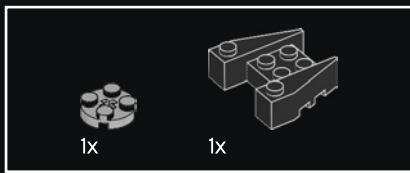


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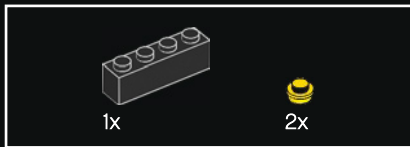
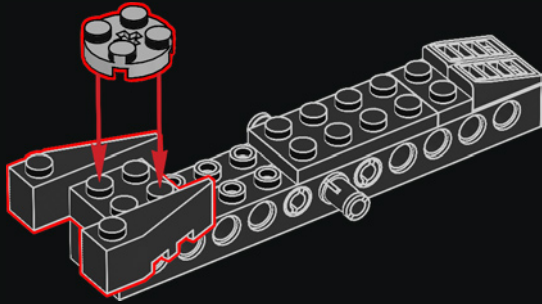


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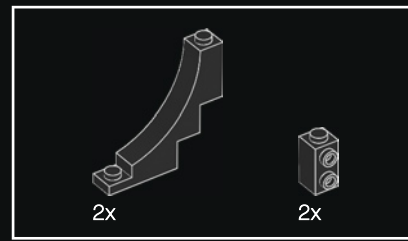
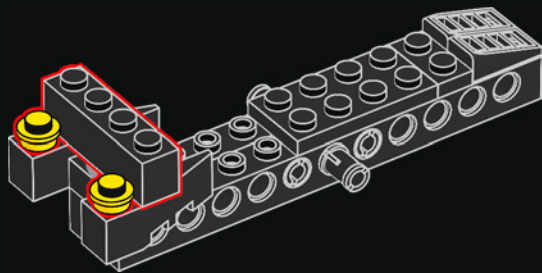




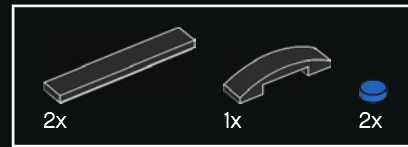
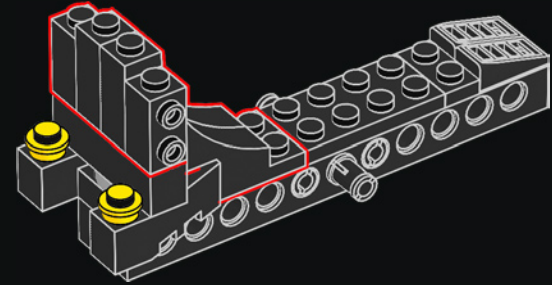
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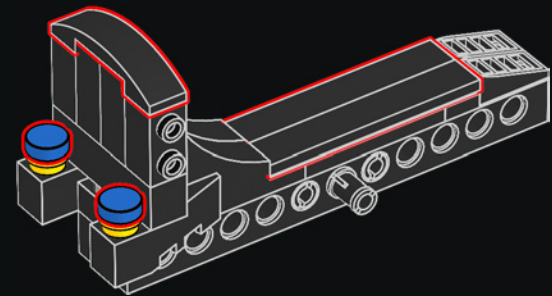
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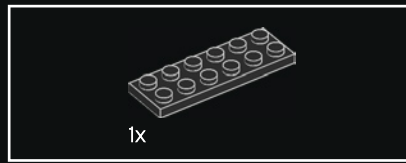
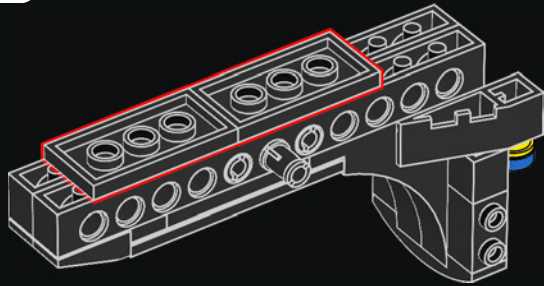


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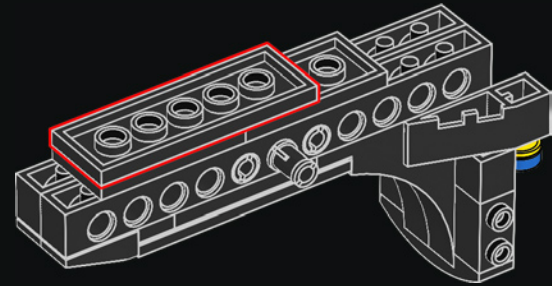


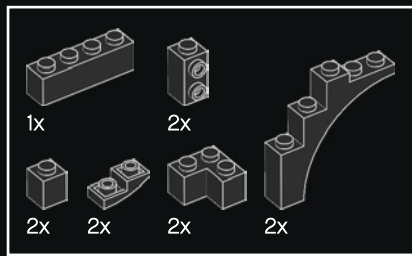


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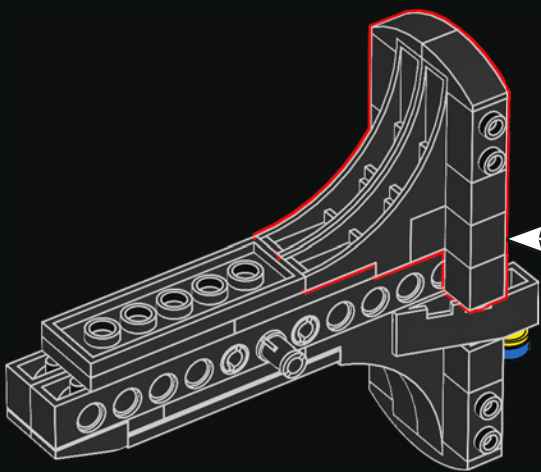
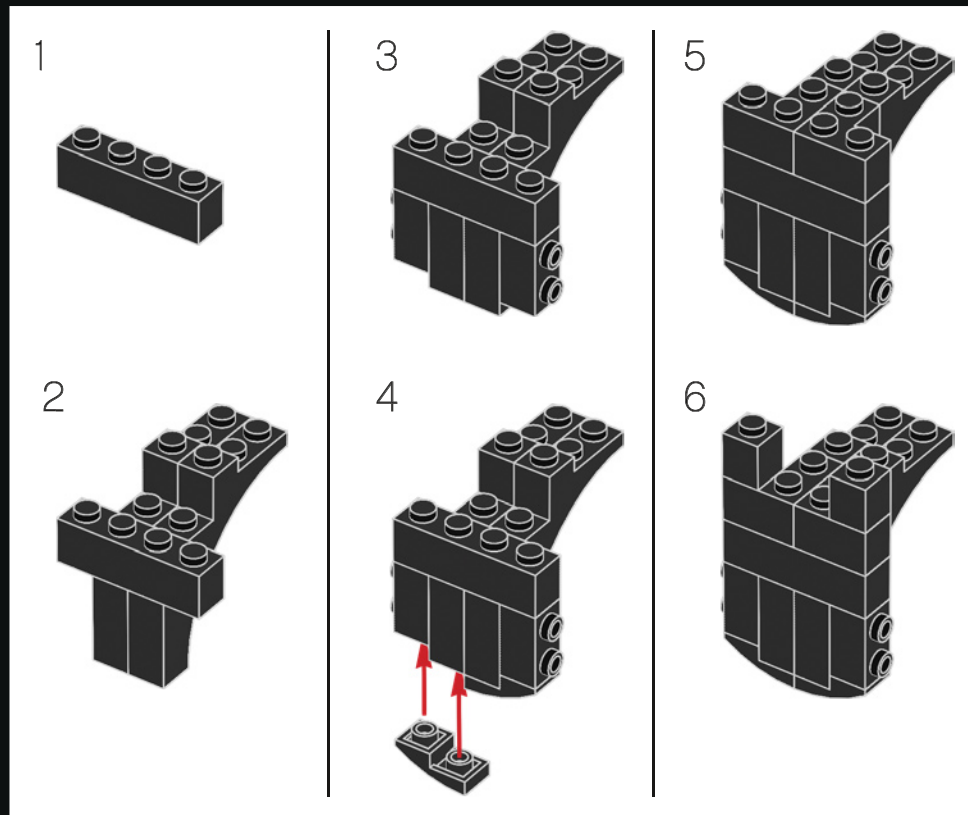


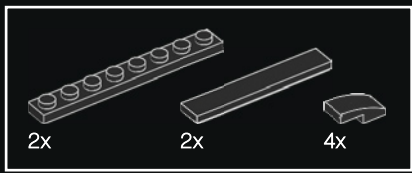
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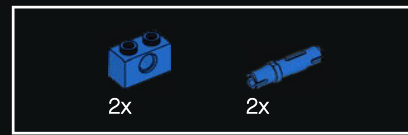
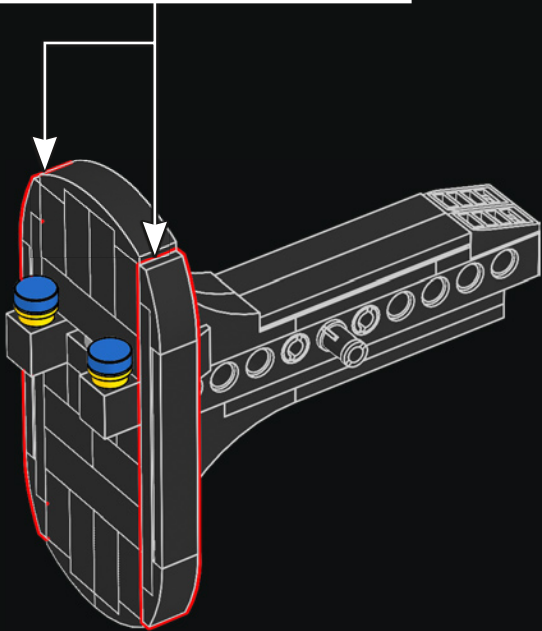
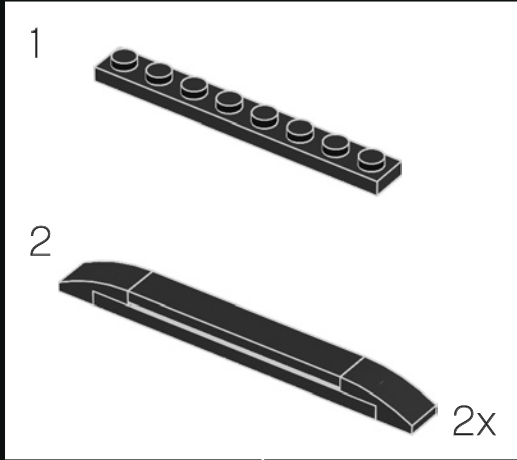


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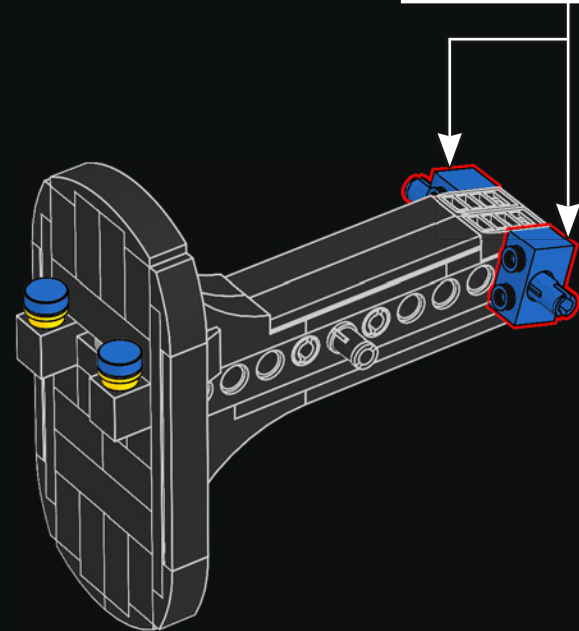
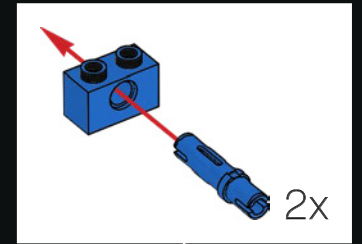


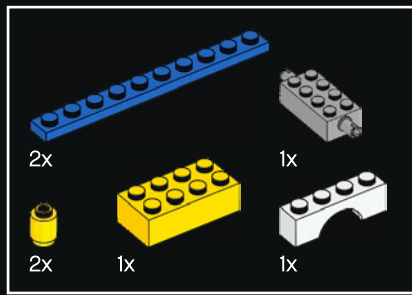


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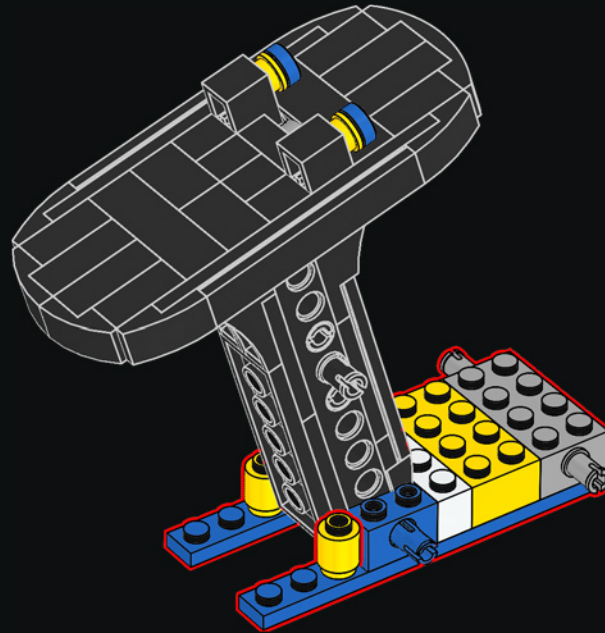
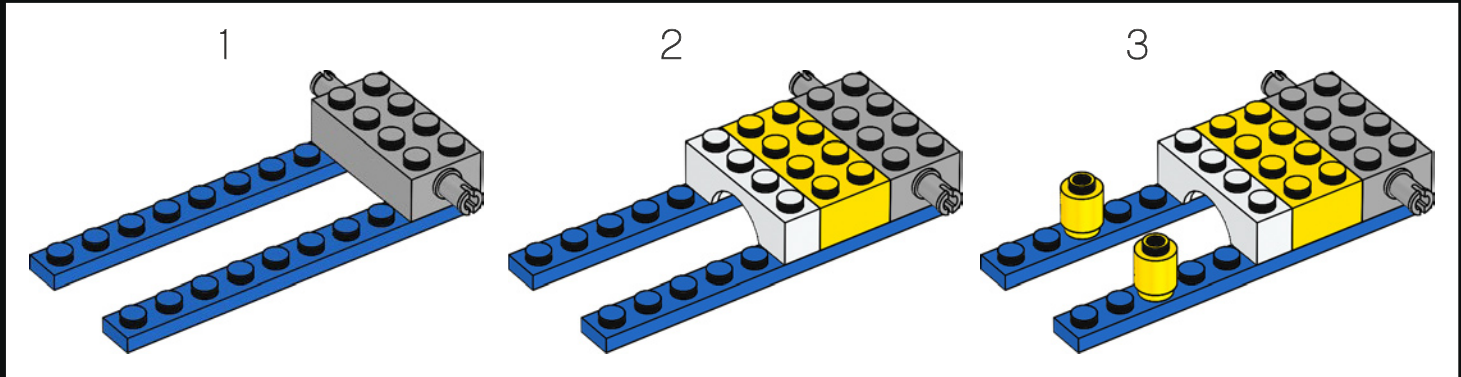


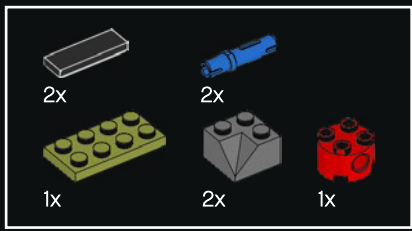
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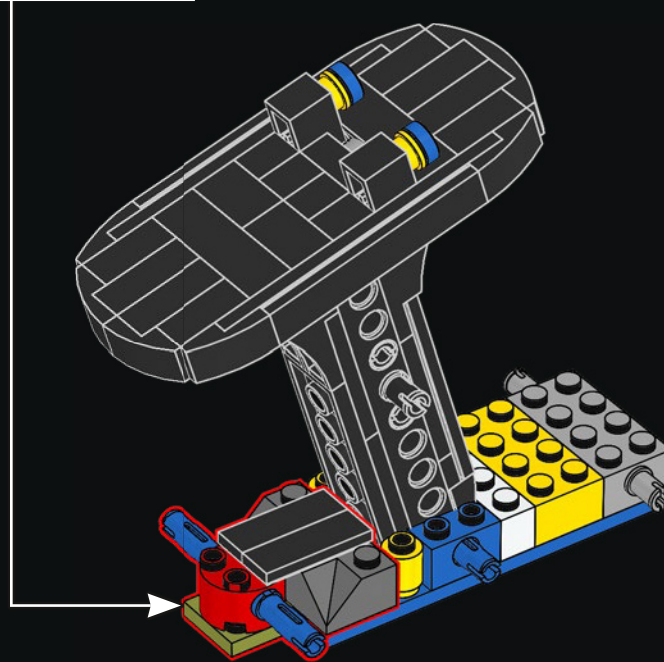
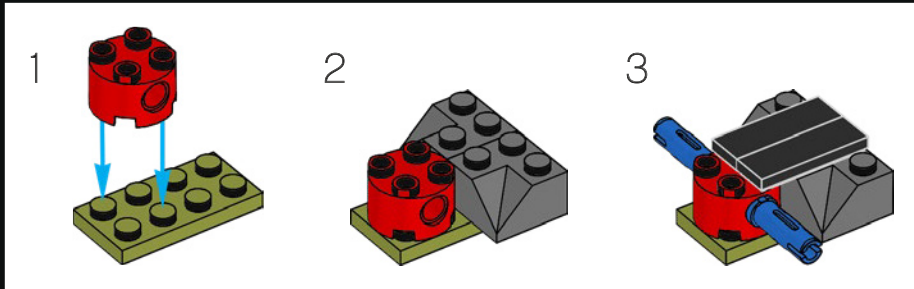


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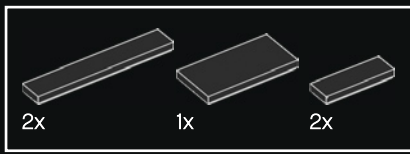




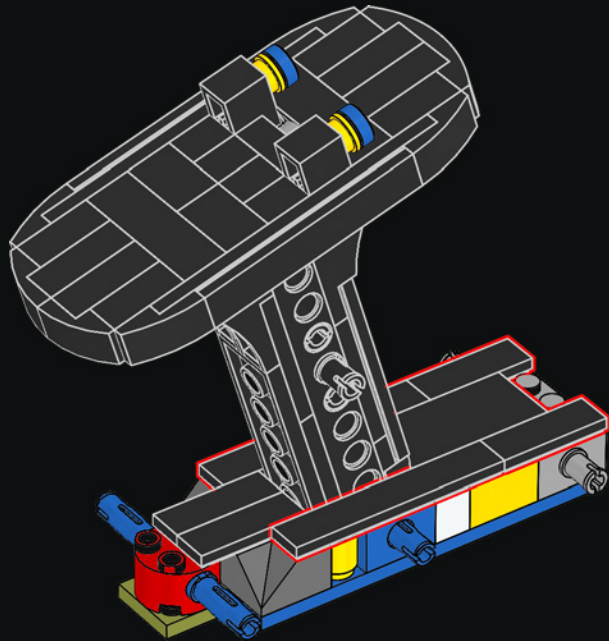
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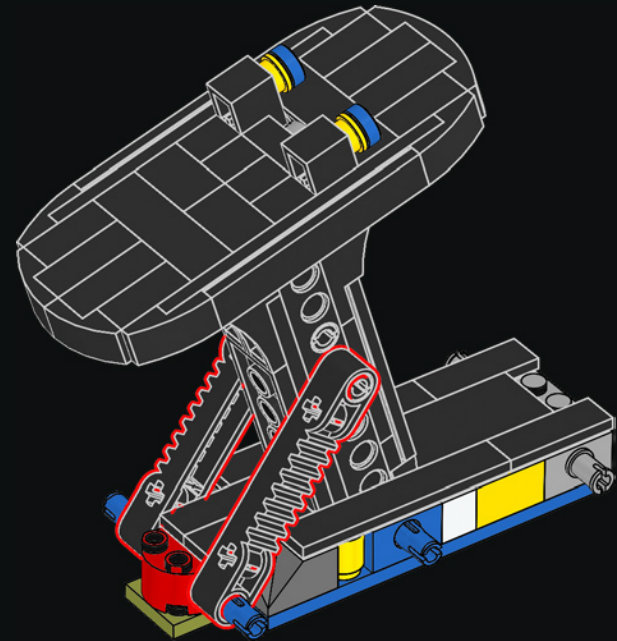


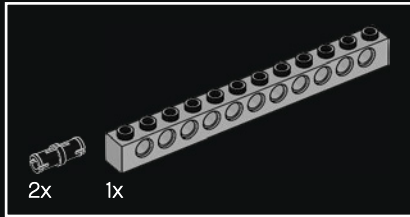
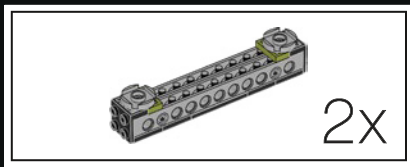


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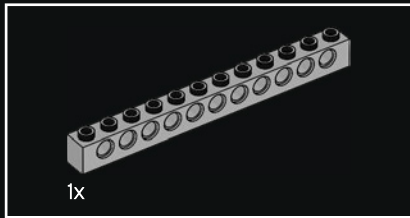
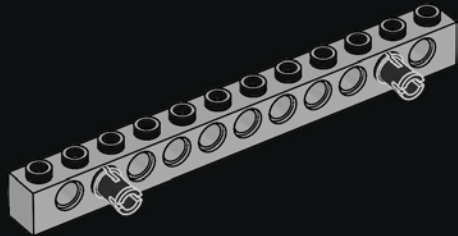


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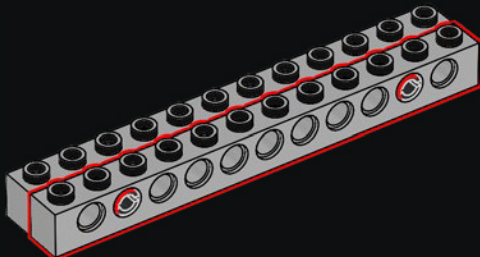




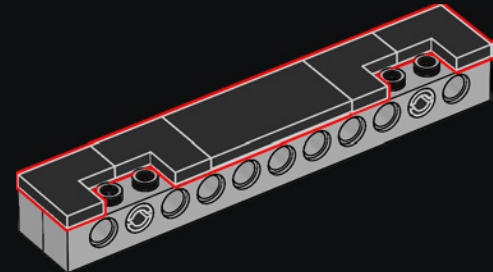
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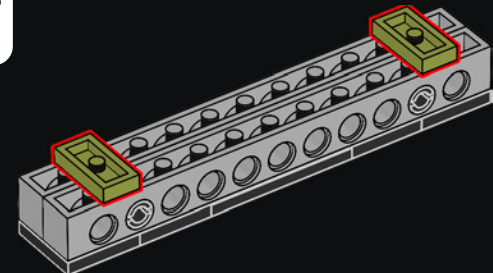
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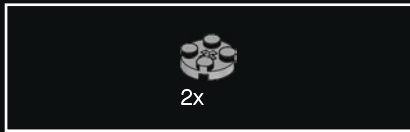
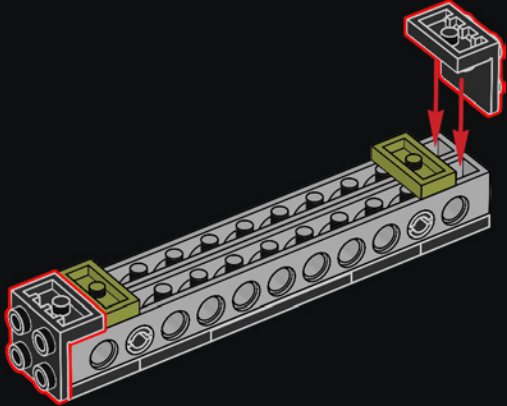


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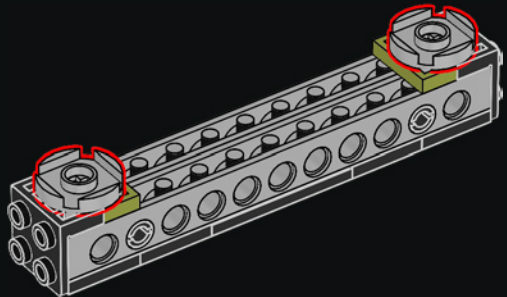




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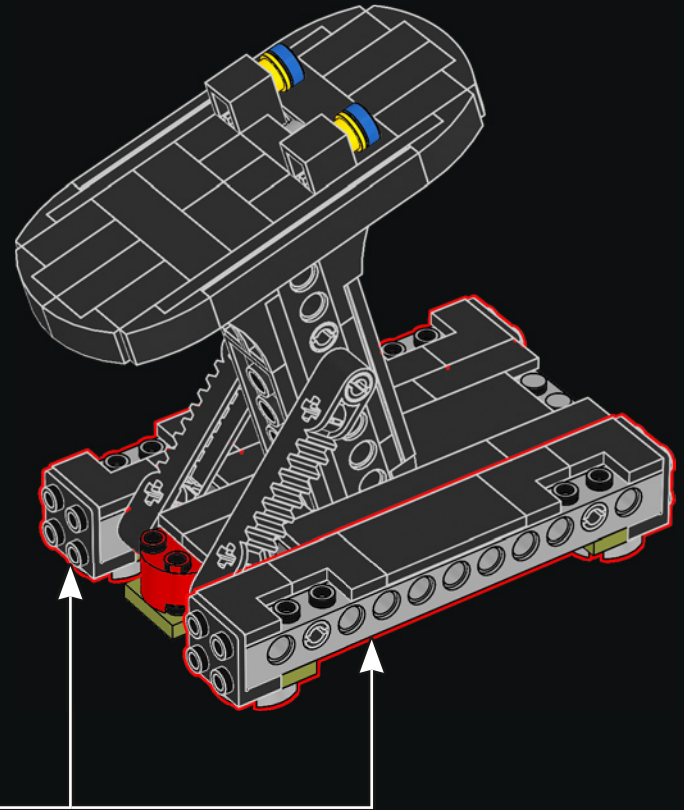


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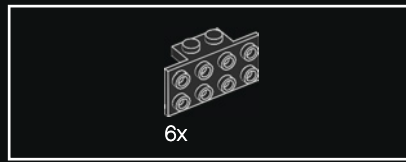
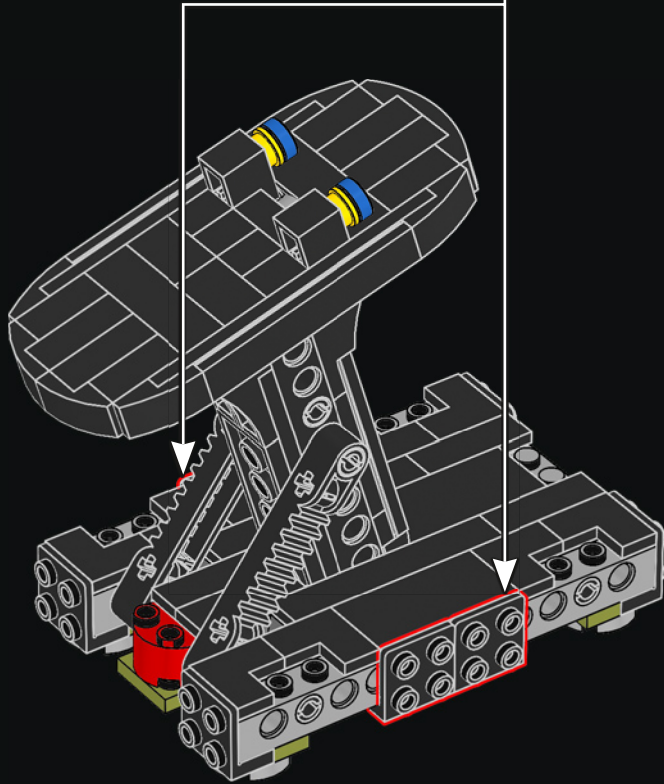
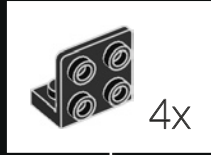
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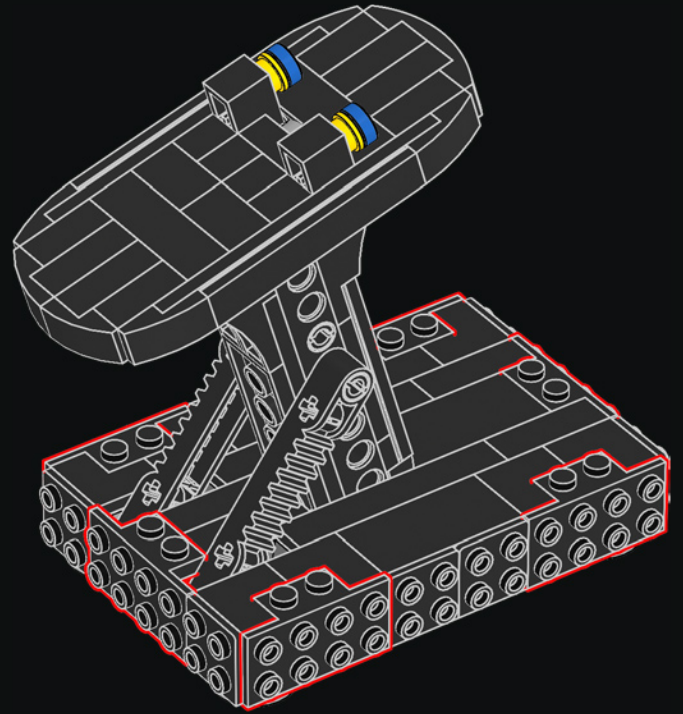


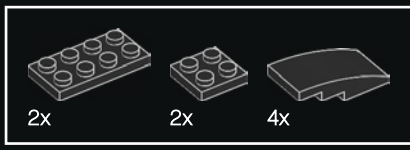


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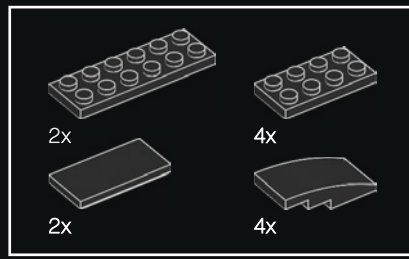
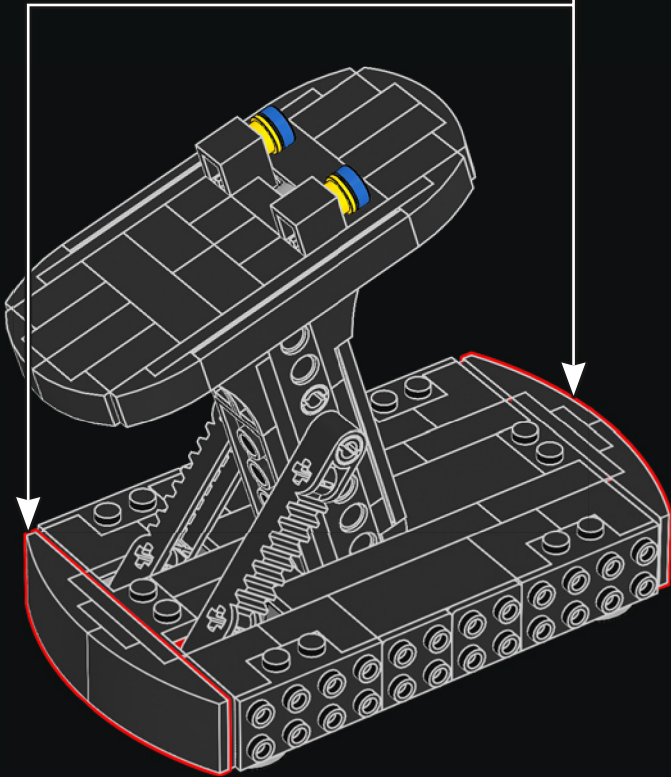
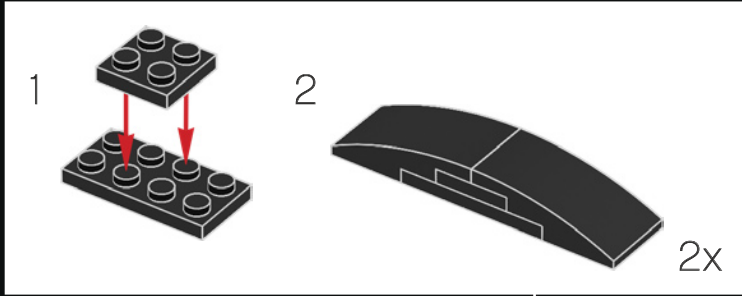


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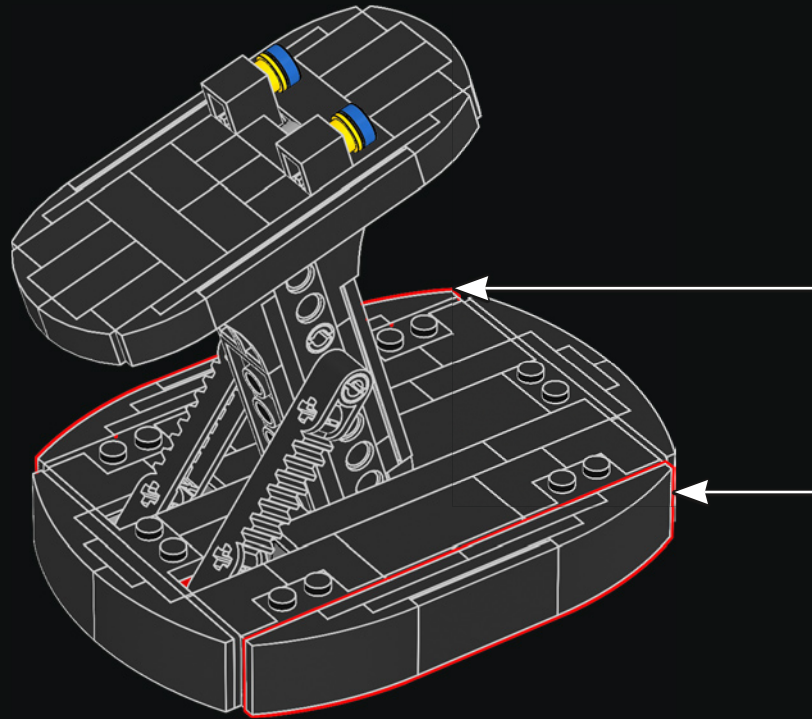
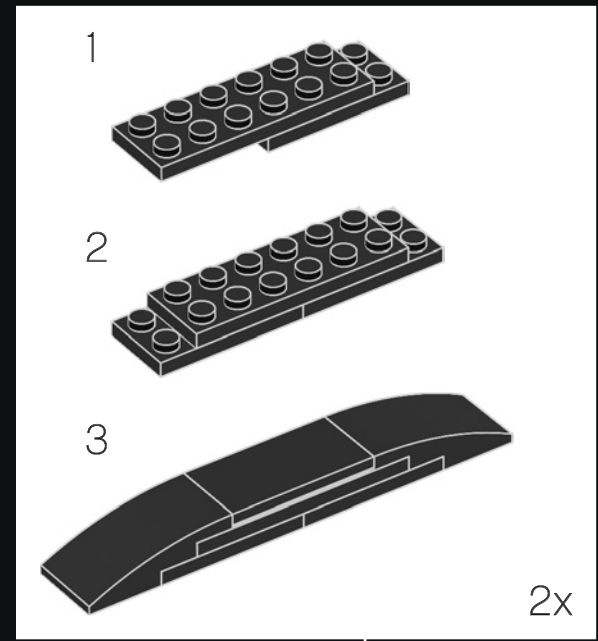


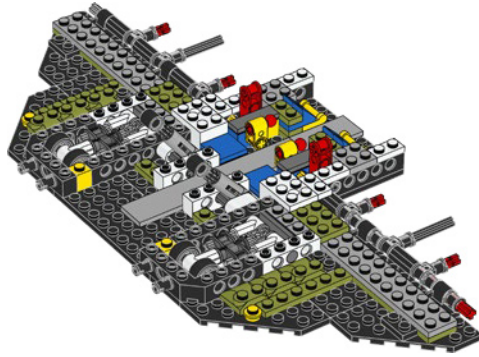


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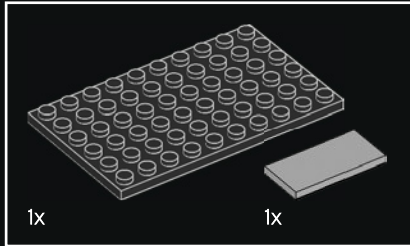
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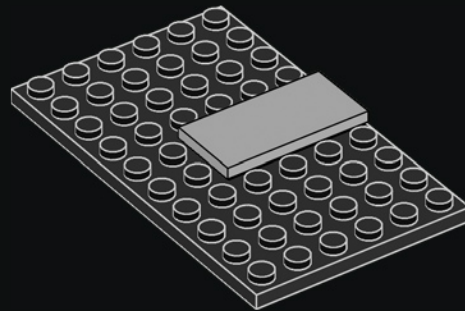


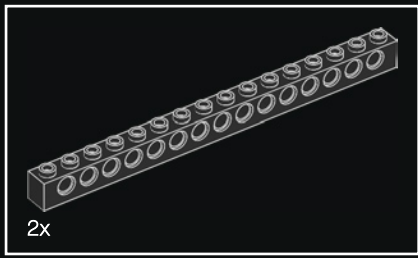
## DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

- Discovery carried 222 people throughout its time in service, the highest number of any shuttle.
- Discovery a transporté 222 personnes au cours de son service, le plus grand nombre de toutes les navettes.
- El Discovery transportó a 222 personas durante su tiempo de servicio, una cifra que ningún transbordador ha igualado.

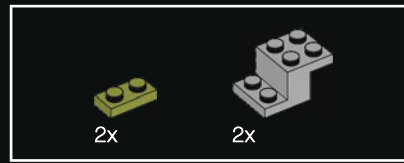
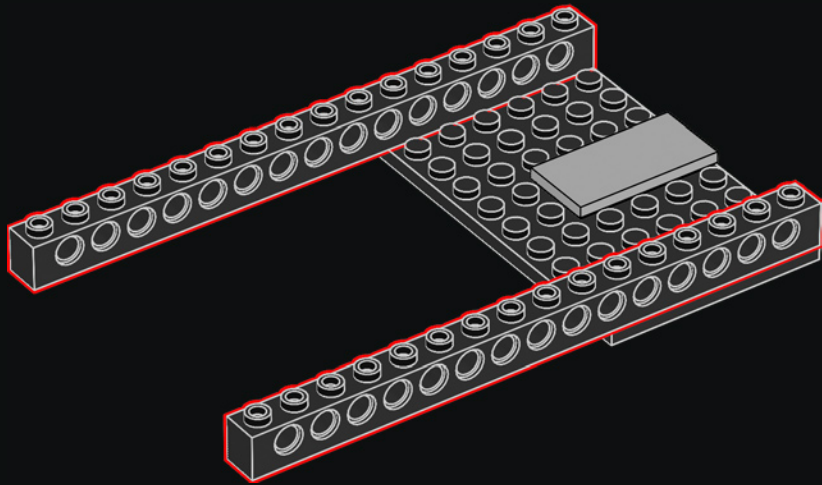


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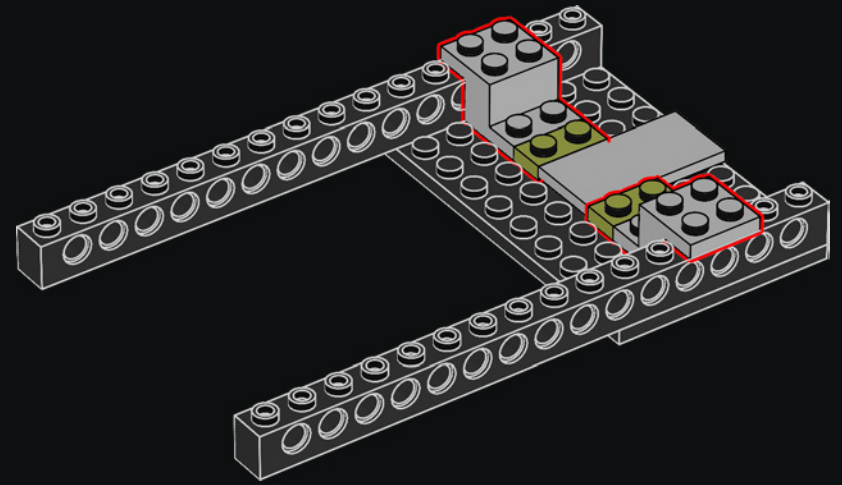




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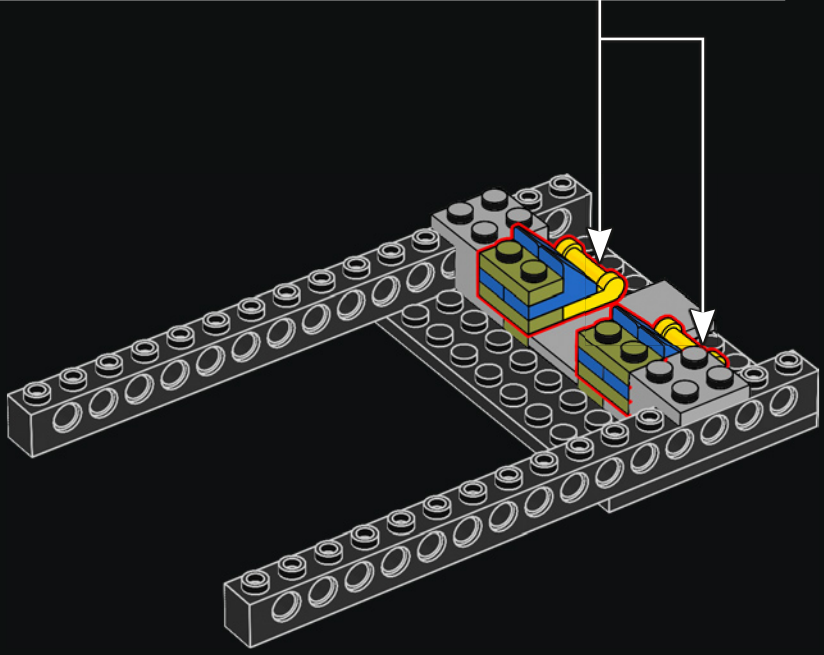
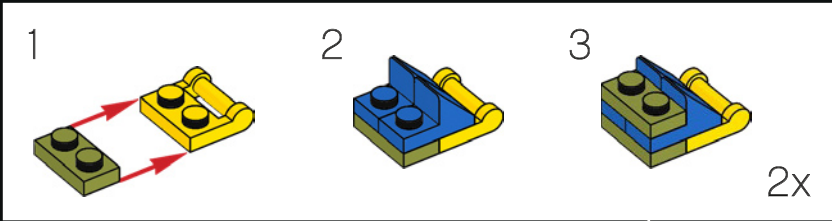


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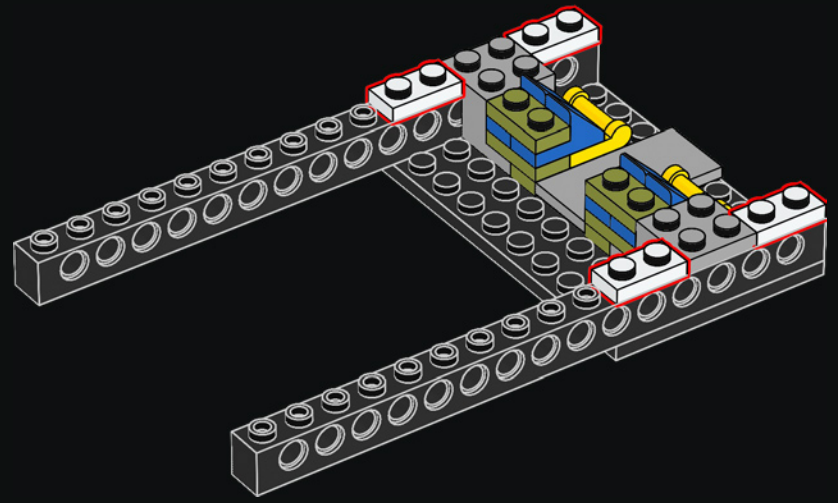




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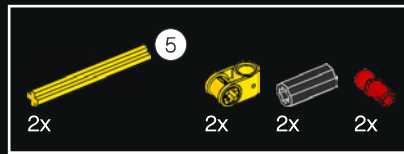
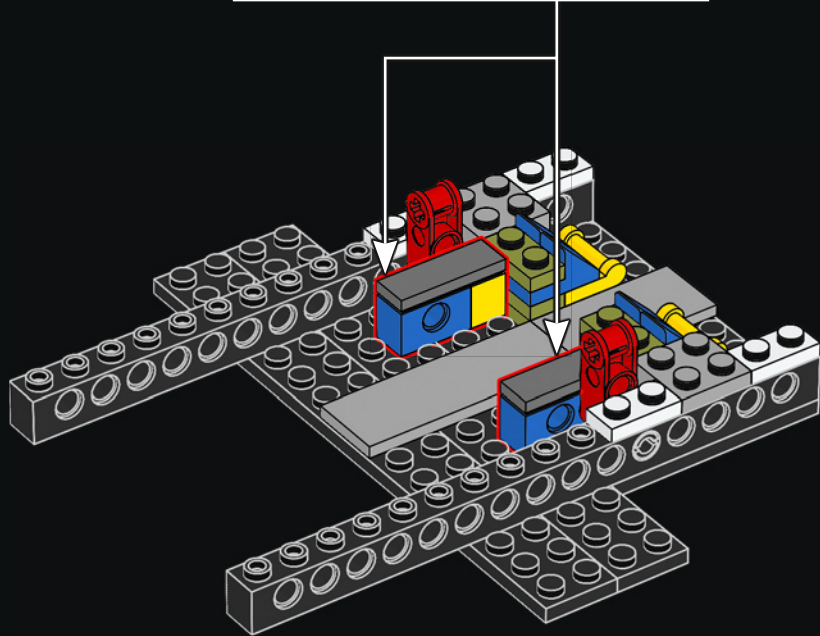
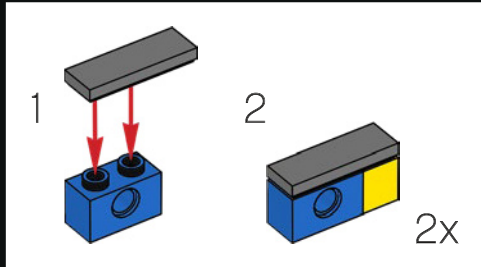




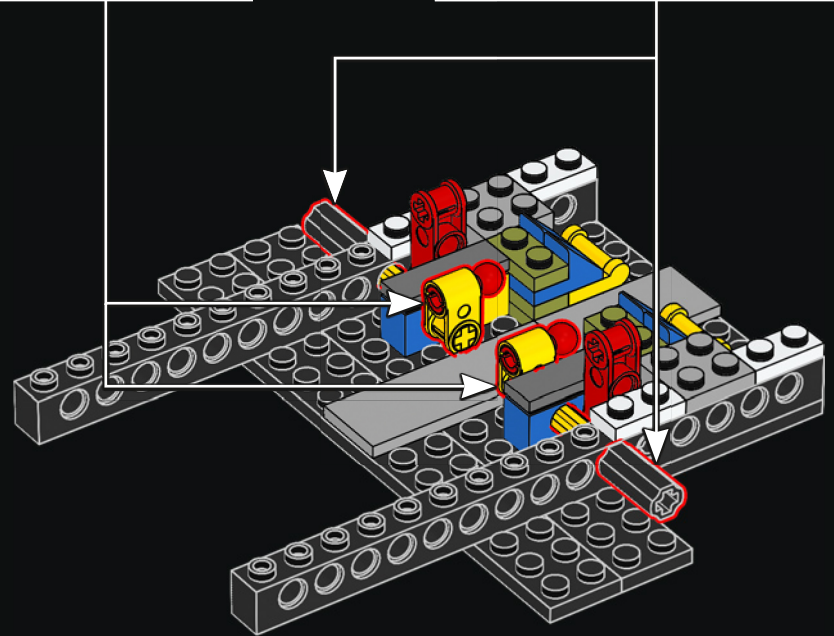
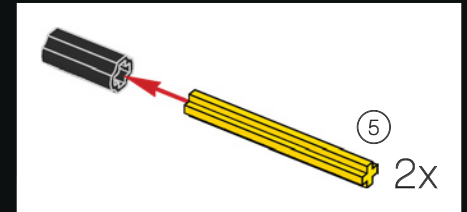
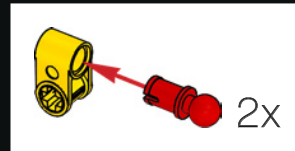




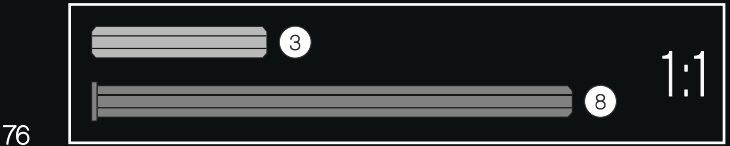
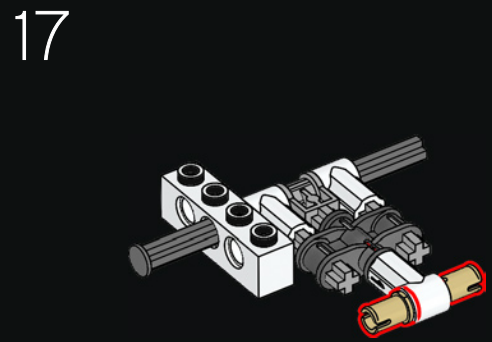
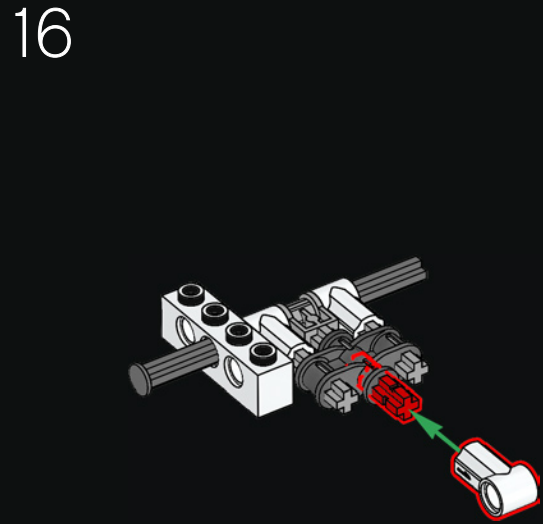
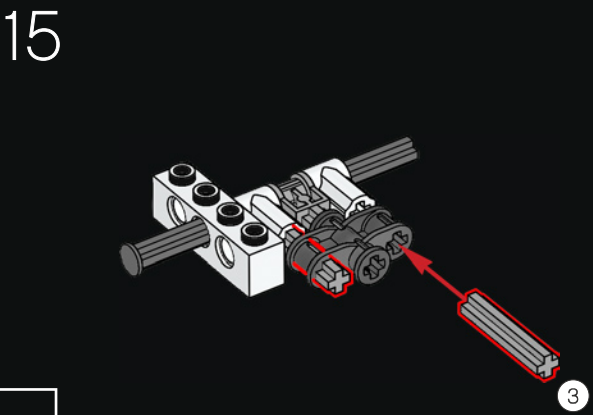
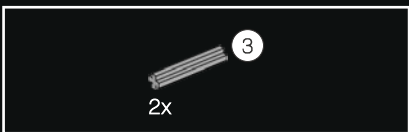
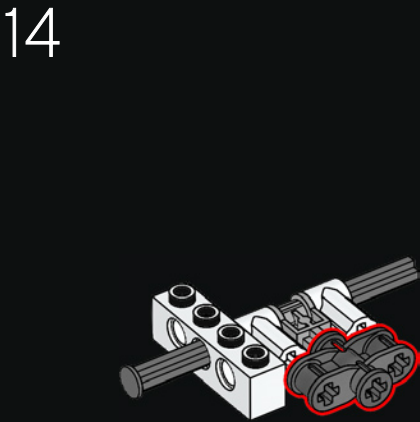
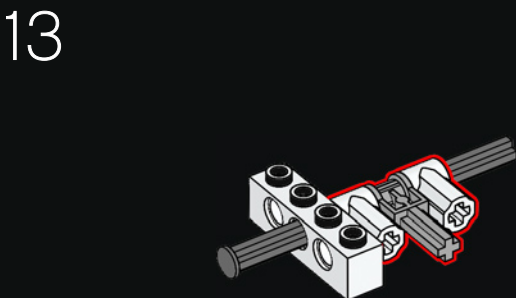
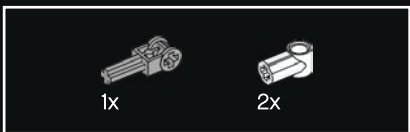
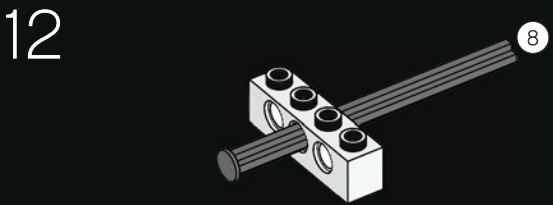
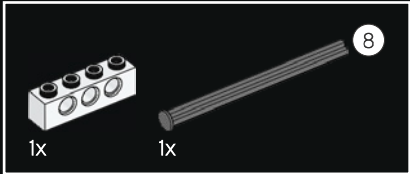
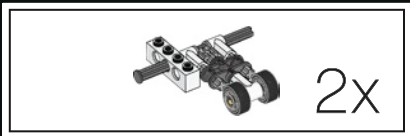
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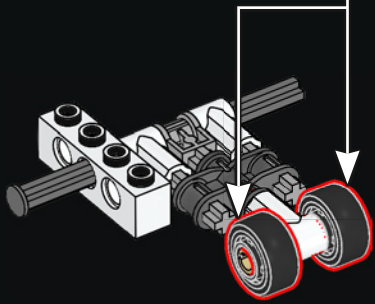
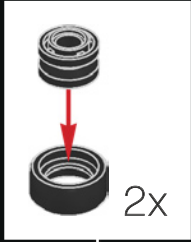




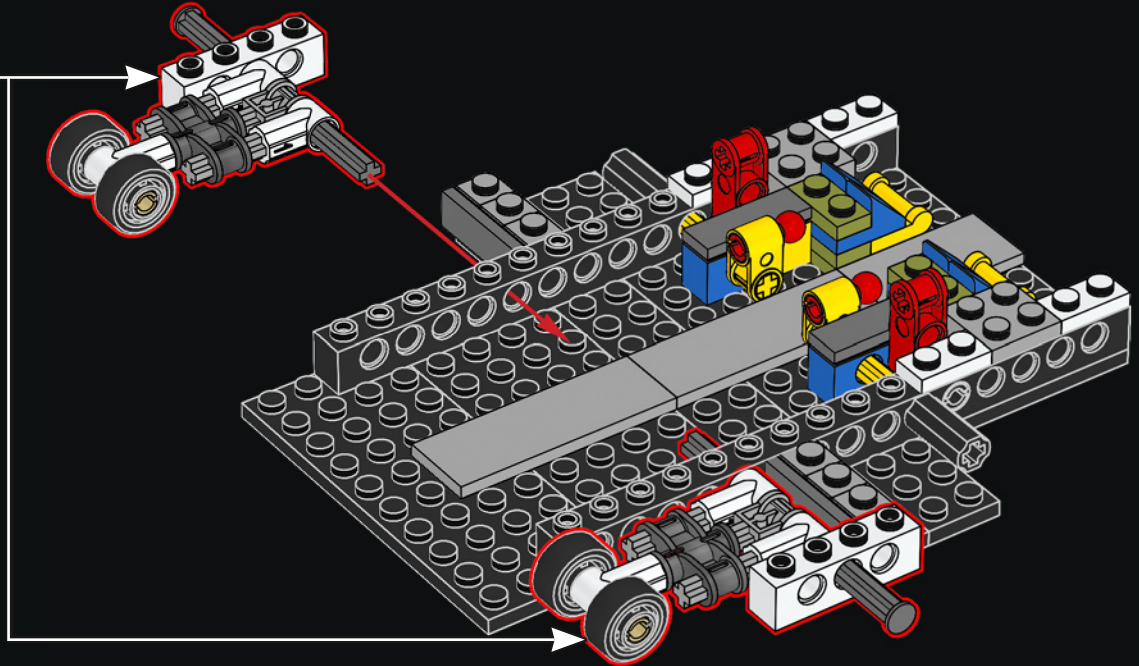




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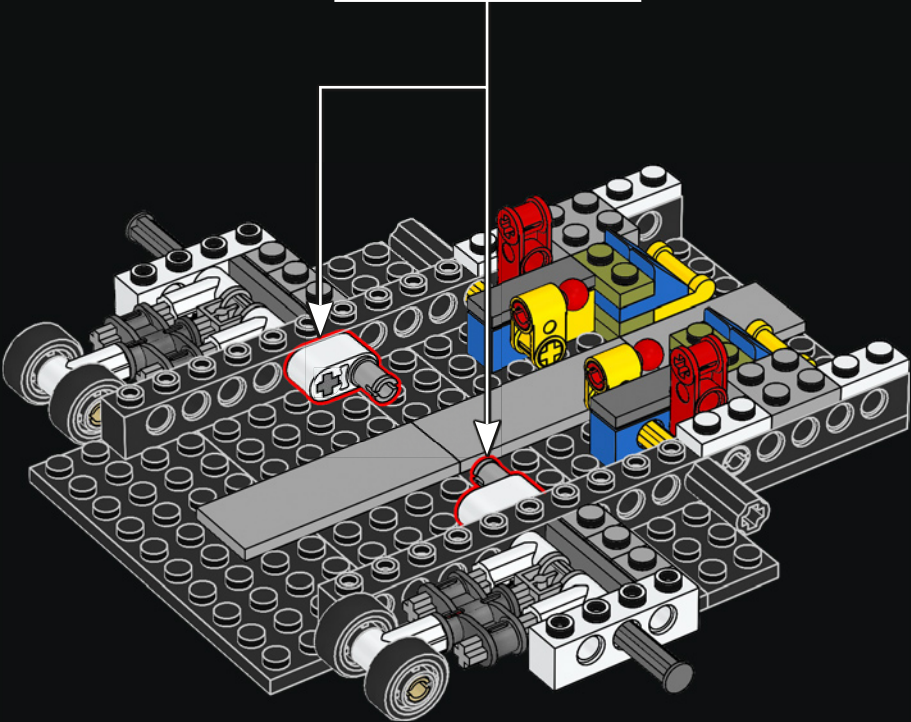
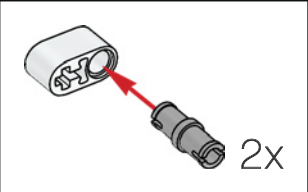


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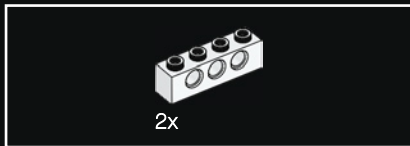
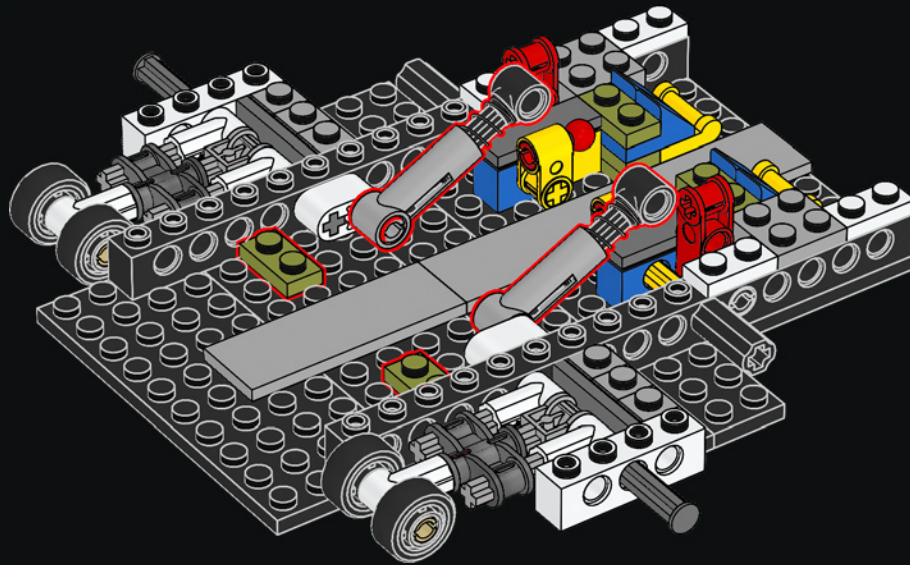


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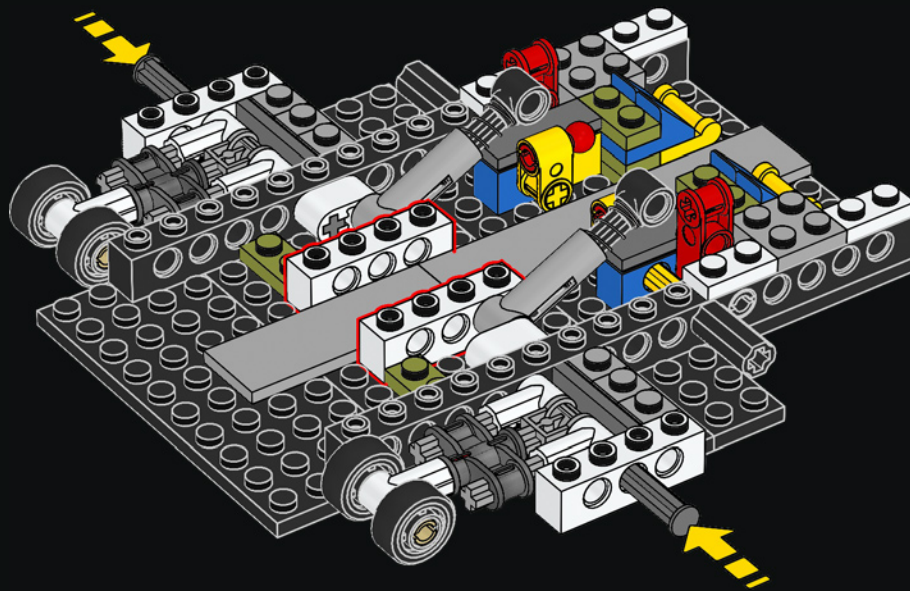


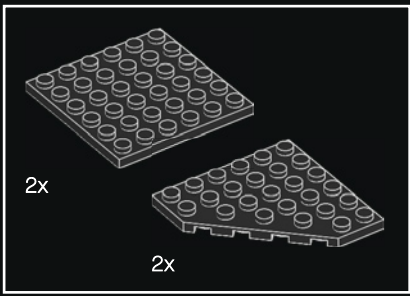


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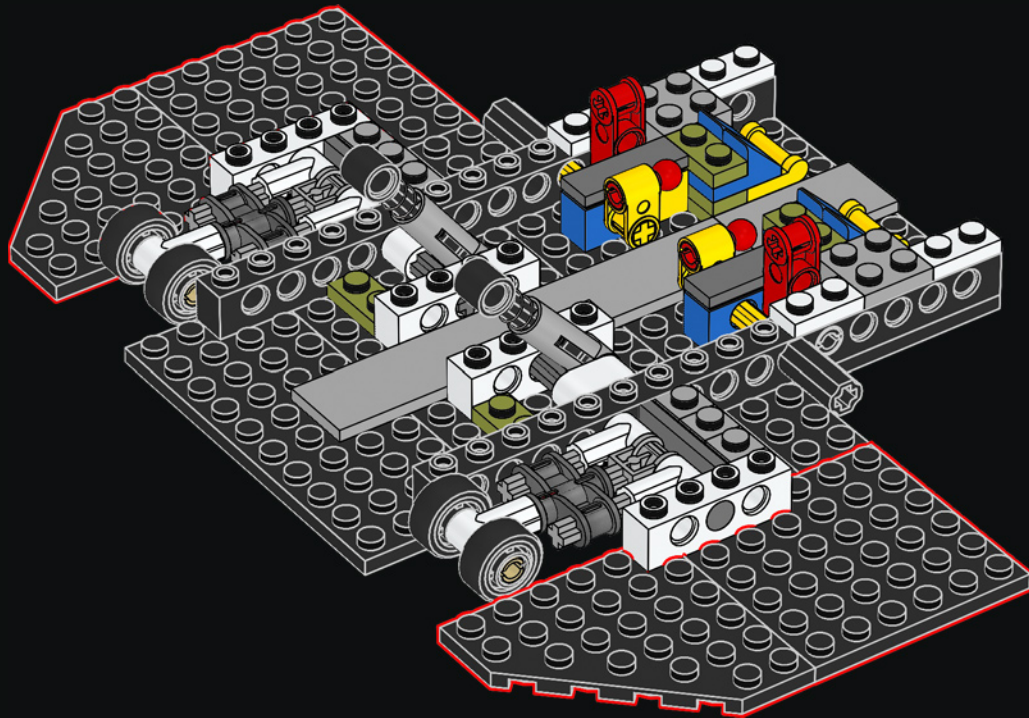


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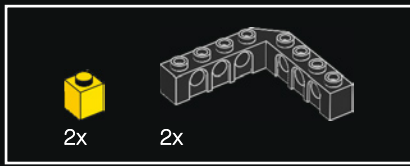




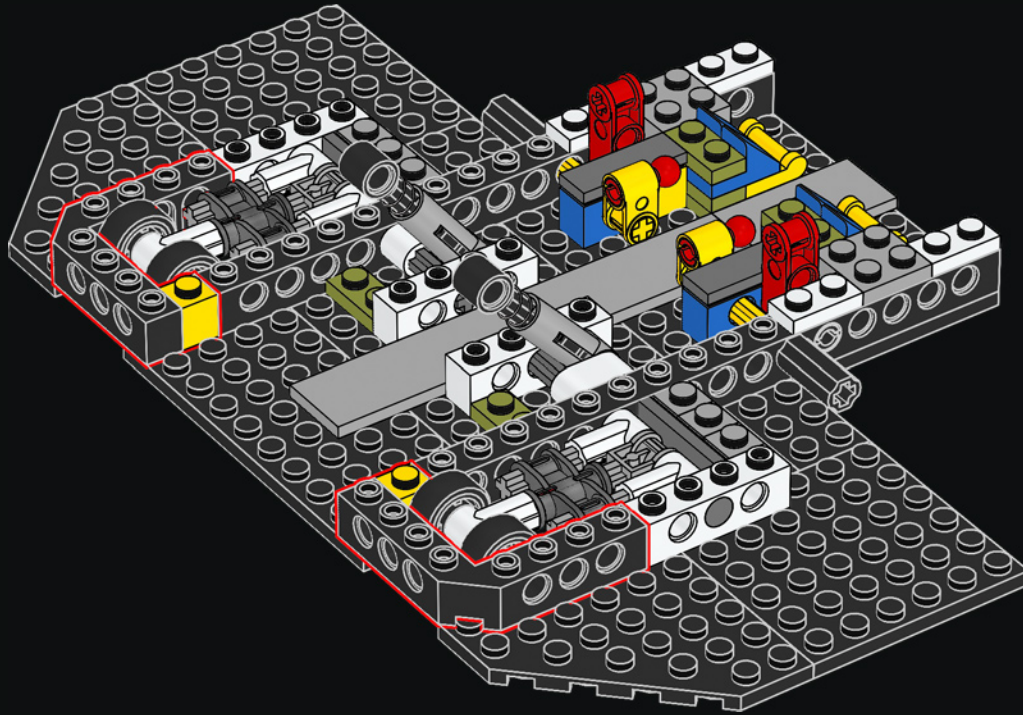
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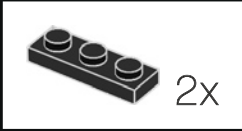
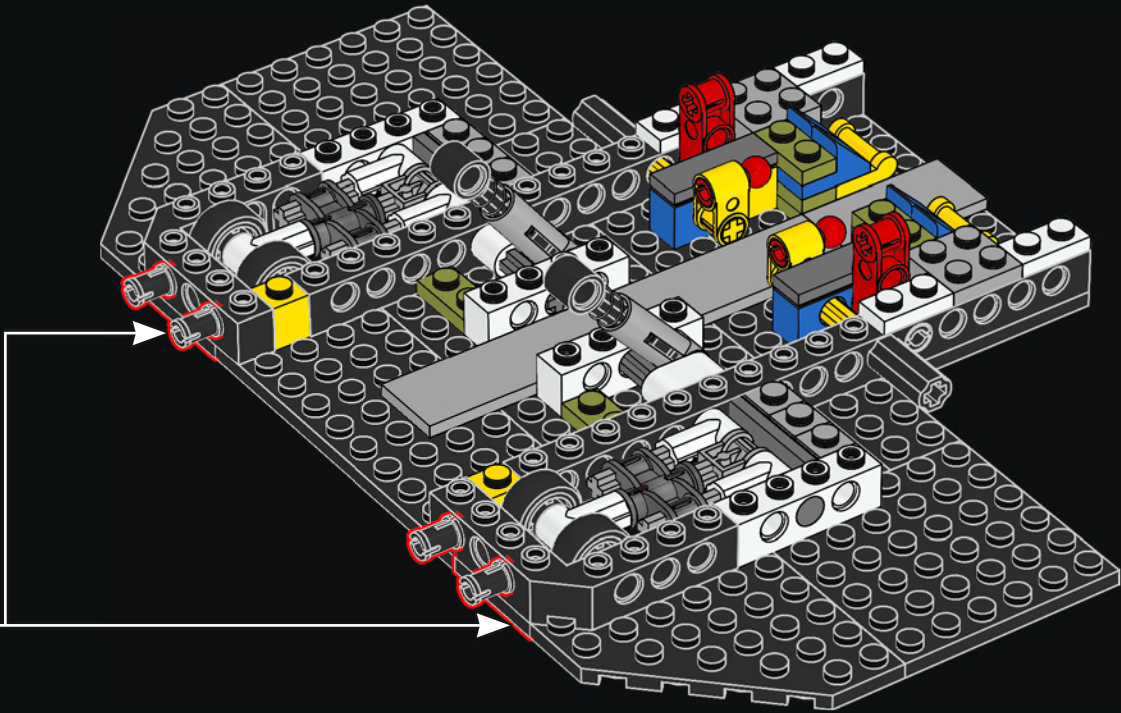


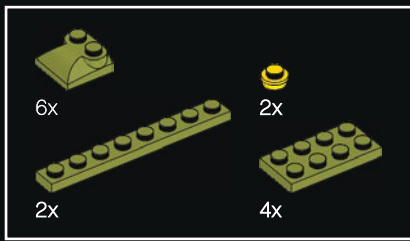
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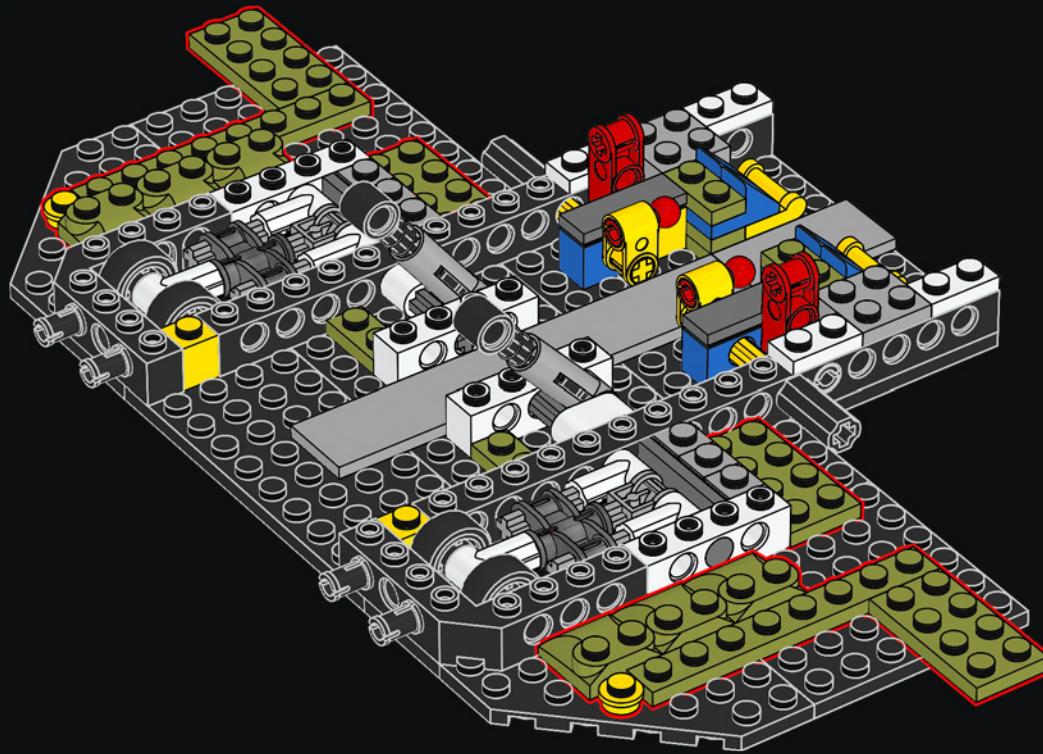


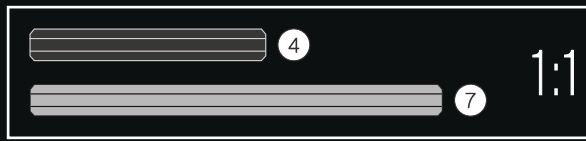
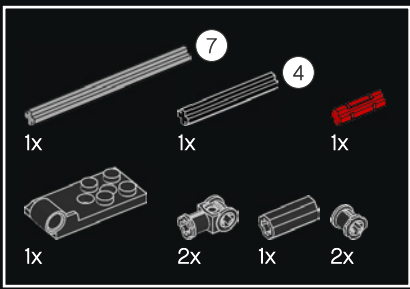
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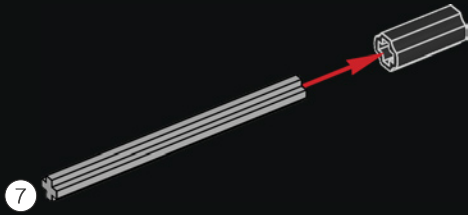
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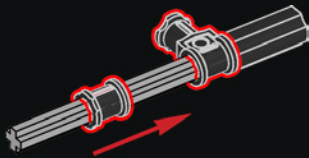


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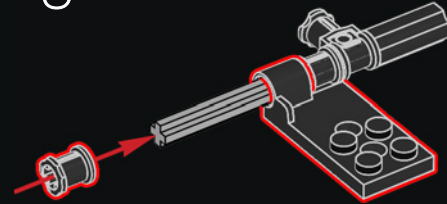
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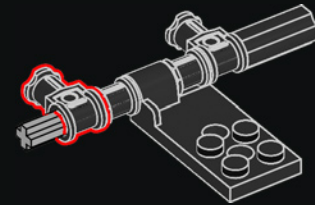
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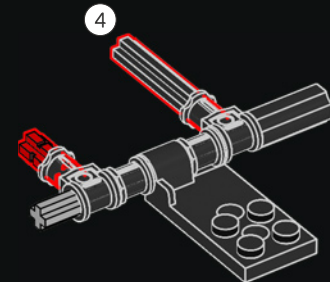
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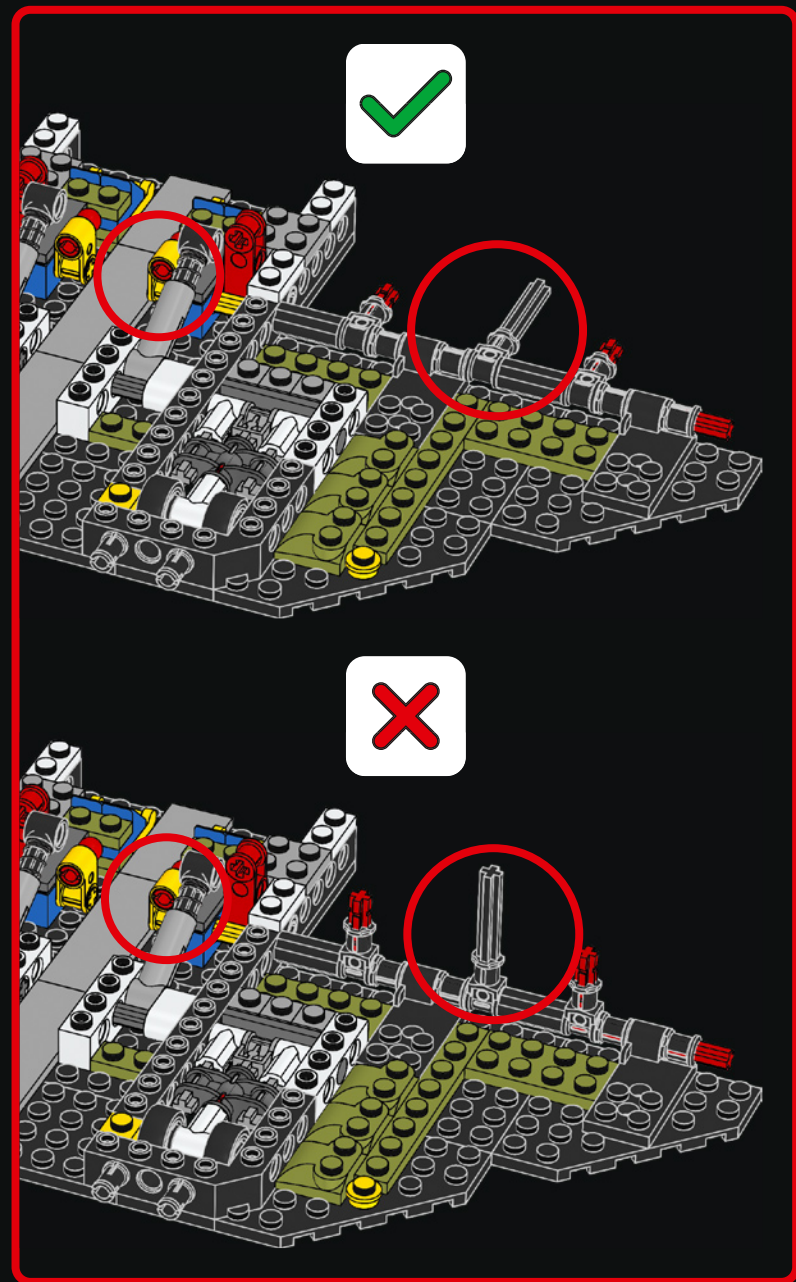
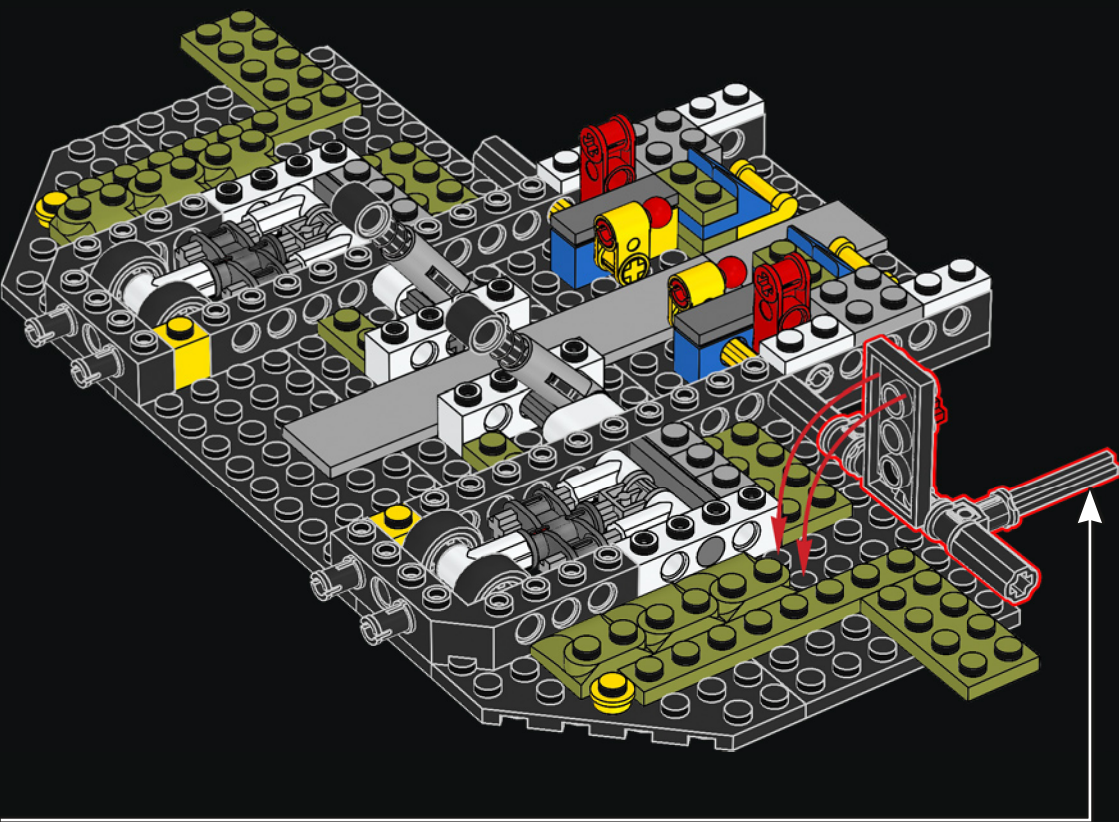


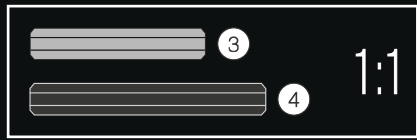
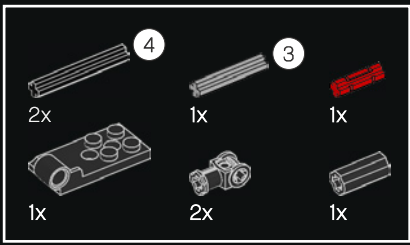
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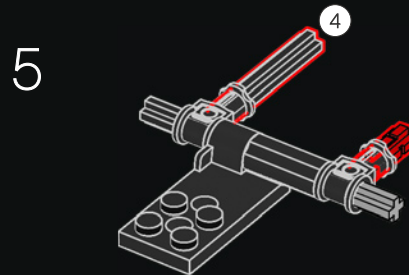
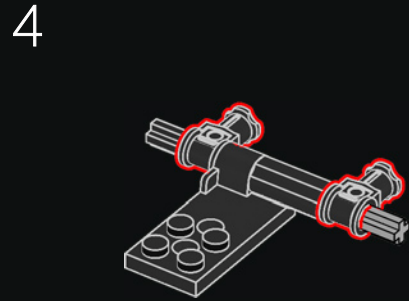
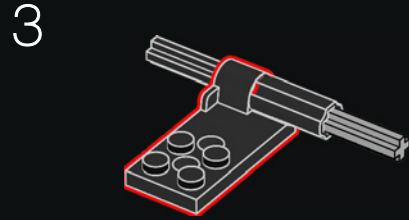
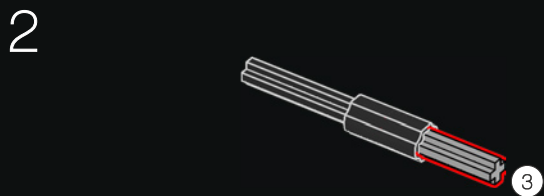
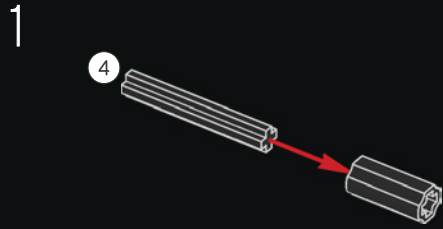
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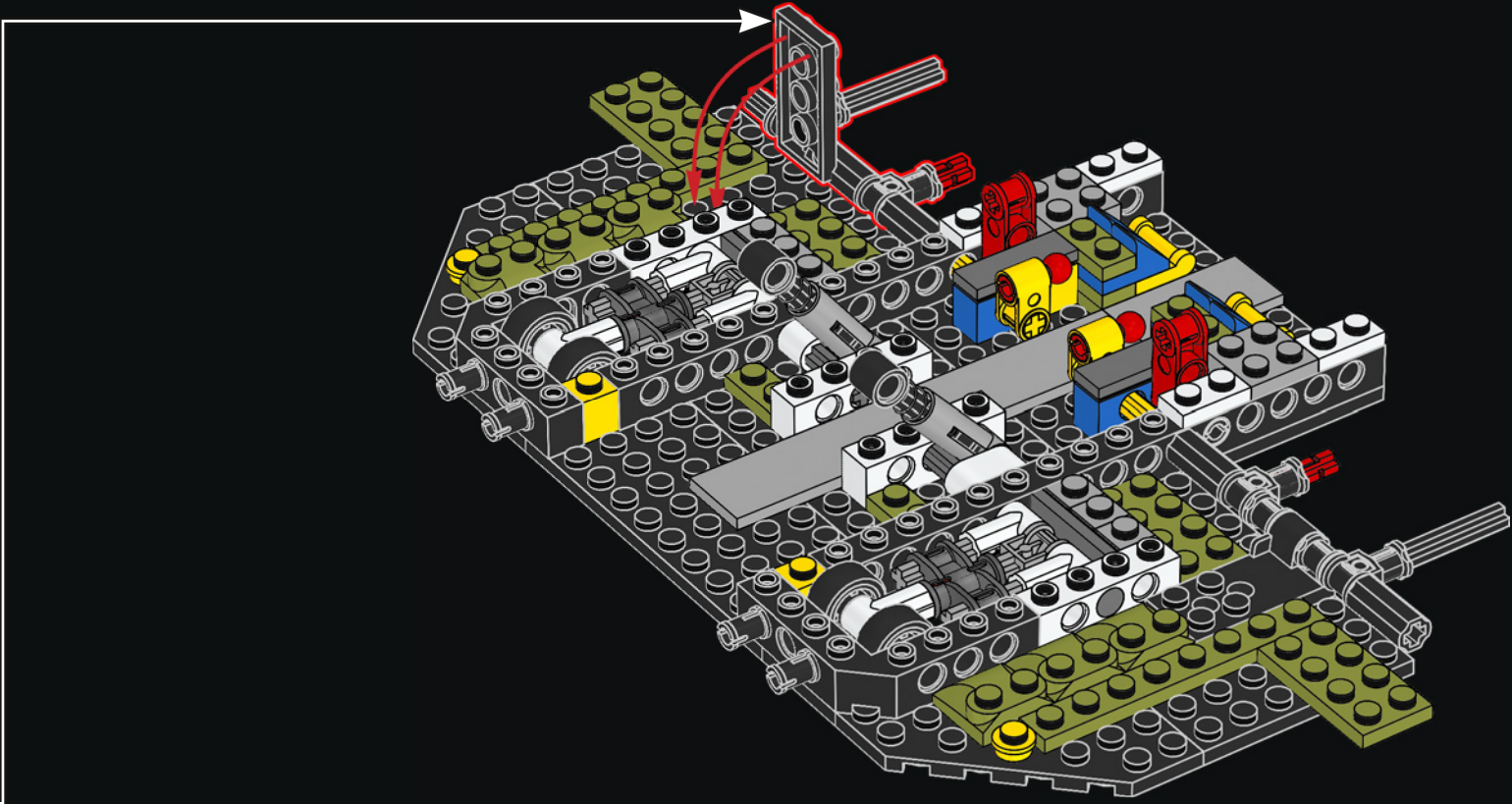


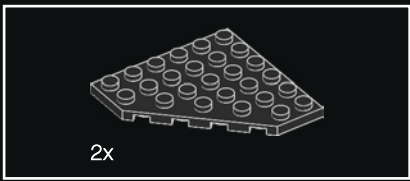




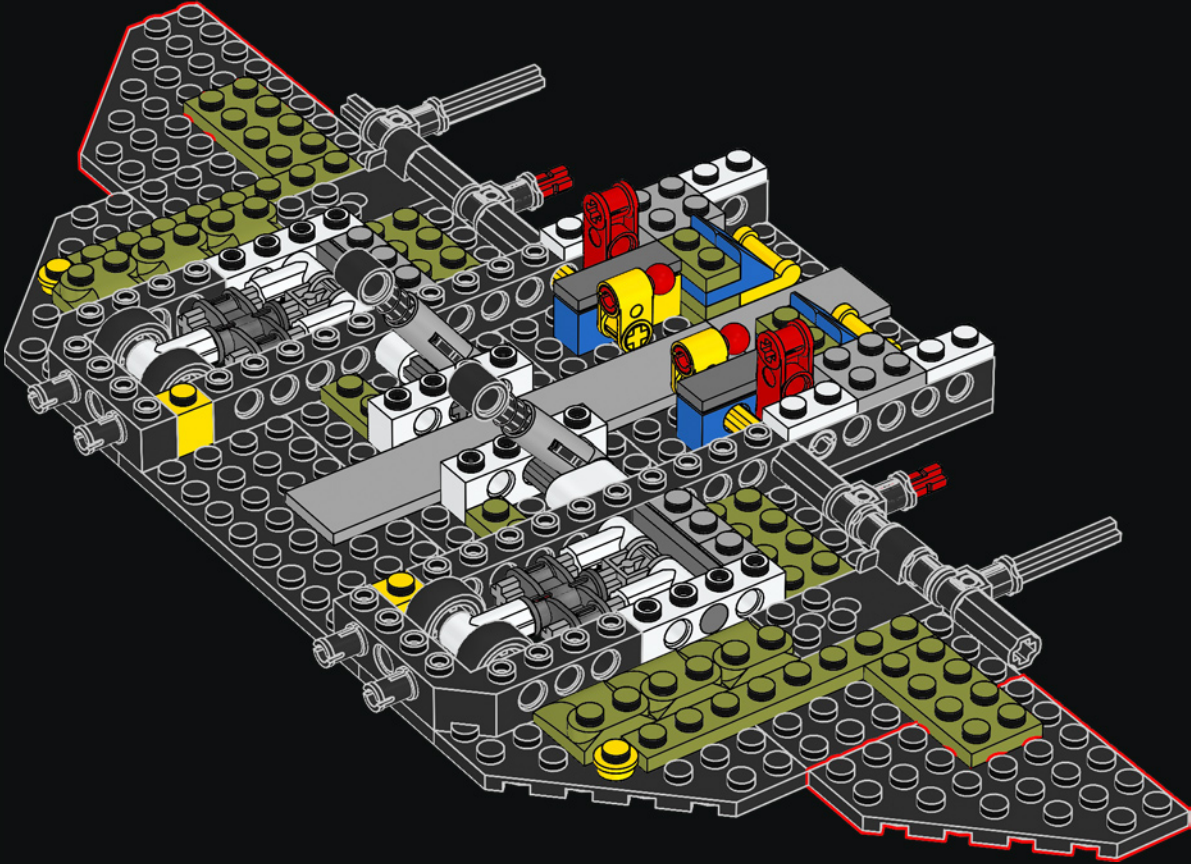
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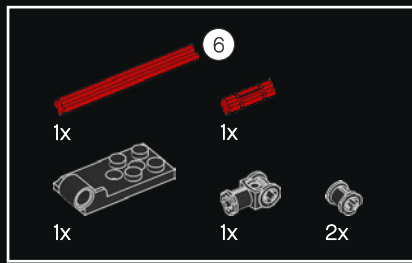




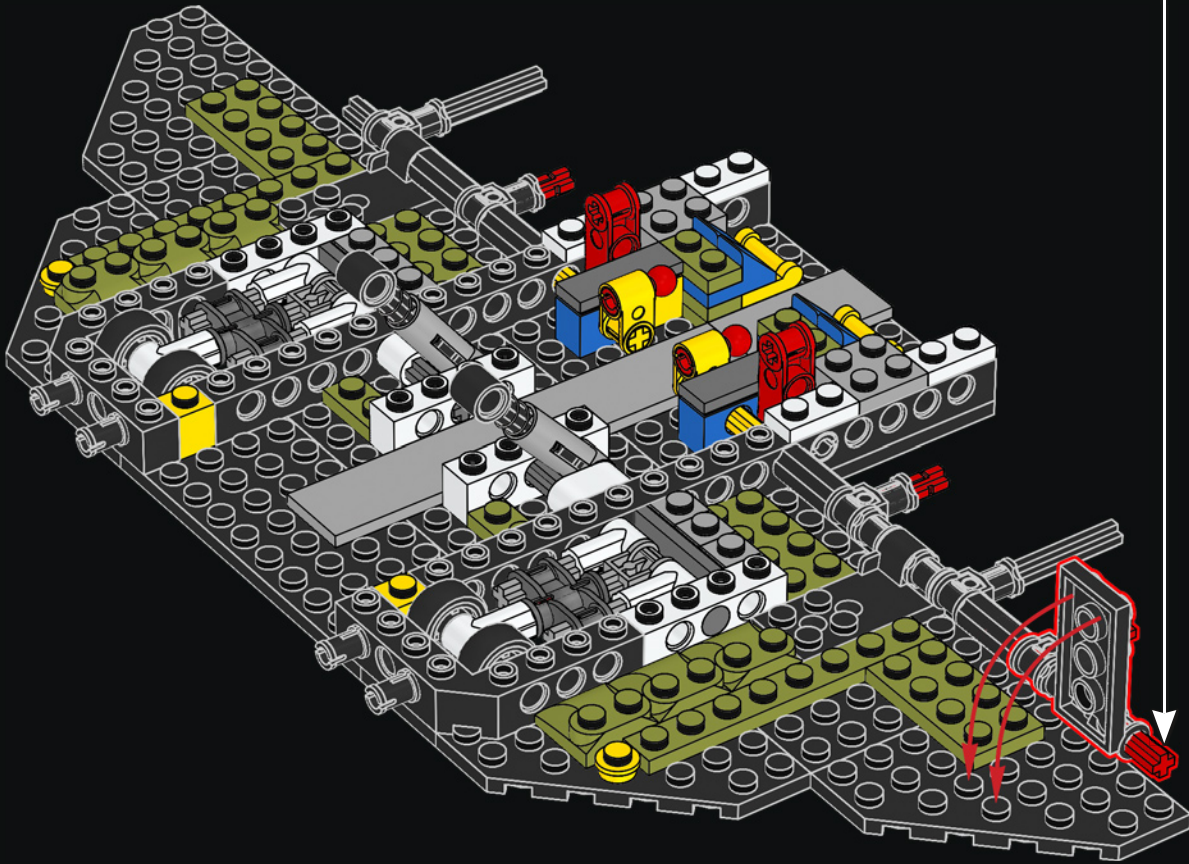
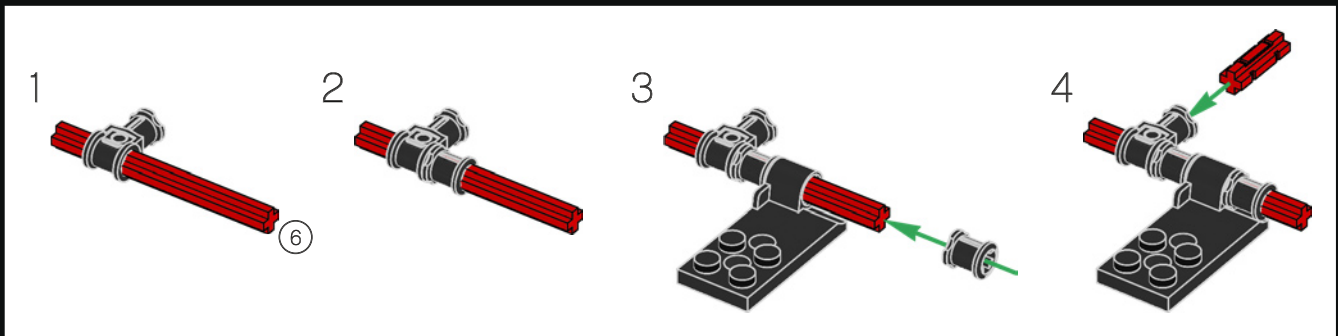
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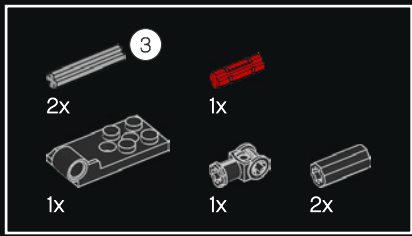




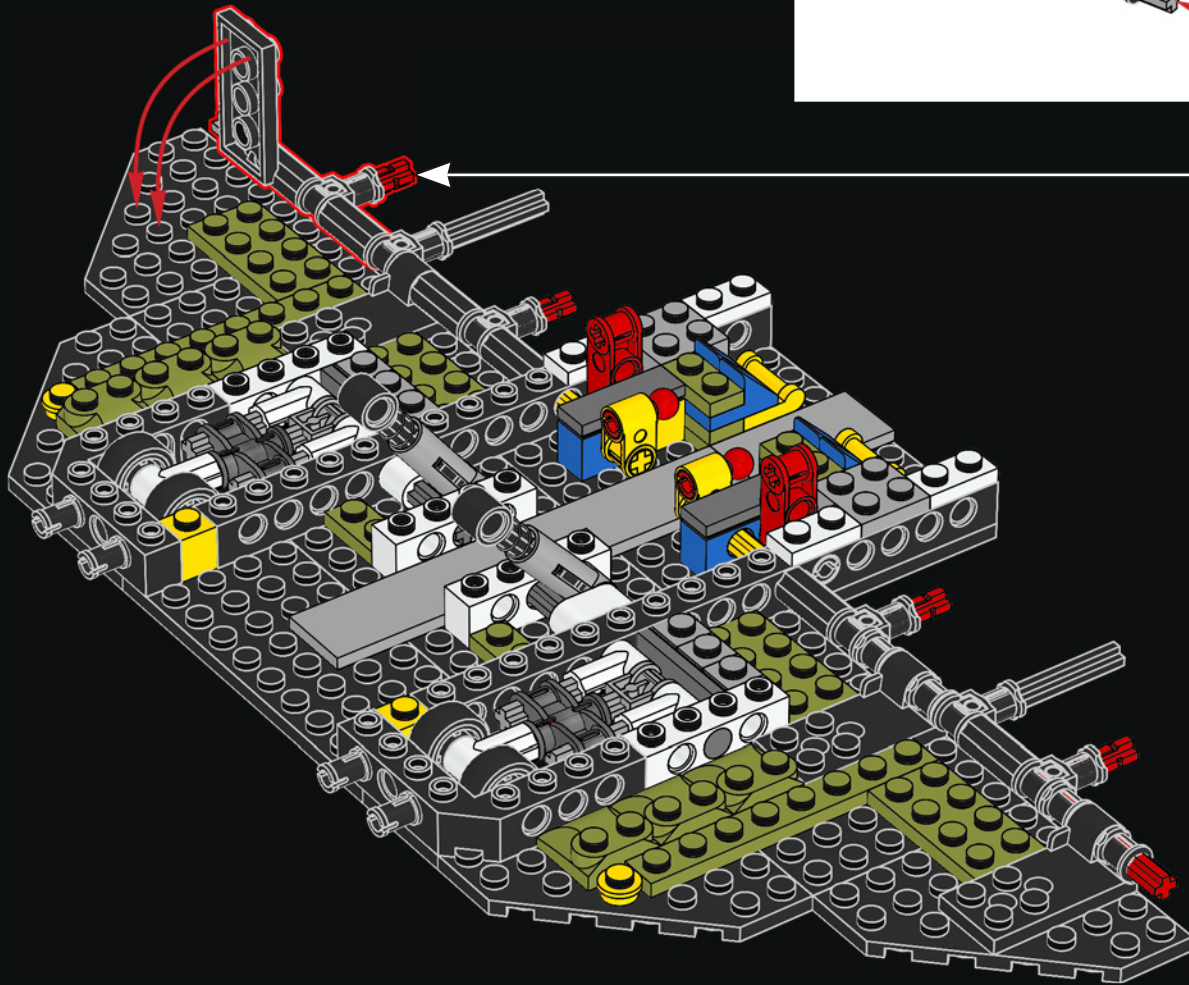
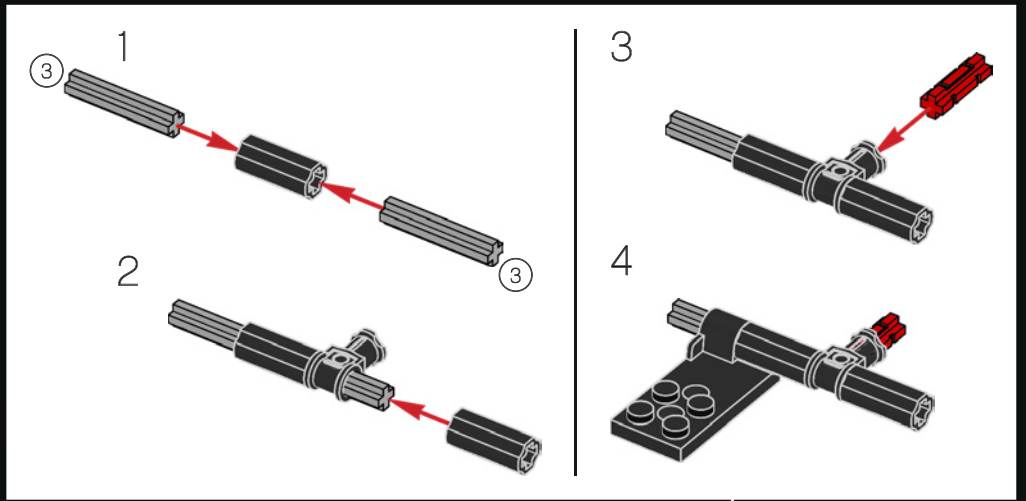


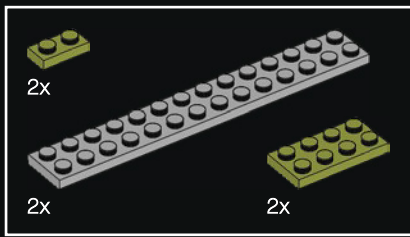
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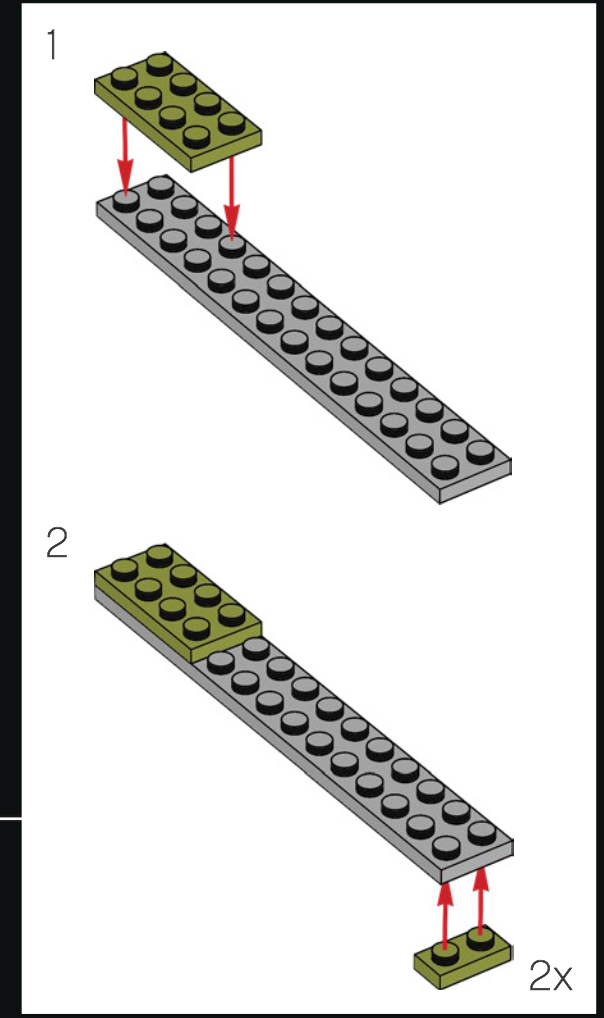
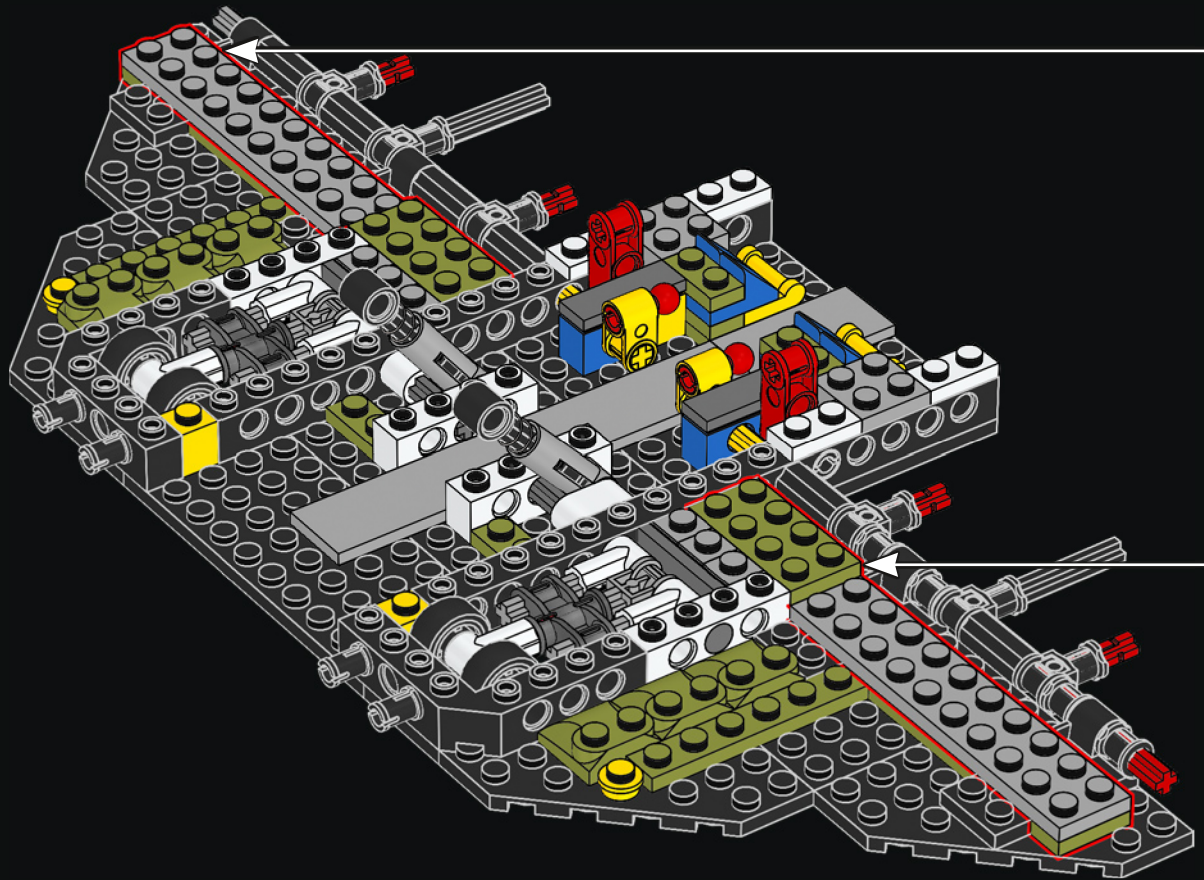


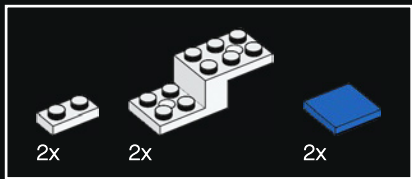
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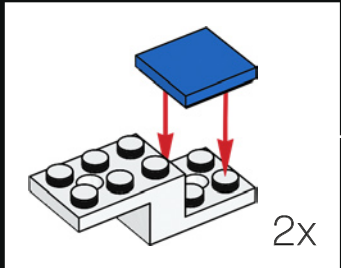
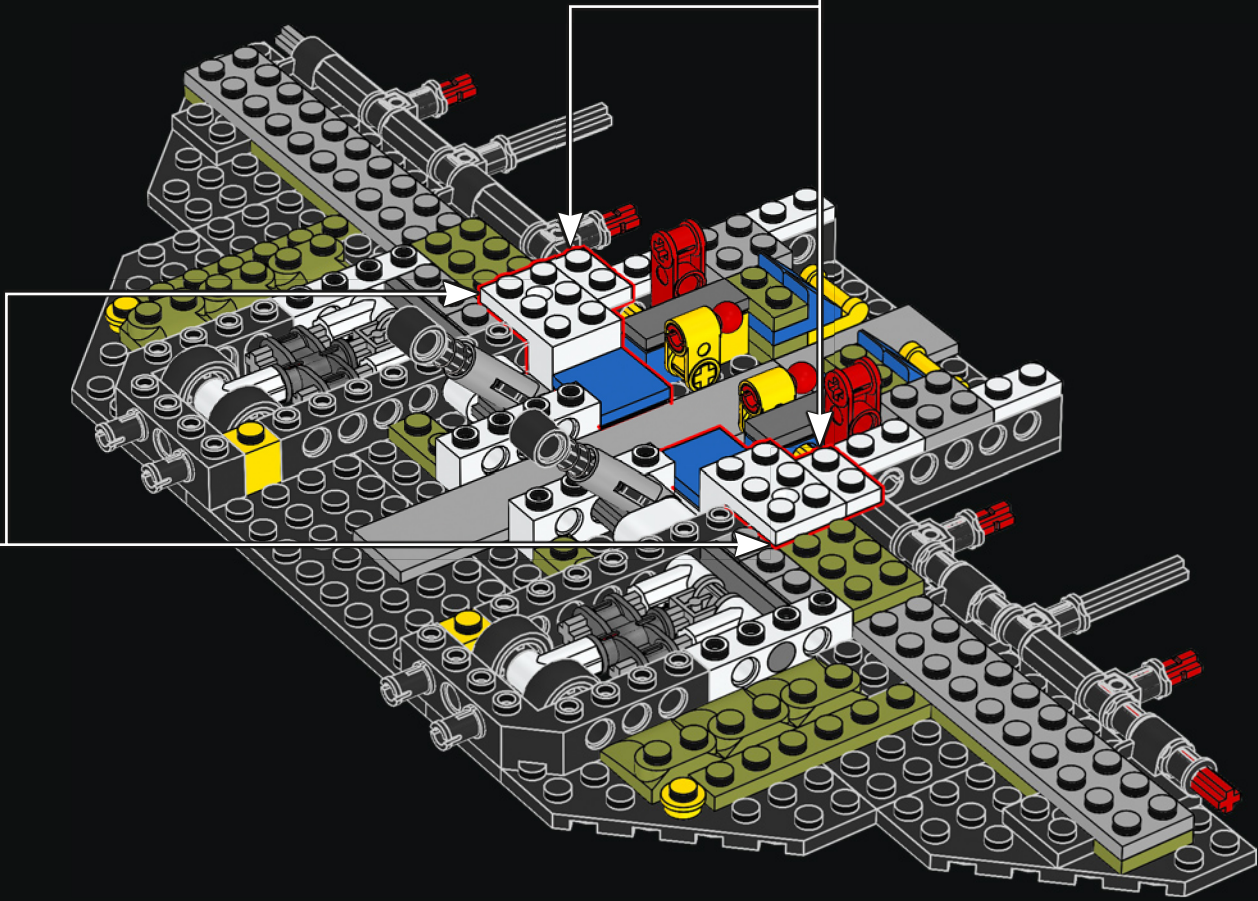
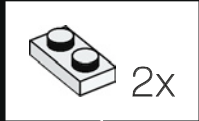


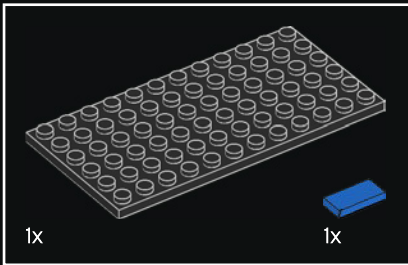
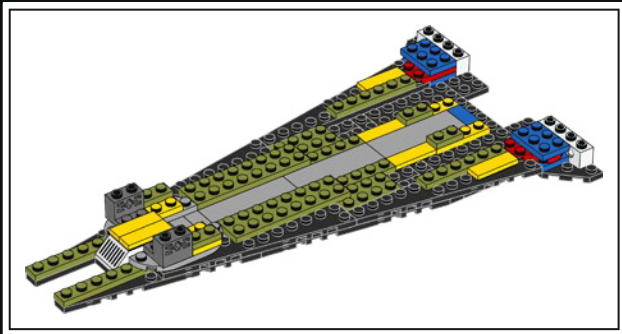
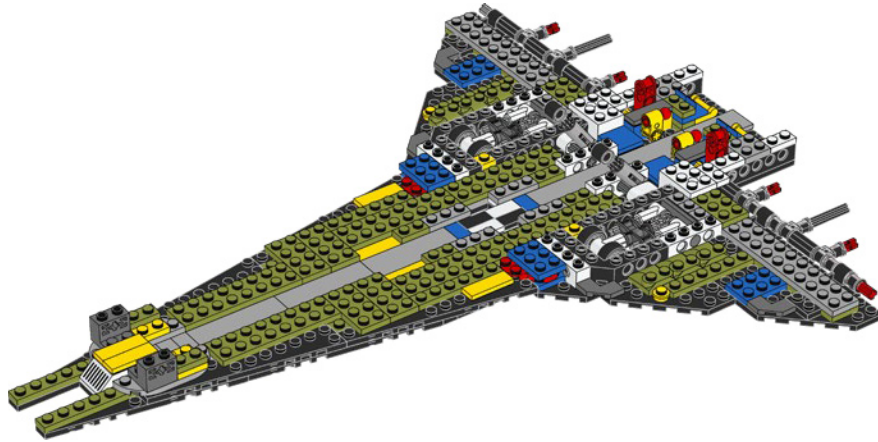
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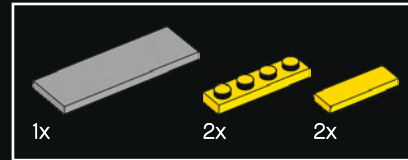
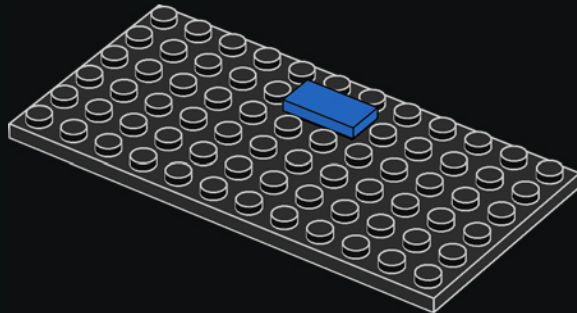


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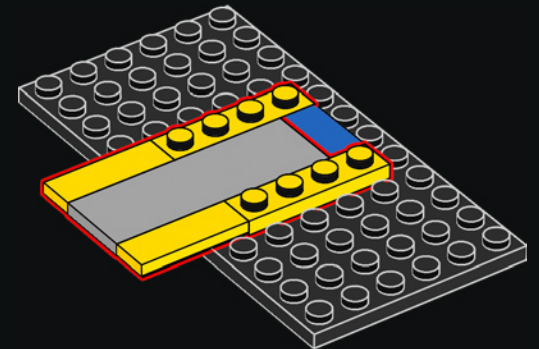


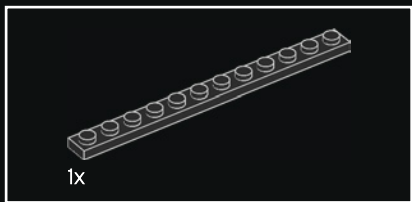


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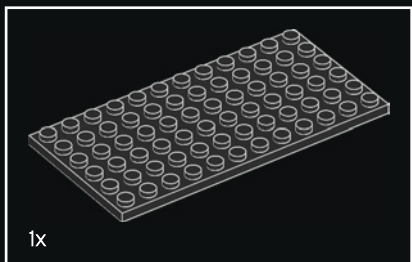
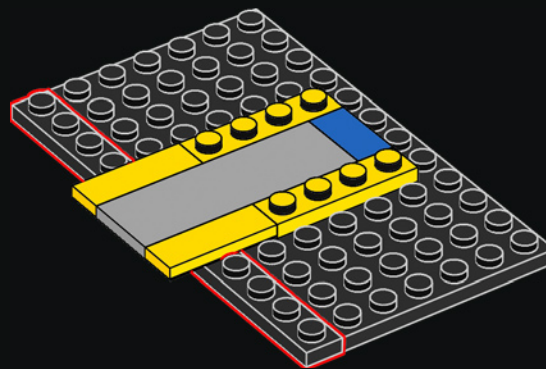


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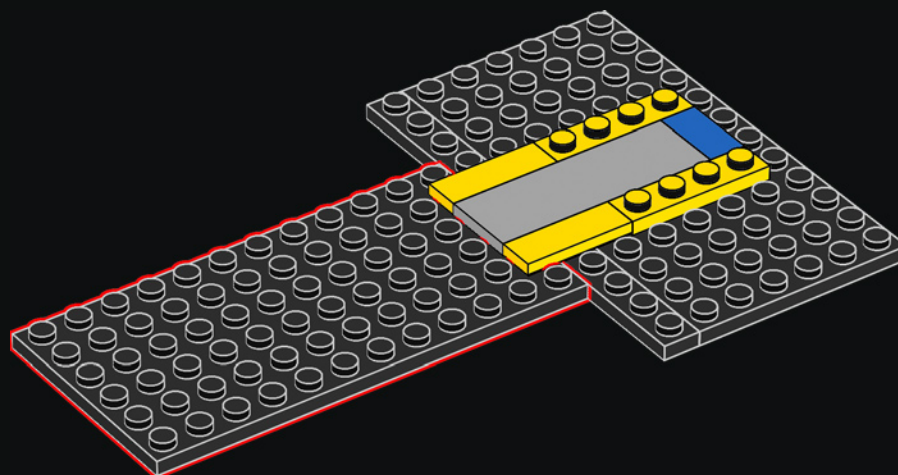


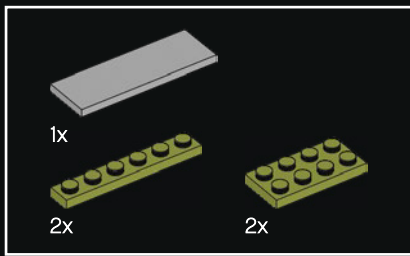


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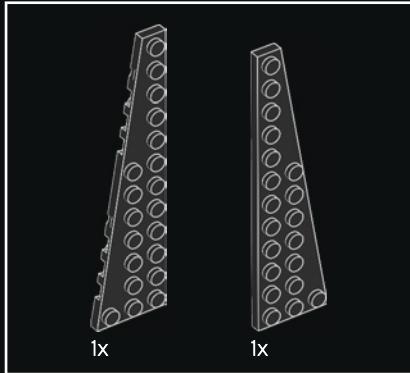
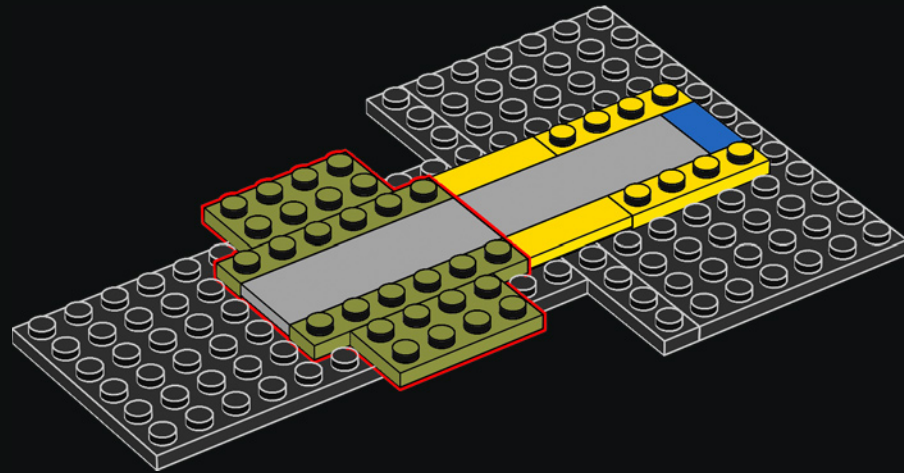


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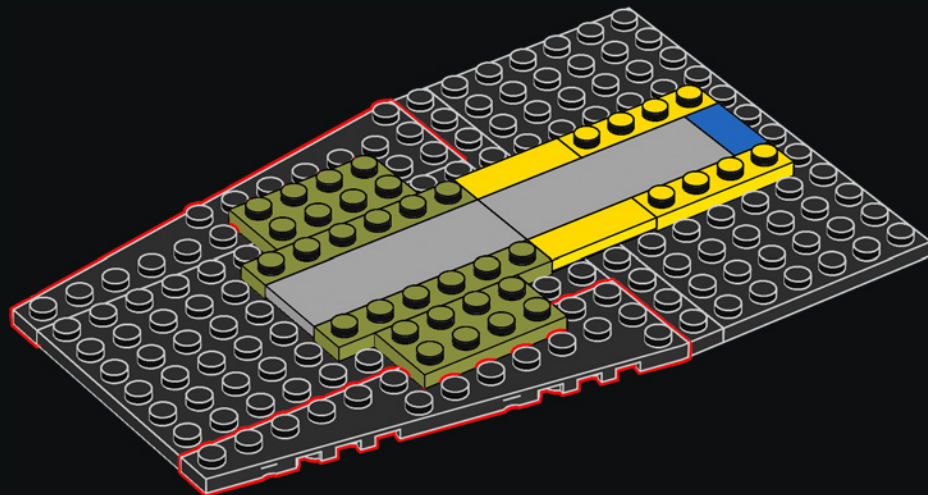


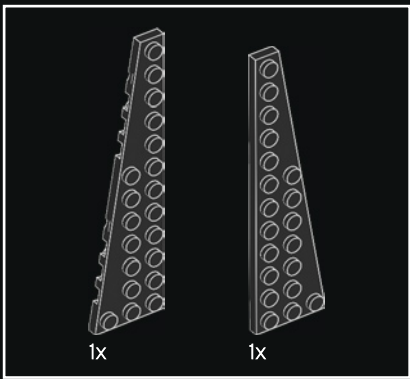


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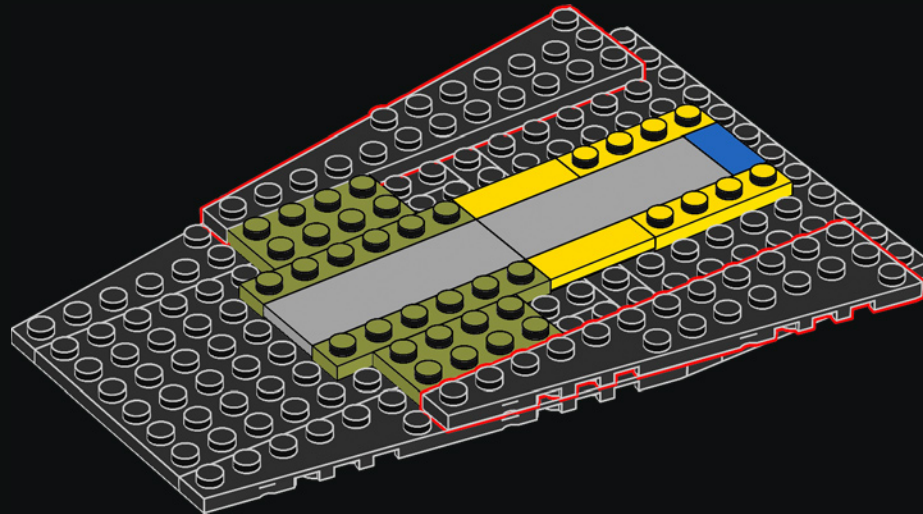




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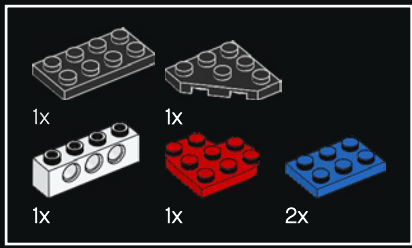
### DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

- With an orbital velocity of 17,500 mph (28,158 km/h), the Space Shuttle crew traveled fast enough to see a sunrise or sunset every 45 minutes.
- La navette voyageant à une vitesse orbitale de 28 158 km/h (17 500 mi/h), son équipage pouvait voir un lever ou un coucher de soleil toutes les 45 minutes.
- Con una velocidad orbital de 28.158 km/h, la tripulación del transbordador espacial viajaba con suficiente rapidez para ver amanecer o atardecer cada 45 minutos.

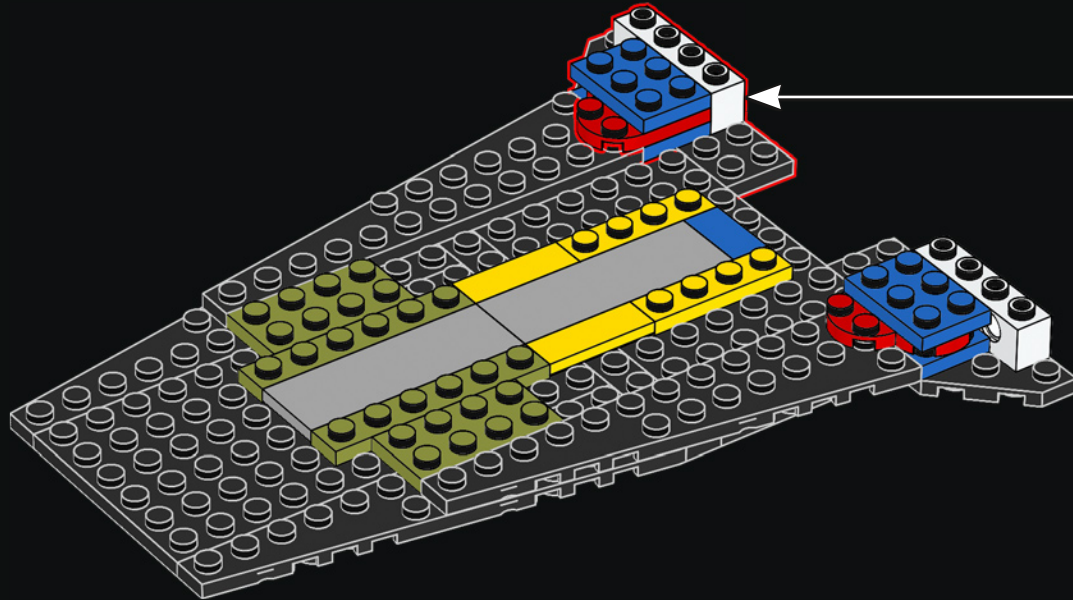
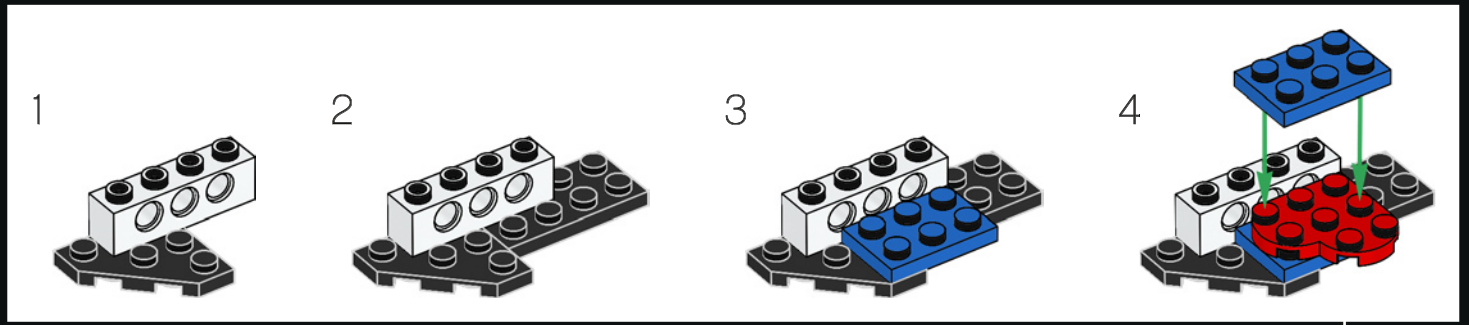


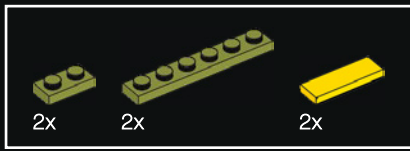




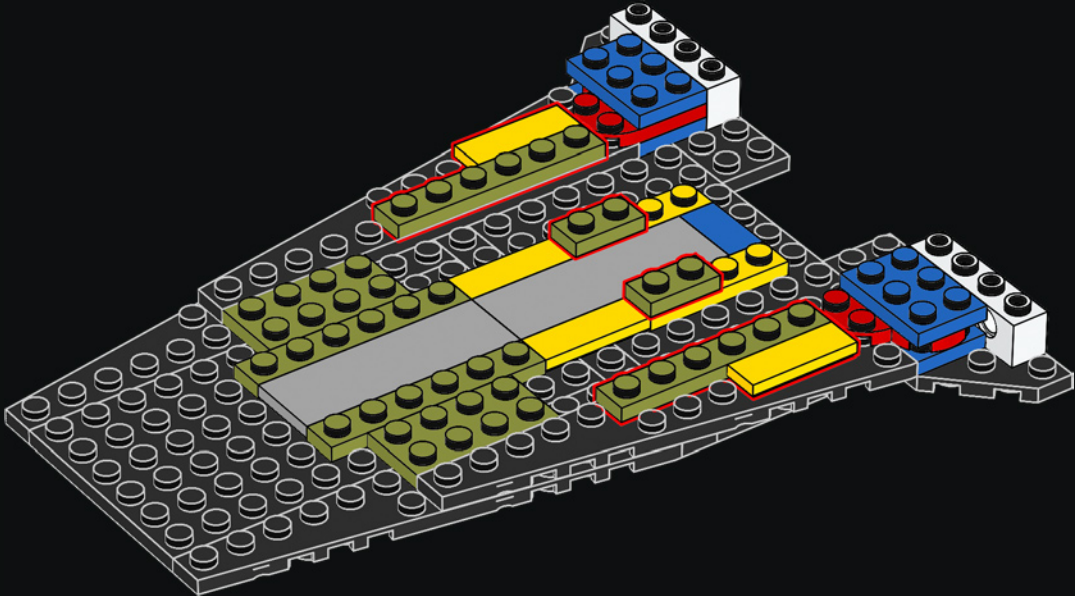


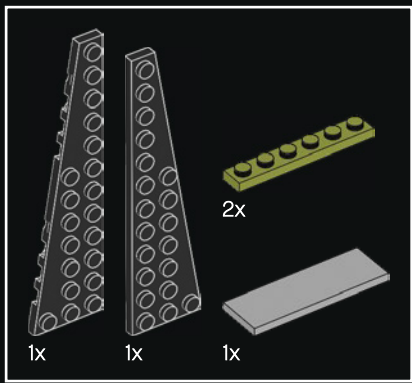
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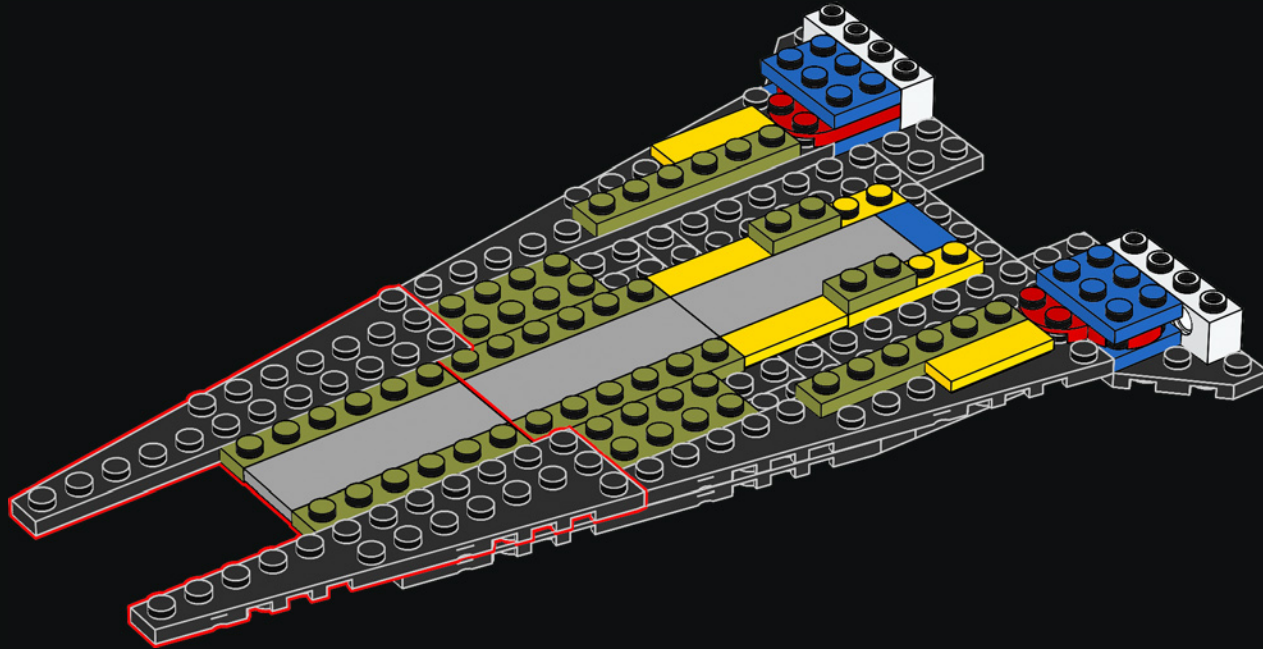


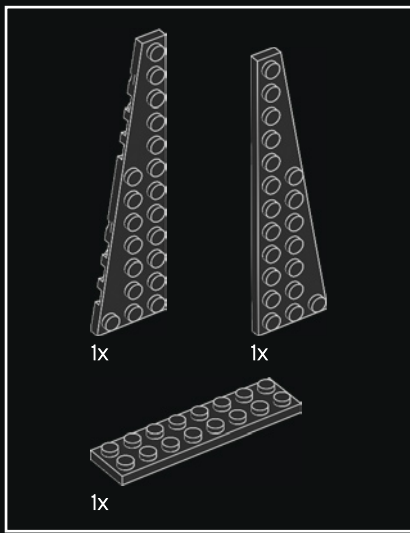
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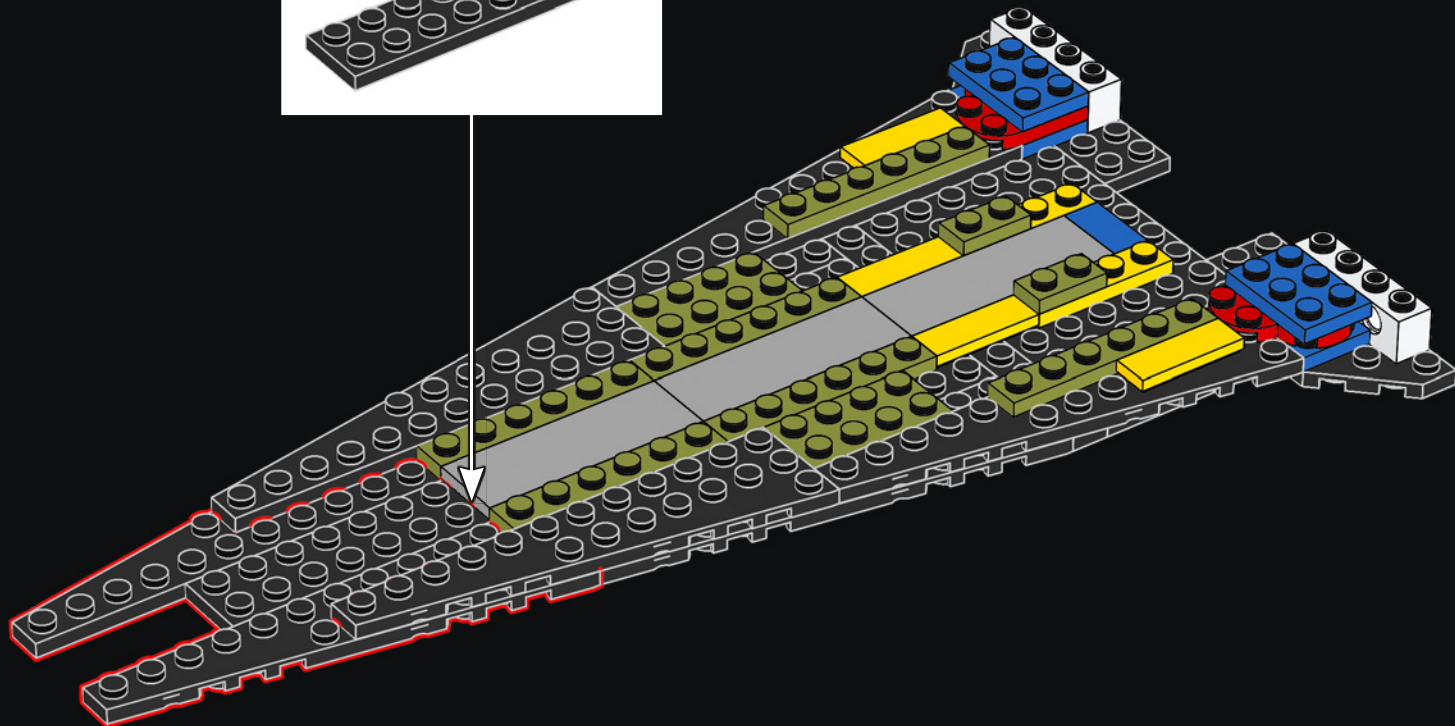
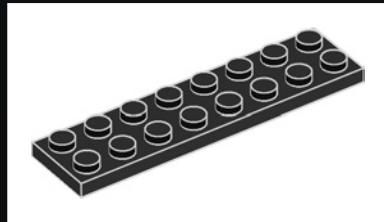


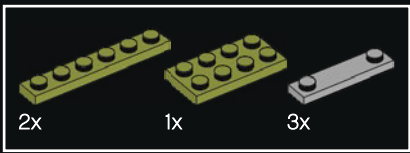
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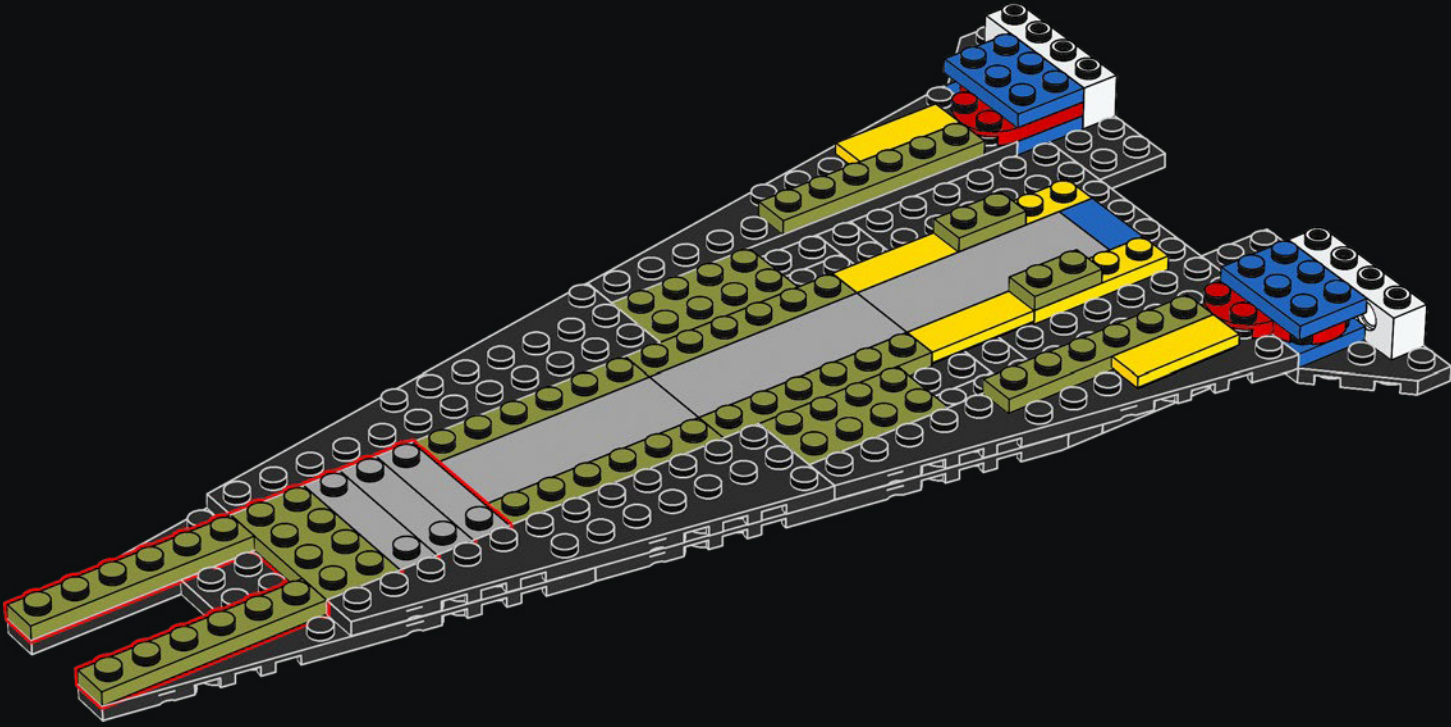


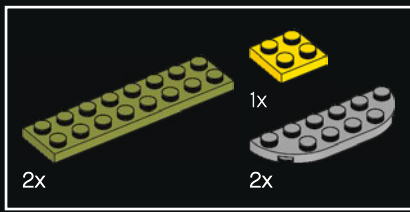
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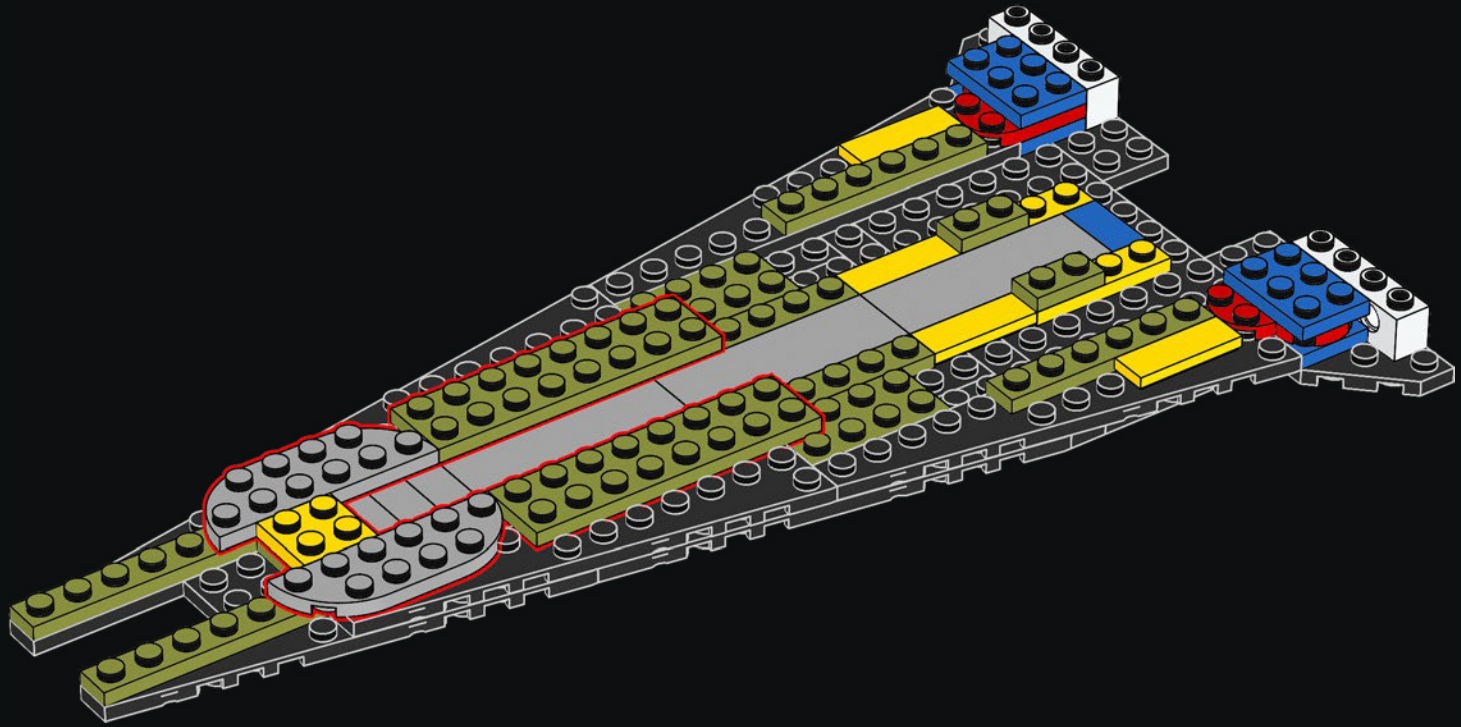


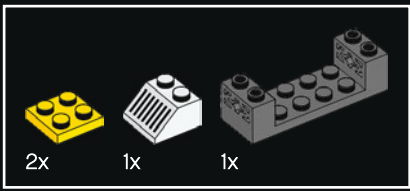
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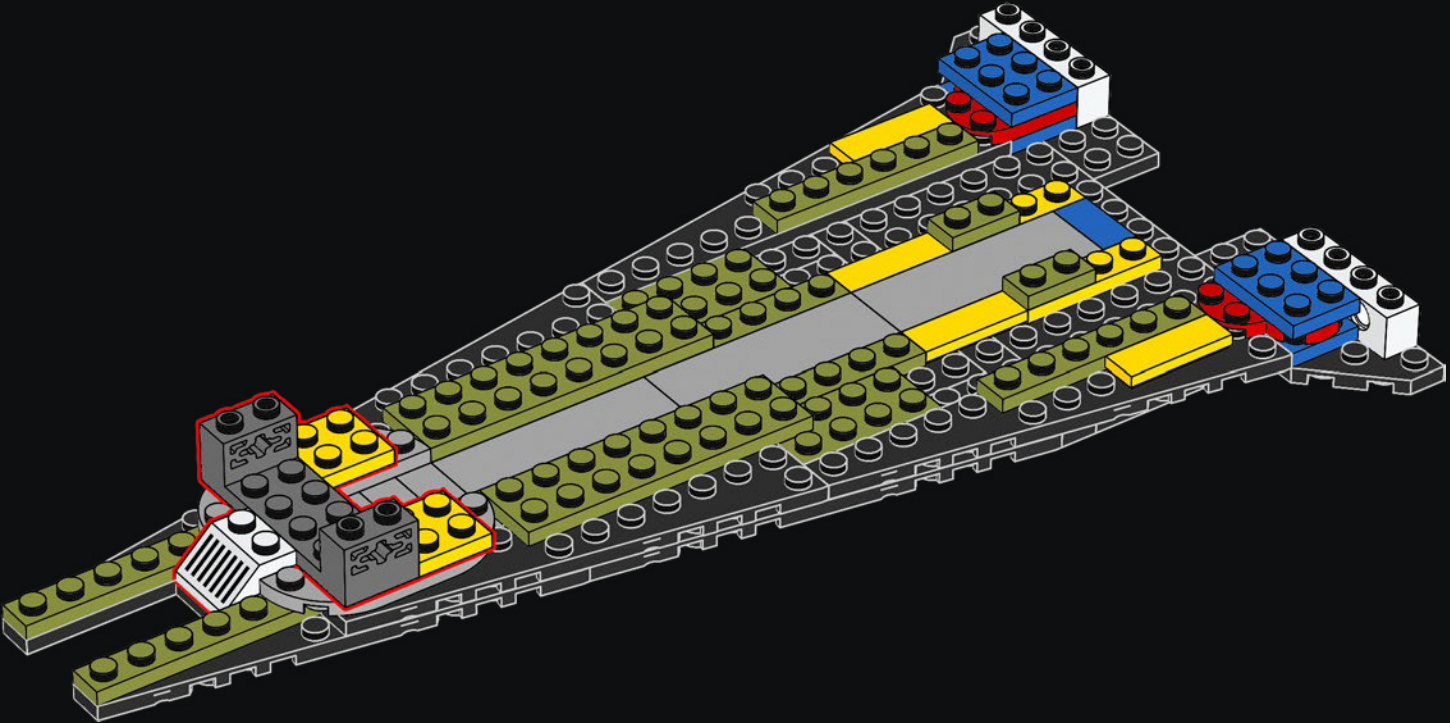


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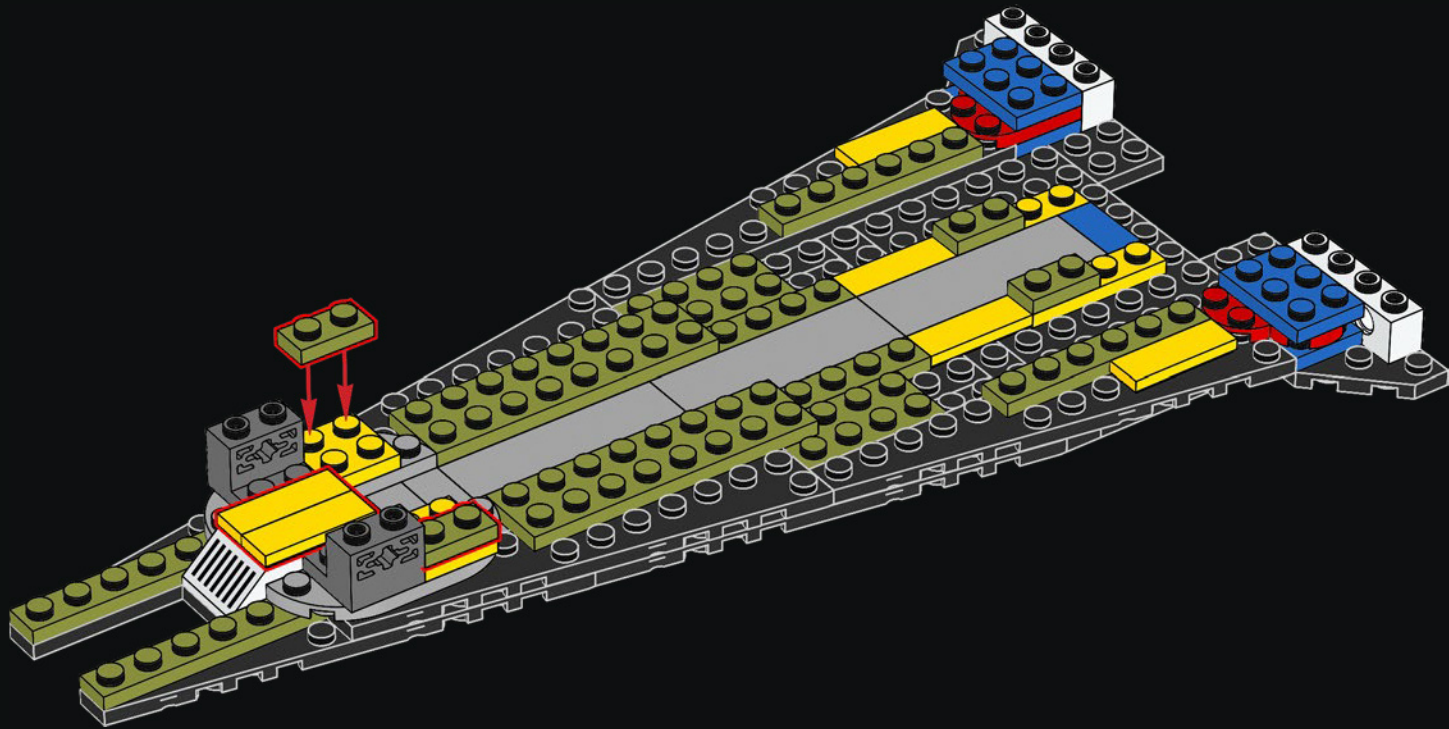
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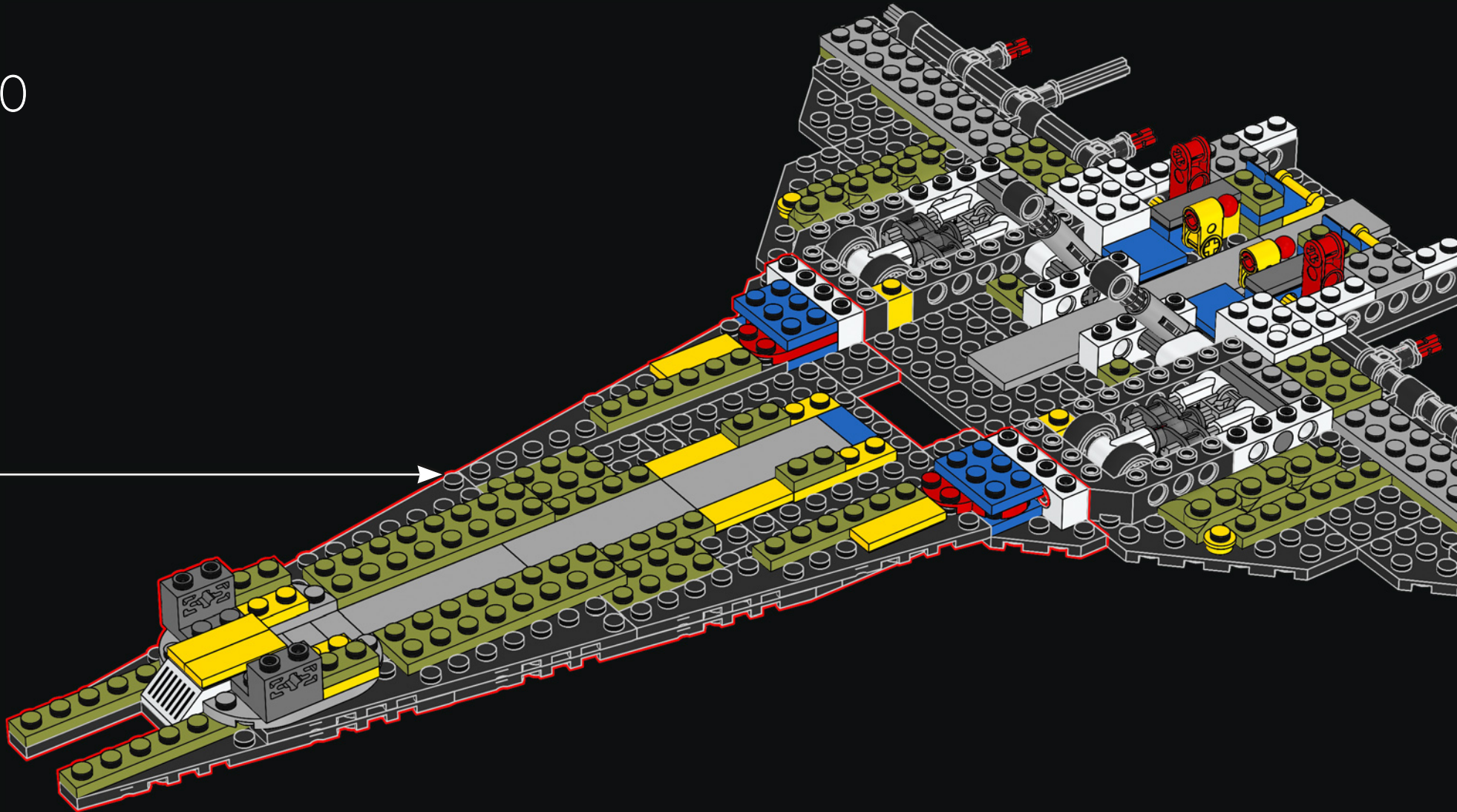


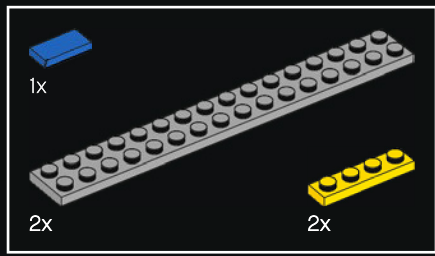


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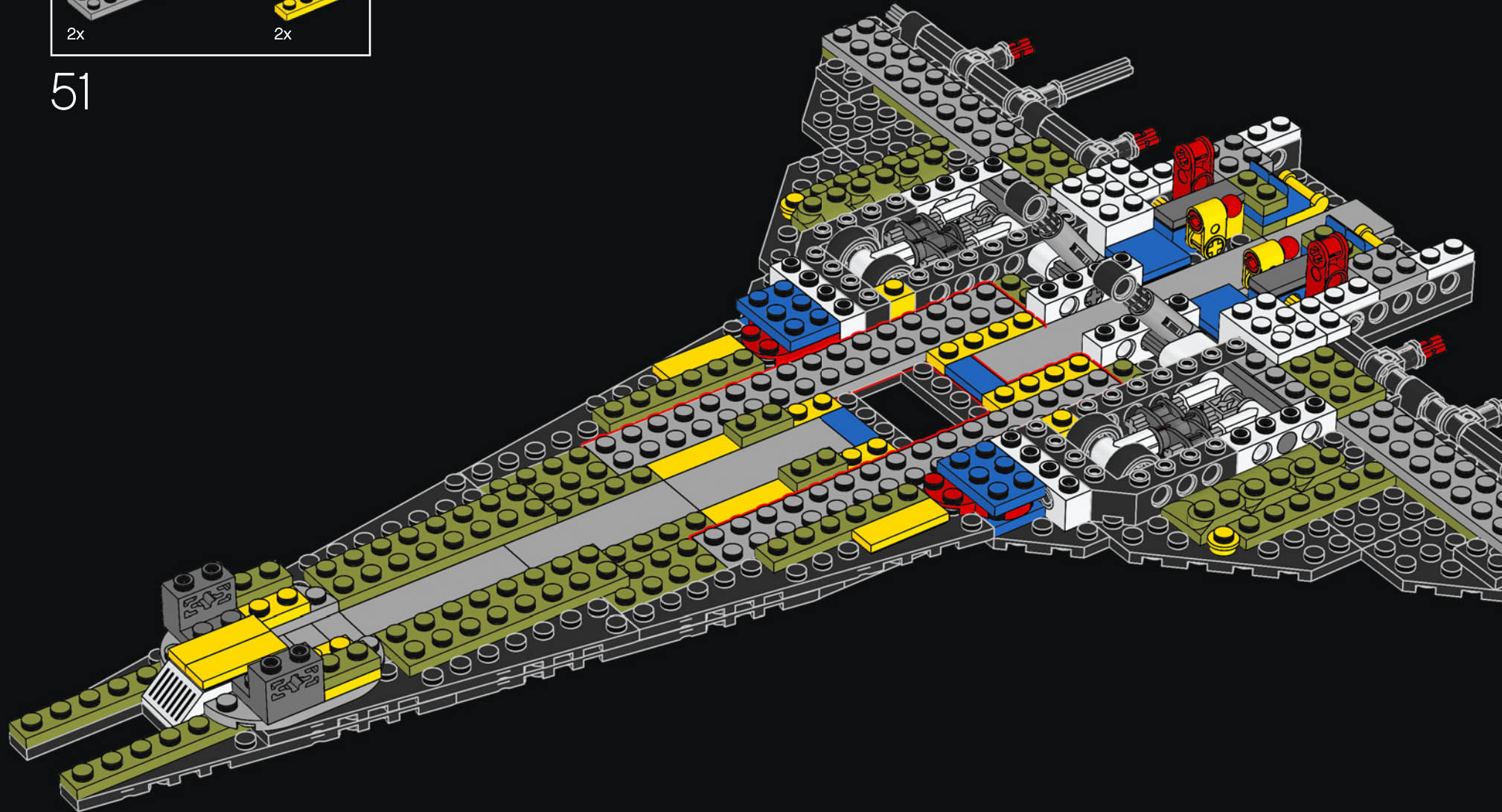


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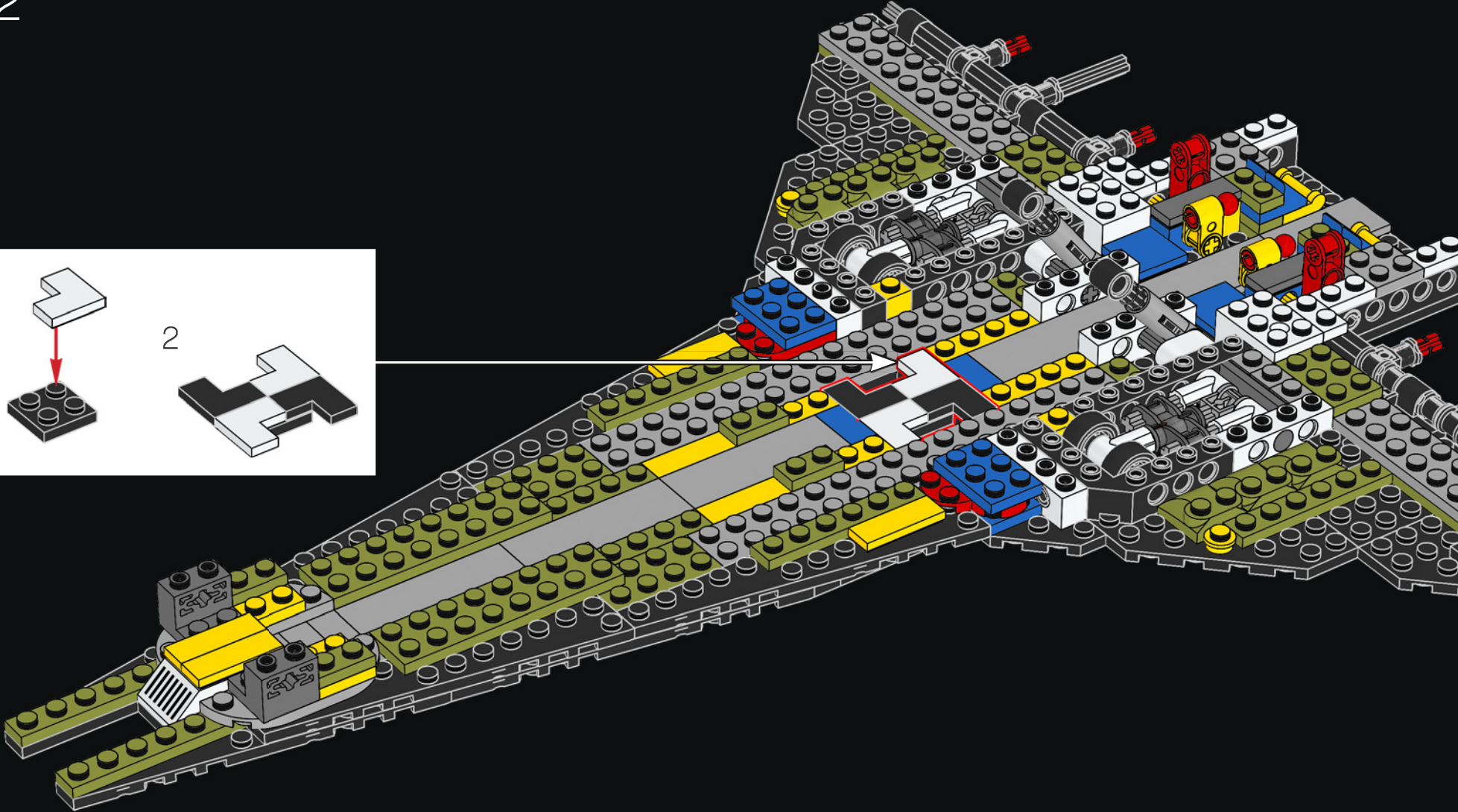
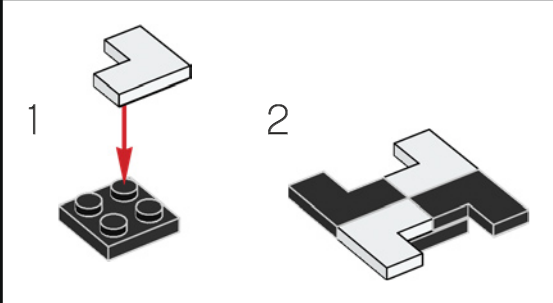


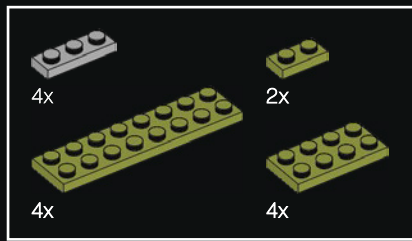
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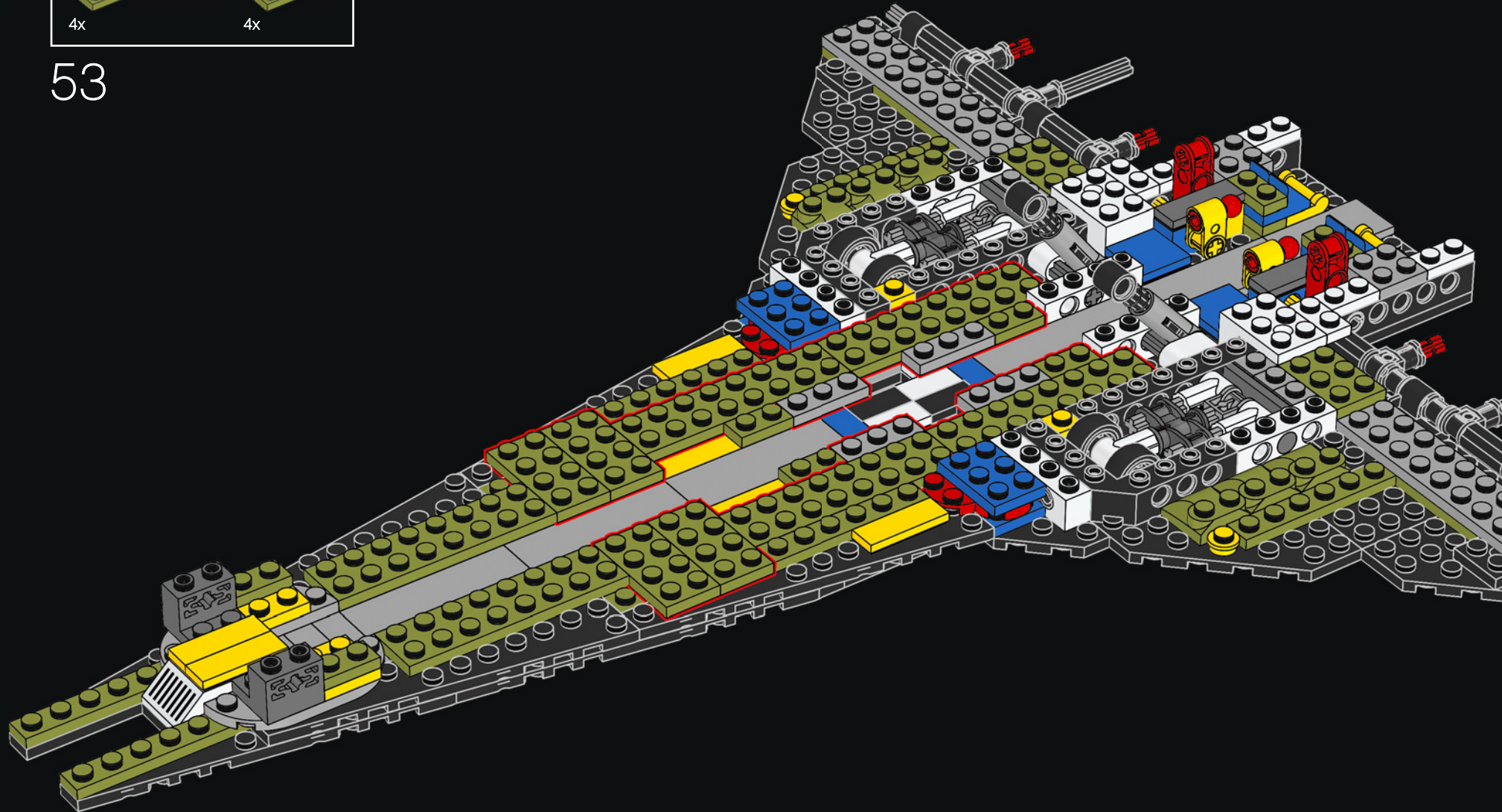


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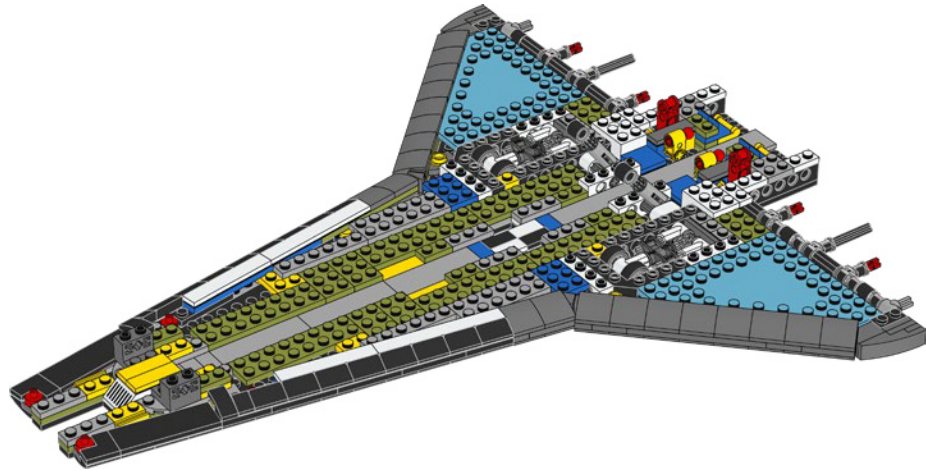




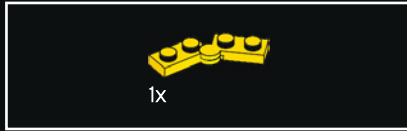
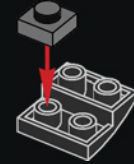
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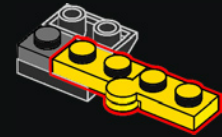




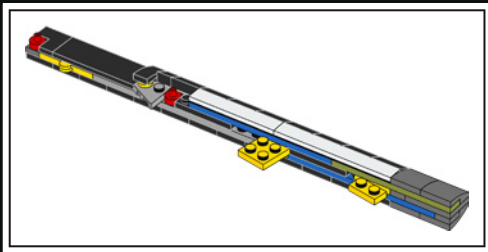
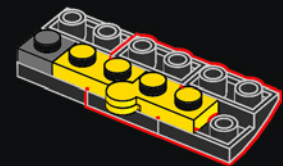
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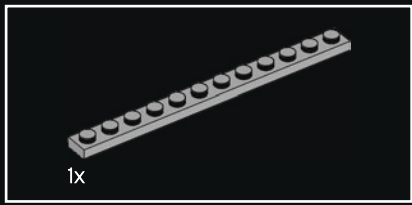


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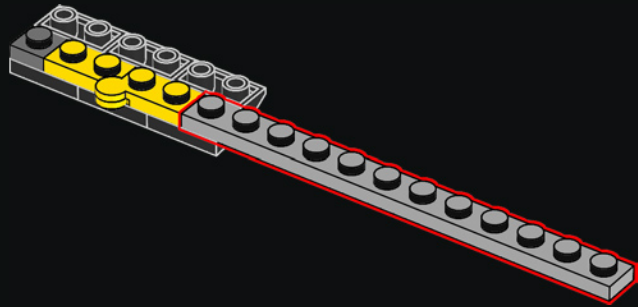


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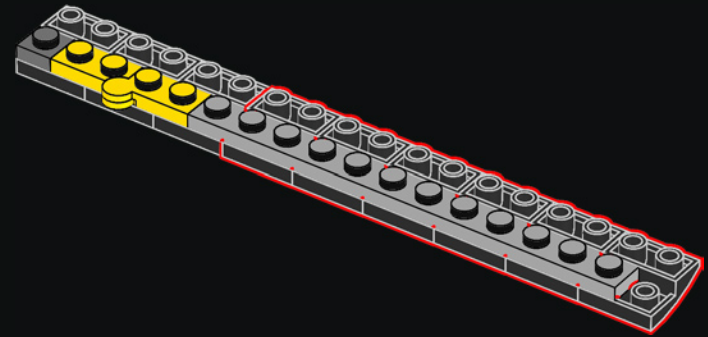




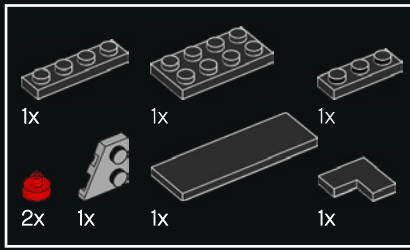
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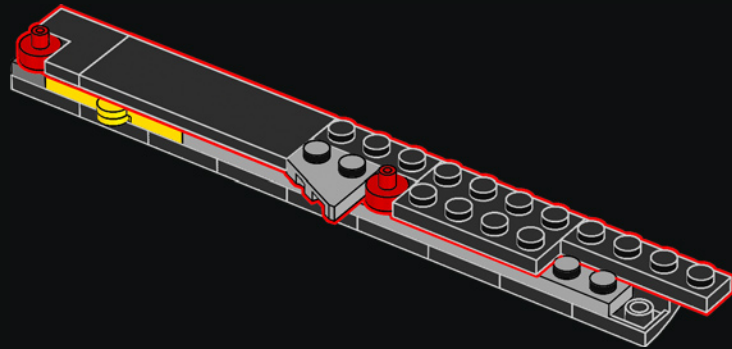
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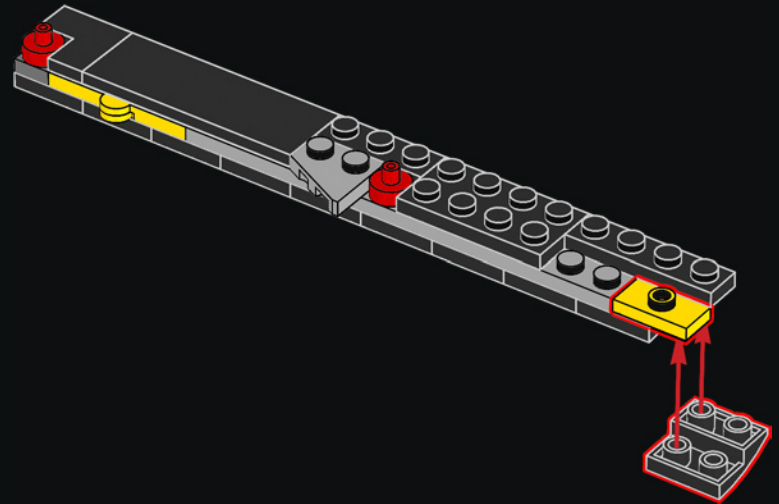


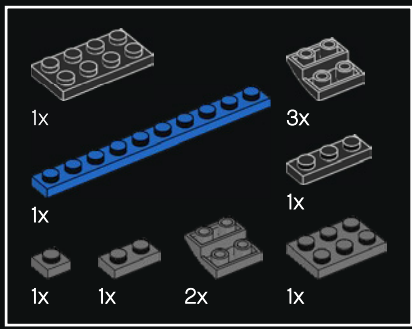


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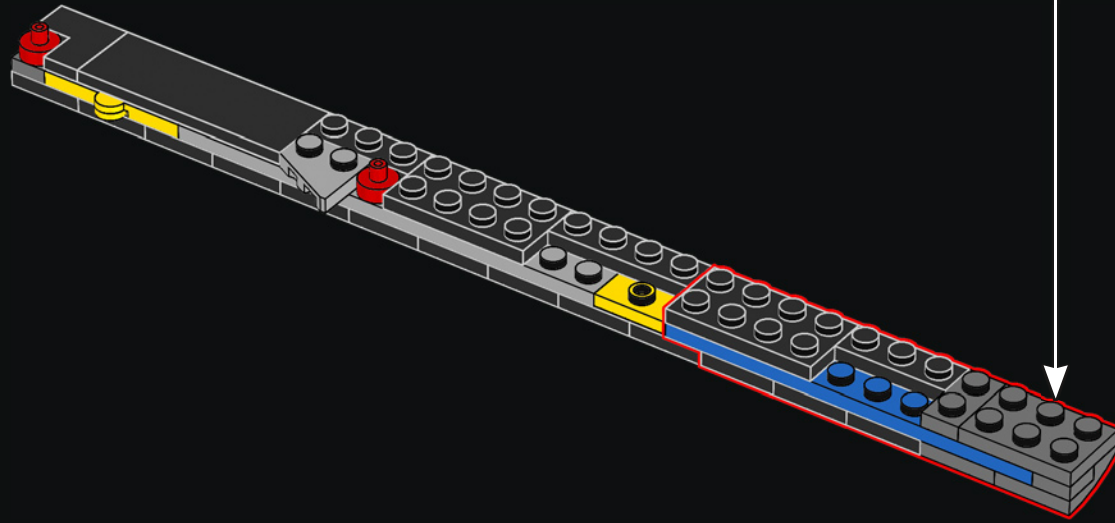
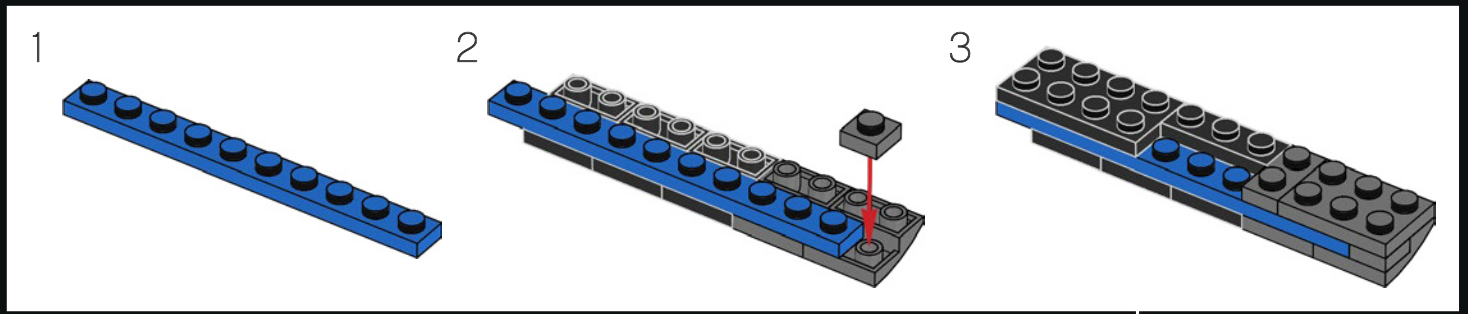


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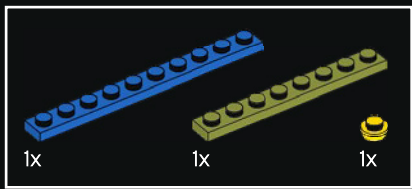




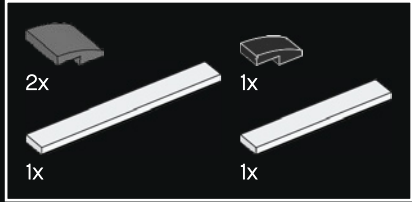
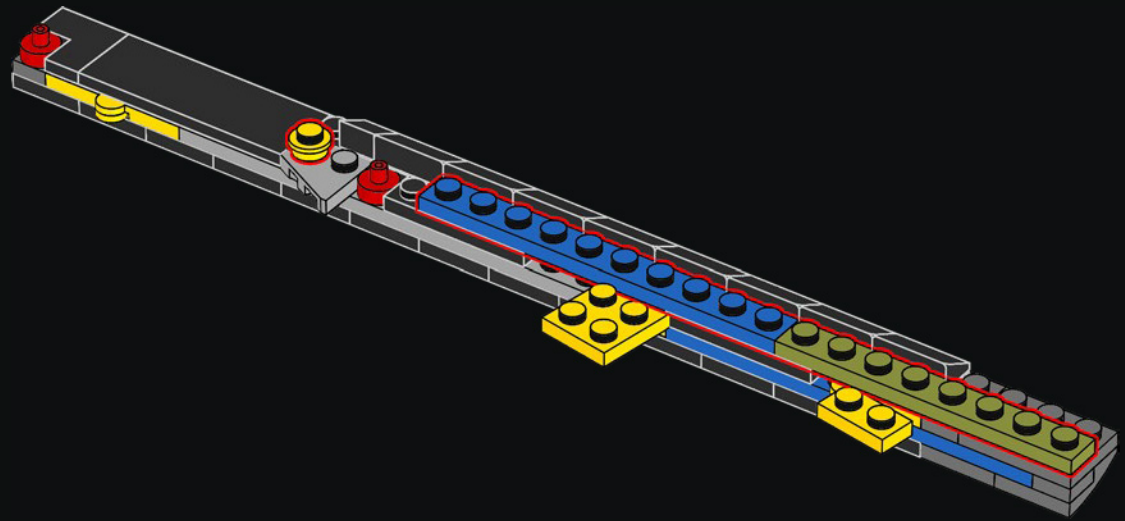
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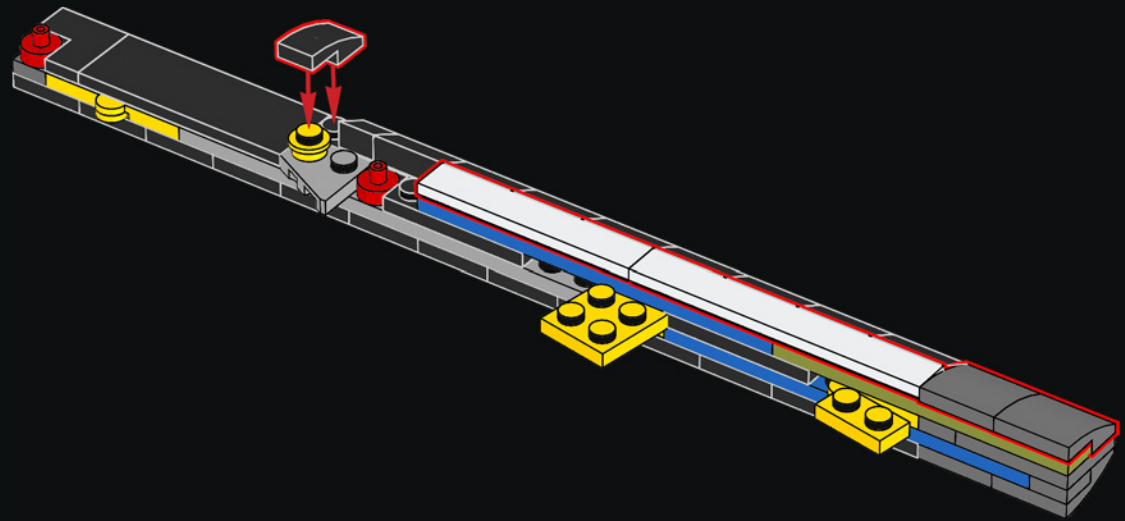




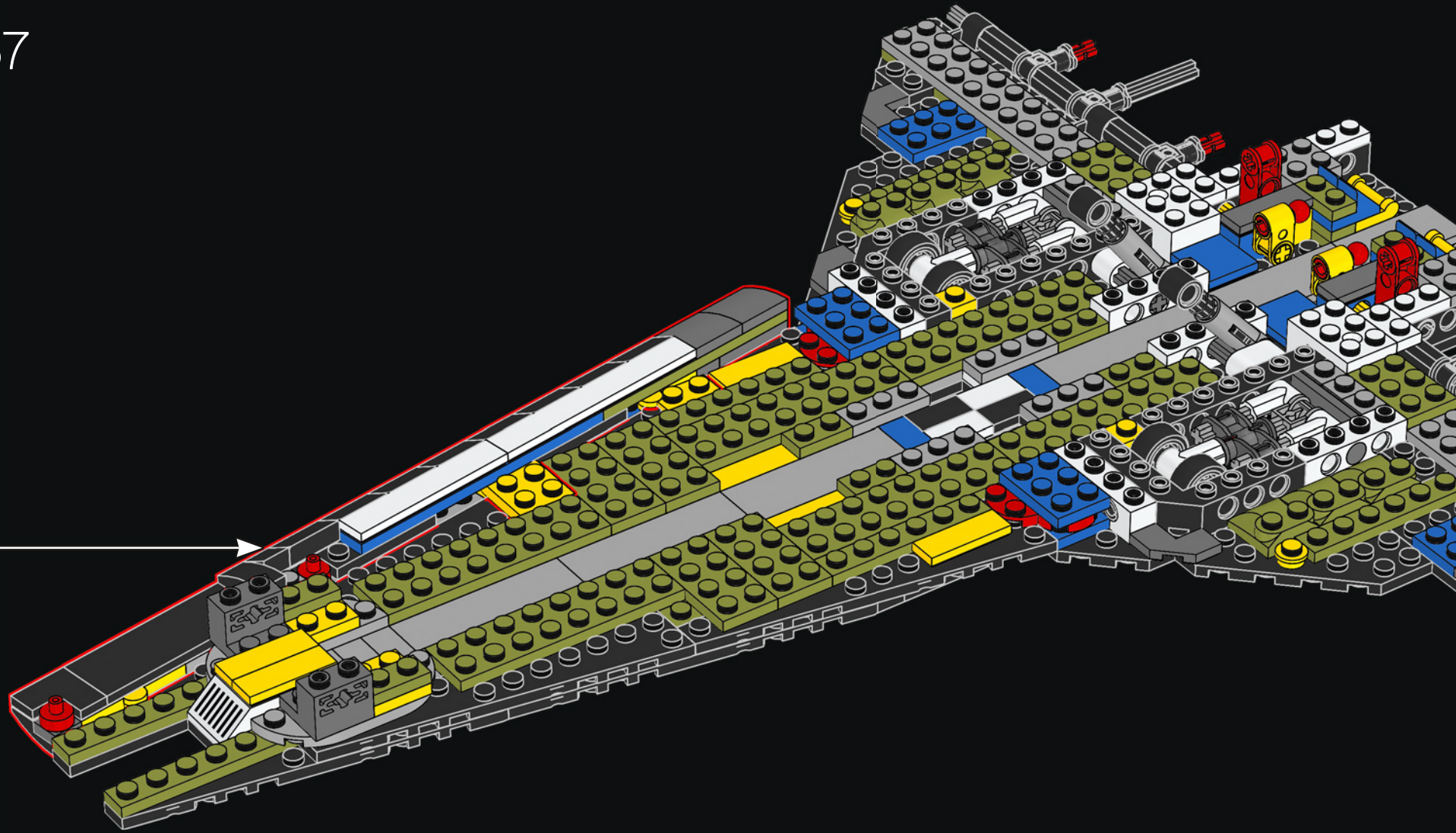
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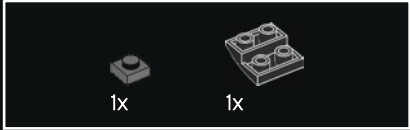
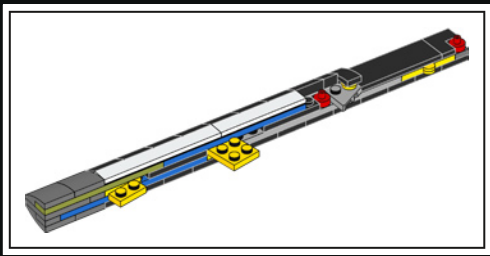


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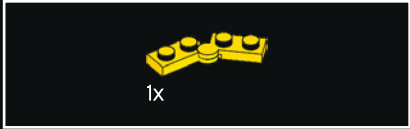
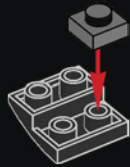


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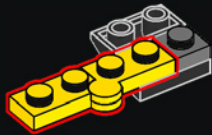




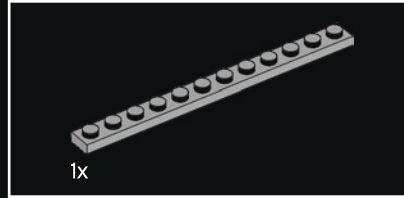
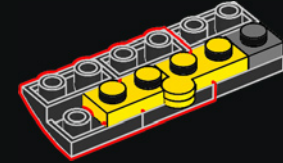
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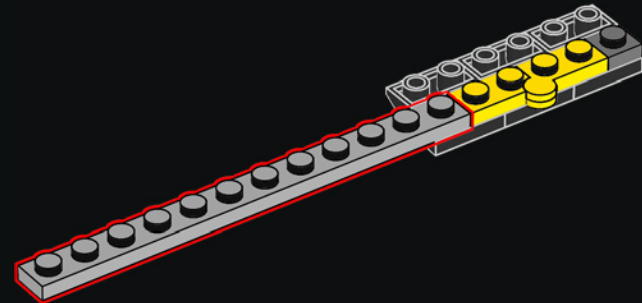
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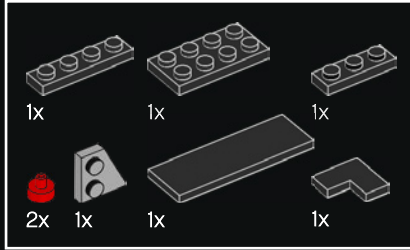
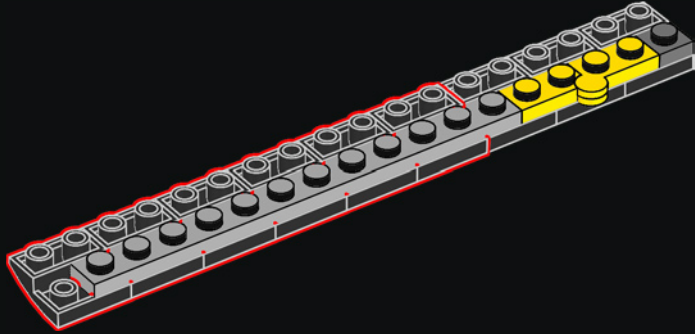


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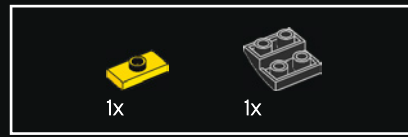
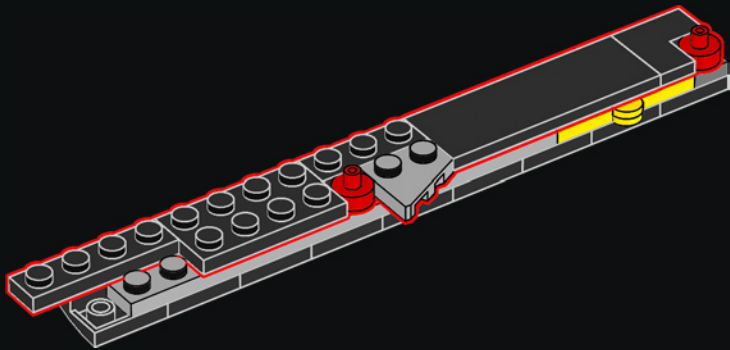




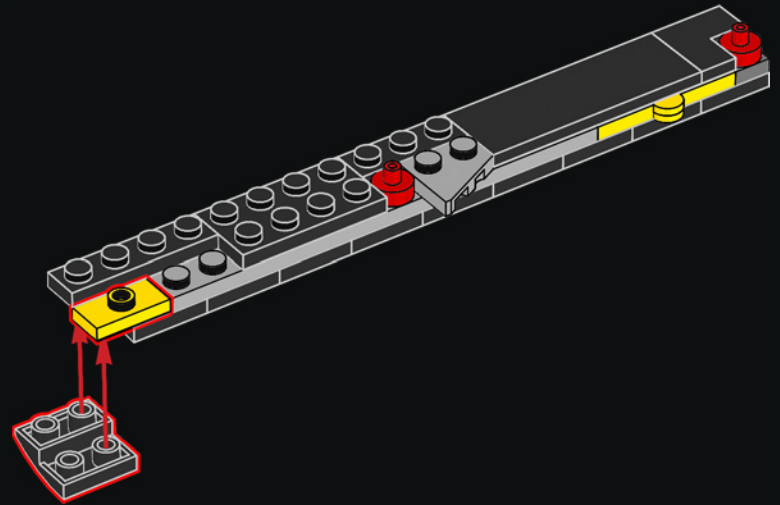
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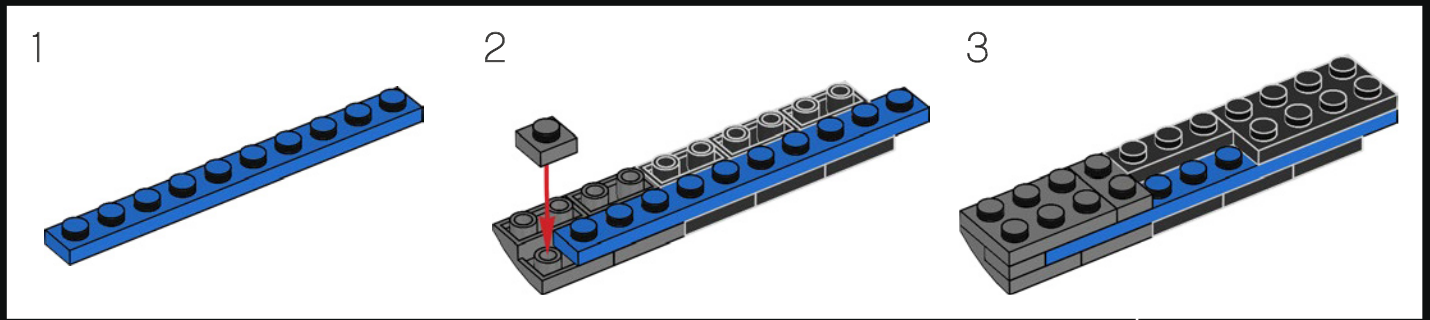
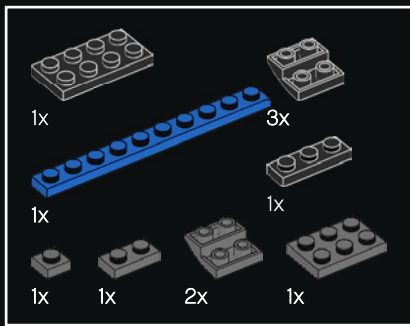


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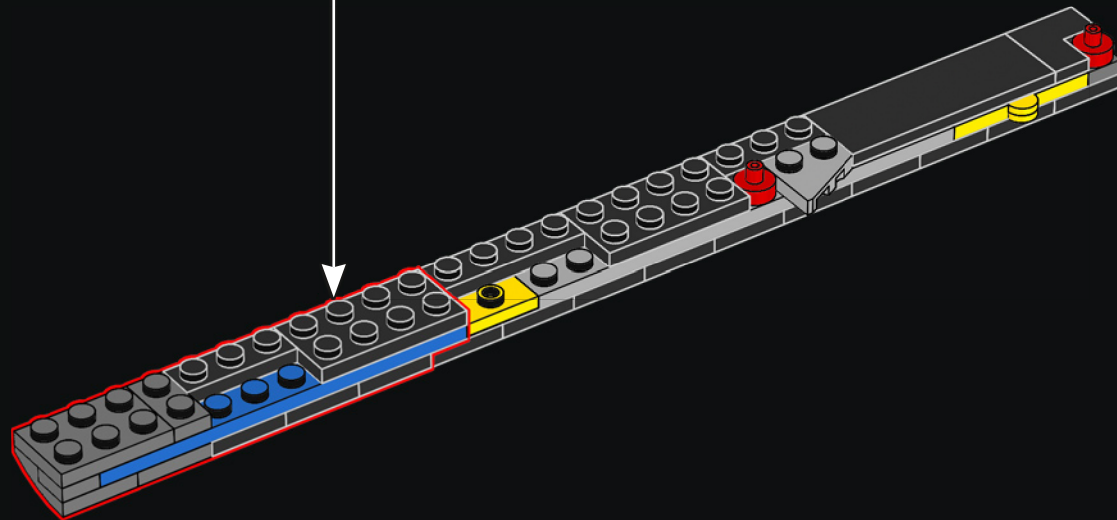


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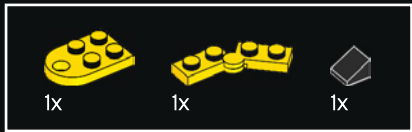
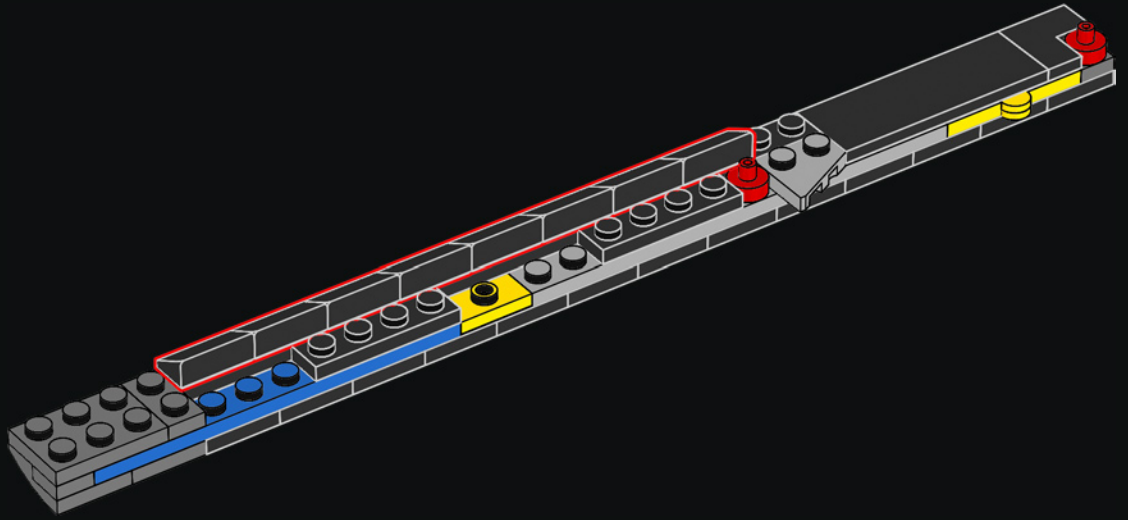
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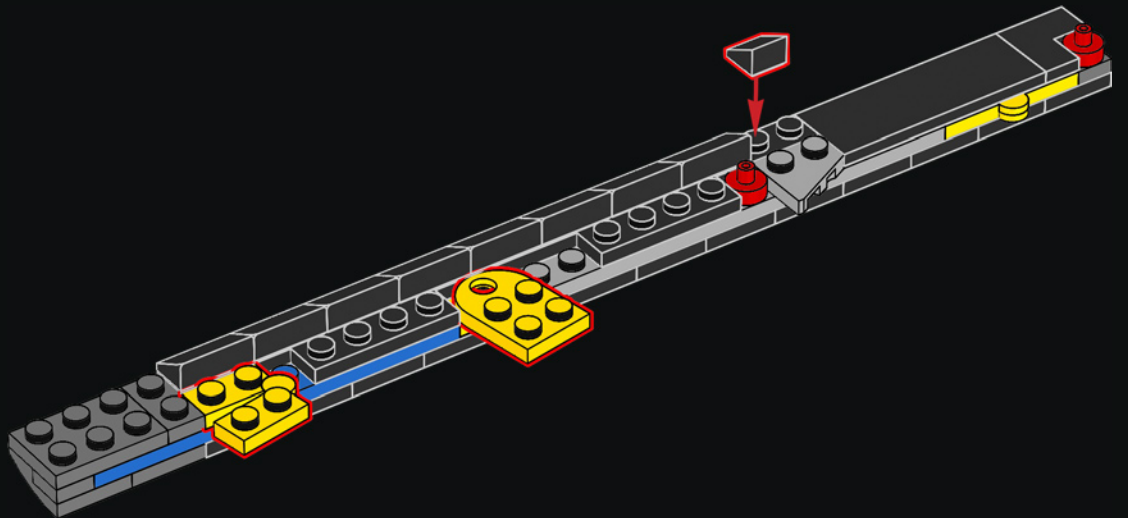


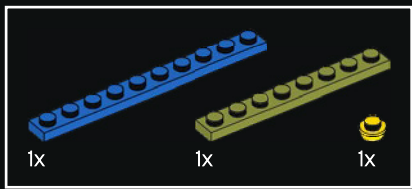


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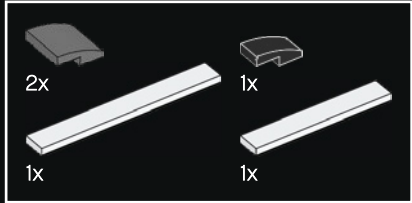
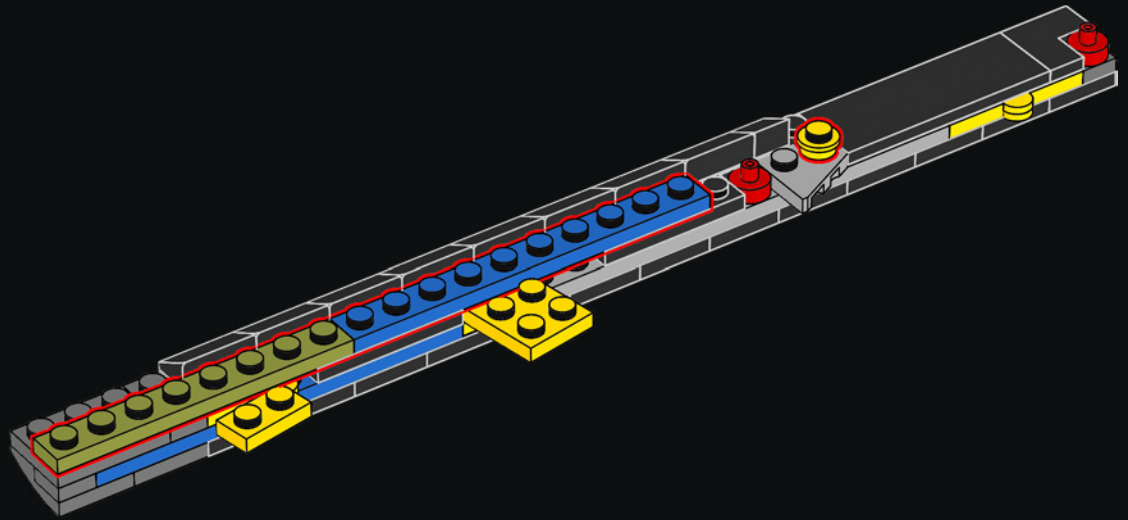


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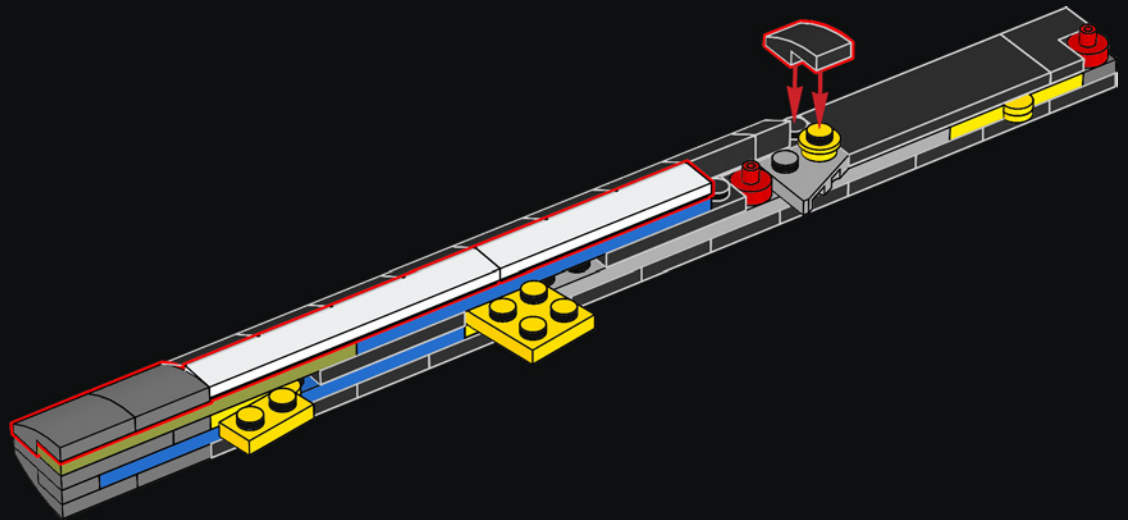




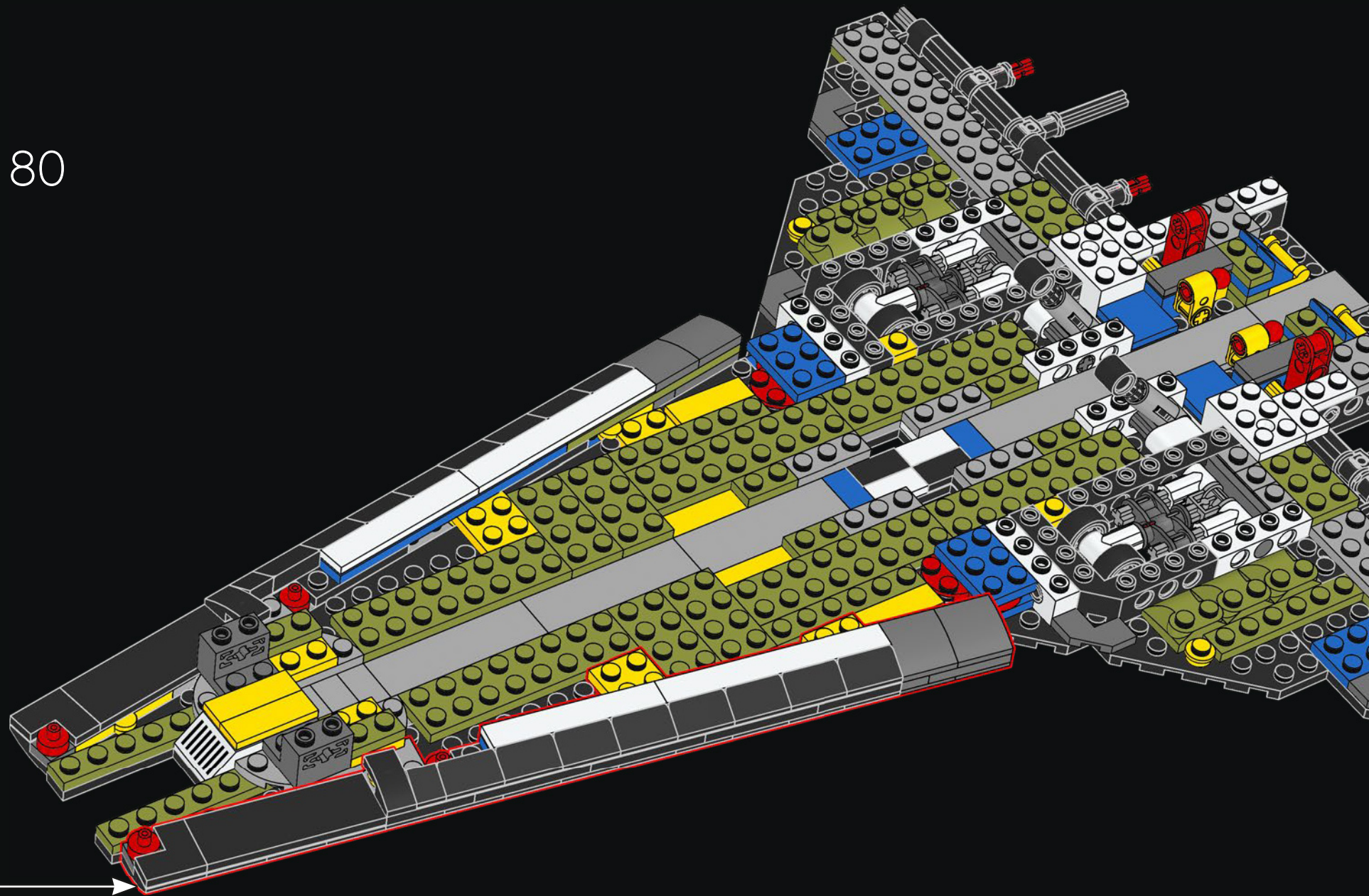
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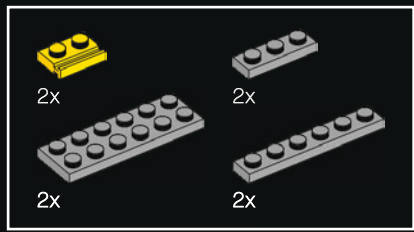


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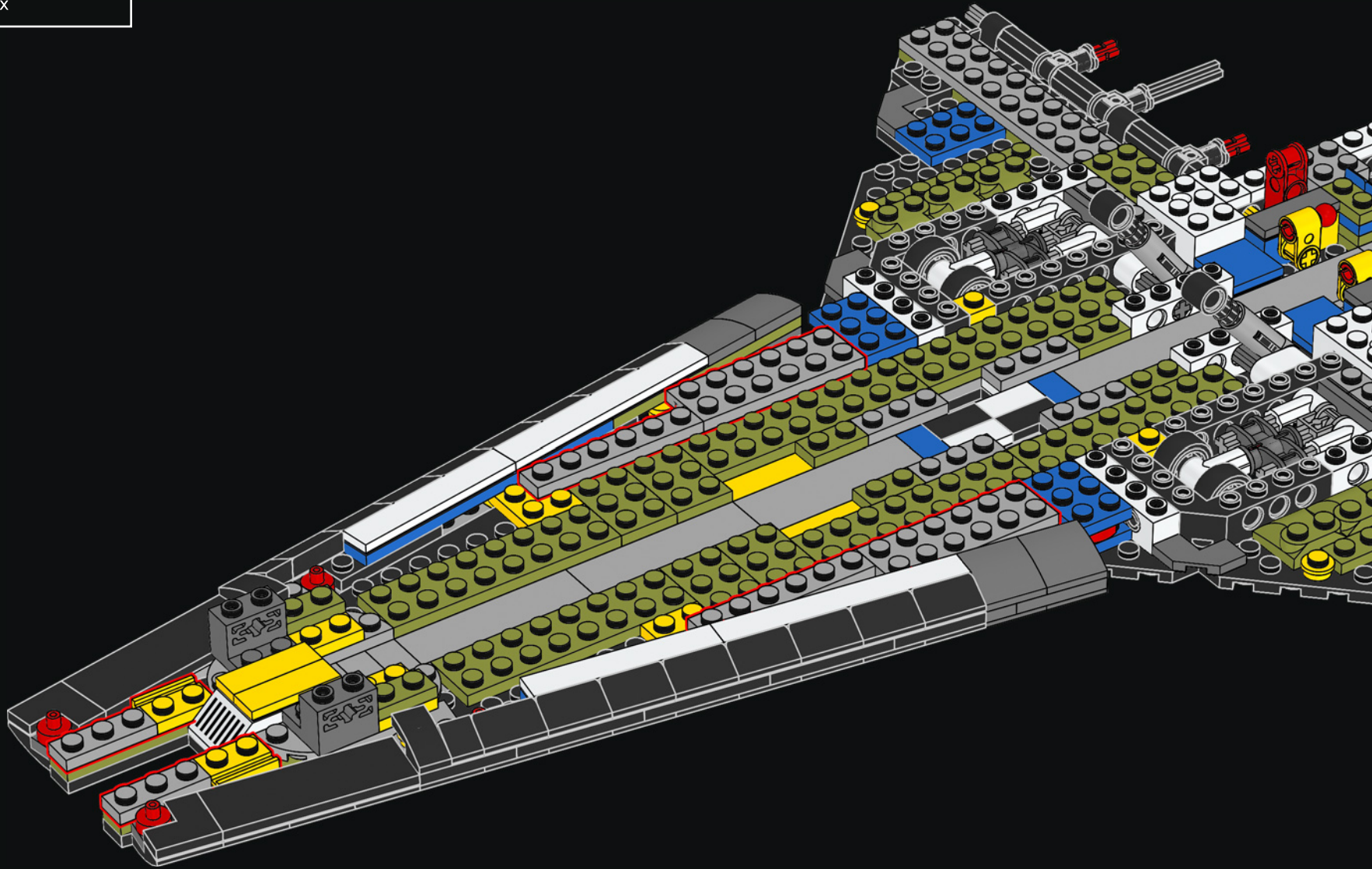


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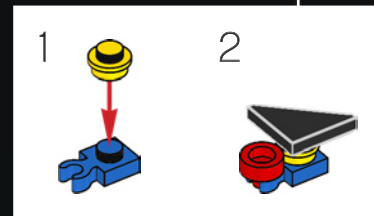
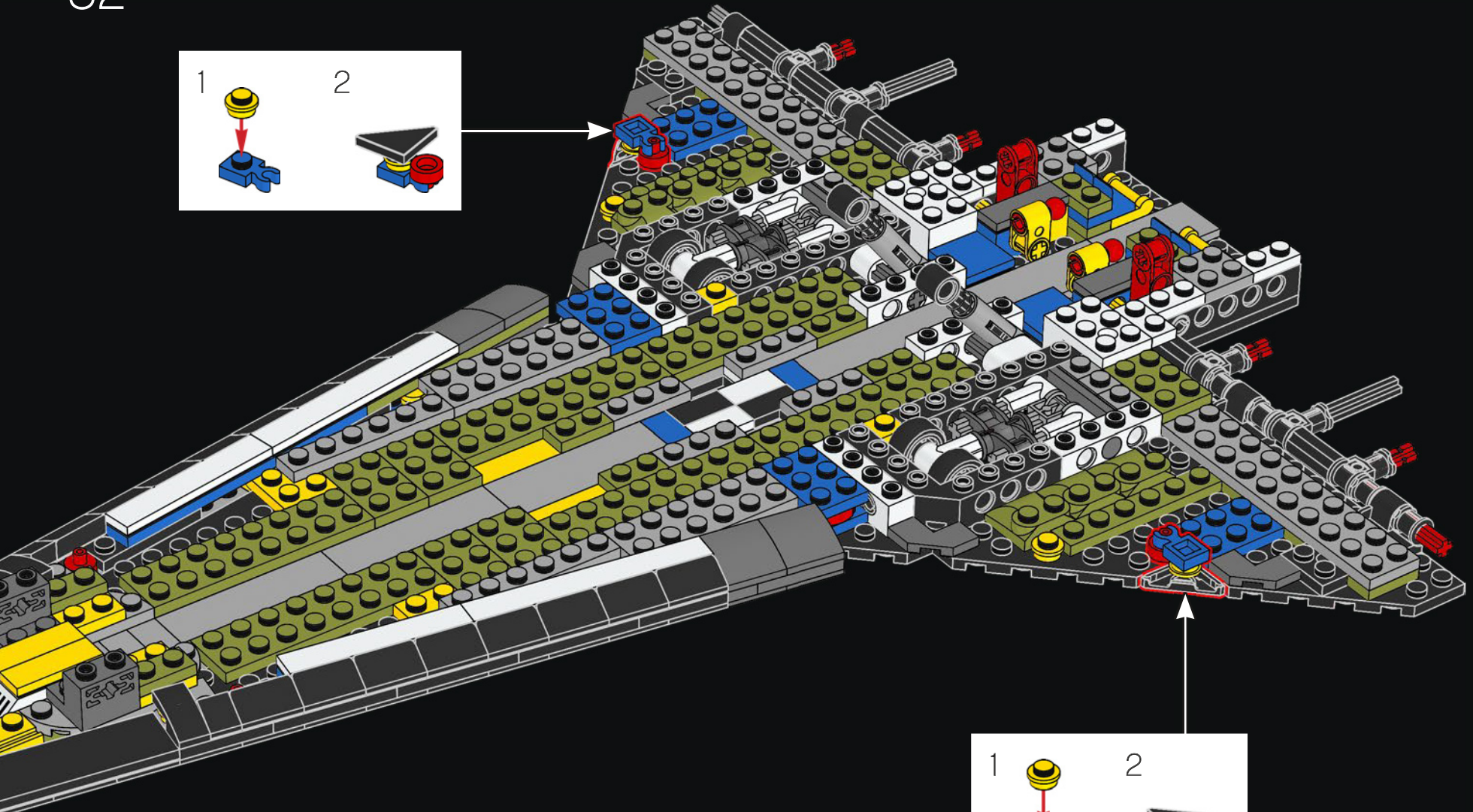
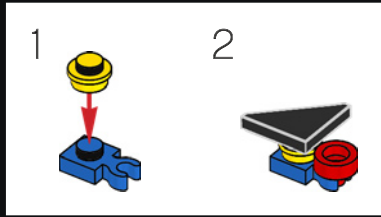


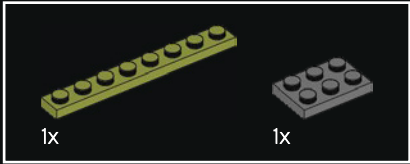
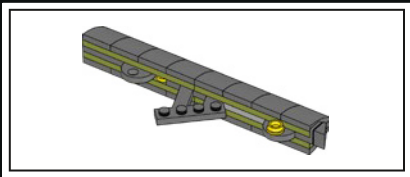
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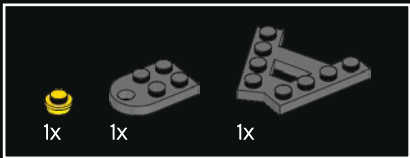
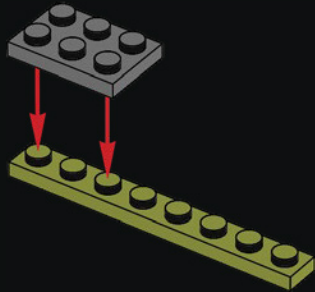
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82

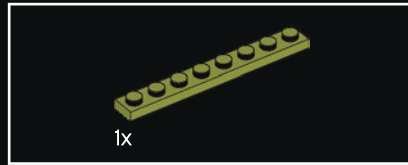
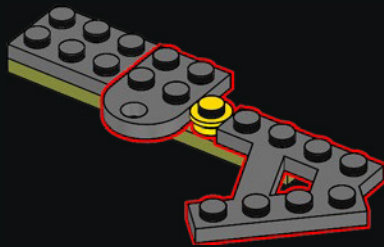




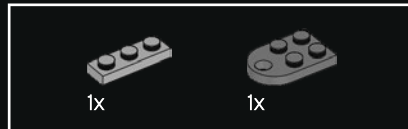
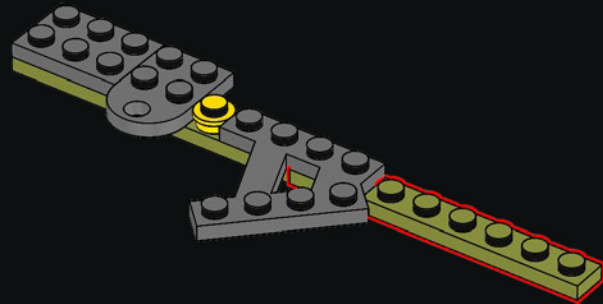
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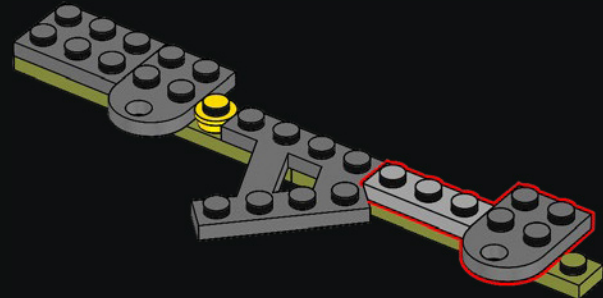
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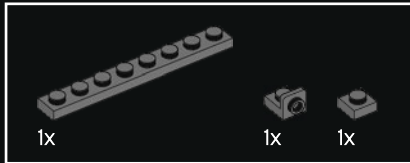
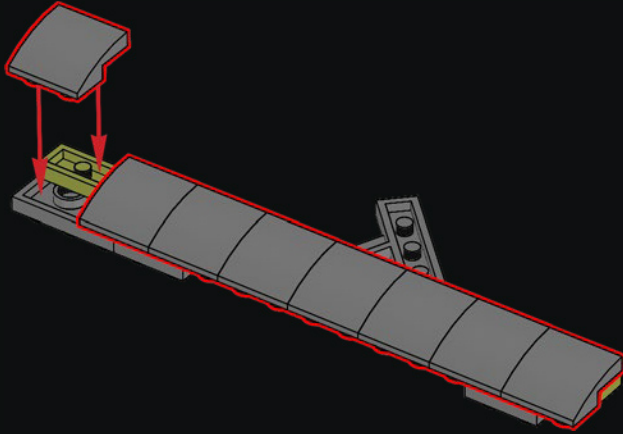


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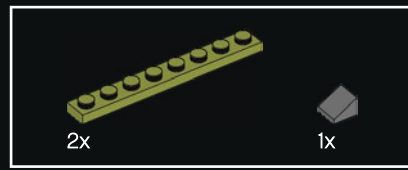
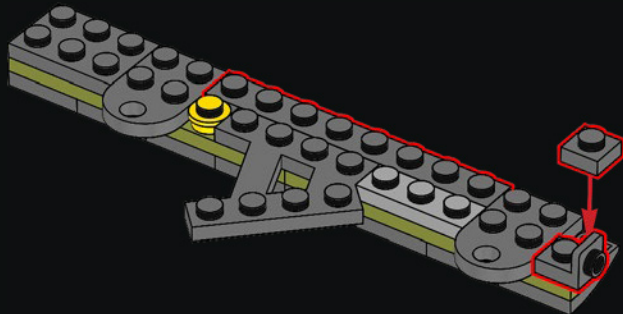




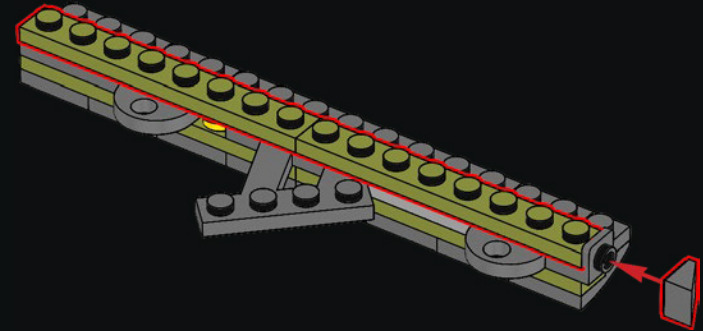
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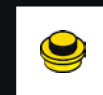
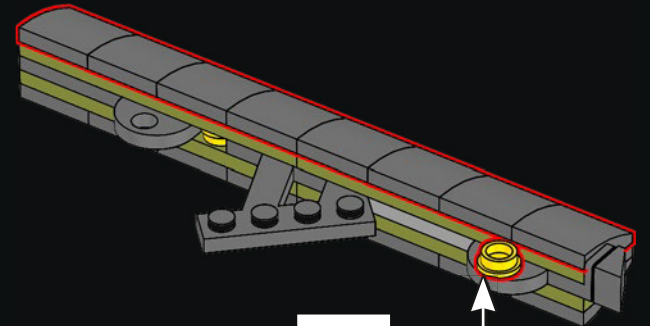
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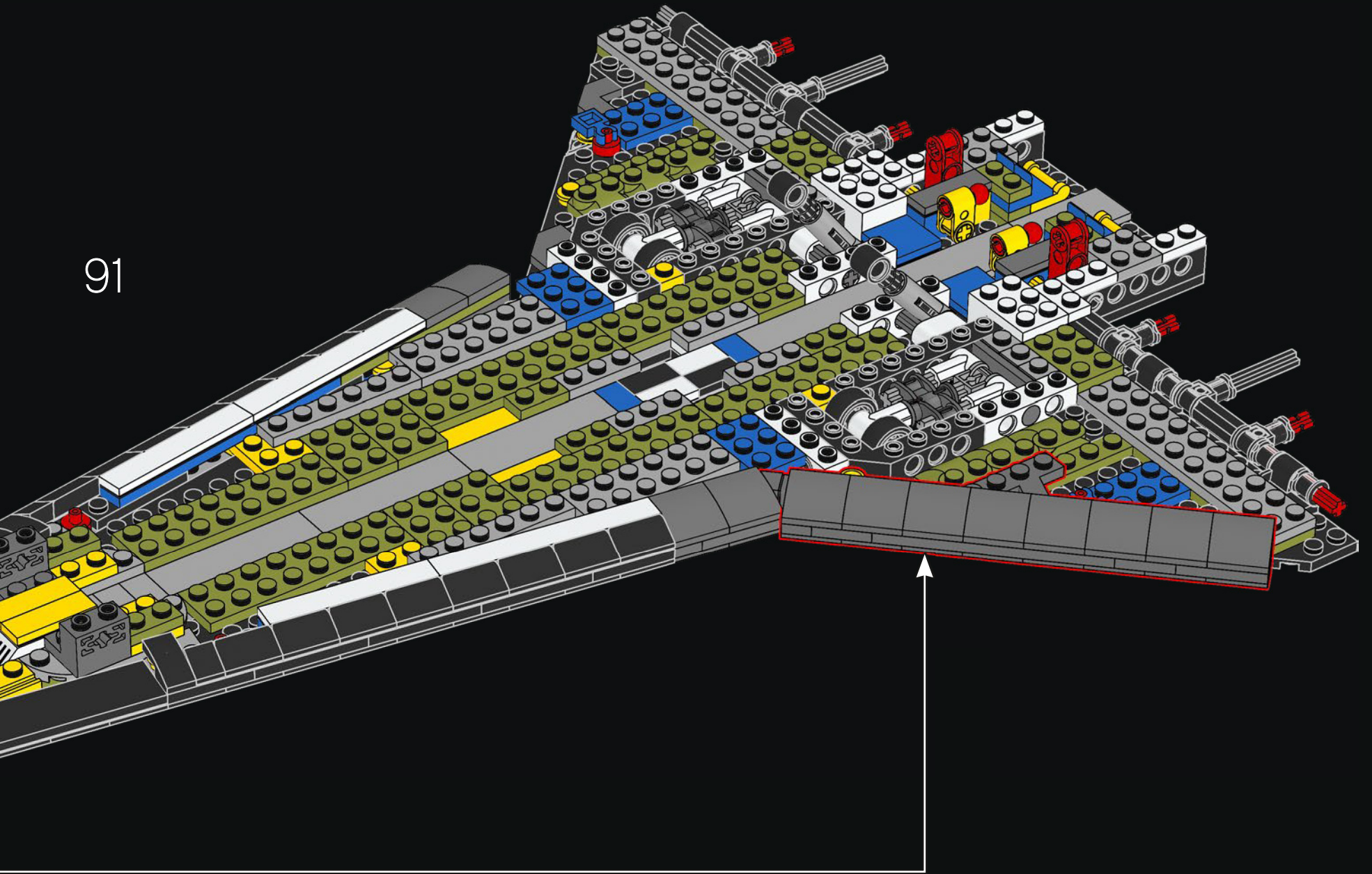
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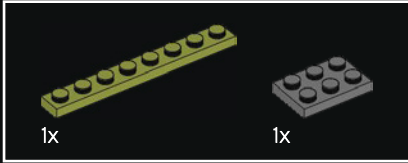
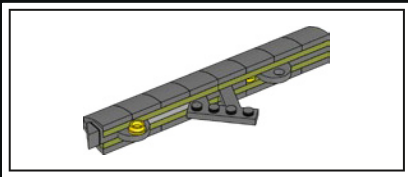
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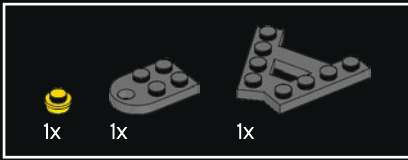
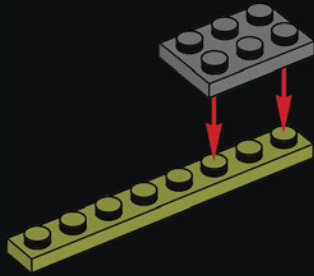
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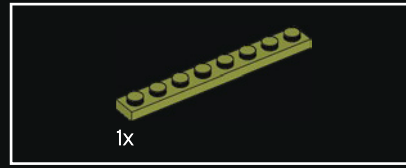
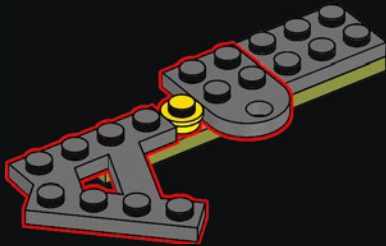




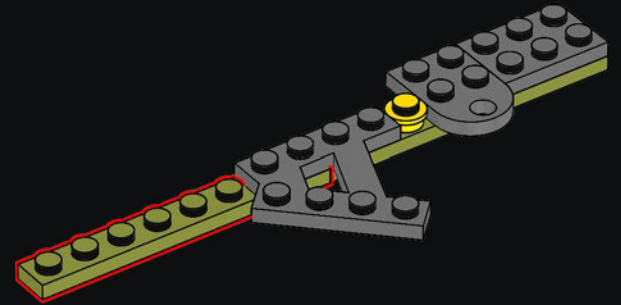
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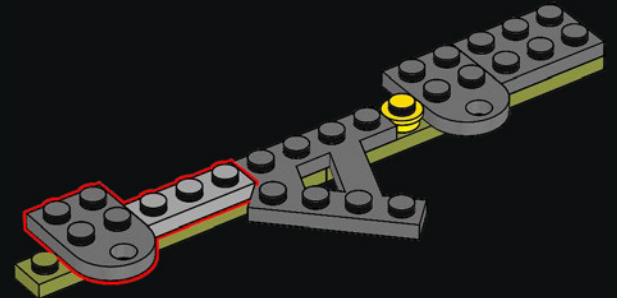
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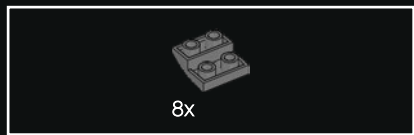


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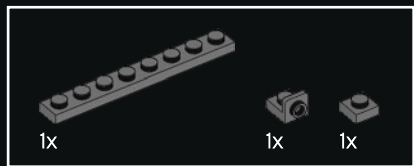
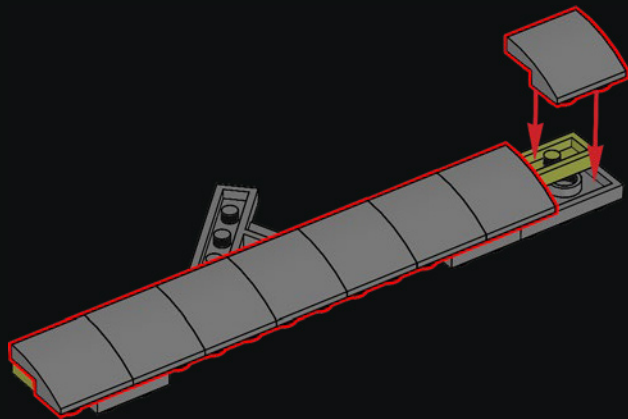


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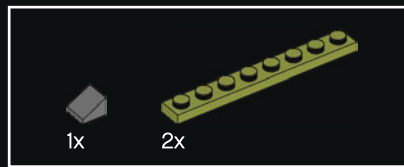
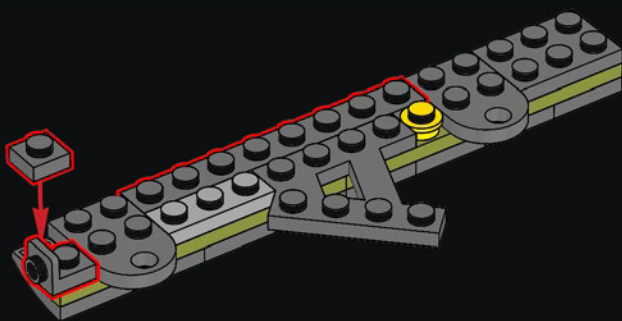




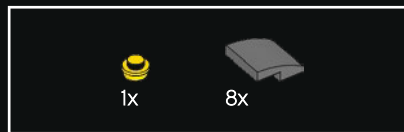
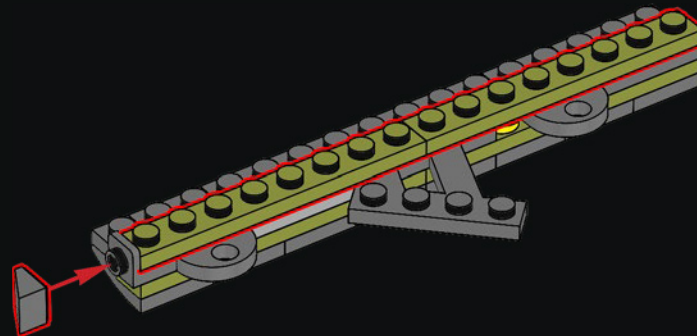
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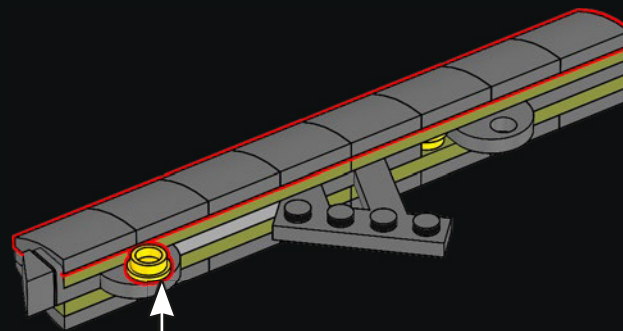
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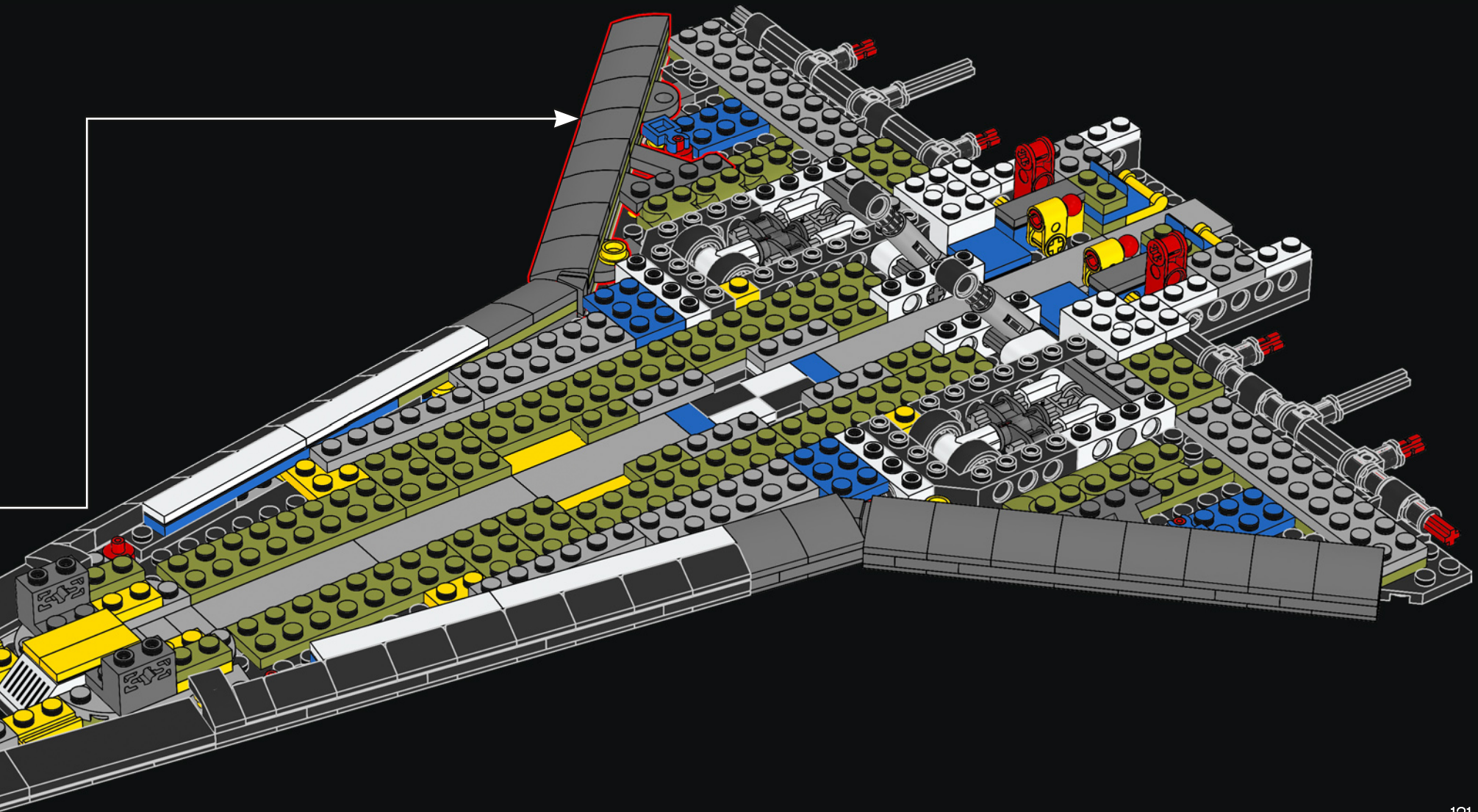
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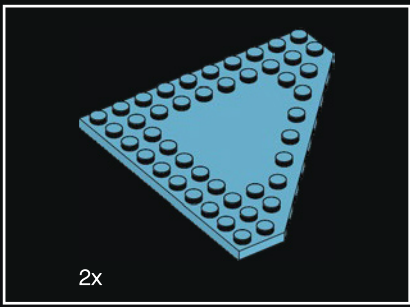


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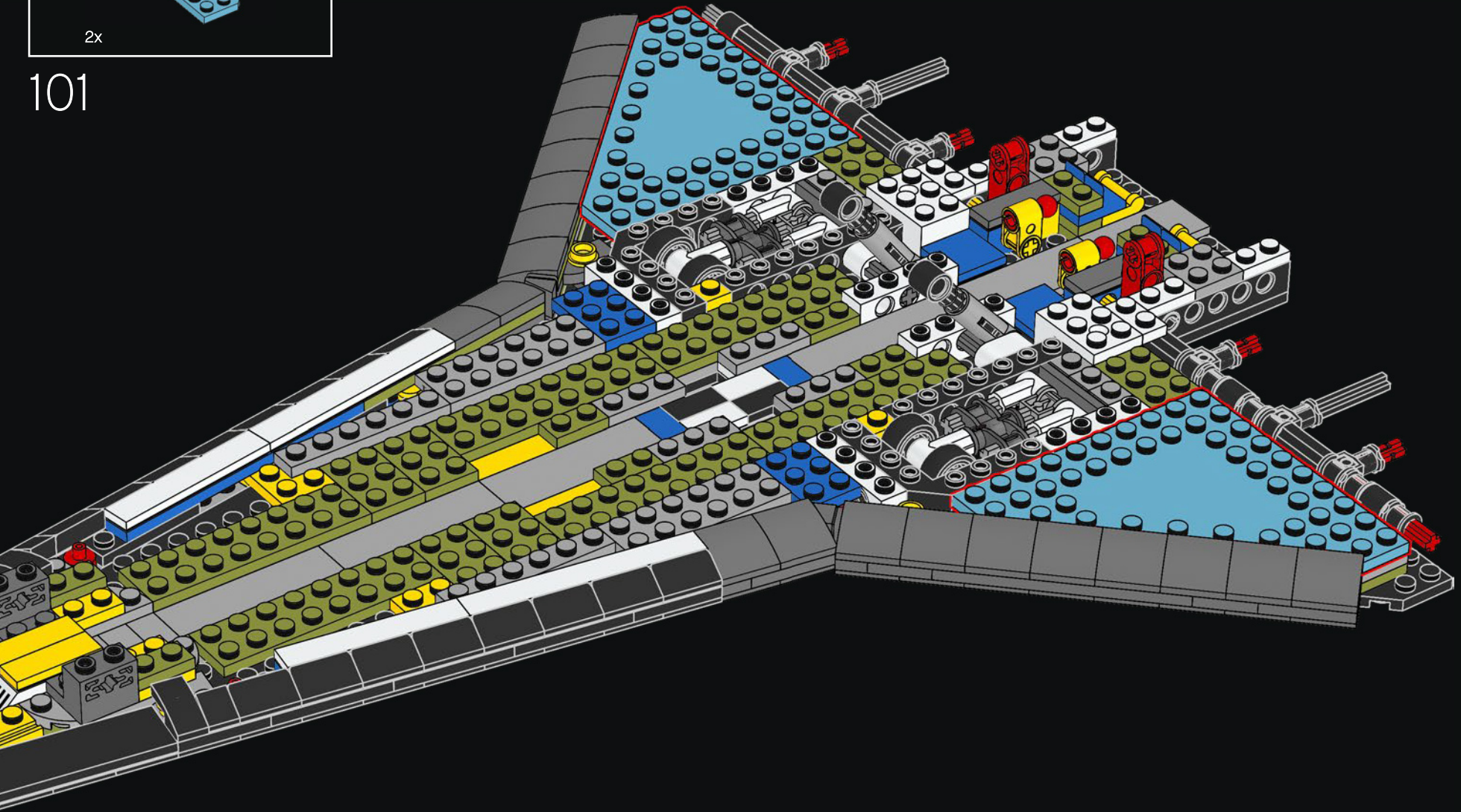


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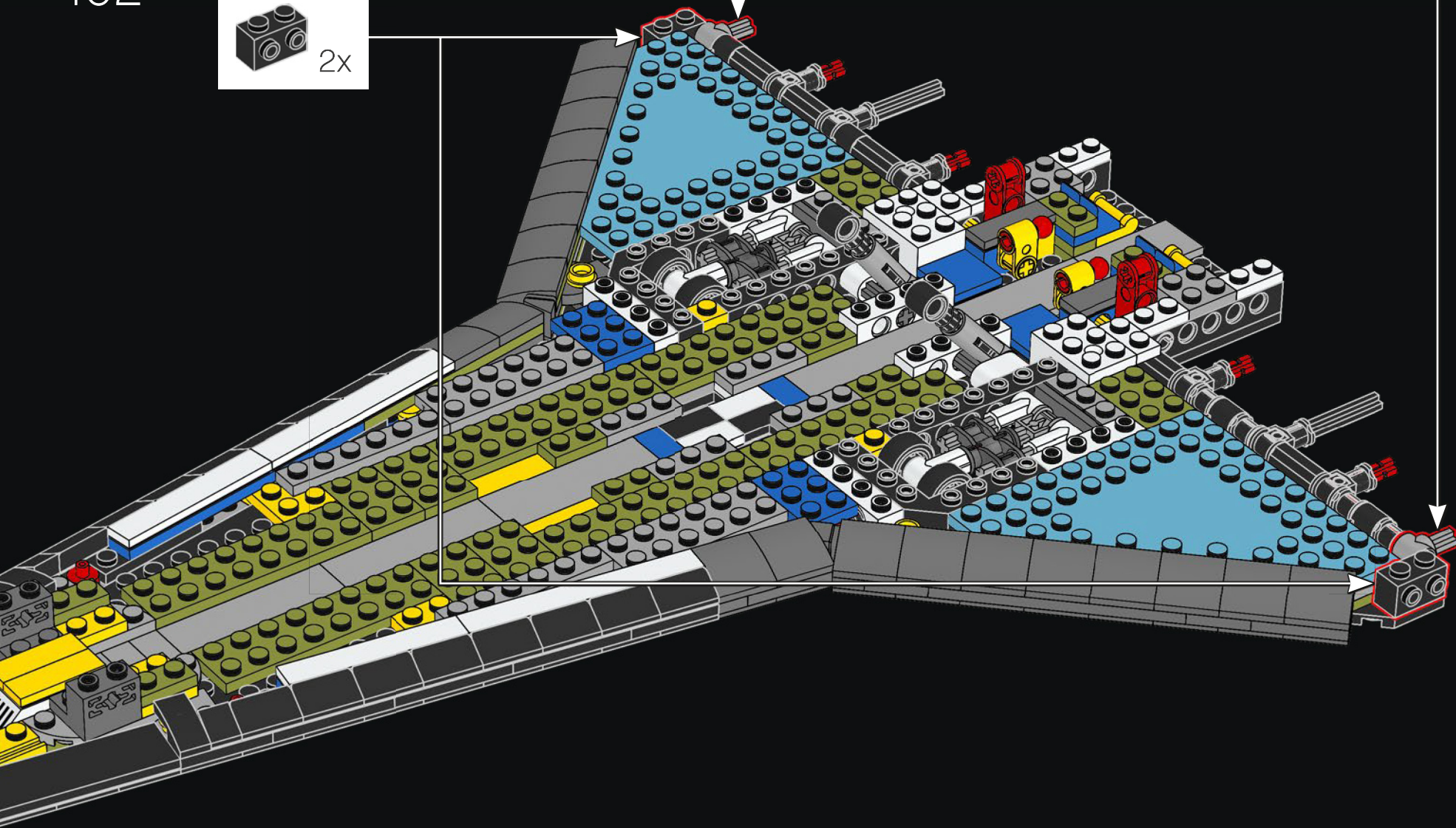
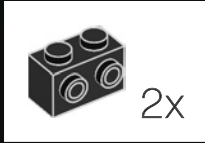


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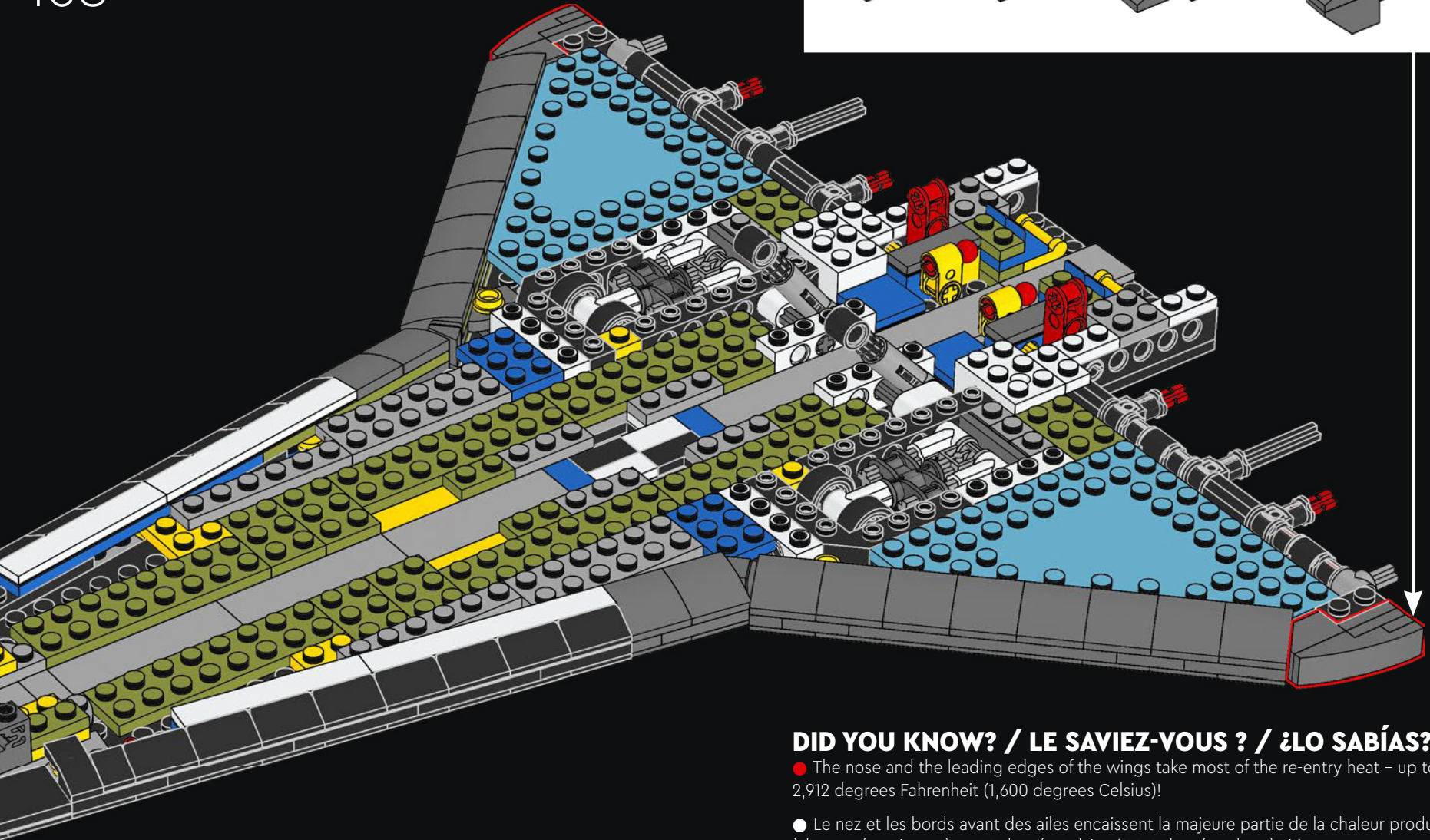
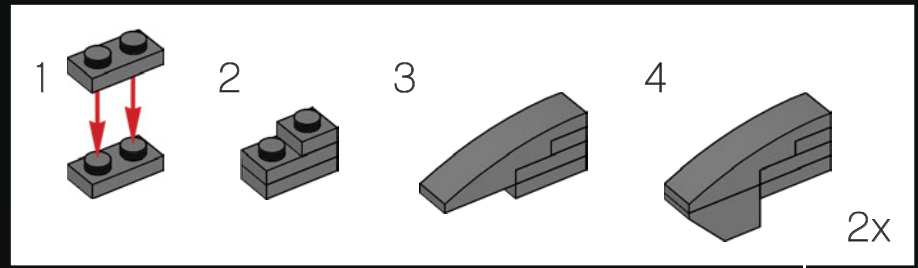


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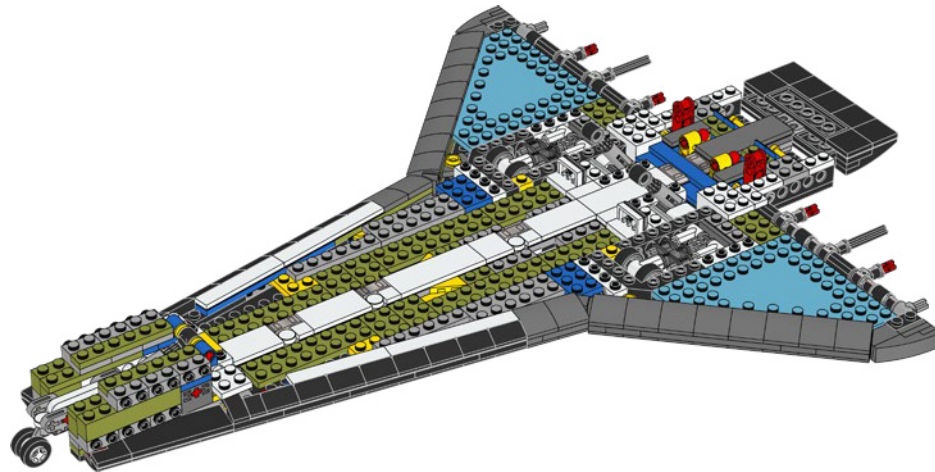
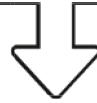


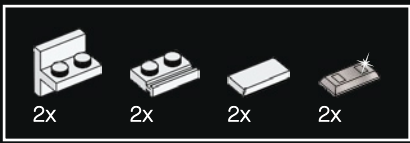
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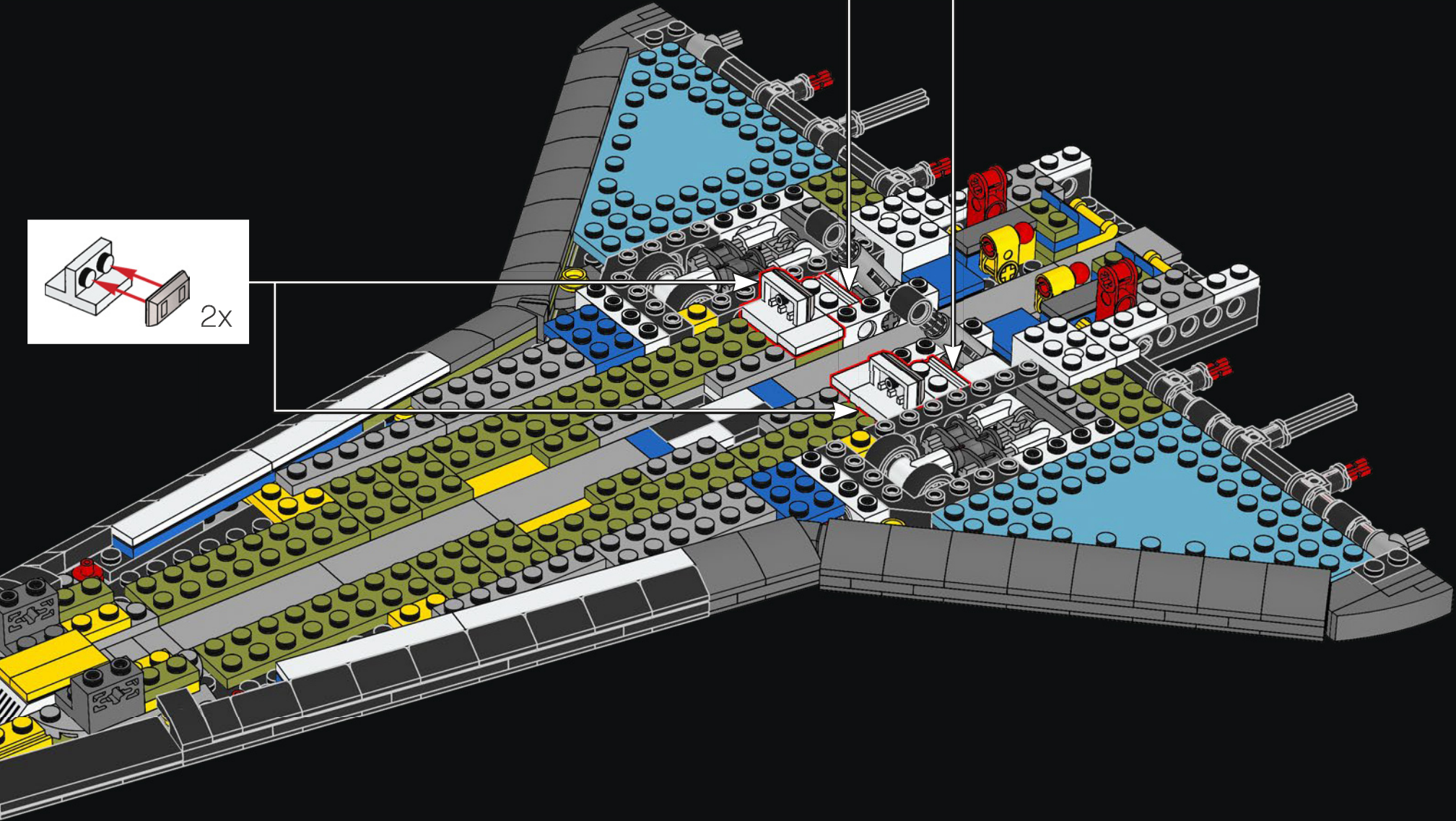
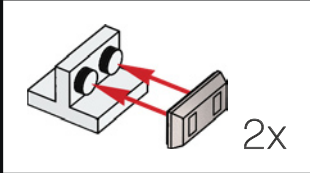
**DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?**

- The nose and the leading edges of the wings take most of the re-entry heat - up to 2,912 degrees Fahrenheit (1,600 degrees Celsius)!
- Le nez et les bords avant des ailes encaissent la majeure partie de la chaleur produite à la rentrée - jusqu'à 1 600 degrés Celsius (2 912 degrés Fahrenheit) !
- La nariz y los bordes de ataque de las alas son las partes que registran más calor durante el reingreso: ¡hasta 1600 °C!

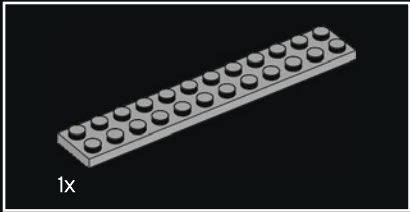
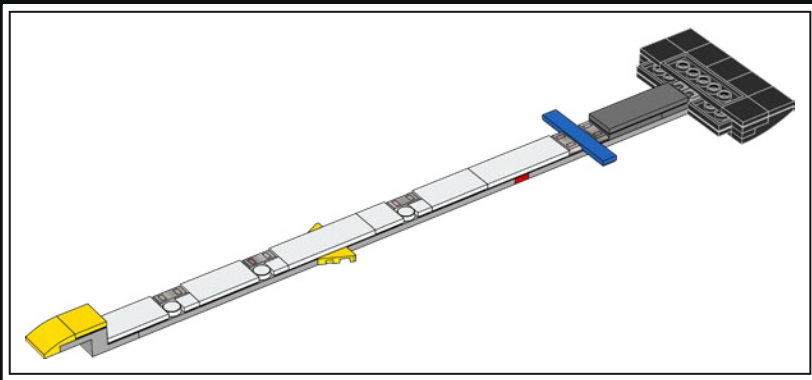




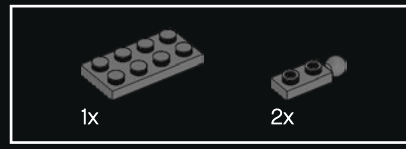
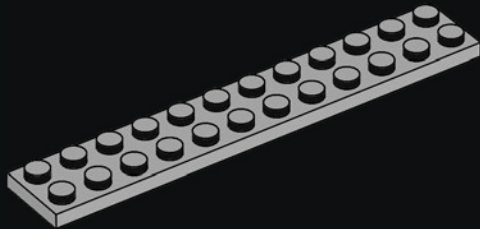
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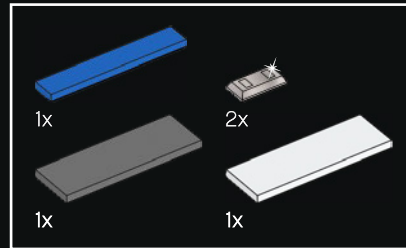
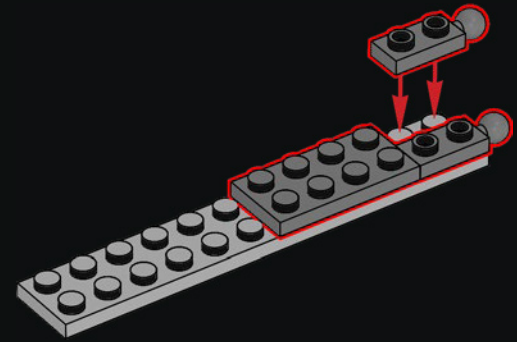




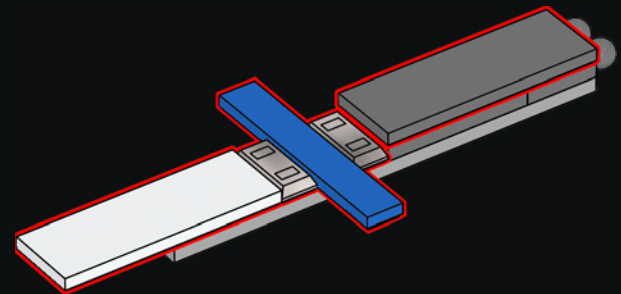
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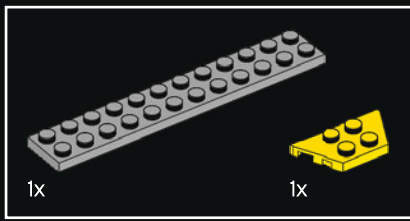
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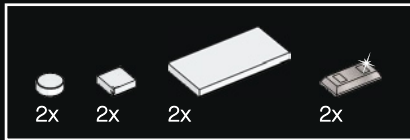
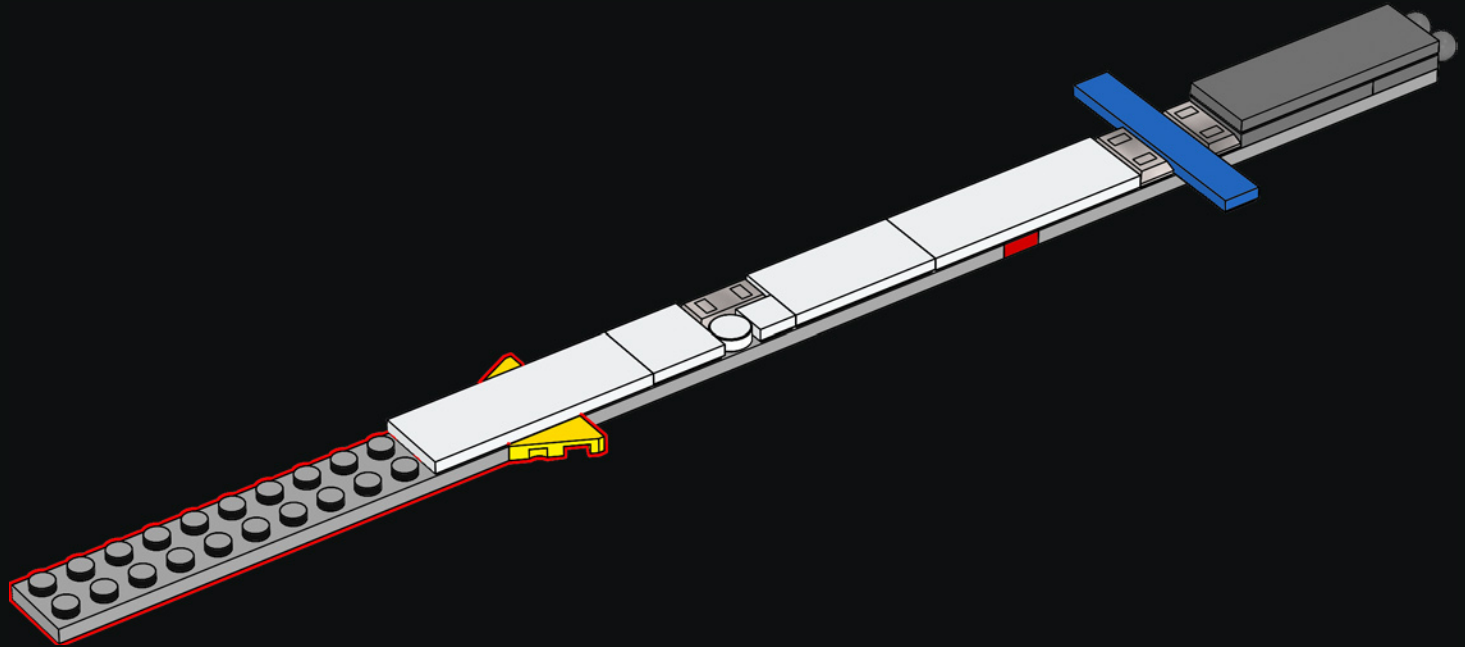
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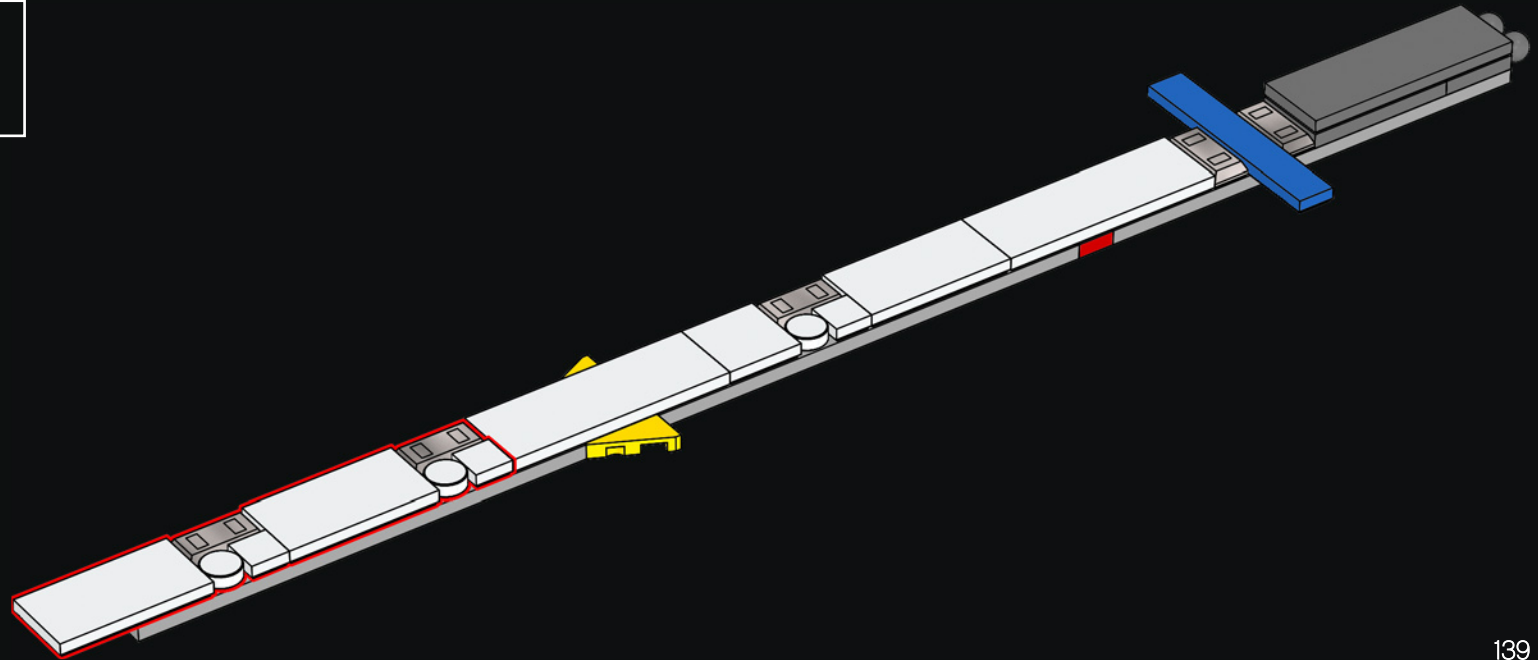


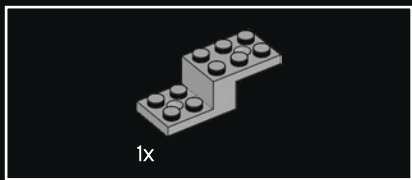


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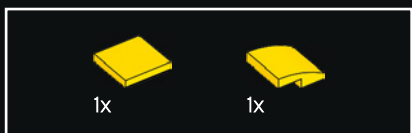
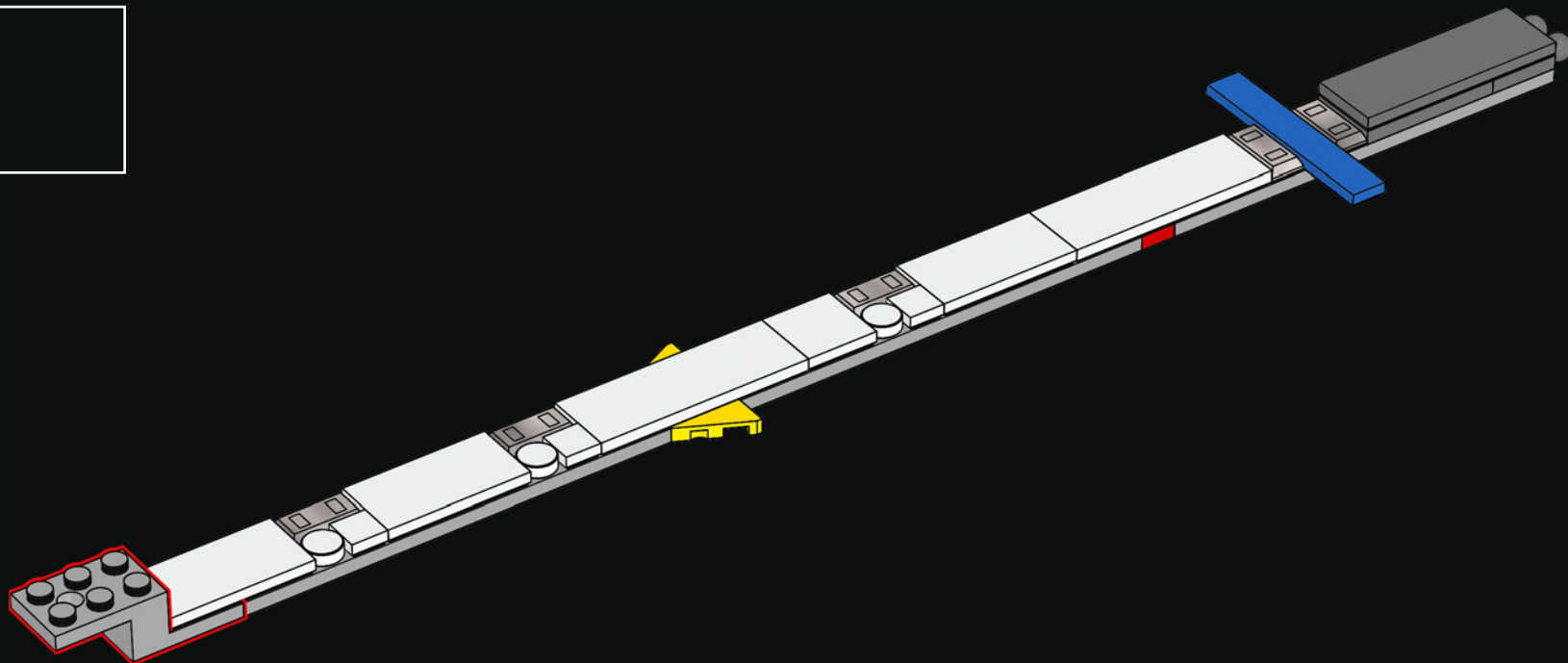


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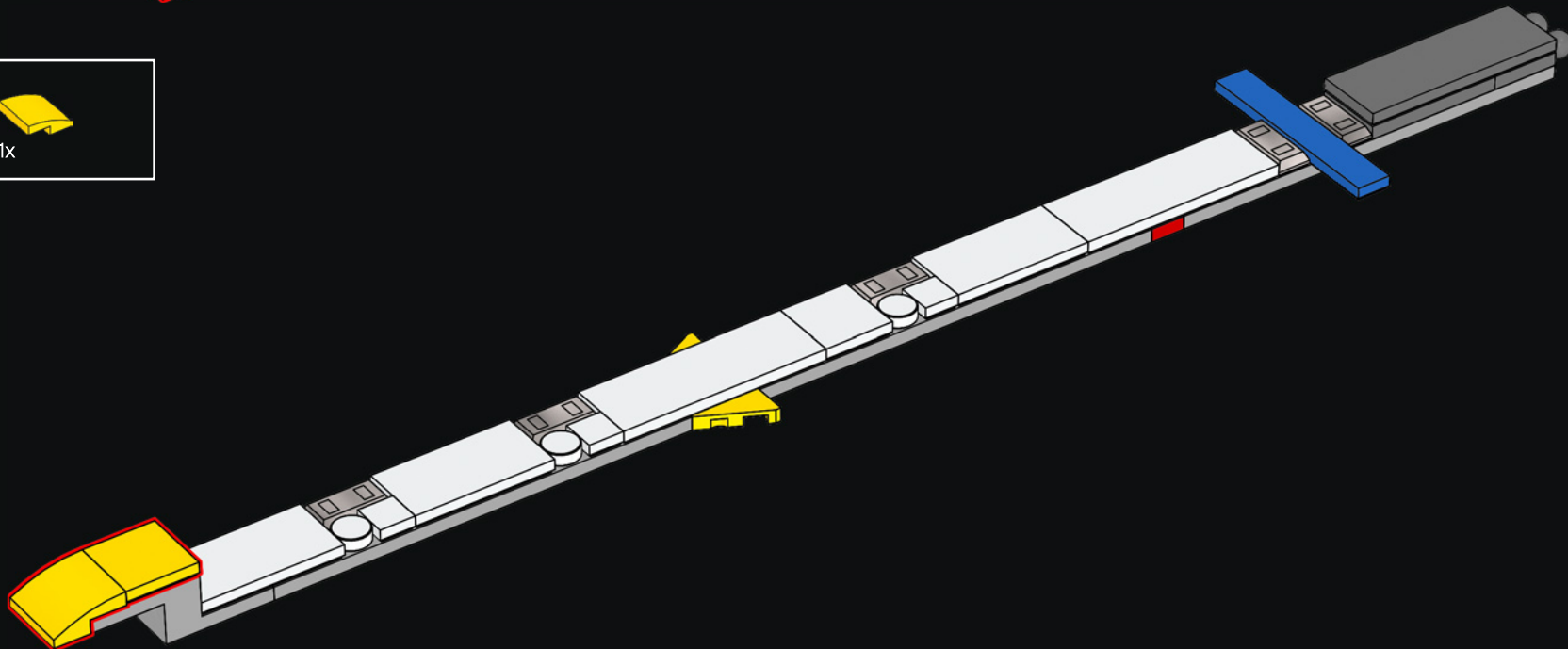


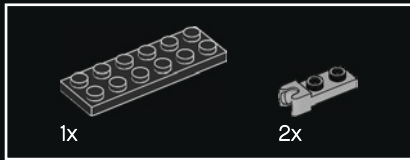
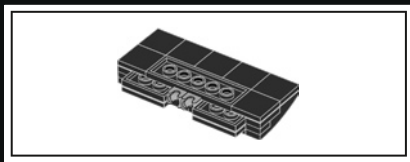


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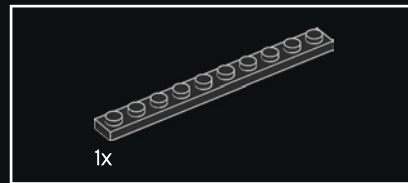
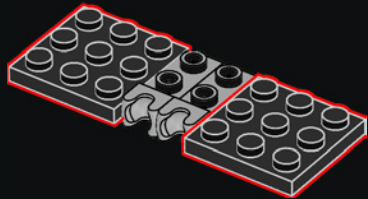




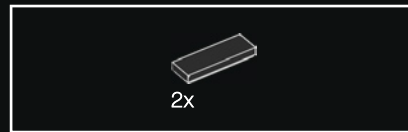
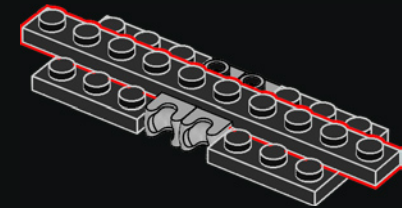
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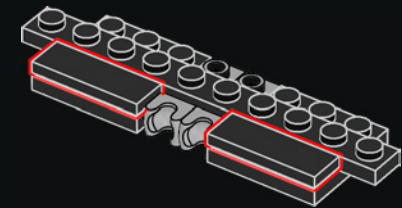
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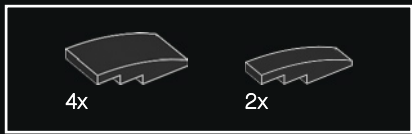


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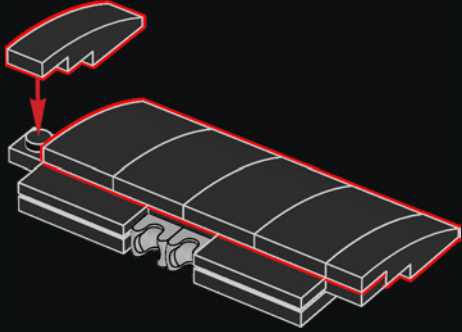


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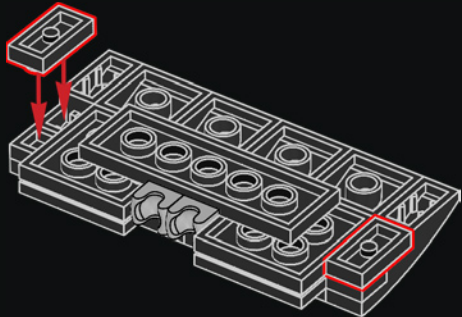




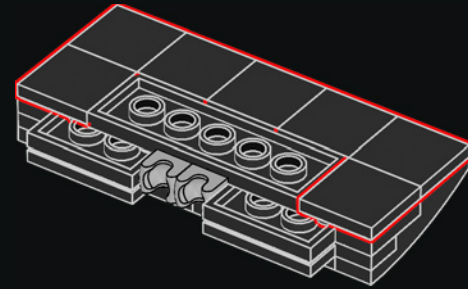
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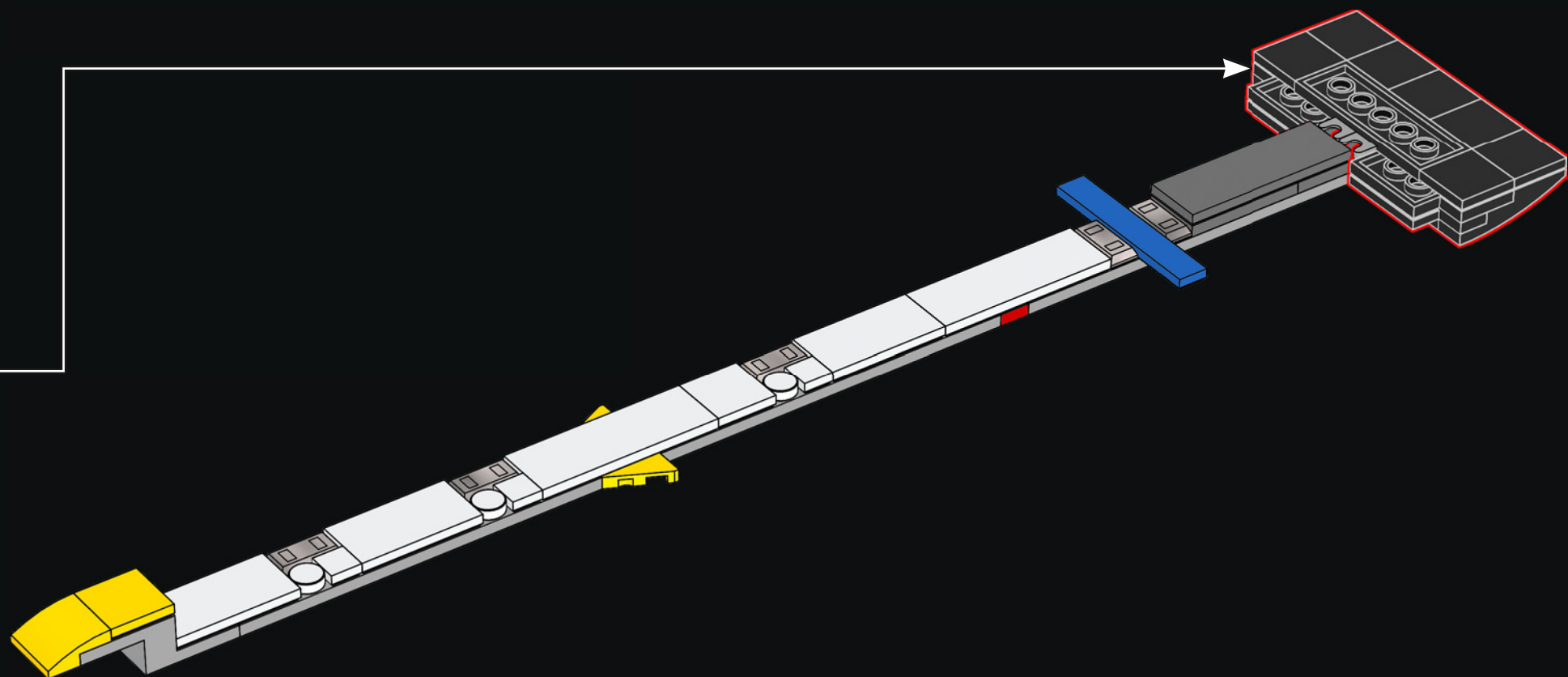
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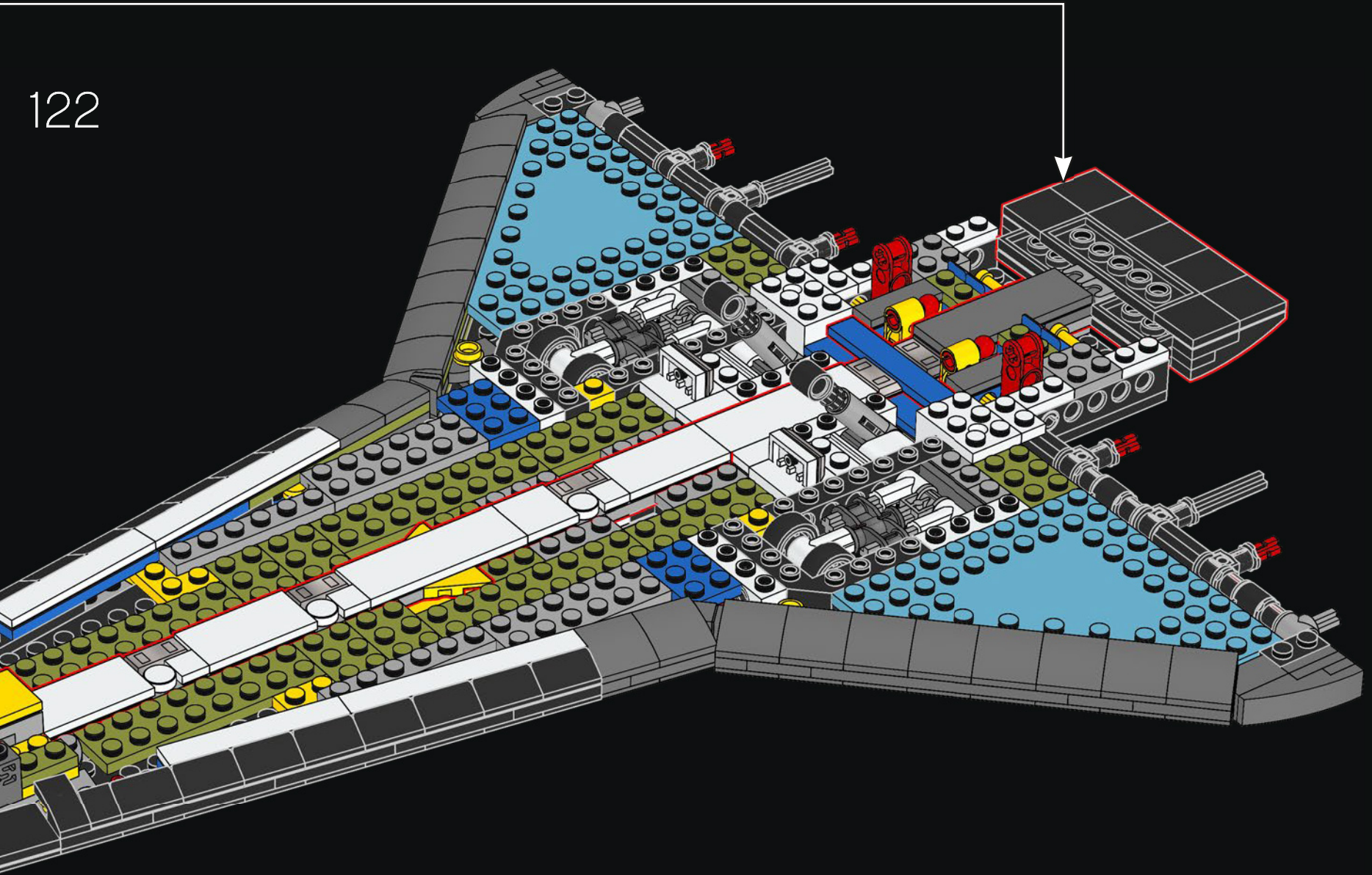
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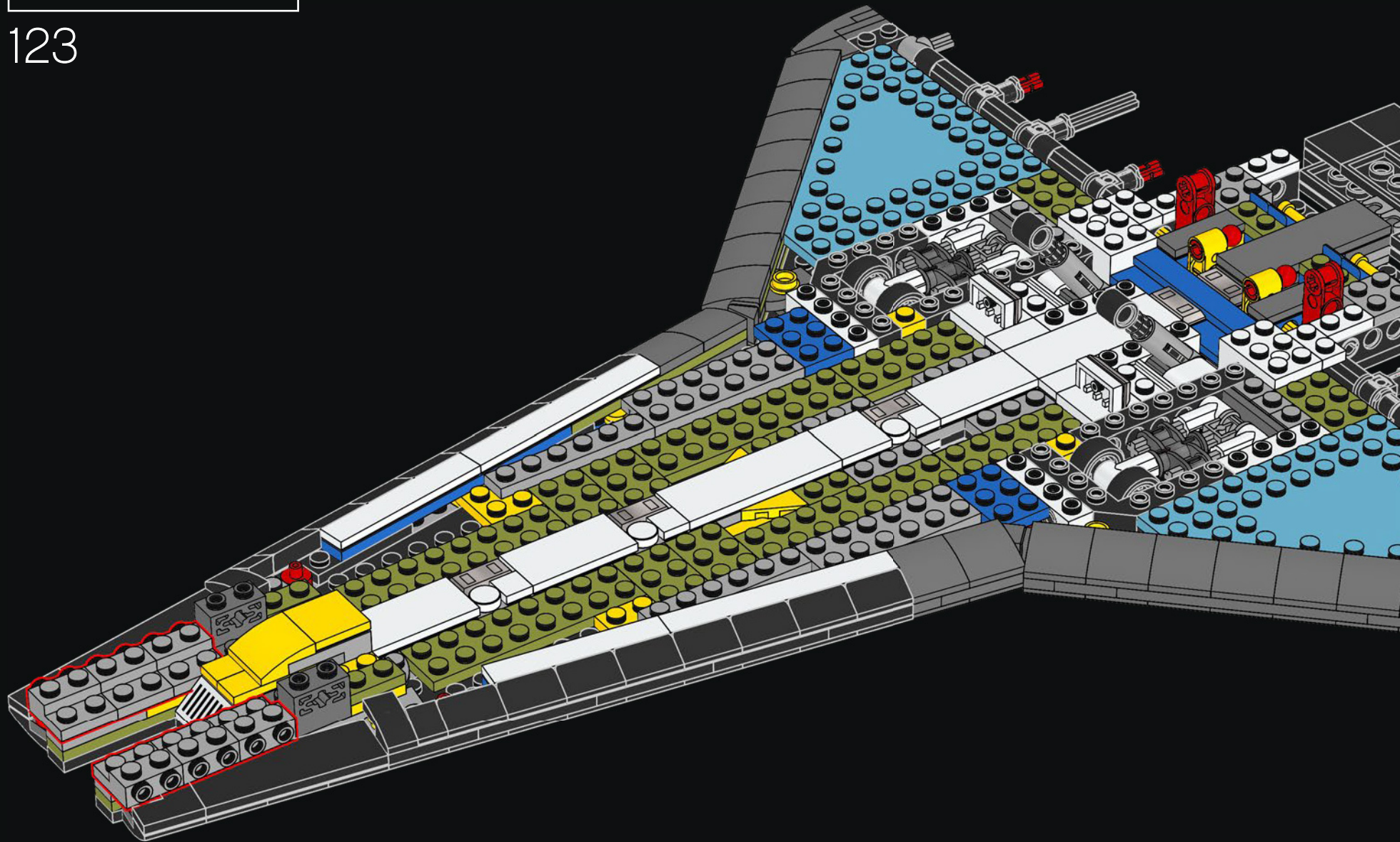
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123





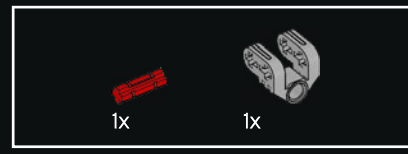
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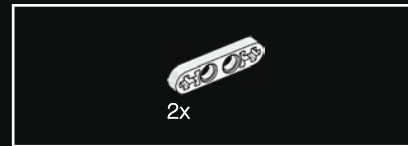
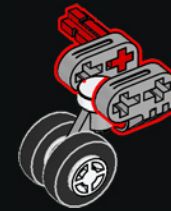
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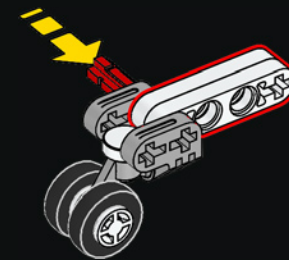
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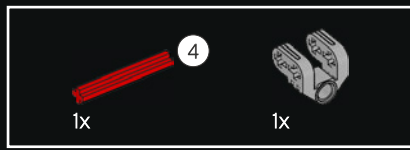


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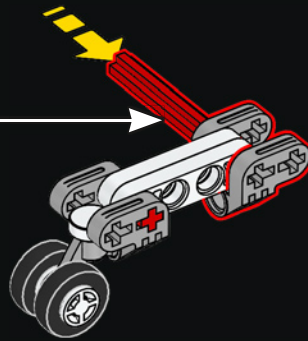
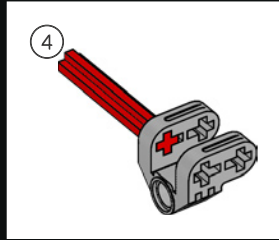


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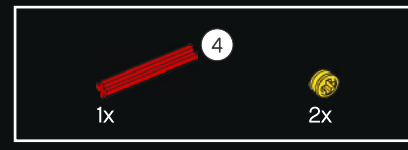
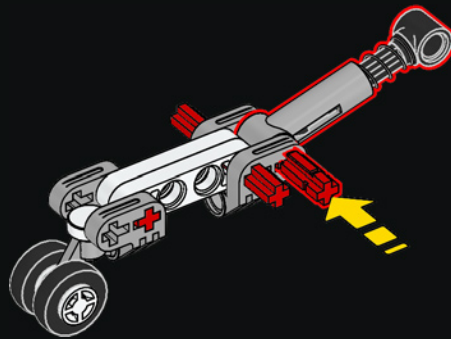




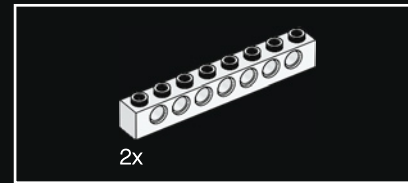
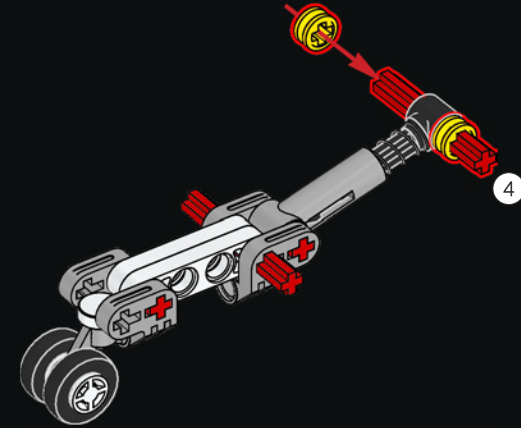
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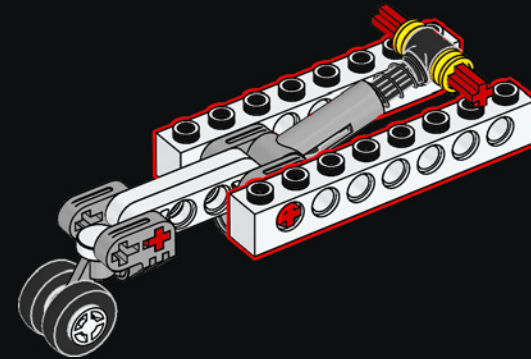
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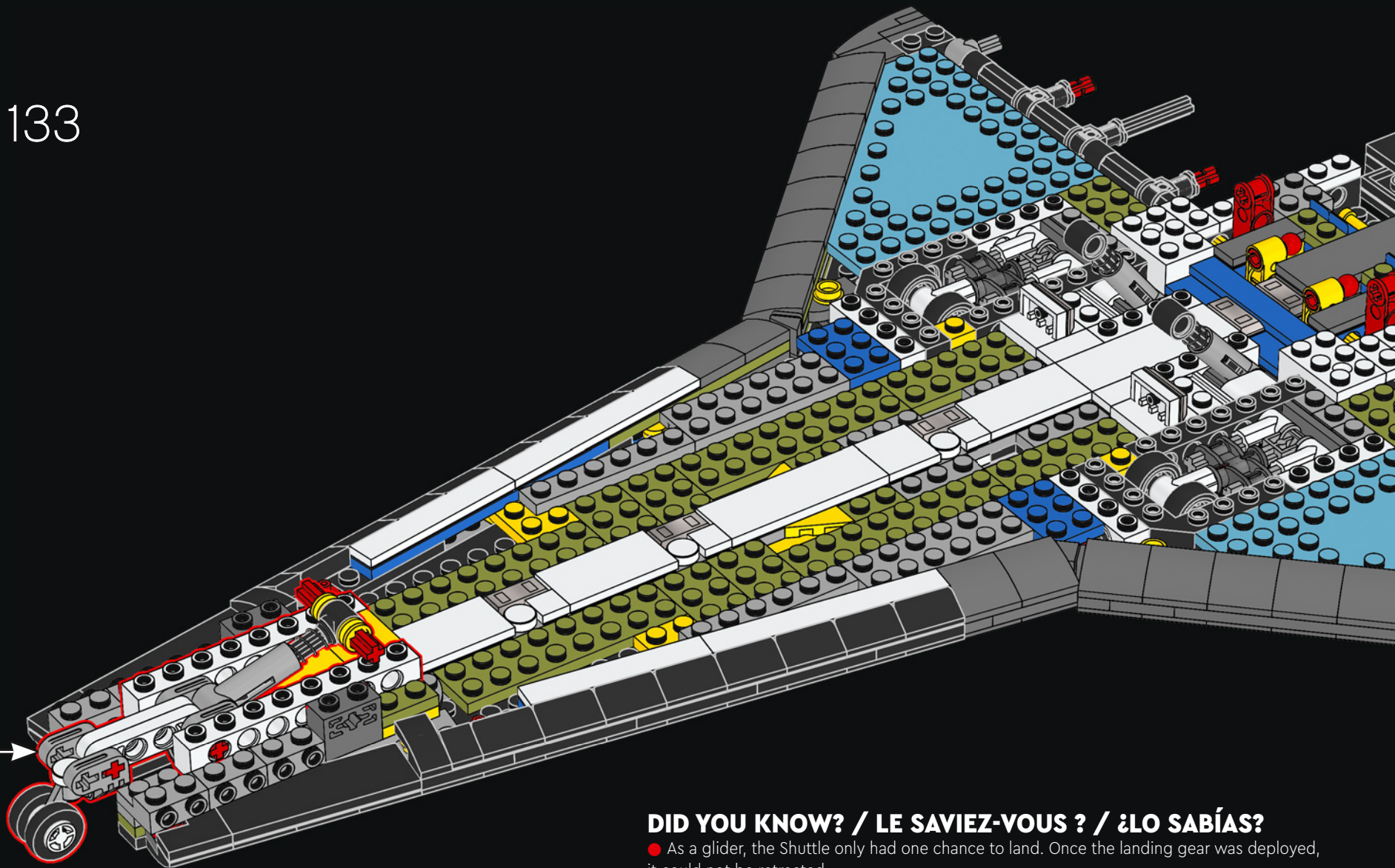
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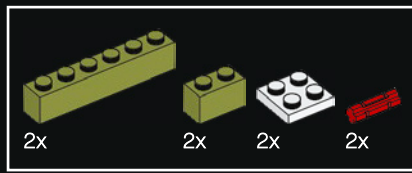


### DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

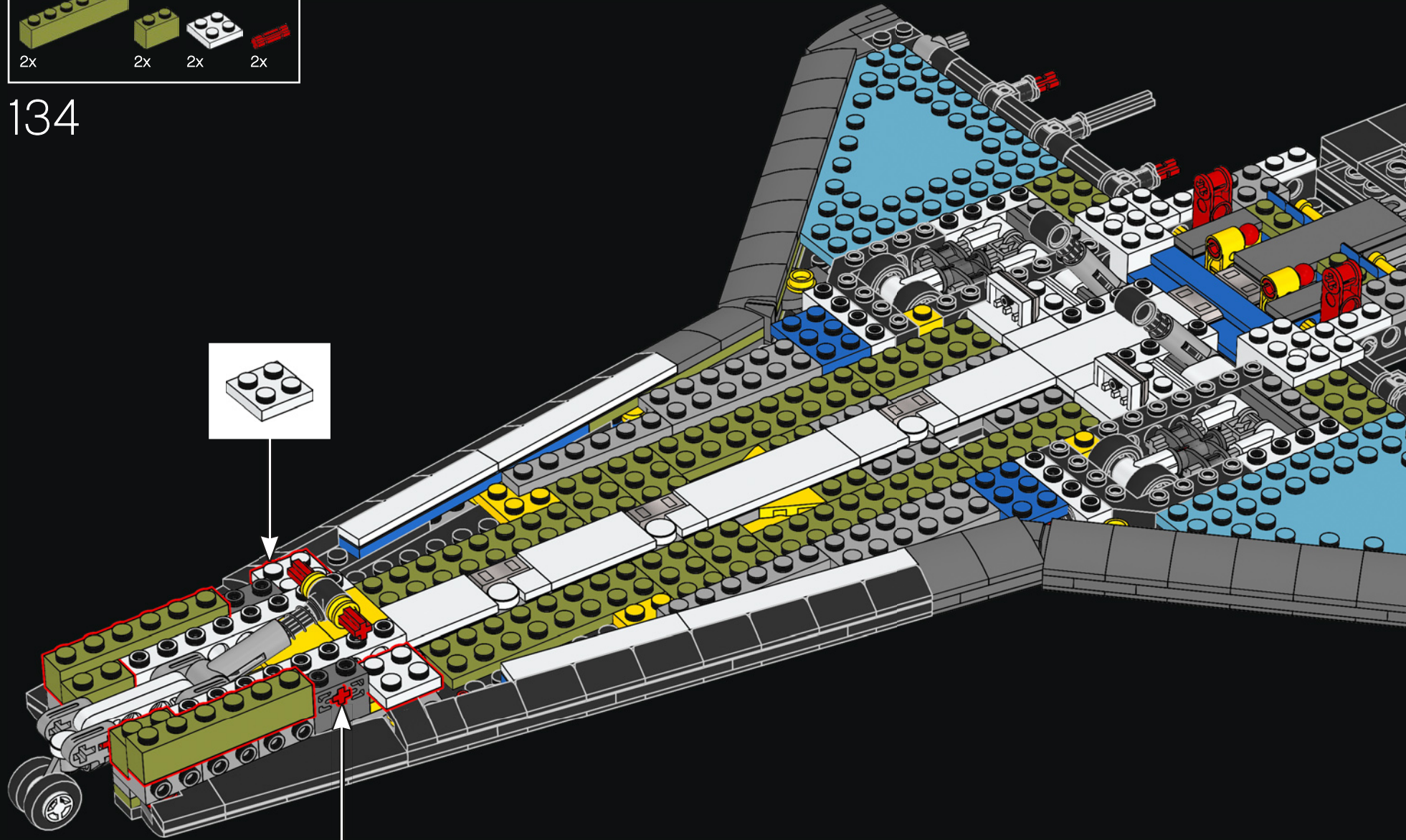
● As a glider, the Shuttle only had one chance to land. Once the landing gear was deployed, it could not be retracted.

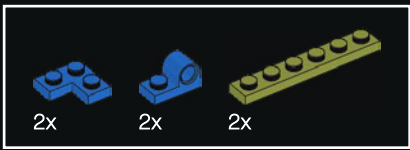
● En tant que planeur, la navette n'avait qu'une seule chance d'atterrir. Une fois le train d'atterrissage déployé, il ne pouvait plus être rétracté.

● Como planeador que es, el transbordador solo tenía una oportunidad de aterrizar. Una vez que se desplegaba el tren de aterrizaje, ya no se podía replegar.

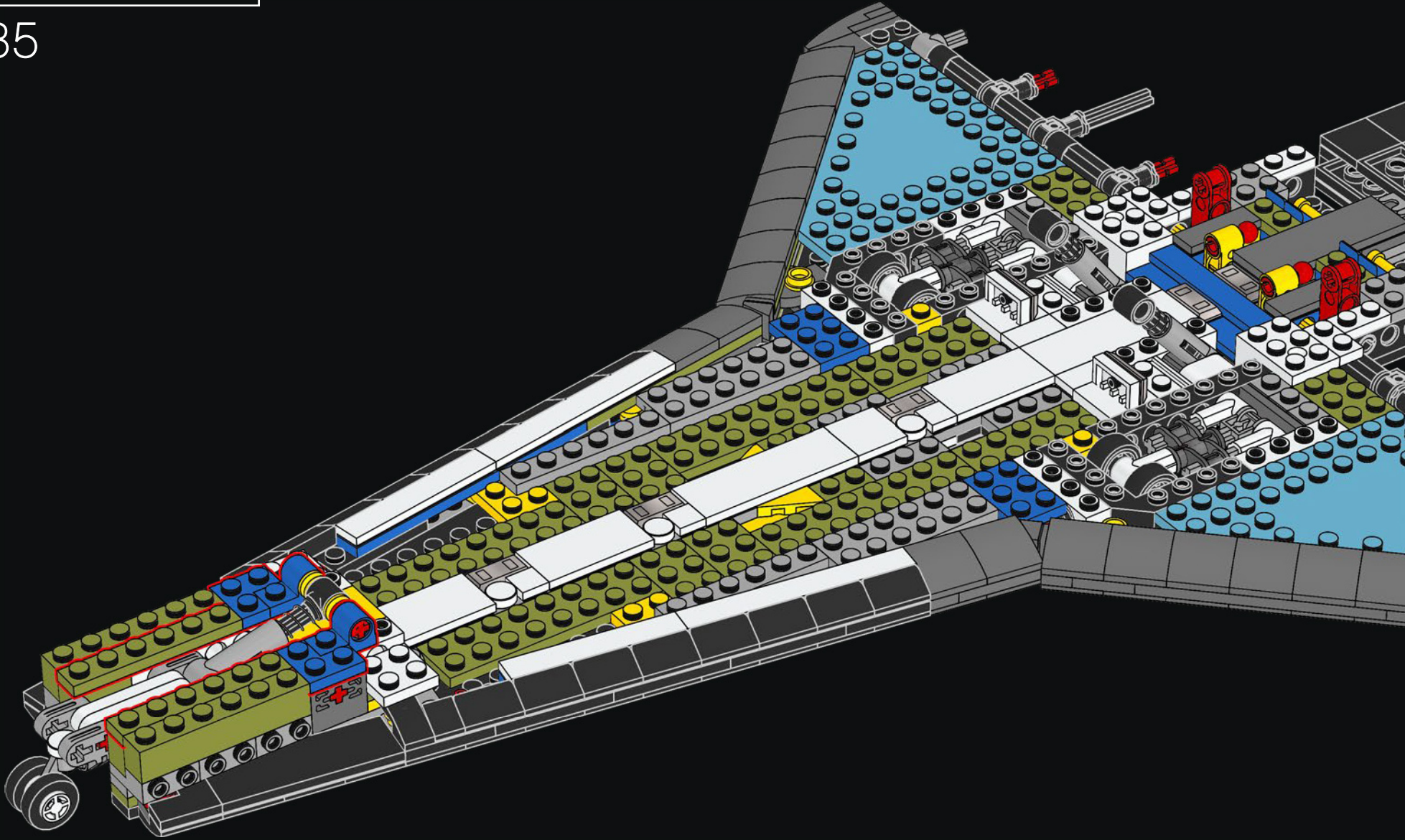


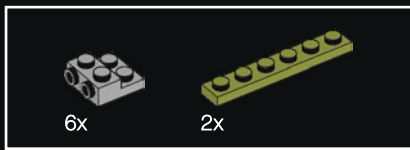
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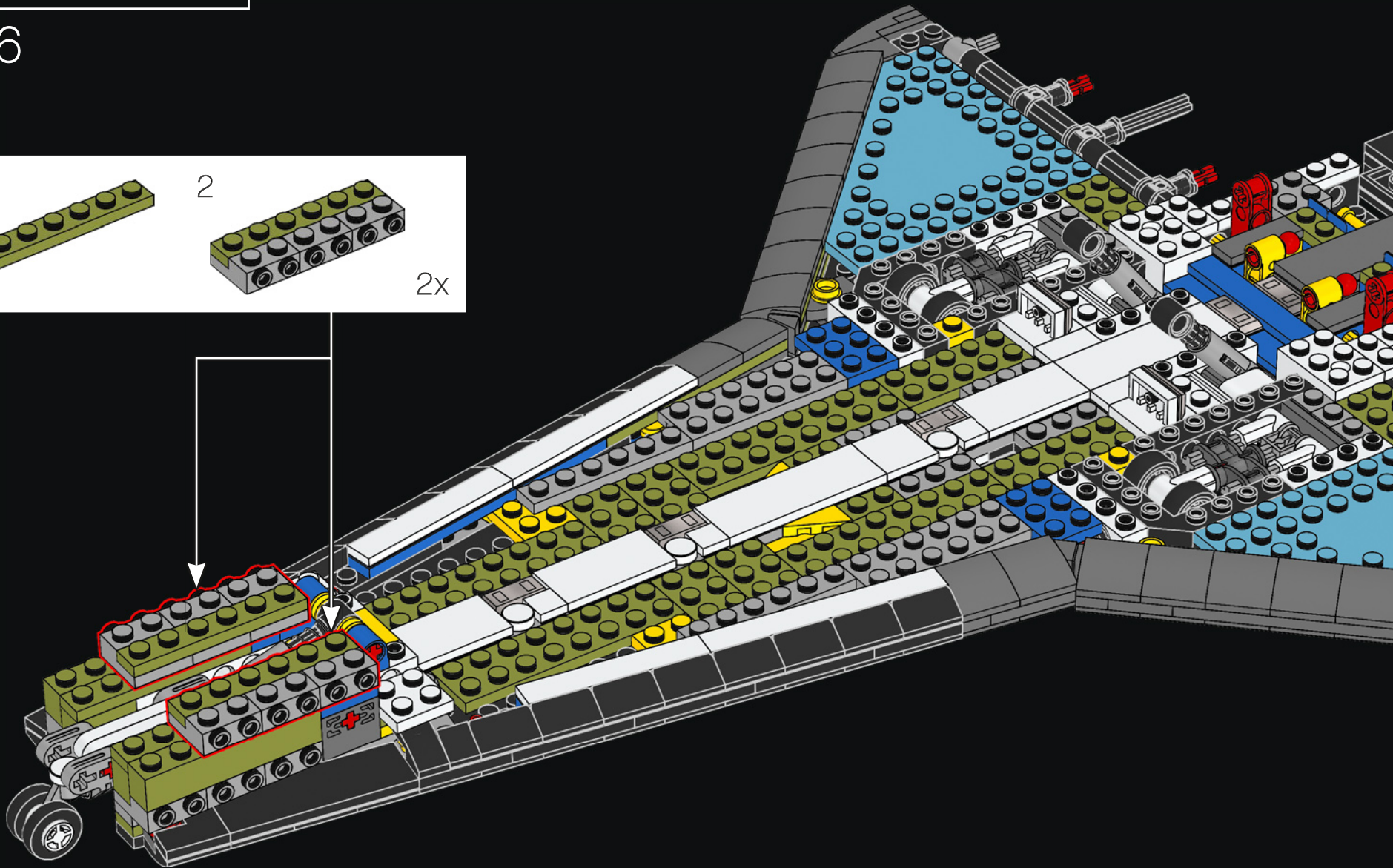
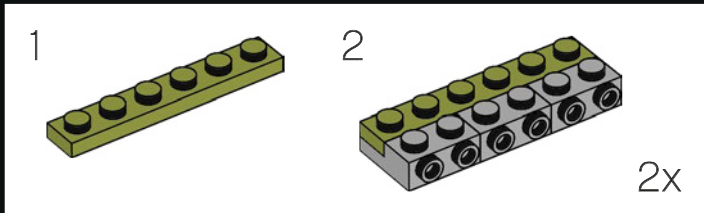


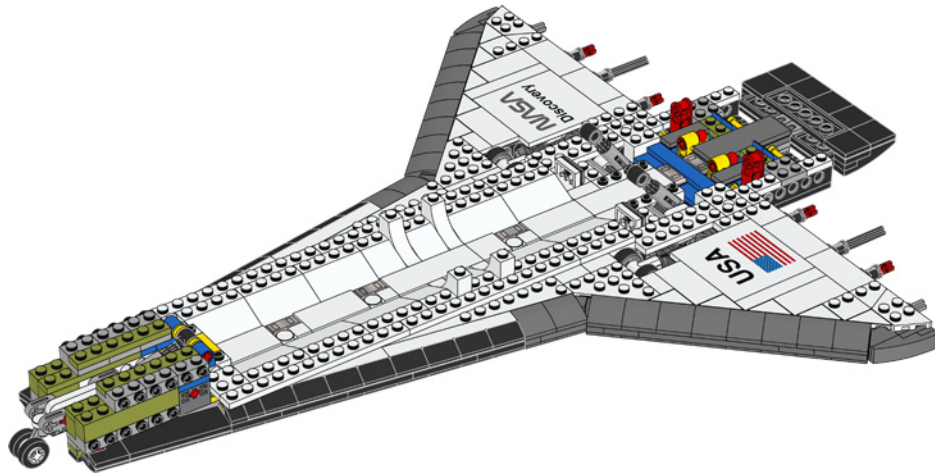
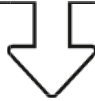
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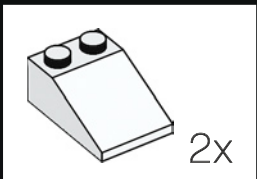
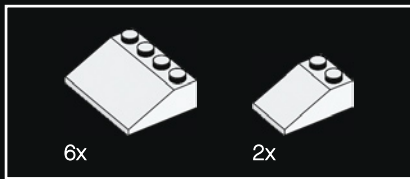


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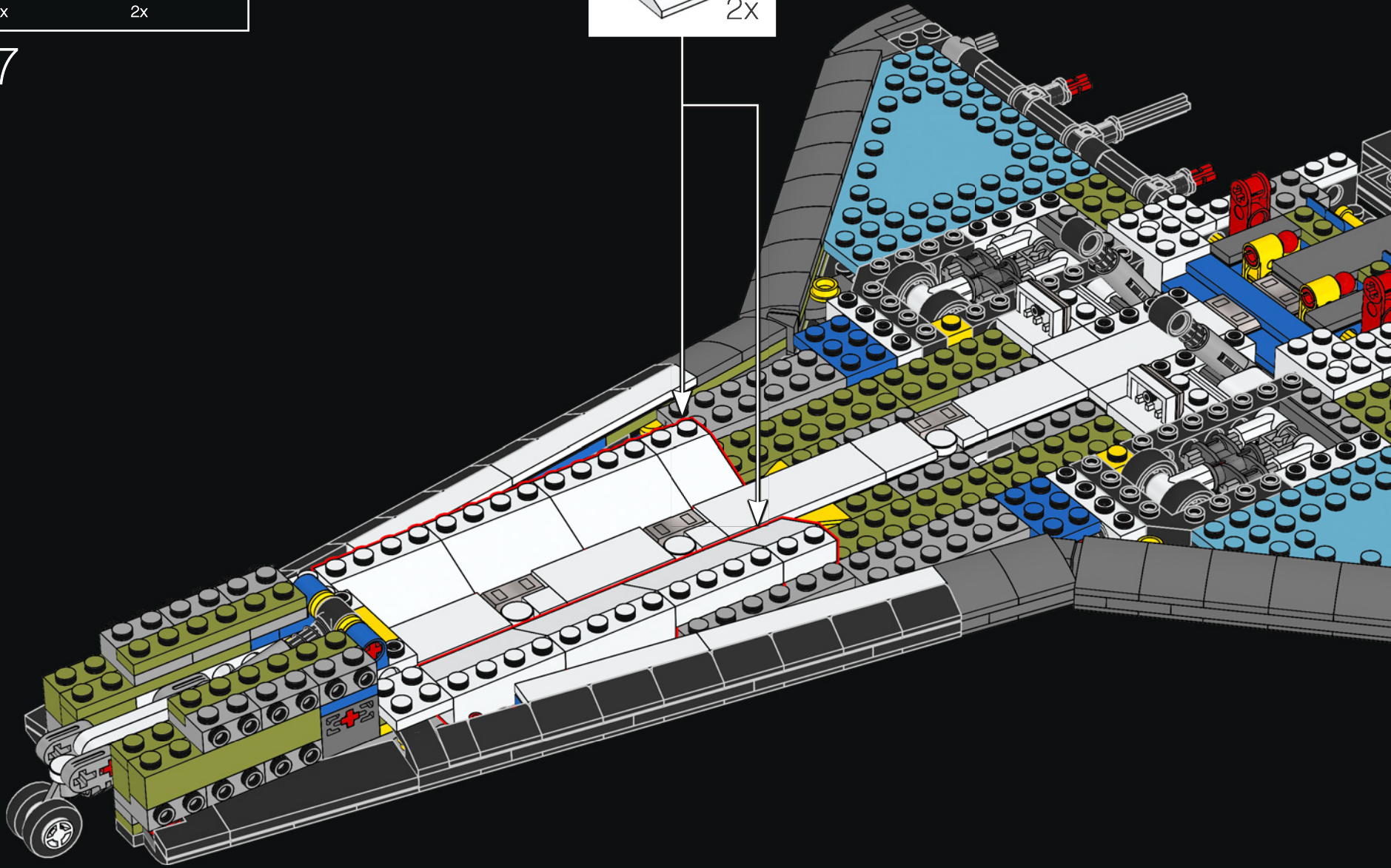


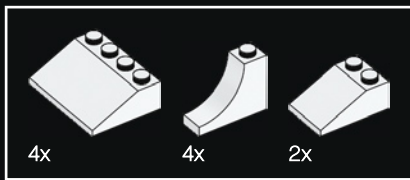




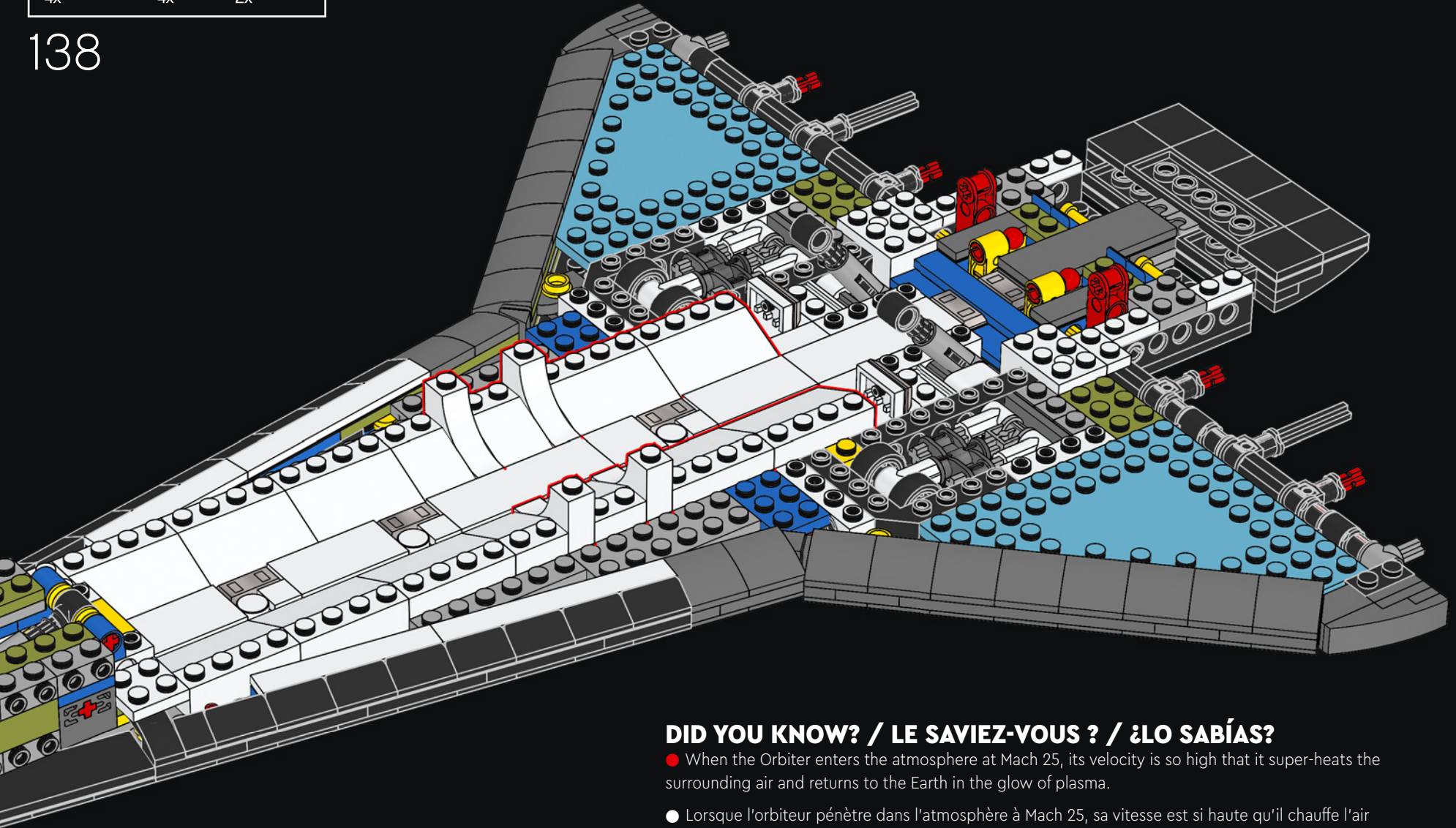


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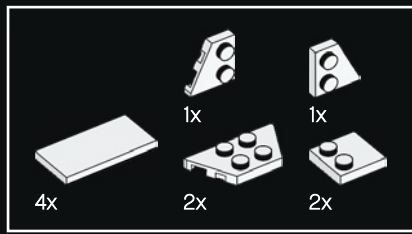


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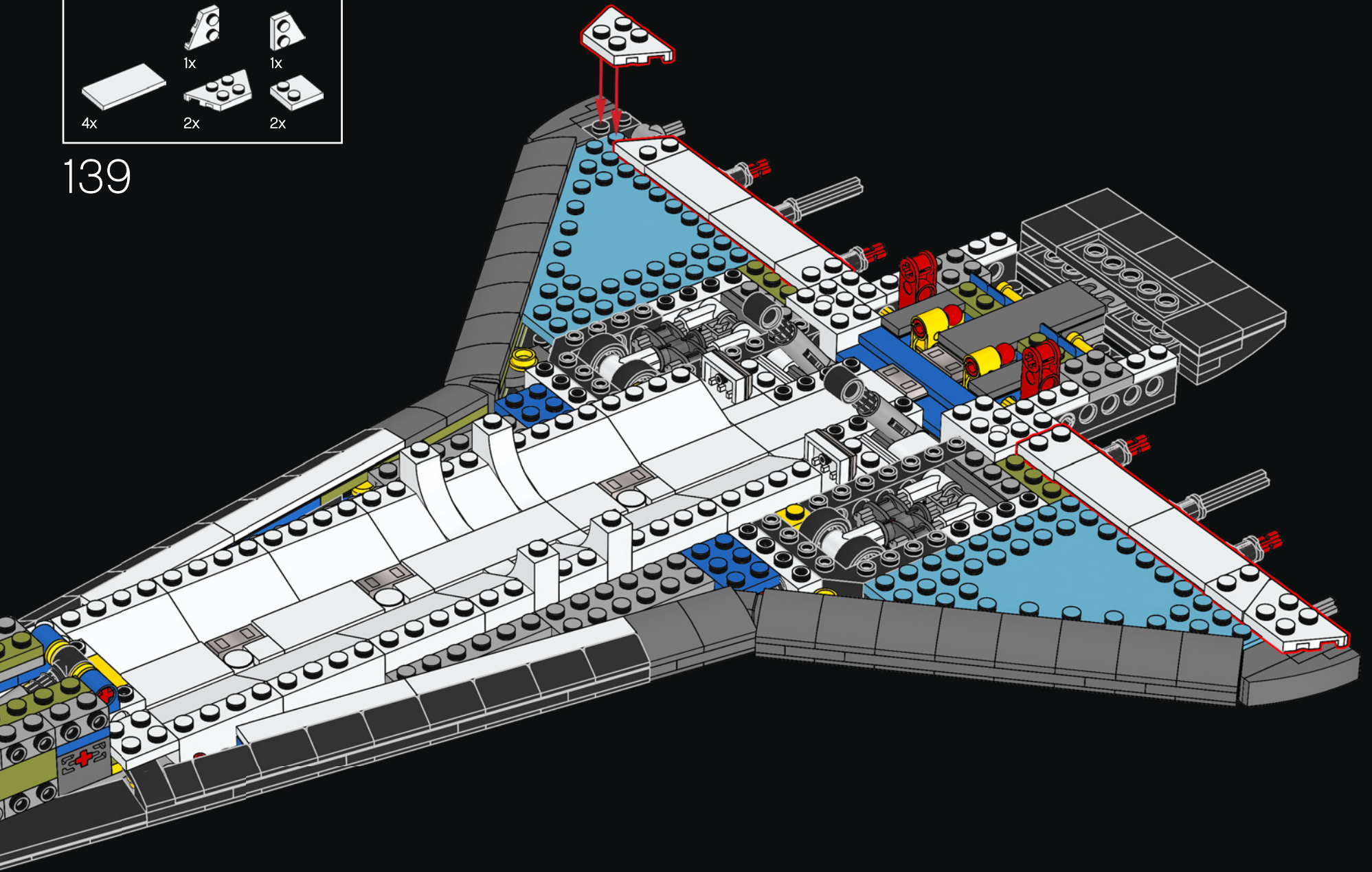


### DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

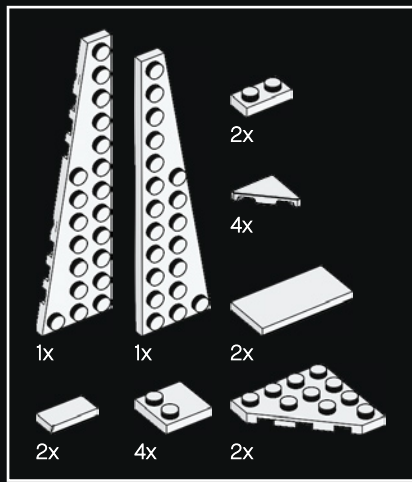
- When the Orbiter enters the atmosphere at Mach 25, its velocity is so high that it super-heats the surrounding air and returns to the Earth in the glow of plasma.
- Lorsque l'orbiteur pénètre dans l'atmosphère à Mach 25, sa vitesse est si haute qu'il chauffe l'air environnant à des températures intenses et revient sur Terre dans la lueur du plasma.
- Cuando el orbitador entra en la atmósfera a Mach 25, su velocidad es tan alta que sobrecalienta el aire circundante y regresa a la Tierra en un resplandor de plasma.



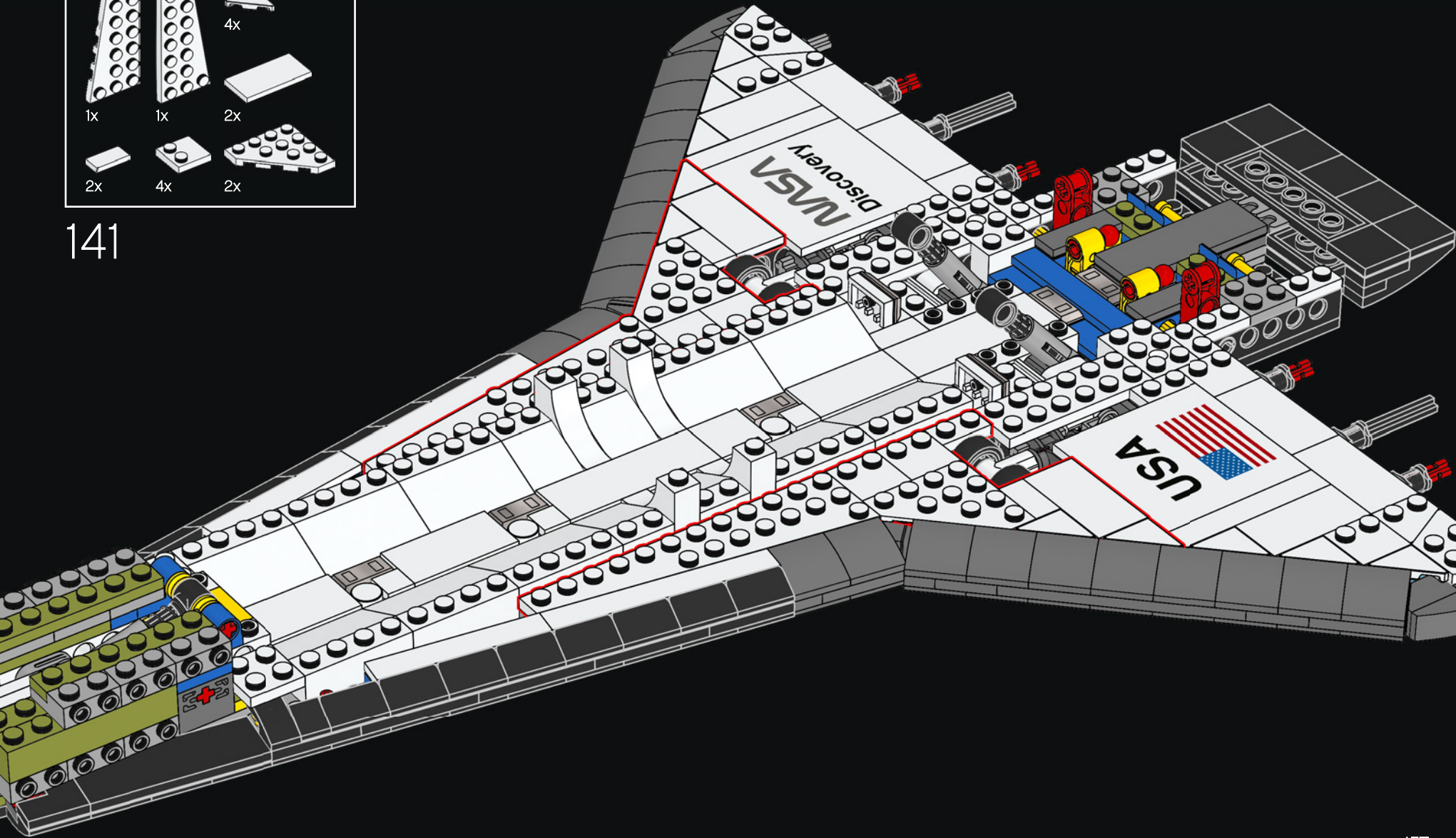
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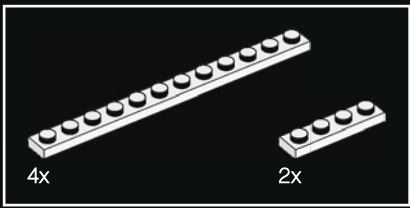




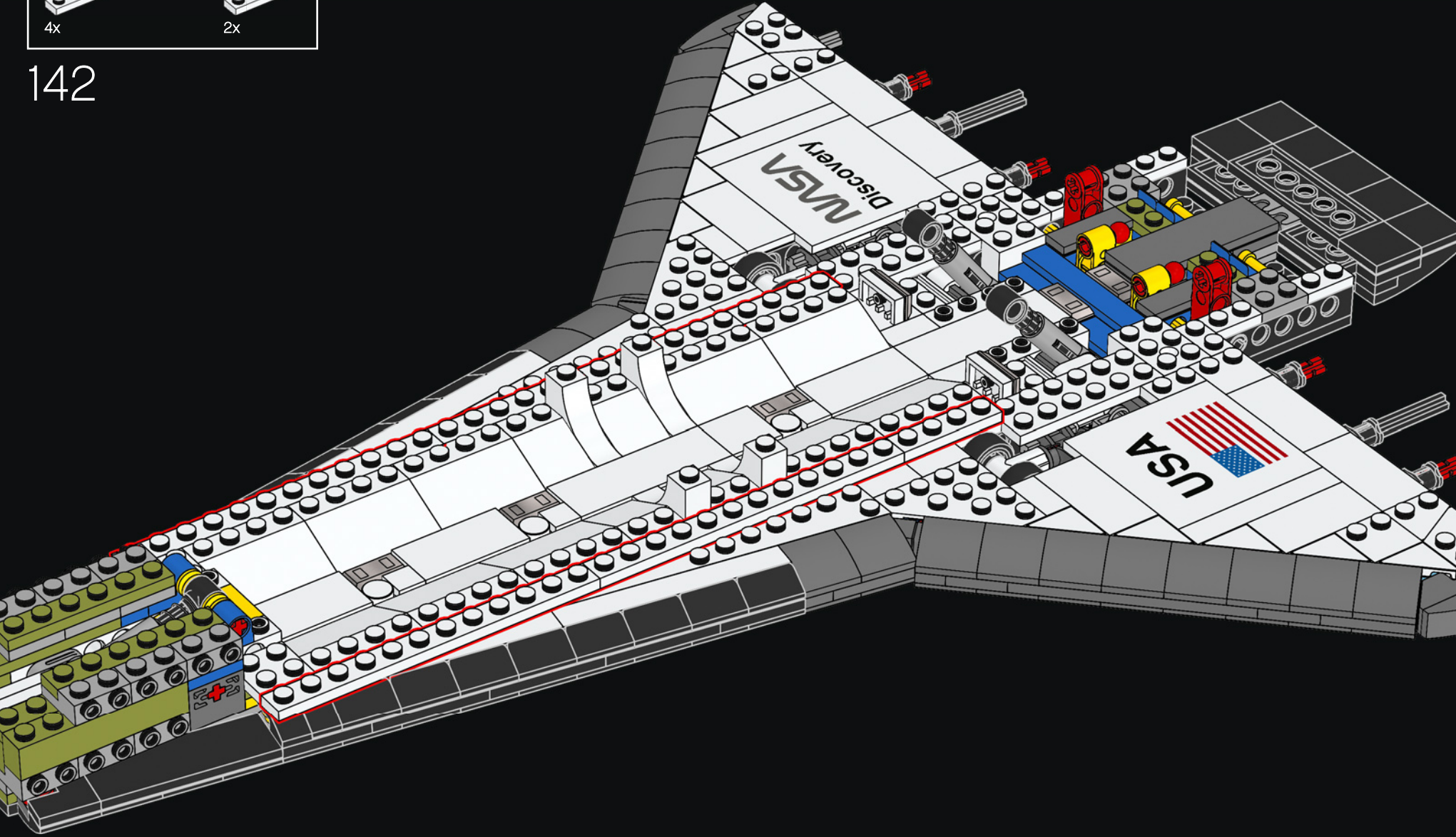


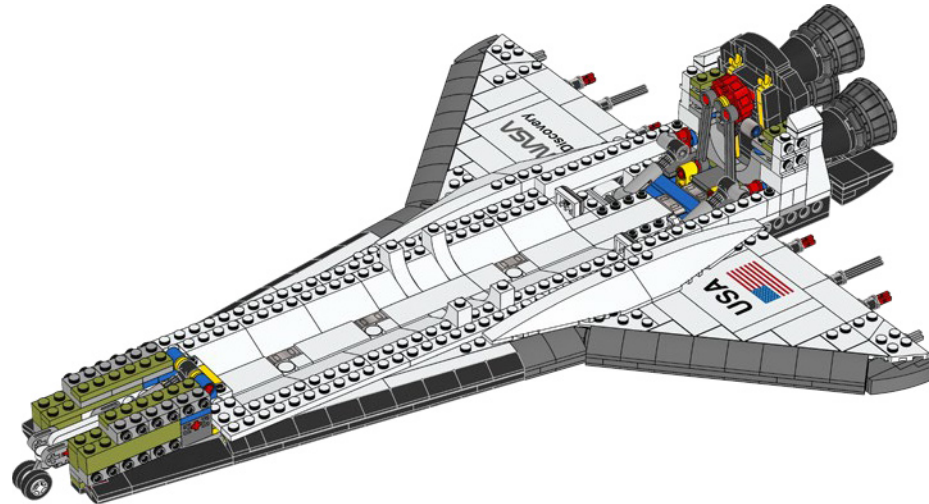
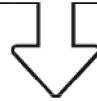
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142

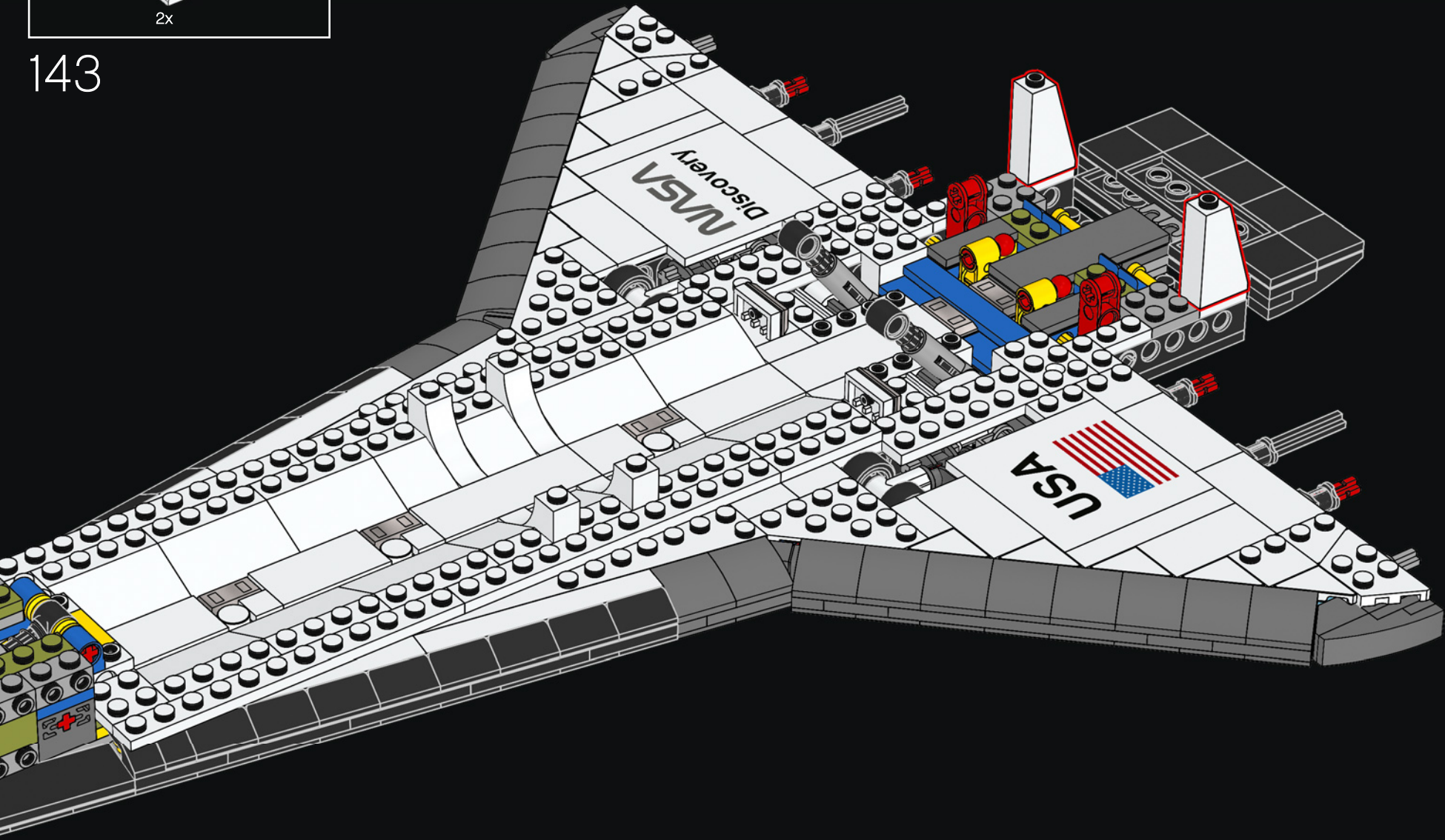






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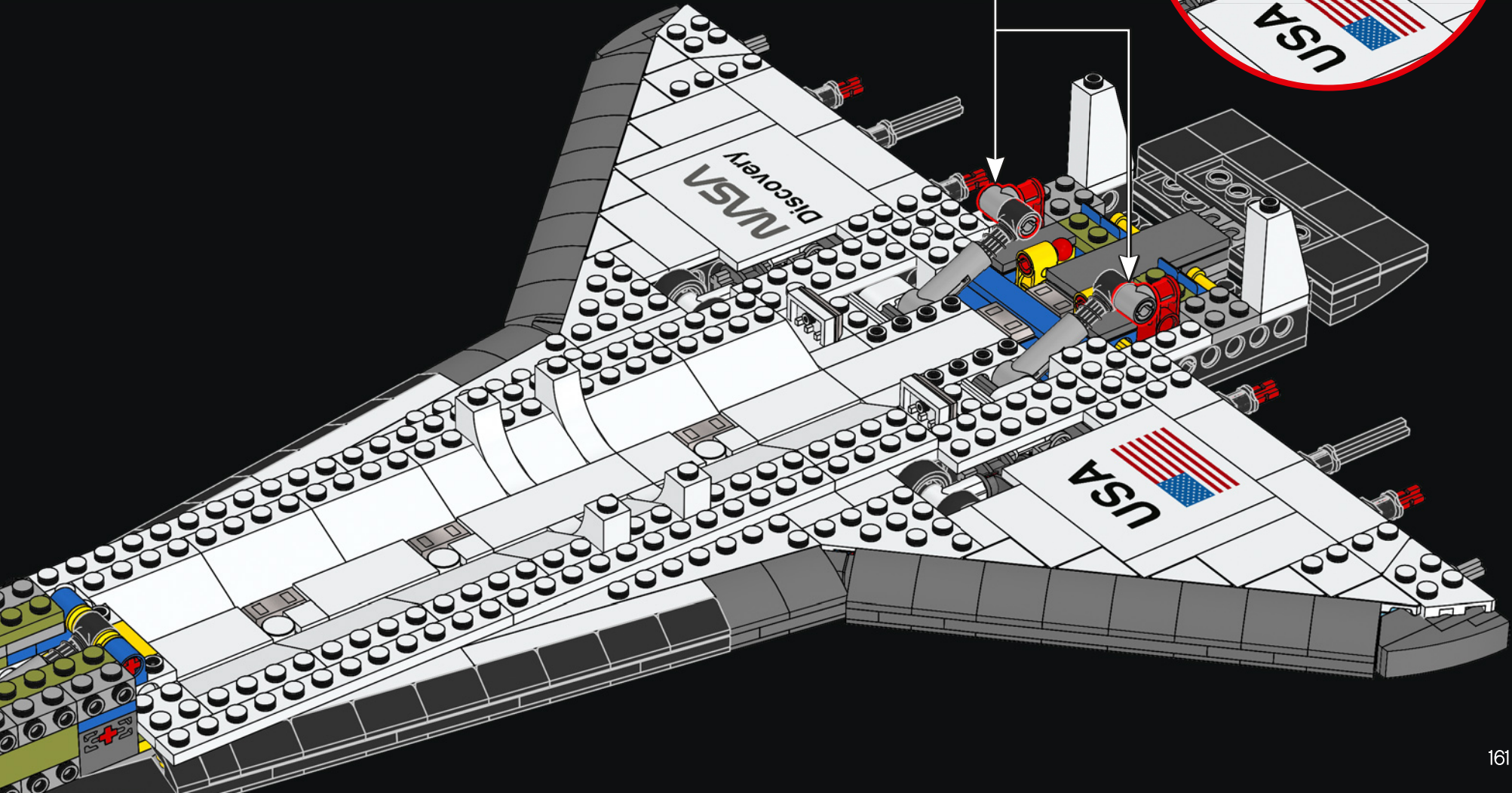
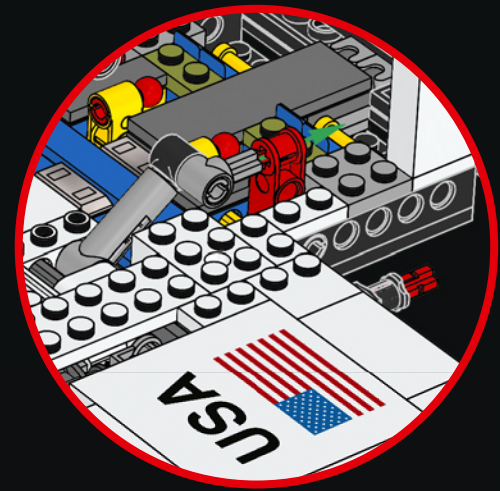
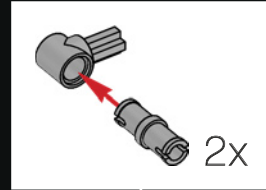
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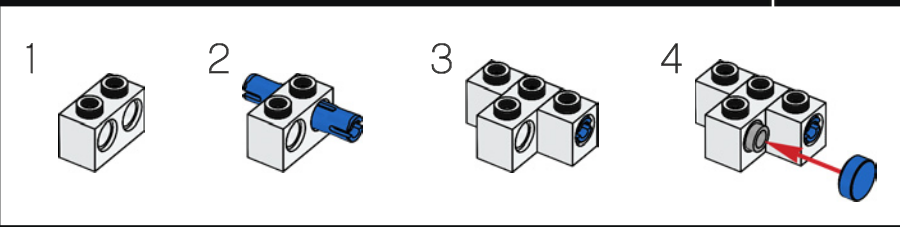
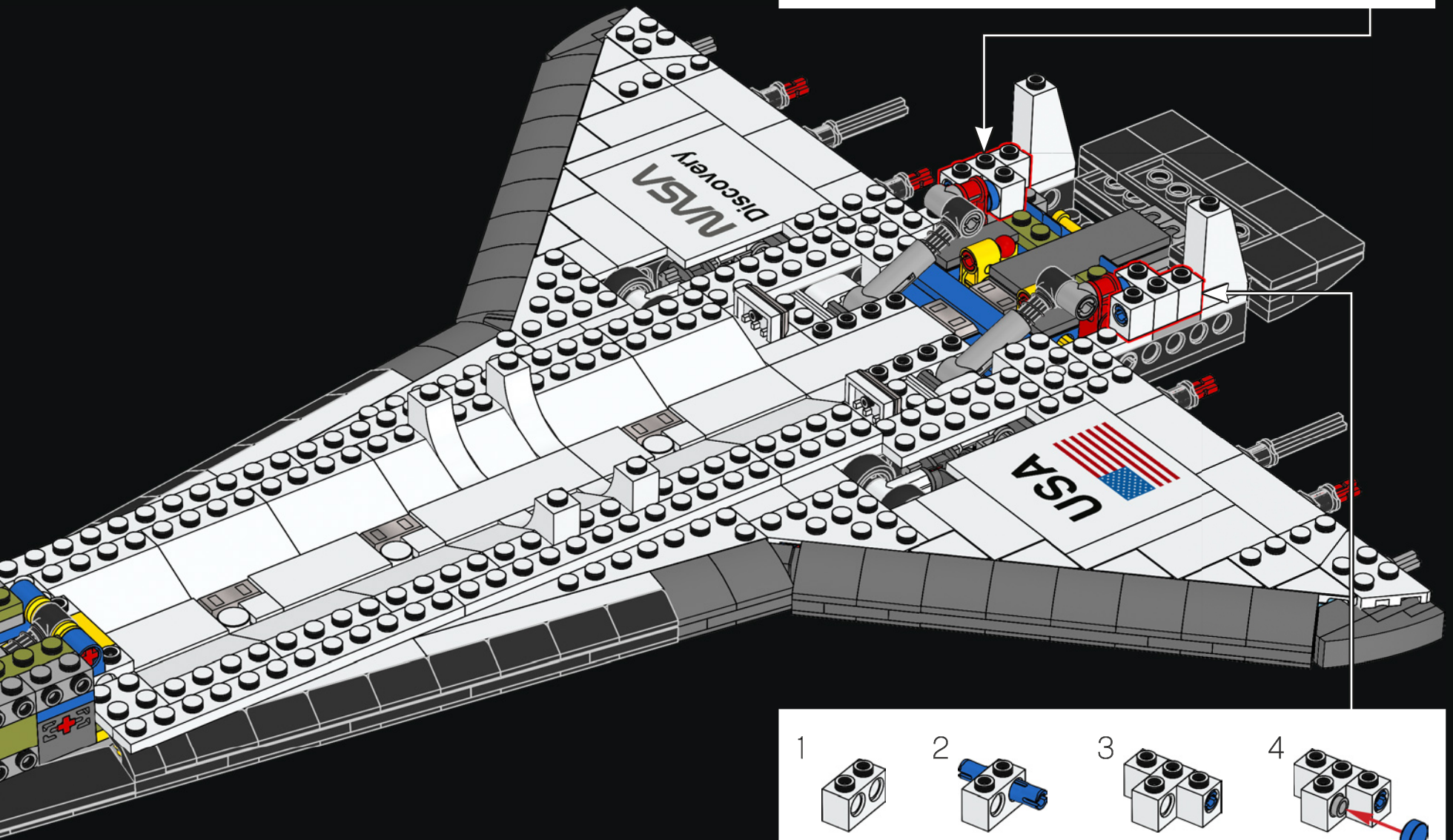
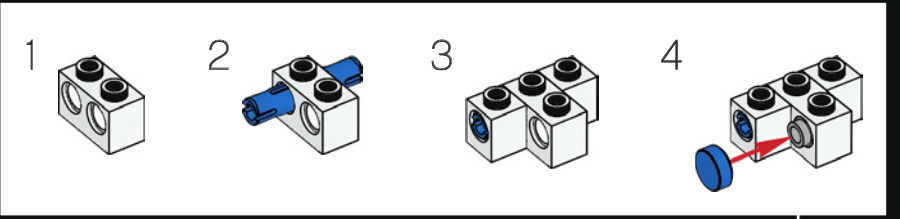


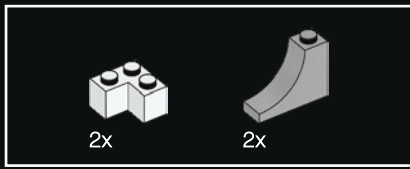
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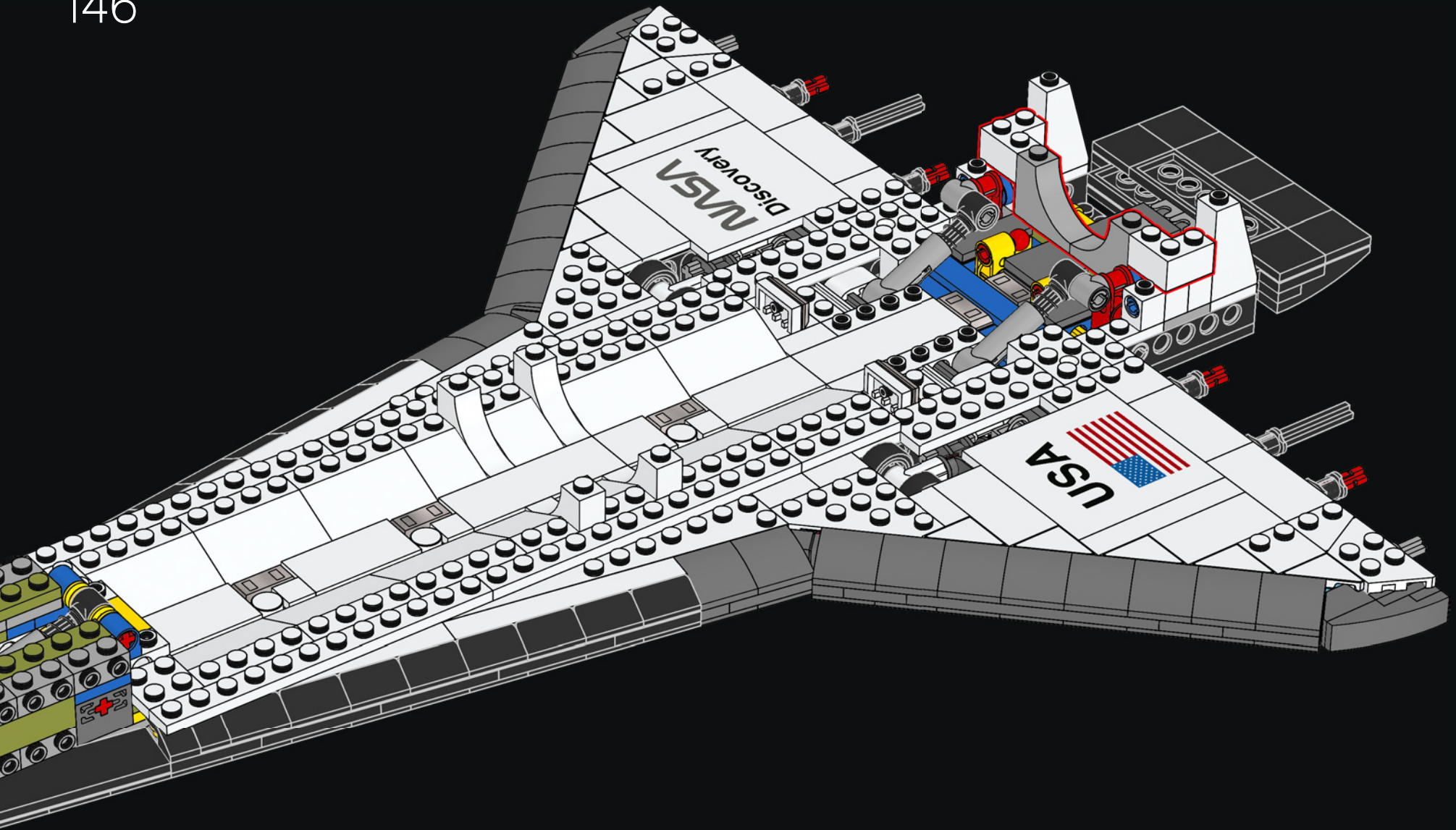


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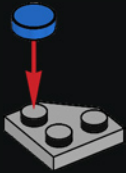


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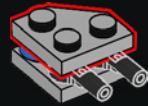
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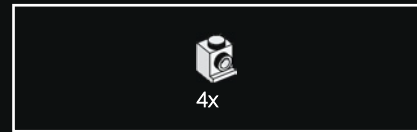
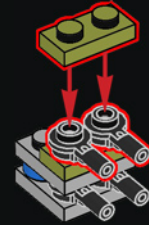
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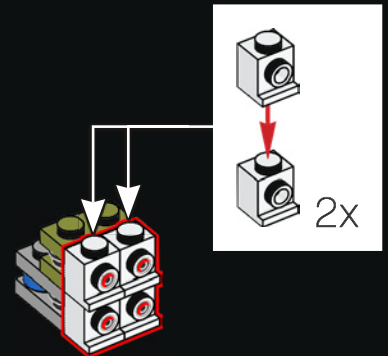
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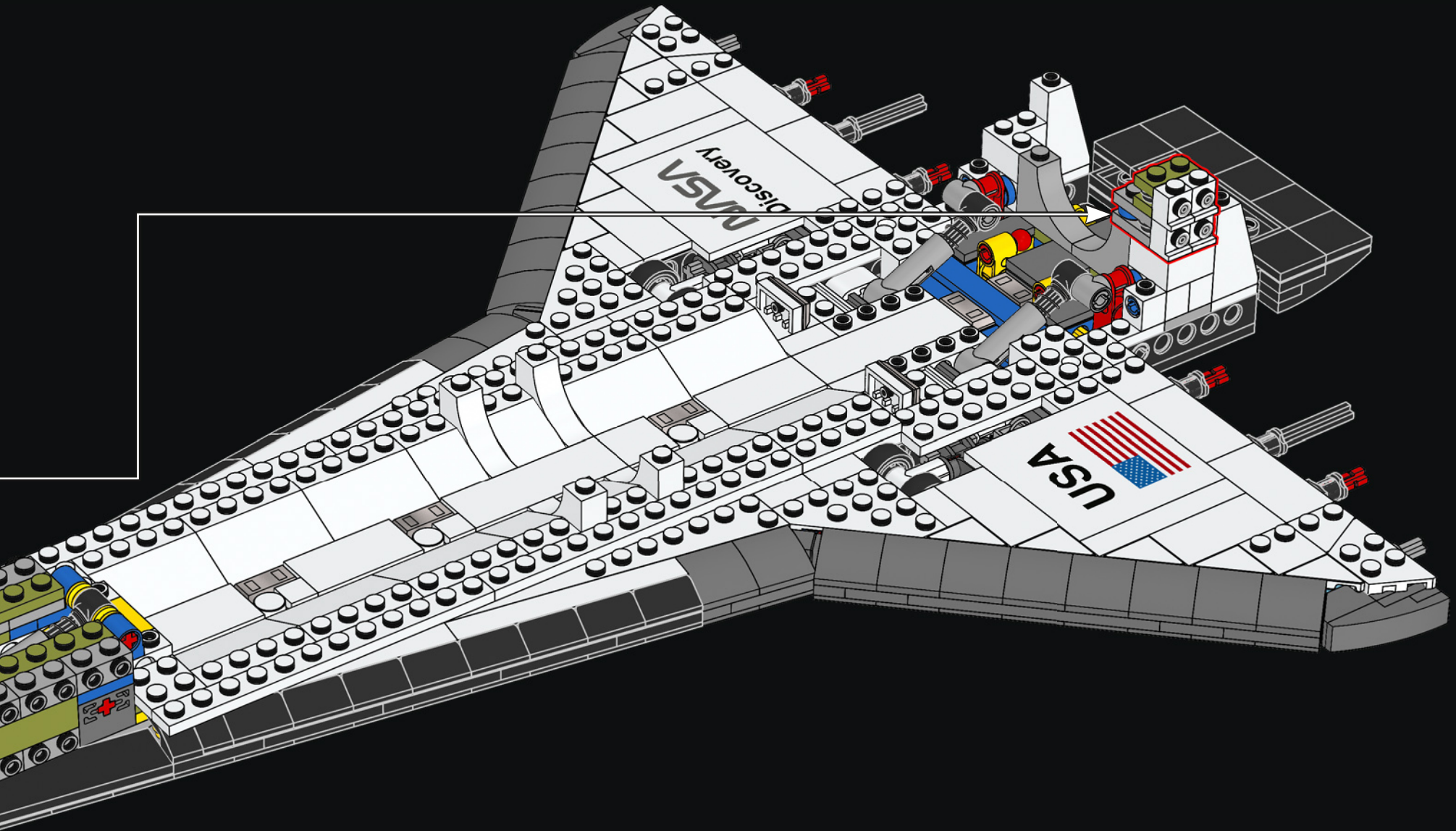


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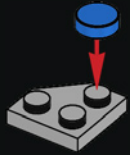
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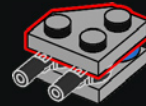
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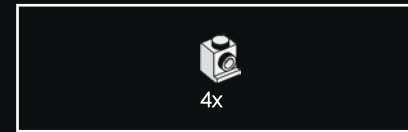
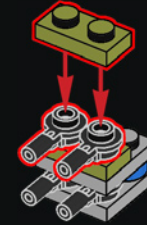
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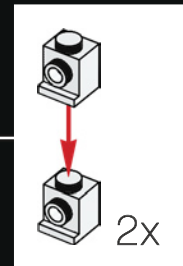
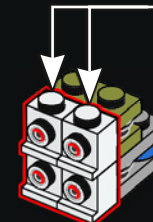
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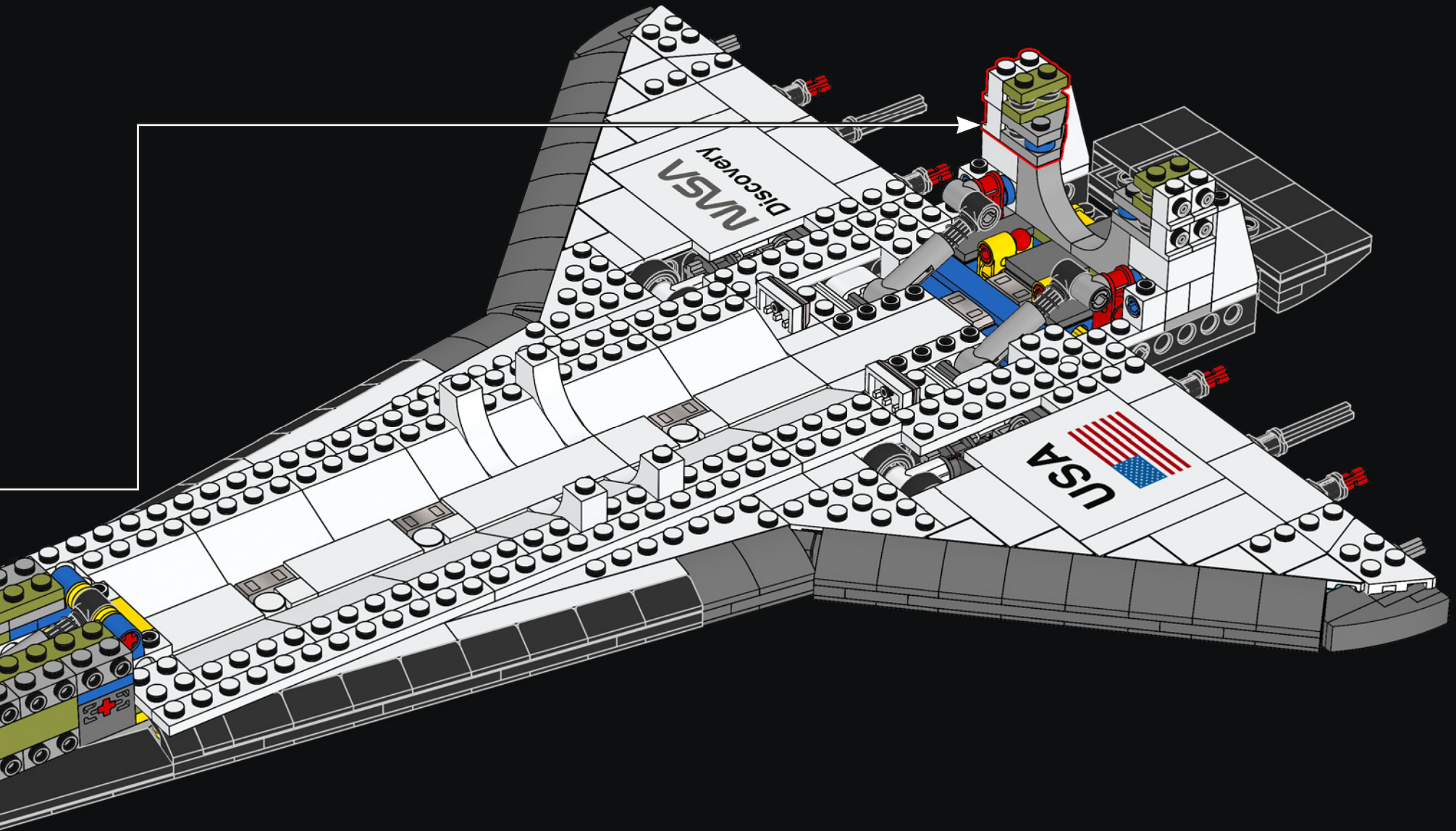


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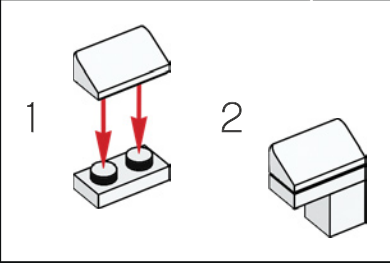
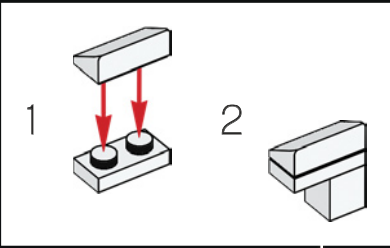
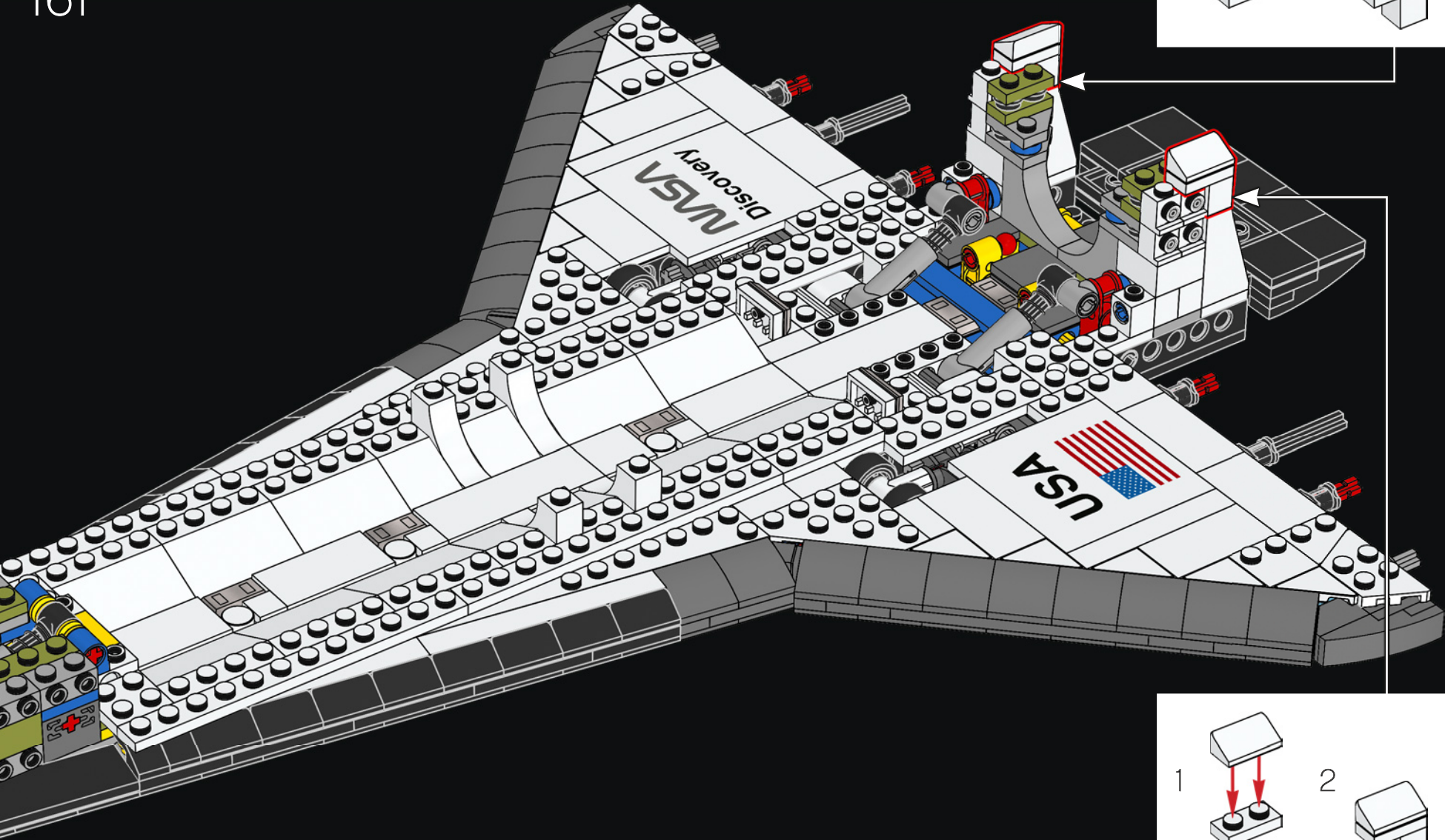
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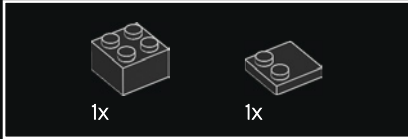
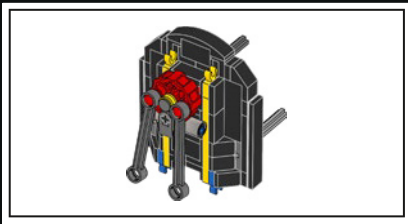




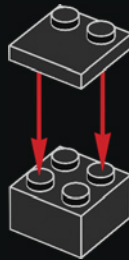
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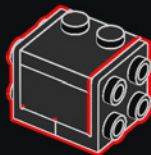




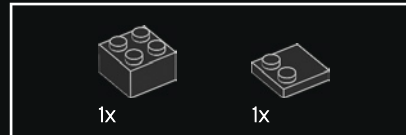
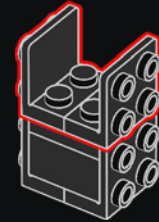
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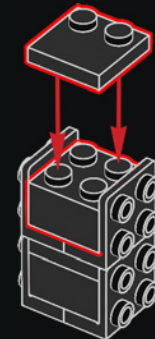
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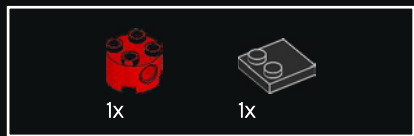


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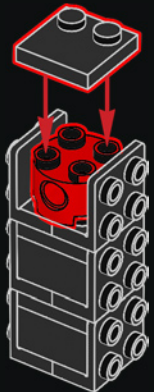




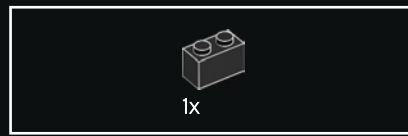
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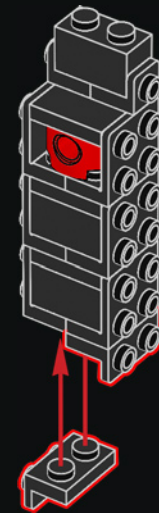
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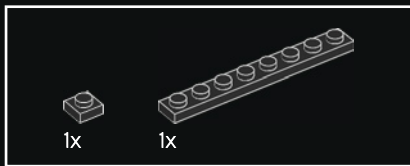
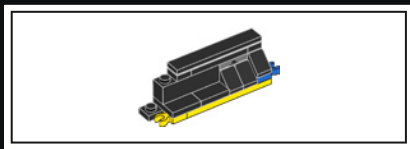


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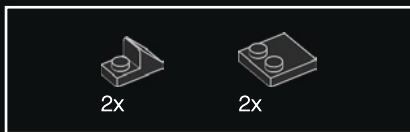
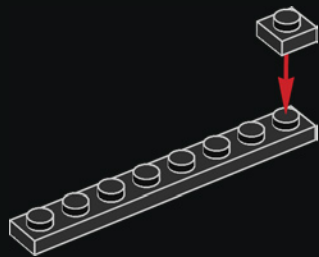


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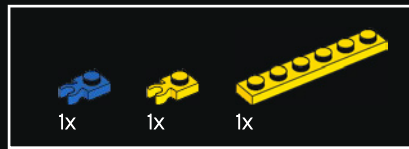
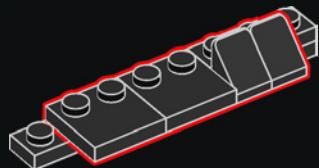




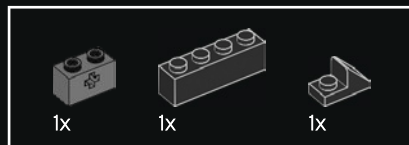
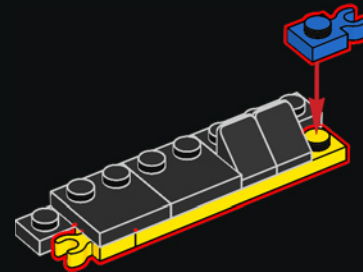
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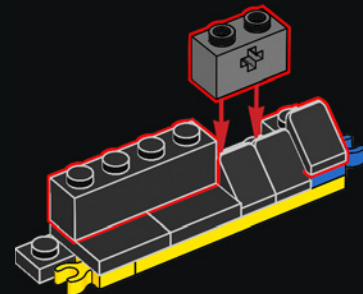
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173

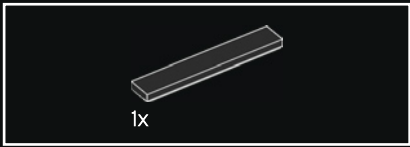
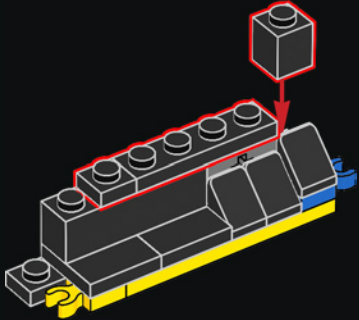


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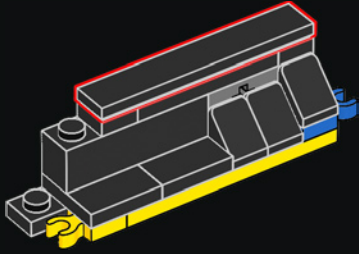




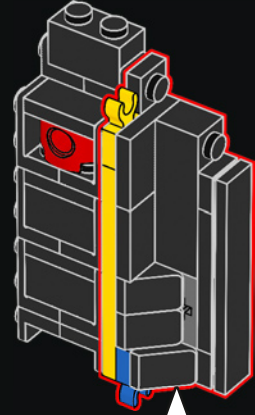
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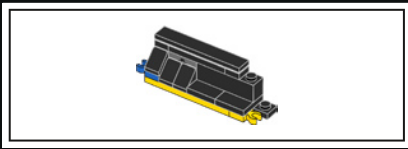


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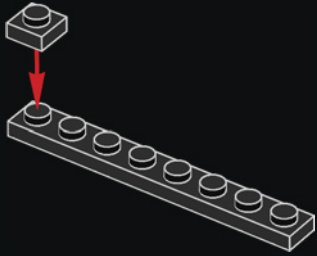


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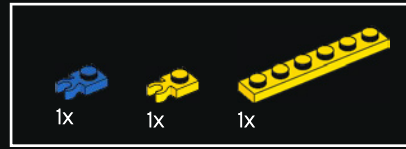
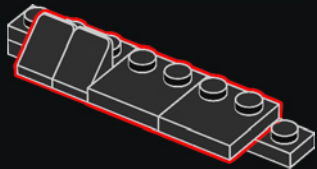




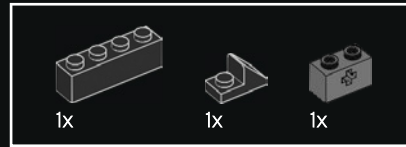
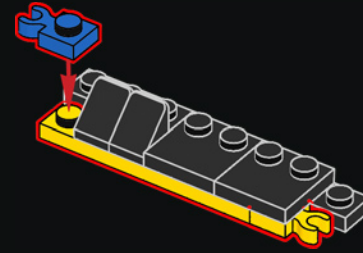
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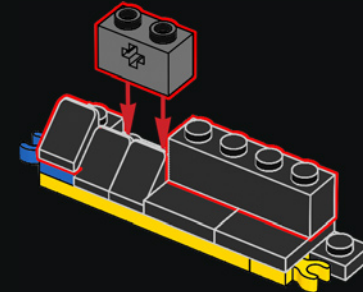
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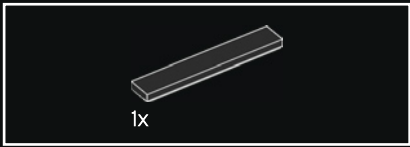
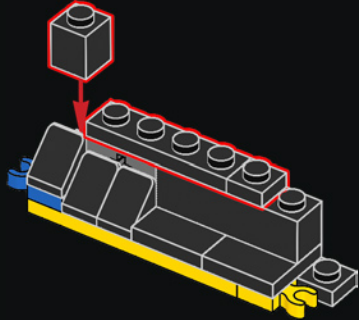


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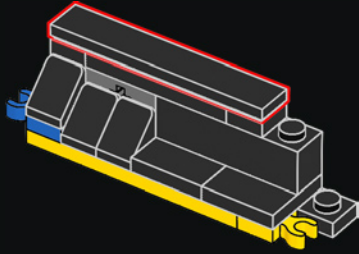




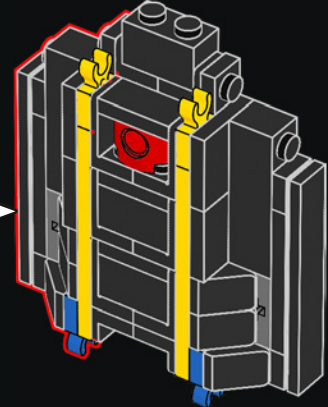
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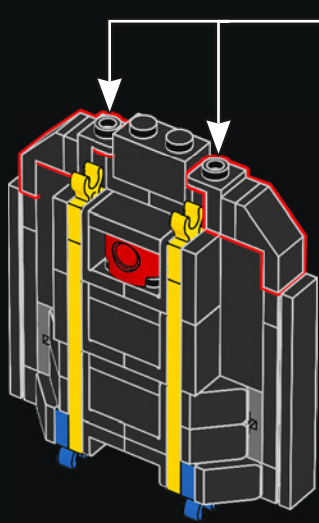
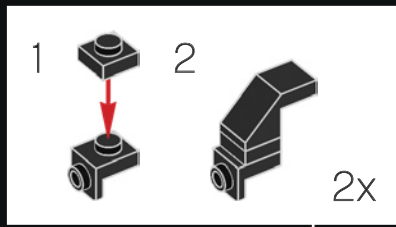


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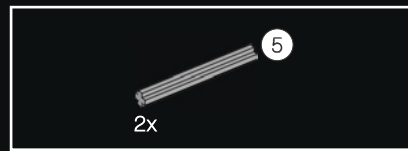
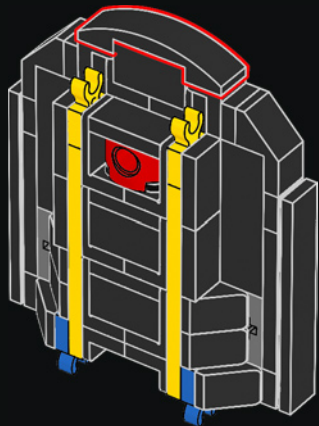




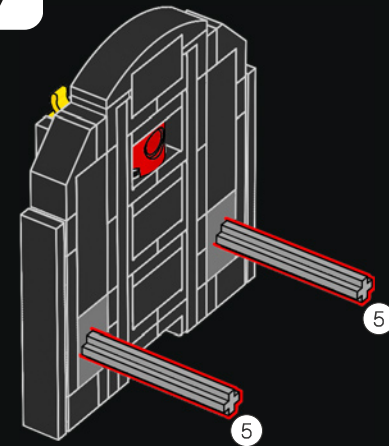
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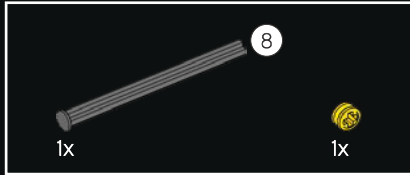
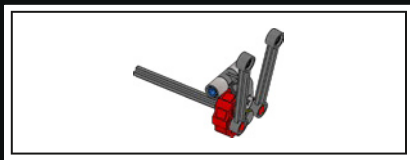


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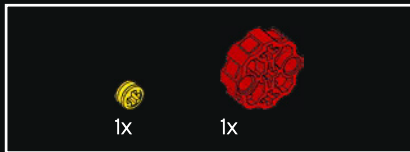
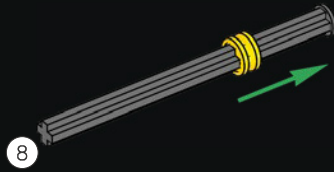


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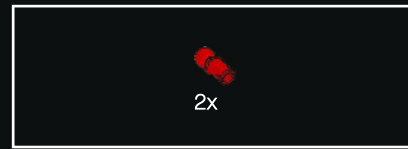
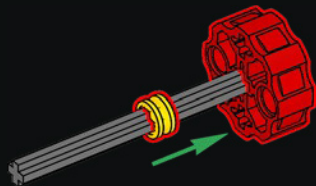




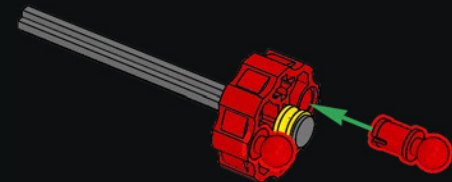
188



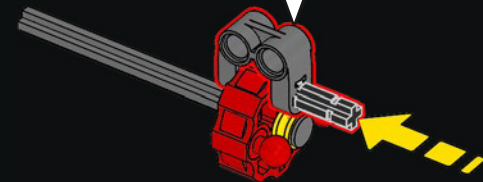
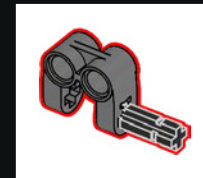
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190



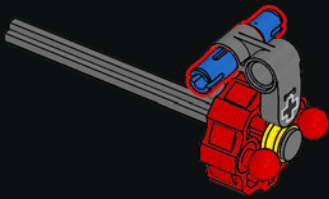
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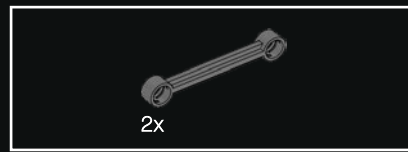
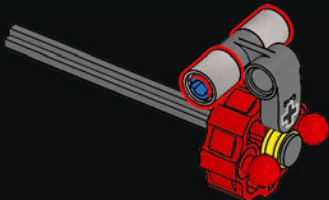




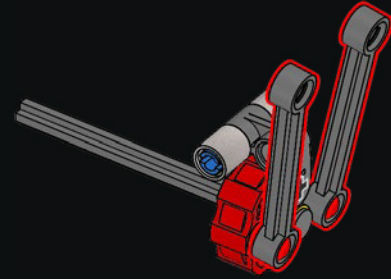
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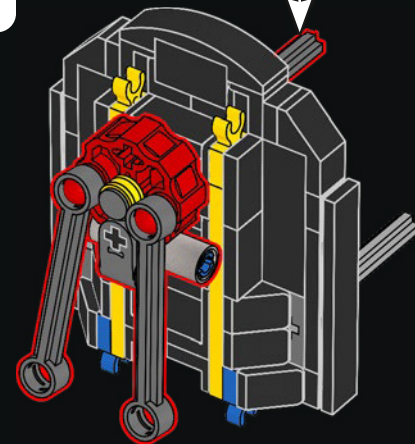
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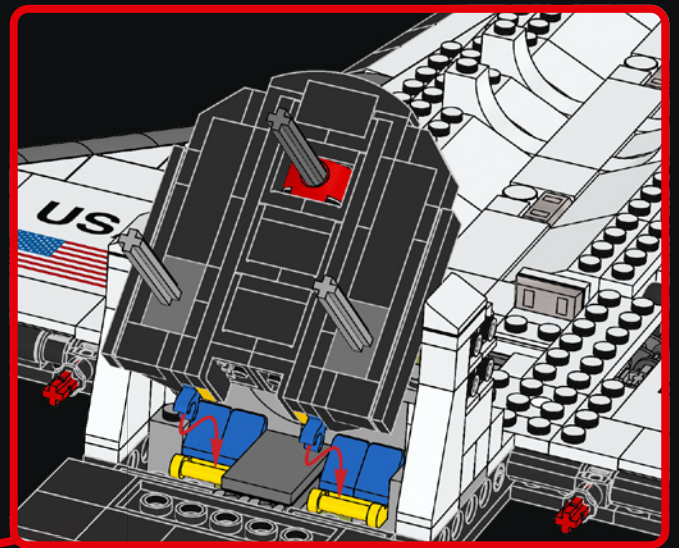
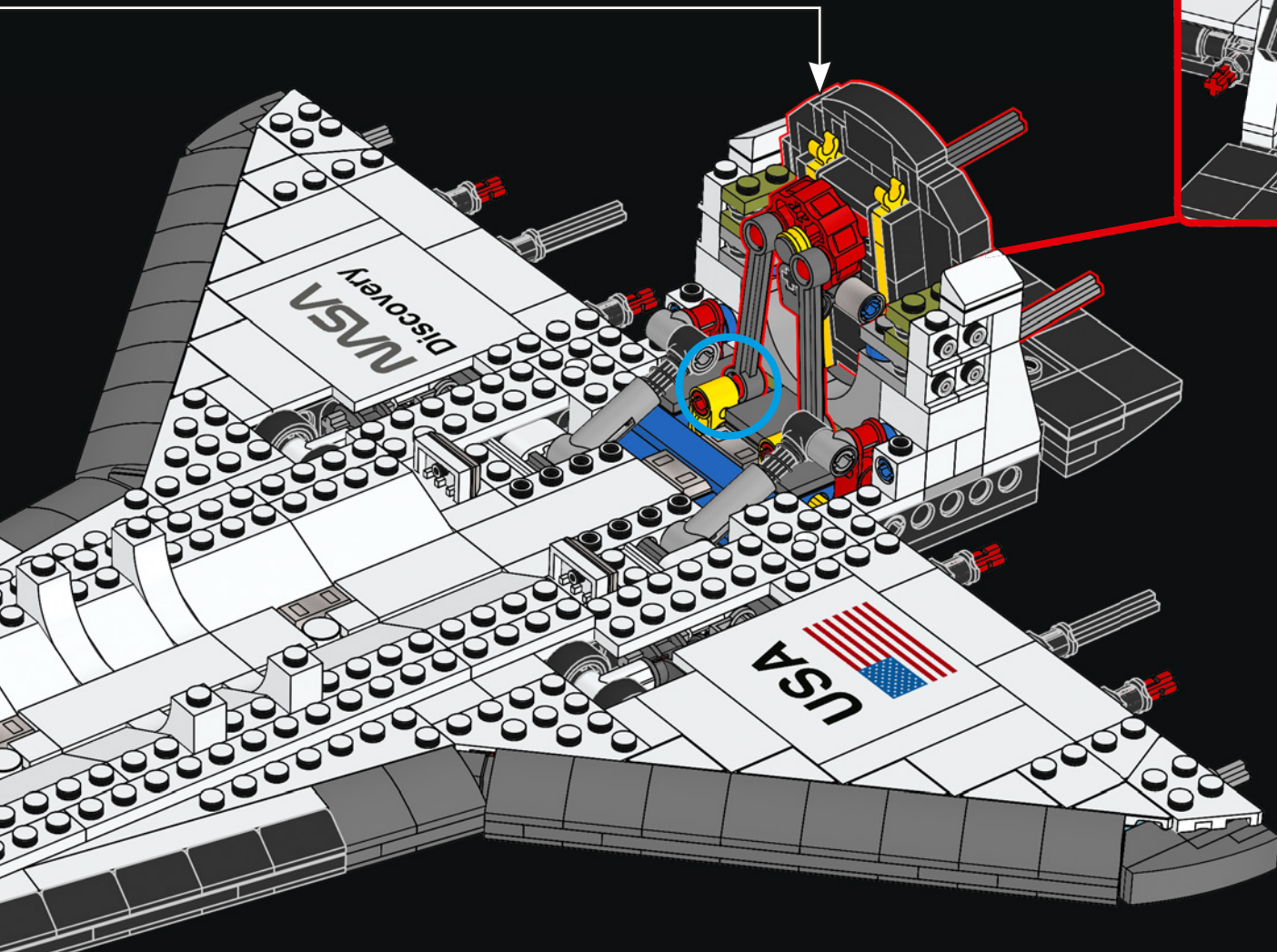


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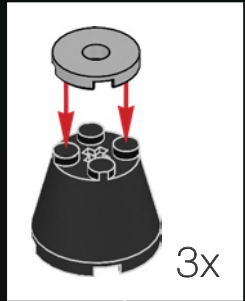
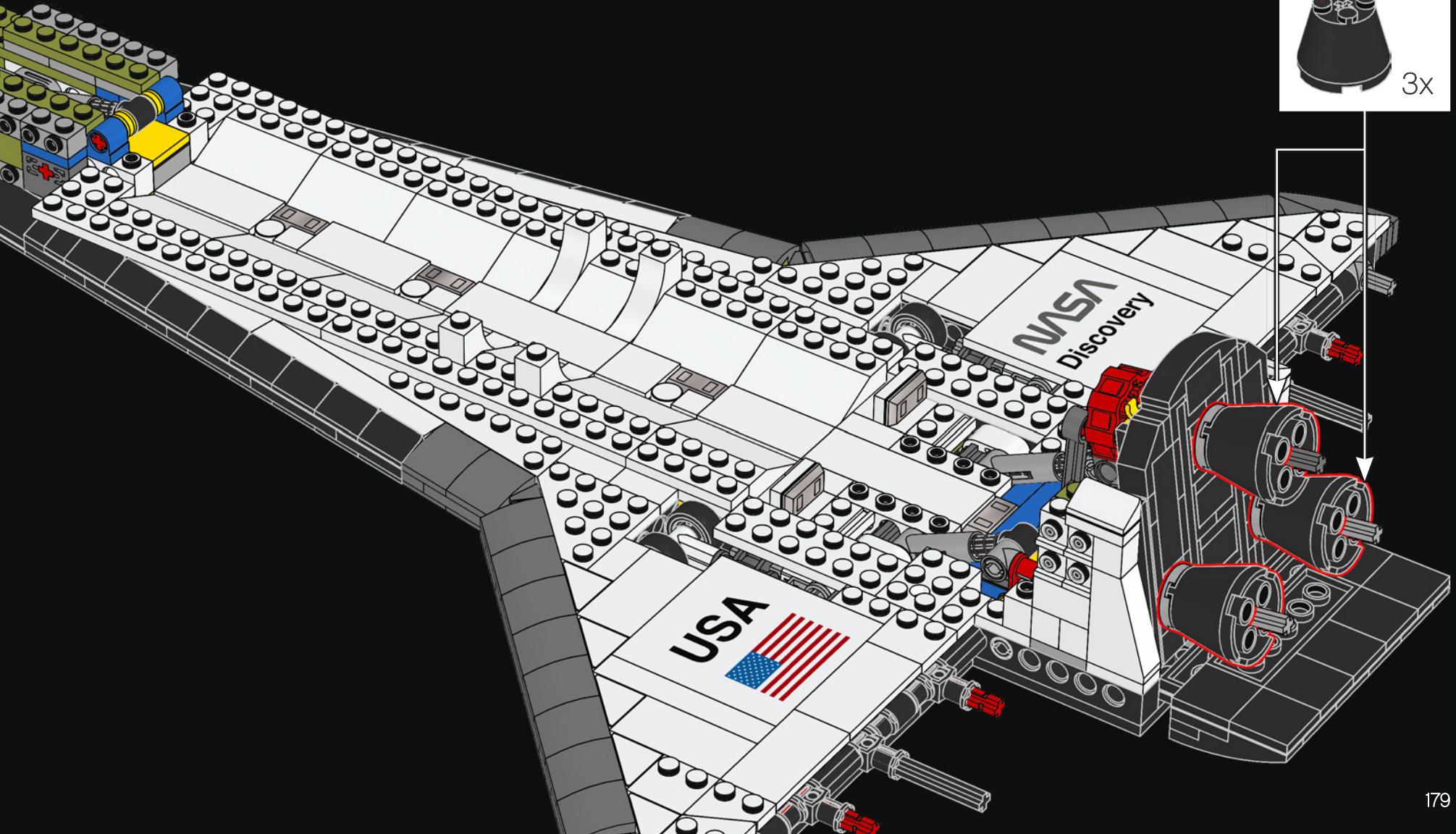
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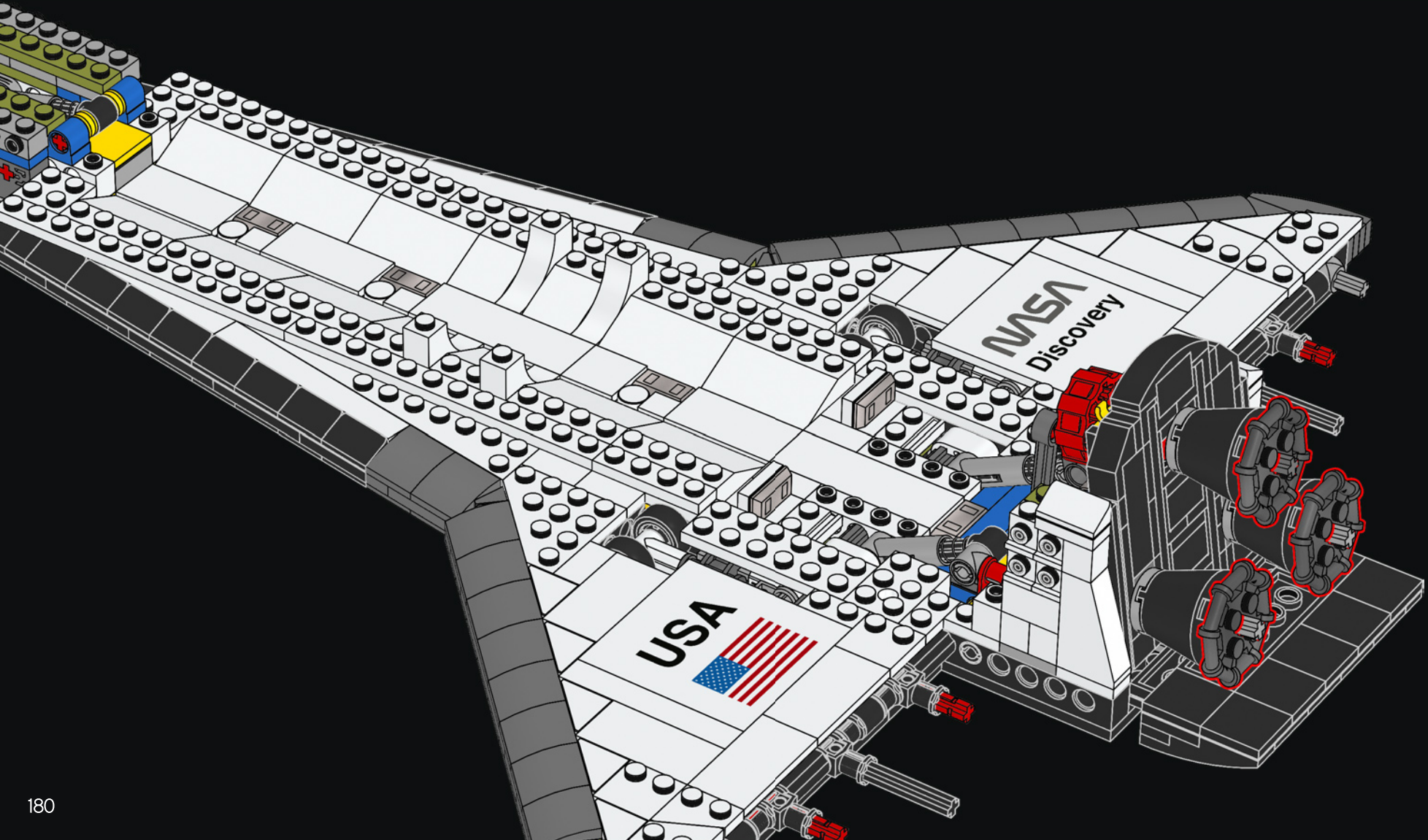


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198





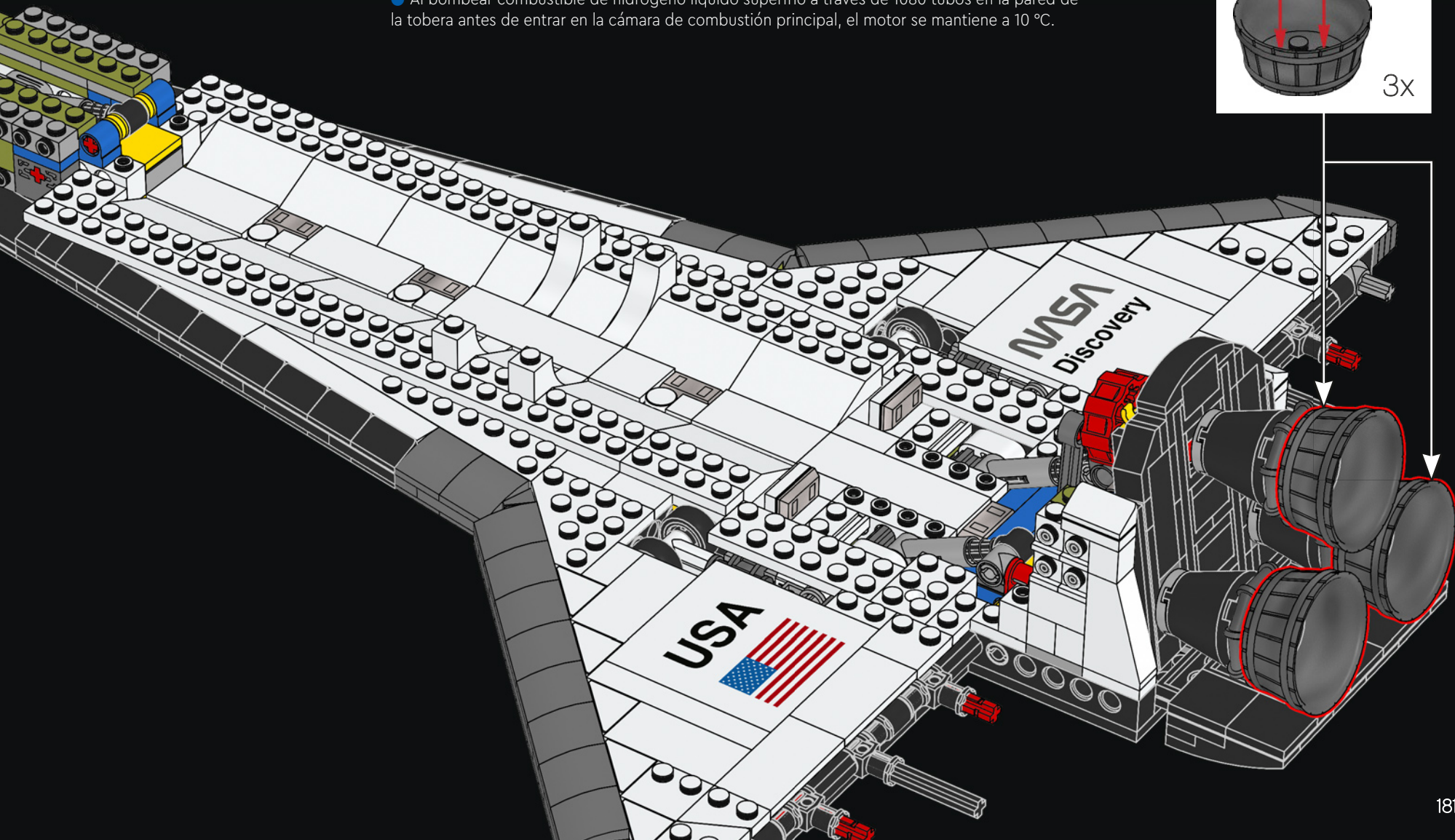
## DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

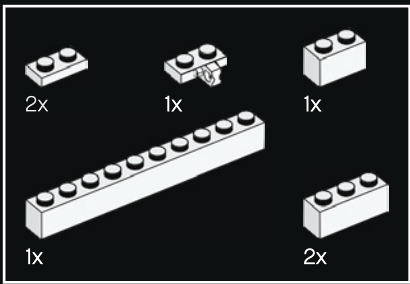
● By pumping super-cold liquid hydrogen fuel through 1,080 tubes in the nozzle wall before it enters the main combustion chamber, the engine is kept at a cool 50 degrees Fahrenheit (10 degrees Celsius).

● Grâce à l'hydrogène liquide extrêmement froid pompé à travers 1 080 tubes dans la paroi de la tuyère avant qu'il n'entre dans la chambre de combustion principale, le moteur est maintenu à une basse température de 10 degrés Celsius (50 degrés Fahrenheit).

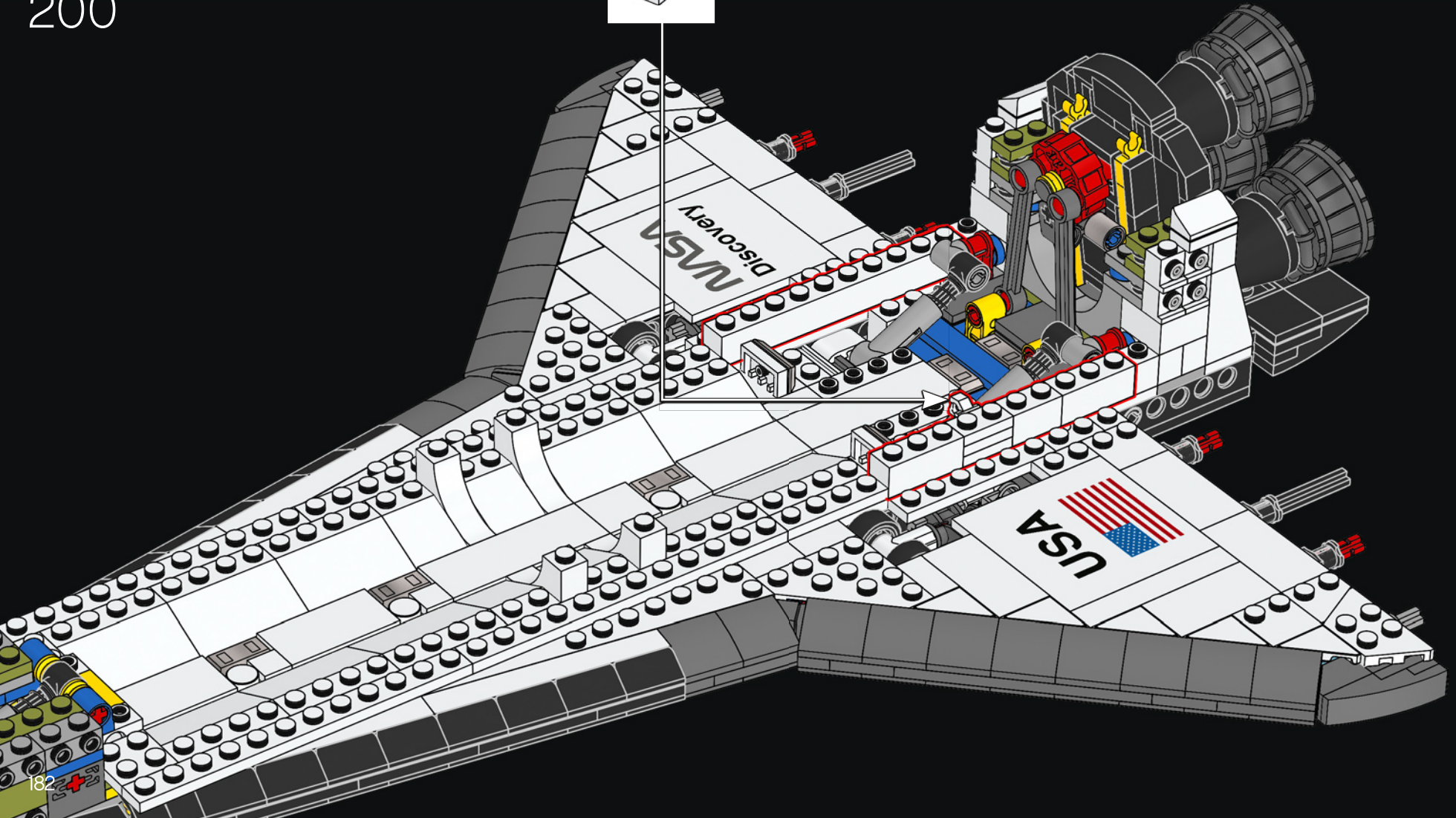
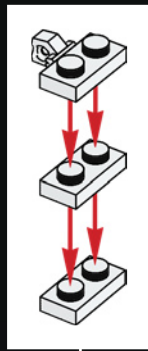
● Al bombear combustible de hidrógeno líquido superfrío a través de 1080 tubos en la pared de la tobera antes de entrar en la cámara de combustión principal, el motor se mantiene a 10 °C.

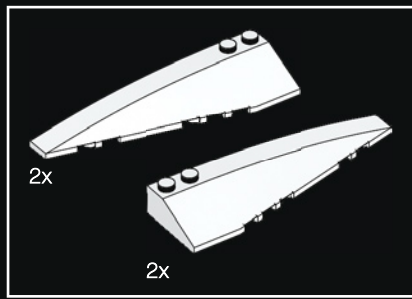
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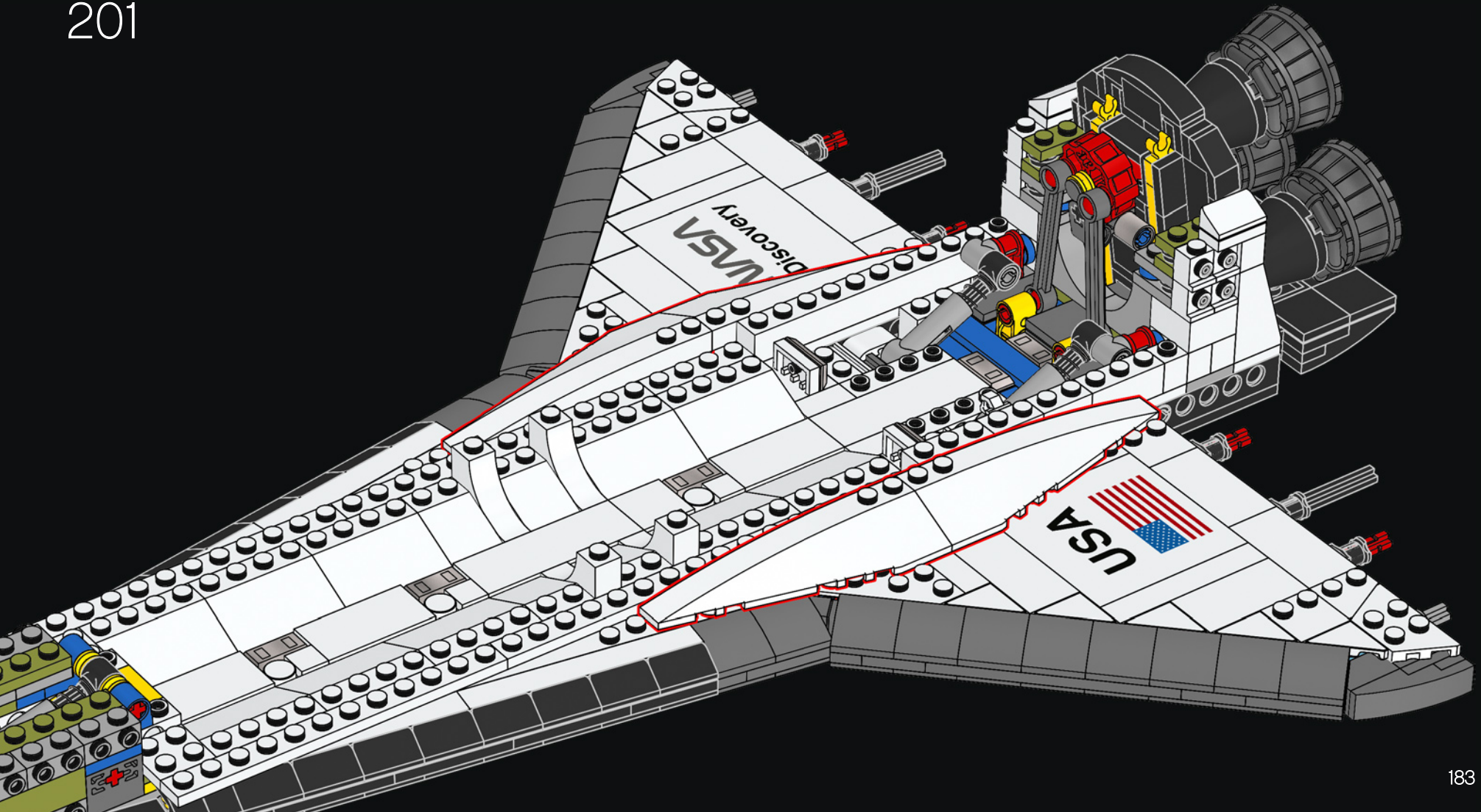


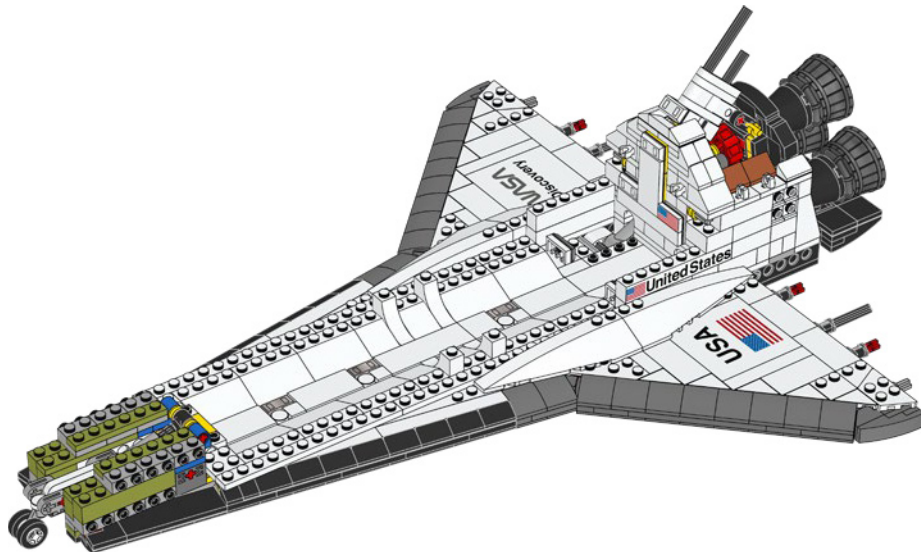
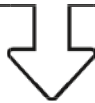
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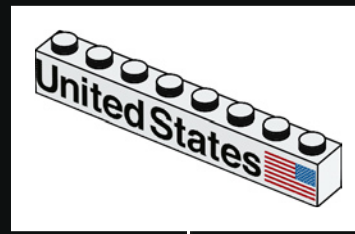
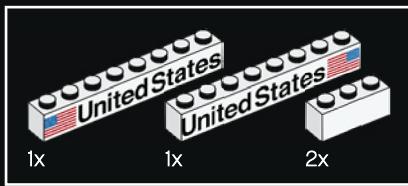


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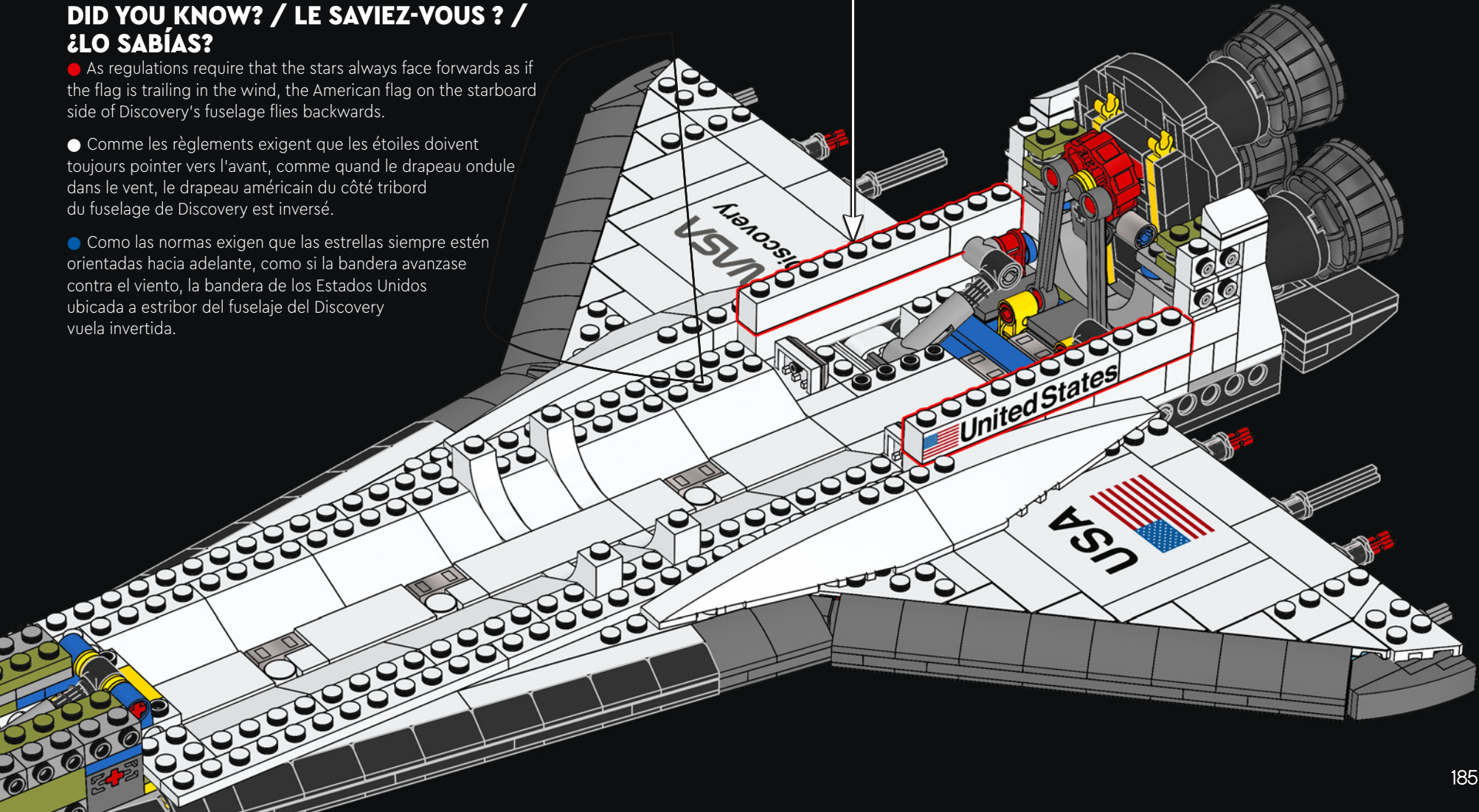
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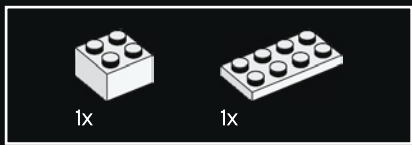
## DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

● As regulations require that the stars always face forwards as if the flag is trailing in the wind, the American flag on the starboard side of Discovery's fuselage flies backwards.

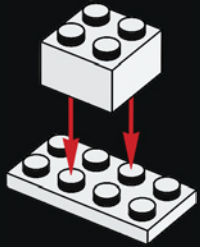
● Comme les règlements exigent que les étoiles doivent toujours pointer vers l'avant, comme quand le drapeau ondule dans le vent, le drapeau américain du côté tribord du fuselage de Discovery est inversé.

● Como las normas exigen que las estrellas siempre estén orientadas hacia adelante, como si la bandera avanzase contra el viento, la bandera de los Estados Unidos ubicada a estribor del fuselaje del Discovery vuela invertida.

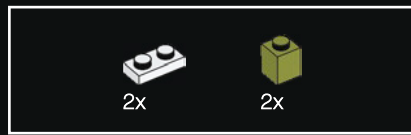
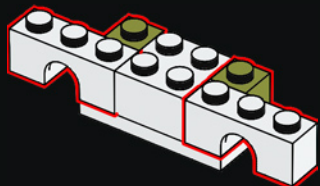




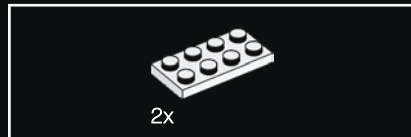
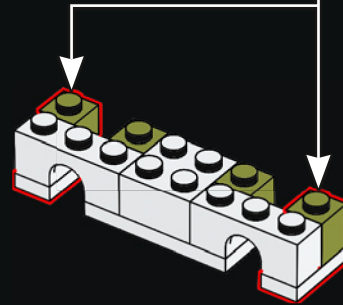
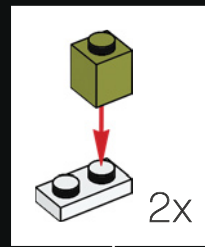
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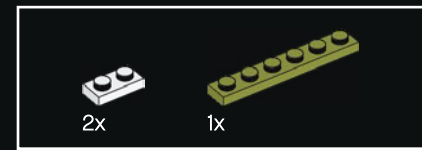
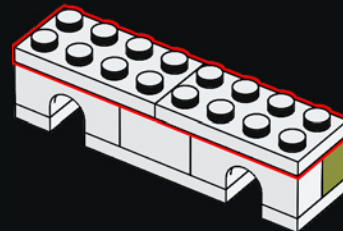
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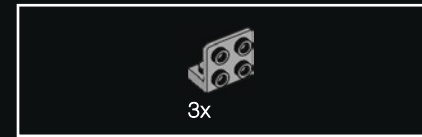
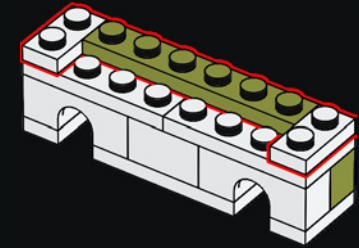
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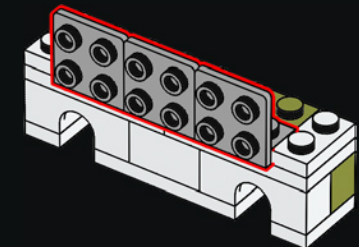
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207

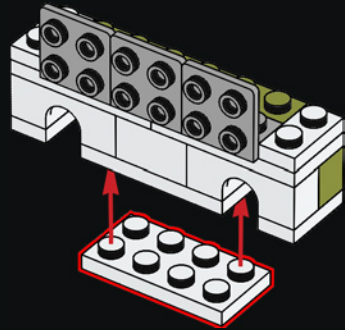


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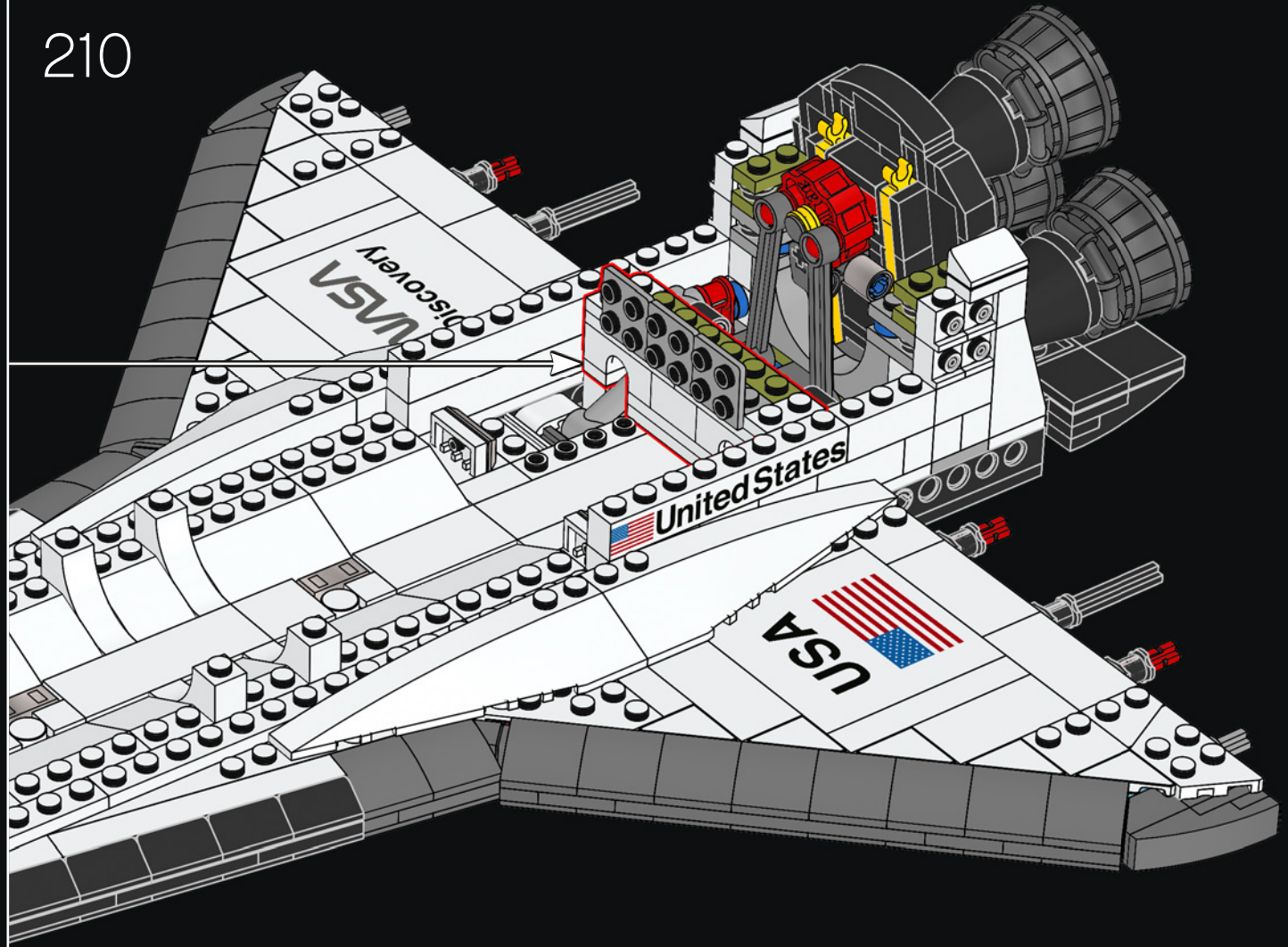


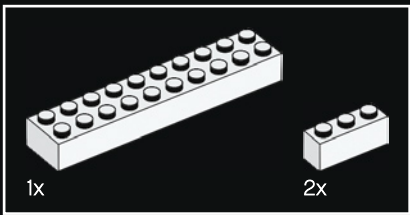


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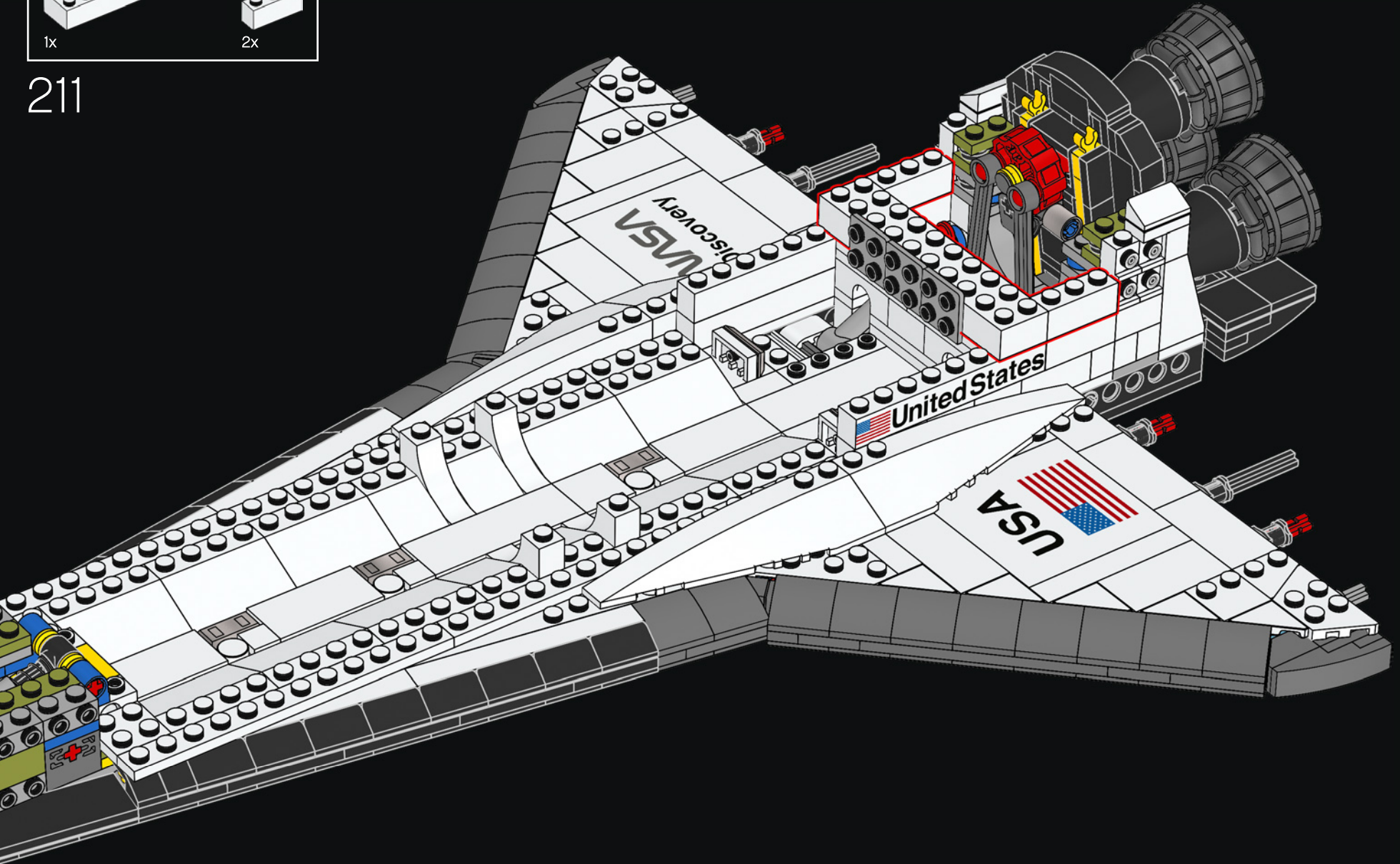


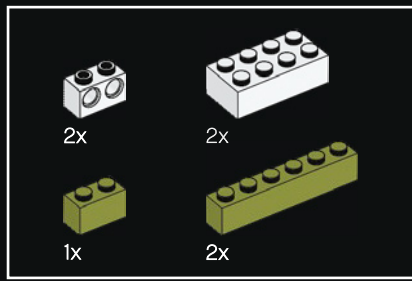
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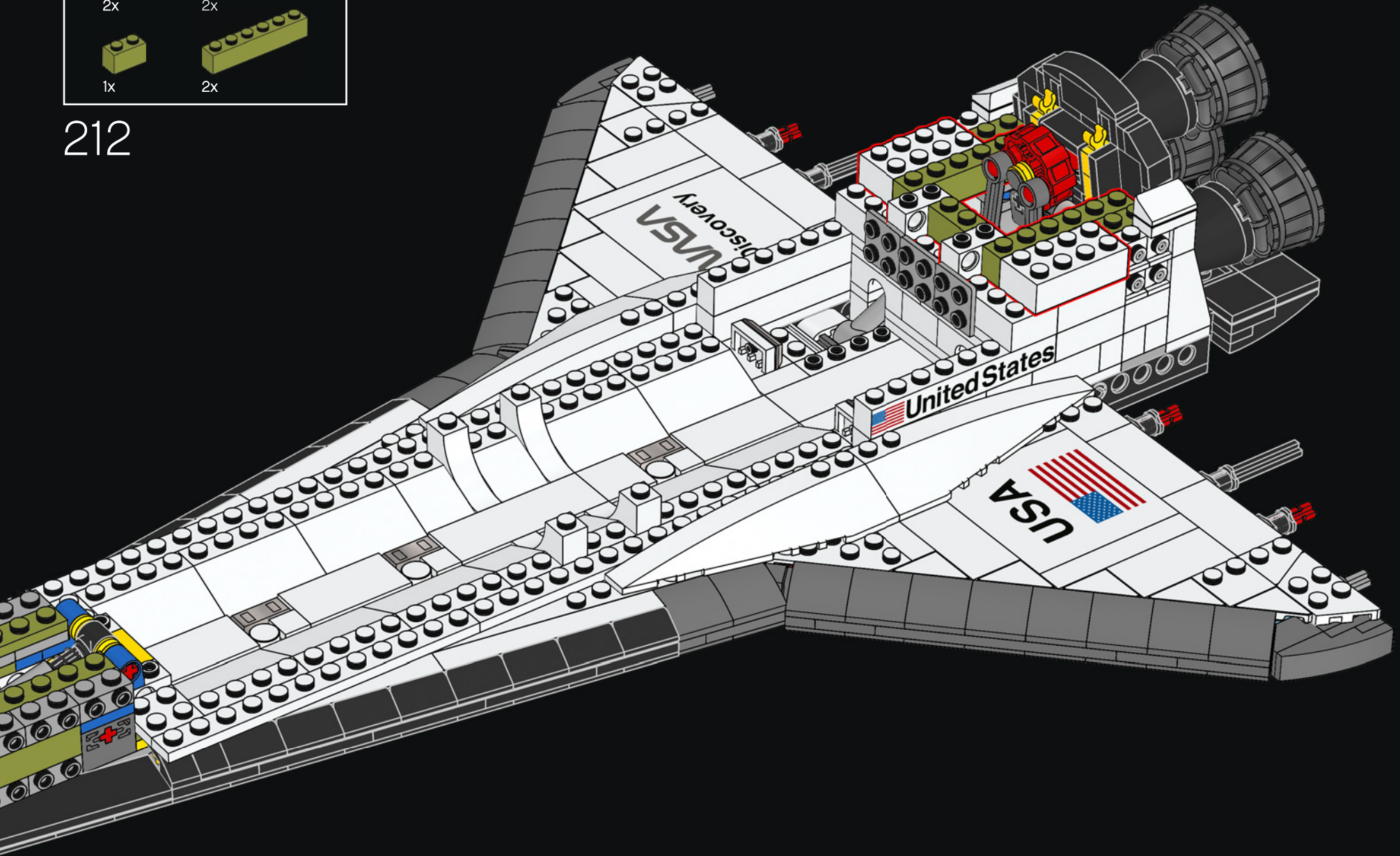


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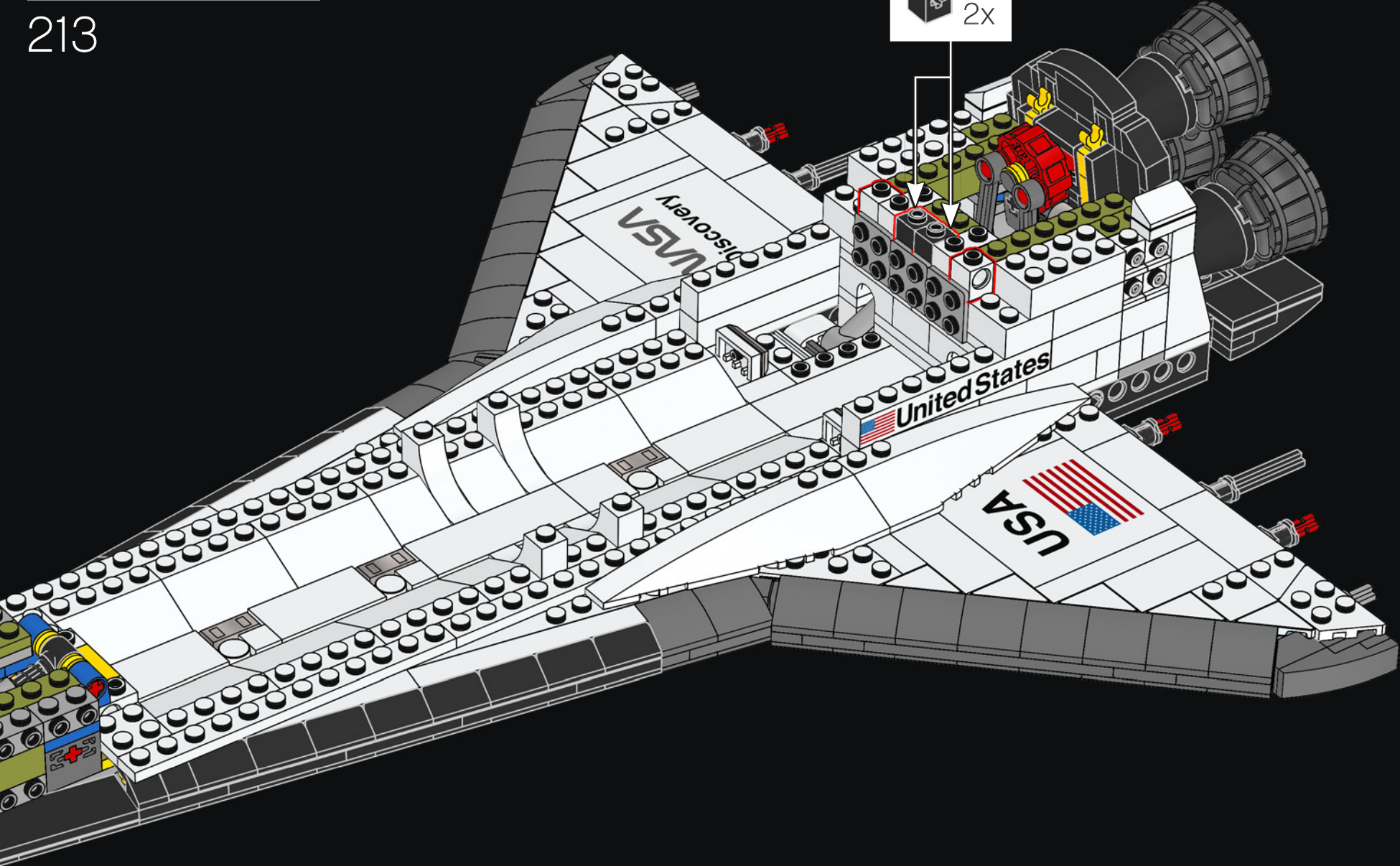


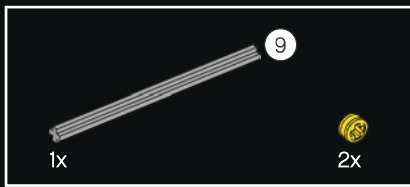
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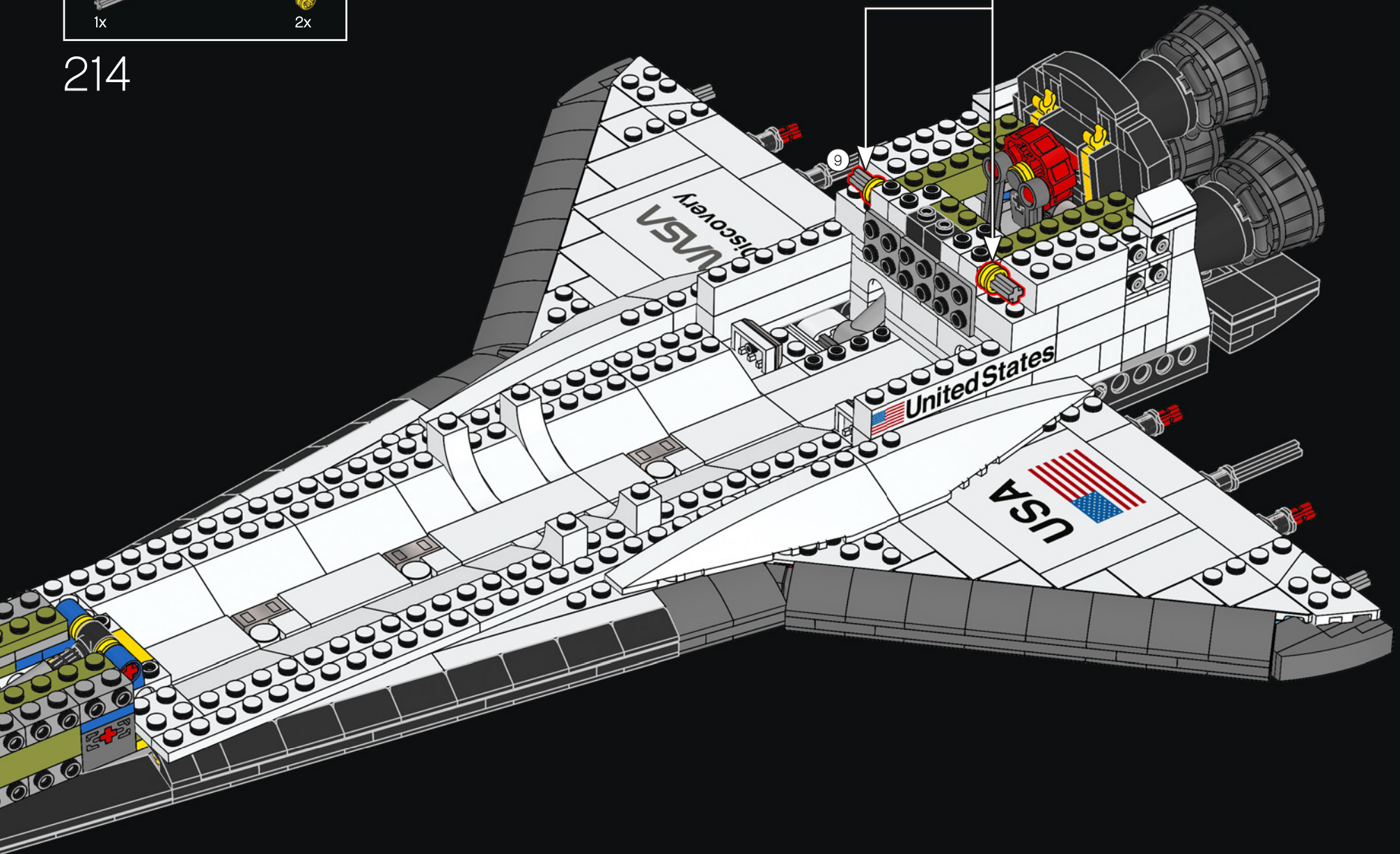


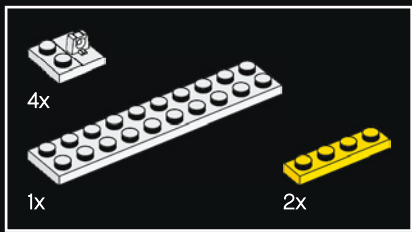
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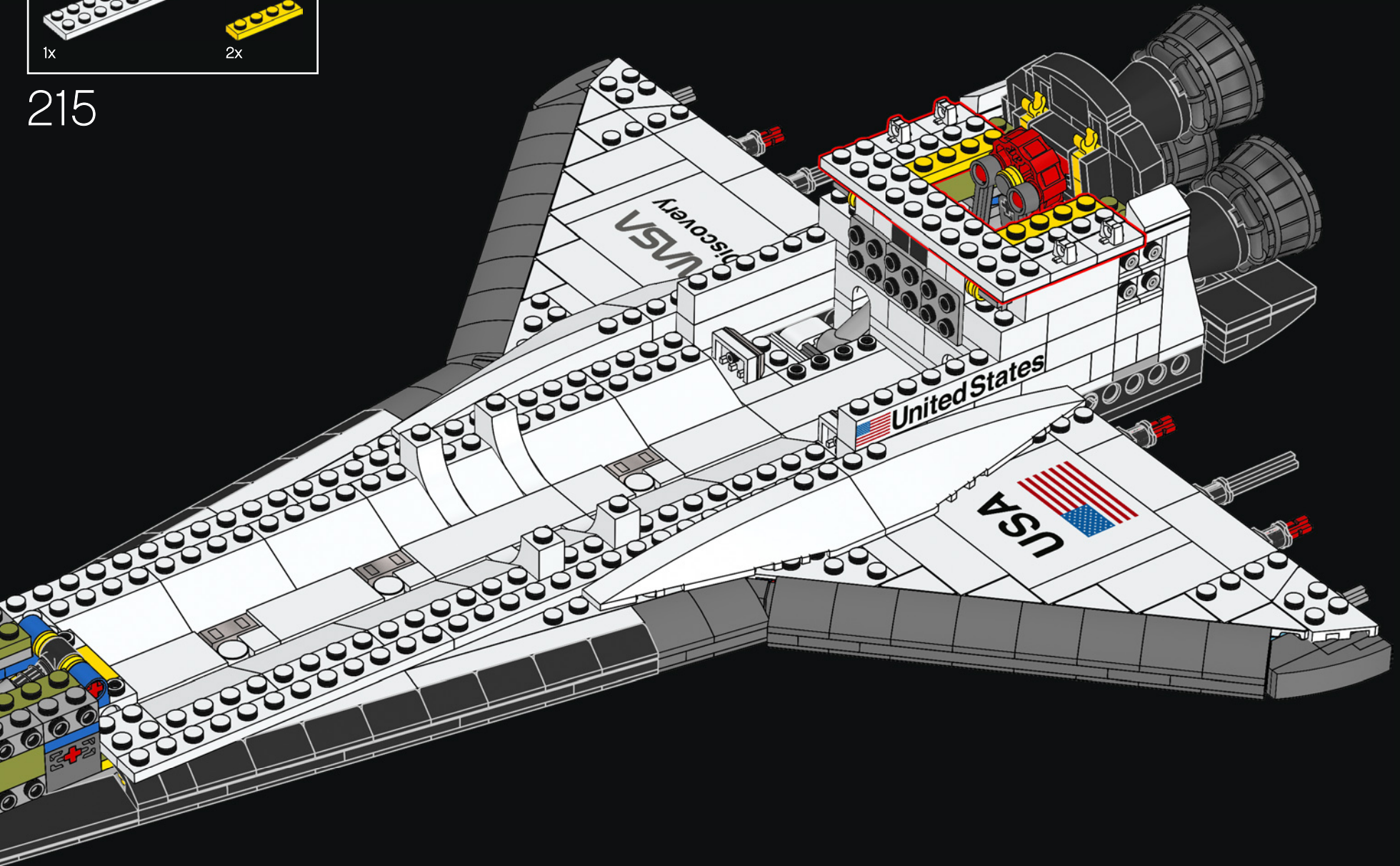


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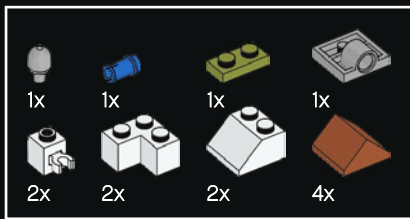




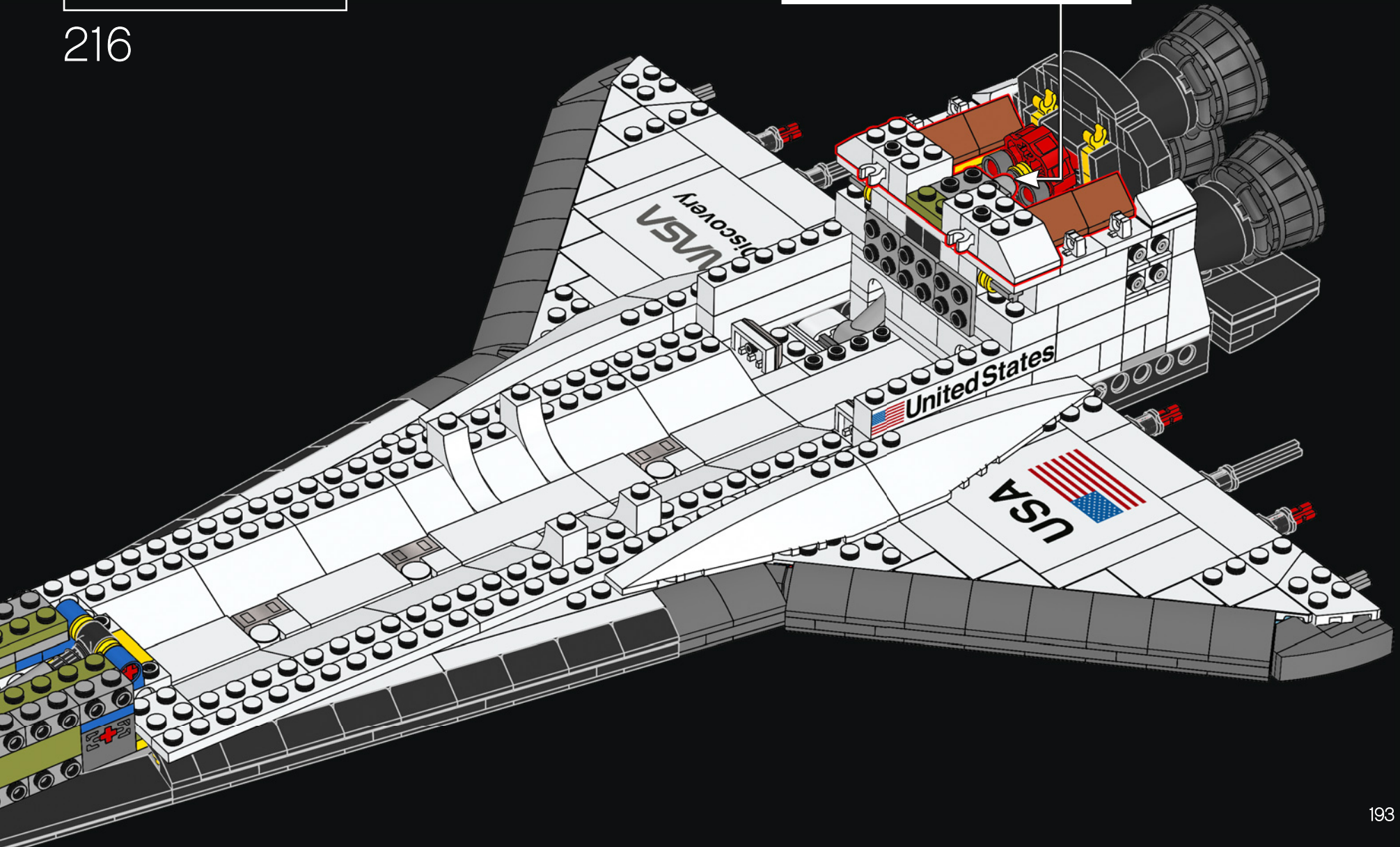
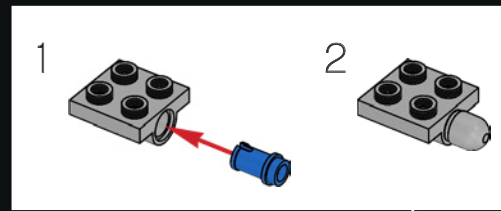
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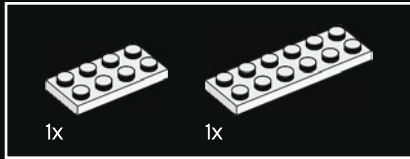
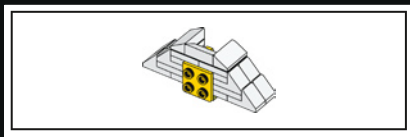




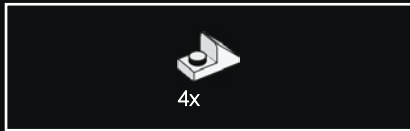
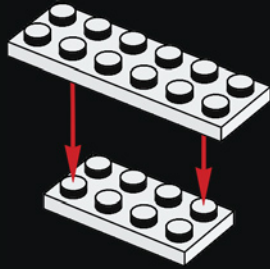
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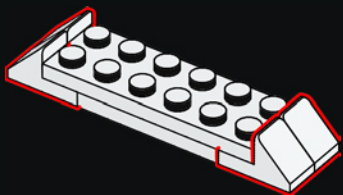




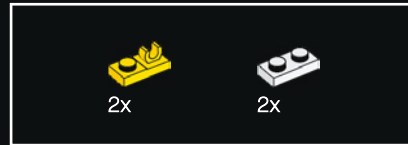
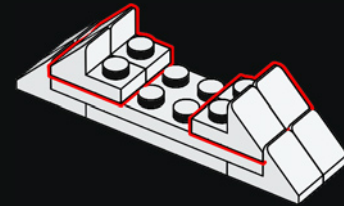
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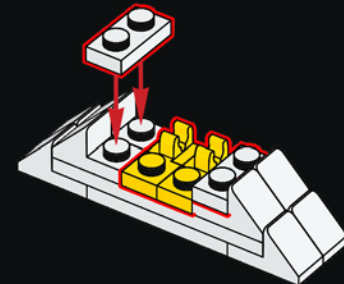
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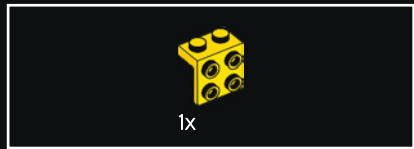
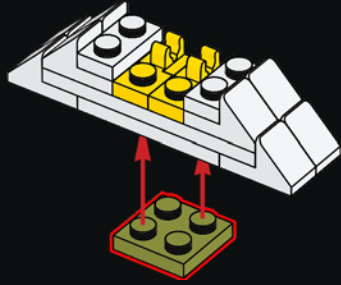


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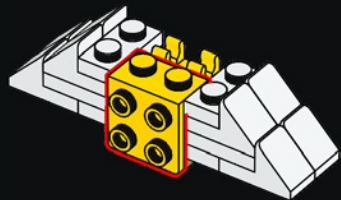




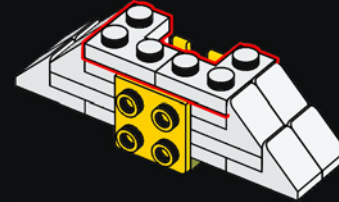
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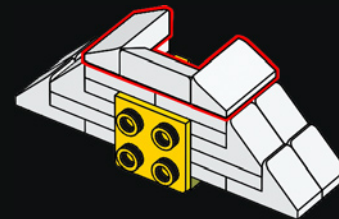
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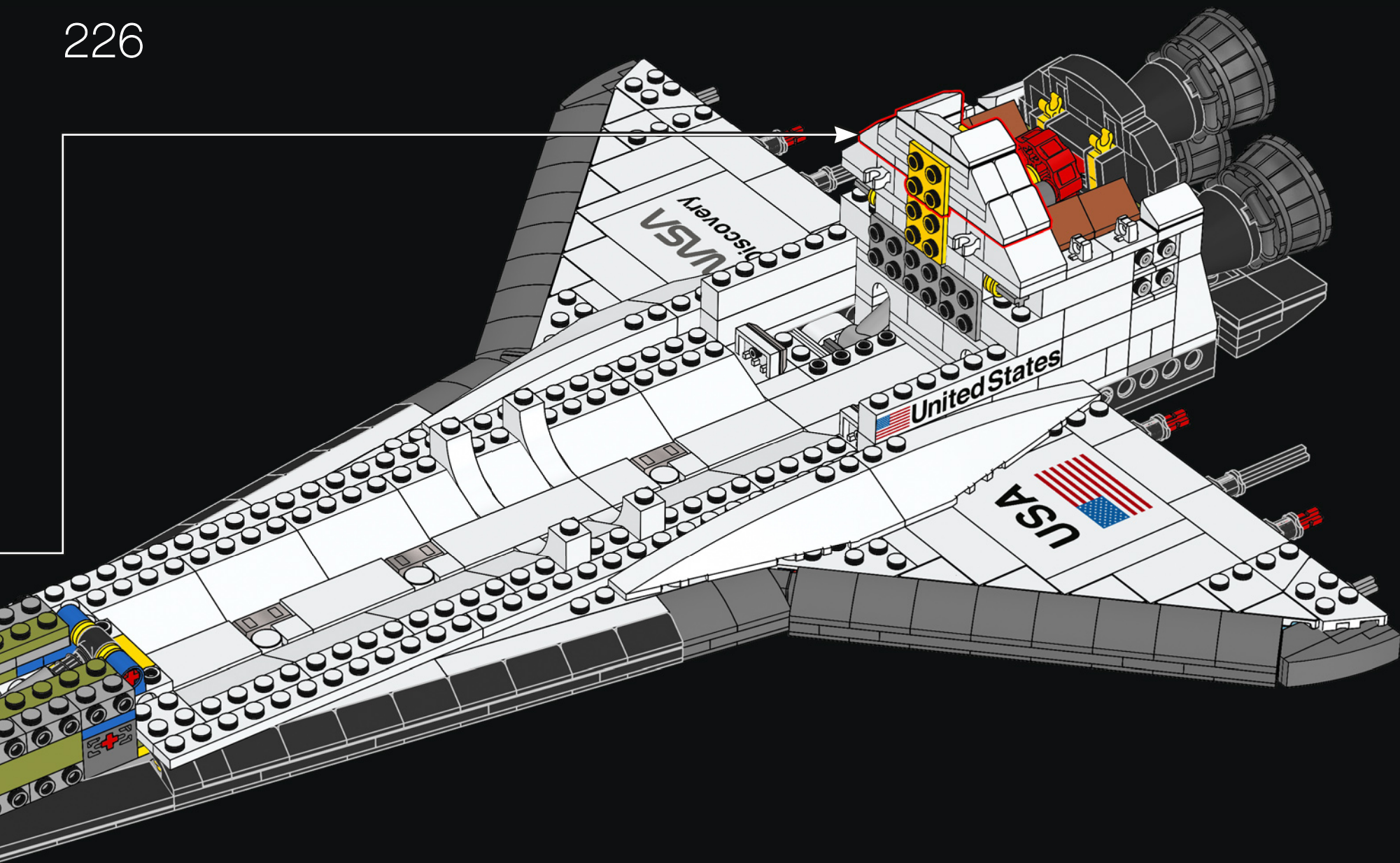
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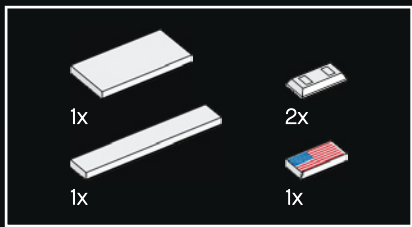


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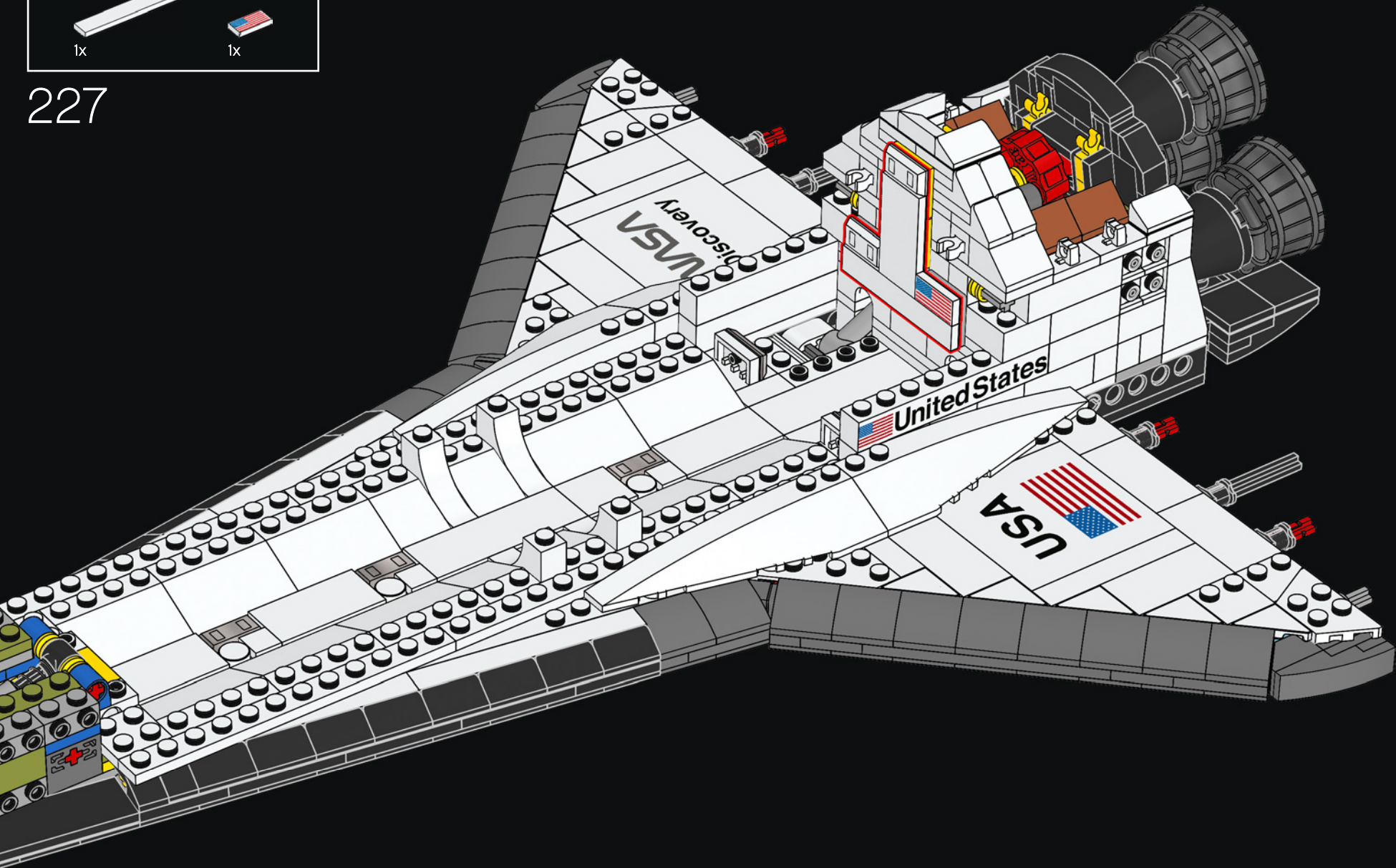


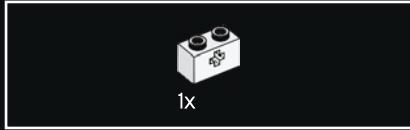
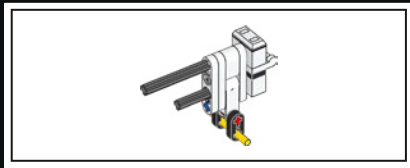
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227





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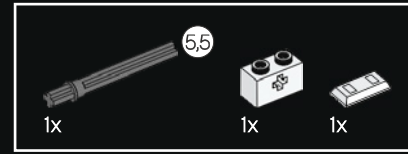
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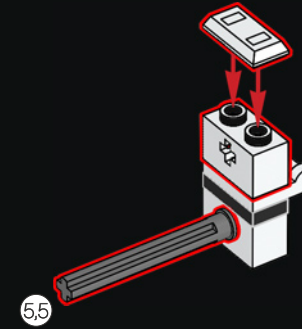


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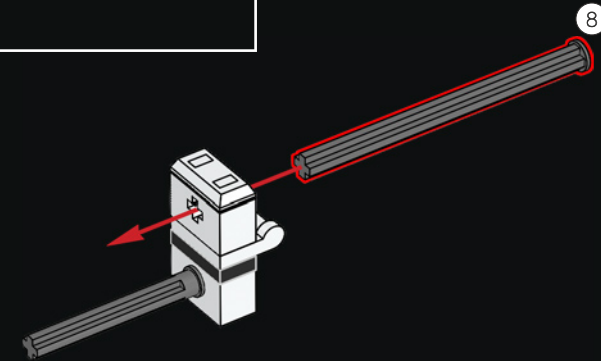
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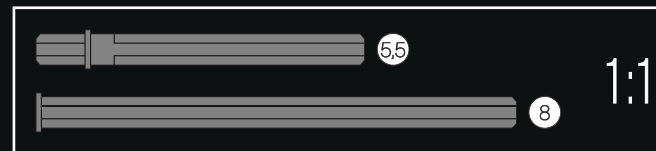
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8

231



8



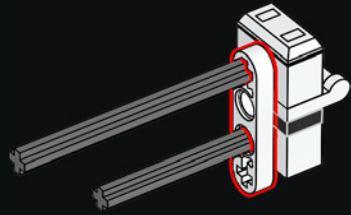
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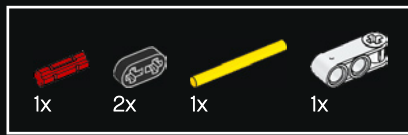
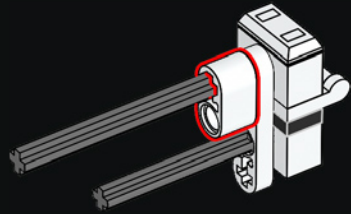
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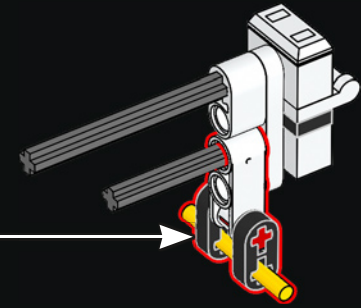
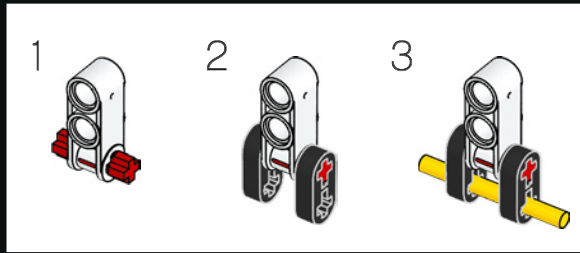
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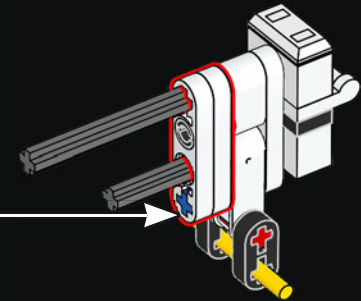
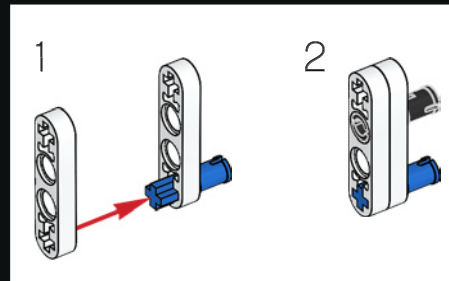
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234

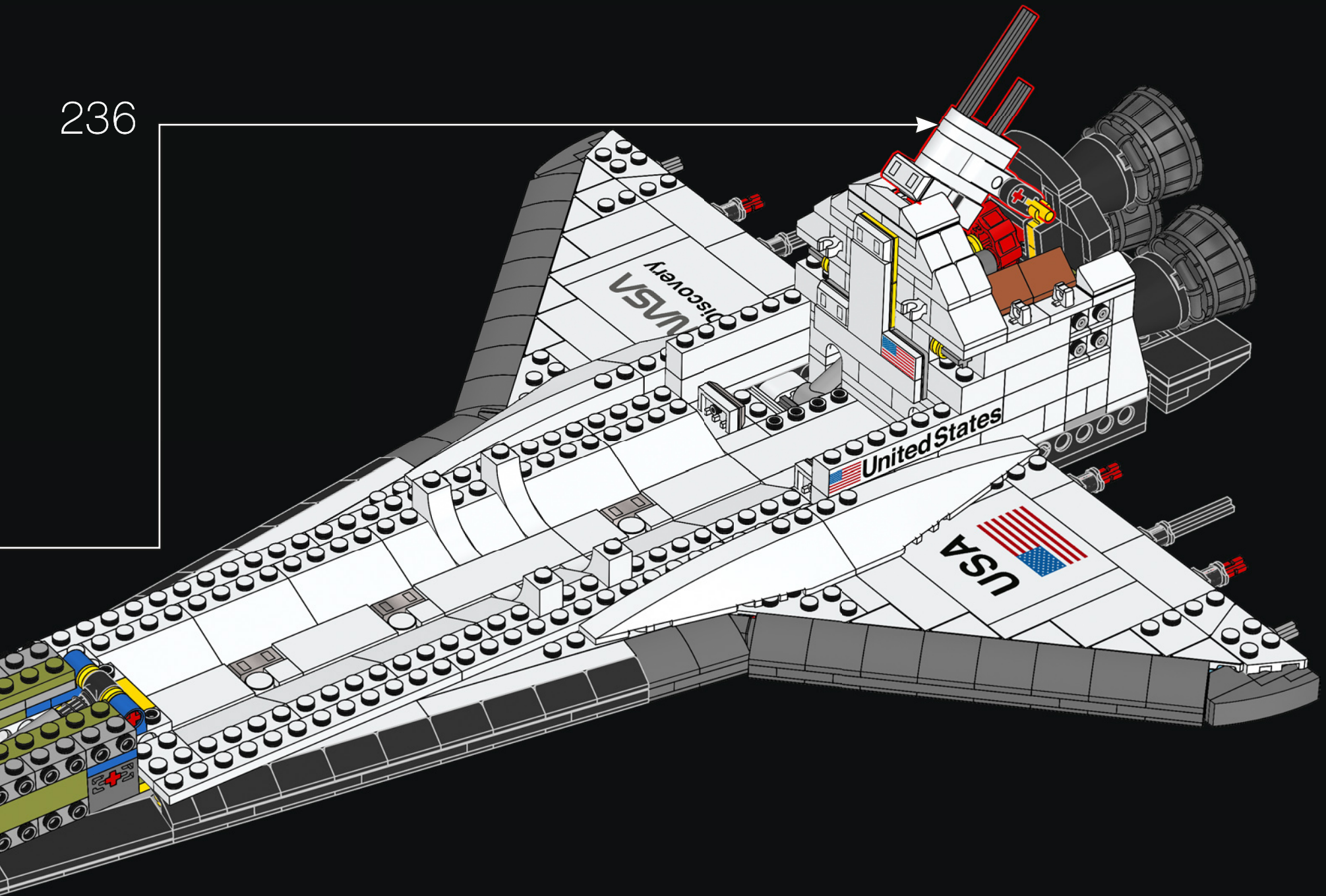


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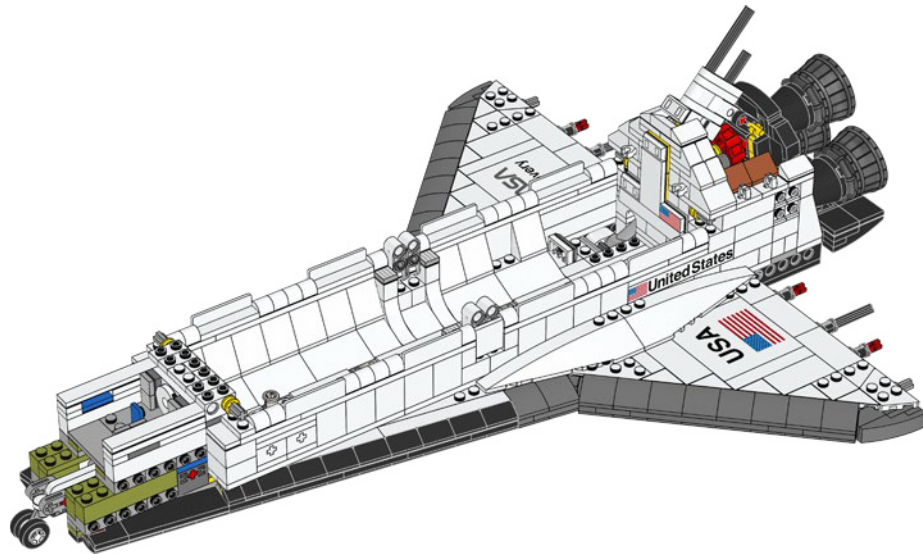




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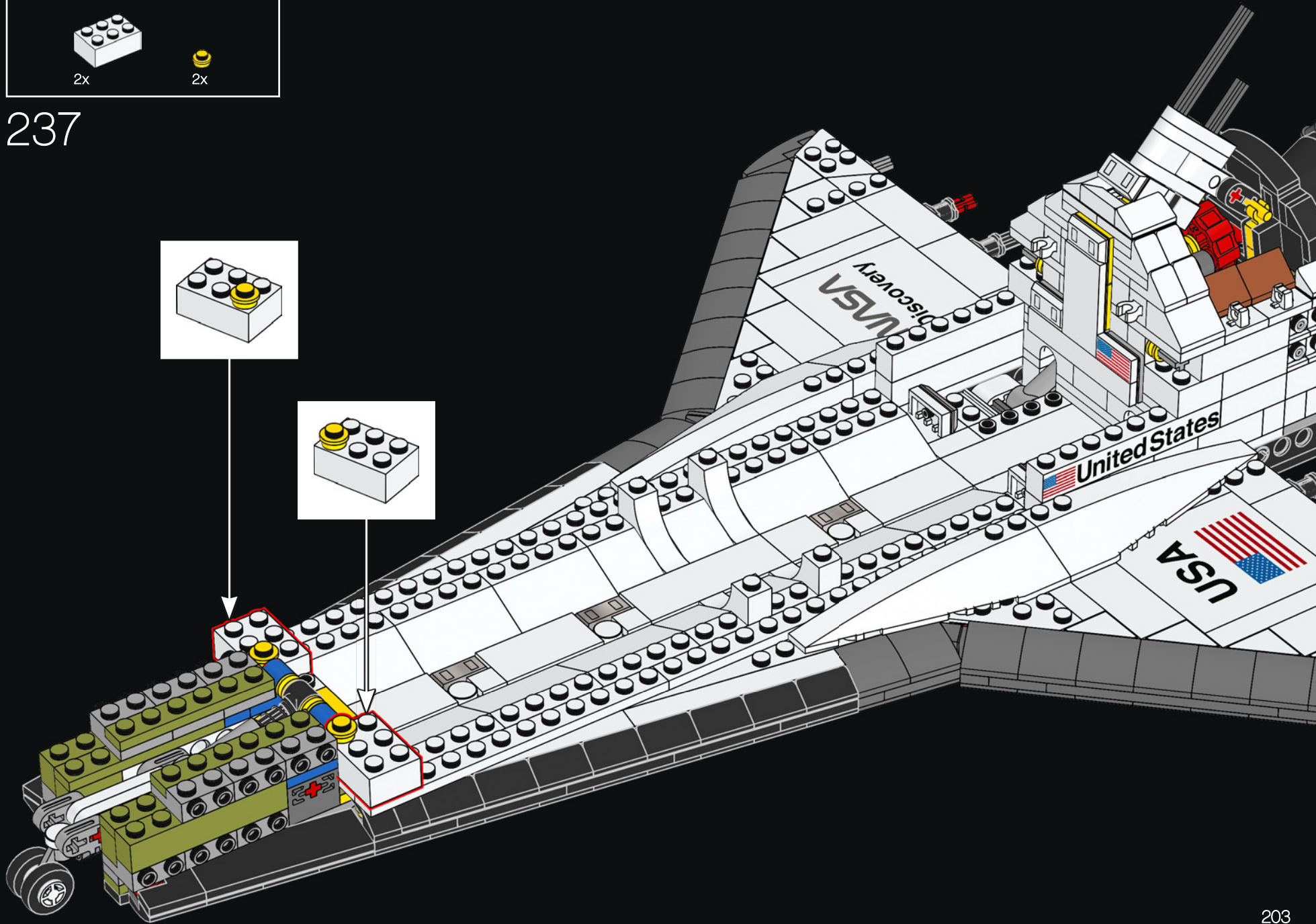
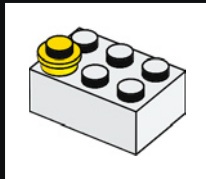
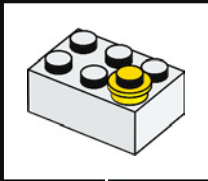


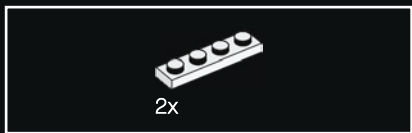
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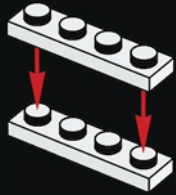


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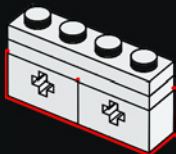




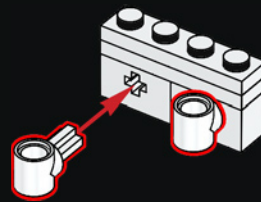
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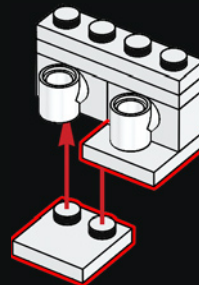
239



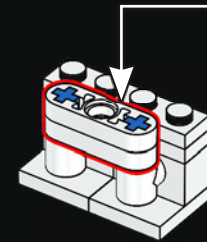
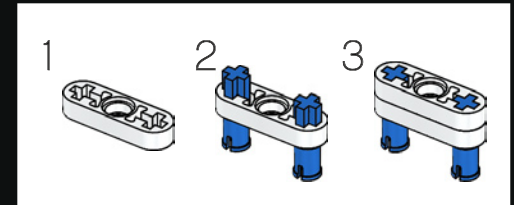
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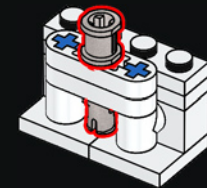
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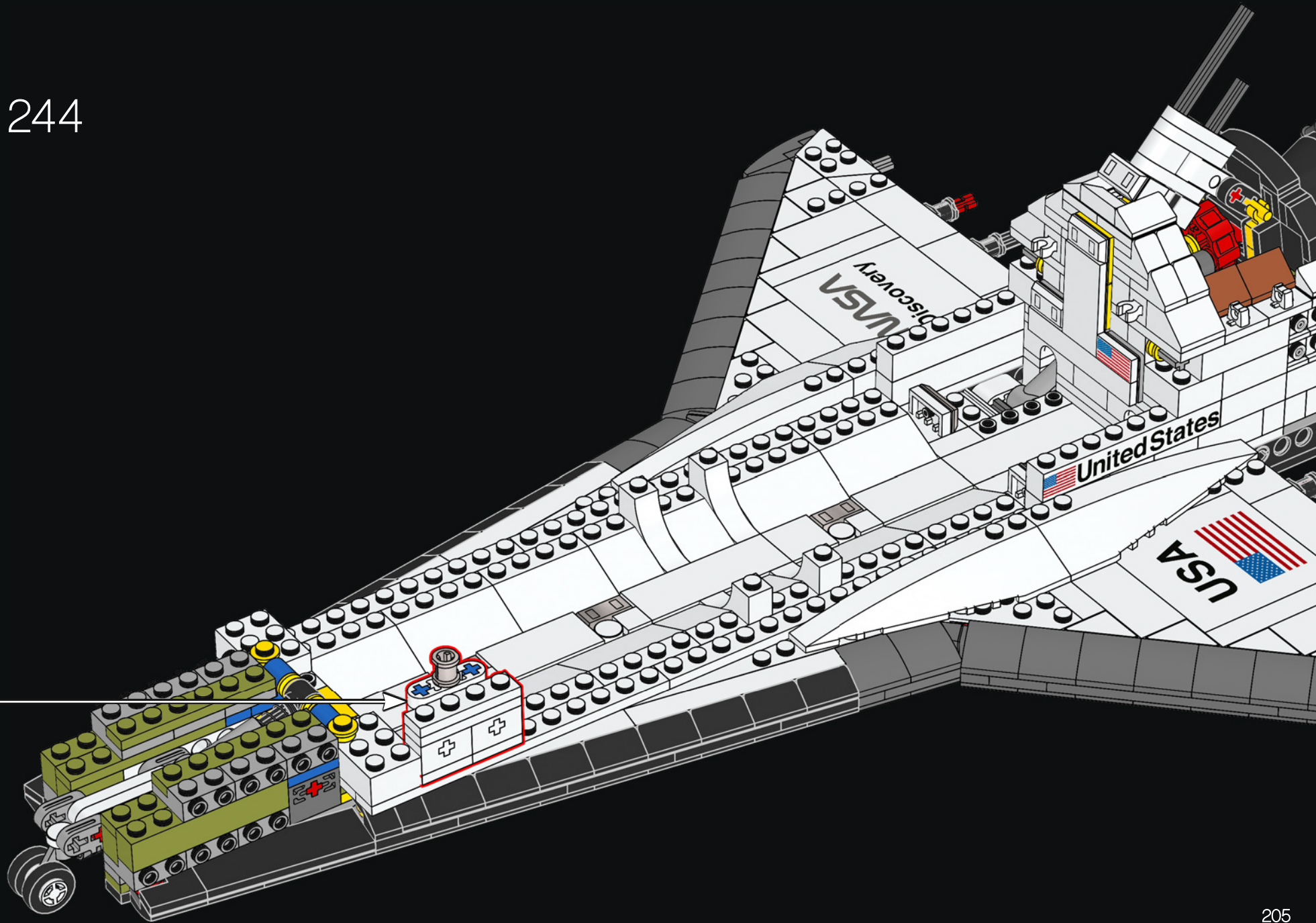


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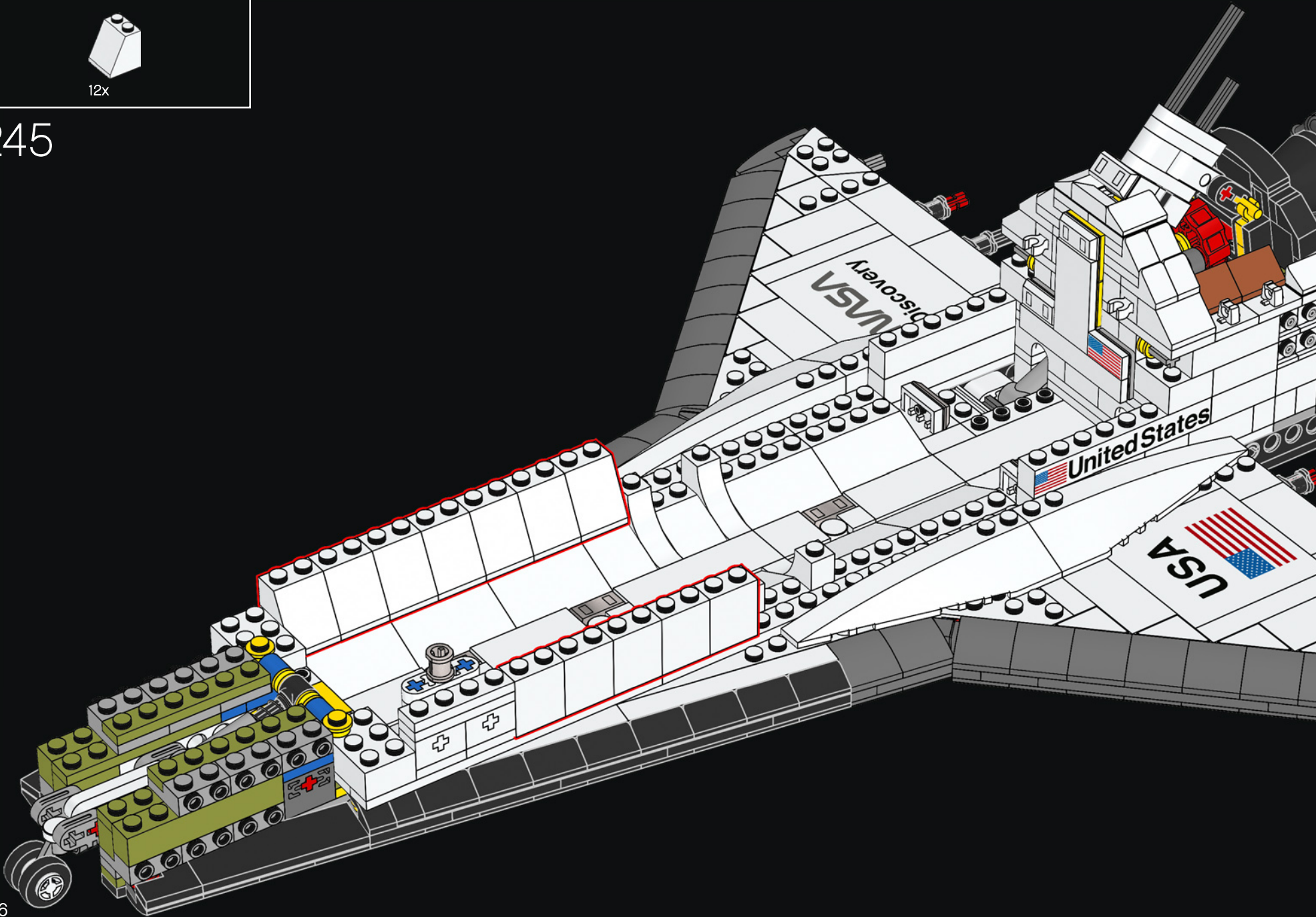
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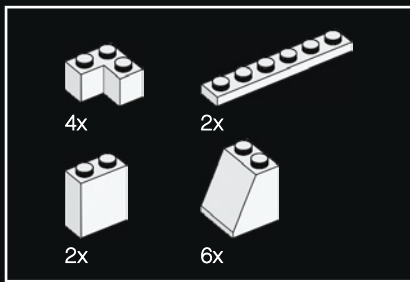




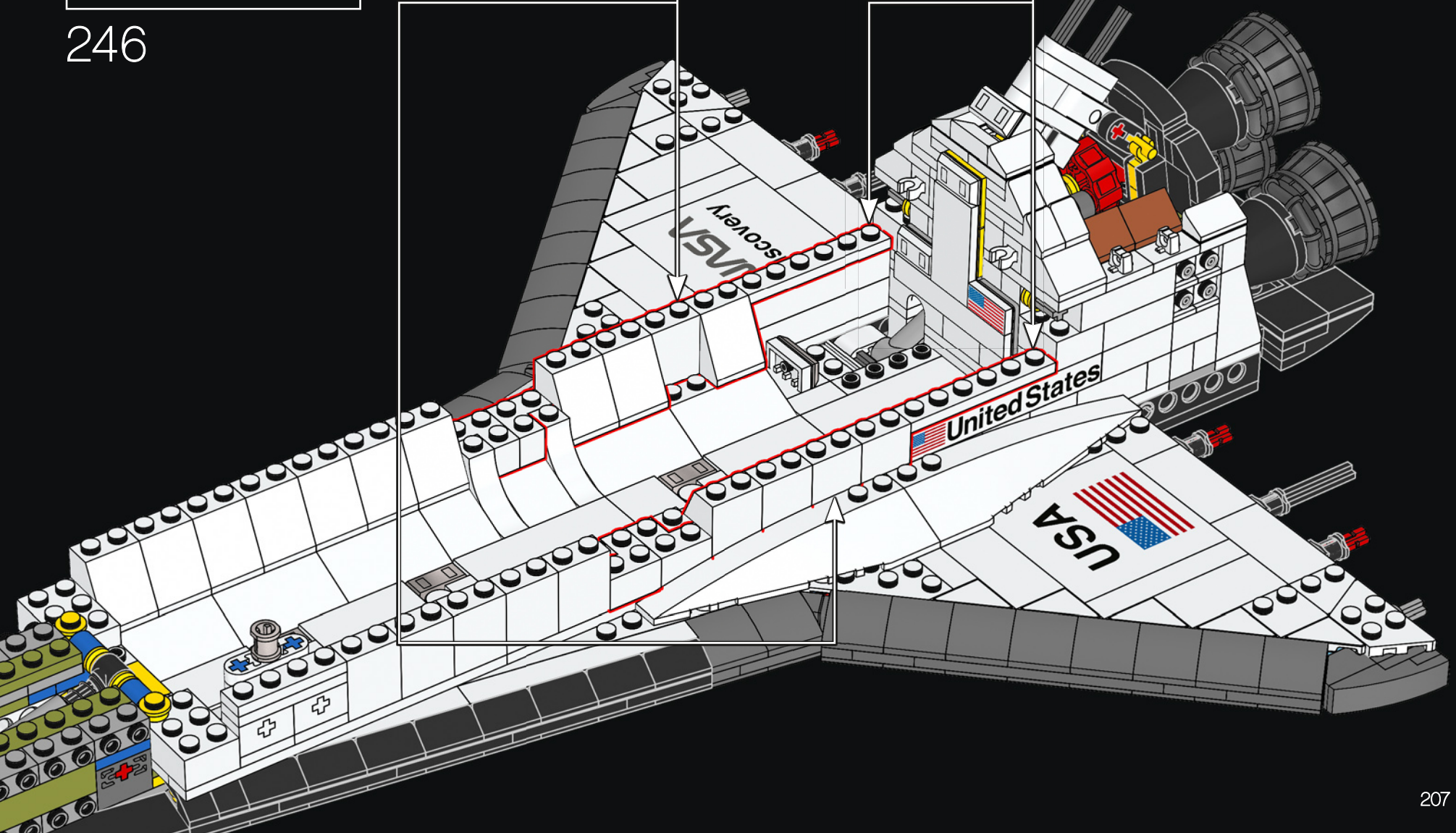
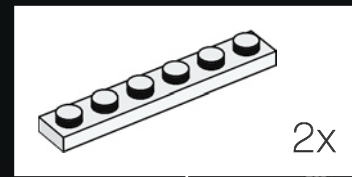
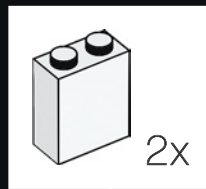


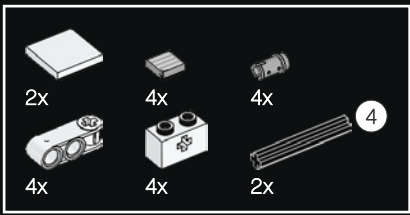
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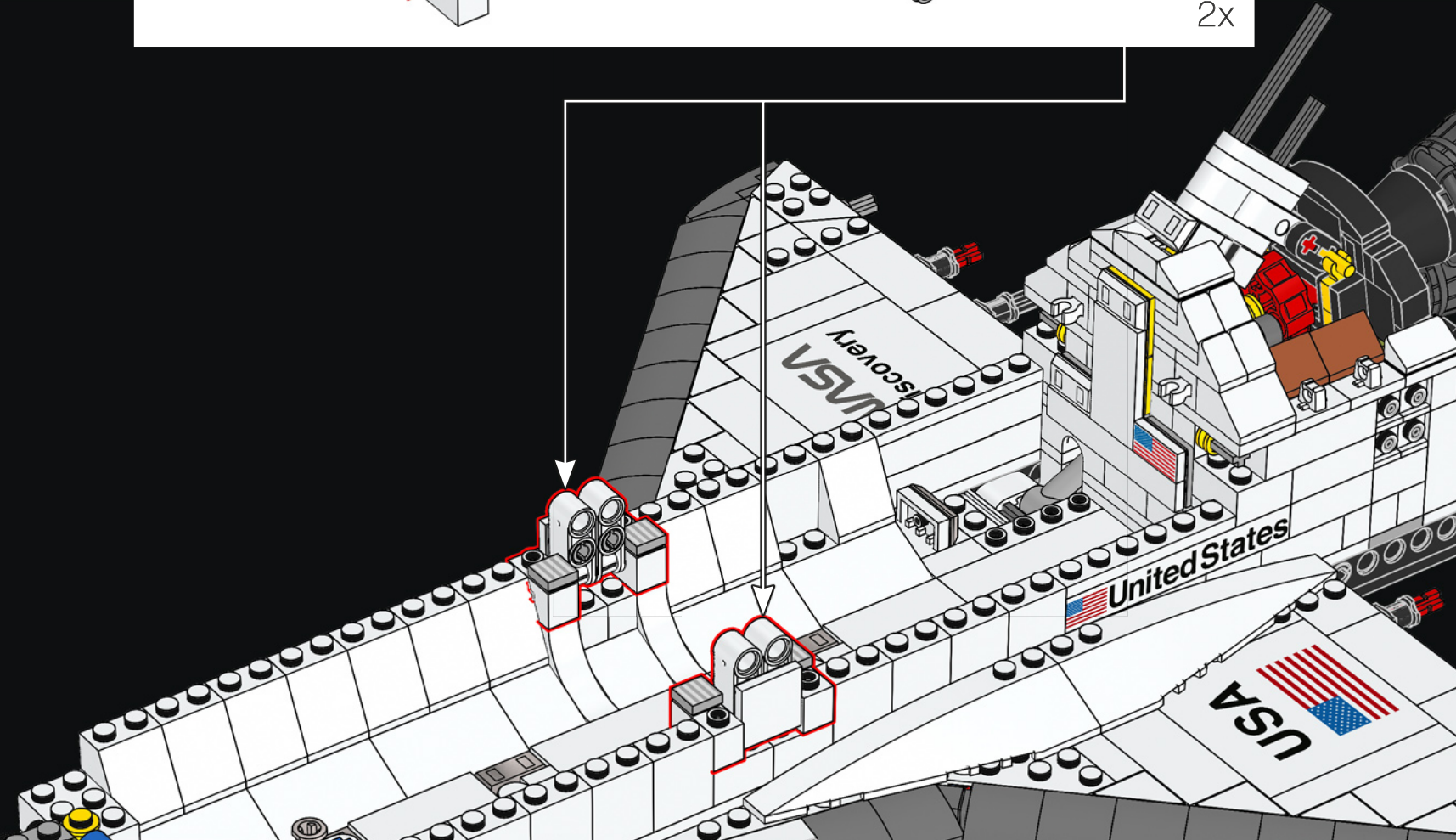
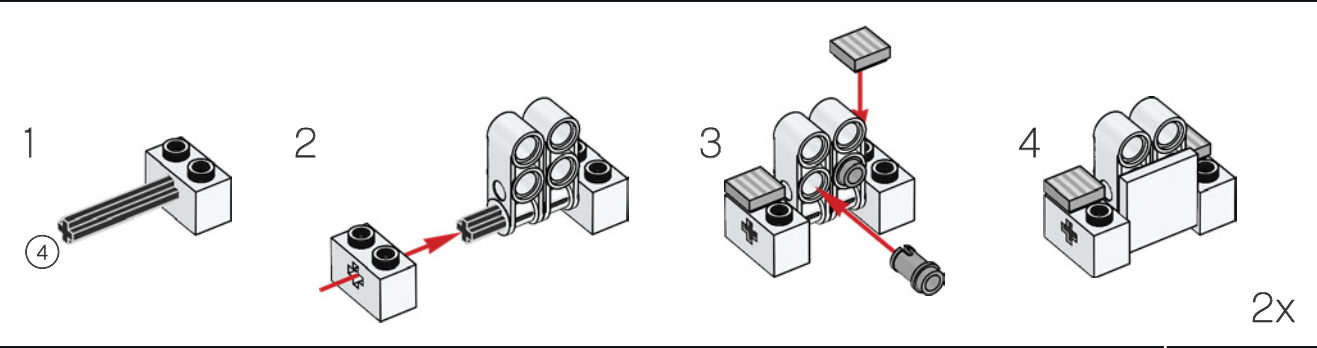


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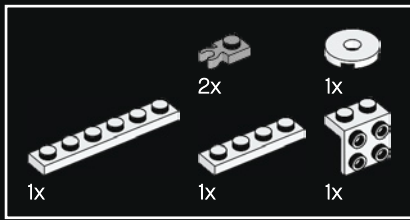




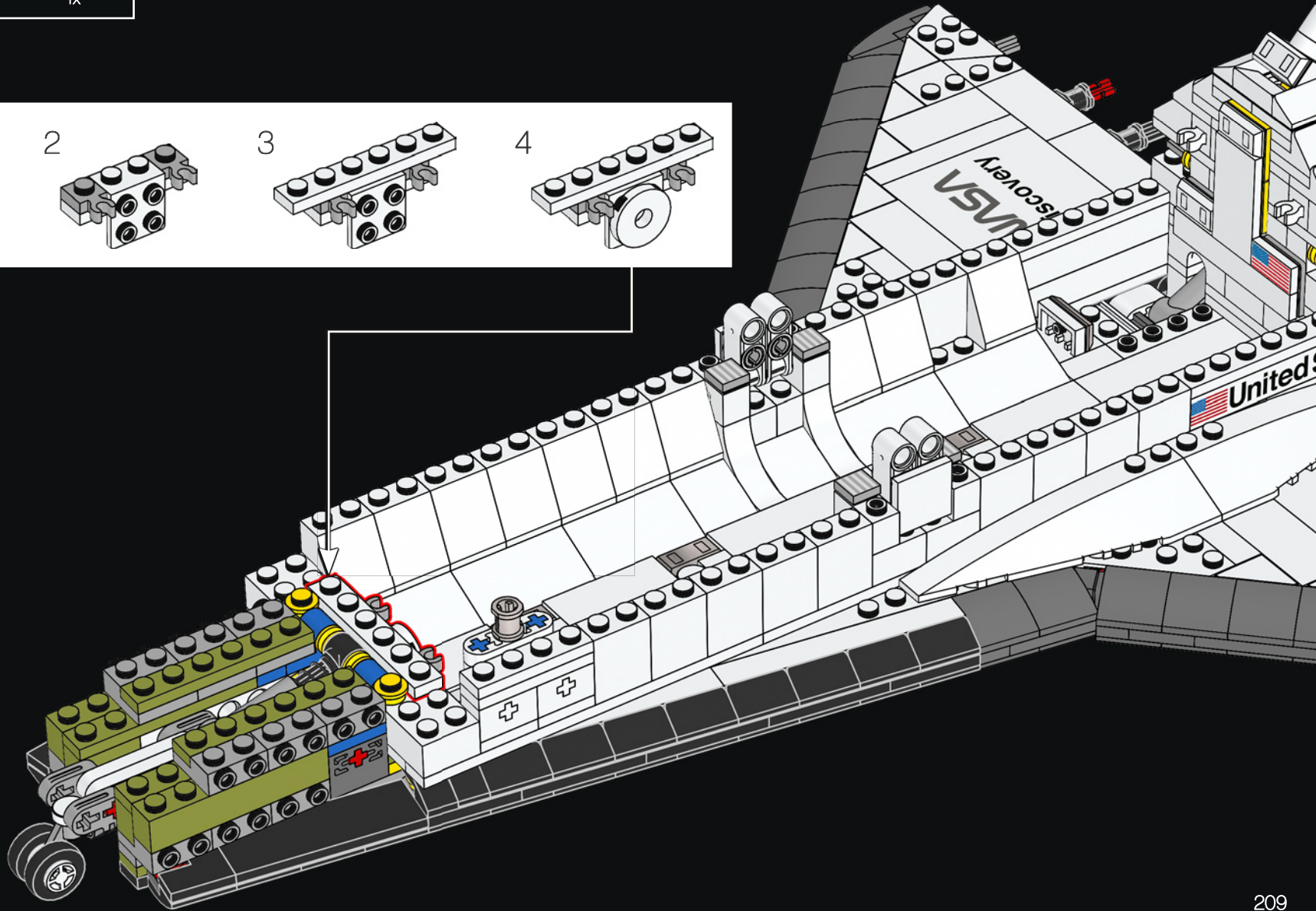
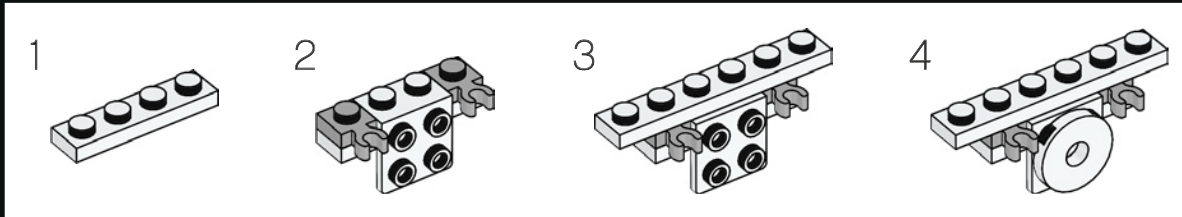
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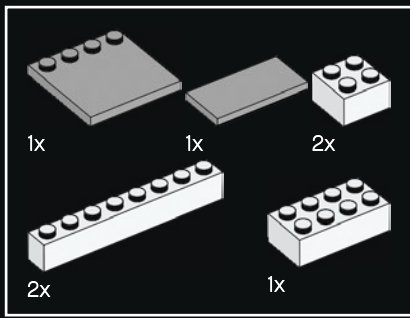






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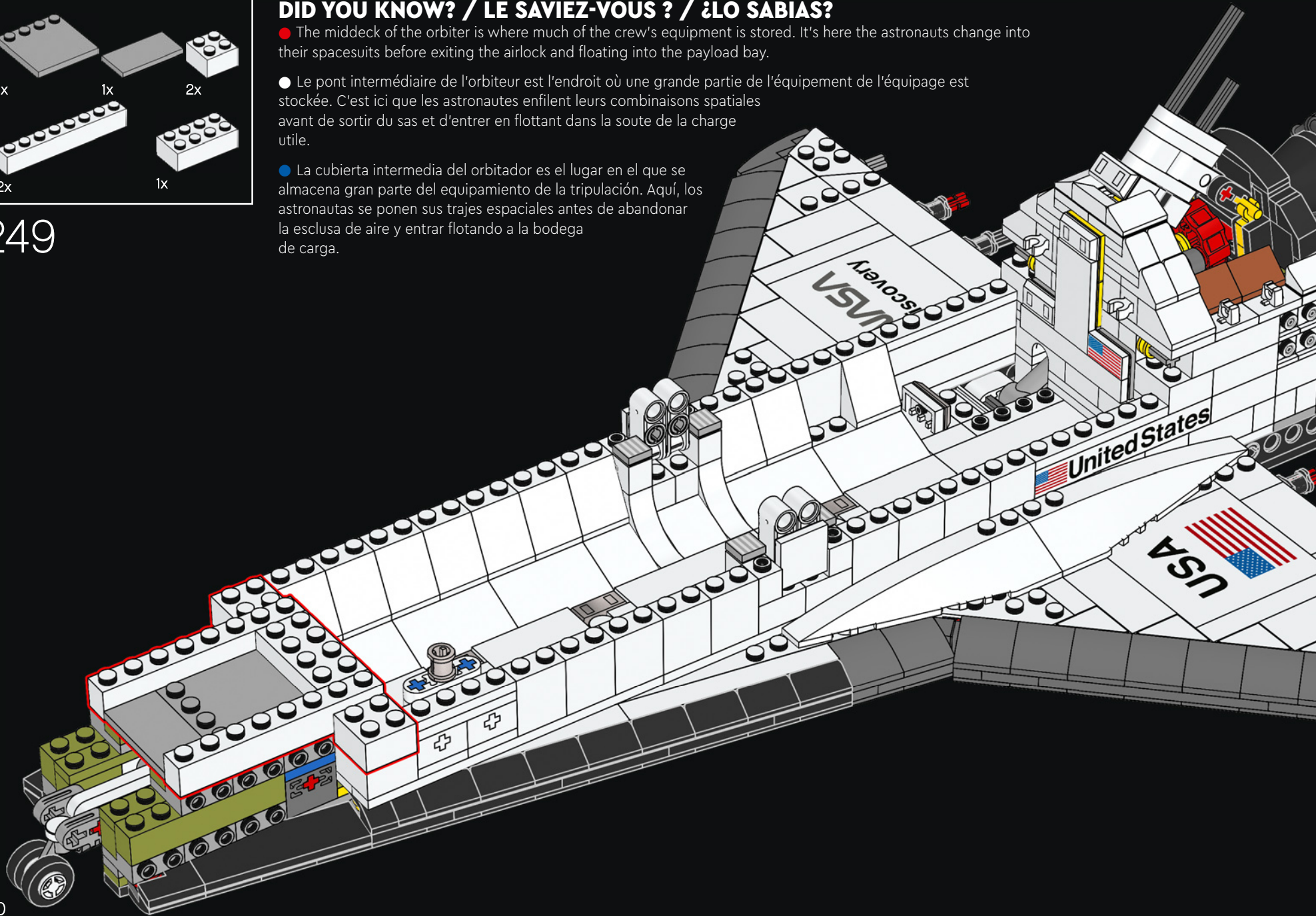
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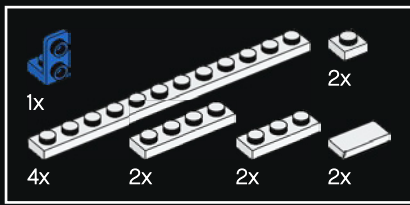
## DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

● The middeck of the orbiter is where much of the crew's equipment is stored. It's here the astronauts change into their spacesuits before exiting the airlock and floating into the payload bay.

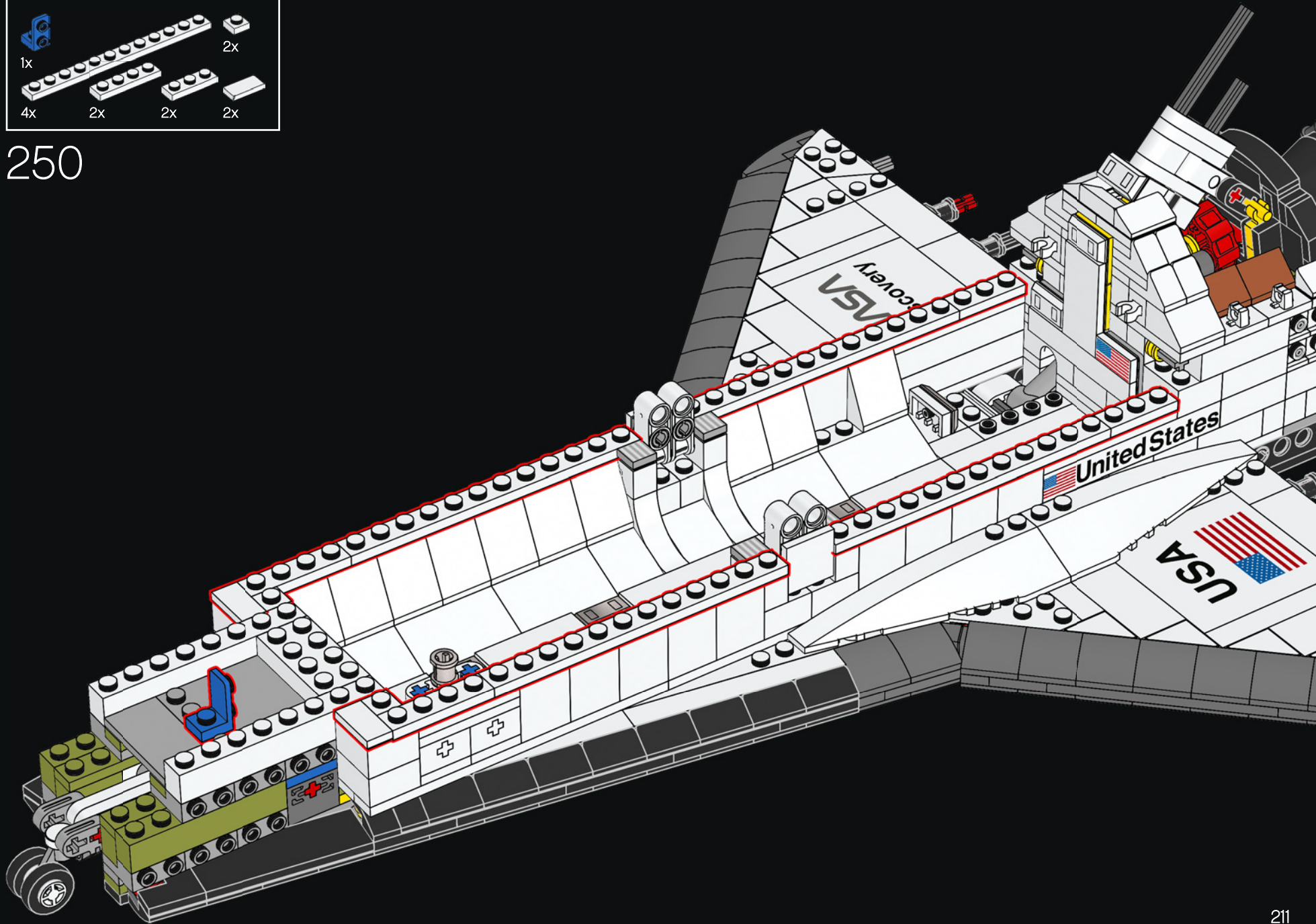
● Le pont intermédiaire de l'orbiteur est l'endroit où une grande partie de l'équipement de l'équipage est stockée. C'est ici que les astronautes enfilent leurs combinaisons spatiales avant de sortir du sas et d'entrer en flottant dans la soute de la charge utile.

● La cubierta intermedia del orbitador es el lugar en el que se almacena gran parte del equipamiento de la tripulación. Aquí, los astronautas se ponen sus trajes espaciales antes de abandonar la esclusa de aire y entrar flotando a la bodega de carga.



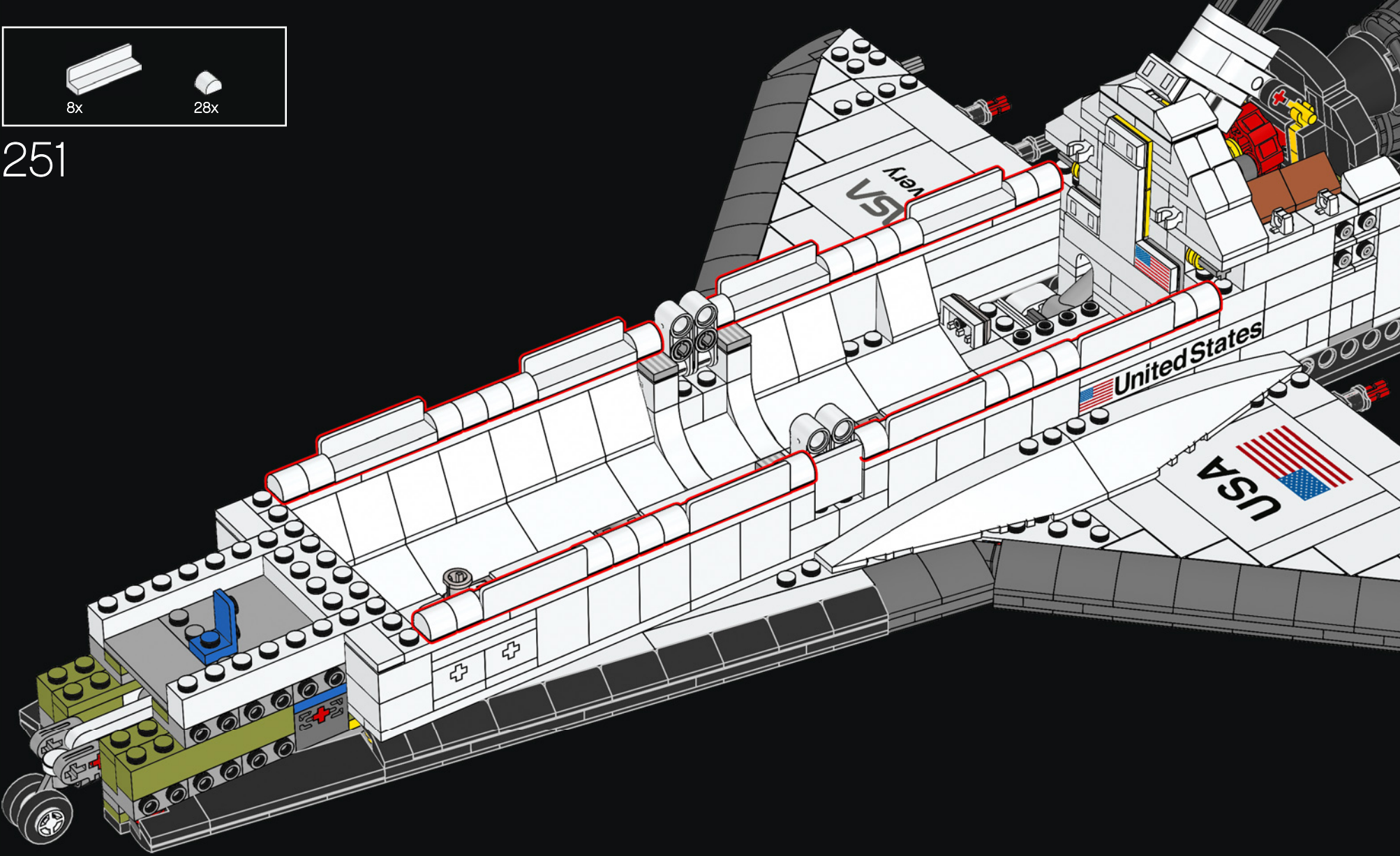


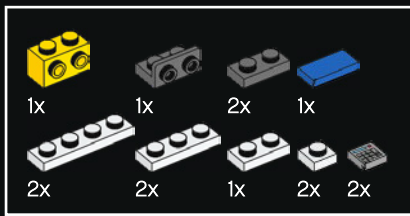
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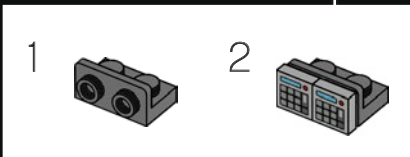
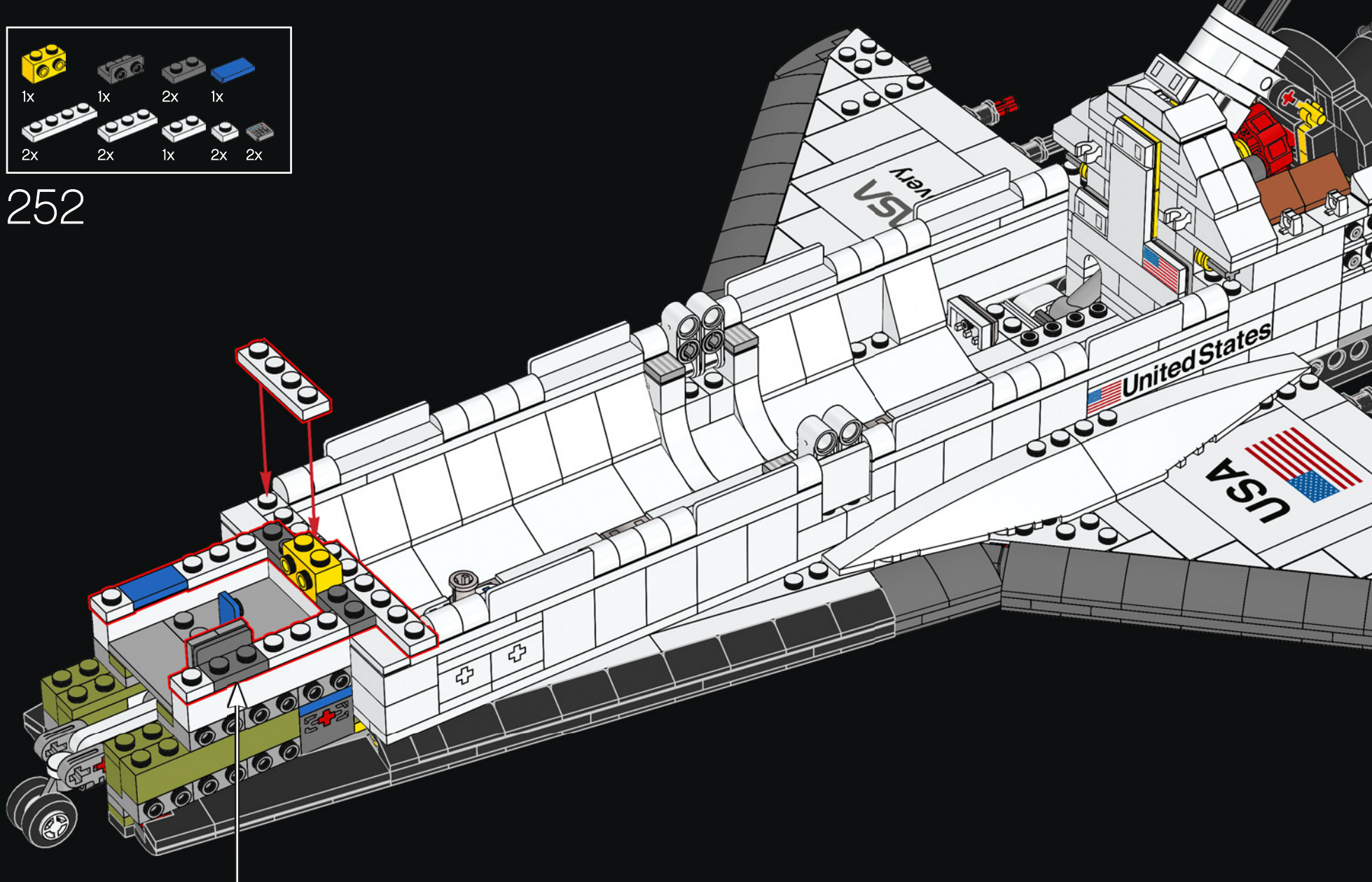


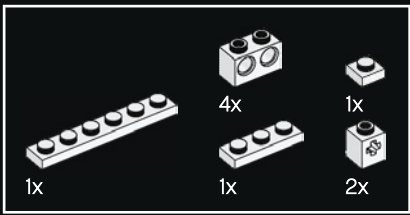
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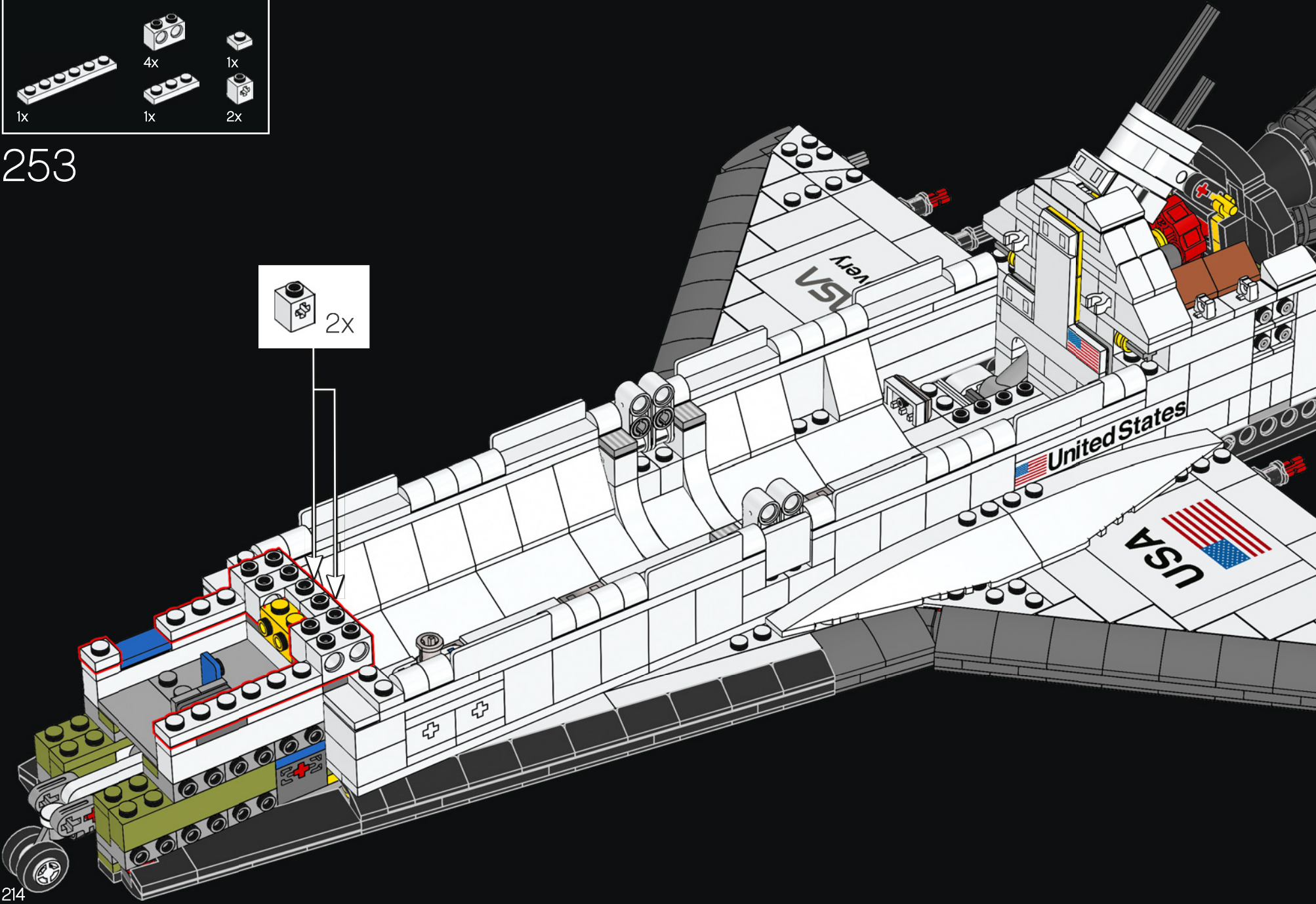
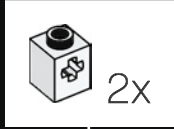


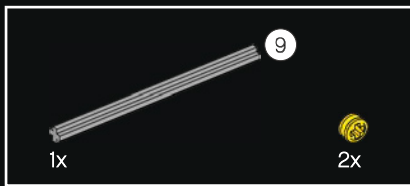
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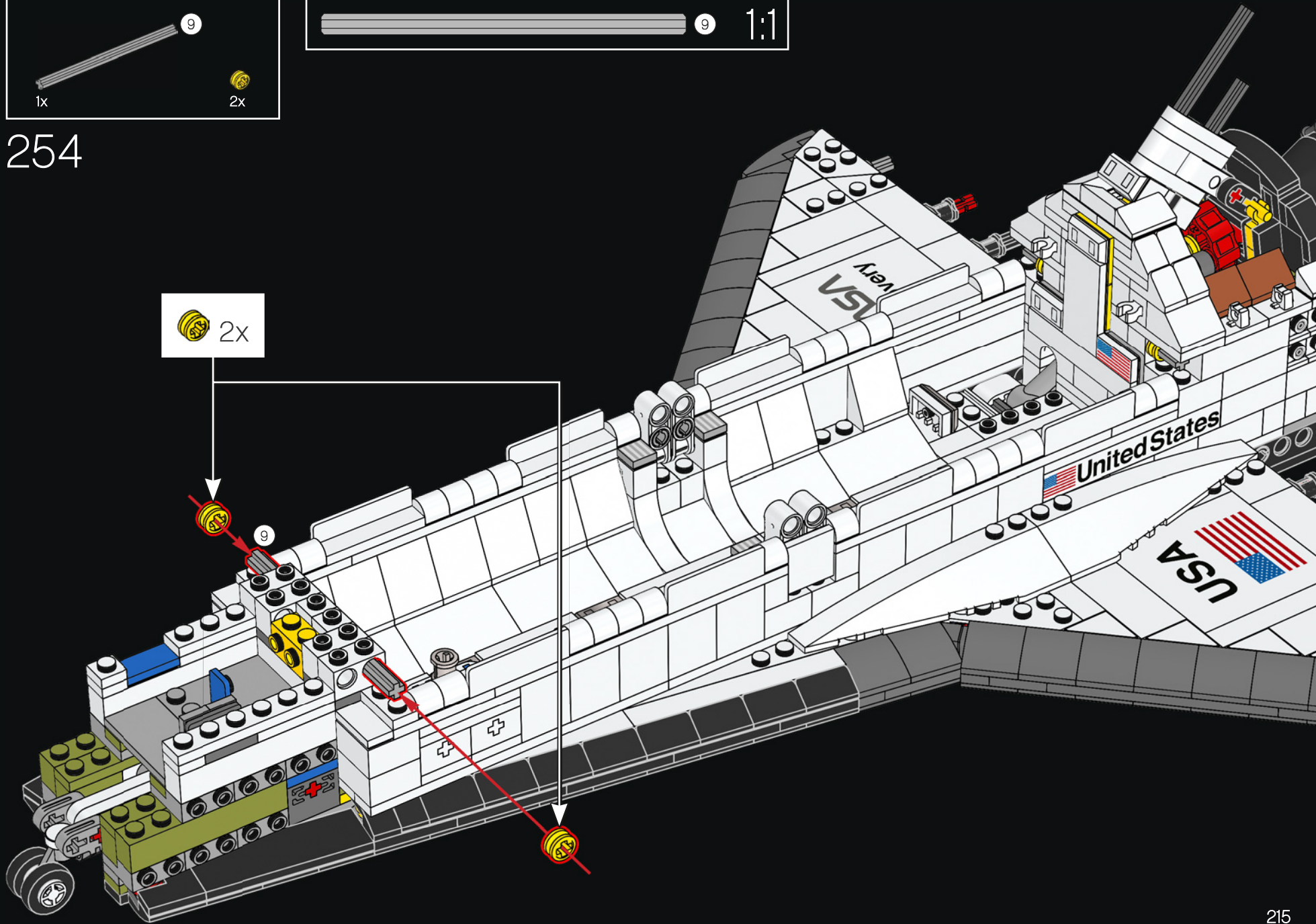
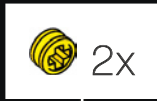


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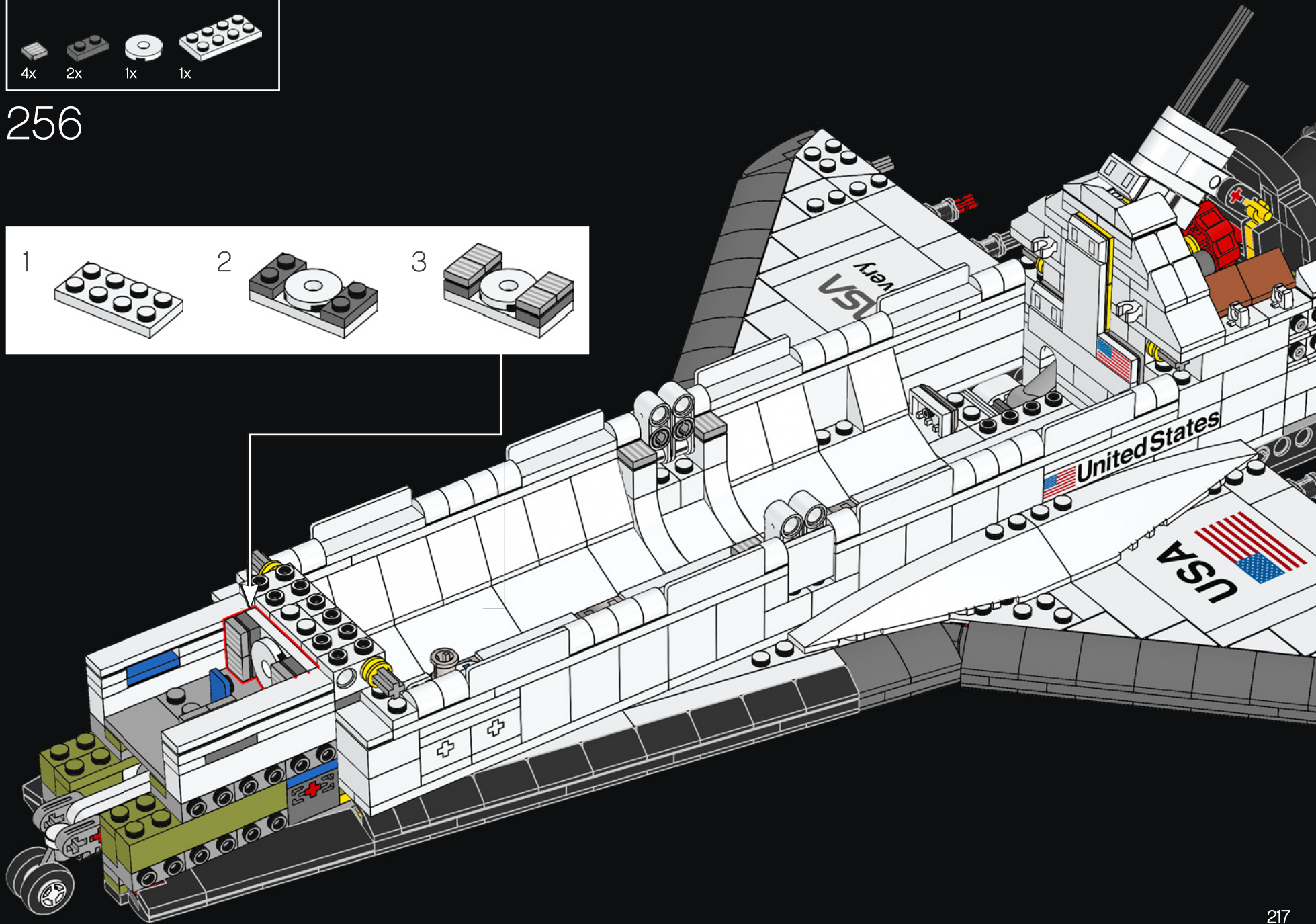
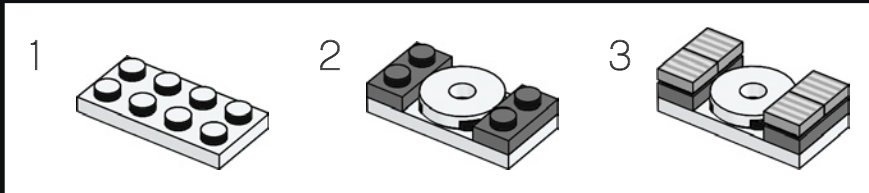


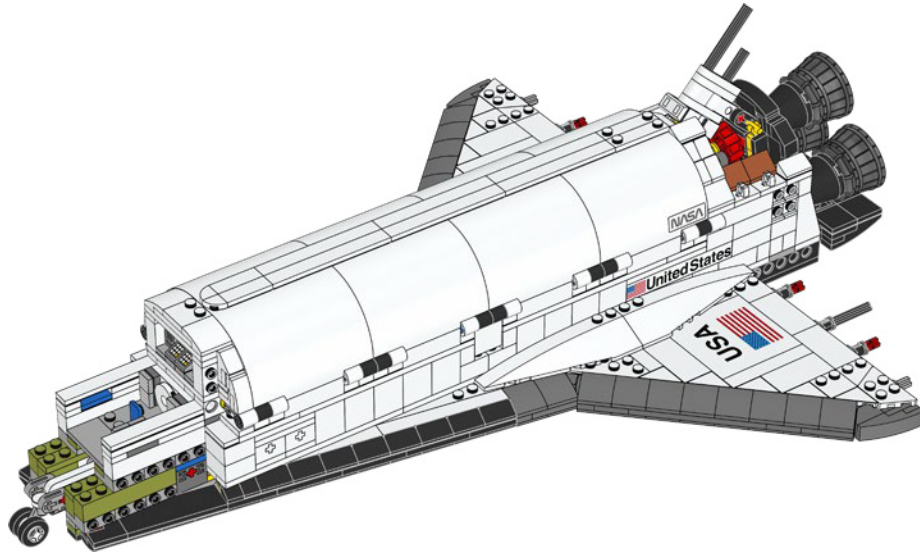




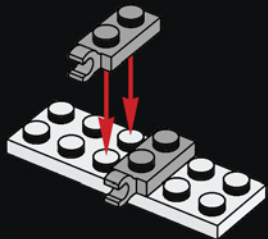


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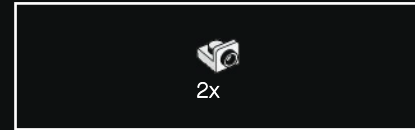
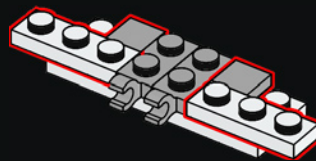




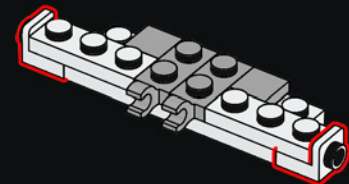
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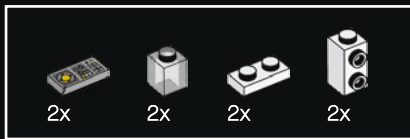
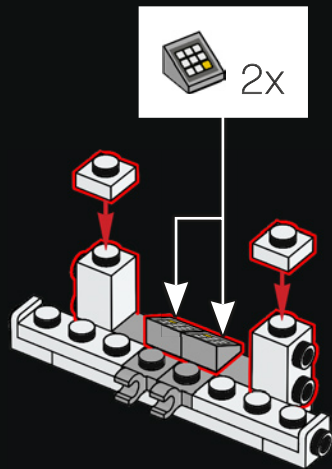


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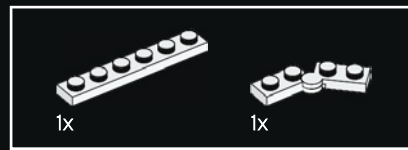
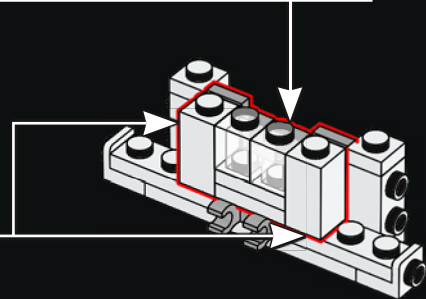
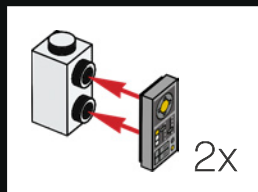
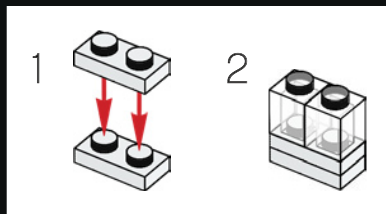




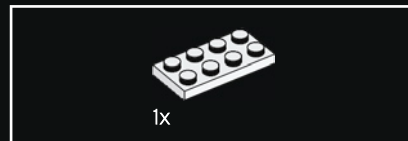
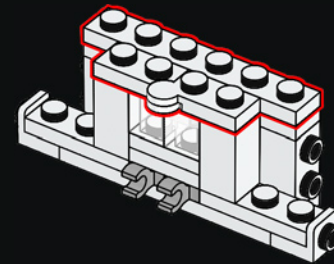
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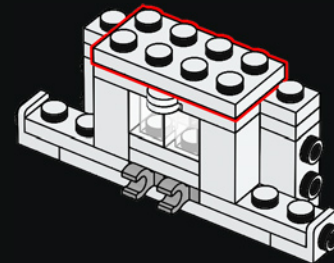
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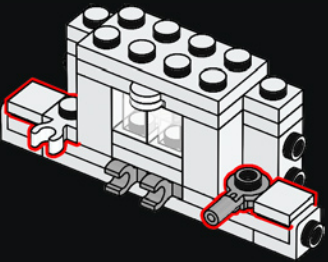


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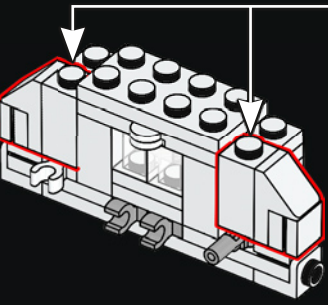
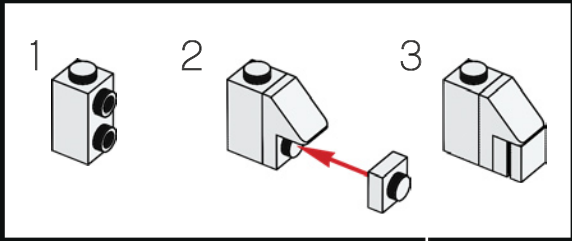




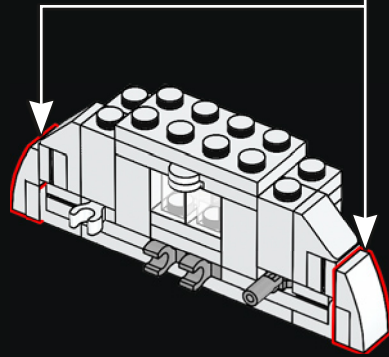
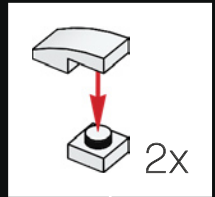
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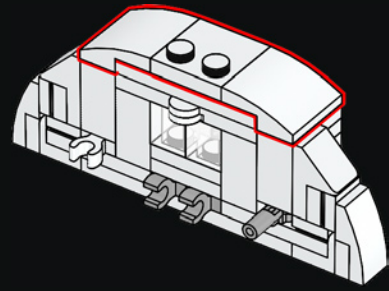
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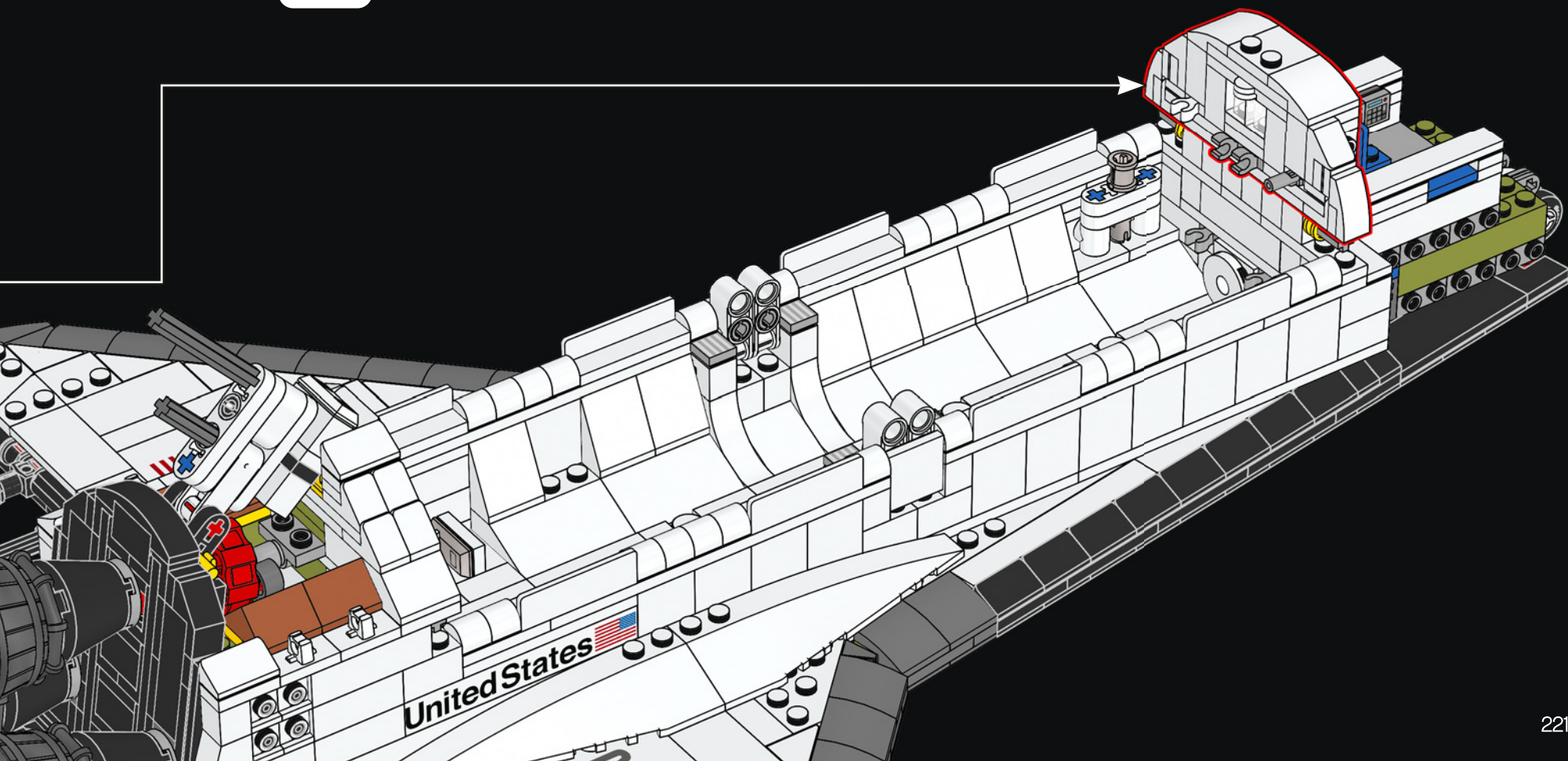


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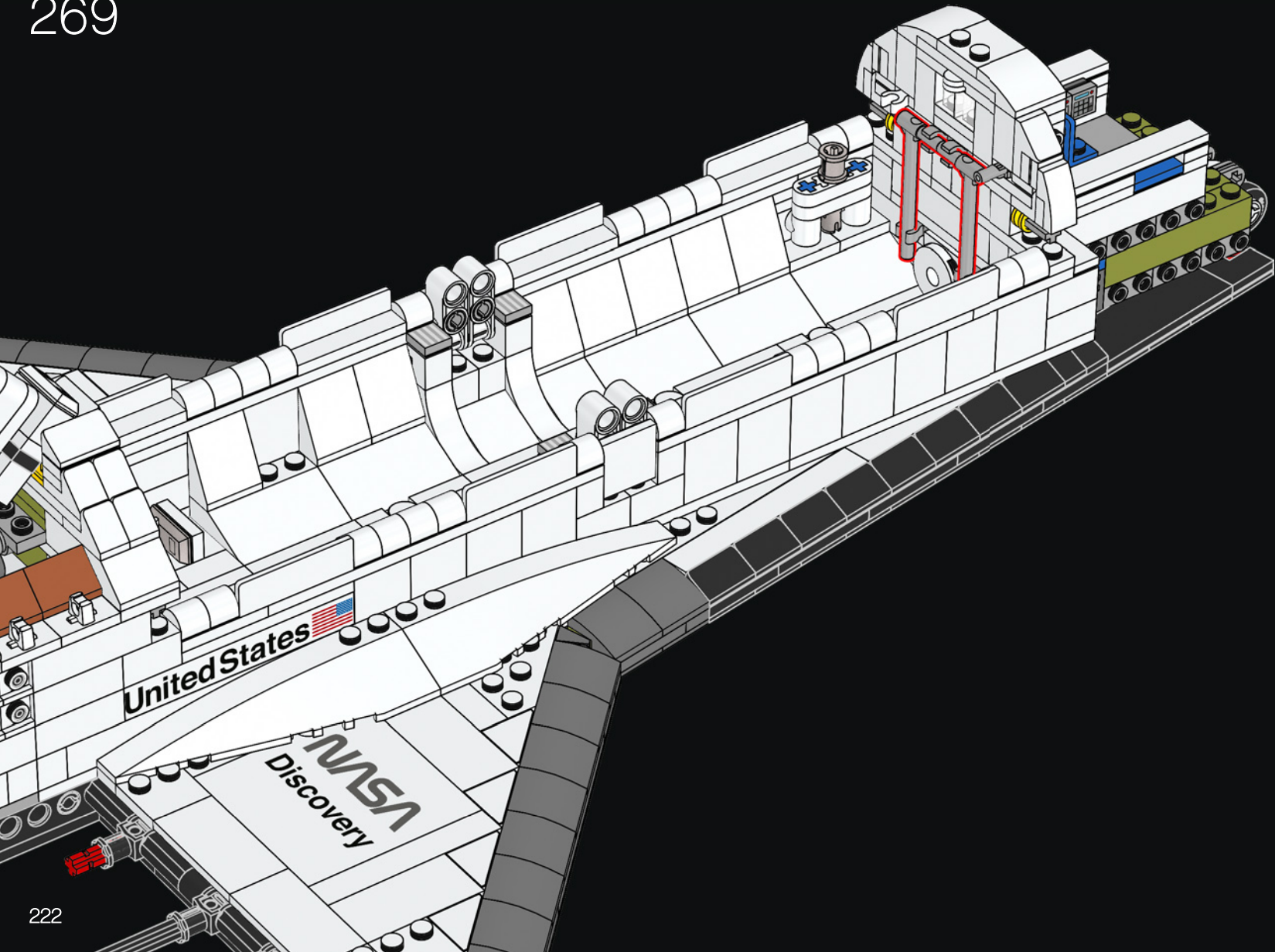
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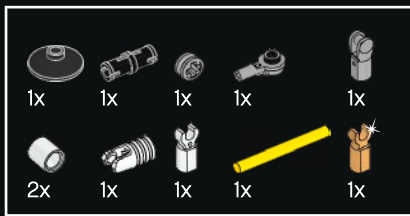




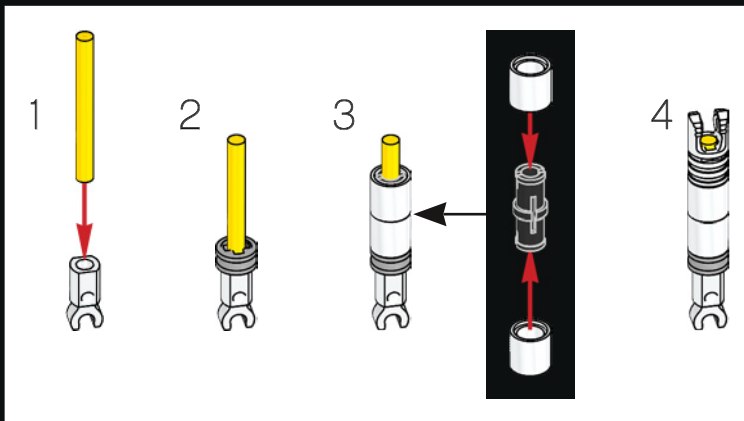
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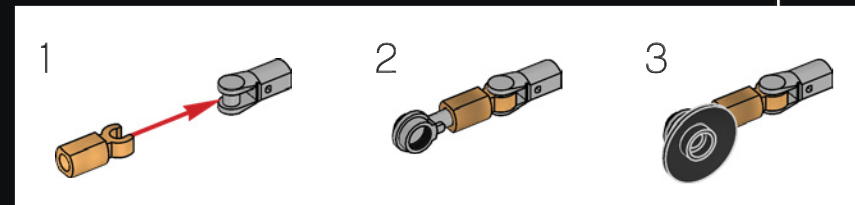
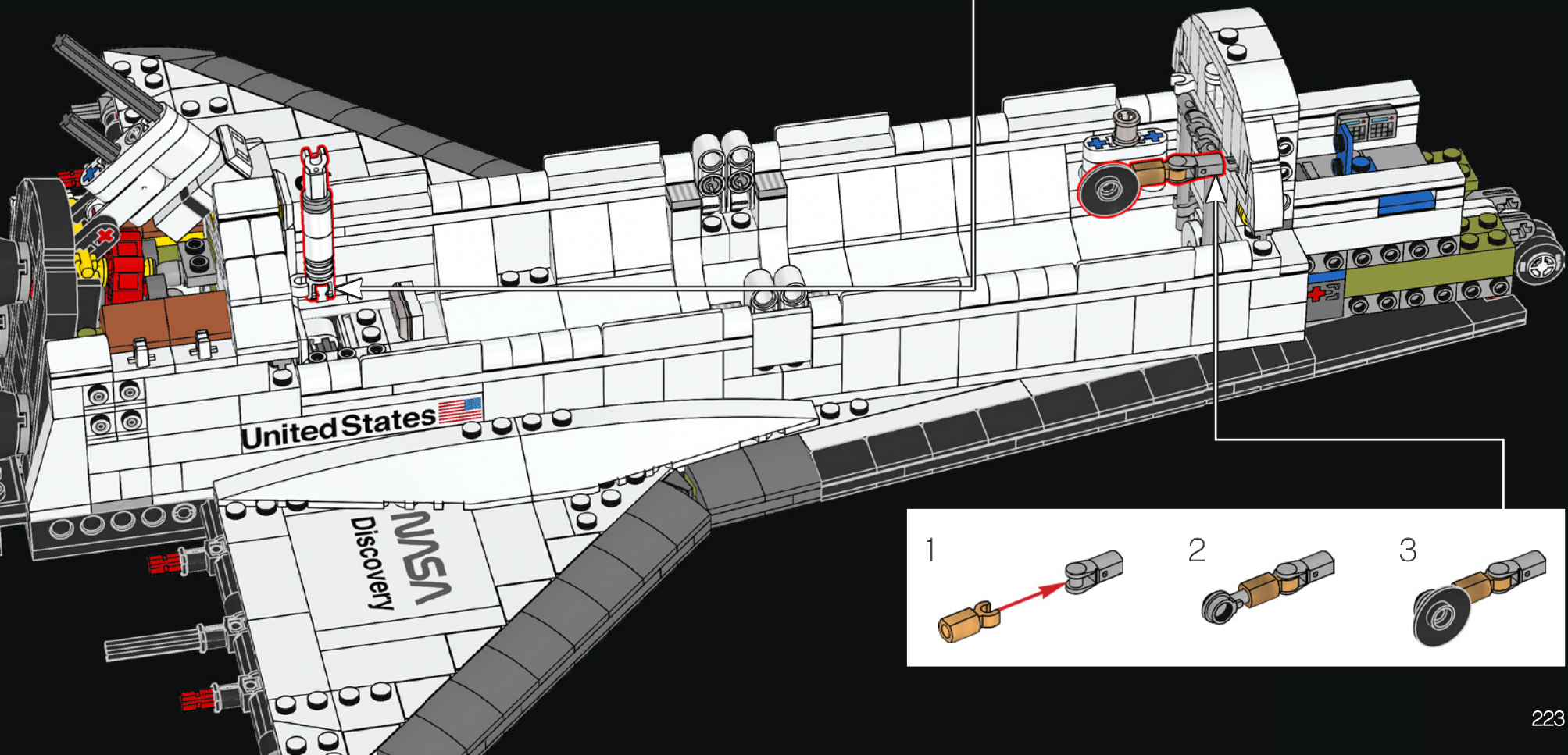


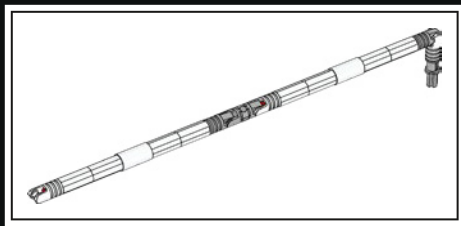
## DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

● The Ku-band antenna is deployed in orbit and allows the crew of the shuttle to send and receive communications from Earth.

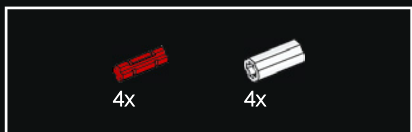
● L'antenne à bande Ku est déployée en orbite et permet à l'équipage de la navette d'échanger des communications avec la Terre.

● La antena de banda Ku se despliega en órbita y permite a la tripulación del transbordador comunicarse con la Tierra.

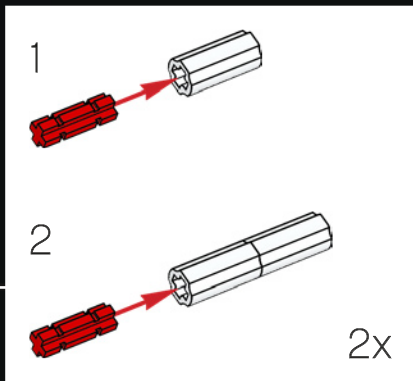
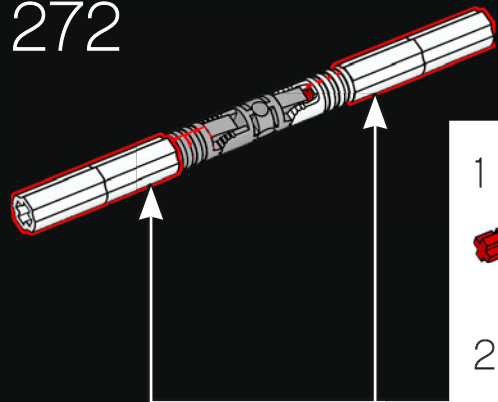




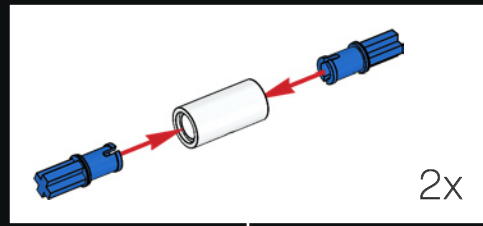
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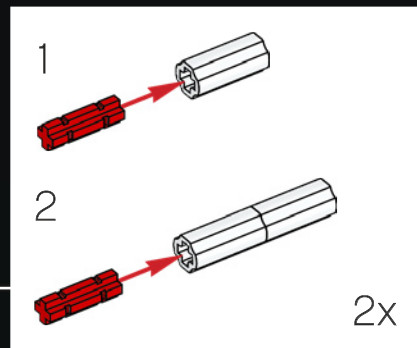
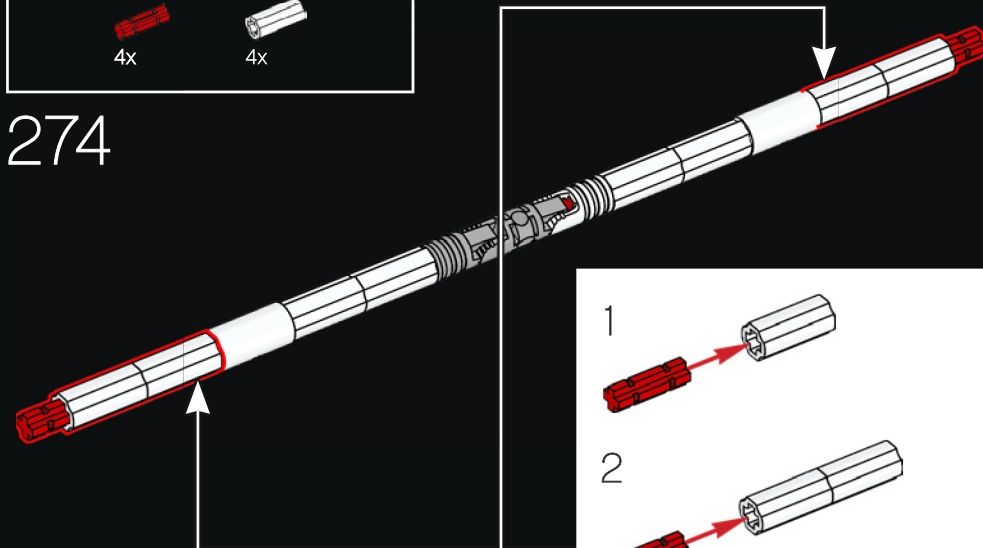
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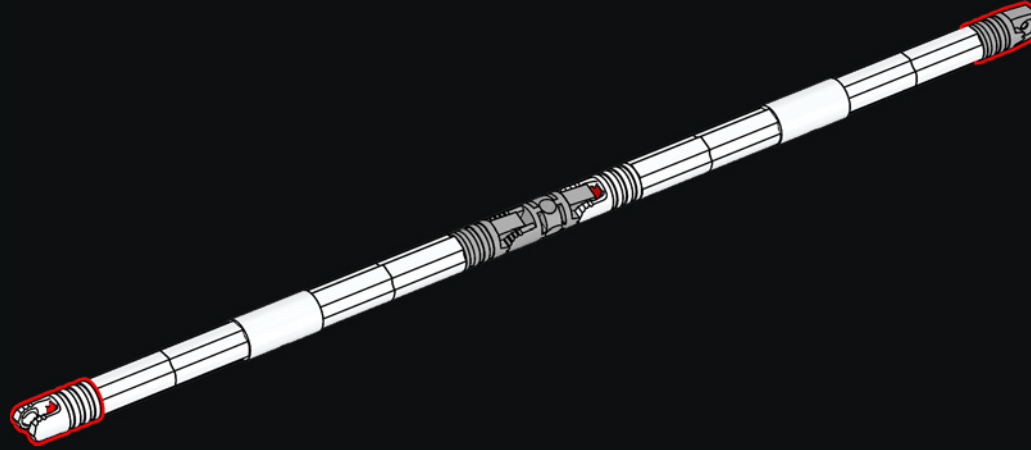
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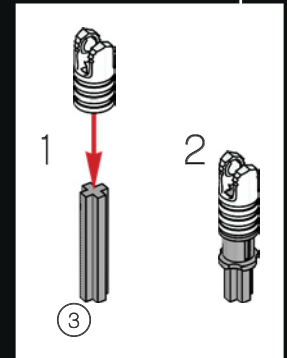
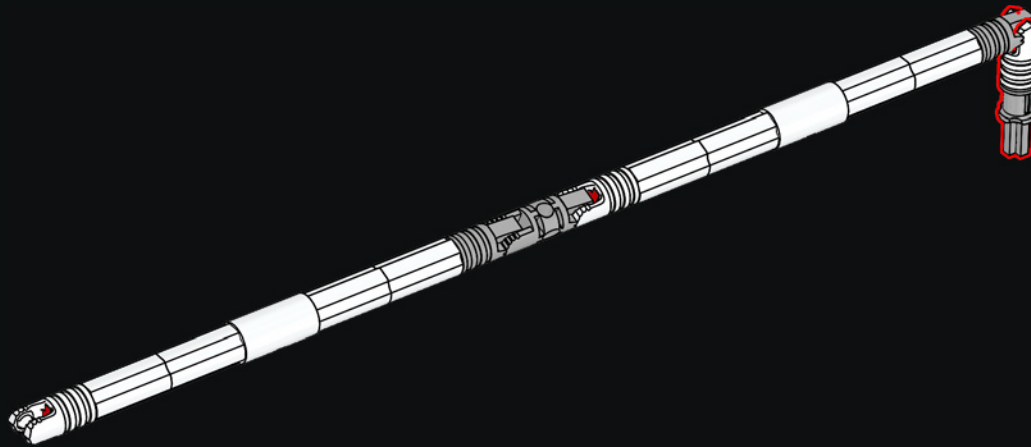




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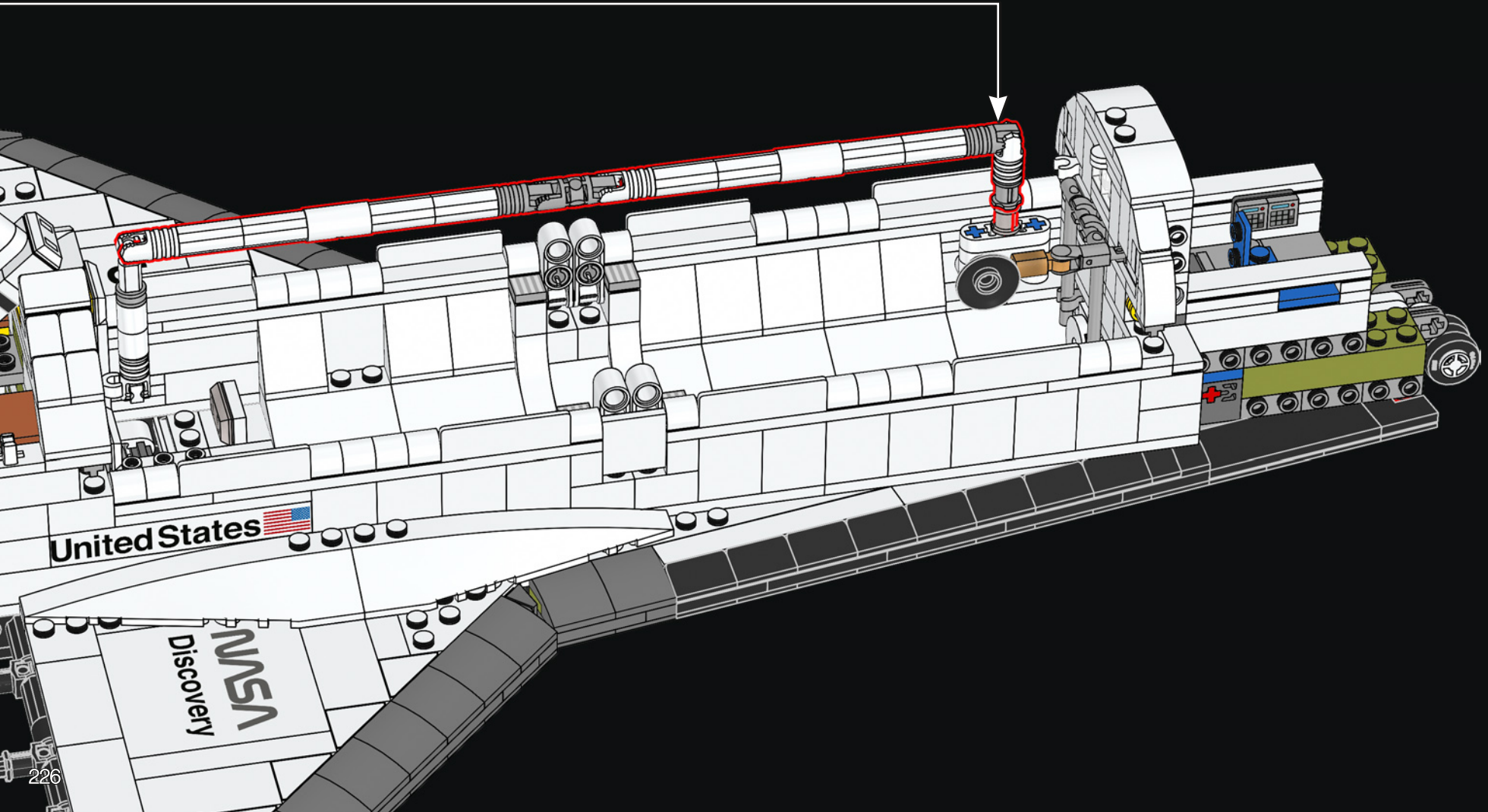
## DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

● The shuttle's Remote Manipulator System (RMS) was used by astronauts inside to deploy and maneuver cargo in the payload bay and astronauts during spacewalks.

● Le système de manipulation à distance (RMS) de la navette était utilisé par des astronautes pour déployer et manœuvrer des cargaisons dans la soute depuis l'intérieur, ainsi que par des astronautes pendant les sorties dans l'espace.

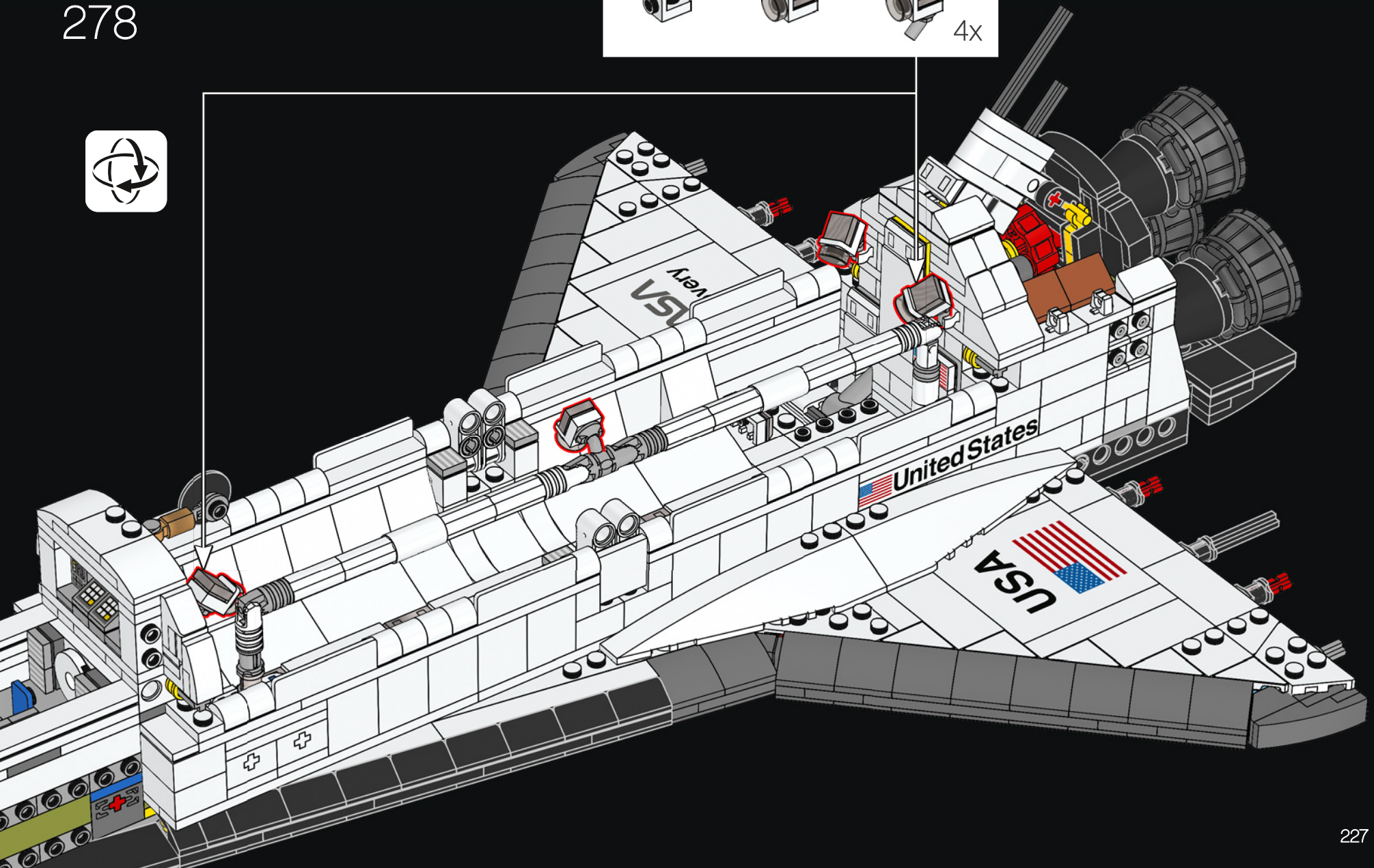
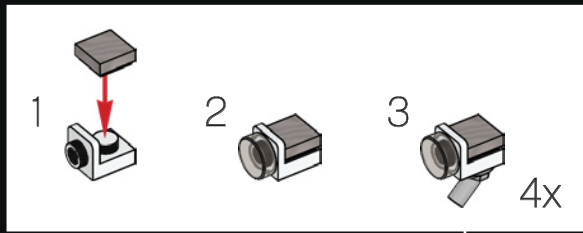
● Los astronautas, desde el interior de la nave, usaban el Sistema de Manipulación Remota (RMS, por sus siglas en inglés) del transbordador para desplegar y manipular la carga en la bodega; a él se anclaban los astronautas durante los paseos espaciales.

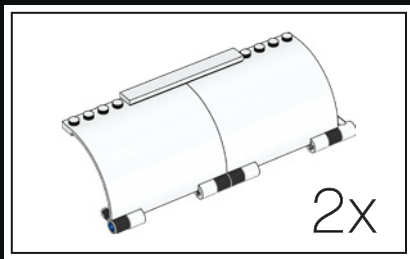
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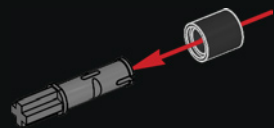


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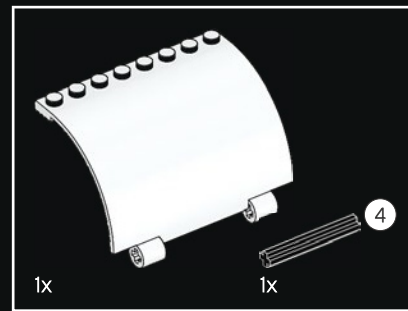




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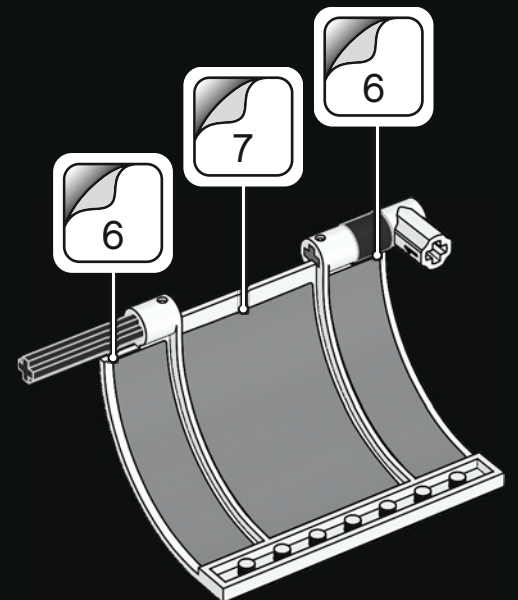
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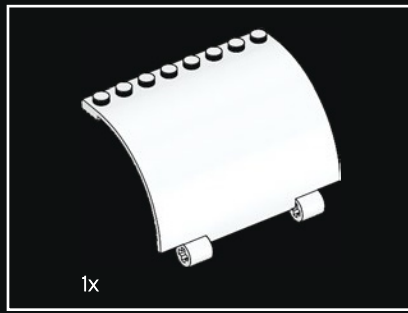
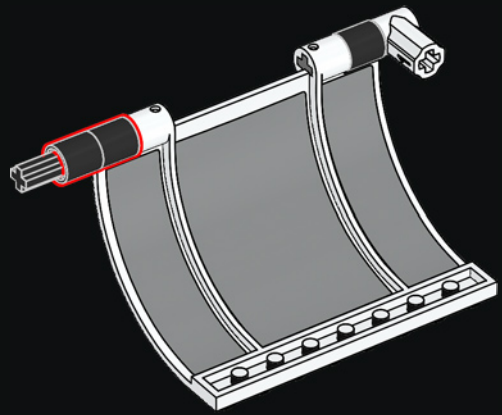


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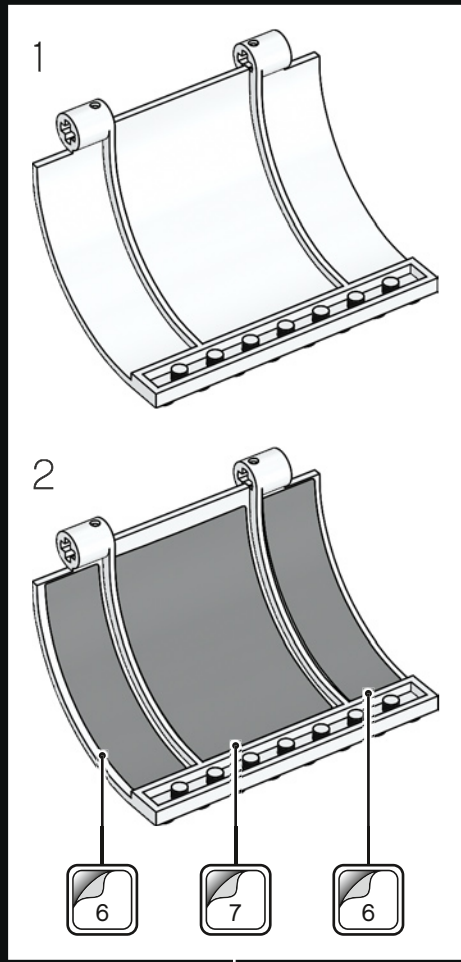
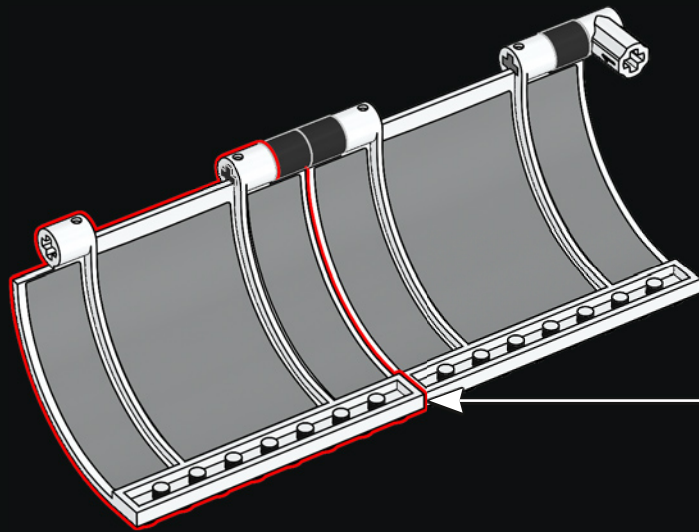




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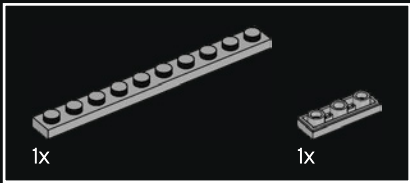
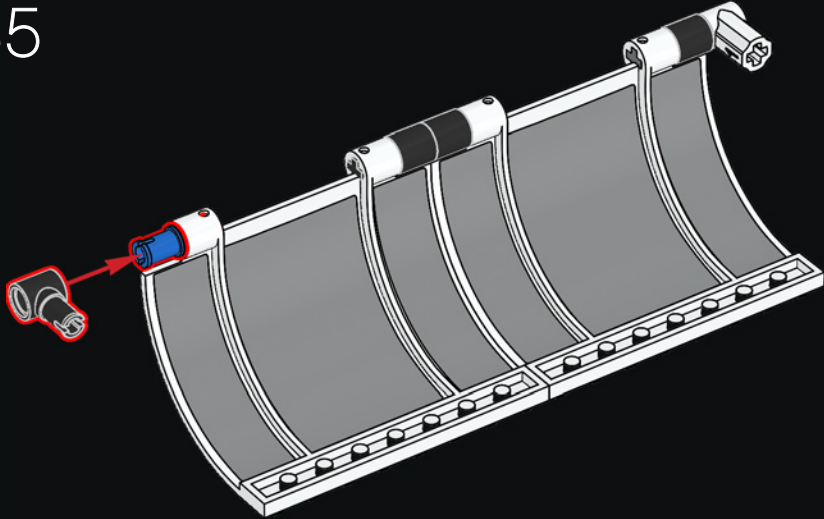


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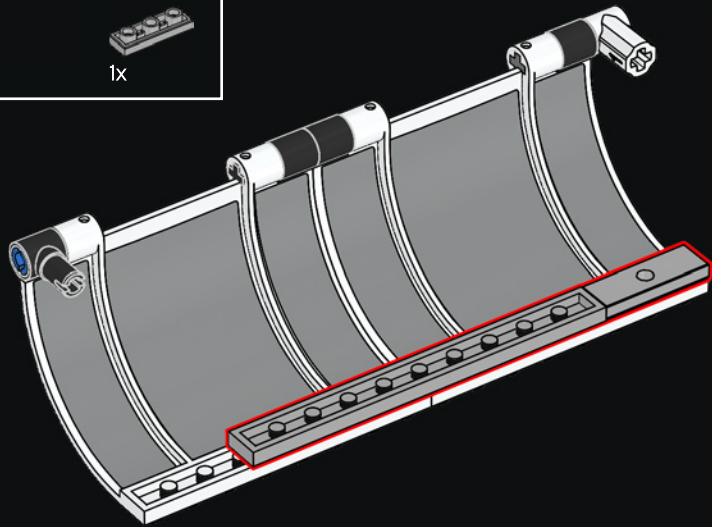




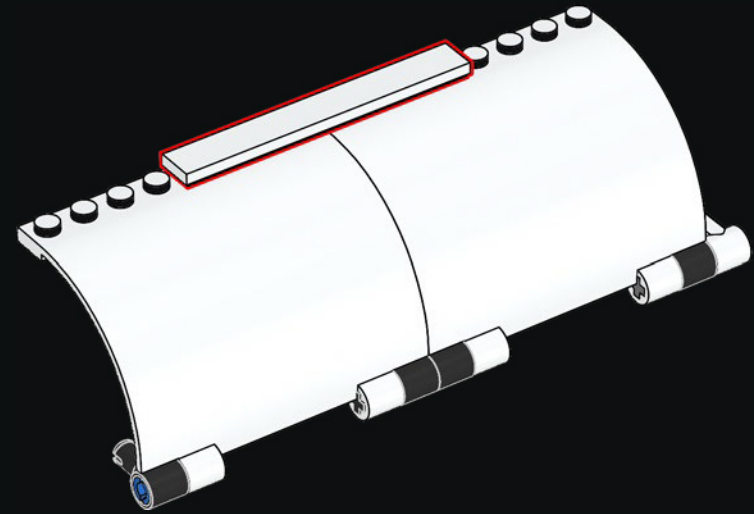
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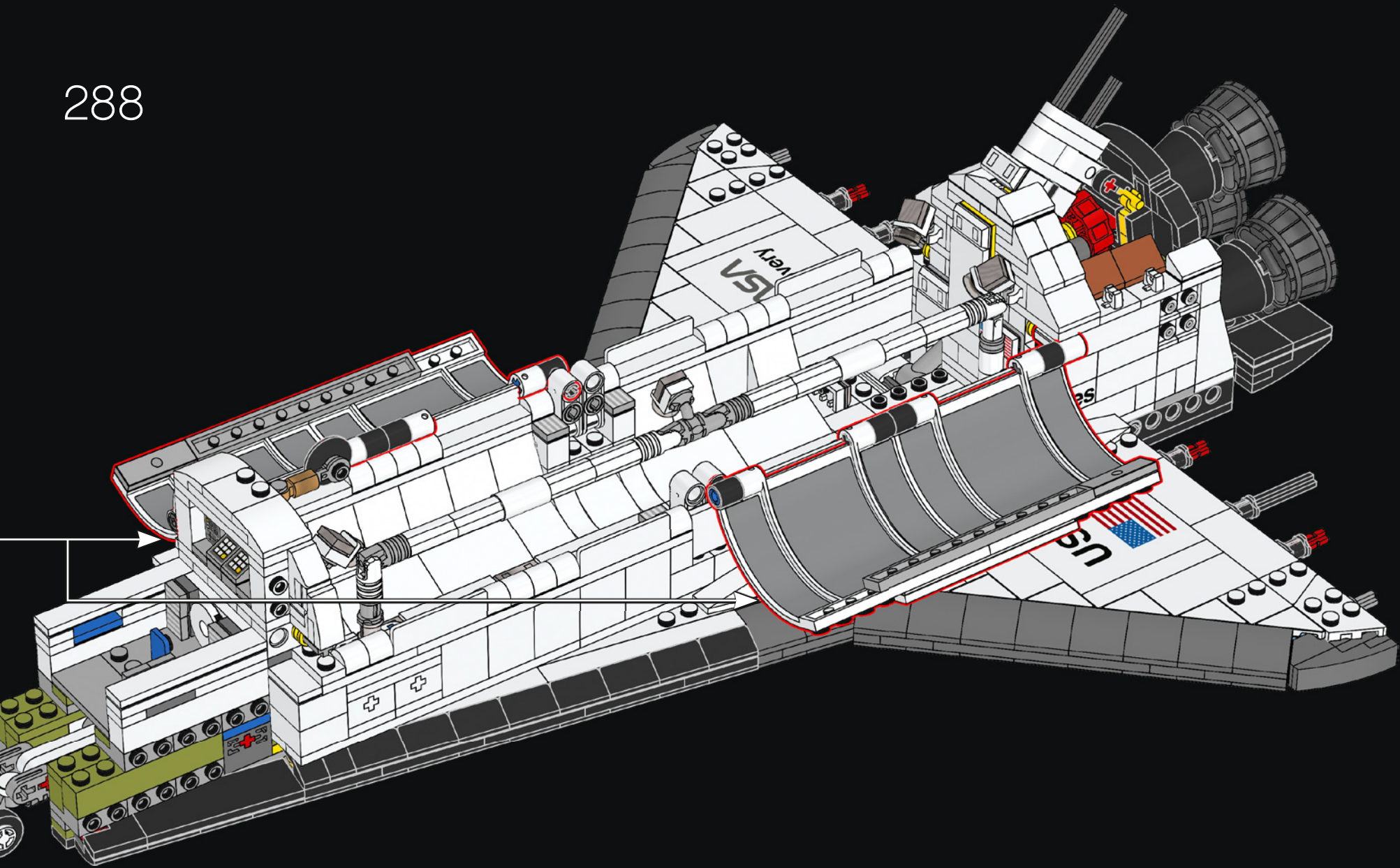
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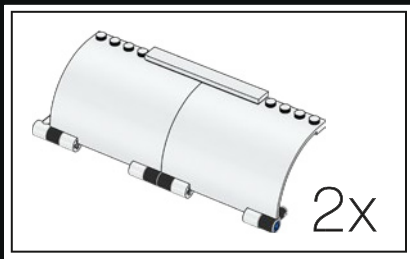


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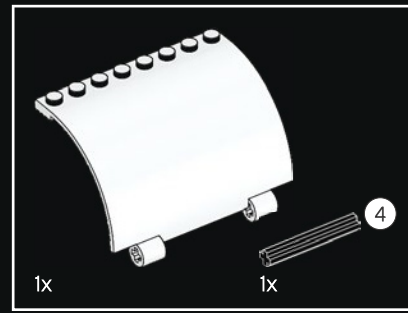
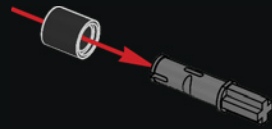




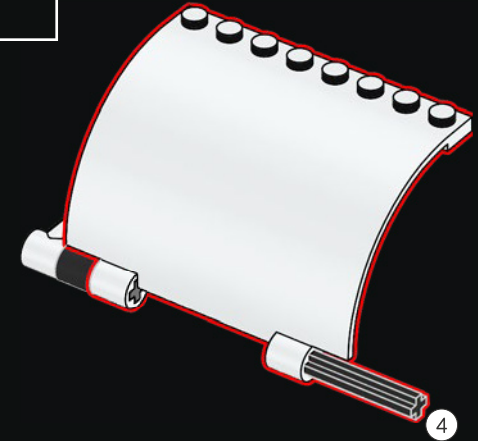
289



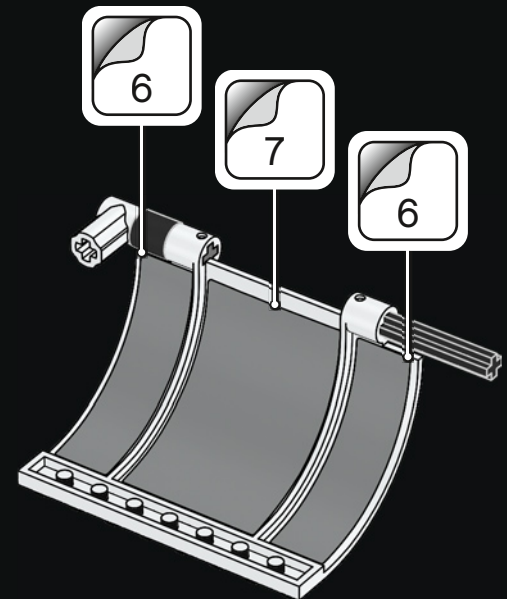
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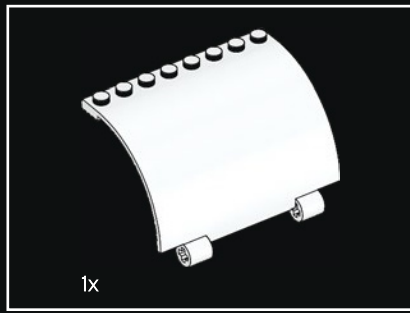
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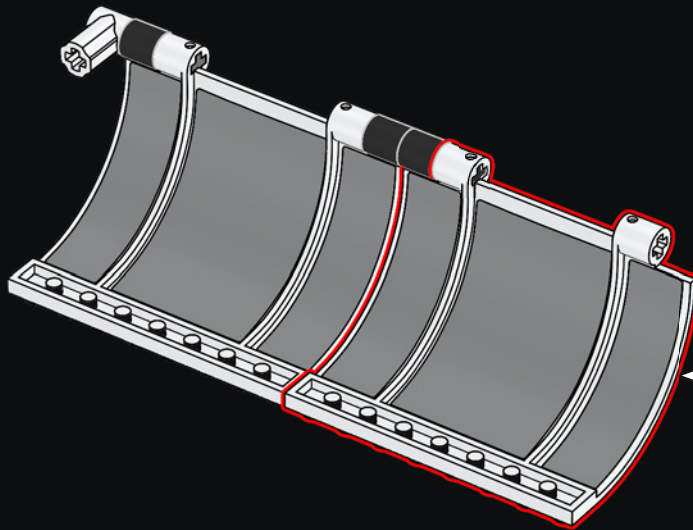
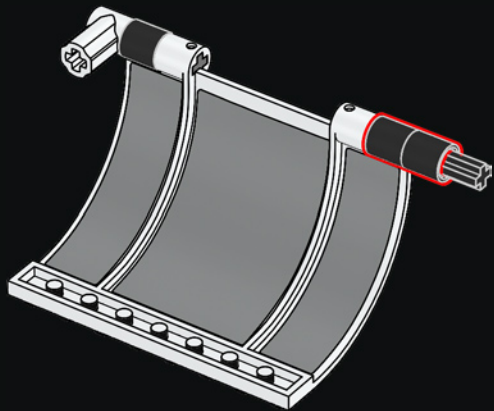
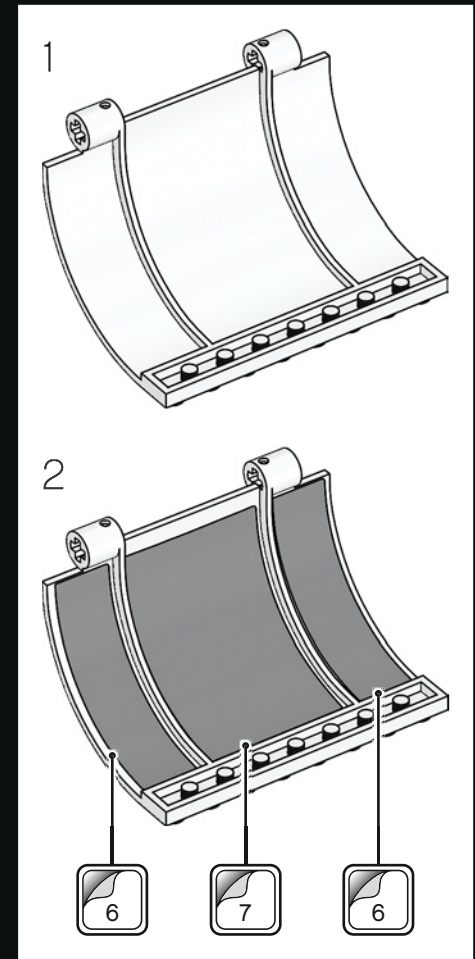




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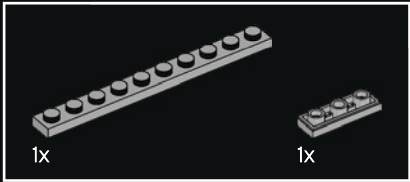
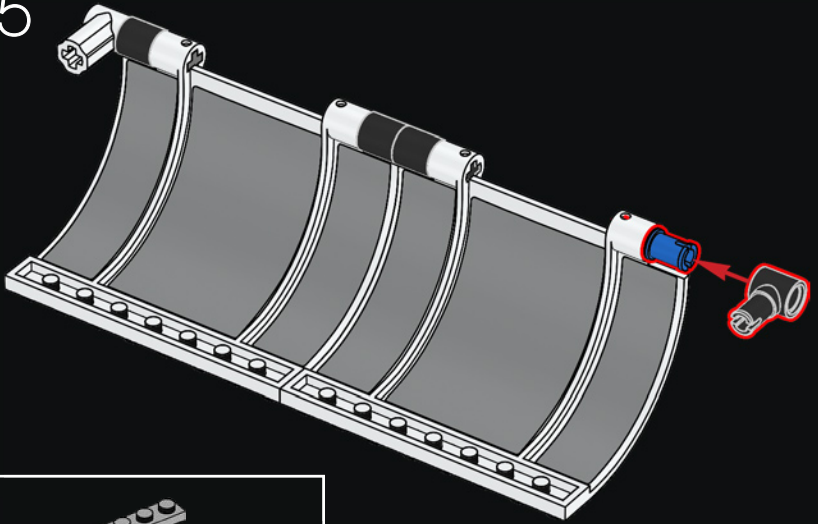


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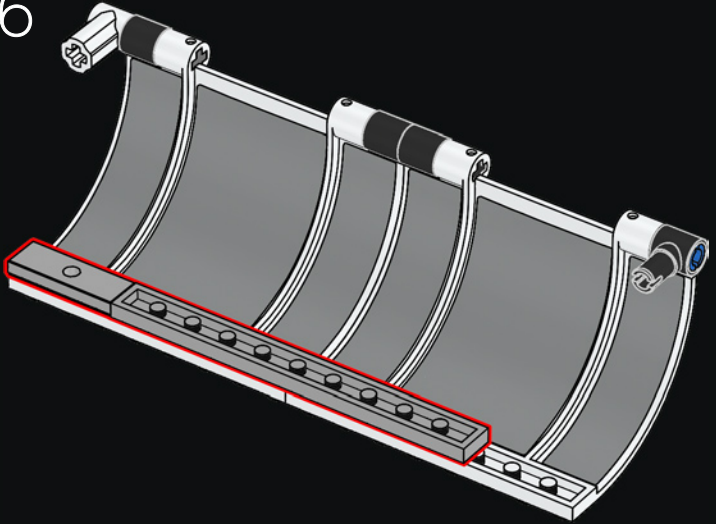




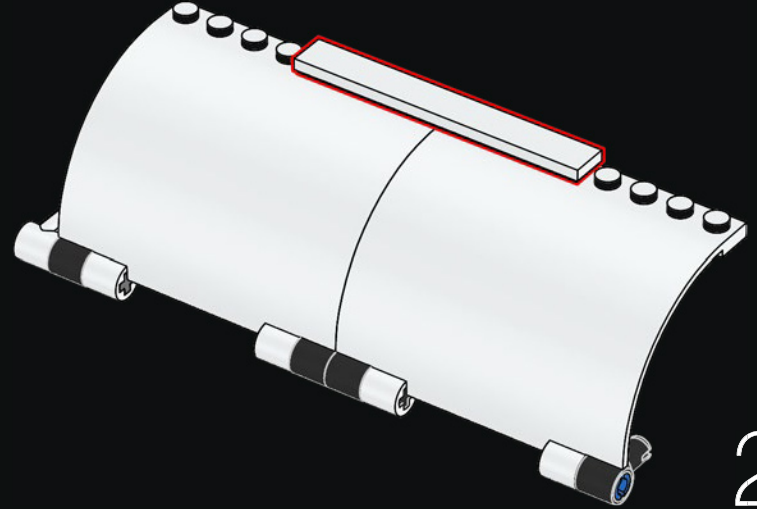
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296



297



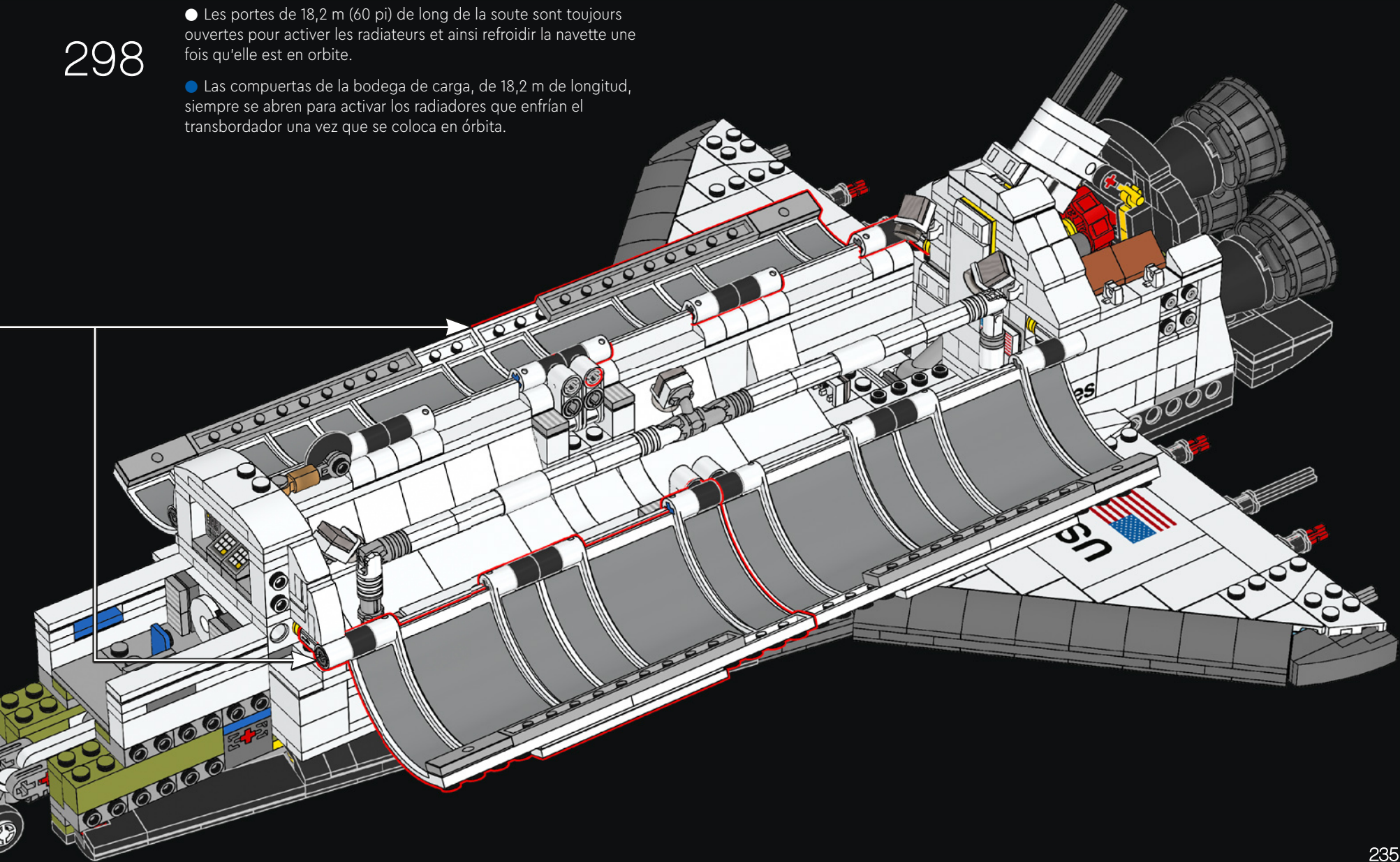
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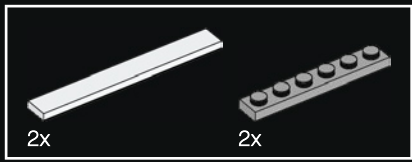
## DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

● The 60 ft. (18.2 m) long payload bay doors are always opened to activate radiators for cooling the shuttle after it has reached orbit.

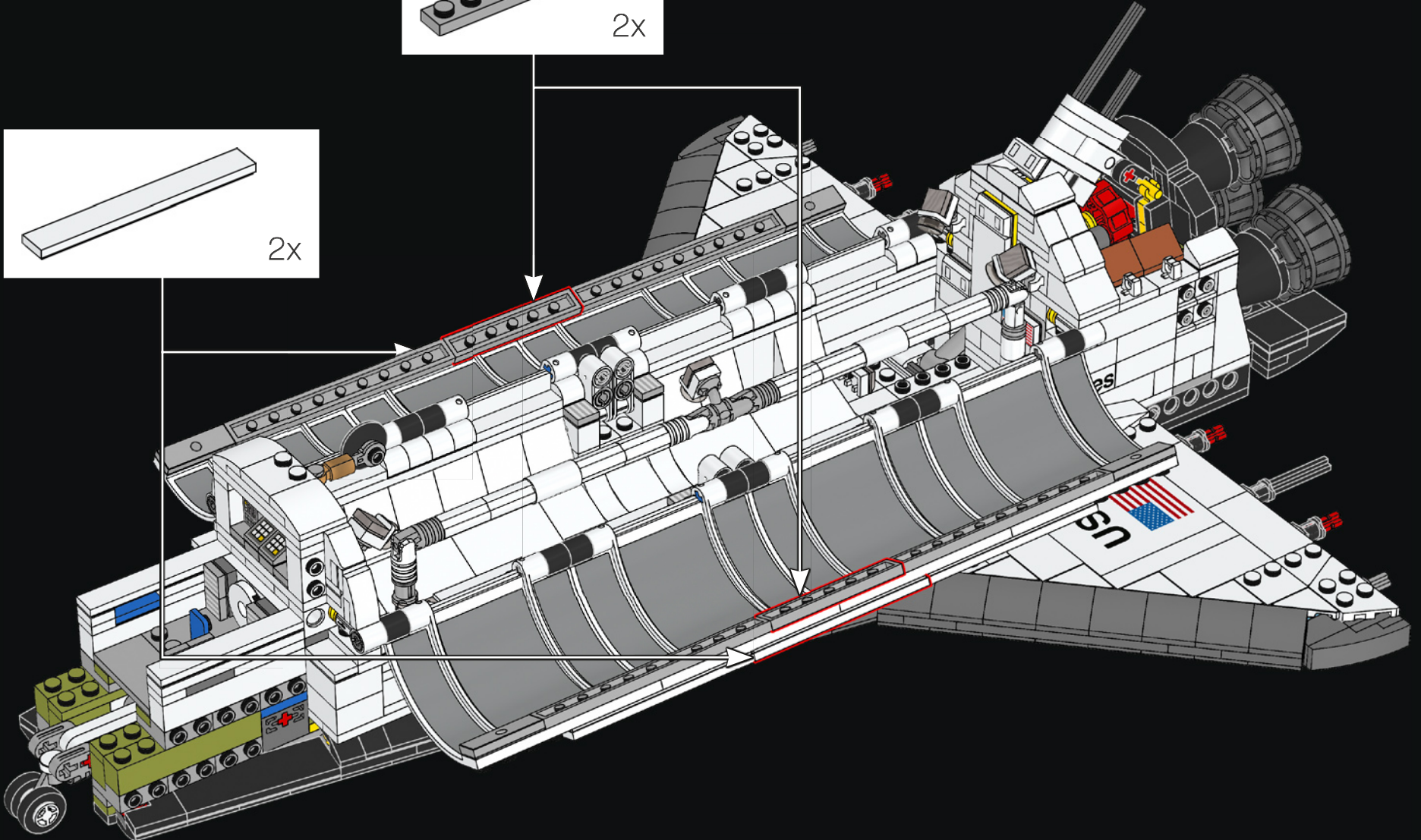
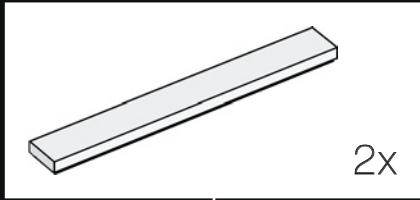
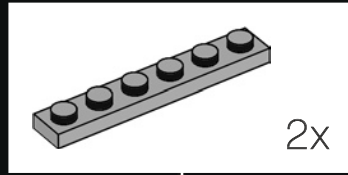
● Les portes de 18,2 m (60 pi) de long de la soute sont toujours ouvertes pour activer les radiateurs et ainsi refroidir la navette une fois qu'elle est en orbite.

● Las compuertas de la bodega de carga, de 18,2 m de longitud, siempre se abren para activar los radiadores que enfrían el transbordador una vez que se coloca en órbita.



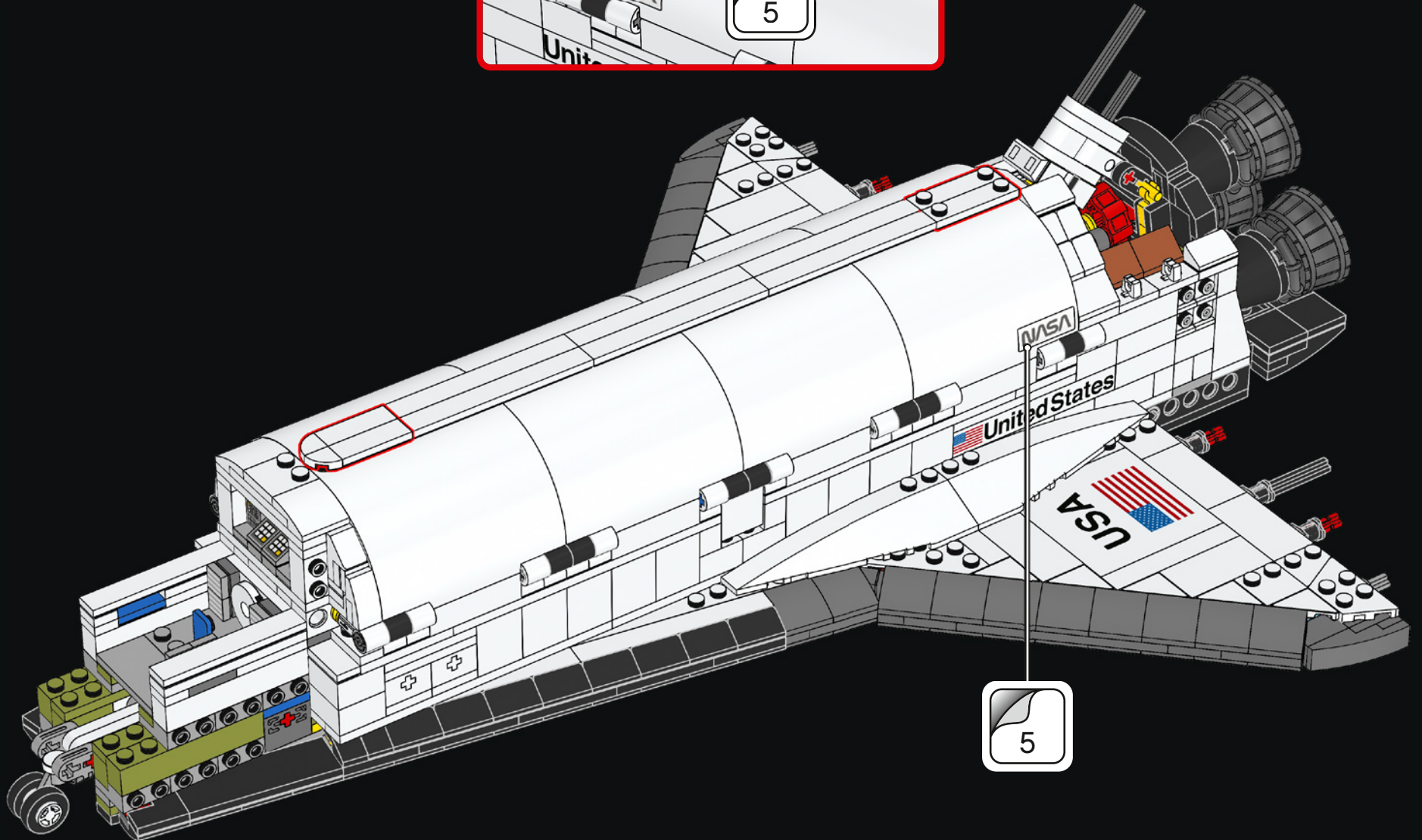
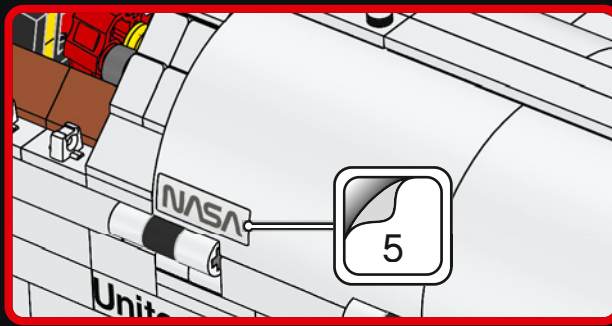


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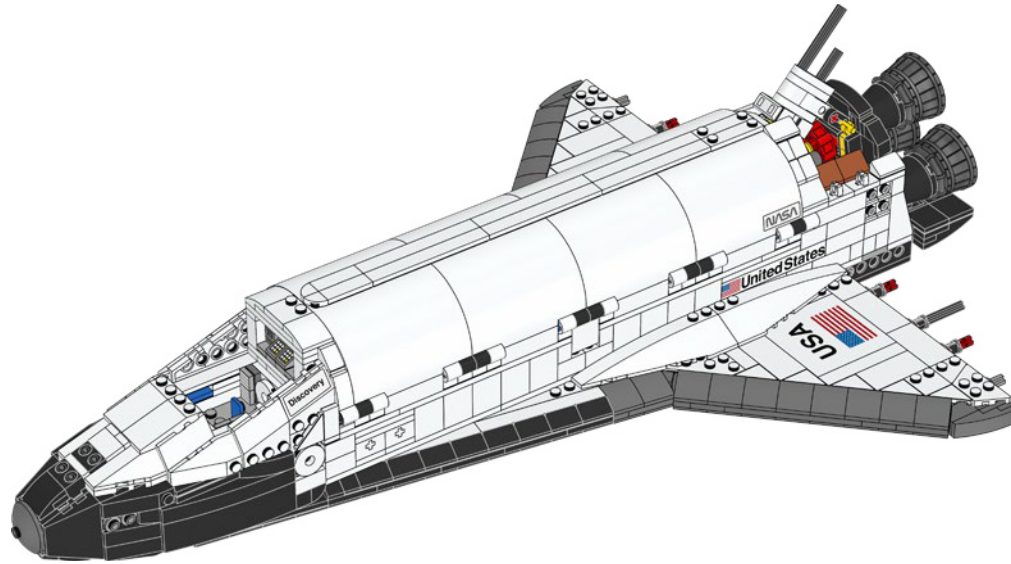


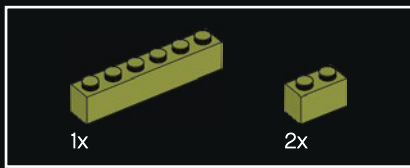


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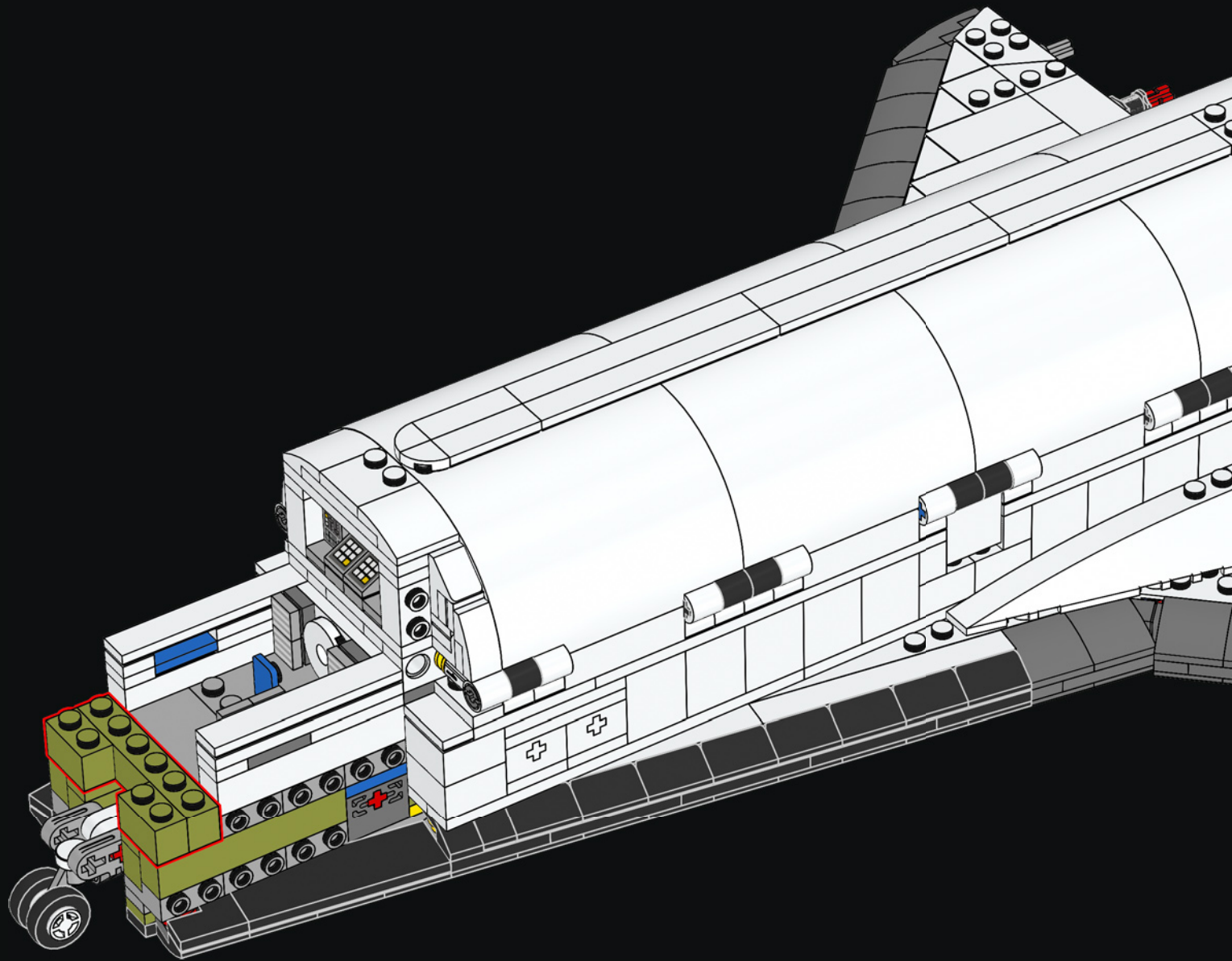


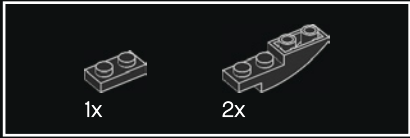
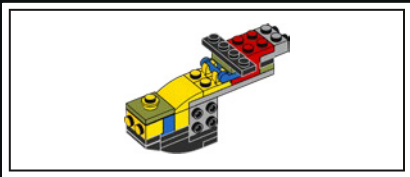
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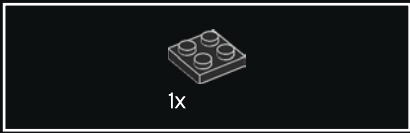
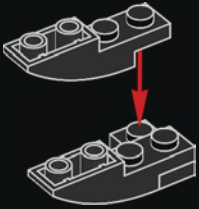


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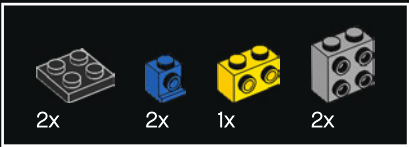
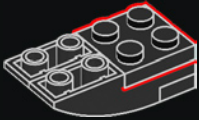




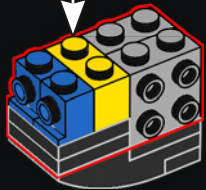
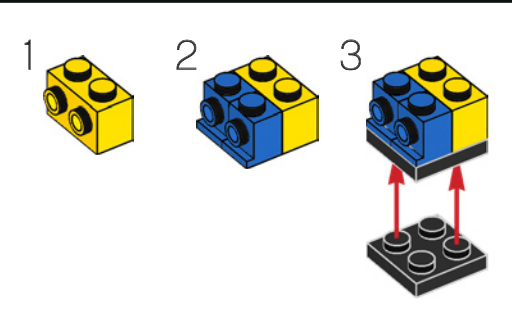
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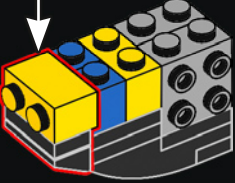
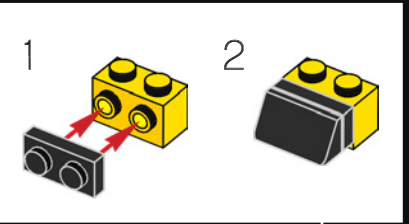
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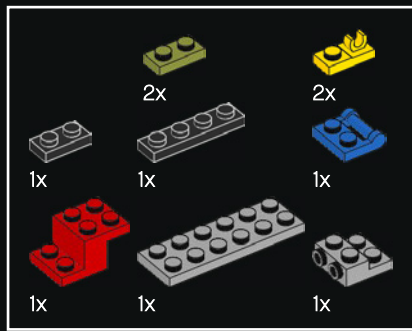
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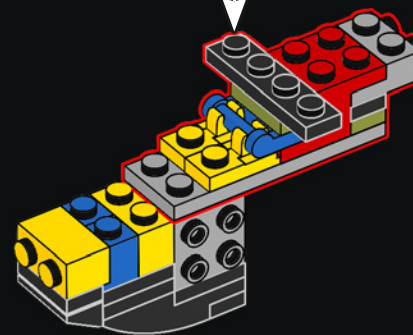
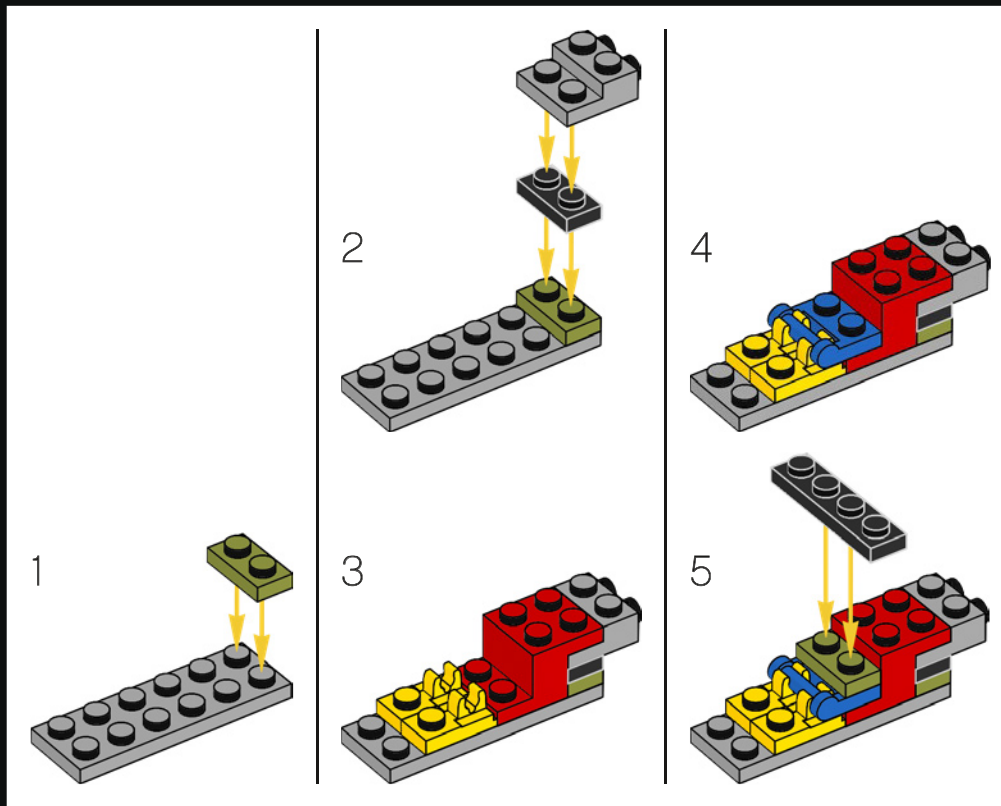
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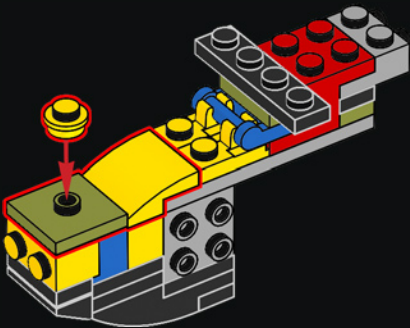


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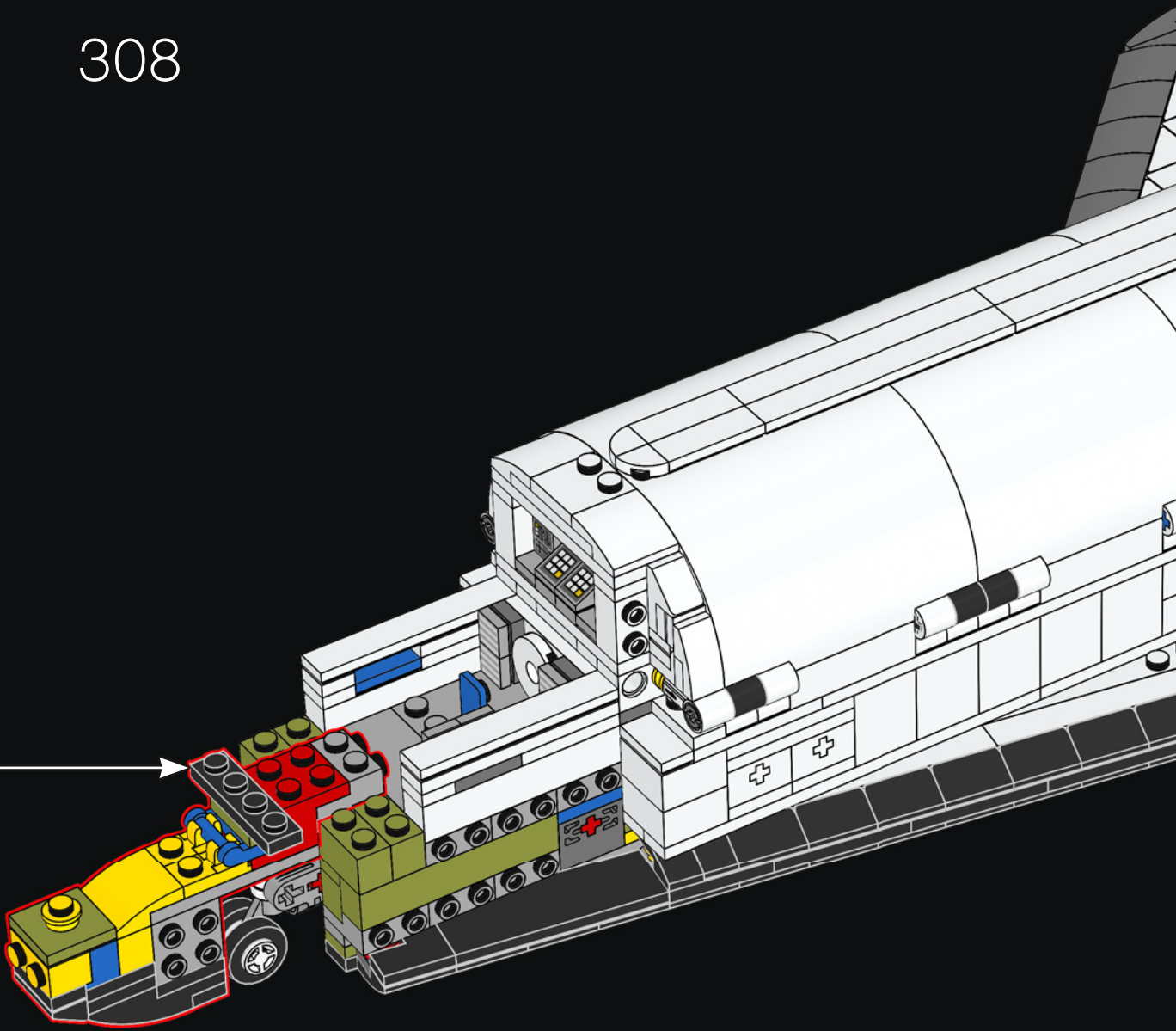


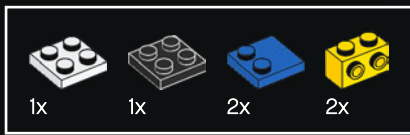


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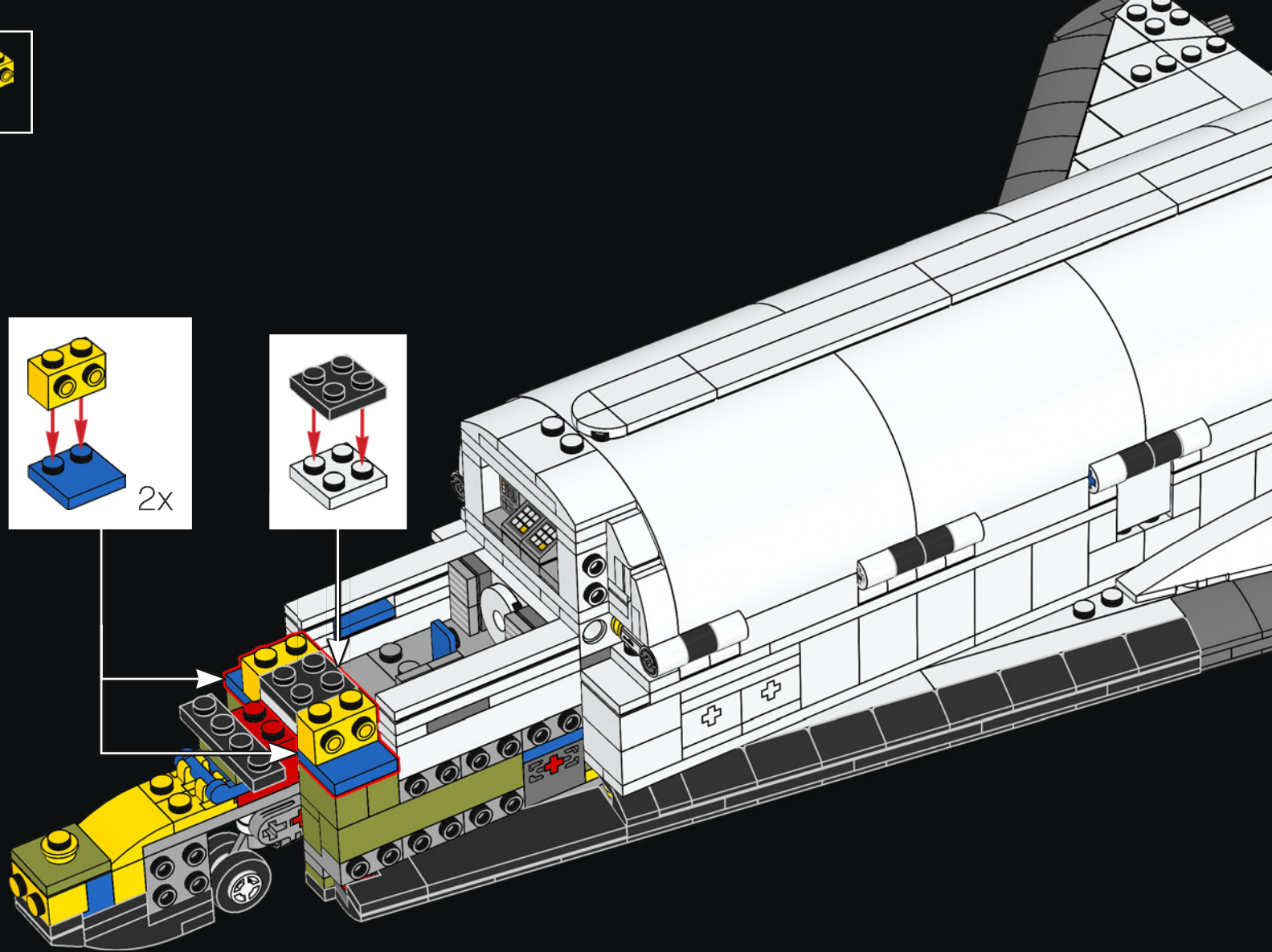
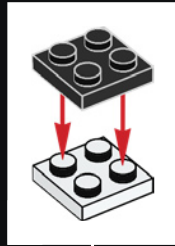
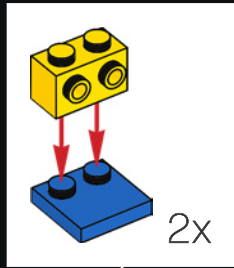


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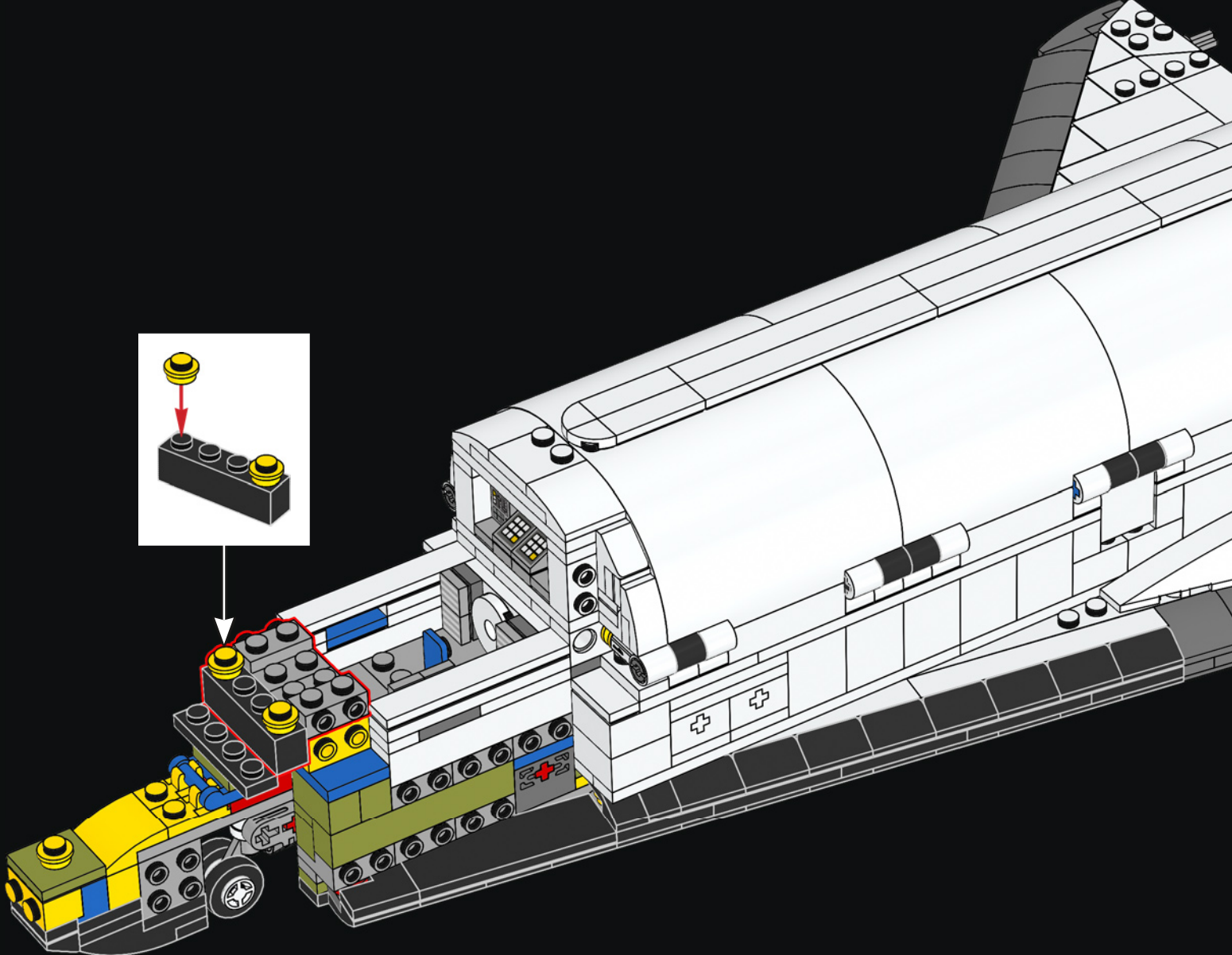
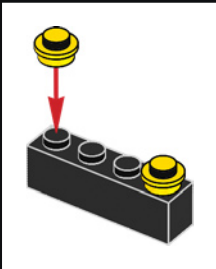


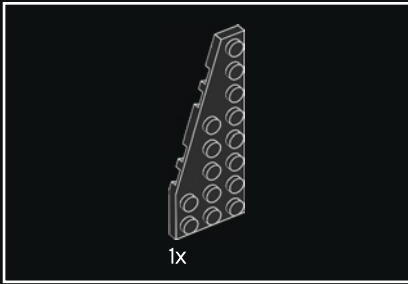
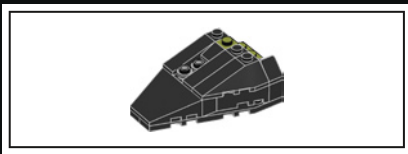
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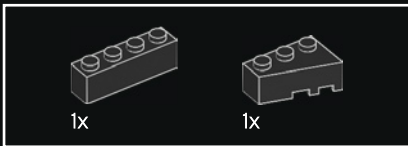
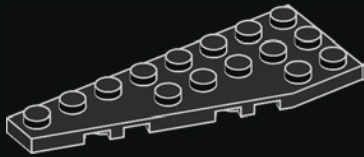
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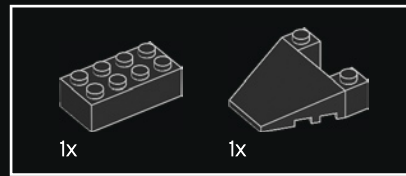
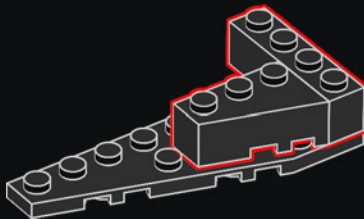
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1x

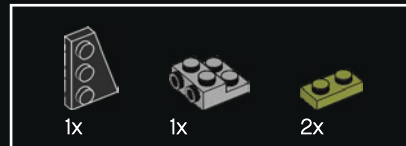
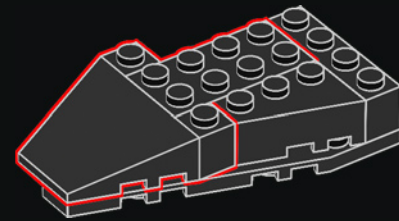
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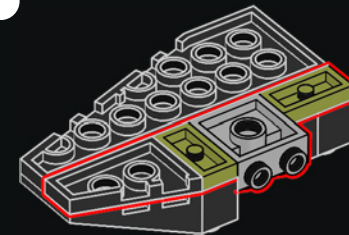


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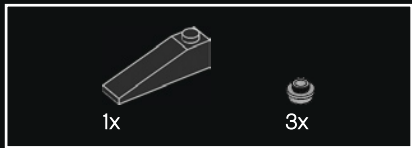
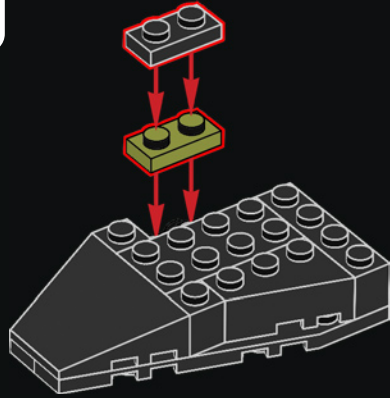
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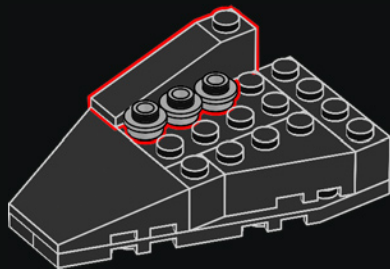




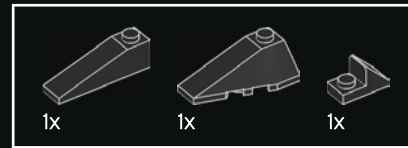
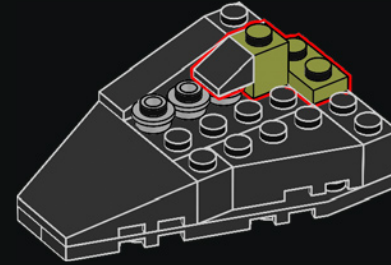
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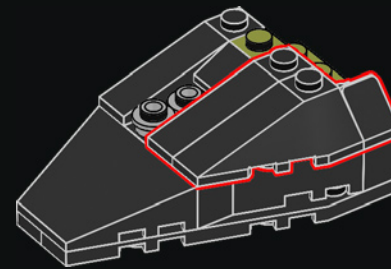
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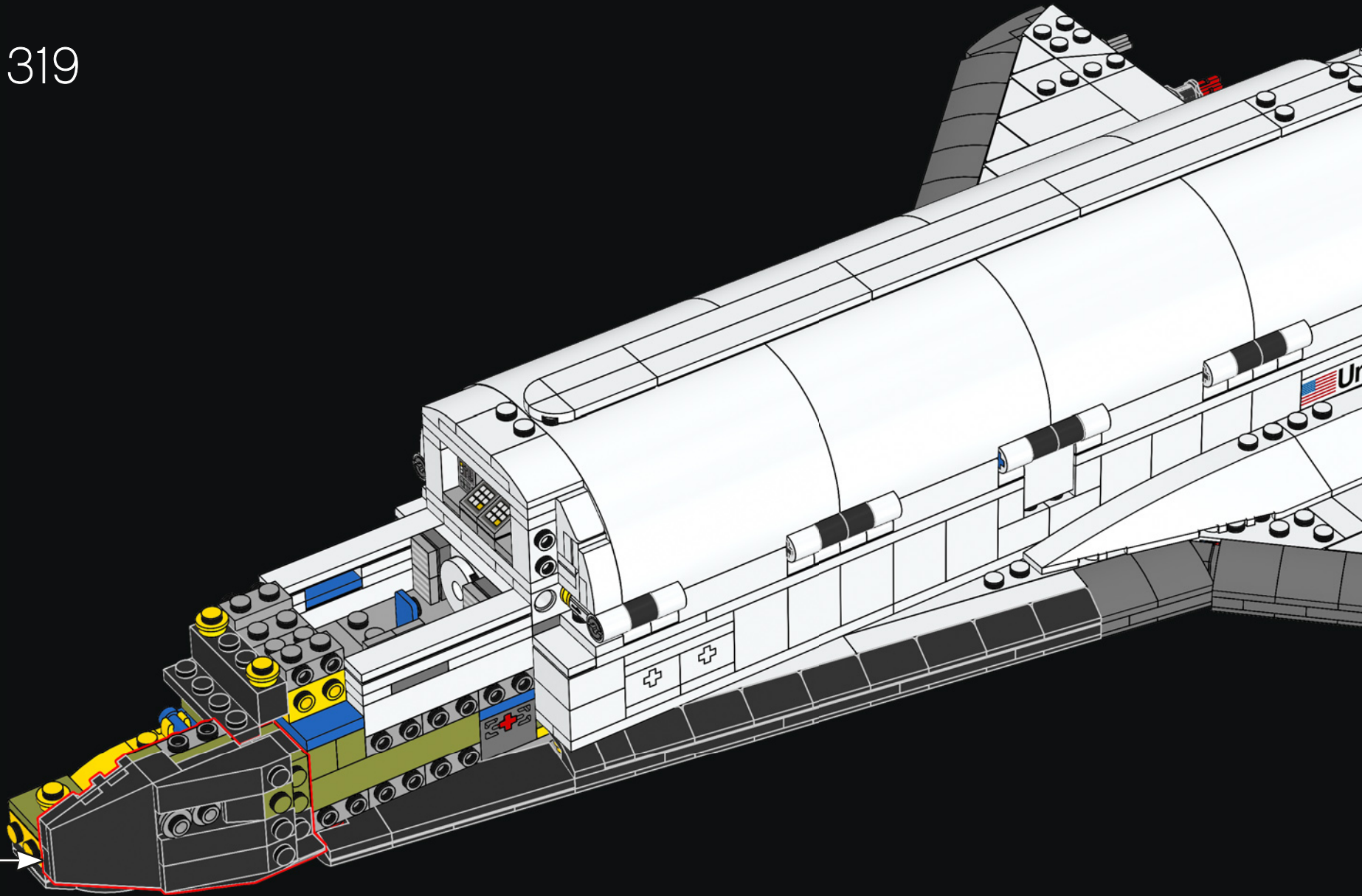
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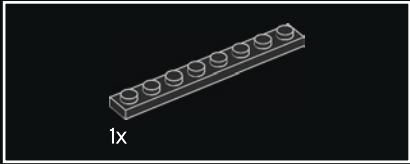
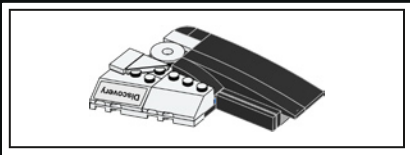


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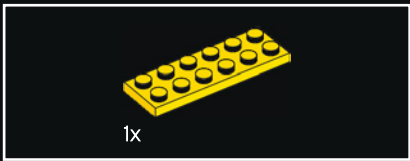
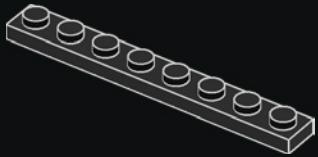


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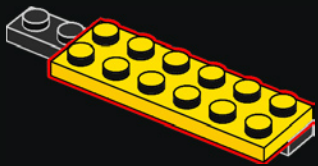




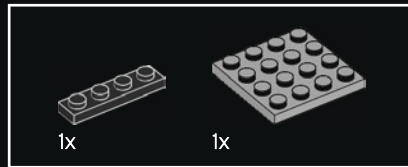
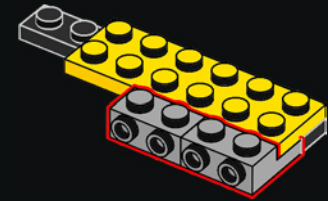
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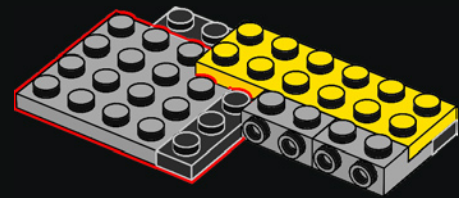
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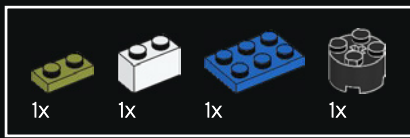
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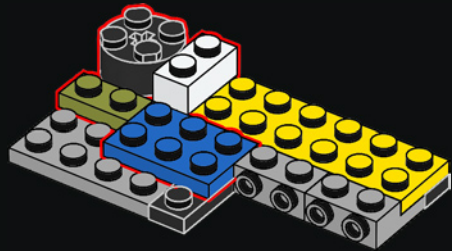
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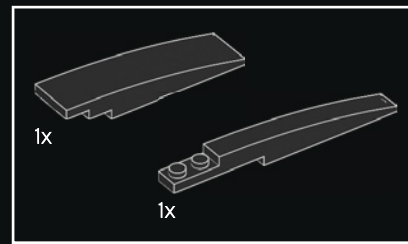
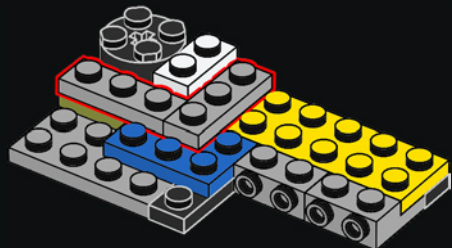




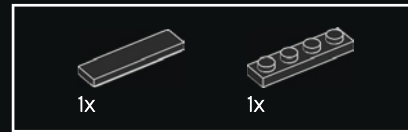
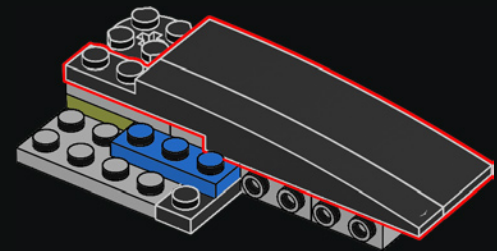
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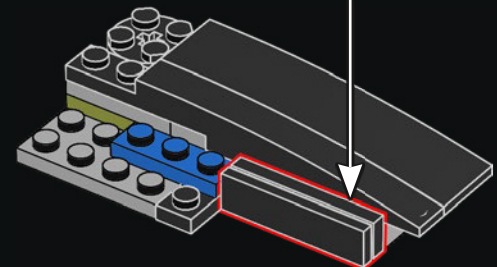
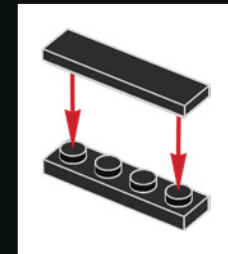
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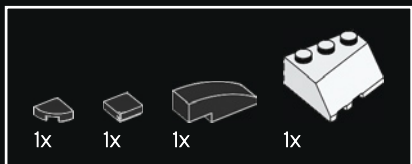
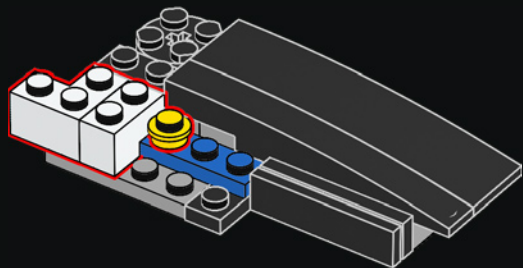


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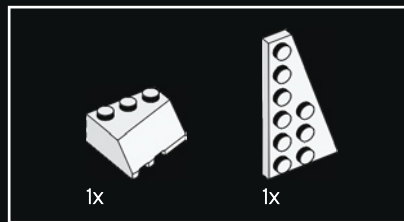
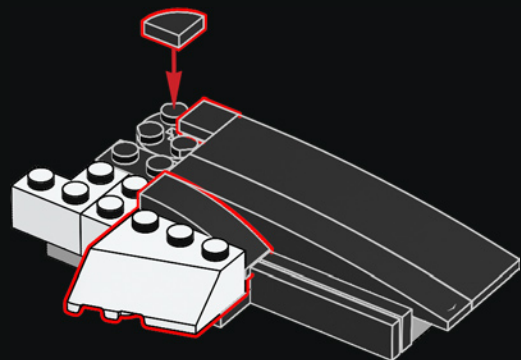




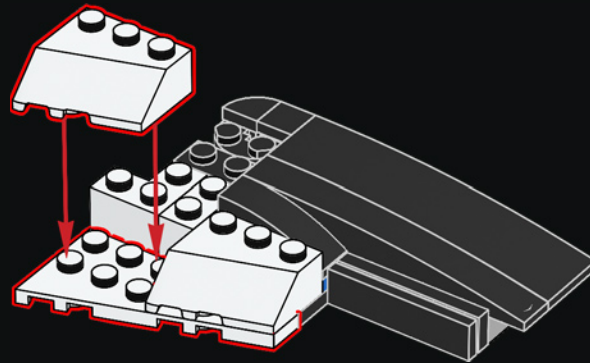
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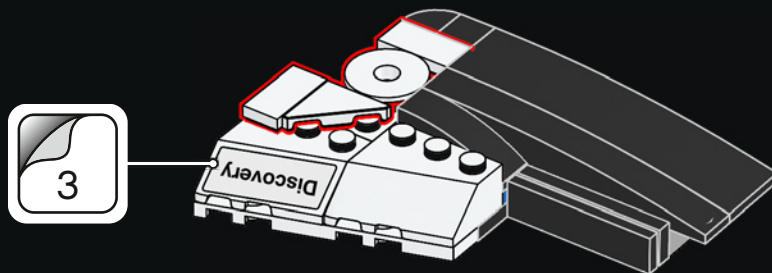
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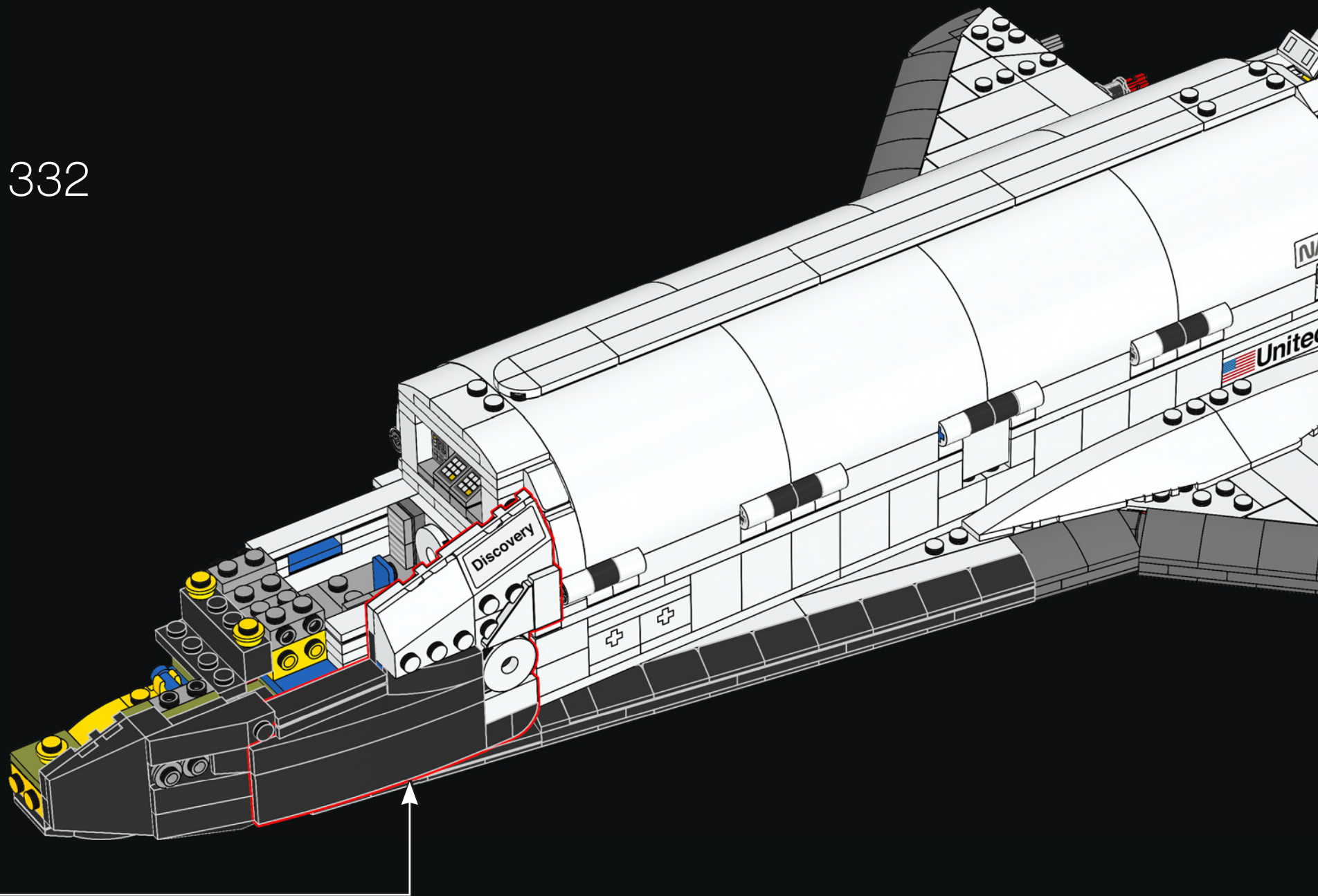
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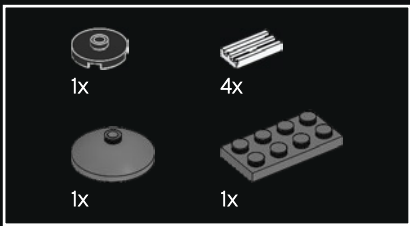


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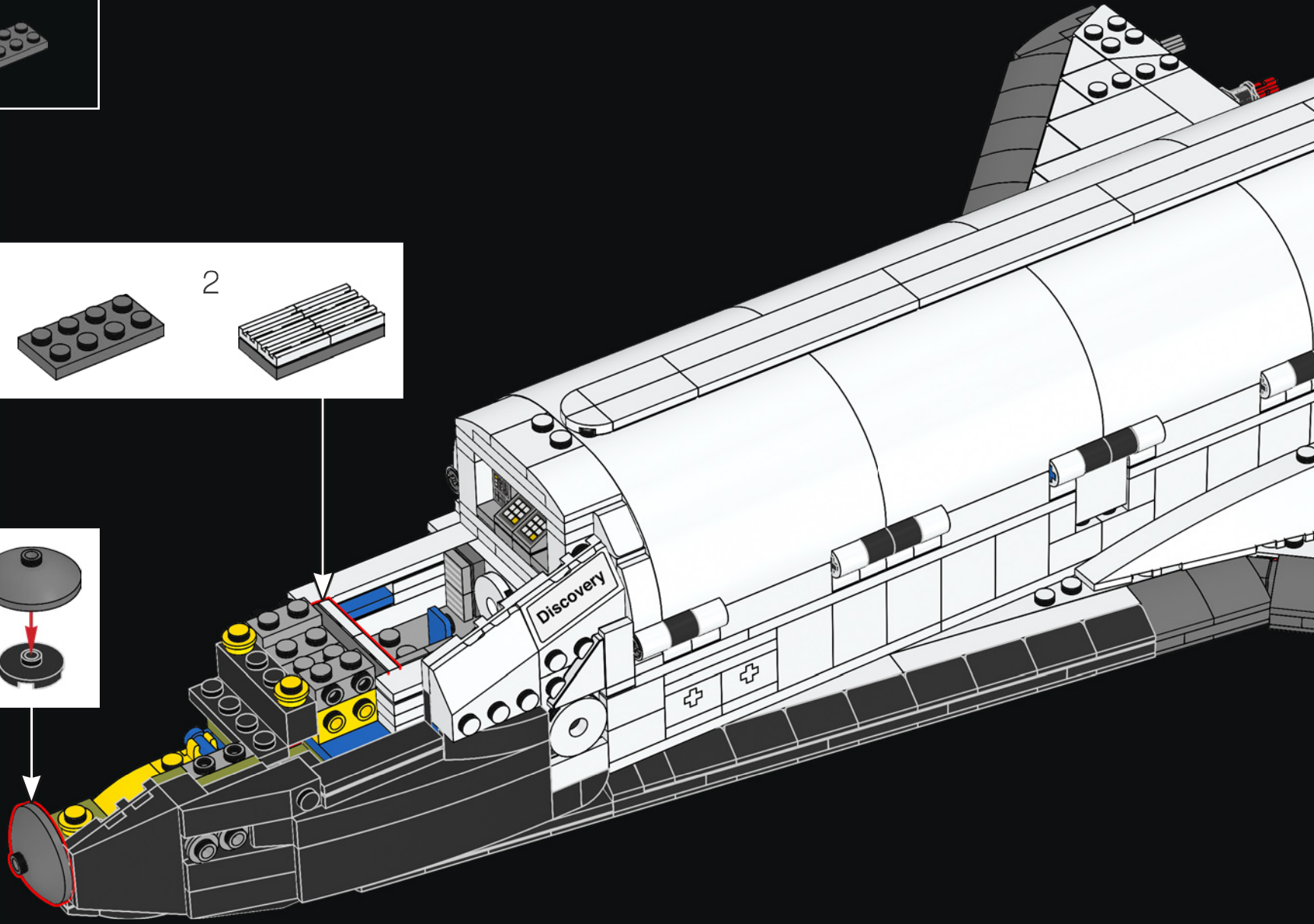
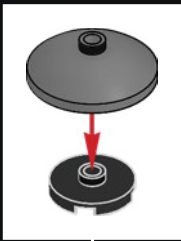
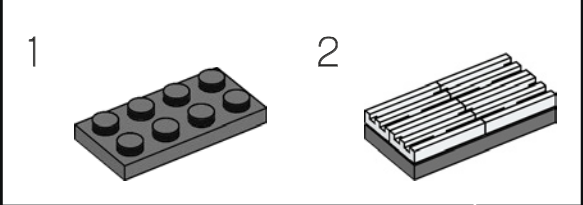


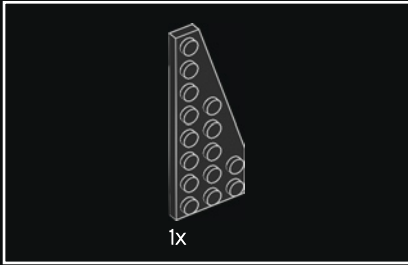
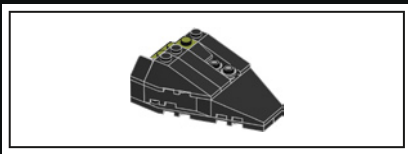
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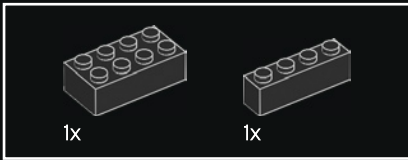
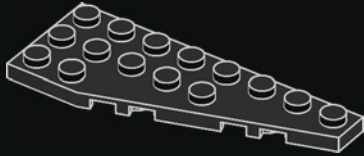


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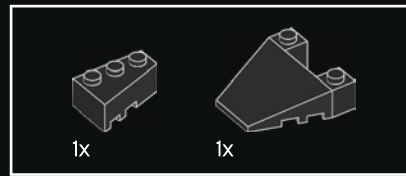
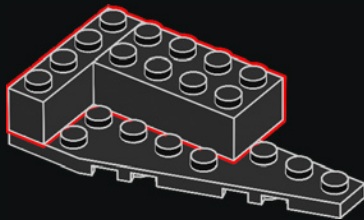




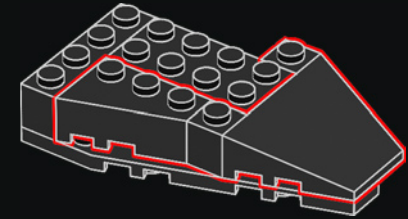
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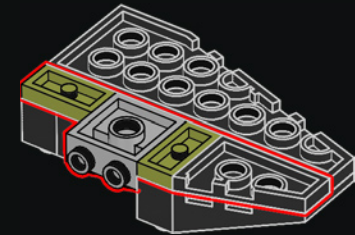
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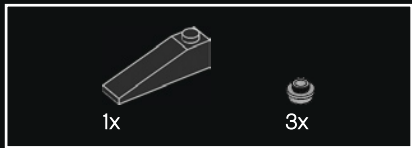
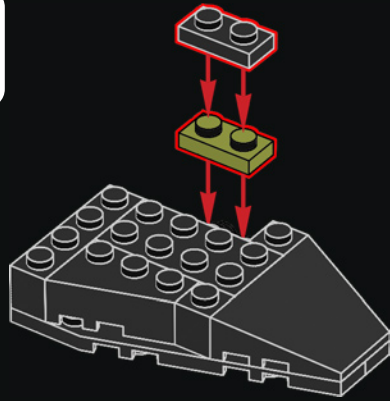


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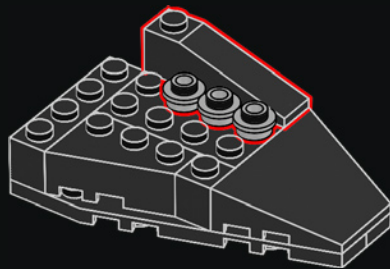




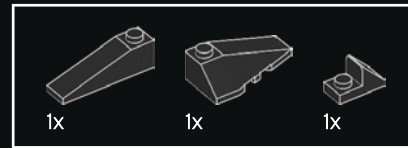
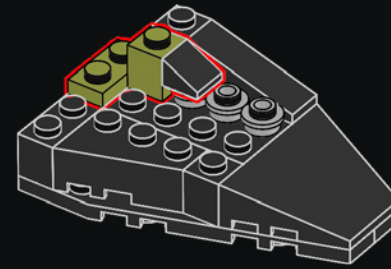
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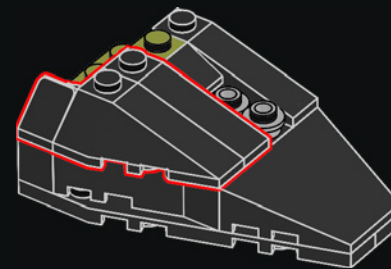
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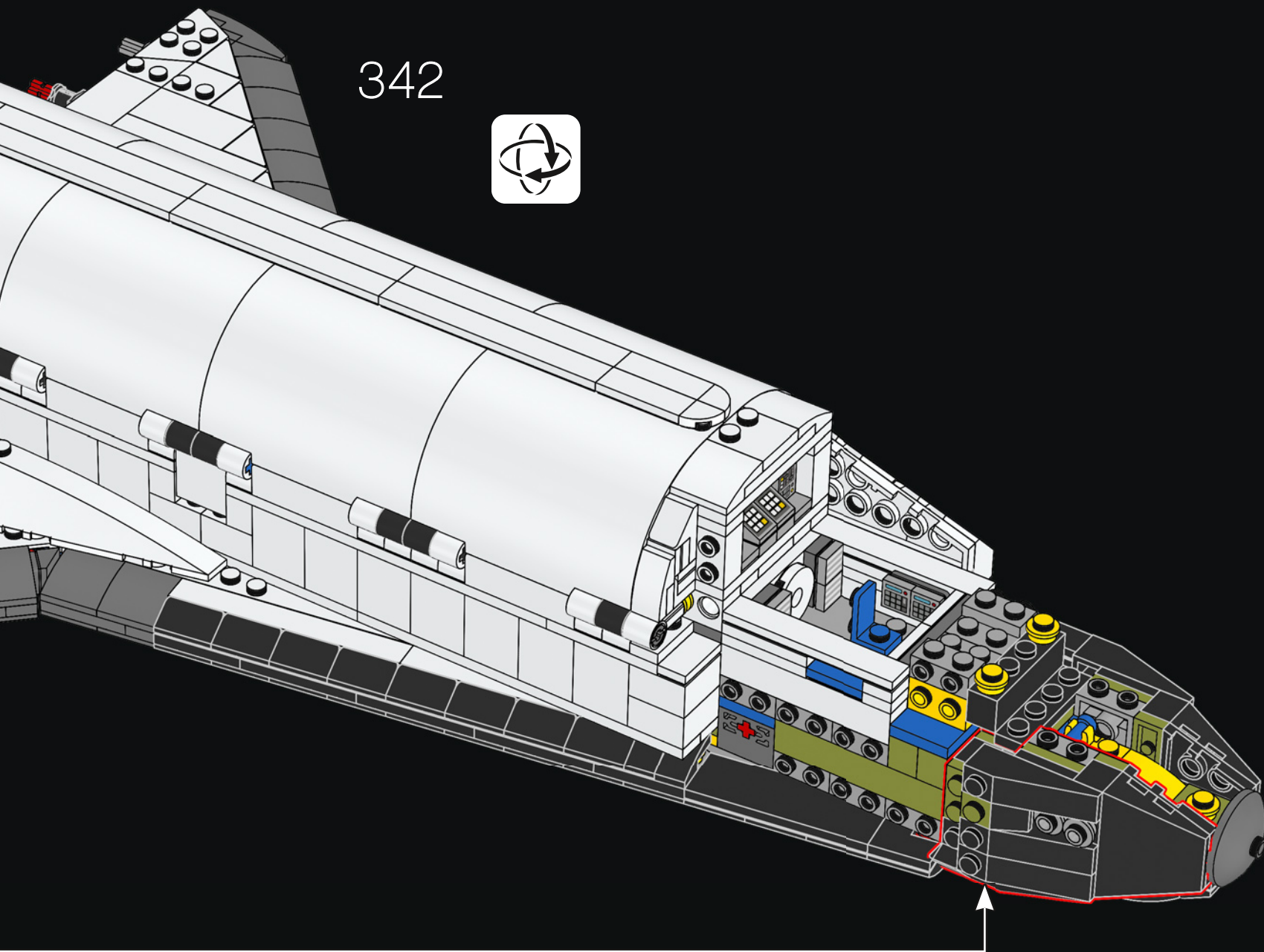
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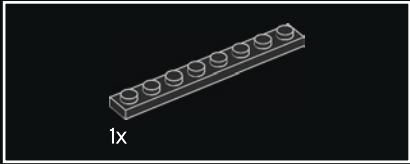
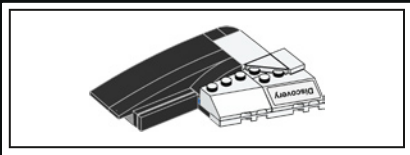


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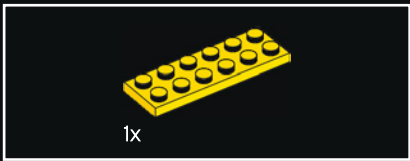
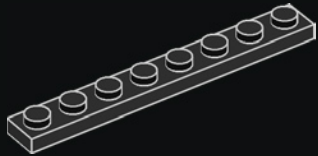


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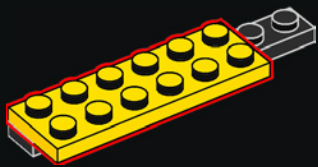




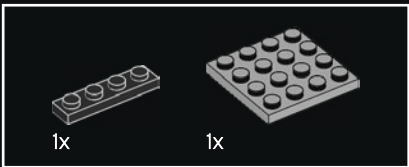
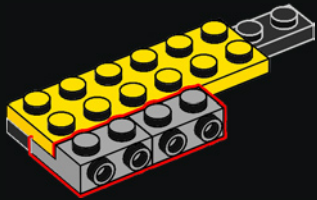
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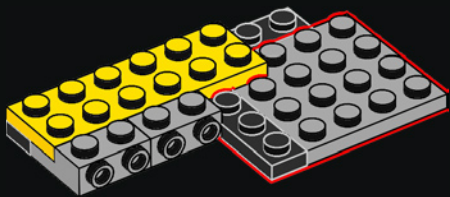
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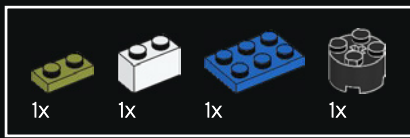
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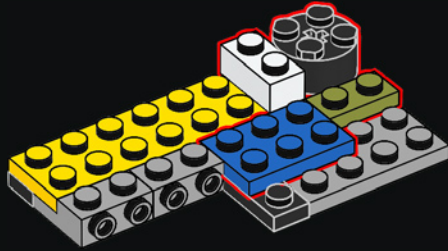
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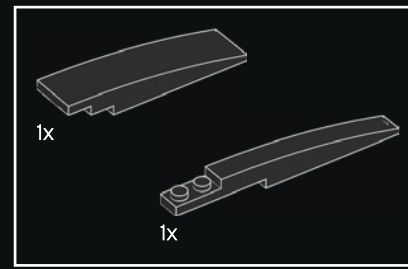
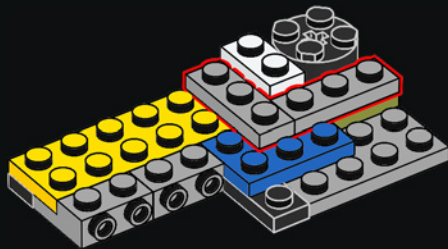




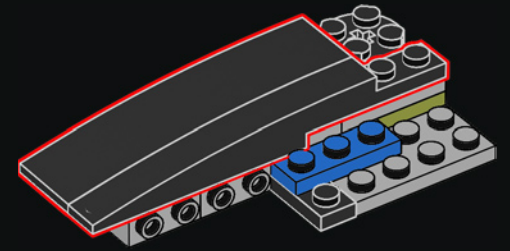
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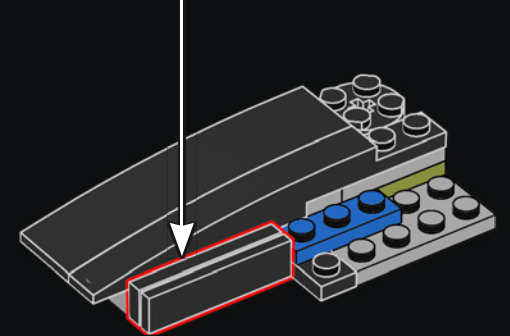
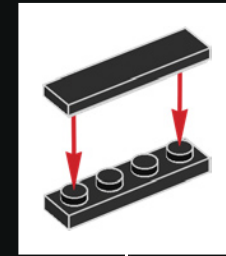
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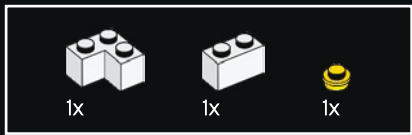


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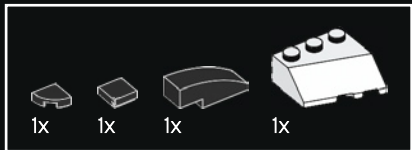
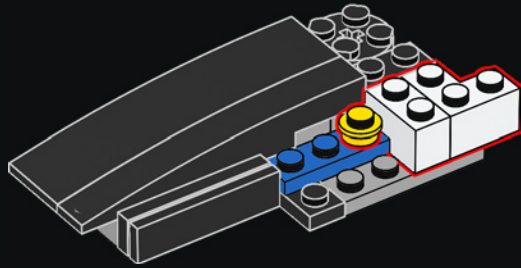


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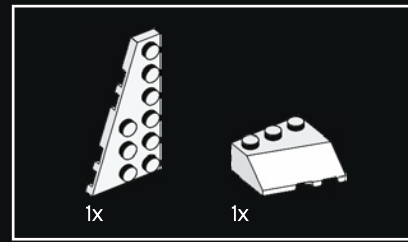
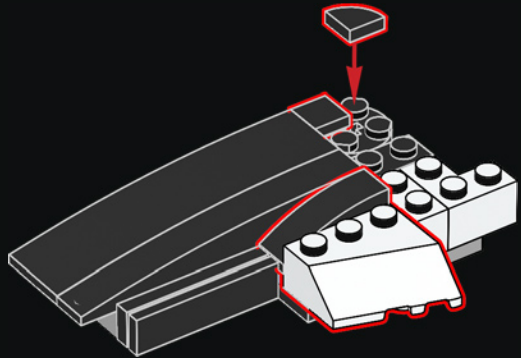




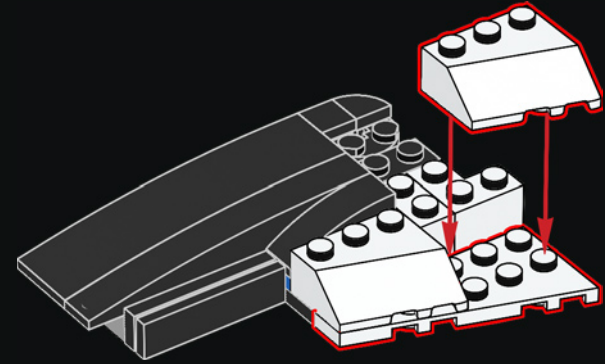
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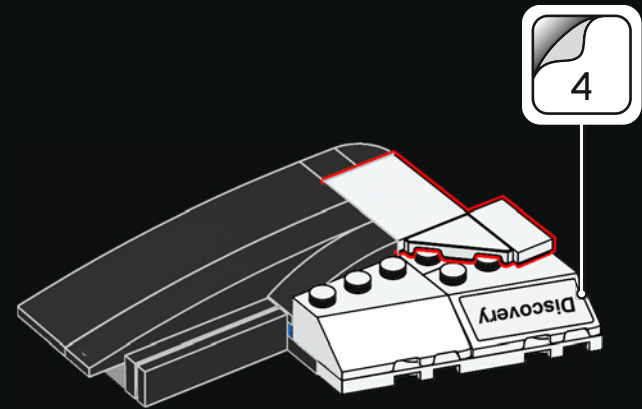
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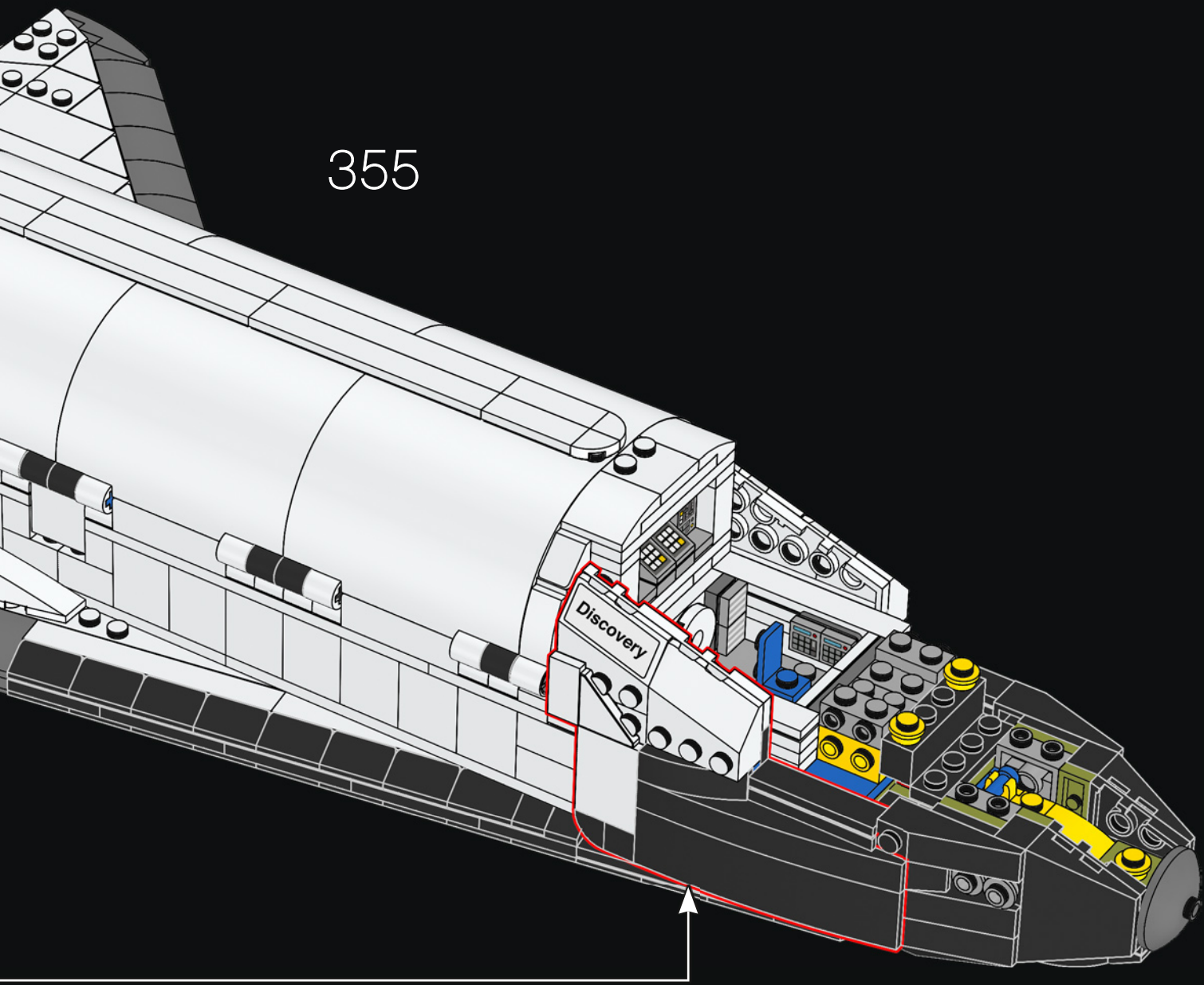


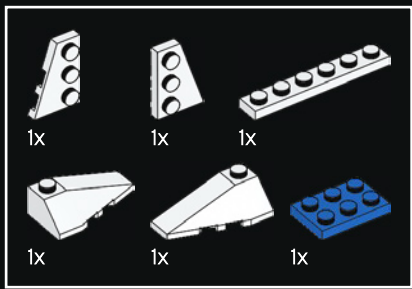
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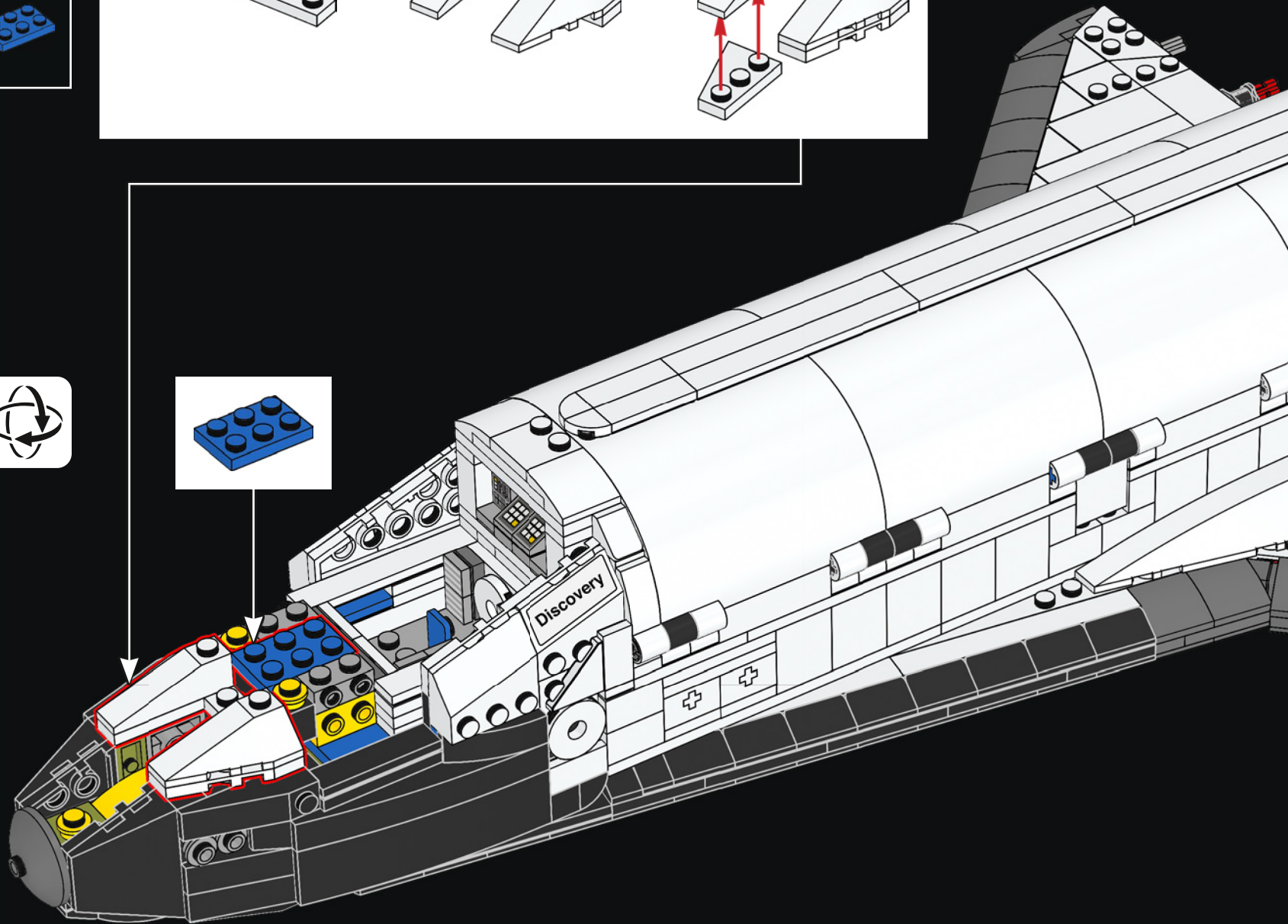
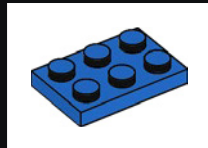
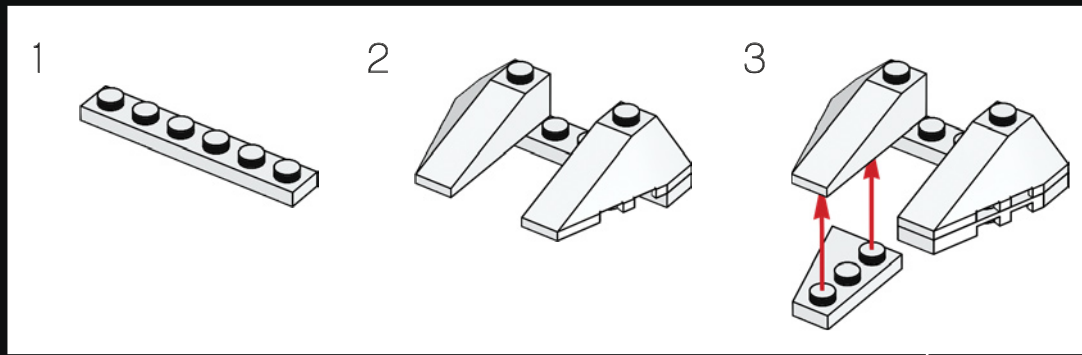
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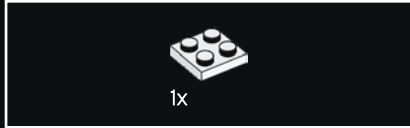
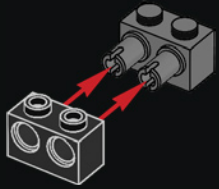


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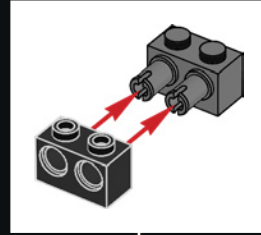
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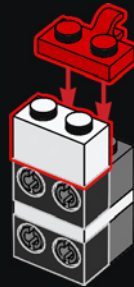
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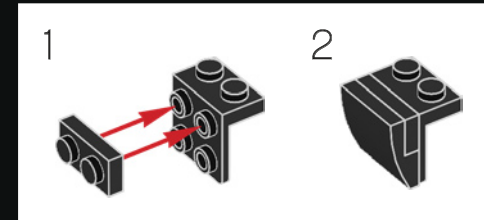
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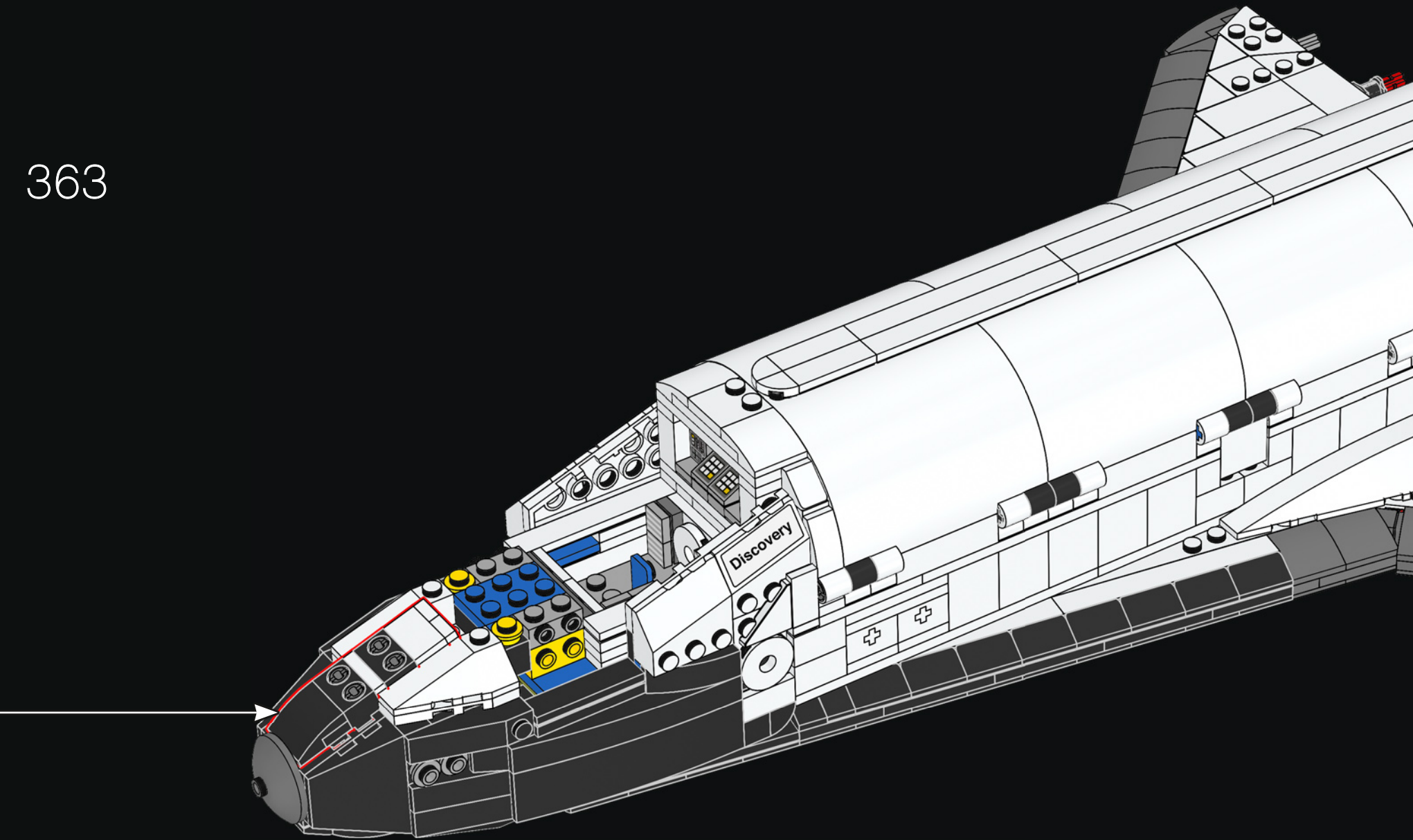
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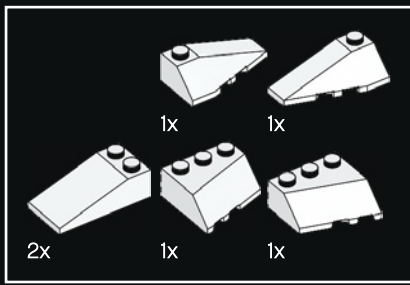


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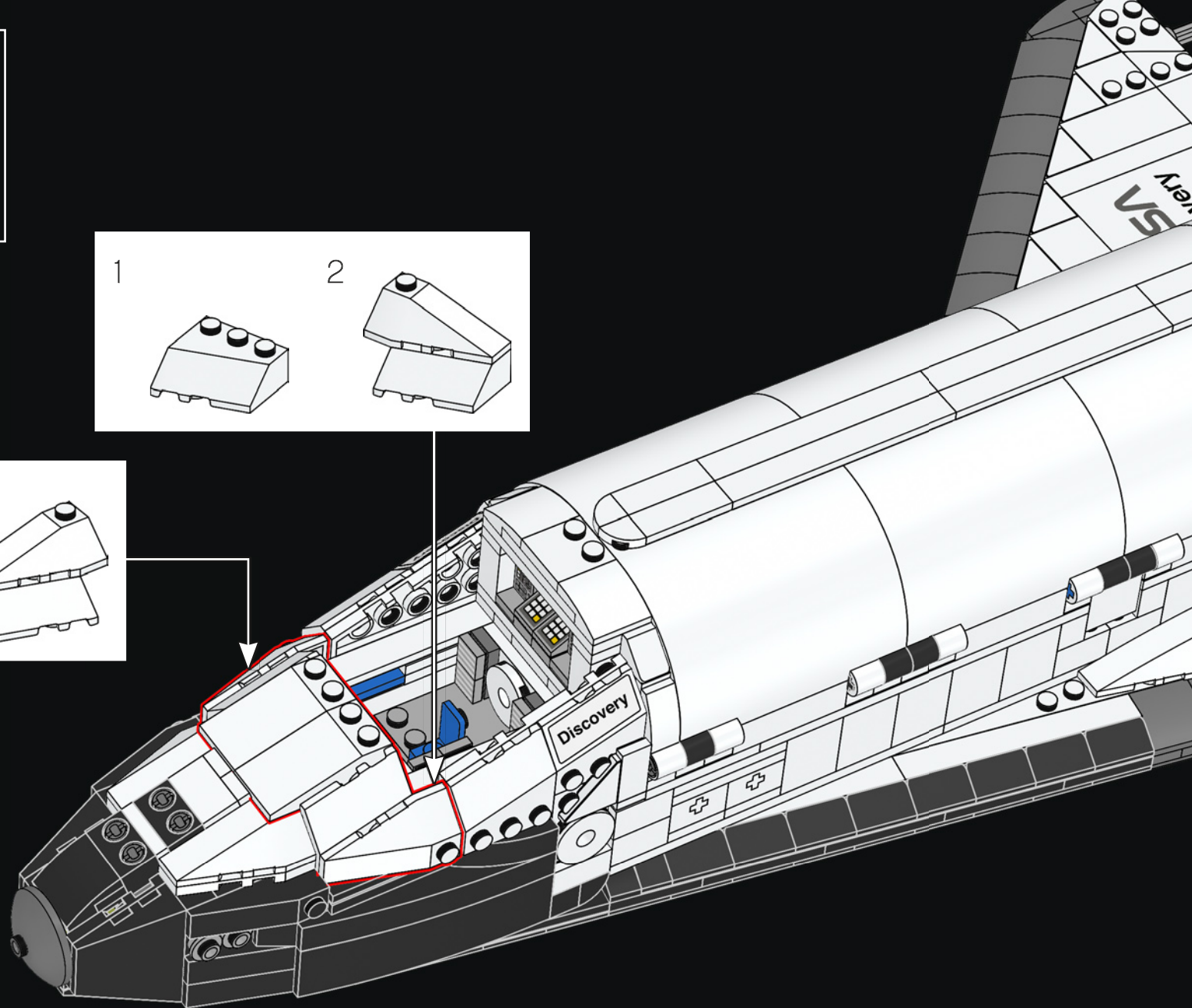
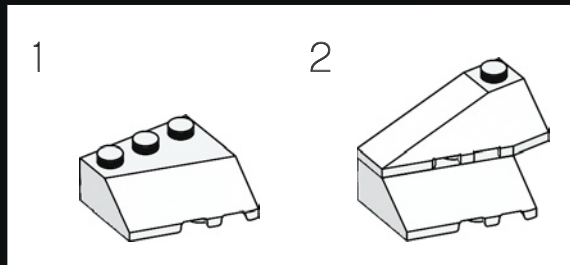
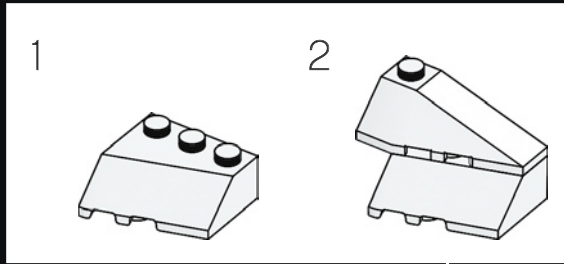


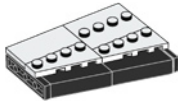
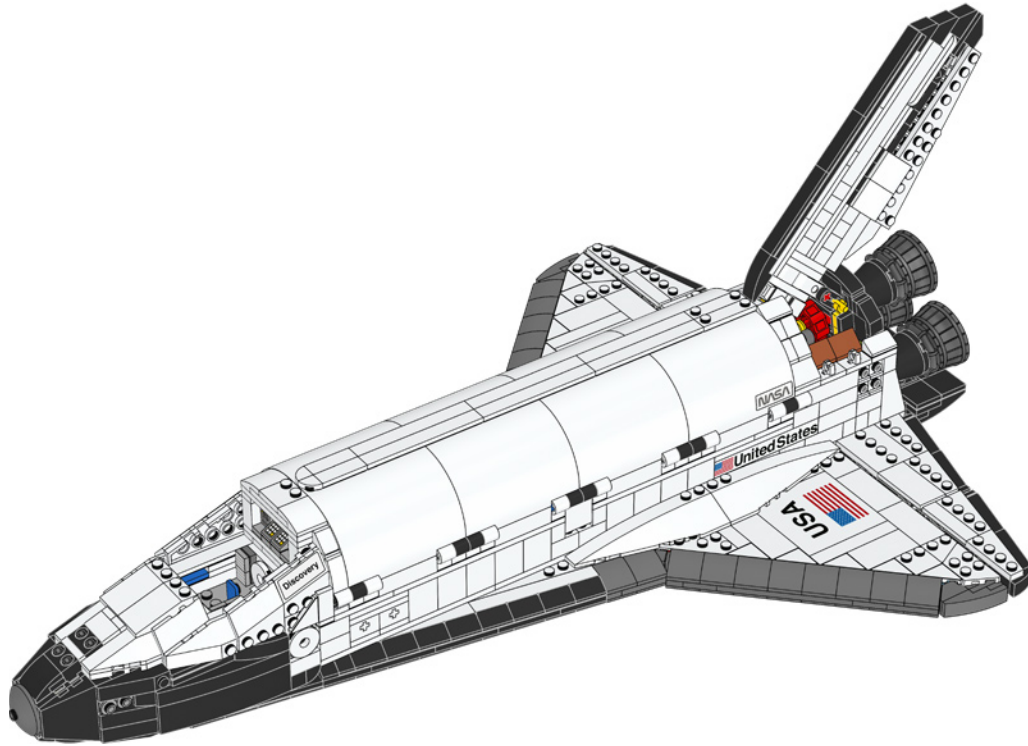
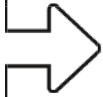
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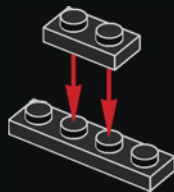


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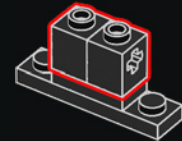
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365



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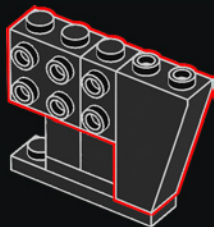
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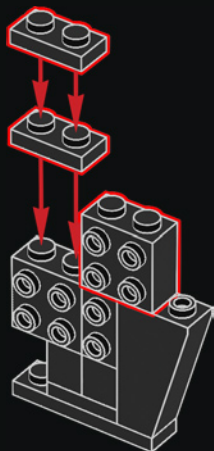




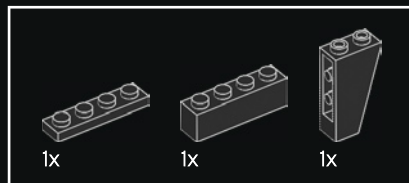
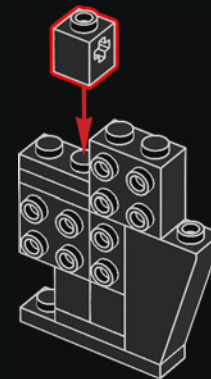
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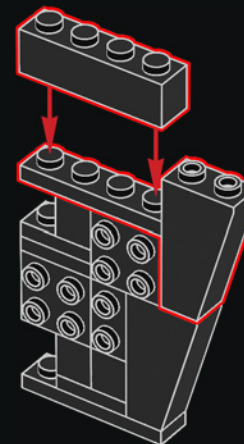
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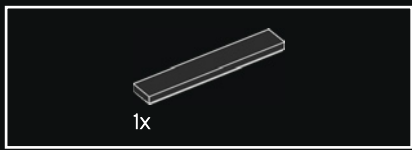


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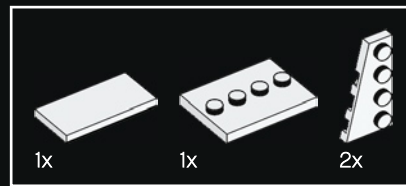
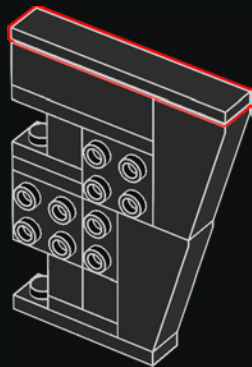


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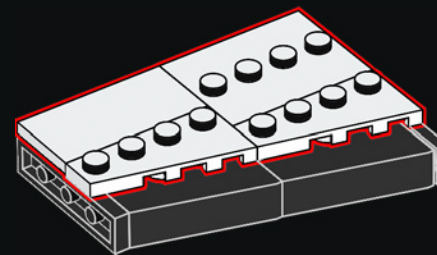




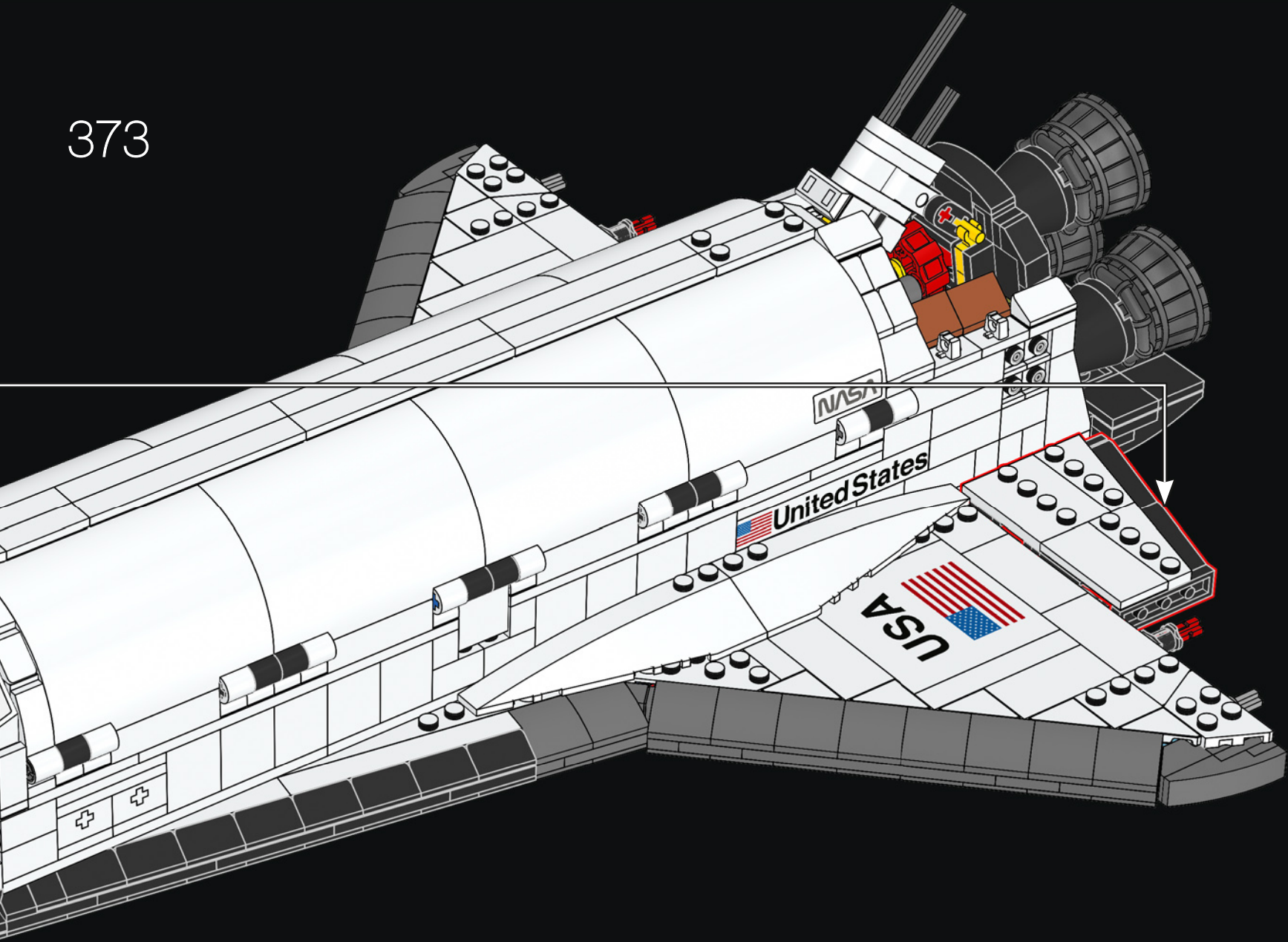
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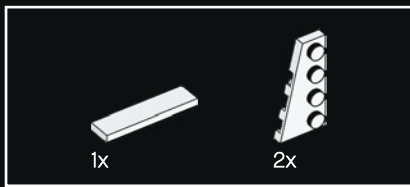
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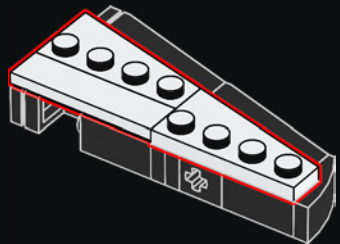
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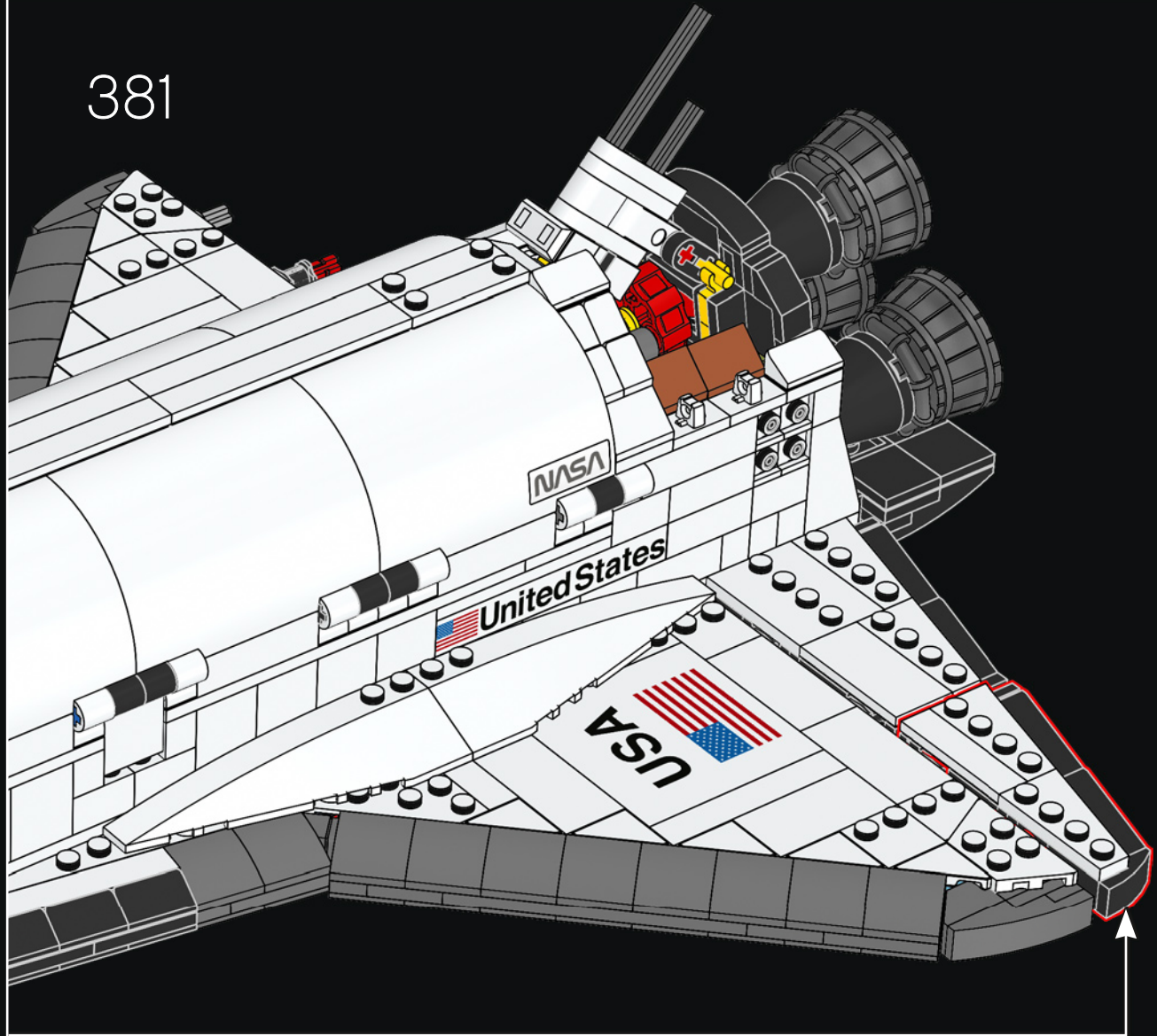


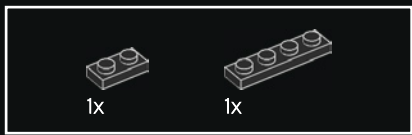


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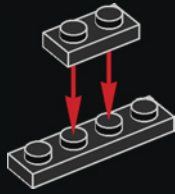


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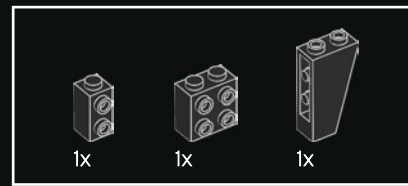
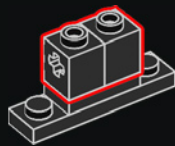




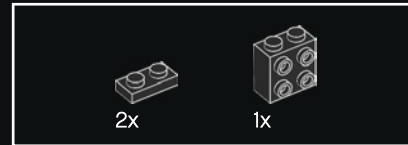
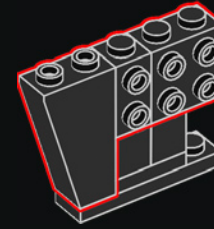
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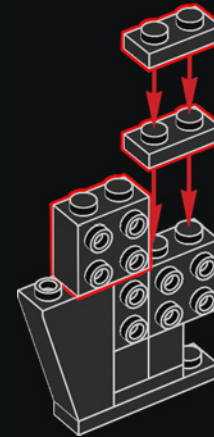
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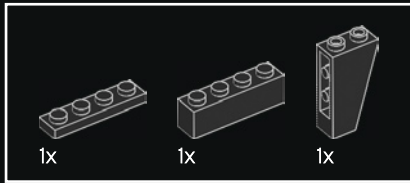
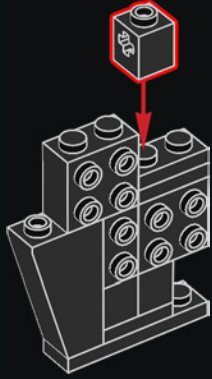


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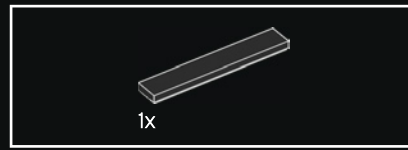
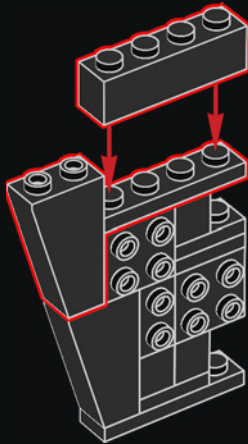




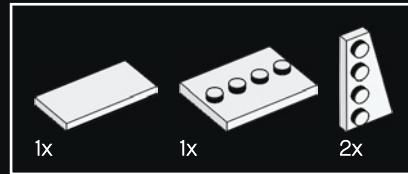
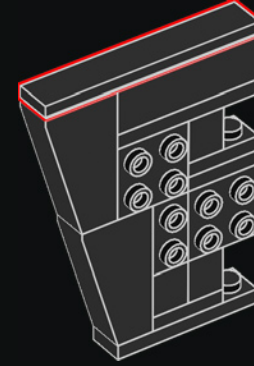
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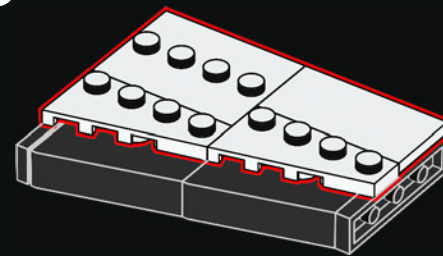
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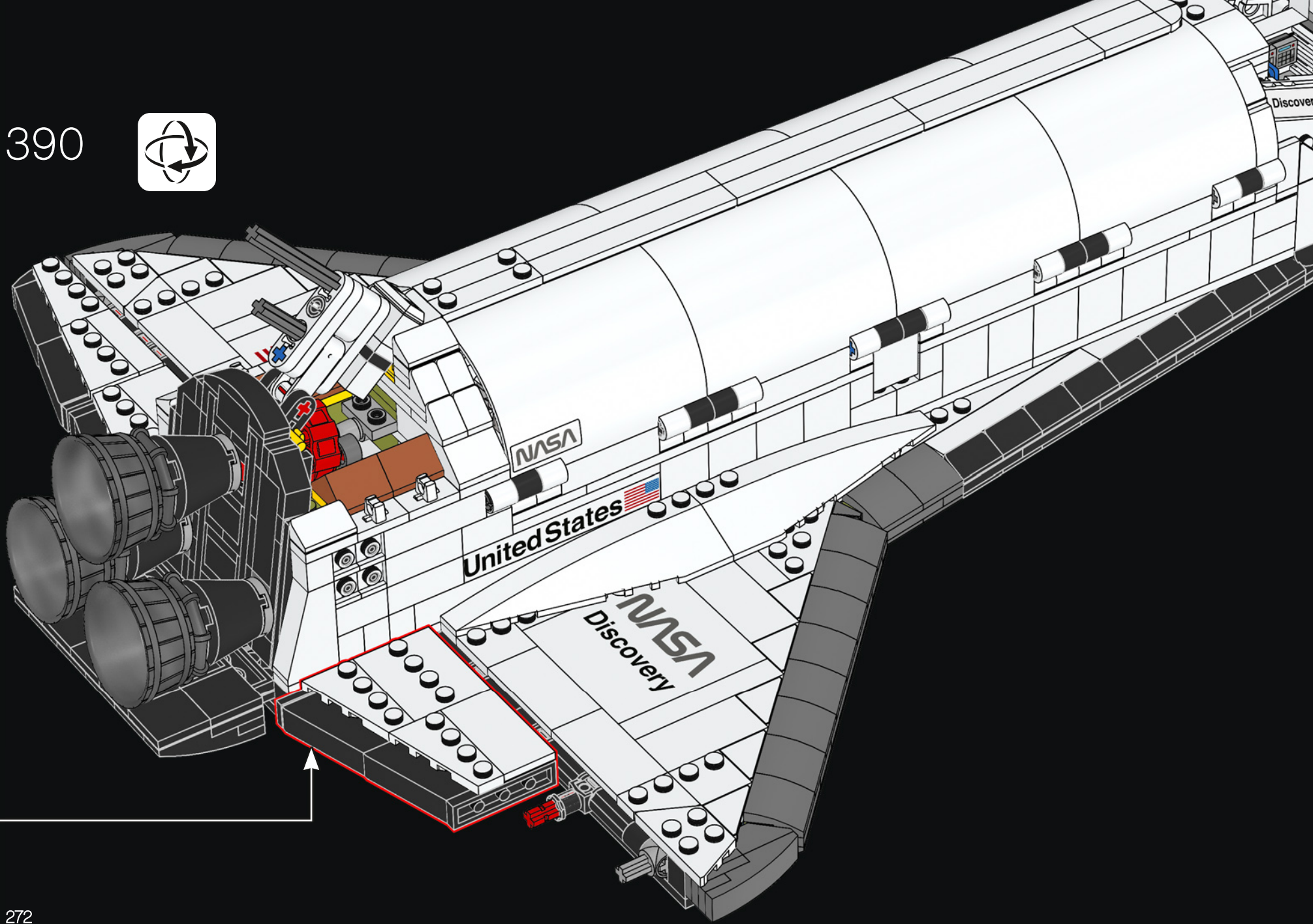
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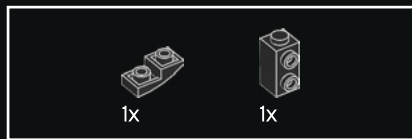
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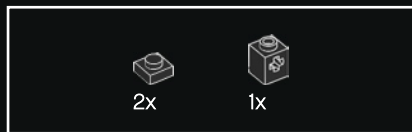
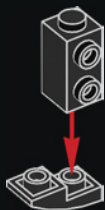
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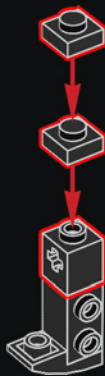




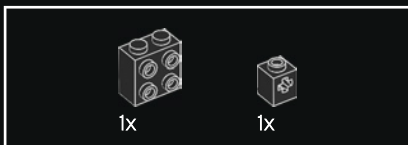
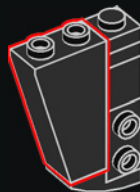
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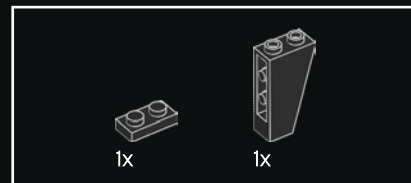
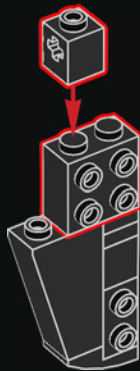
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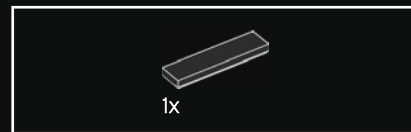
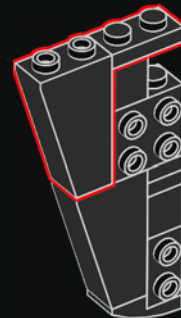
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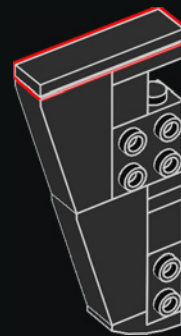
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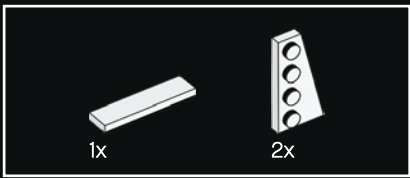


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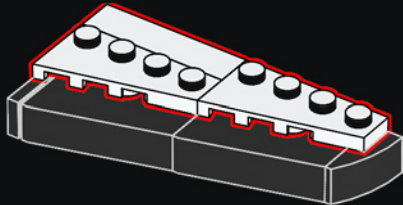


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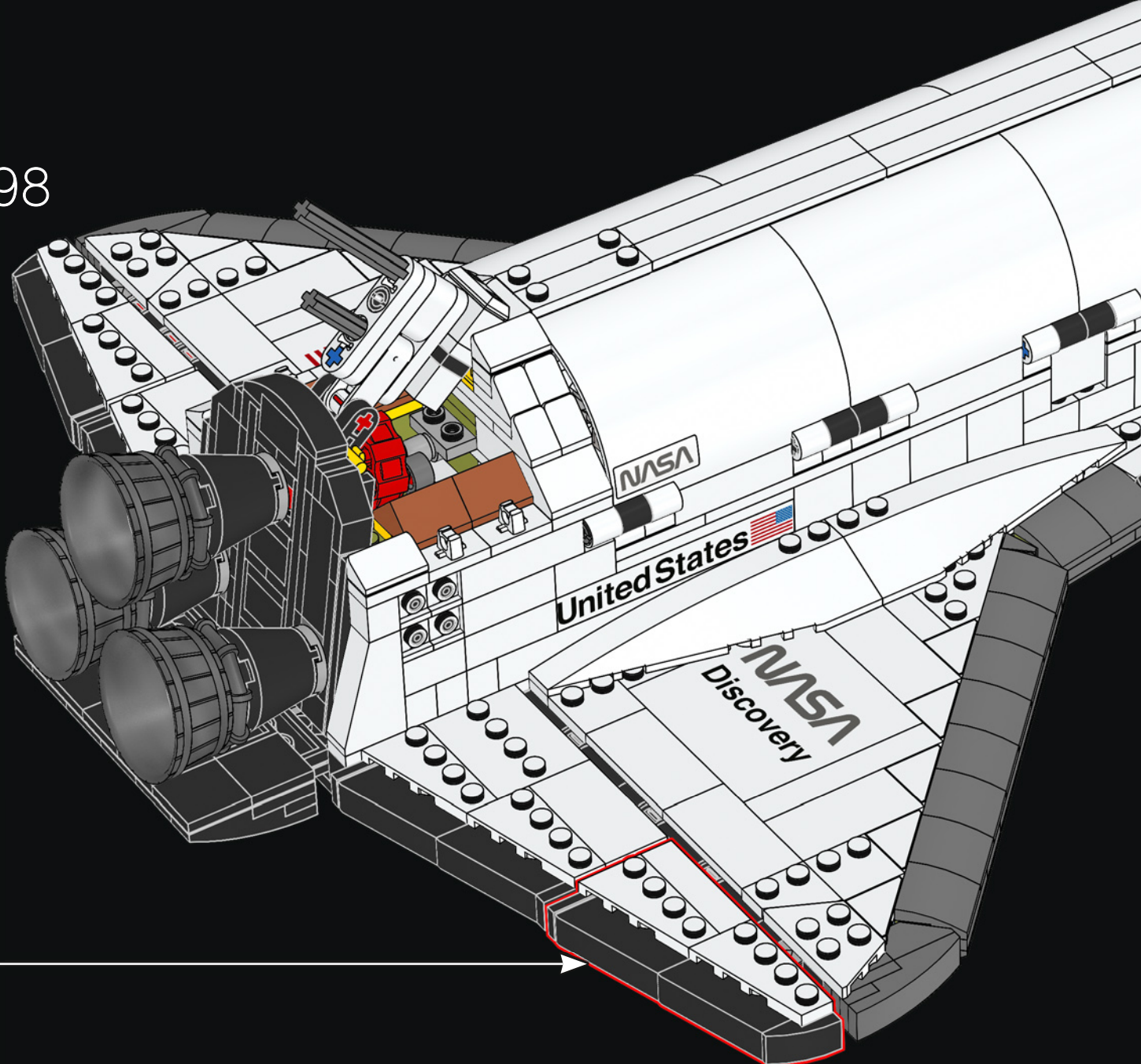


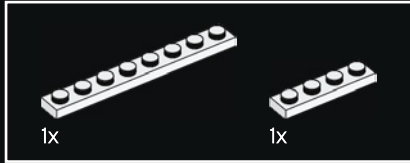
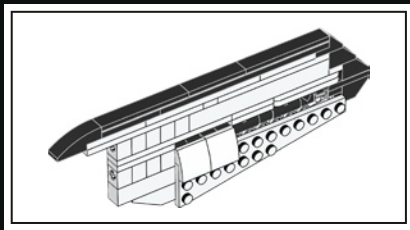


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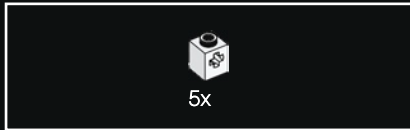
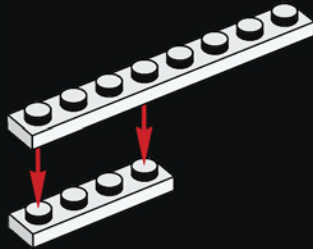


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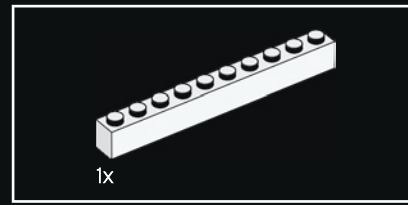
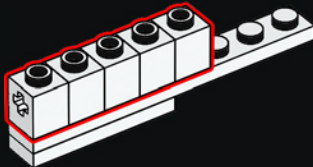




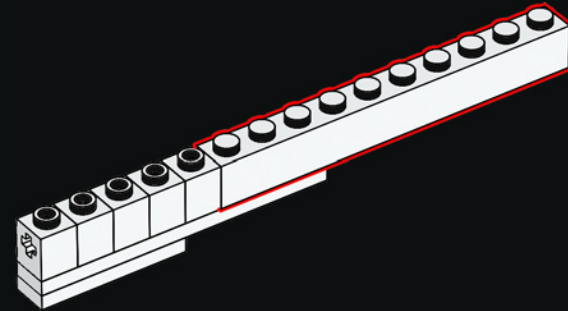
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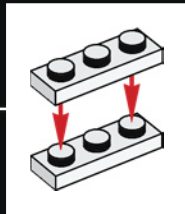
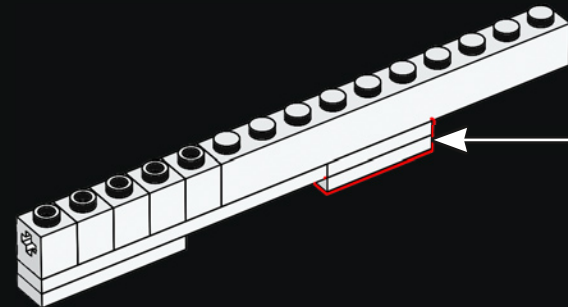
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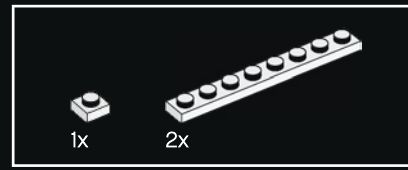
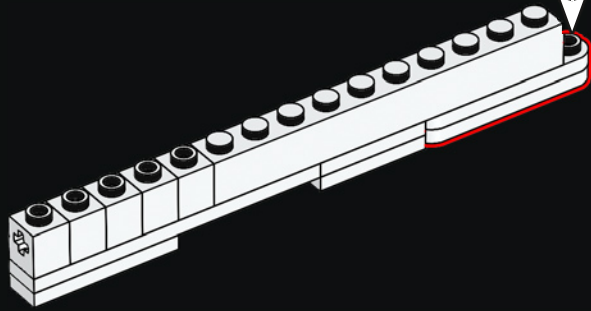
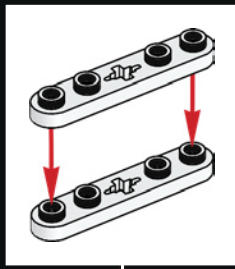


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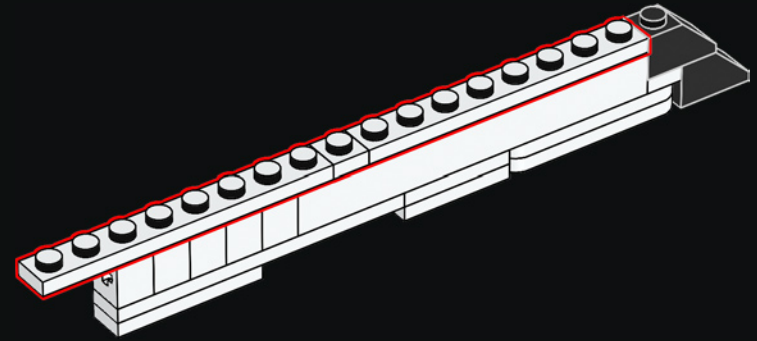




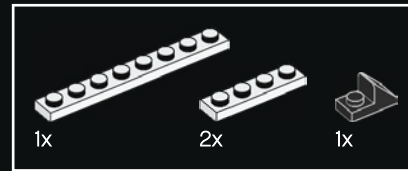
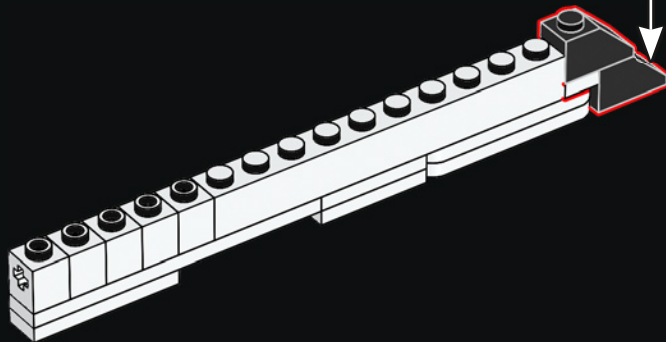
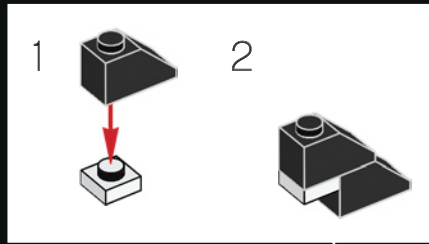
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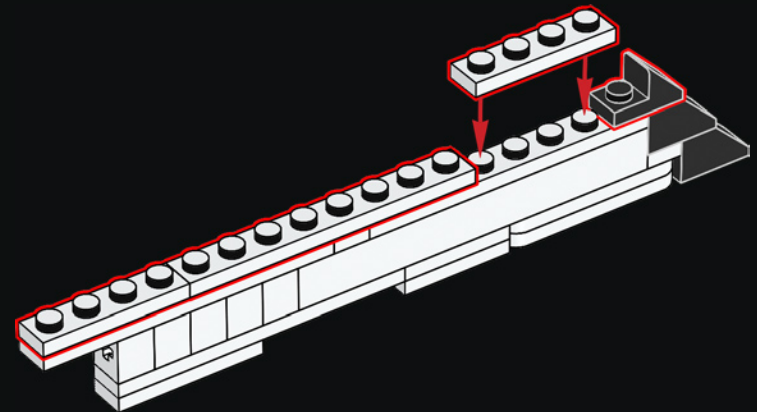
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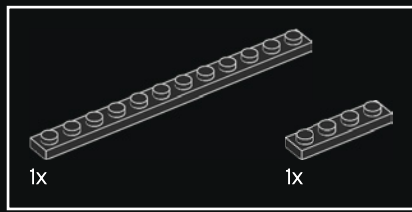


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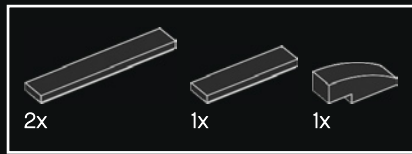
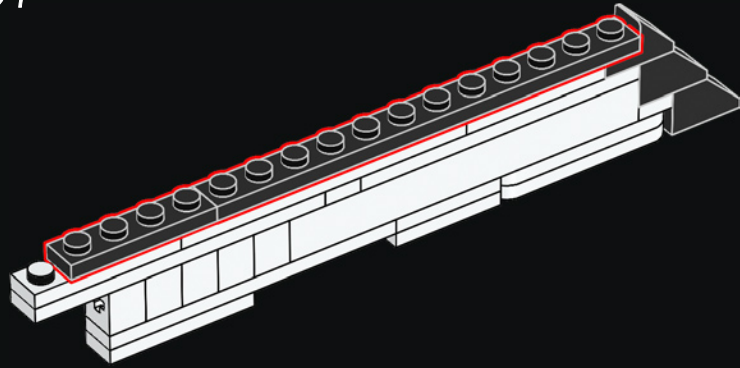


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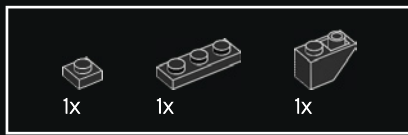
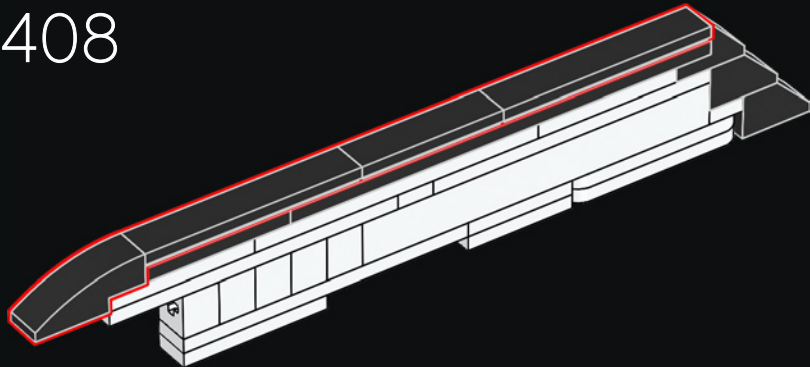




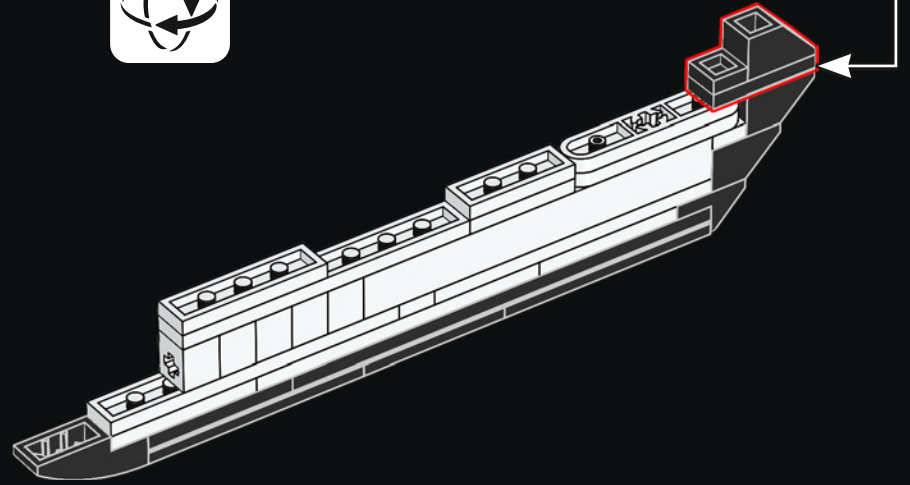
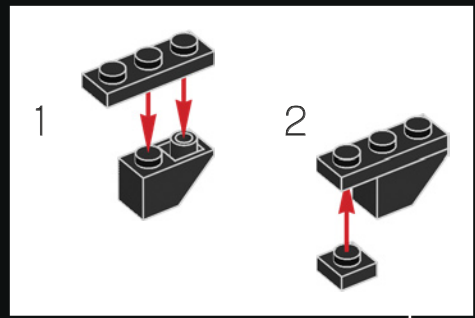
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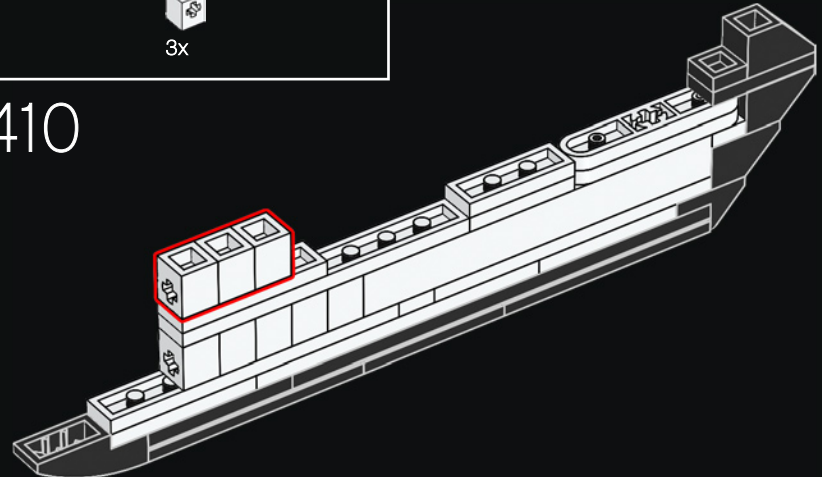
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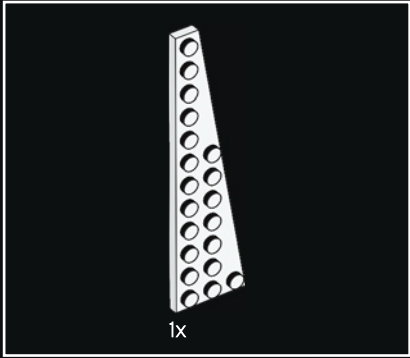
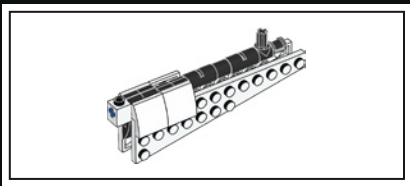


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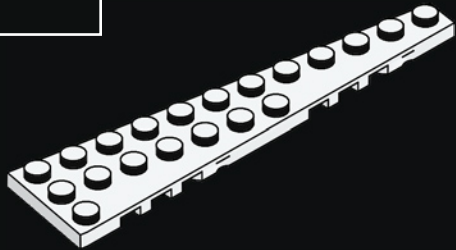


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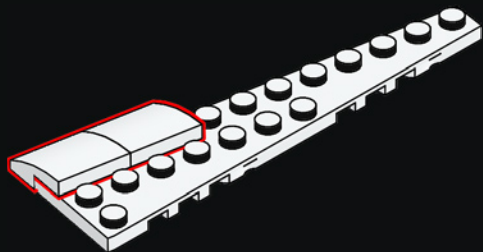




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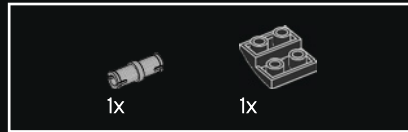
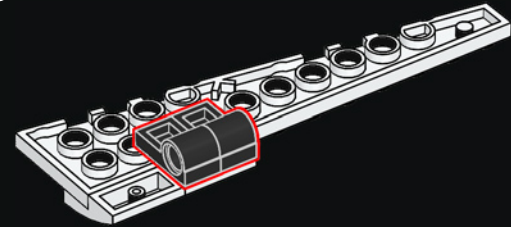


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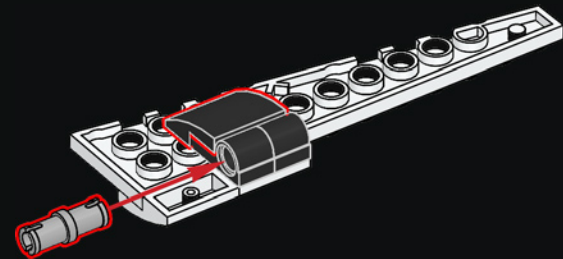
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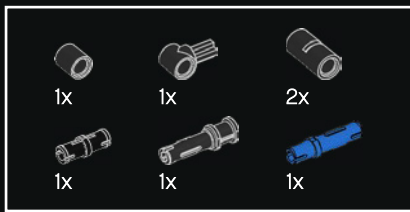


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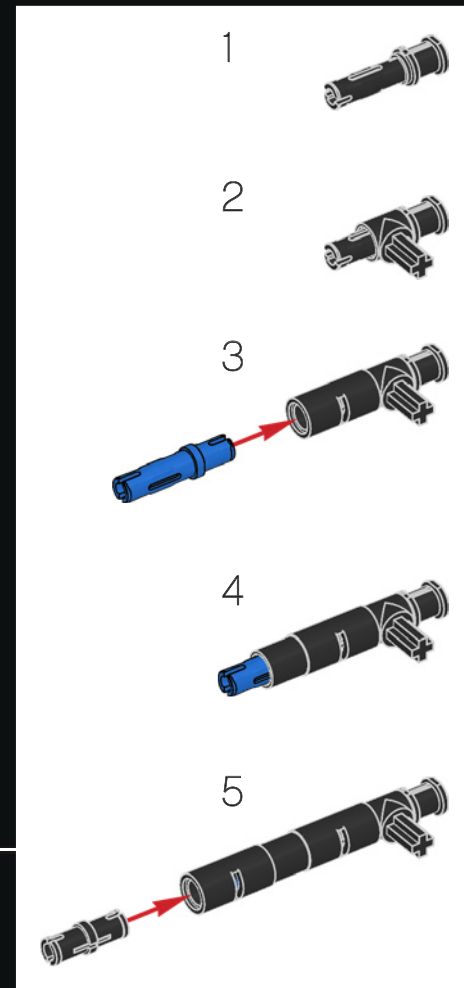
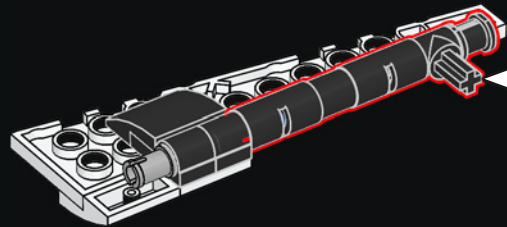
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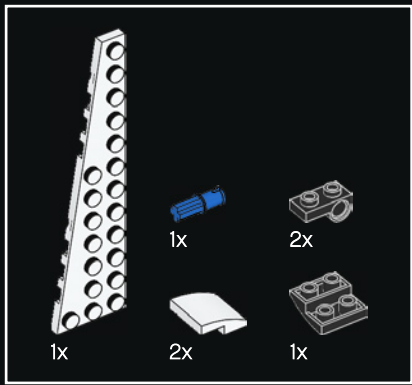
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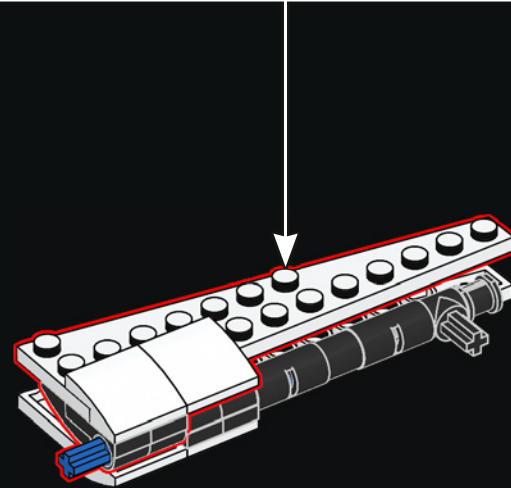
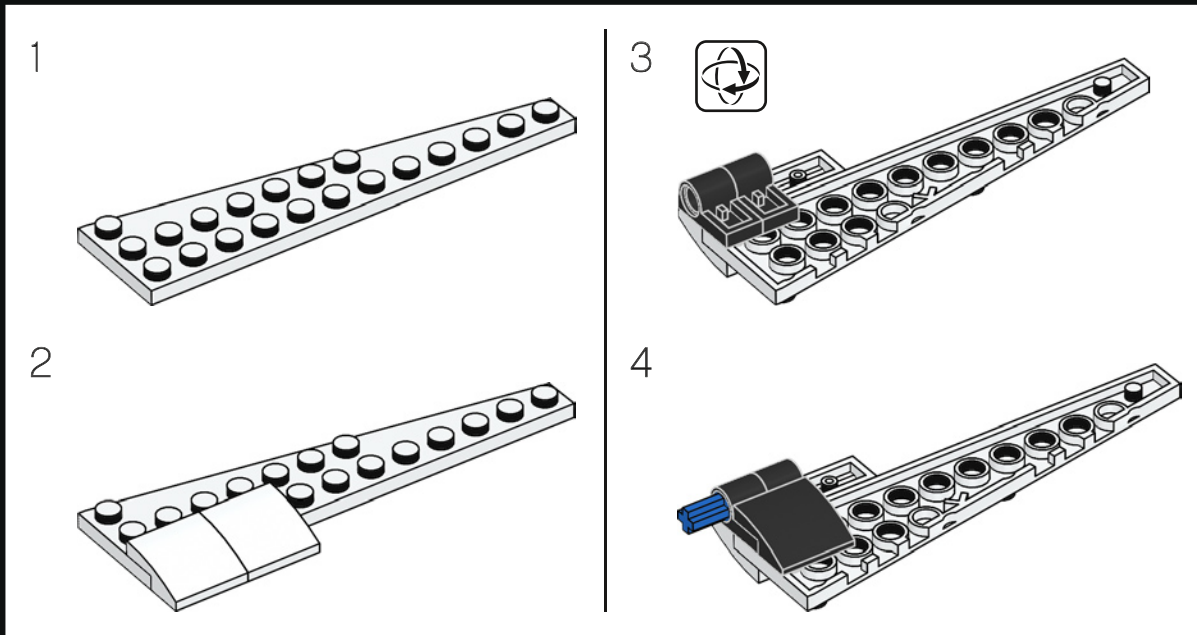


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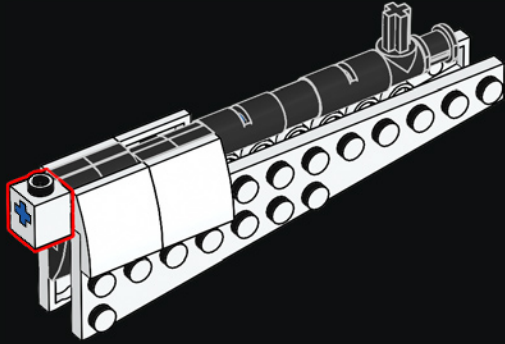
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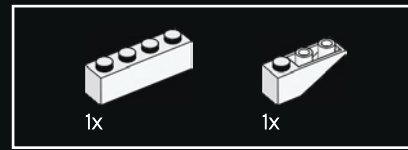
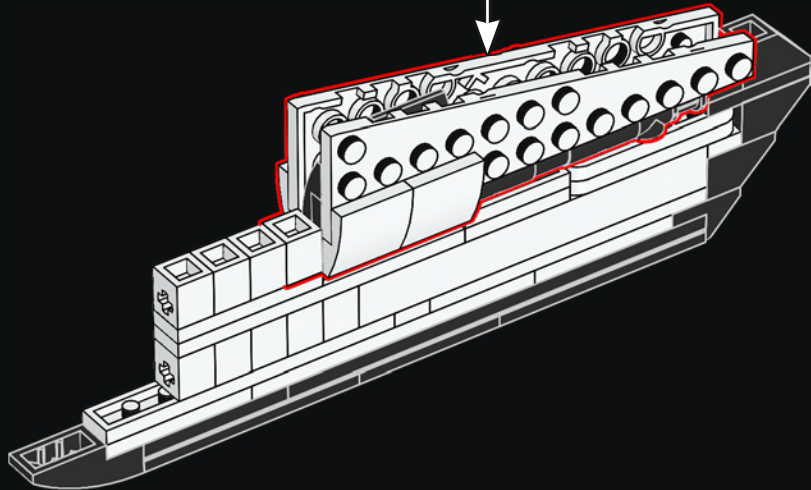




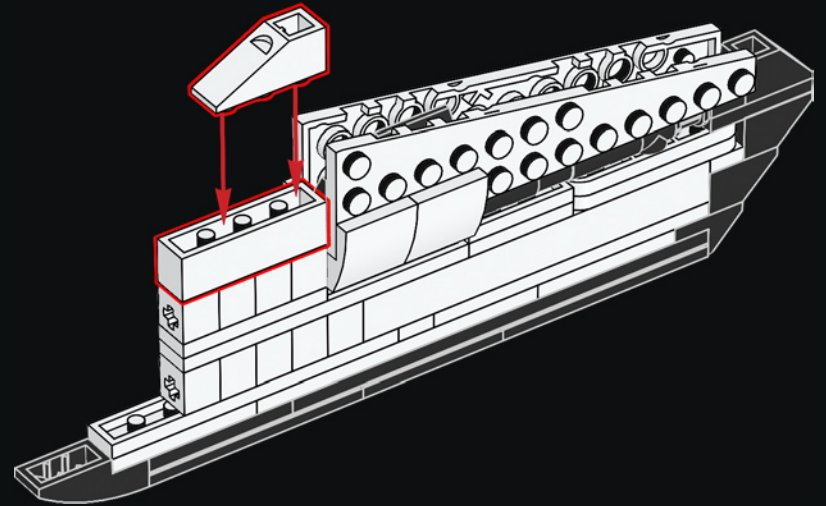
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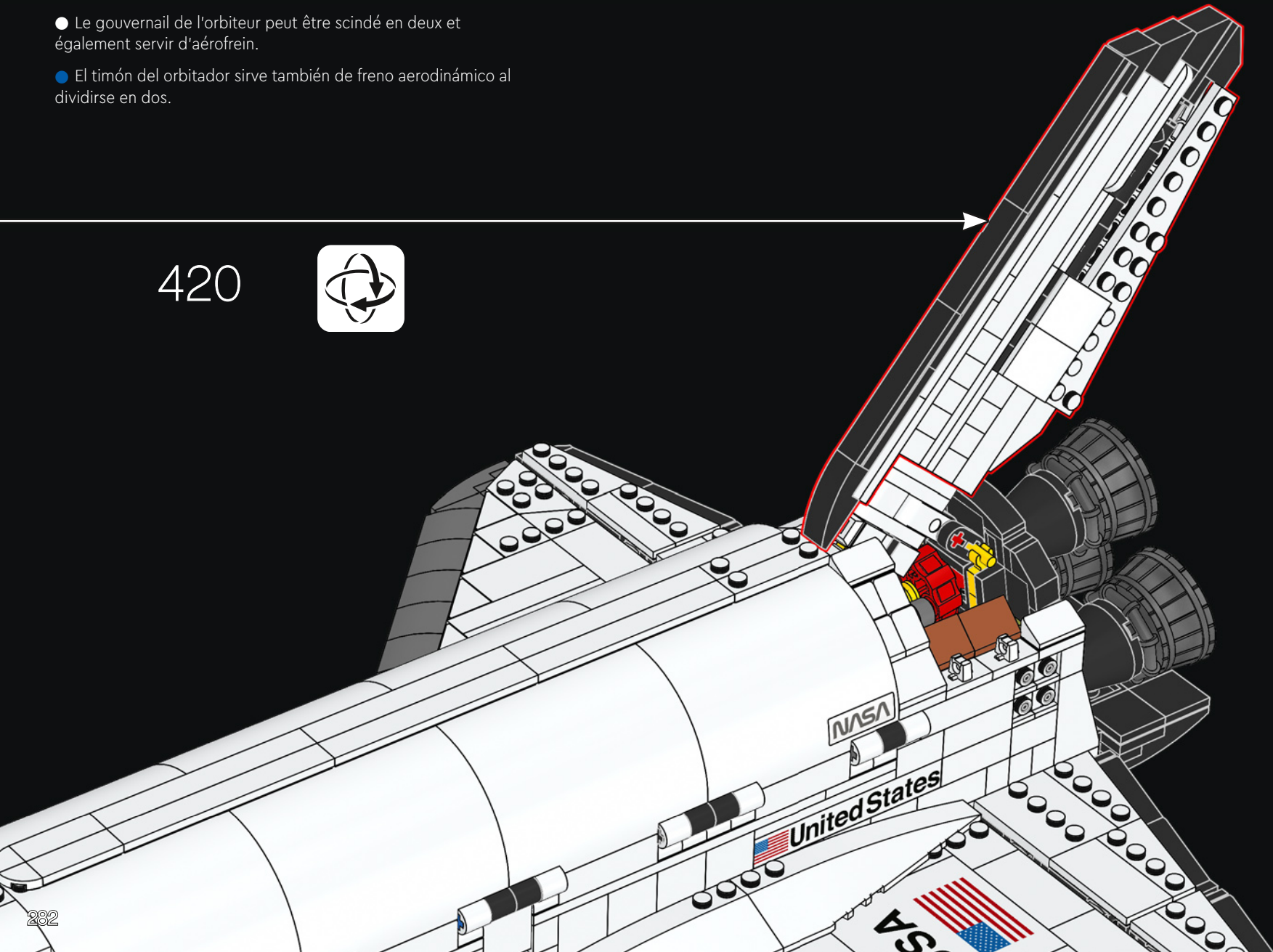
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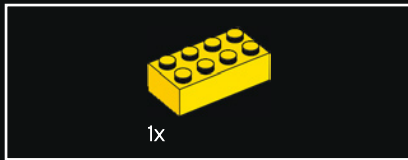
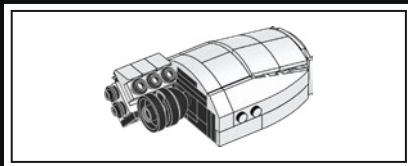
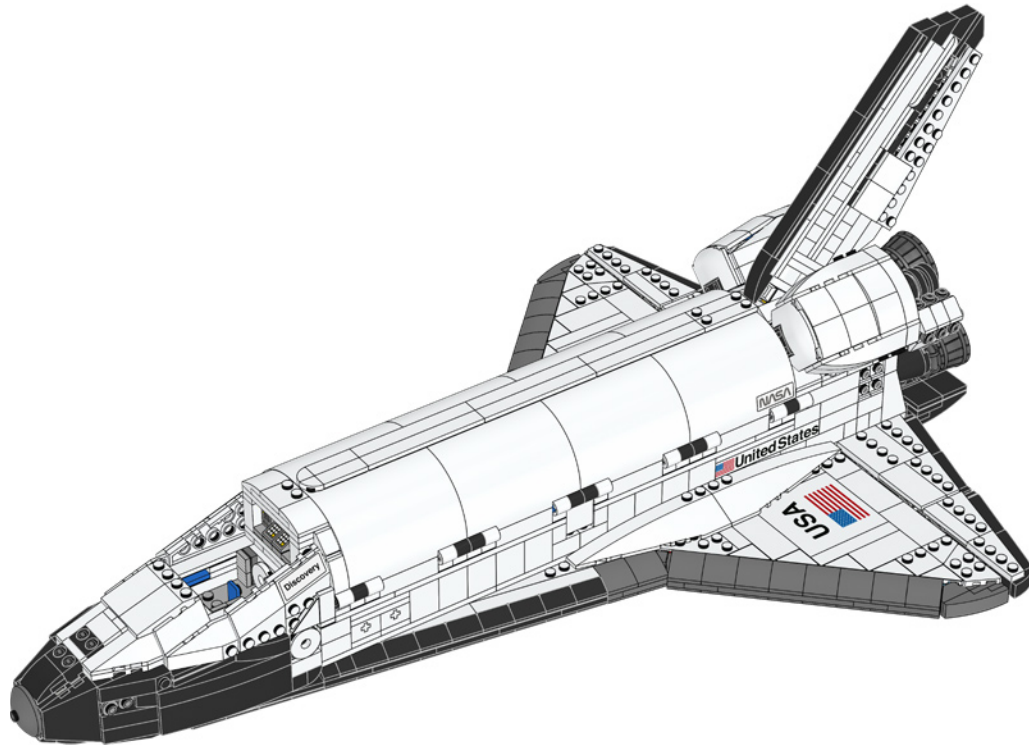
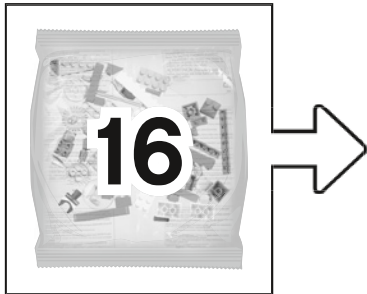


## DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

- The Orbiter's rudder doubles as an airbrake by splitting in two.
- Le gouvernail de l'orbiteur peut être scindé en deux et également servir d'aérofrein.
- El timón del orbitador sirve también de freno aerodinámico al dividirse en dos.

420

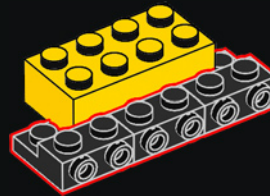




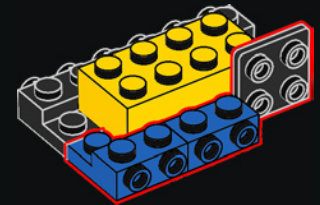
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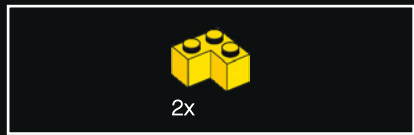


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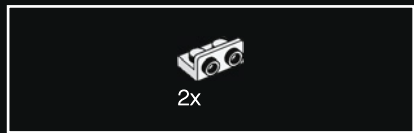
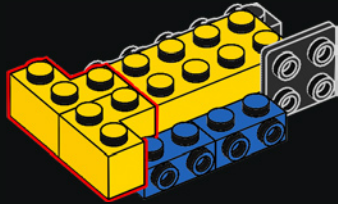


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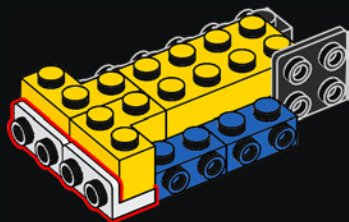




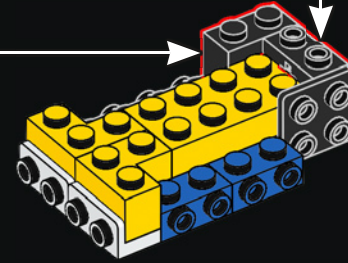
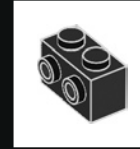
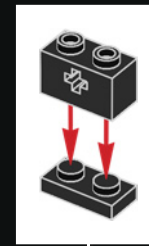
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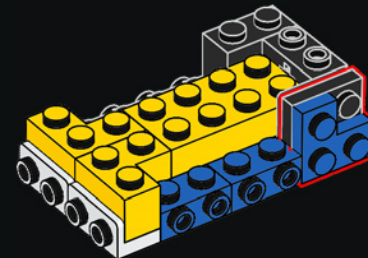
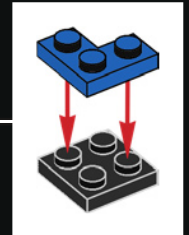
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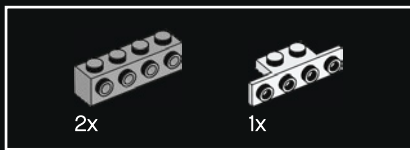


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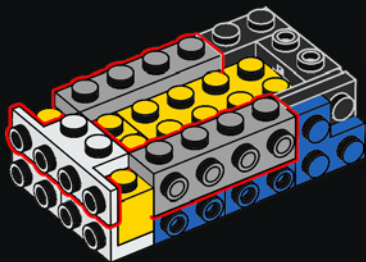


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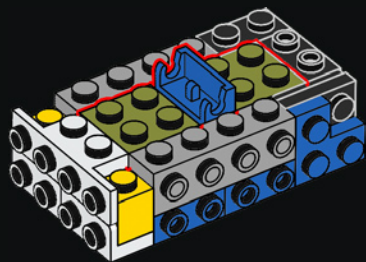




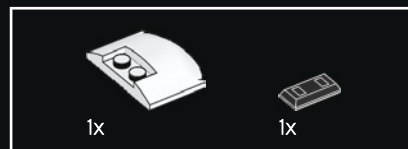
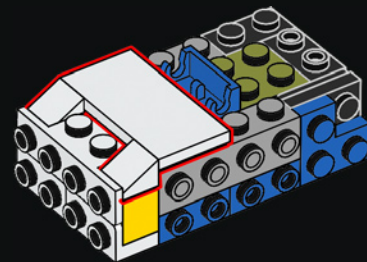
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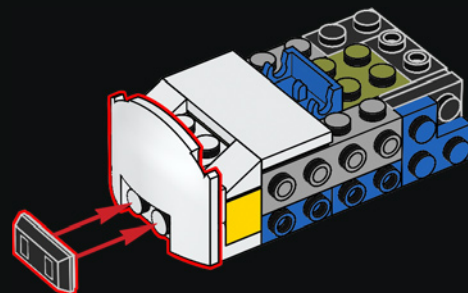
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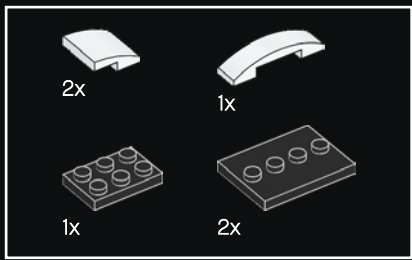


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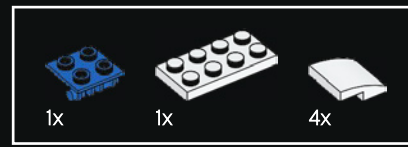
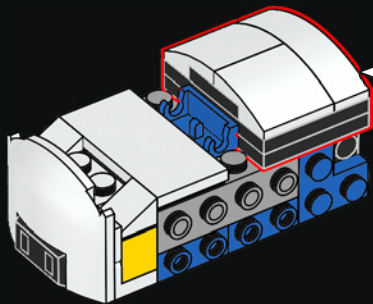
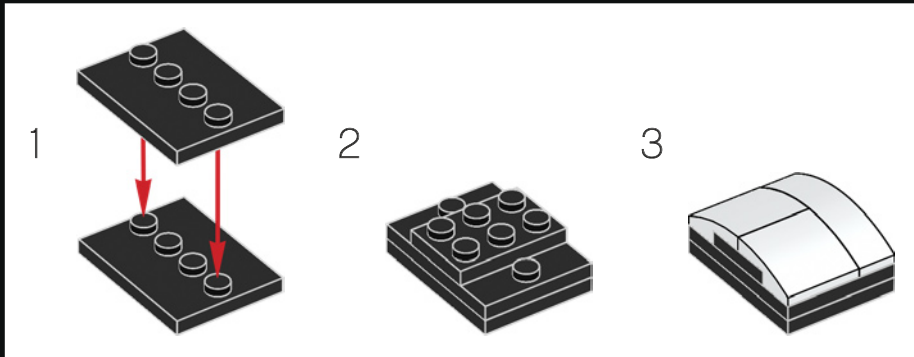


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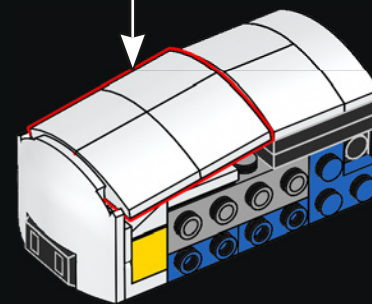
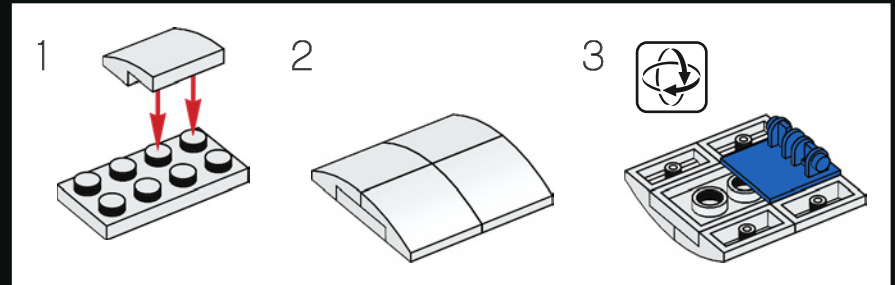


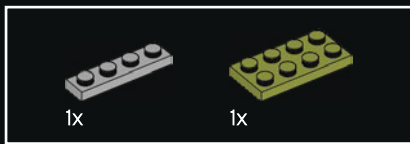


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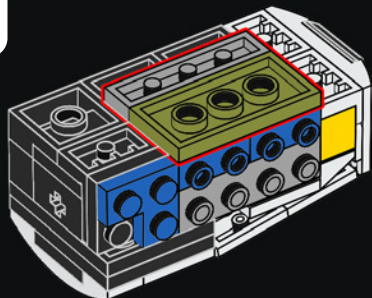


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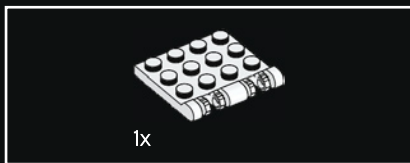
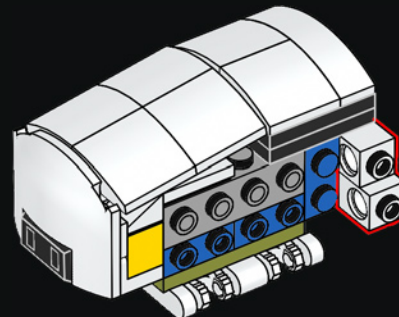




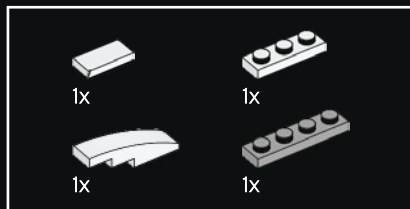
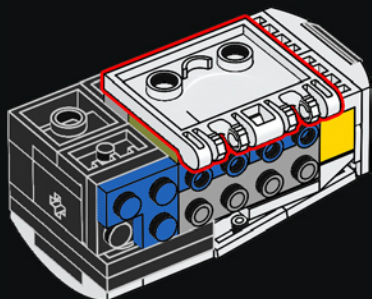
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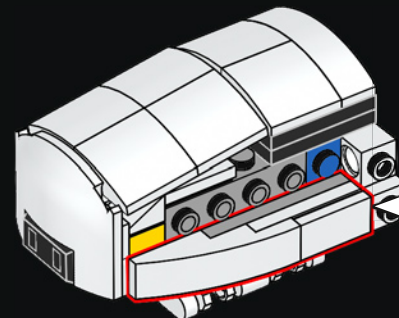
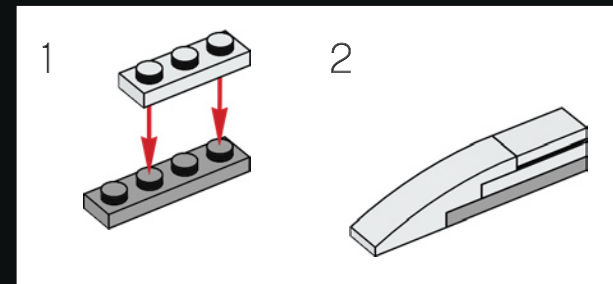
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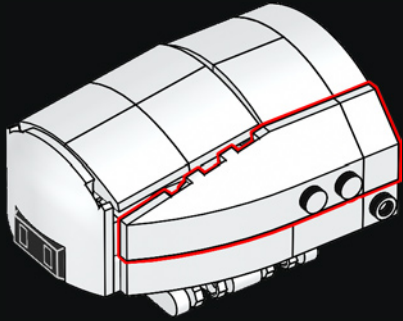


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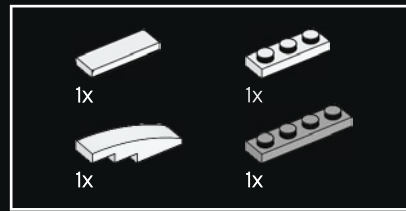
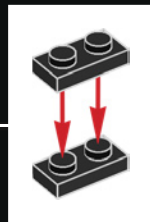
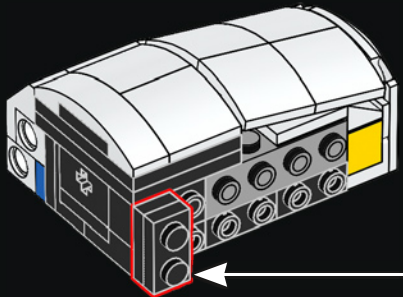




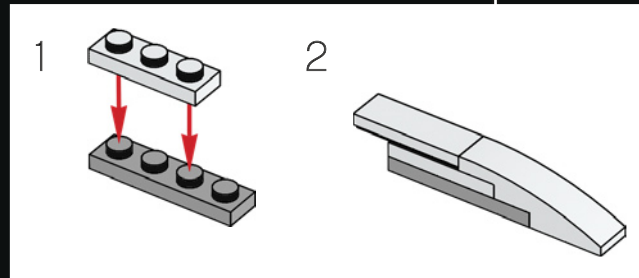
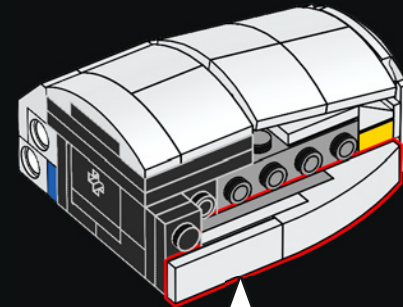
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439



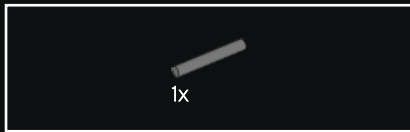
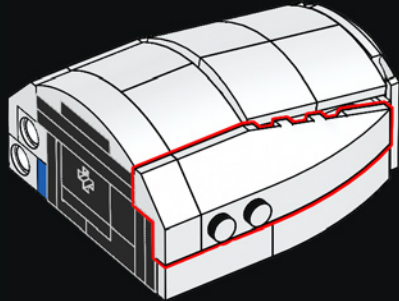
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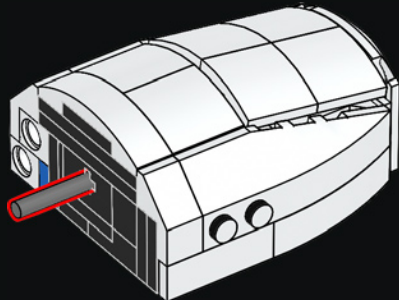




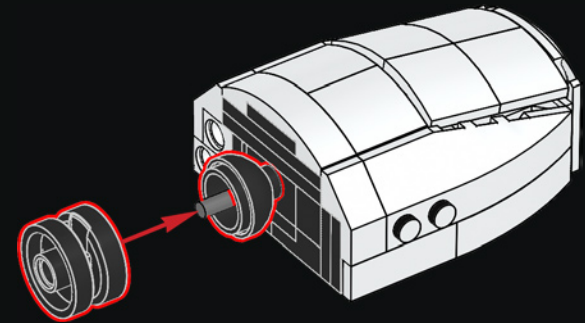
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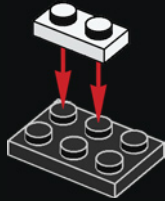


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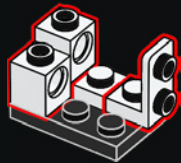




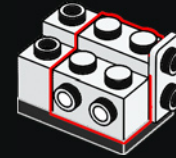
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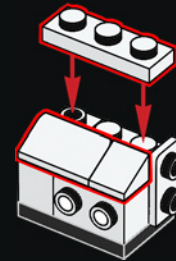
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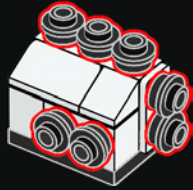


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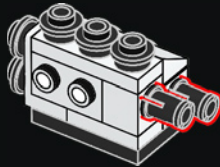




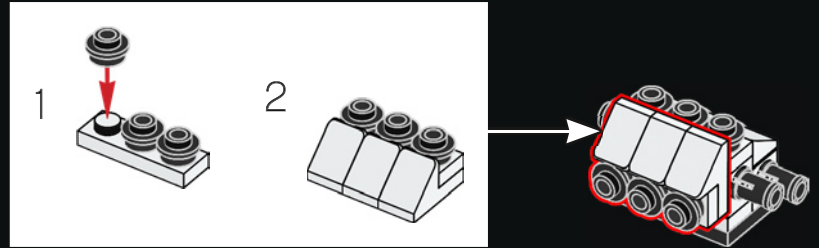
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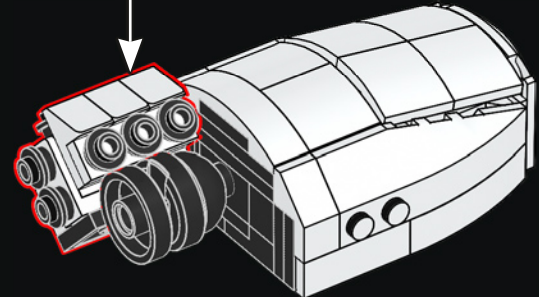
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450



451



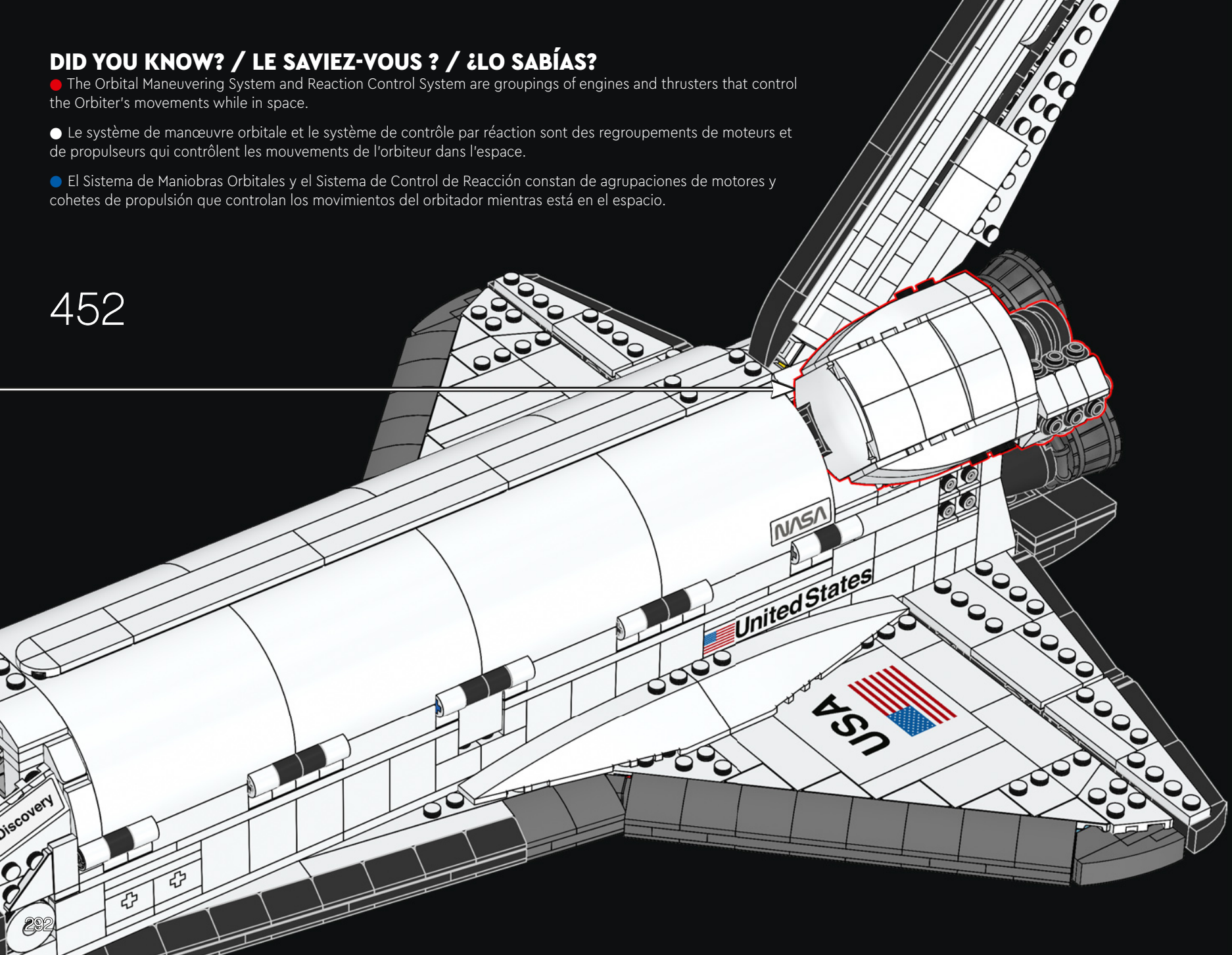
## DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

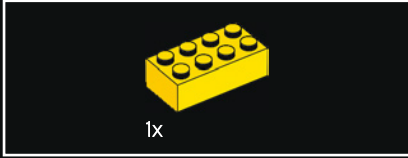
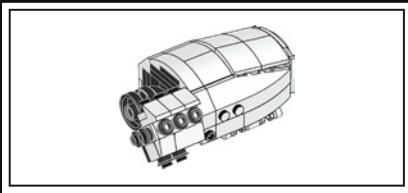
● The Orbital Maneuvering System and Reaction Control System are groupings of engines and thrusters that control the Orbiter's movements while in space.

● Le système de manœuvre orbitale et le système de contrôle par réaction sont des regroupements de moteurs et de propulseurs qui contrôlent les mouvements de l'orbiteur dans l'espace.

● El Sistema de Maniobras Orbitales y el Sistema de Control de Reacción constan de agrupaciones de motores y cohetes de propulsión que controlan los movimientos del orbitador mientras está en el espacio.

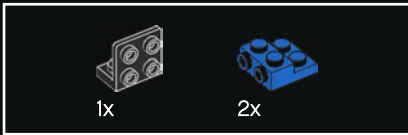
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1x

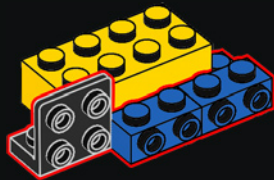
453



1x

2x

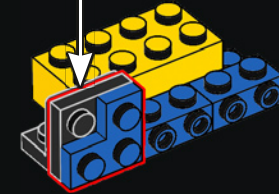
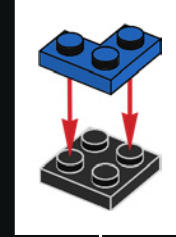
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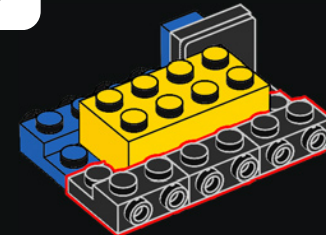
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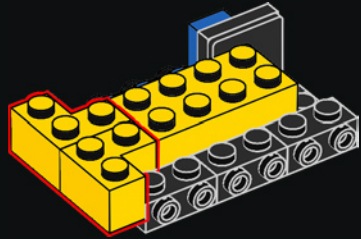
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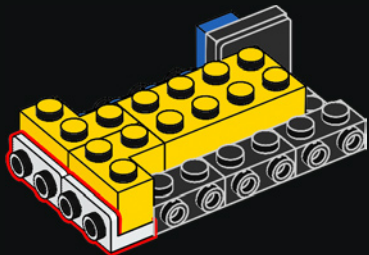




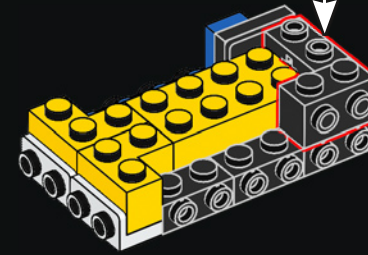
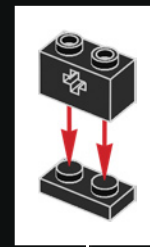
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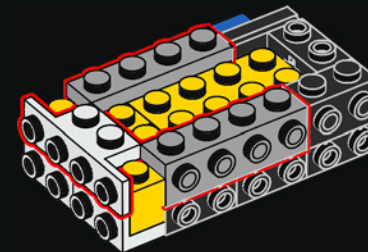
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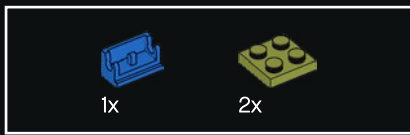


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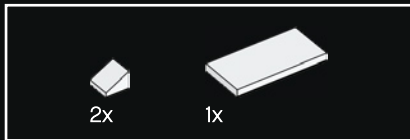
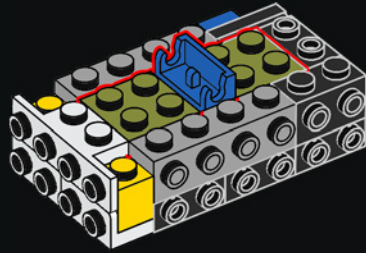


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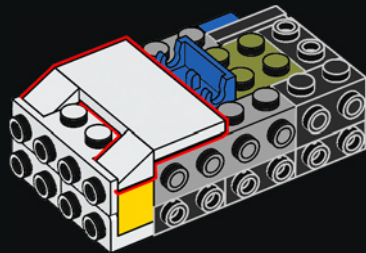




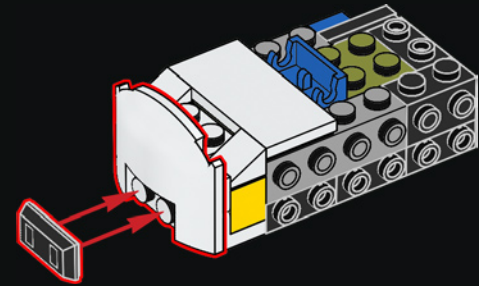
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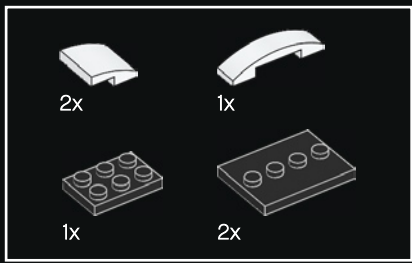


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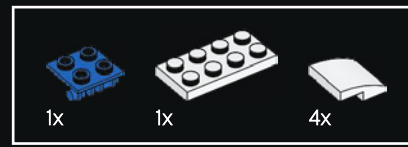
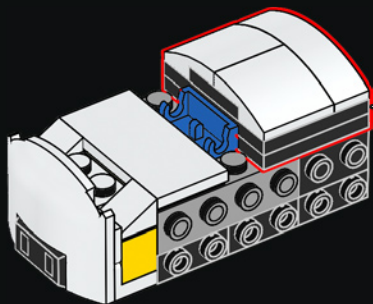
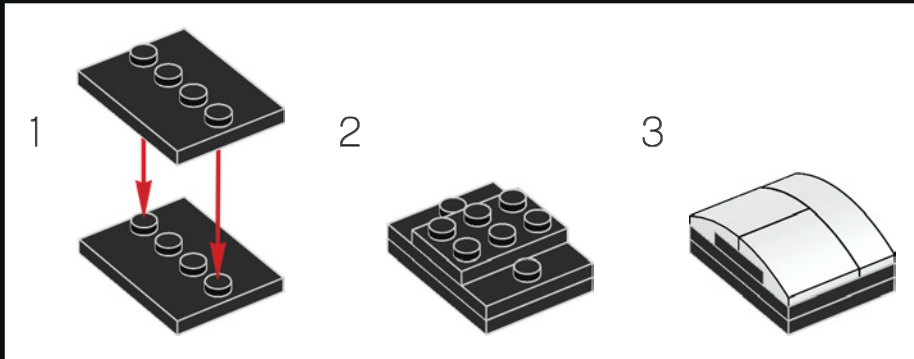


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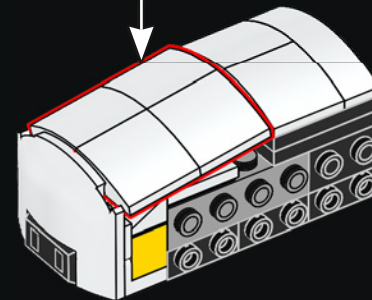
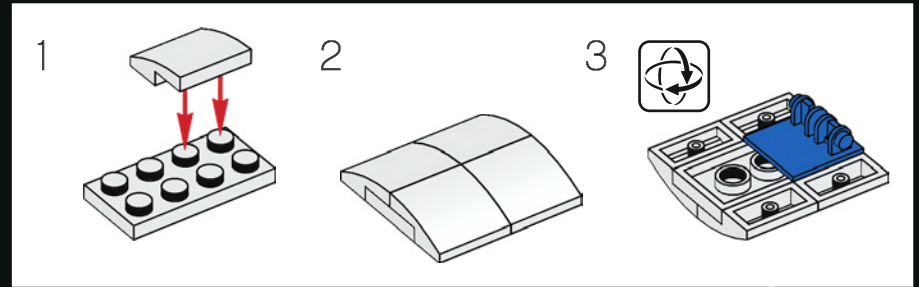




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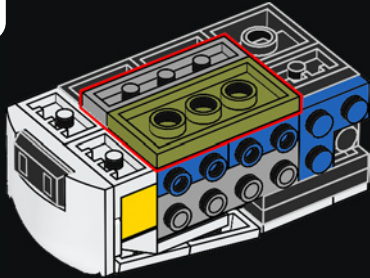
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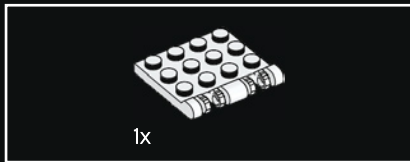
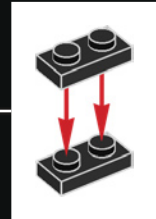
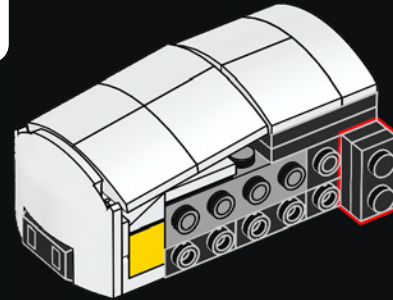




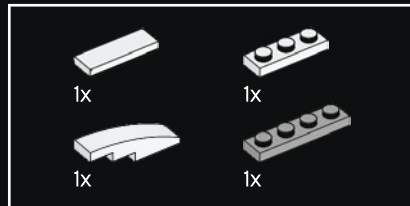
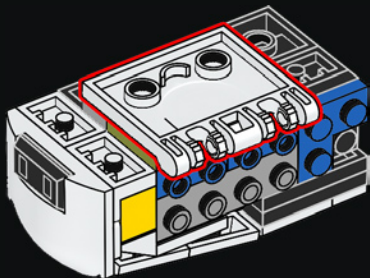
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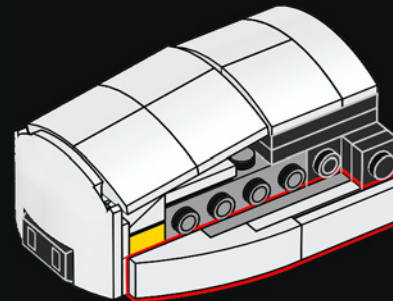
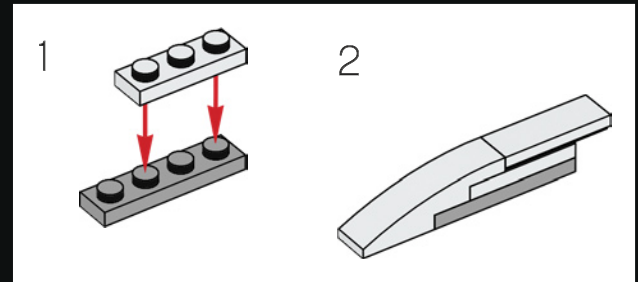
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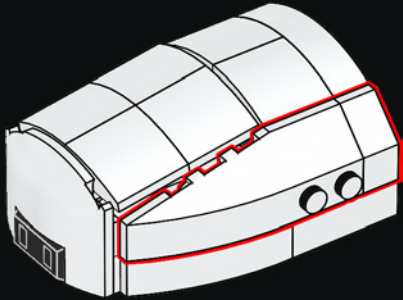


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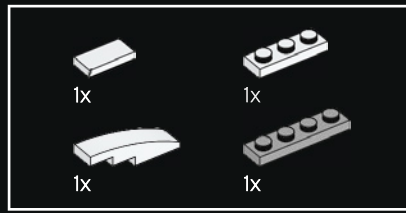
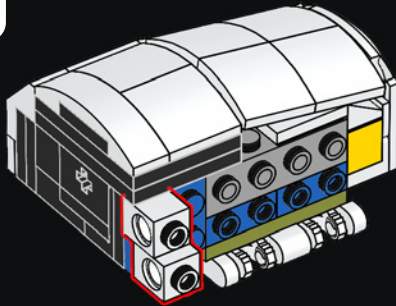




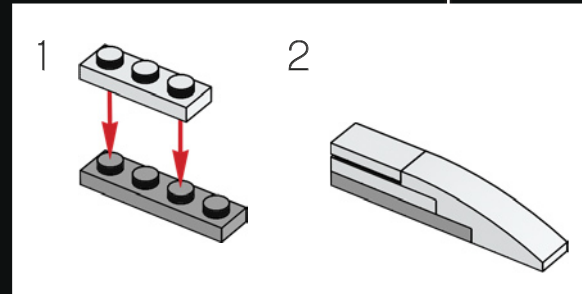
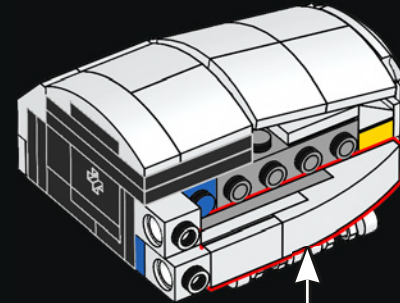
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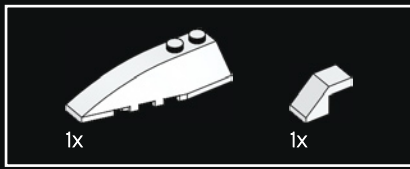


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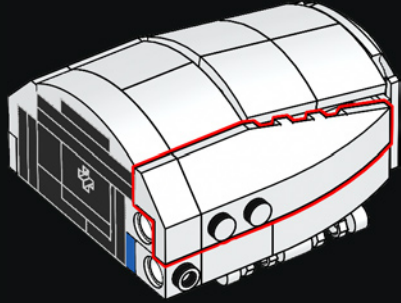


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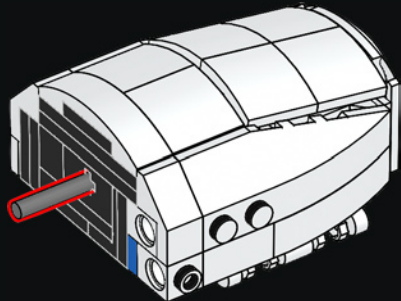




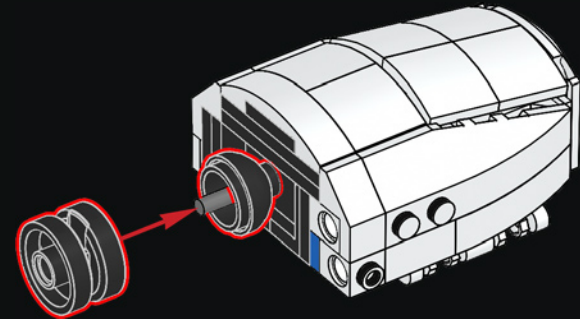
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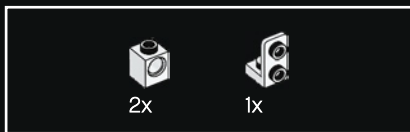
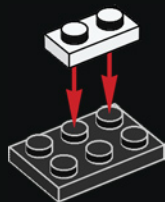


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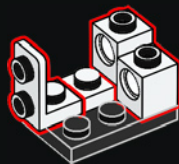




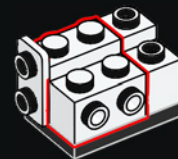
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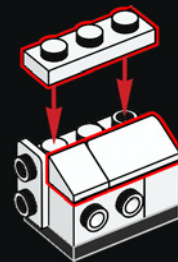
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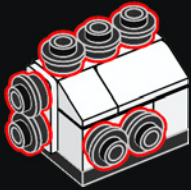


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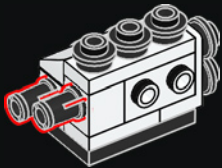




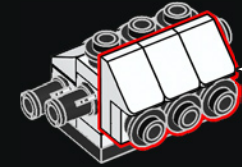
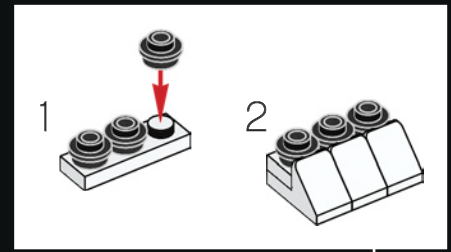
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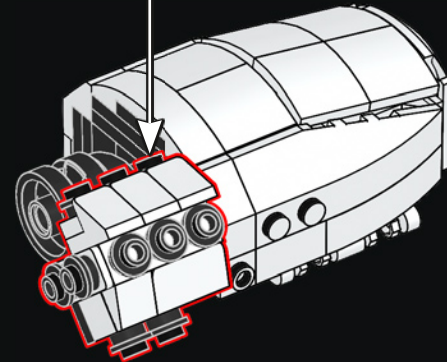
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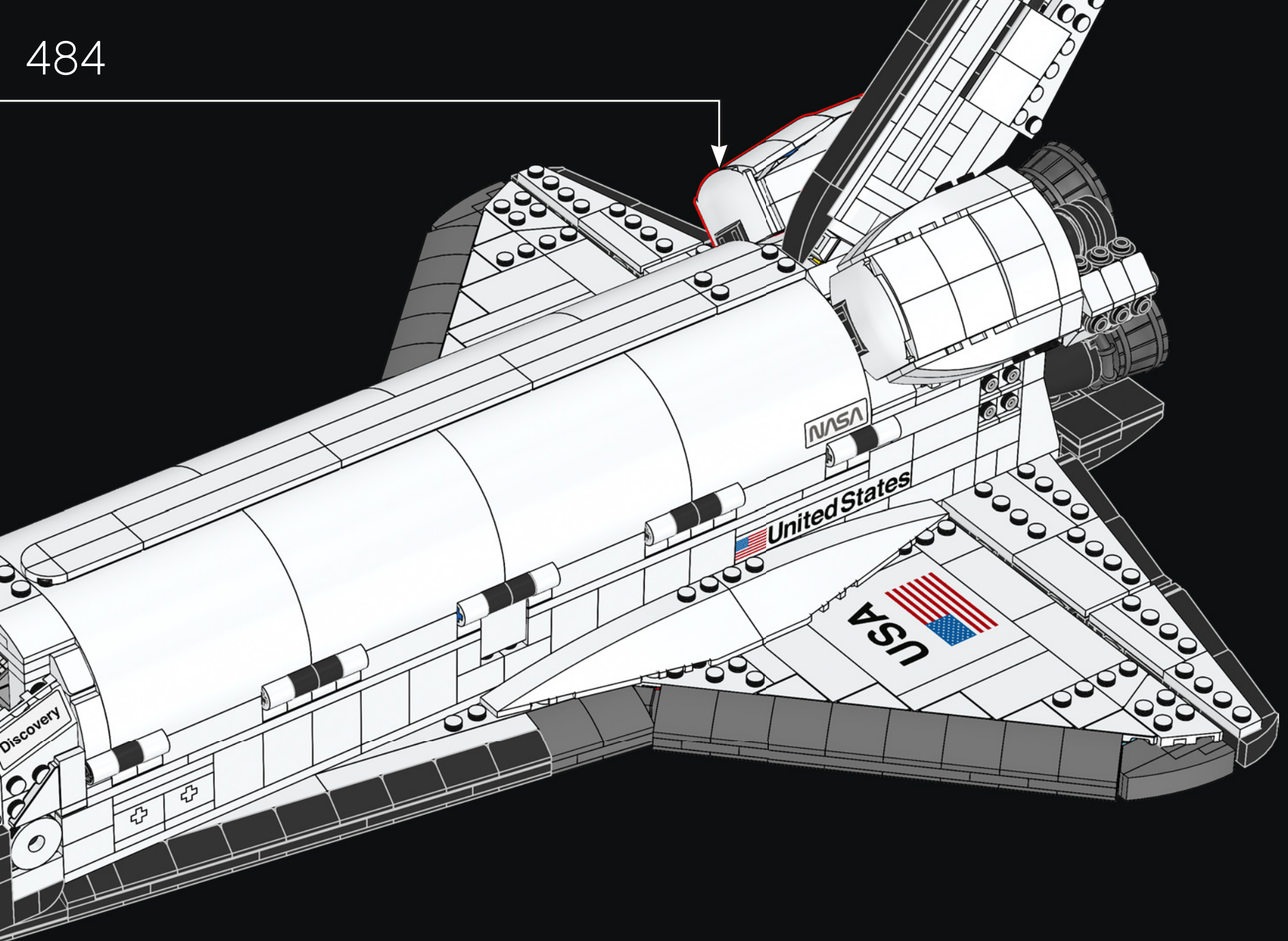


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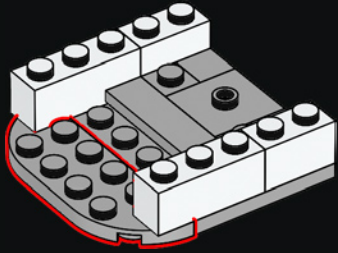




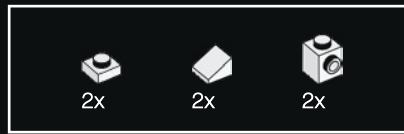
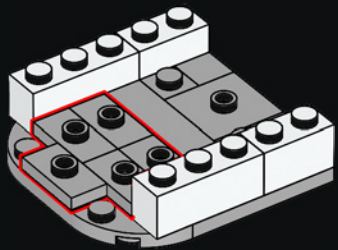




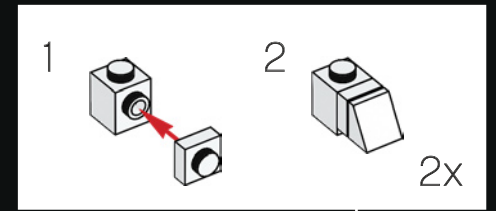
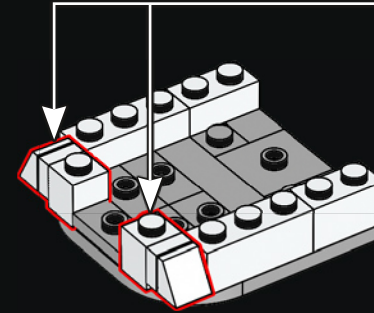
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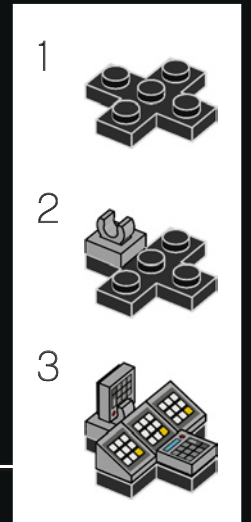
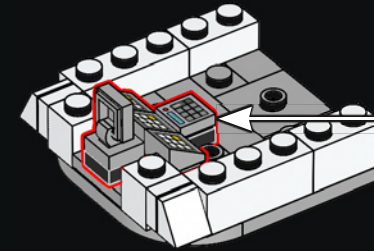
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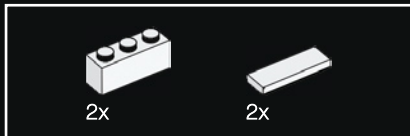
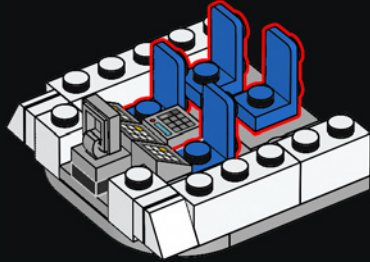
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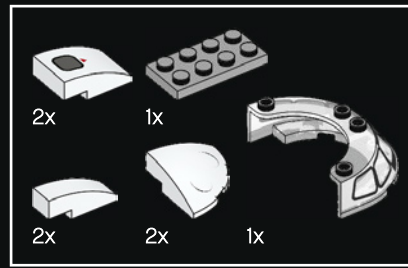
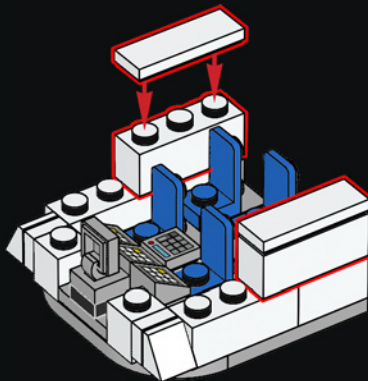




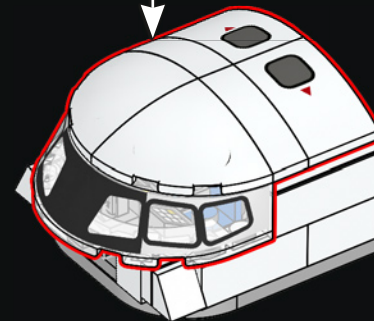
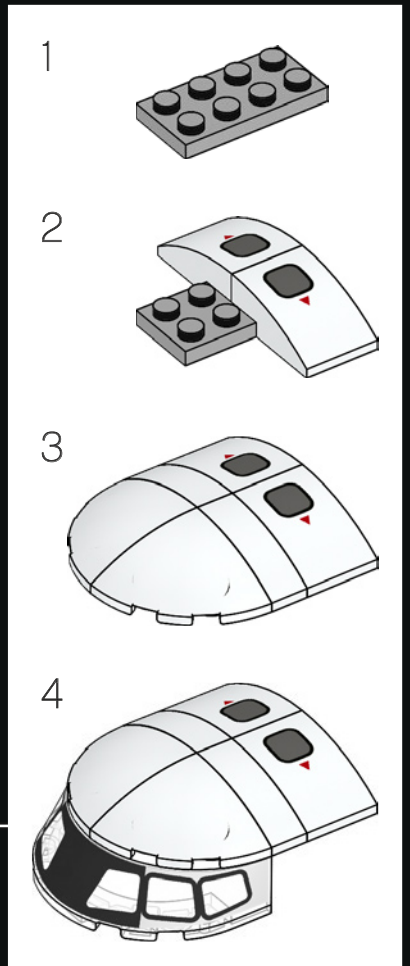
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493



494



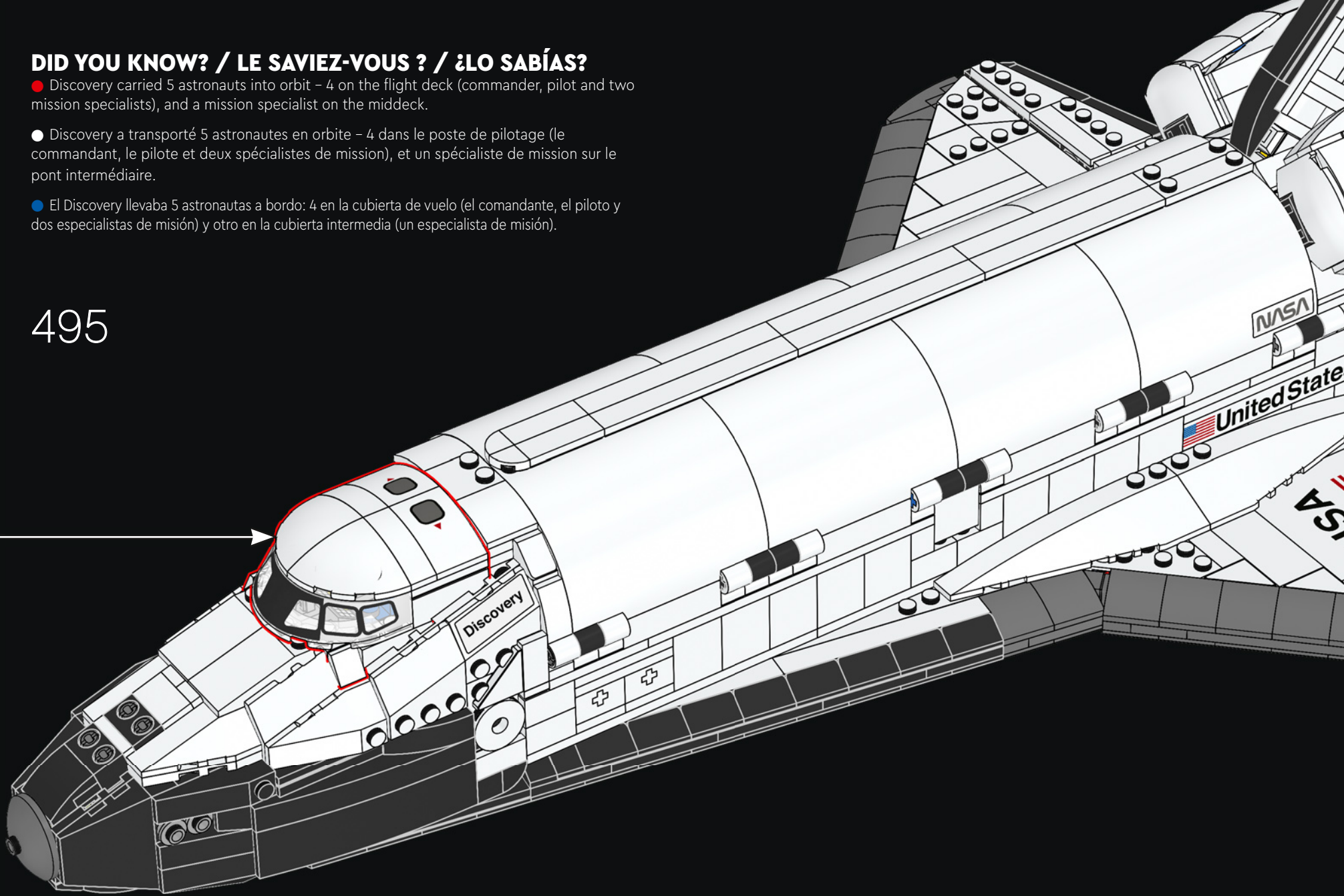
## DID YOU KNOW? / LE SAVIEZ-VOUS ? / ¿LO SABÍAS?

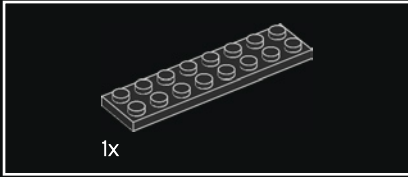
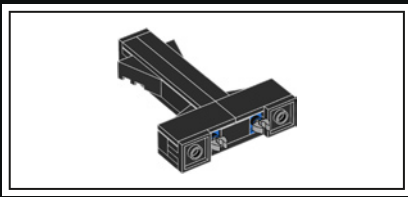
● Discovery carried 5 astronauts into orbit – 4 on the flight deck (commander, pilot and two mission specialists), and a mission specialist on the middeck.

● Discovery a transporté 5 astronautes en orbite – 4 dans le poste de pilotage (le commandant, le pilote et deux spécialistes de mission), et un spécialiste de mission sur le pont intermédiaire.

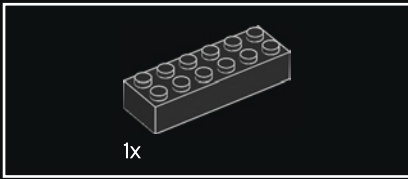
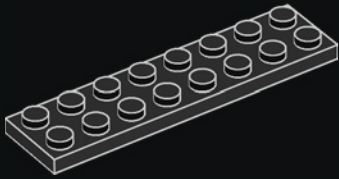
● El Discovery llevaba 5 astronautas a bordo: 4 en la cubierta de vuelo (el comandante, el piloto y dos especialistas de misión) y otro en la cubierta intermedia (un especialista de misión).

495

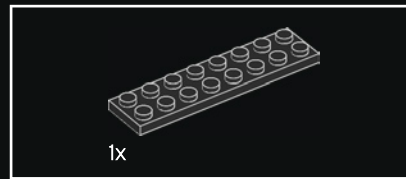
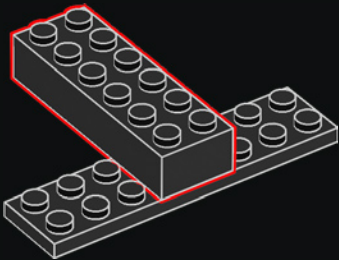




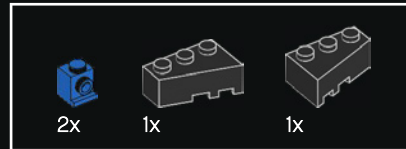
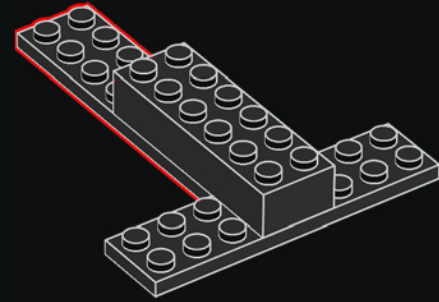
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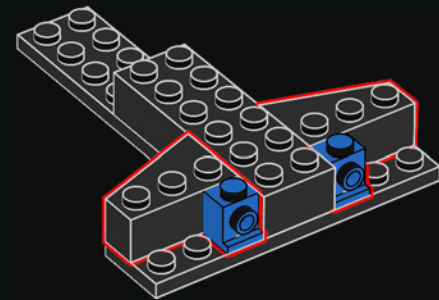
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498



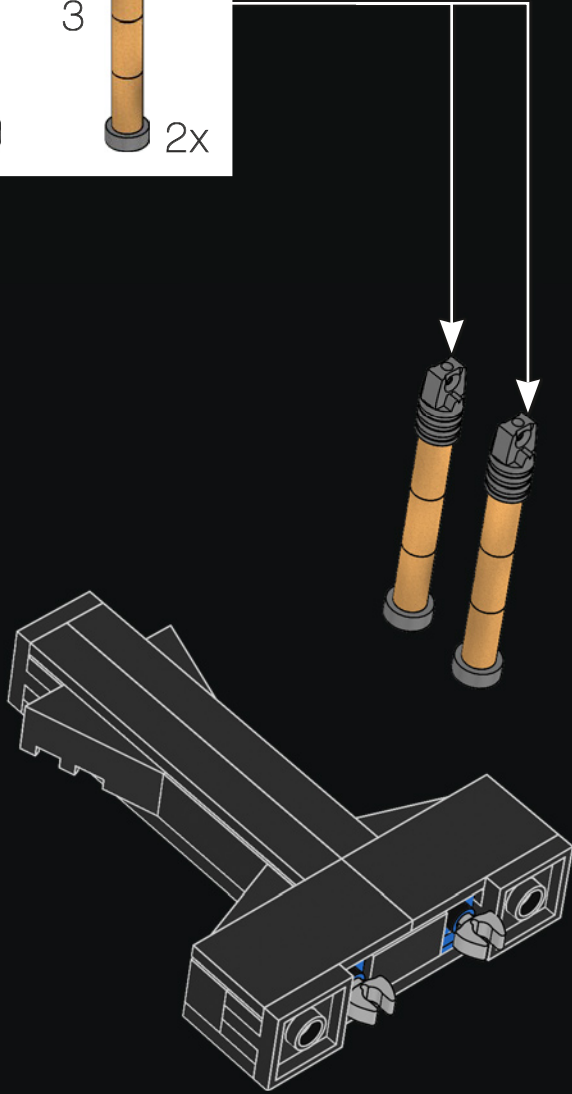
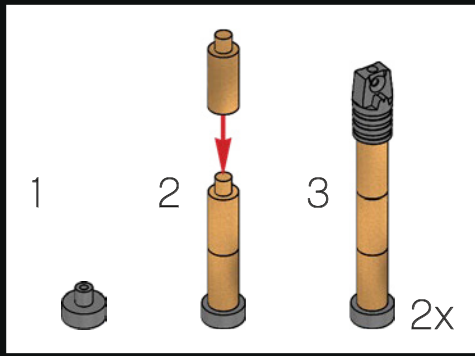
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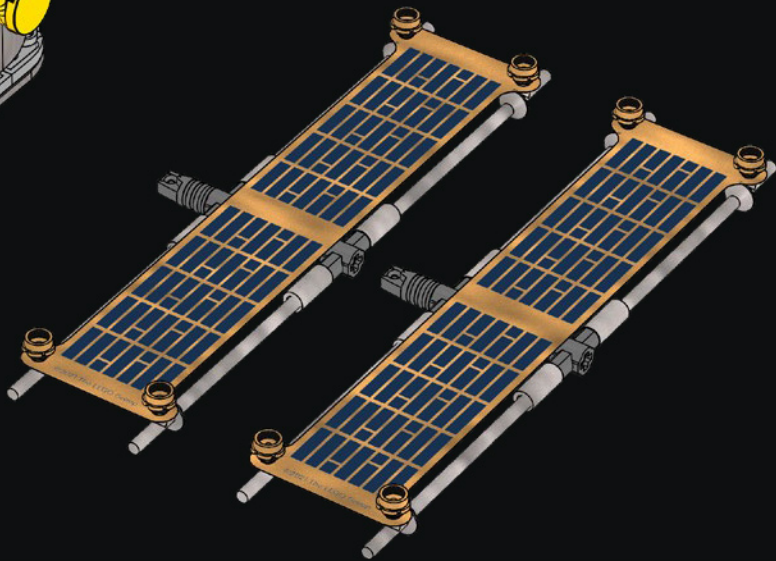
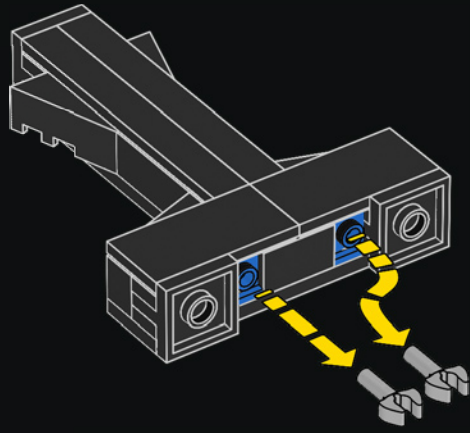
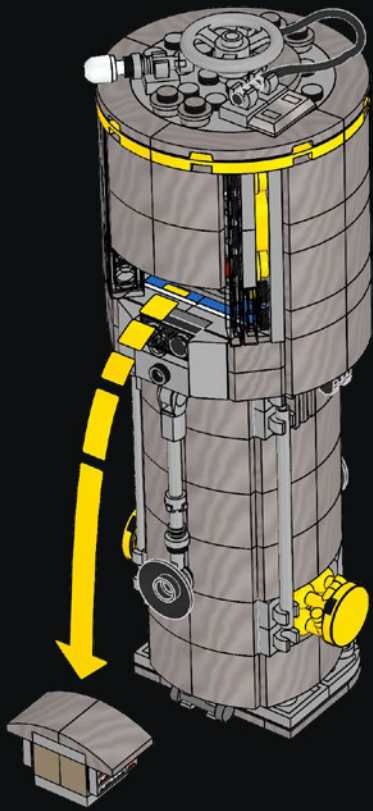


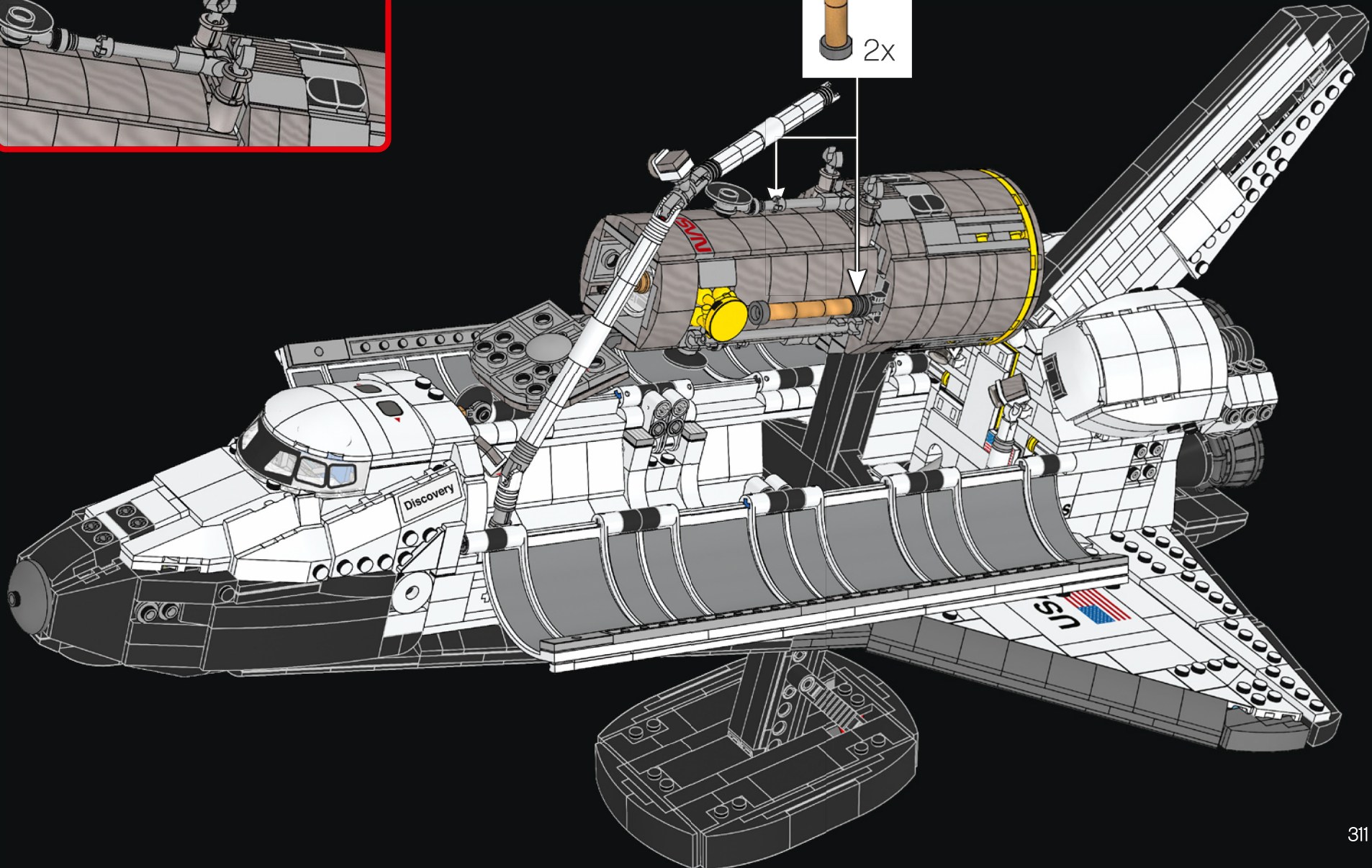
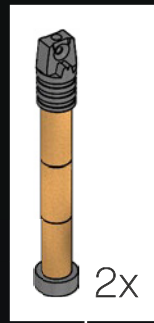
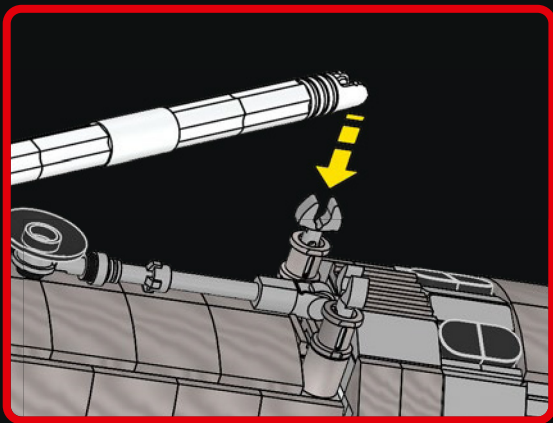


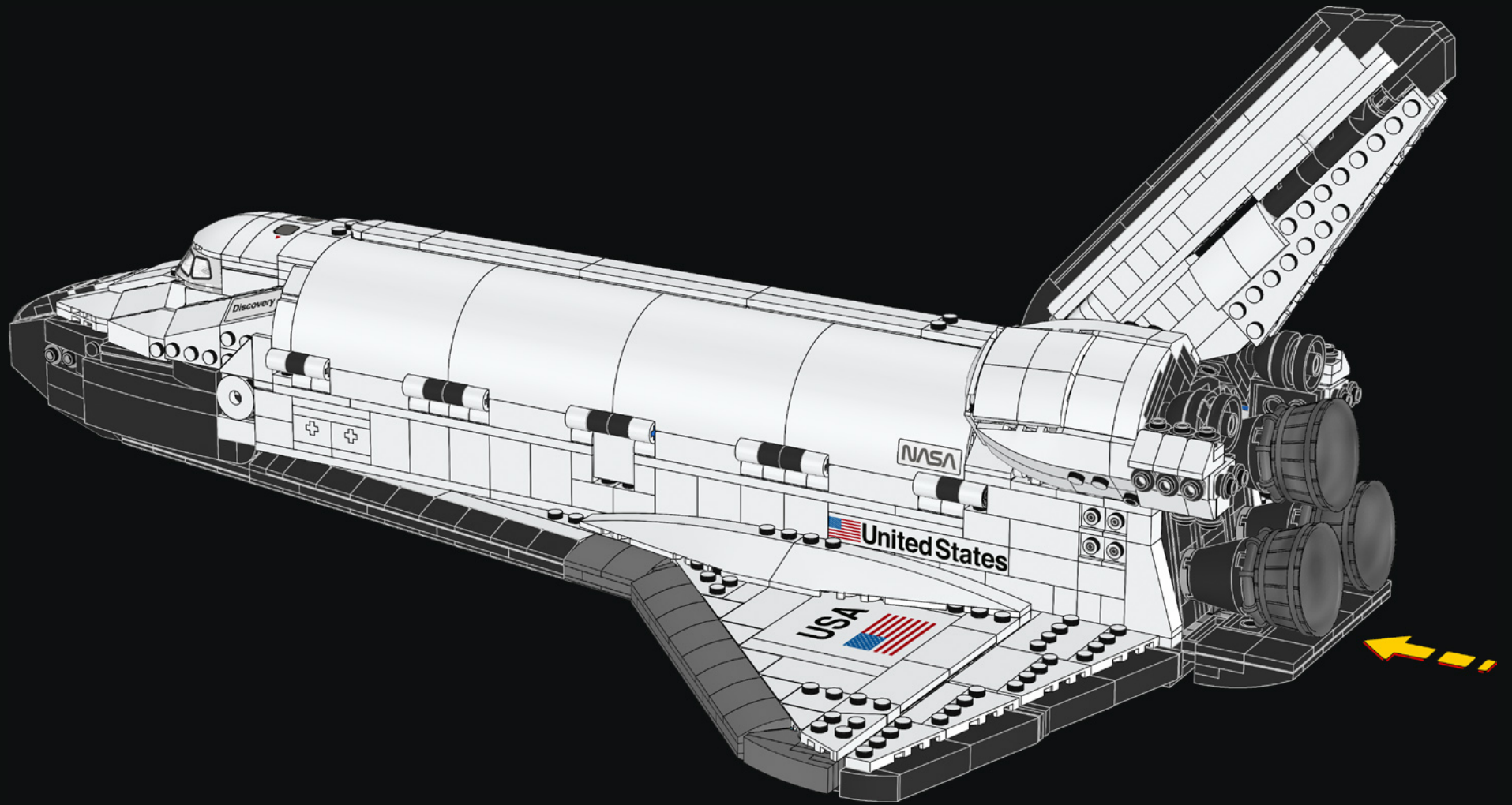


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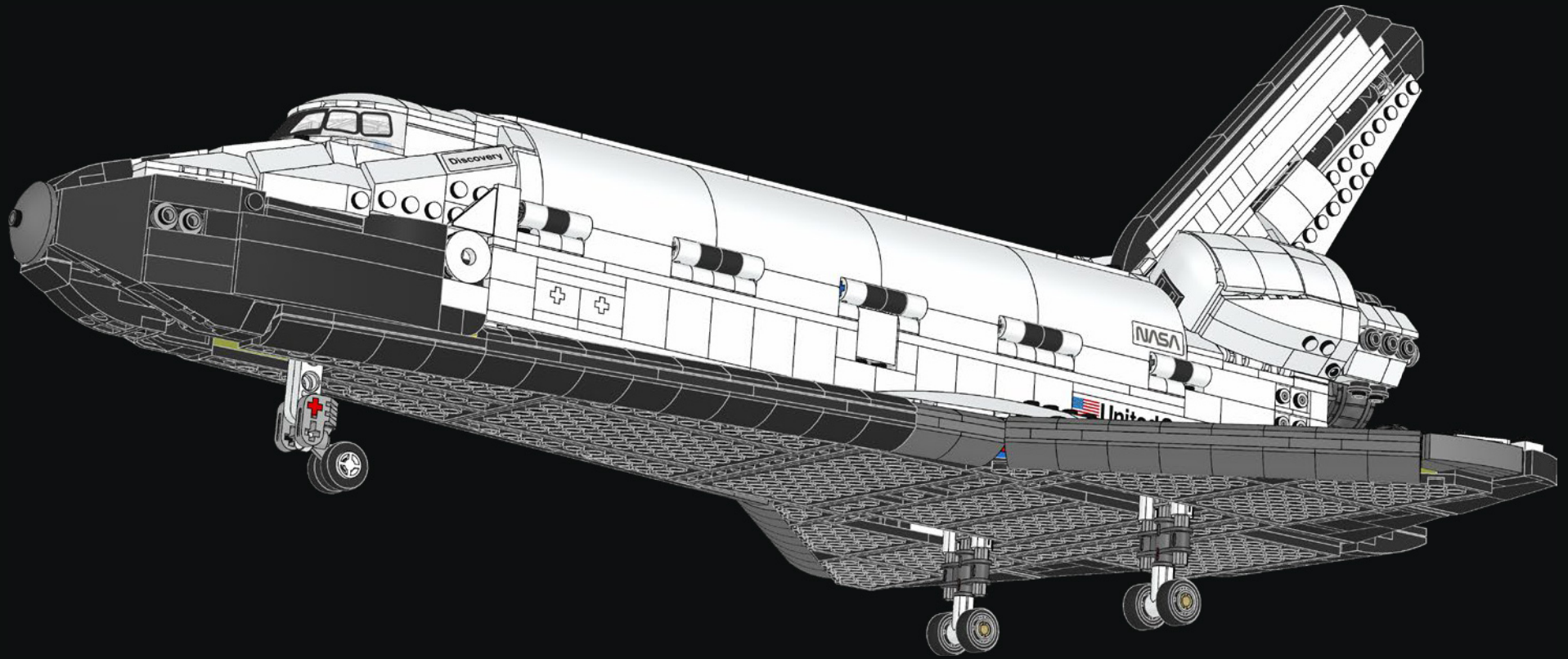


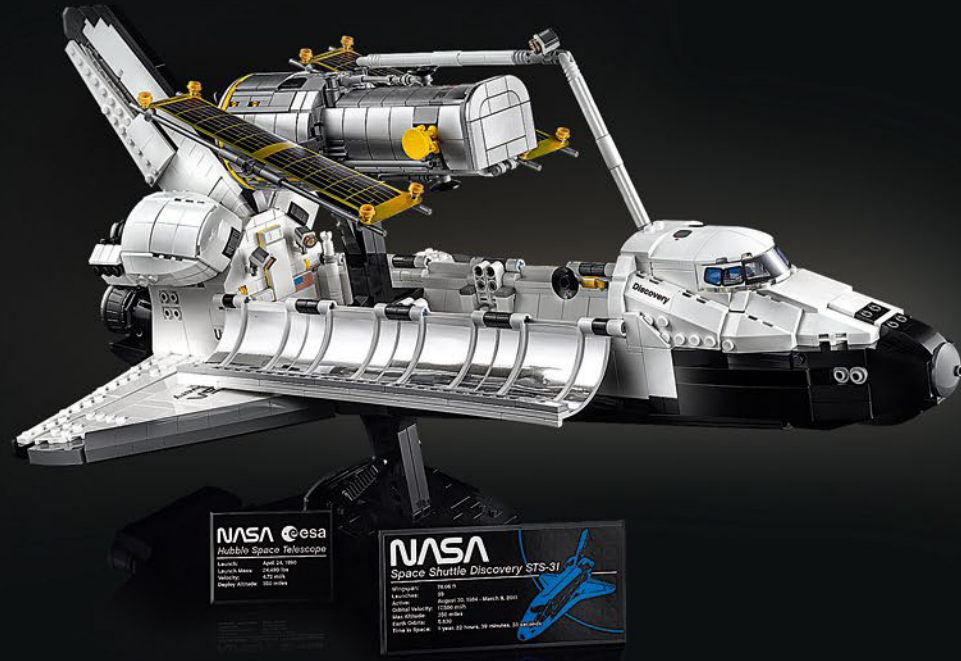














# FEEDBACK AND WIN



## FEEDBACK AND WIN

Your feedback will help shape the future development of this product series.

Please visit:

## FEEDBACK UND GEWINNEN

Dein Feedback trägt zur Weiterentwicklung dieser Produktreihe bei.

Geh auf:

## COMMENTEZ ET GAGNEZ

Vos commentaires nous aideront à concevoir les futurs produits de cette gamme.

Rendez-vous sur :

## COMENTA Y GANA

Tu opinión nos ayudará a dar forma al desarrollo de esta serie de productos en el futuro.

Visita:

## 反馈有奖

您的反馈将有助于我们在今后改进本系列产品。

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[LEGO.com/productfeedback](https://www.lego.com/productfeedback)

By completing, you will automatically enter a drawing to win a LEGO® set.

Terms & Conditions apply.

Durch Ausfüllen nimmst du automatisch an der Verlosung eines LEGO® Preises teil.

Es gelten die Teilnahmebedingungen.

En envoyant vos commentaires, vous serez automatiquement inscrit(e) à un tirage au sort qui vous permettra de remporter un prix LEGO®.

Offre soumise à conditions.

Al contestar, participarás automáticamente en el sorteo y podrás ganar un set LEGO®.

Sujeto a Términos y Condiciones.

完成我们的反馈调查，即可自动进入抽奖环节，赢取乐高®套装。

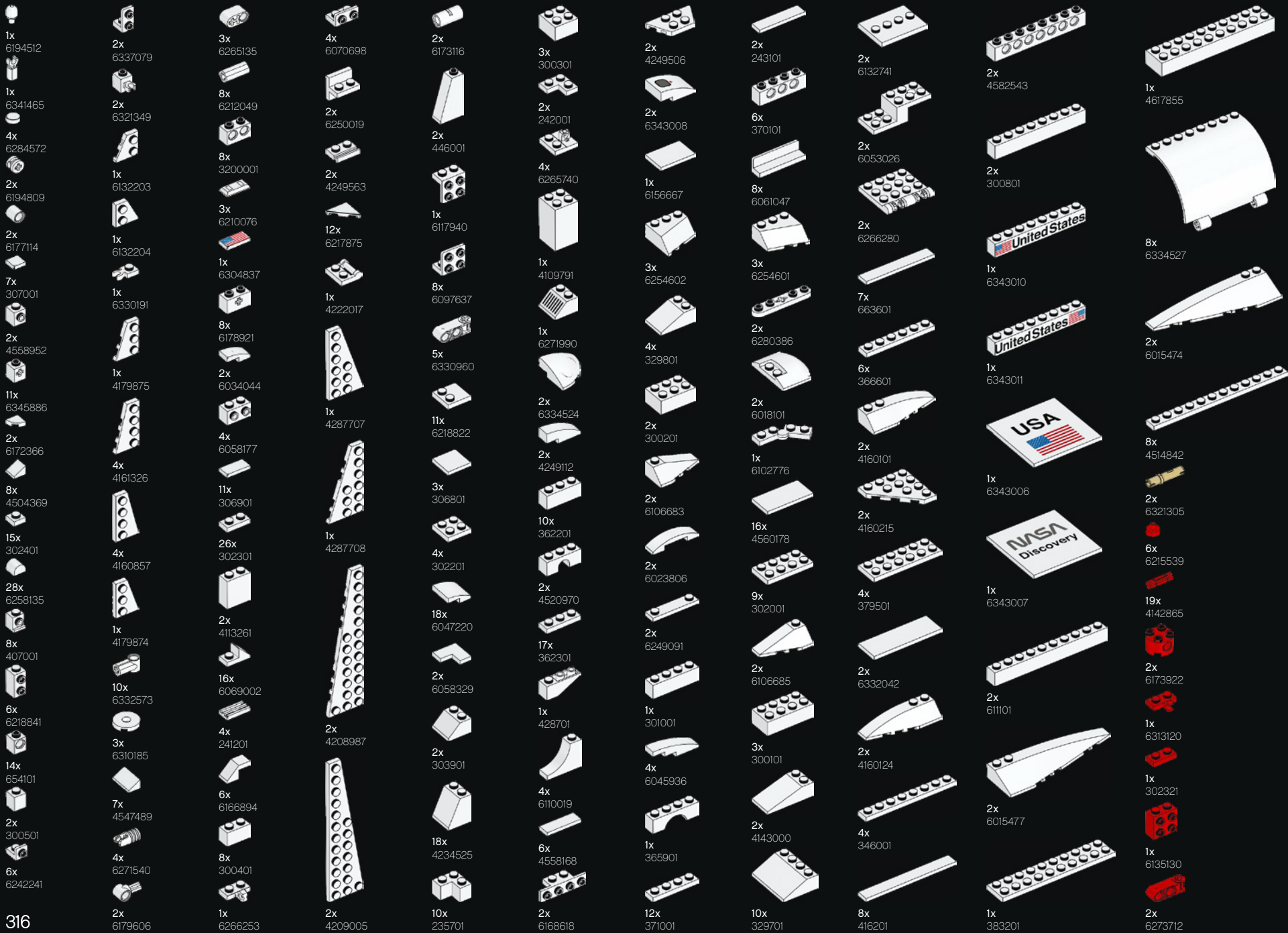
适用《条款和条件》。

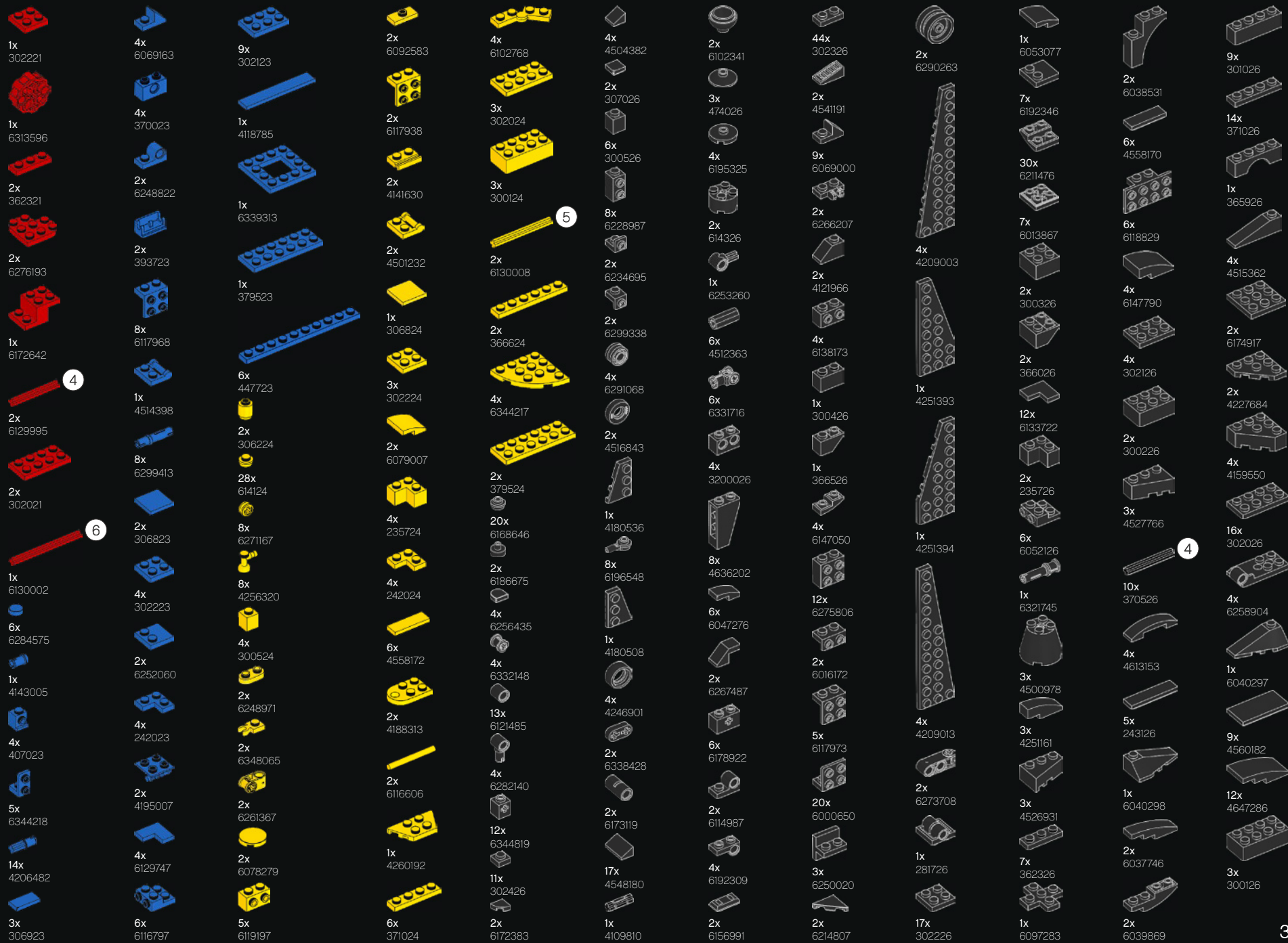
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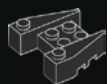


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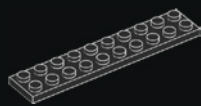
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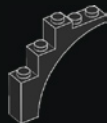
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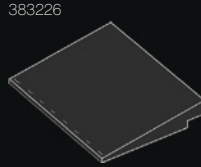
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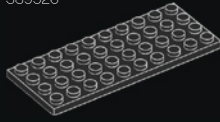
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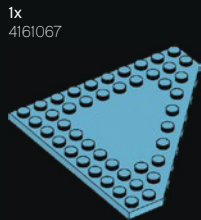
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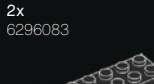
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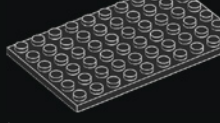
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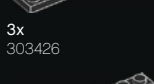


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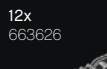


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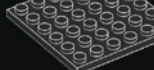


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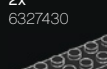


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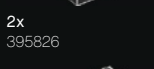


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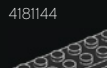


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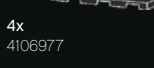


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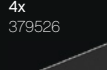


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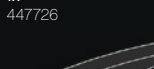


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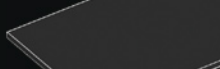
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