



fischertechnik 

PROFI

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157724 - Printed in Germany - Technische Änderungen vorbehalten - Subject to technical modifications

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PROFI

Bauanleitung
Assembly instruction
Instructions de montage
Bouwhandleiding
Instrucciones de construcción
Manual de montagem
Istruzioni di montaggio
Инструкция по сборке
安装说明书



Solar Power

4 MODELS

Solar Power

4 MODELS



■ Mit dem fischertechnik eLearning-Portal geben wir dir die Möglichkeit, noch mehr Hintergrundwissen zum Thema des Baukastens zu erhalten. Über die Eingabe des eLearning-Codes bekommst du Zugang zu didaktischen Begleitinformationen mit spannenden Versuchen, Animationen und Fotos. So macht Lernen noch mehr Spaß - garantiert! Über www.fischertechnik-elearning.com gelangst du direkt zum eLearning-Portal. Einfach auf den entsprechenden Baukasten klicken und den folgenden Code eingeben: **ft85z8**

■ The fischertechnik eLearning portal gives you the possibility of obtaining additional background information on the subject of the construction set. After entering the eLearning code you receive access to additional educational information with interesting experiments, animations and photographs. This makes learning fun - for sure! The eLearning portal can be reached directly at www.fischertechnik-elearning.com. Simply click on the construction set in question and enter the following code: **ft85z8**

■ Le portail d'apprentissage en ligne appelé eLearning de fischertechnik vous confère la possibilité d'obtenir encore plus d'informations complémentaires spécifiques aux boîtes de construction. Il suffit de saisir le code eLearning pour accéder aux informations d'accompagnement didactiques assorties d'essais captivants, d'animations et de photos. Qu'attendez-vous pour apprendre davantage en s'amusant ?

Vous accédez directement au portail de l'apprentissage en ligne en cliquant sur www.fischertechnik-elearning.com. Cliquez sur la boîte de construction qui vous intéresse et saisissez le code : **ft85z8**

■ Met het fischertechnik eLearning-portaal bieden wij jou de mogelijkheid om nog meer achtergrondkennis over het onderwerp van de bouwdoos op te doen. Door het invoeren van de eLearning-code krijg je toegang tot leerzame informatie met spannende testen, animaties en foto's. Zo is leren gegarandeerd nog leuker! Via www.fischertechnik-elearning.com ga je direct naar het eLearning-portaal. Klik simpelweg op de desbetreffende bouwdoos en voer de volgende code in: **ft85z8**

■ Con el portal eLearning de fischertechnik te ofrecemos la posibilidad de adquirir mayores conocimientos sobre el tema del kit de construcción. Introduciendo el código de eLearning obtendrás información didáctica adicional con interesantes experimentos, animaciones y fotos. Así, aprender será mucho más divertido. En www.fischertechnik-elearning.com accedes directamente al portal de eLearning. Solo debes hacer clic en el kit de construcción correspondiente e introducir el siguiente código: **ft85z8**

■ Com o portal eLearning da fischertechnik, oferecemos a você a possibilidade de obter ainda mais conhecimentos básicos sobre o tema dos módulos. Ao digitar o código de eLearning, você vai acessar informações didáticas adicionais, com experimentos empolgantes, animações e fotos. Assim, aprender se torna muito mais divertido! Através do site www.fischertechnik-elearning.com você acessa diretamente o portal eLearning. Basta clicar no módulo correspondente e inserir o seguinte código: **ft85z8**

■ Con il portale di e-learning di fischertechnik hai la possibilità di approfondire ulteriormente gli argomenti del set di costruzione. Immettendo il codice per l'e-learning, potrai accedere alle informazioni didattiche con fantastici esperimenti, animazioni e foto. Imparare sarà ancora più divertente, te lo garantiamo! Per accedere al portale di e-learning basta visitare la pagina www.fischertechnik-elearning.com. Quindi fai clic sul set di costruzione corrispondente e immetti il seguente codice: **ft85z8**

■ Портал eLearning даёт тебе возможность получить ещё больше знаний по теме набора fischertechnik. Введи код eLearning, и ты получишь доступ к обучающей сопроводительной информации с увлекательными опытами, анимациями и фотографиями. Так обучение доставит ещё больше удовольствия - мы гарантируем это! Через www.fischertechnik-elearning.com ты попадёшь прямо на портал eLearning. Просто щёлкни по соответствующему набору и введи следующий код: **ft85z8**

■ 通过慧鱼 (fischertechnik) 网络学习门户，你能够获取更多与标准构件相关的背景知识。输入网络学习代码你就能获得指导性的安装信息，且配有引人入胜的实验、动画和图片。所以保证学起来更有兴趣！通过 www.fischertechnik-elearning.com 直接进入网络学习门户。点击相应的标准构件，并输入以下代码：**ft85z8**

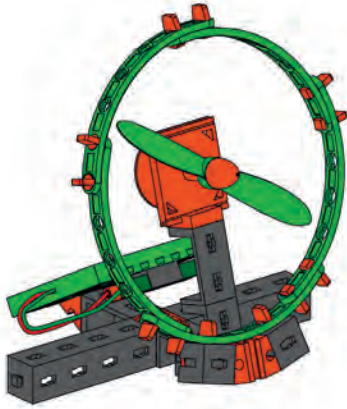
Inhalt
Contents
Contenu

Inhoud
Contenido
Conteúdo

Contenuto
Содержание
目录

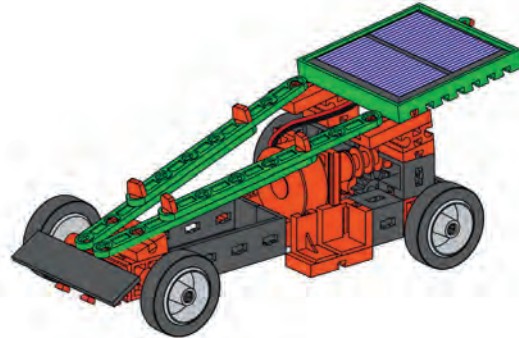
Einzelteilübersicht / Spare parts list / Liste des pièces détachées / Onderdelenoverzicht / Lista da piezas / Resumo de peça individual /
Singoli componenti / Перечень деталей / 零件概览 2

Montagetips / Tips for assembly / Tuyaux pour le montage / Montagetips / Consejos para el montaje / "Dicas" para montagem /
Consigli per il montaggio / Советы по сборке / 装配建议 3

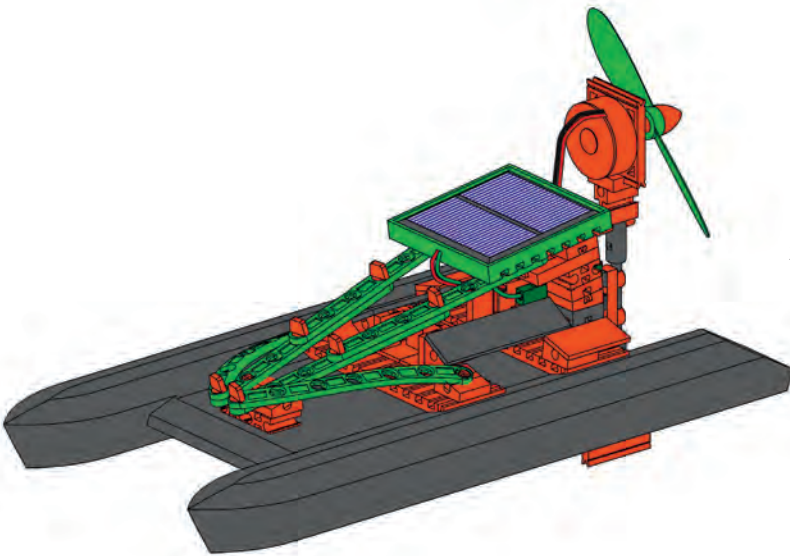


Ventilator / Ventilating fan / Ventilateur / Ventilator / Ventilador /
Ventilador / Ventola / Вентилятор / 风扇 4

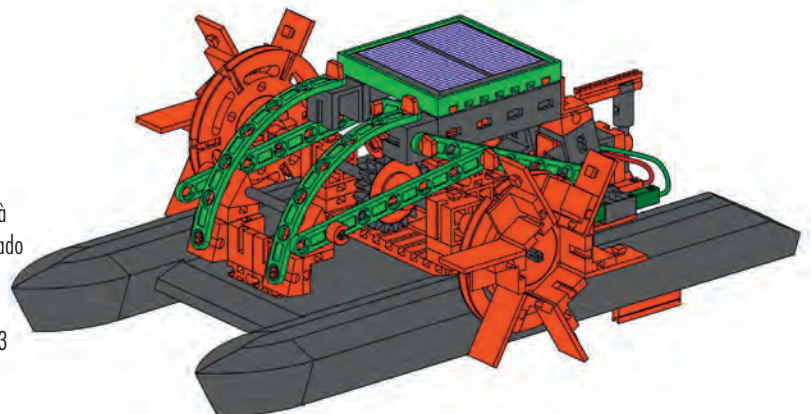
Solarfahrzeug / Solar vehicle / Véhicule solaire / Voertuig op zonne-energie /
Vehículo solar / Veículo solar / Veicolo ad energia solare / Электромобиль
с солнечными батареями / 太阳能电动车 6



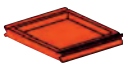







Solarkatamaran / Solar catamaran / Catamaran solaire / Catamaran op
zonne-energie / Catamarán solar / Catamarã solar / Catamarano solare /
Катамаран с солнечными батареями /
太阳能双体船 9



Solarbetriebenes Schaufelradboot / Solar-powered paddle wheel boat / Bateau à
aubes solaire / Raderboot op zonne-energie / Bote de rodas de paletas impulsado
por energia solar / Barco de roda de pá solar / Barca con ruota a pale a energia
solare / Колёсный катер на солнечных батареях /
太阳能驱动的明轮船 13
















Einzelteilübersicht
Spare parts list
Liste des pièces détachées

| | |
|---|---------------|
|  | 31 010 2 x |
|  | 31 013 1 x |
|  | 31 019 2 x |
|  | 31 021 1 x |
|  | 31 058 3 x |
|  | 31 061 1 x |
|  | 31 336 2 x |
|  | 31 337 2 x |
|  | 31 848 6 x |
|  | 31 915 1 x |
|  | 31 981 6 x |
|  | 31 982 4 x |
|  | 31 983 2 x |

Onderdelenoverzicht
Lista da piezas
Resumo de peça individual

| | |
|---|----------------|
|  | 32 064 4 x |
|  | 32 071 2 x |
|  | 32 859 2 x |
|  | 34 995 4 x |
|  | 35 031 3 x |
|  | 35 049 3 x |
|  | 35 064 1 x |
|  | 35 065 1 x |
|  | 35 405 1 x |
|  | 35 945 1 x |
|  | 35 980 2 x |
|  | 36 227 2 x |
|  | 36 323 12 x |

| | |
|--|---------------|
|  | 36 334 2 x |
|  | 36 443 1 x |
|  | 36 920 2 x |
|  | 36 921 2 x |
|  | 36 922 5 x |
|  | 37 034 3 x |
|  | 37 237 5 x |
|  | 37 468 6 x |
|  | 37 527 1 x |
|  | 37 679 6 x |
|  | 37 681 1 x |
|  | 37 858 1 x |
|  | 38 216 1 x |

Singoli componenti
Перечень деталей
零件概览

| | |
|---|----------------|
|  | 38 240 18 x |
|  | 38 241 17 x |
|  | 38 423 4 x |
|  | 38 428 2 x |
|  | 133 008 2 x |
|  | 143 236 6 x |
|  | 146 535 4 x |
|  | 155 903 1 x |
|  | 156 108 1 x |
|  | 156 121 1 x |
|  | 156 494 1 x |
| | |
| | |

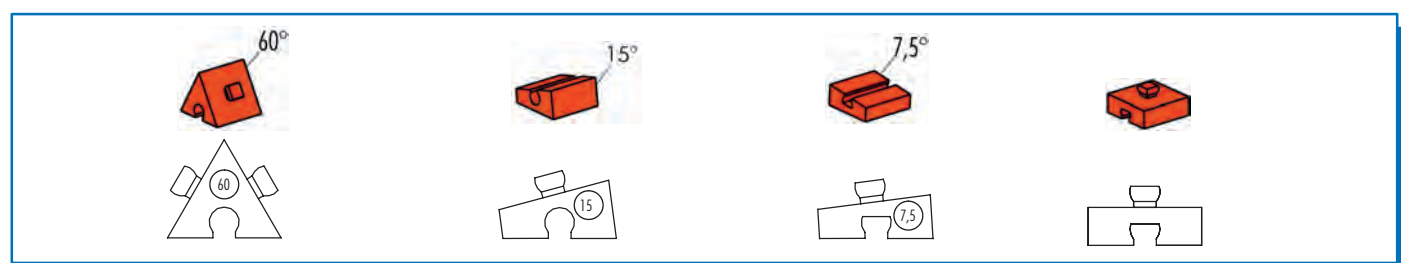
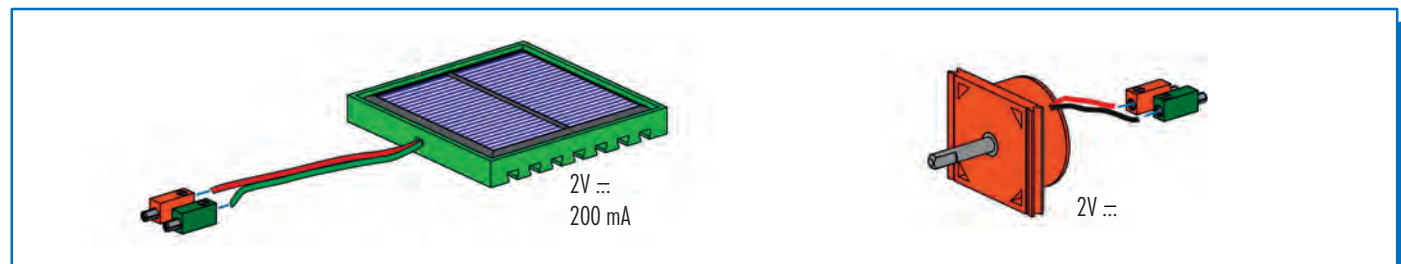
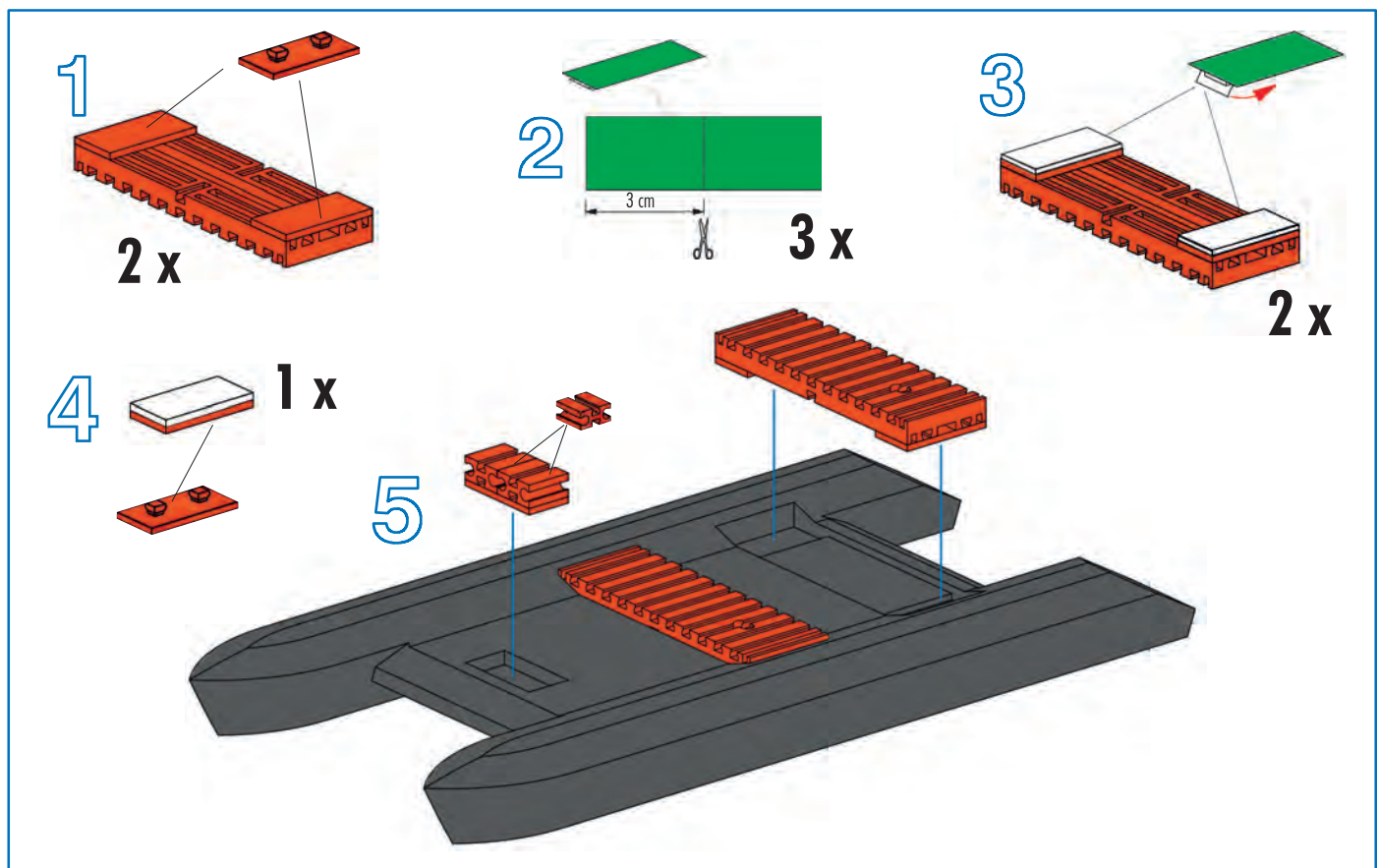
- Alle Einzelteile, insbesondere bewegliche Teile sind falls notwendig zu warten und zu reinigen.
- All components, especially moving parts, should be maintained and cleaned as necessary.
- Toutes les pièces détachées et en particulier les pièces mobiles, sont, si nécessaire, à entretenir et à nettoyer.
- Alle onderdelen, vooral de bewegende delen, kunnen, indien noodzakelijk, onderhouden en gereinigd worden.
- Es necesario limpiar y mantener en buen estado todas las diferentes piezas - especialmente las piezas móviles.

- Caso necessário, todas as peças individuais, especialmente peças móveis, tem que ser submetidas à manutenção e ser limpadas.
- Se necessario, tutti i singoli componenti, soprattutto le parti mobili, si devono eventualmente sottoporre a manutenzione e pulizia.
- Все детали, особенно подвижные, требуют ухода и чистки.
- 必要时应保养和清洁所有零件，尤指运动部件。

Montagetipps
Tips for assembly
Tuyaux pour le montage

Montagetips
Consejos para el montaje
"Dicas" para montagem

Consigli per il montaggio
Советы по сборке
装配建议

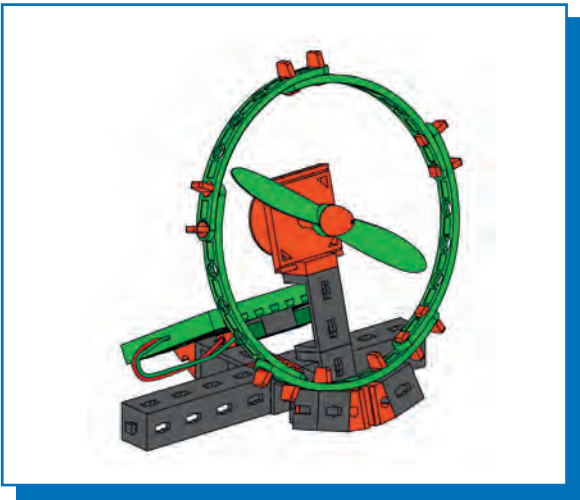


Sicherheitshinweise
Safety Information
Consignes de sécurité

Veiligheidsrichtlijnen
Indicaciones de seguridad
Observações sobre segurança

Informazioni per la sicurezza
Указания по технике безопасности
安全指南

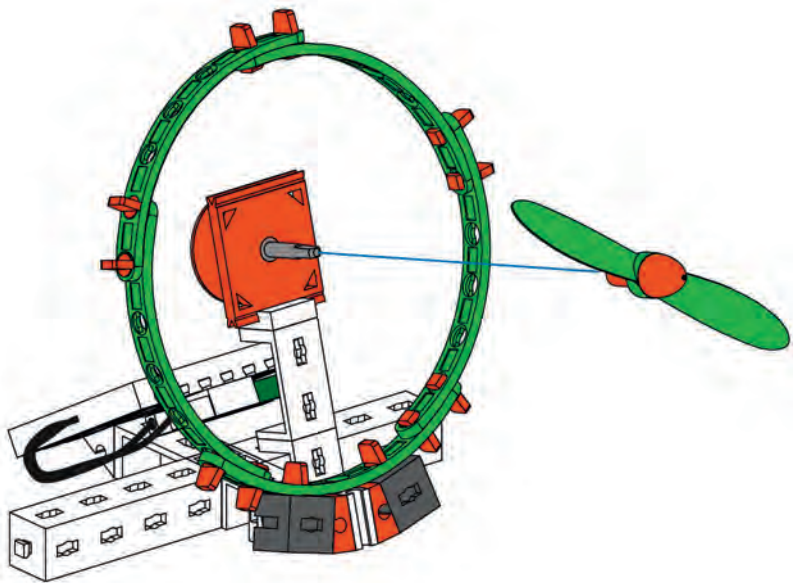
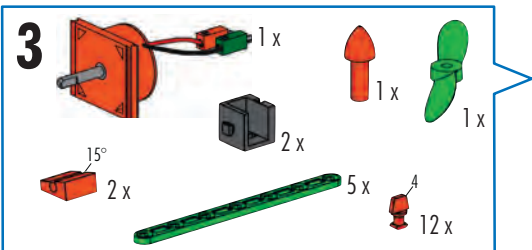
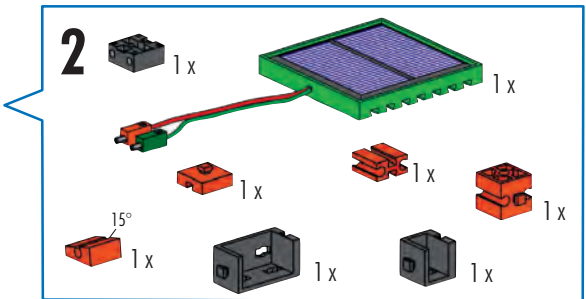
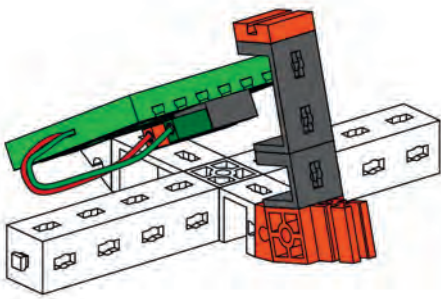
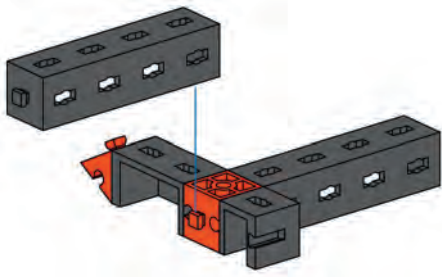
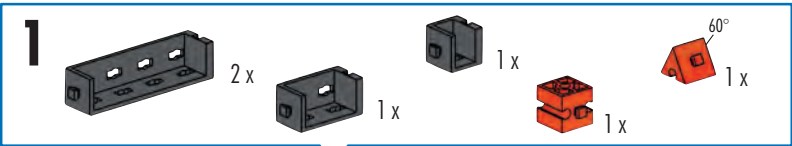
- Achtung! Verletzungsgefahr an Bauteilen mit funktionsbedingten scharfen Kanten und Spitzen!
- Caution! Be careful not to hurt yourself on components with sharp or pointed edges!
- Attention! Risque de blessure sur les éléments comportant des arêtes et o pointes vives indispensables au bon fonctionnement!
- Let op! U kunt zich bezeren aan bouwstenen met sherpe randen of punten!
- Attenzione! Esiste il pericolo di lesione con i pezzi di costruzione che hanno bordi e punte spigolosi necessari per la funzionalita del pezzo!
- Atenção! Perigo de ferimentos em peças componentes com cantos vivos e pontas obrigatórios para o funcionamento!
- Attenzione! Pericolo di lesioni dovute a componenti con spigoli vivi e punte per motivi funzionali!
- Будьте осторожны! Об острые края деталей и и наконечники можно порезаться!
- 注意！因功能需要而带有锋利的棱边和尖角的部件可能会带来受伤危险！

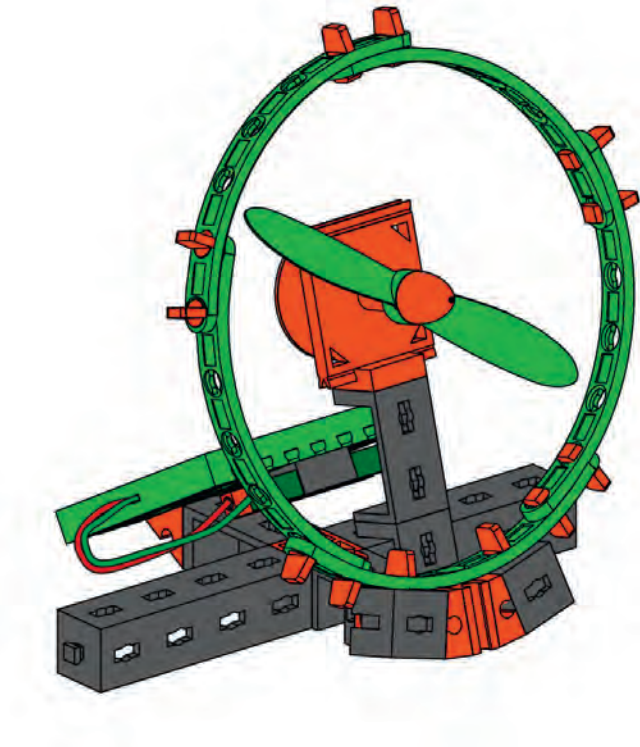


Ventilator
Ventilating fan
Ventilator

Ventilator
Ventilador
Ventilador

Ventola
Вентилятор
风扇

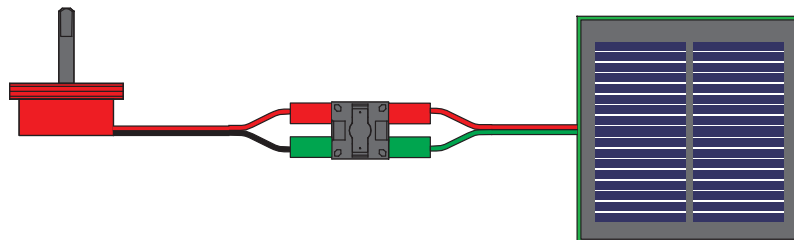


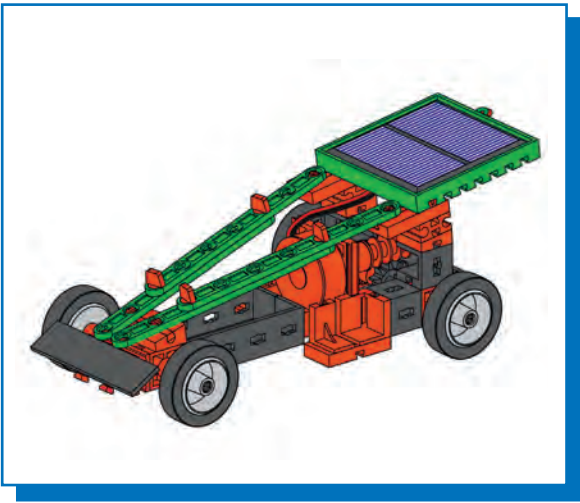


Schaltplan
Circuit diagram
Plan électrique

Schakelschema
Diagrama de circuitos
Plano elétrico de ligação

Schema elettrico
Схема подключения
电路图

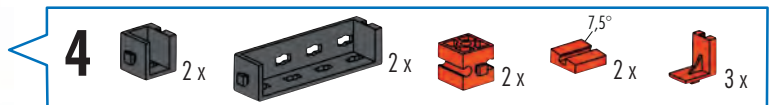
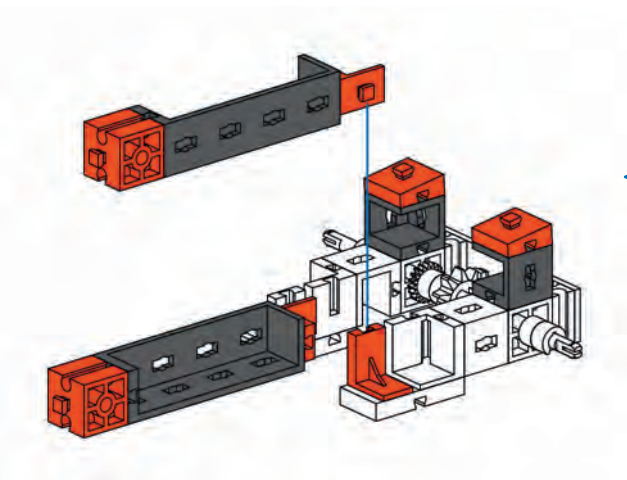
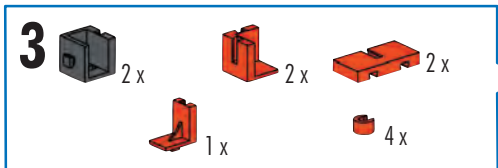
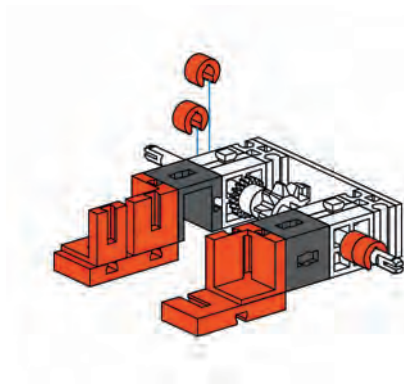
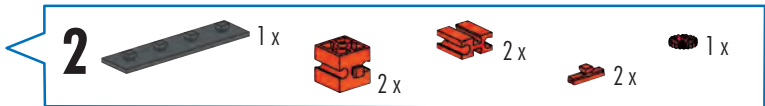
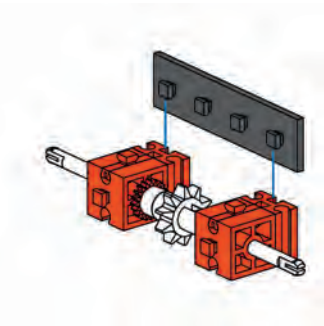
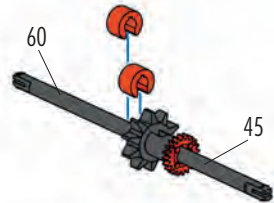
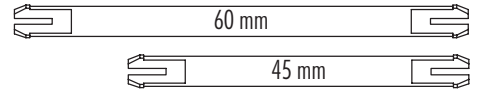
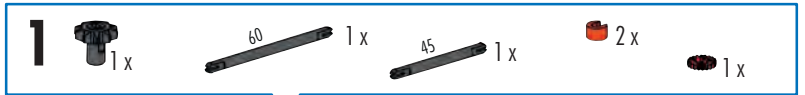


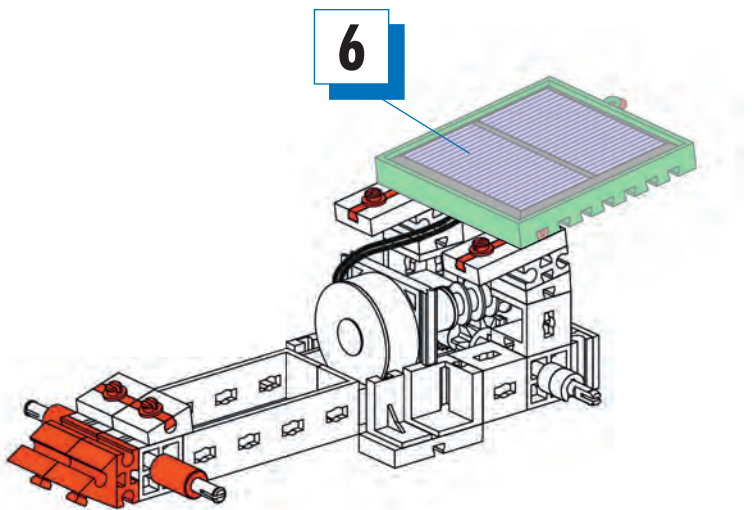
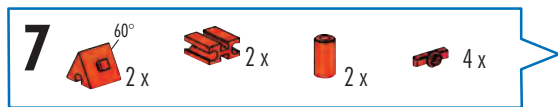
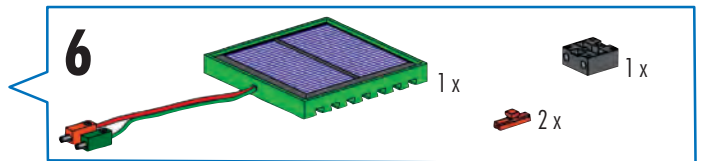
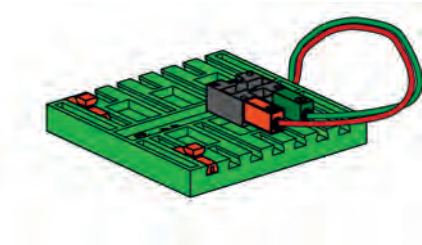
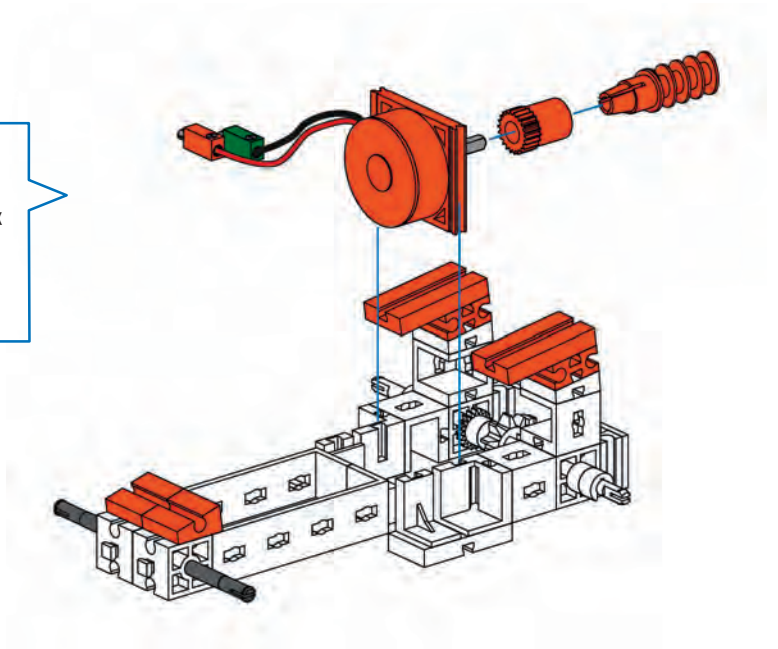
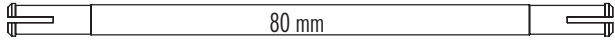
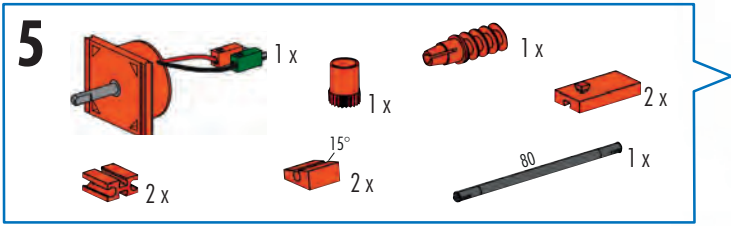


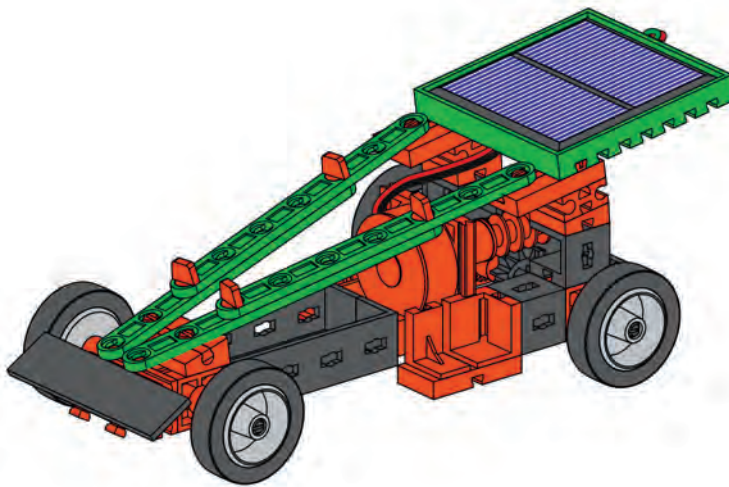
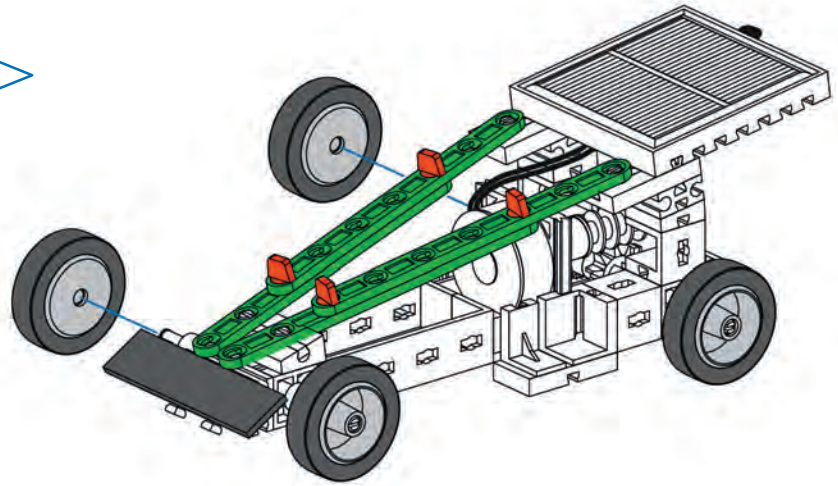
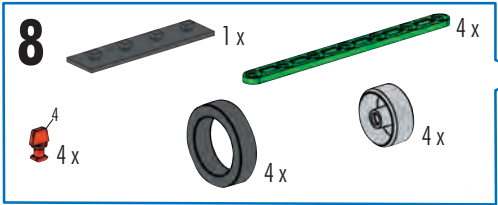
Solarfahrzeug
Solar vehicle
Véhicule solaire

Voertuig op
zonne-energie
Vehículo solar
Veículo solar

Veicolo ad energia solare
Электромобиль
с солнечными батареями
太阳能电动车



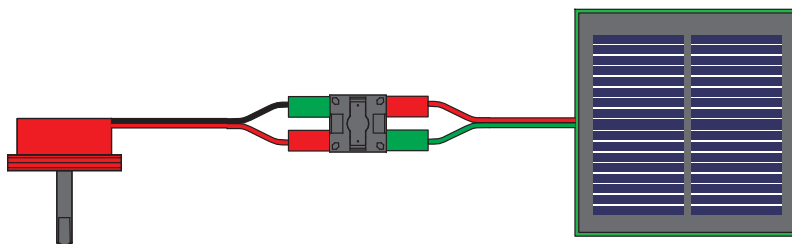




Schaltplan
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Schakelschema
Diagrama de circuitos
Plano elétrico de ligação

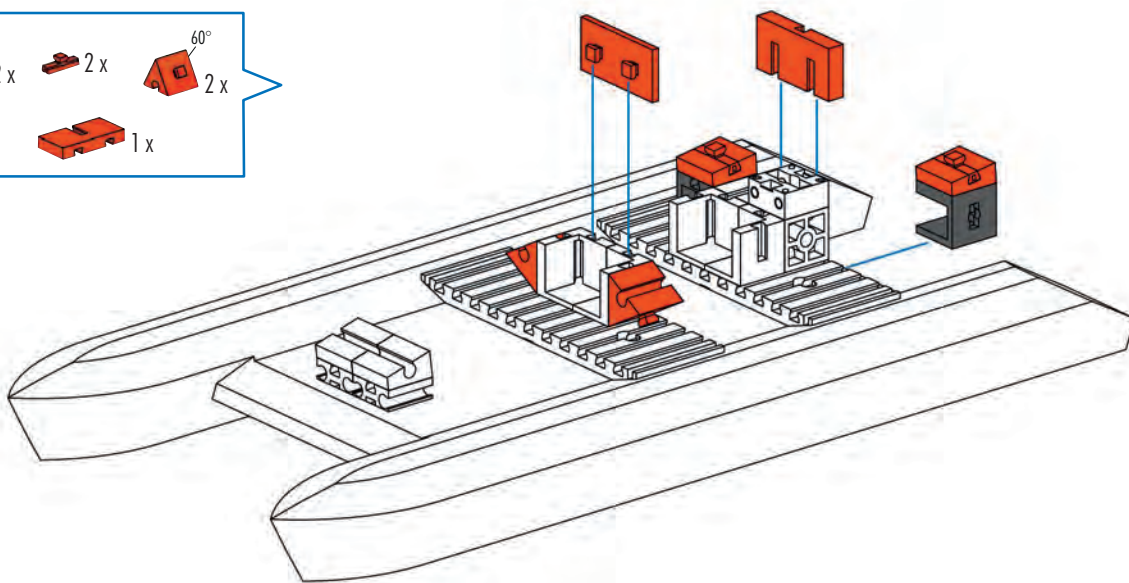
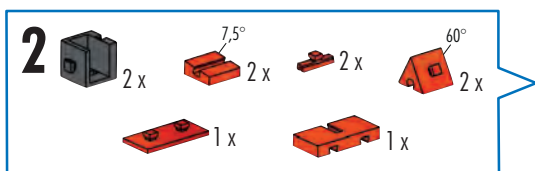
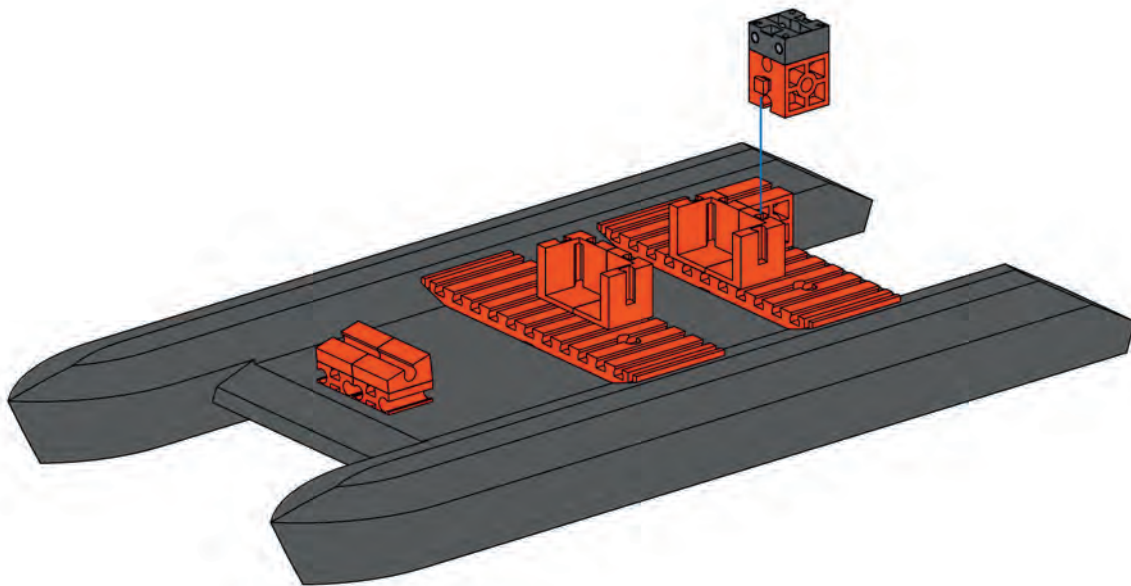
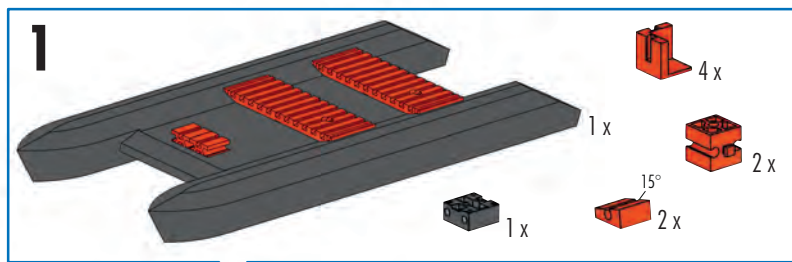
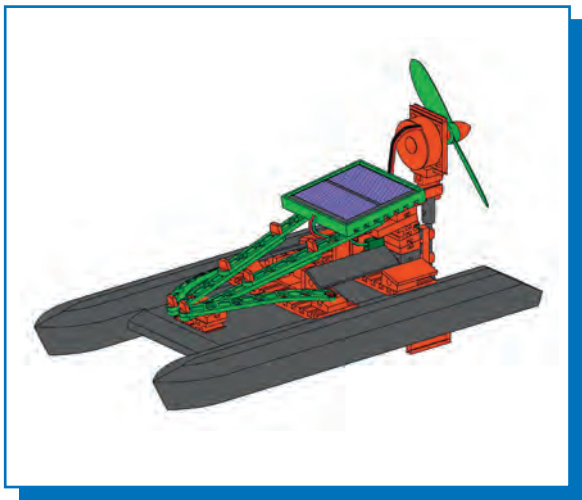
Schema elettrico
Схема подключения
电路图








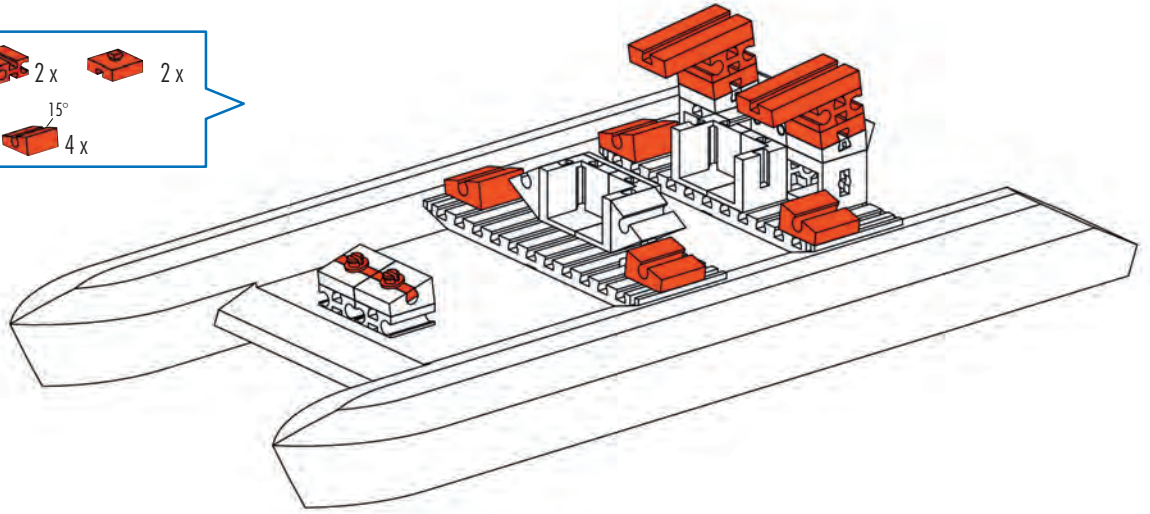
Solarkatamaran
Solar catamaran
Catamaran solaire




Catamaran op
zonne-energie
Catamarán solar
Catamarã solar

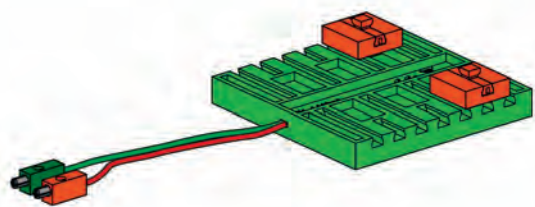
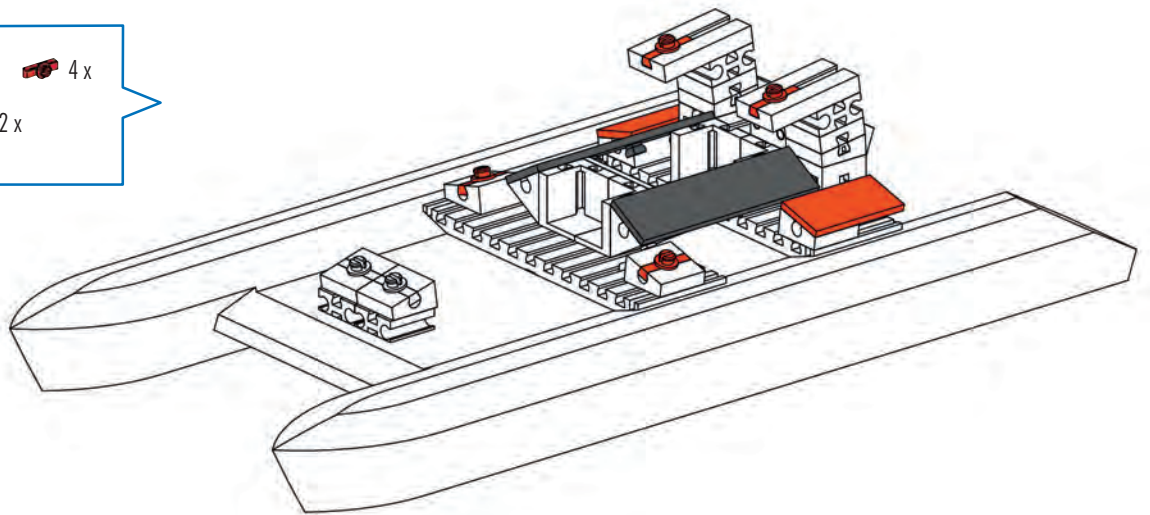
Catamarano solare
Катамаран с
солнечными батареями
太阳能双体船


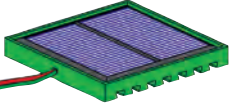



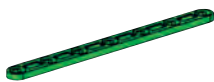

- 3**
-  2 x
 -  2 x
 -  2 x
 -  2 x
 -  4 x



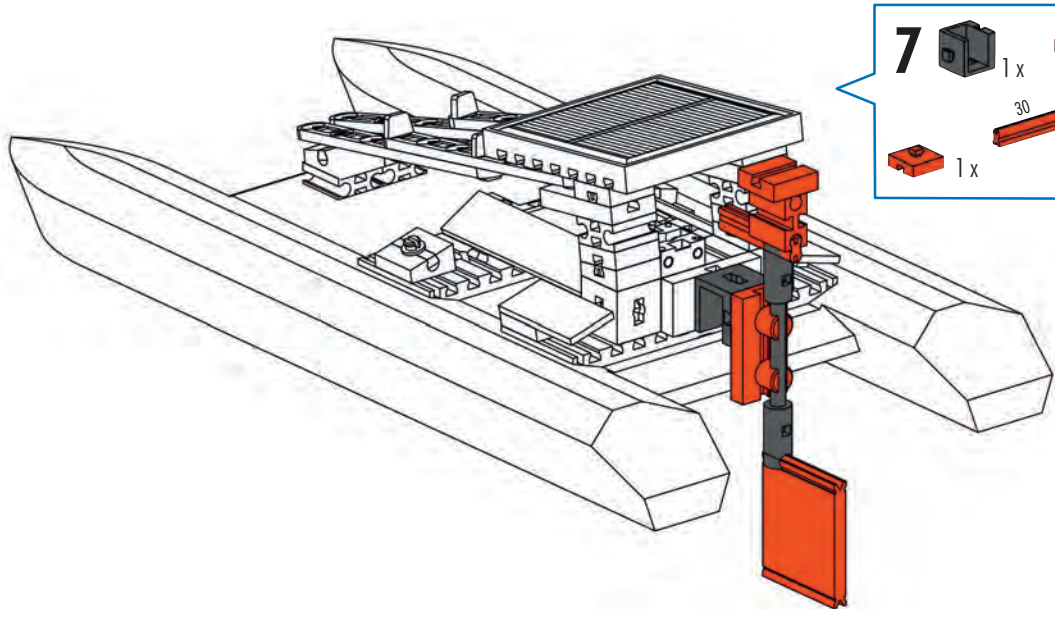
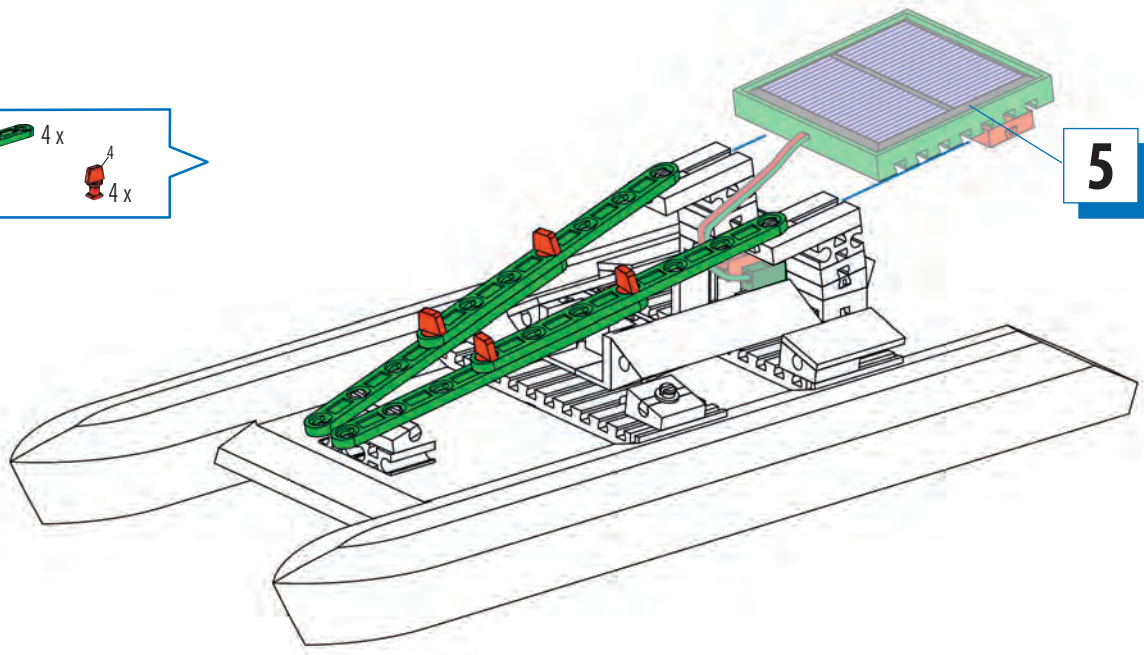
- 4**
-  2 x
 -  4 x
 -  2 x












- 5**
-  2 x
 -  1 x
 -  2 x

6  4x  4x



5






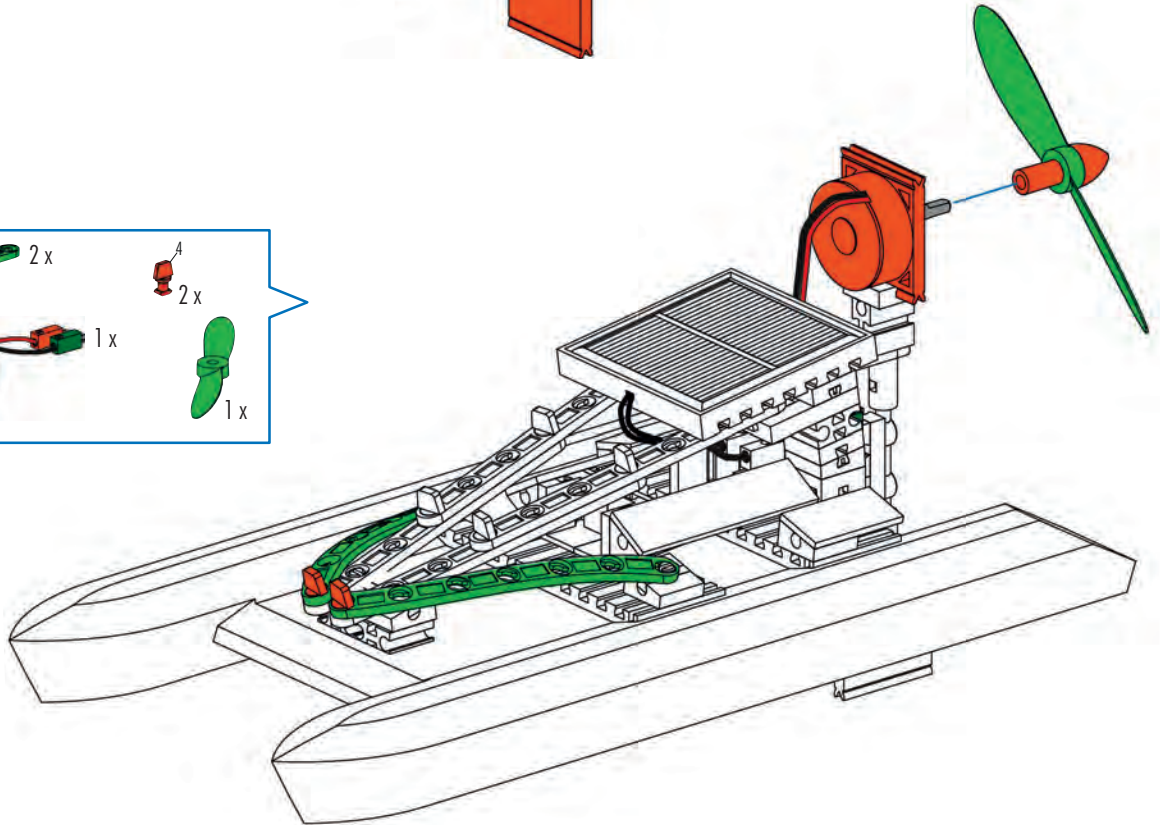
7  1x  1x  1x  2x

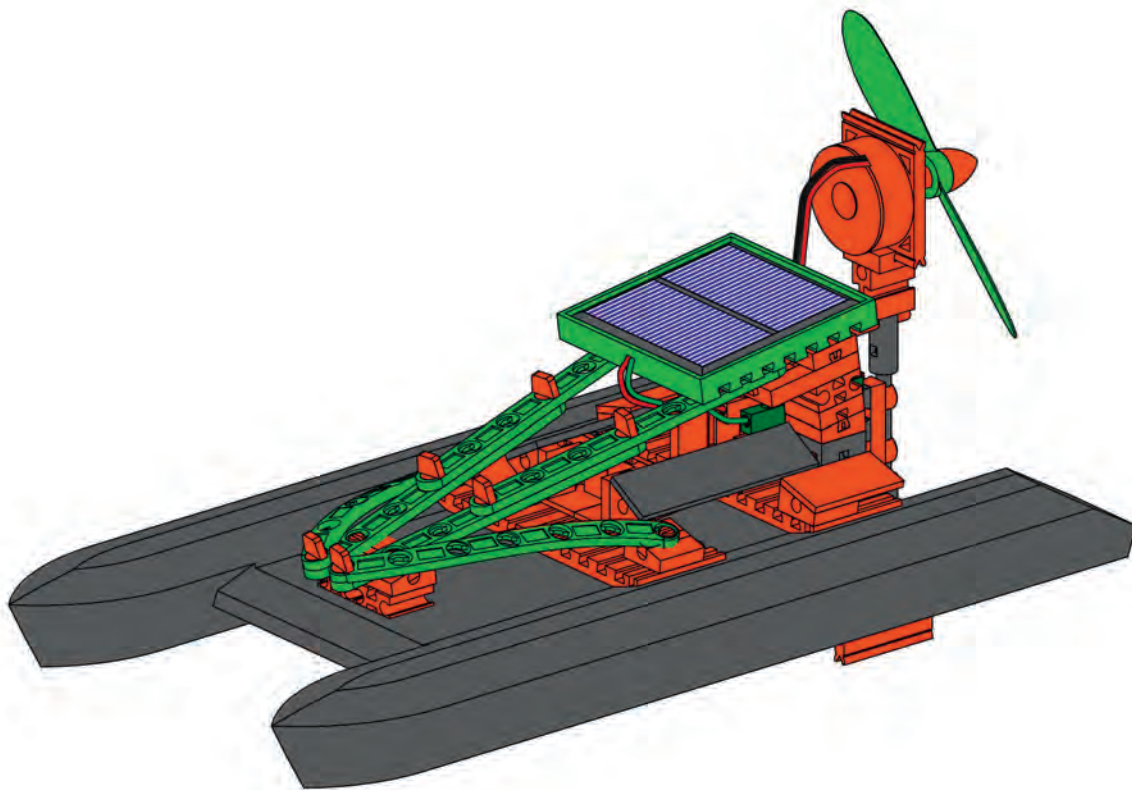
 1x  1x  1x  2x  45 1x

45 mm

8  2x  2x

 1x  1x  1x





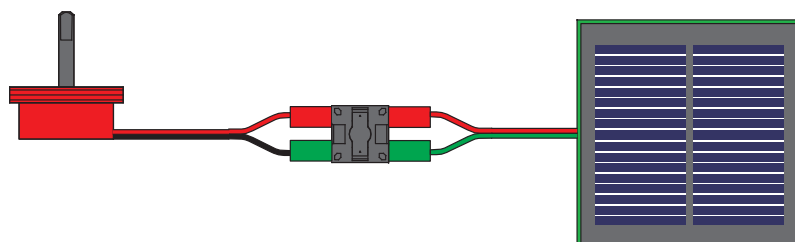
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Nur im flachen Wasser unter Aufsicht von Erwachsenen verwenden.
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Do not use electrically powered light sources in the vicinity of water - lethal hazard!
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Schaltplan
Circuit diagram
Plan électrique

Schakelschema
Diagrama de circuitos
Plano elétrico de ligação

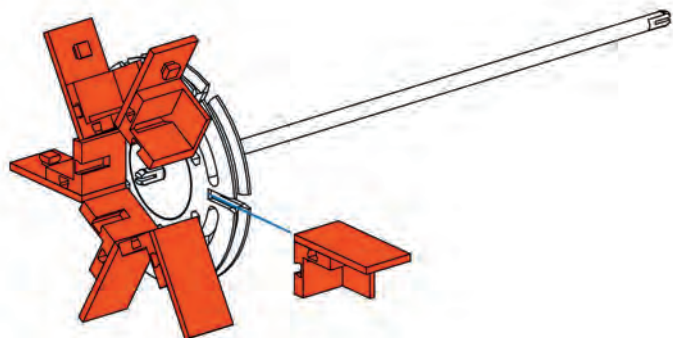
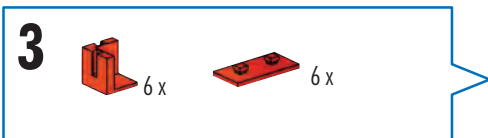
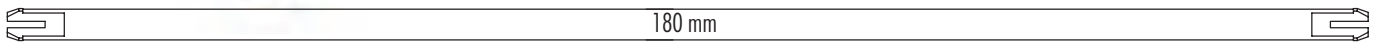
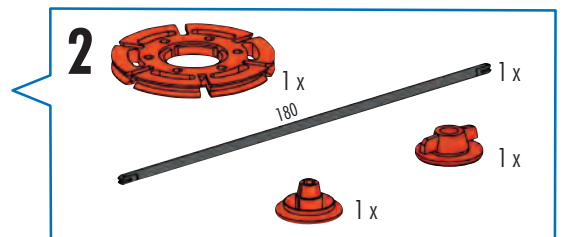
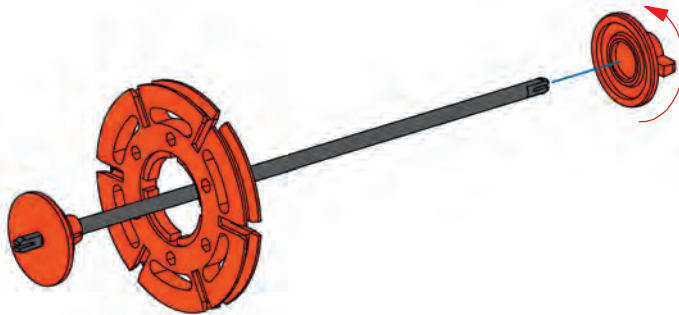
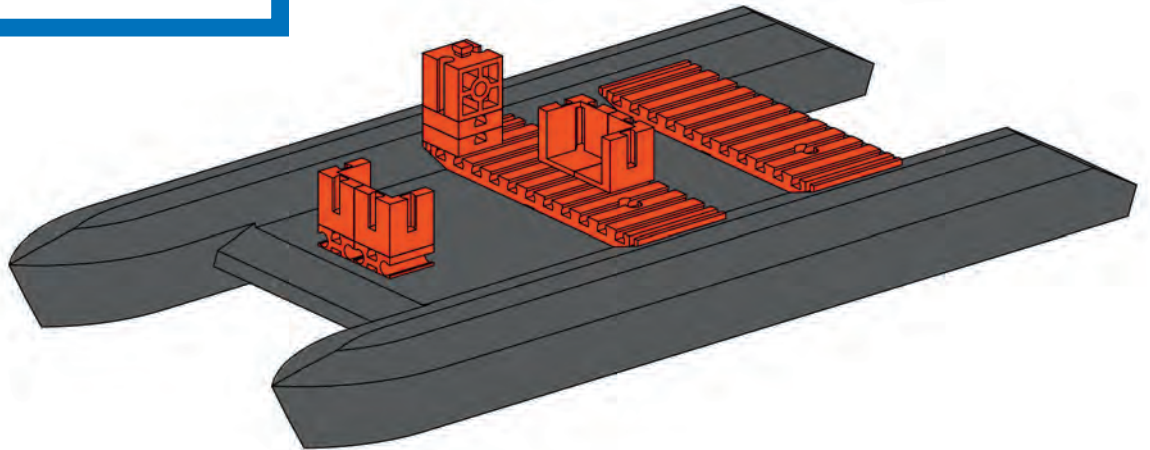
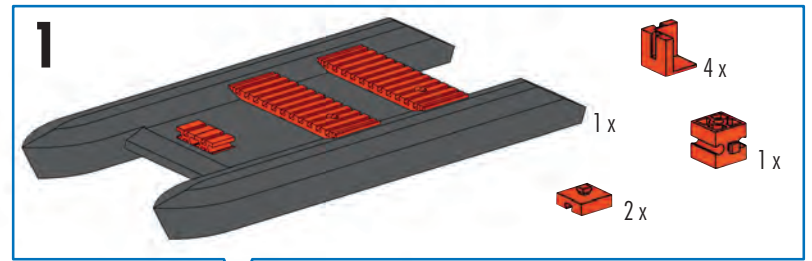
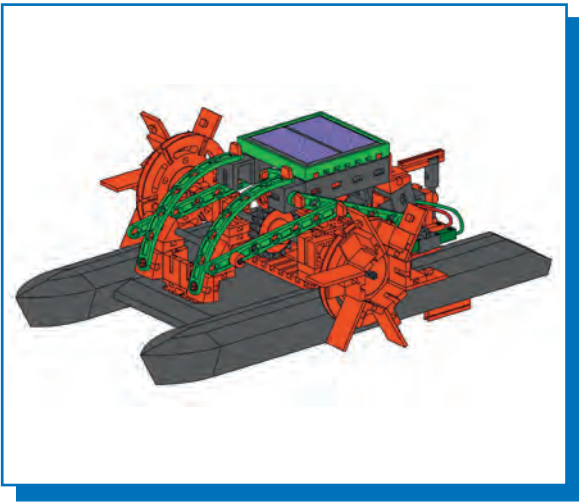
Schema elettrico
Схема подключения
电路图

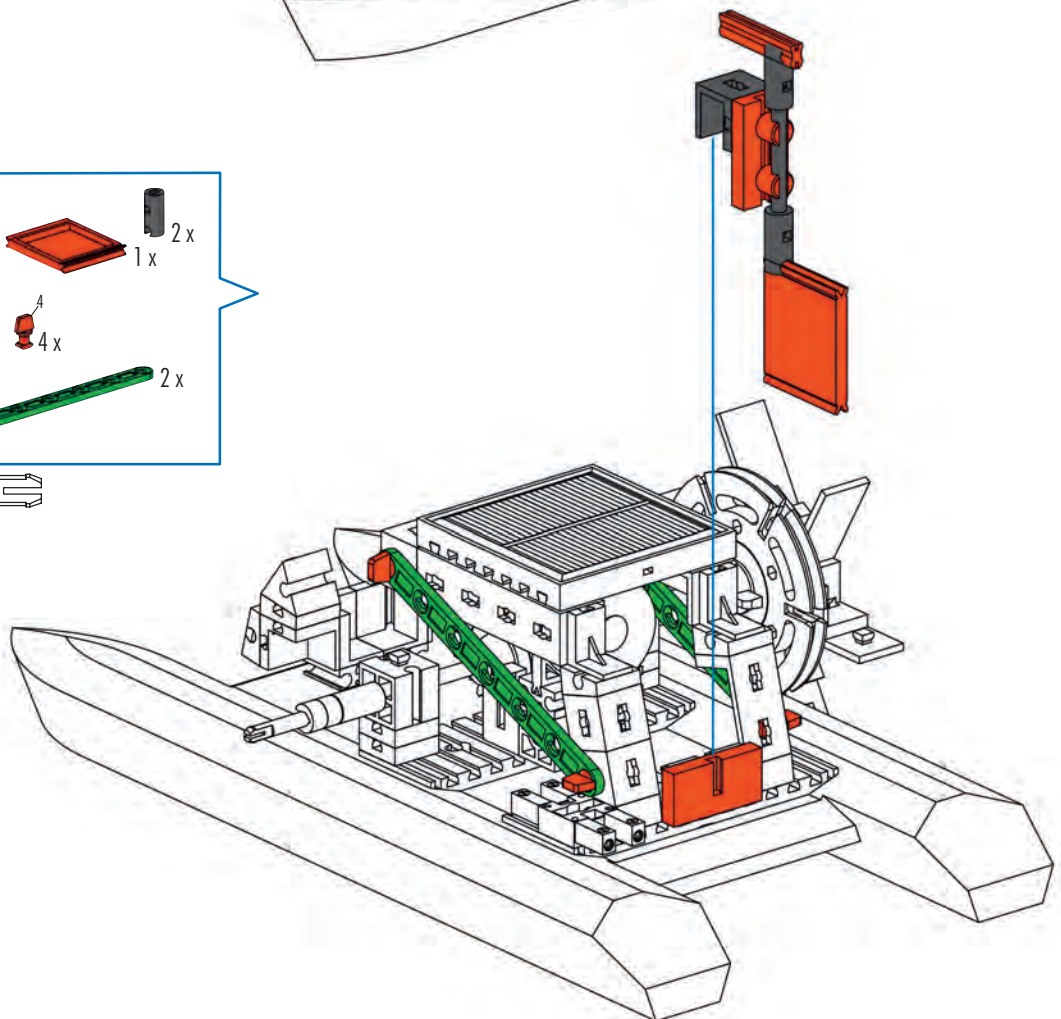
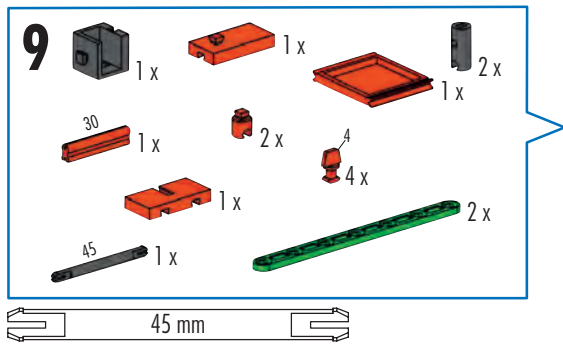
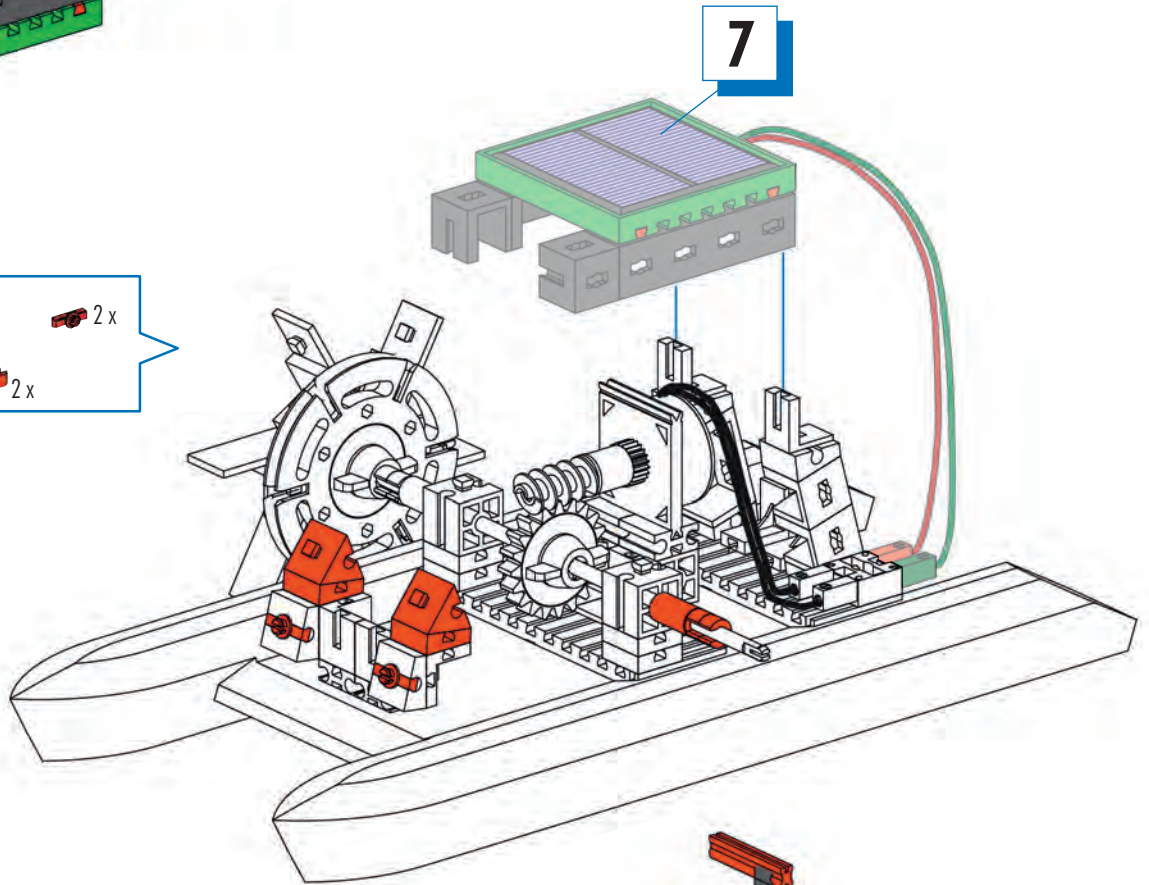
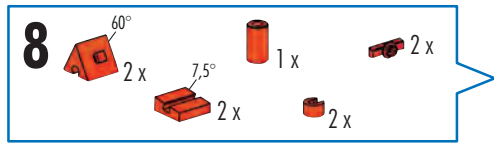
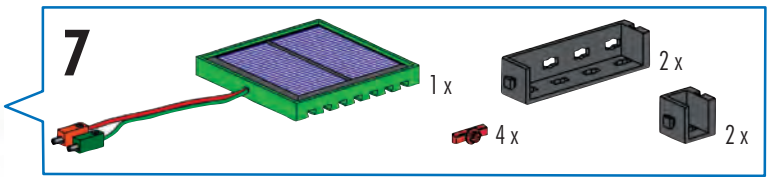
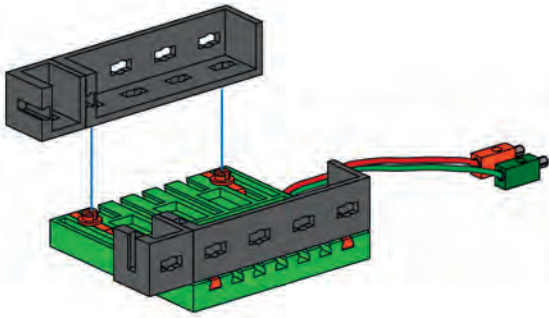


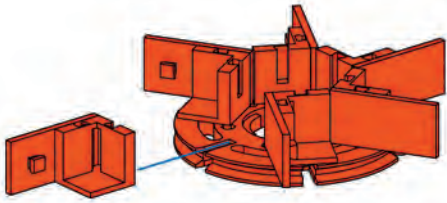
Solarbetriebenes Schaufelradboot
Solar-powered paddle wheel boat
Bateau à aubes solaire

Raderboot op zonne-energie
Bote de ruedas de paletas impulsado por energía solar
Barco de roda de pá solar

Barca con ruota a pale a energia solare
Колёсный катер на солнечных батареях
太阳能驱动의明轮船

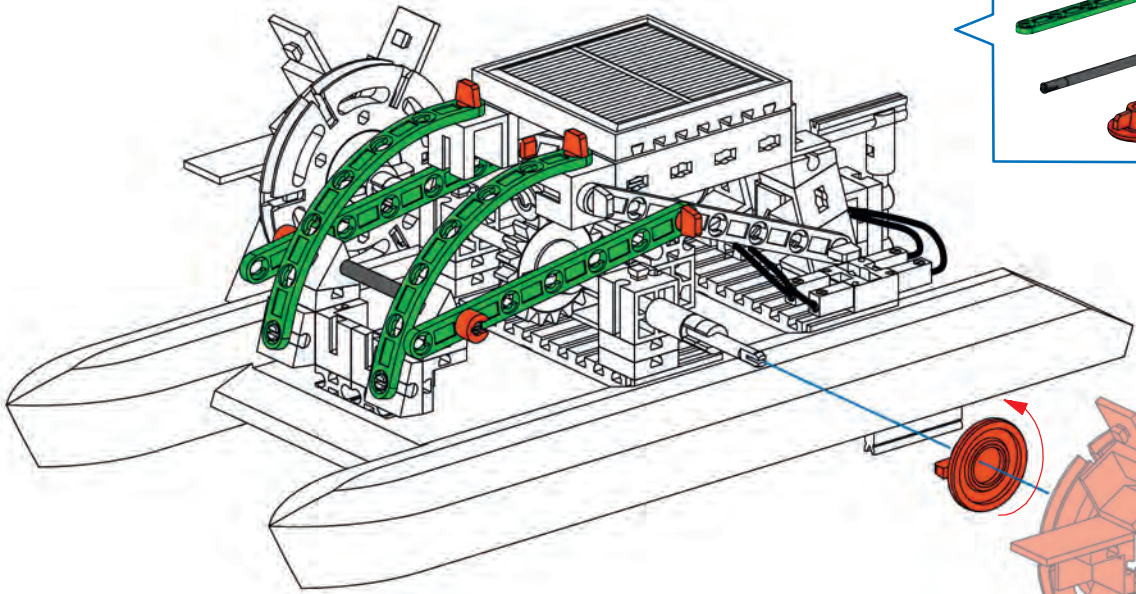






10

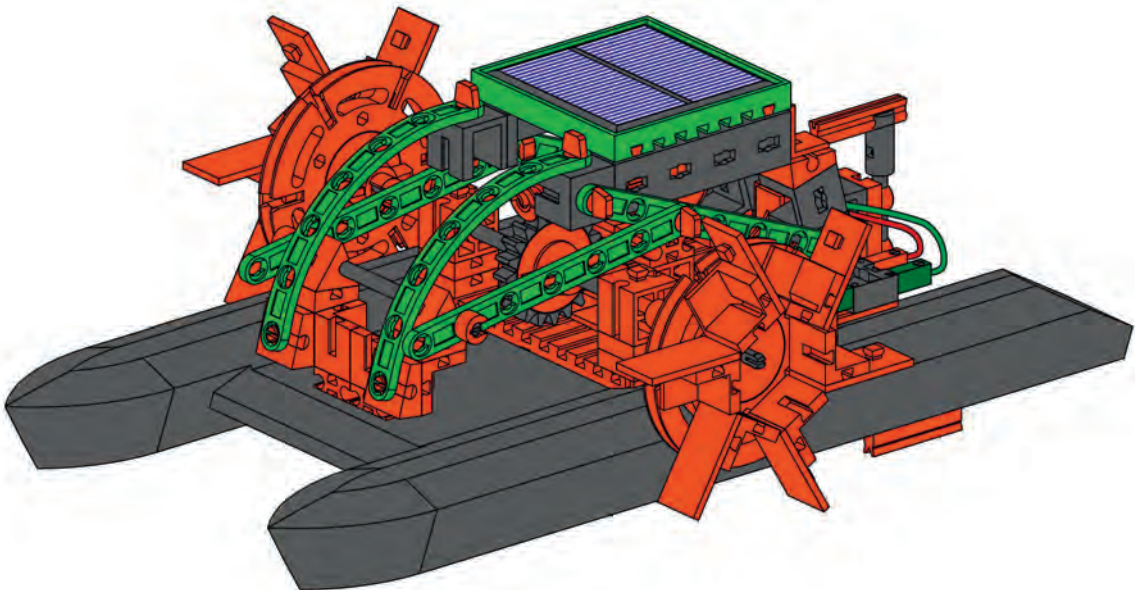
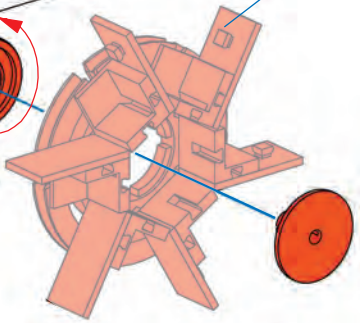
- 1x (Red ring)
- 6x (Red L-shaped pins)
- 6x (Red 1x2 Technic bricks)



11

- 4x (Green curved Technic beams)
- 1x (Grey axle)
- 4x (Red pins with a small protrusion)
- 2x (Red pins)
- 1x (Red bush)
- 1x (Red bush)

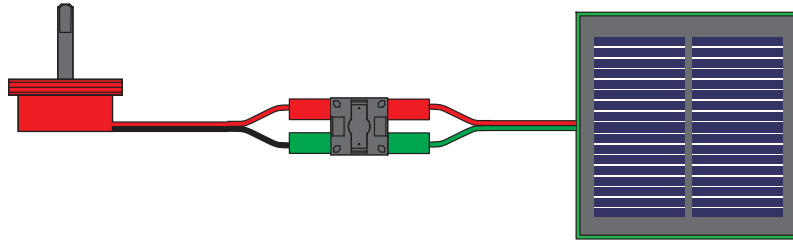
10



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- **Hinweise zum Umweltschutz**
Die elektrischen und elektronischen Bauteile dieses Baukastens (z. B. Motoren, Lampen, Sensoren) gehören nicht in den Hausmüll. Sie müssen am Ende ihrer Lebensdauer an einem Sammelpunkt für das Recycling von elektrischen und elektronischen Geräten abgegeben werden. Das Symbol auf dem Produkt, der Verpackung oder der Anleitung weist darauf hin.
- **Instructions for Environmental Protection**
Do not put the electrical and electronic components of this construction kit such as motors, lights and sensors in the household waste. At the end of their service life, take them to a collection point for the recycling of electrical and electronic devices. The symbol on the product, packaging or the instructions shows this.
- **Remarques de protection de l'environnement**
Les composants électriques et électroniques de ce coffret (par ex. moteurs, lampes, capteurs) ne doivent pas être jetés avec les ordures ménagères. Lorsqu'elles ne sont plus utilisables, il faut les remettre auprès d'un centre de collecte spécialisé dans le recyclage des appareils électriques et électroniques. Le symbole sur le produit, l'emballage ou la notice d'instructions le signale.
- **Bescherming van het milieu**
De elektrische en elektronische onderdelen van deze module (bijv. motoren, lampen, sensoren) behoren niet bij het huisvuil. Aan het einde van hun levensduur moeten ze worden ingeleverd bij een verzamelplaats voor de recycling van elektrische en elektronische apparaten. Het symbool op het product, de verpakking of de gebruiksaanwijzing wijst je daar ook op.
- **Notas con respecto a la protección del medio ambiente**
Los componentes eléctricos y electrónicos de esta unidad modular (p. ej. motores, lámparas, sensores) no han de tirarse a la basura casera. Al final de su vida útil tienen que ser entregados en un puesto colector para el reciclaje de aparatos eléctricos y electrónicos. El símbolo sobre el producto, el embalaje o las instrucciones lo señala.

- **Instruções para a proteção do meio ambiente**
Os componentes elétricos e eletrônicos deste módulo (p.ex. motores, lâmpadas, sensores) não pertencem ao lixo doméstico. Eles devem ser entregues, no final da sua vida útil, num posto de coleta para a reciclagem de aparelhos elétricos e eletrônicos. O símbolo no produto, na embalagem ou no manual indica isto.
- **Indicazioni sulla tutela ambientale**
I componenti elettrici ed elettronici di questa scatola di montaggio (ad es. motori, lampadine, sensori) non vanno smaltiti tra i rifiuti domestici. Alla fine della loro durata di utilizzo devono essere consegnati a un centro di raccolta adibito al riciclaggio di apparecchi elettrici ed elettronici. Ciò viene indicato dal simbolo che si trova sul prodotto, sull'imballo o sul manuale d'istruzioni.
- **Указания по охране окружающей среды**
Электрические и электронные детали этого комплекта (датчики, электромоторы, лампочки и др.) нельзя выбрасывать с бытовым мусором. После того как они отслужат свой срок, их нужно сдать для переработки на сборный пункт электрических и электронных приборов. На это указывает знак на изделии, на упаковке или на инструкции.
- **有关环保的提示**
不得将本组件中的电气和电子部件(如电机, 灯泡, 传感器)当作家庭垃圾扔掉。
它们的使用寿命结束后, 应将它们送抵电气和电子器材回收站。
产品、包装或说明书上的标记也说明这一规定。

