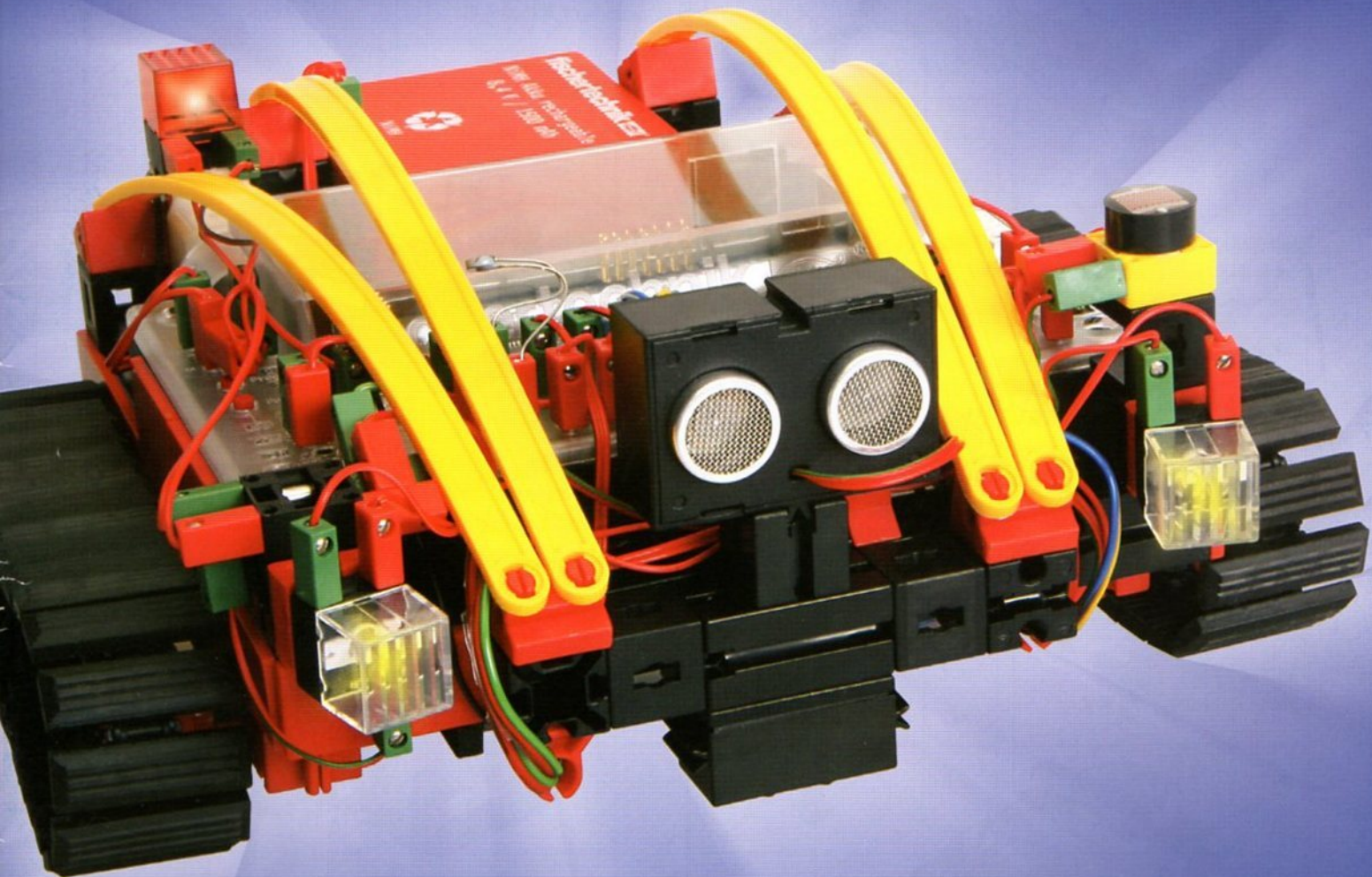


fischertechnik 

COMPUTING

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



ROBO EXPLORER
6 MODELS

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Contenu

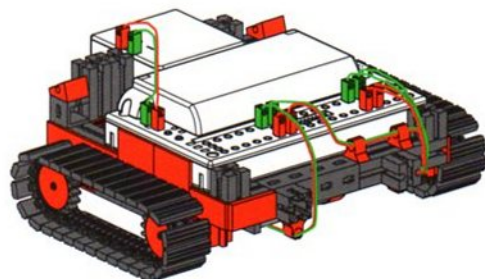
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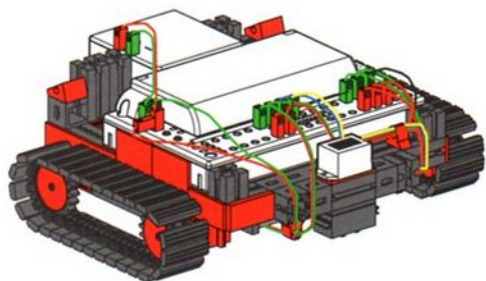
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Singoli componenti / Отдельные детали / 零件概览 S./p./стр. / 页次 1

Montagetipps / Tips for assembly / Tuyaux pour le montage / Montagetips / Consejos para el montaje / "Dicas" para montagem /
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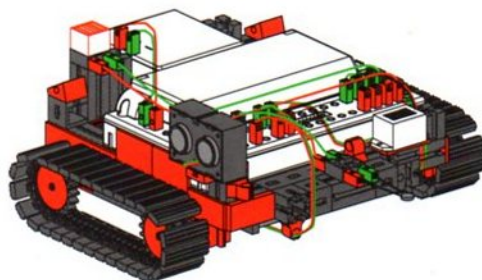
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Modelo básico / Modelo básico / Modello base /
Базовая модель / 基本模型 S./p./стр. / 页次 4



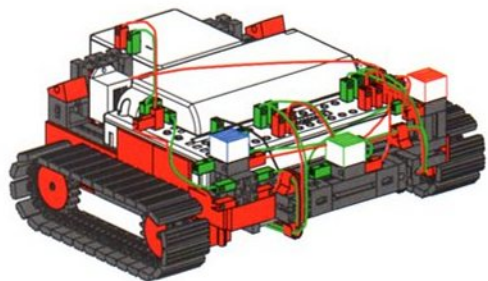
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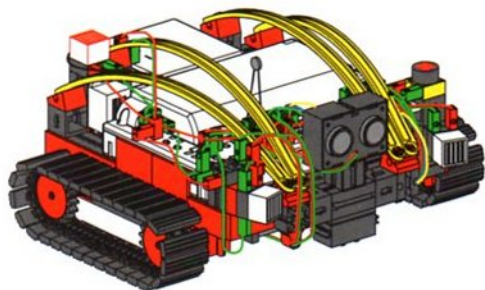
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Robot de túnel / Robo de túnel / Robot da tunnel /
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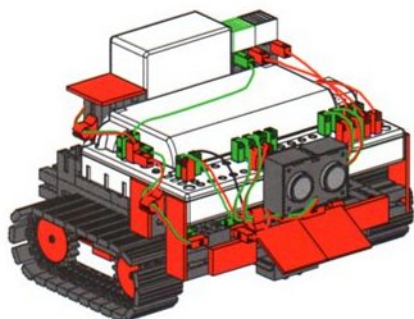
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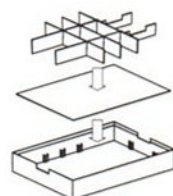
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Sorteervoorstel voor bewaarsysteem / Propuesta de clasificación para almacenamiento / Proposta de divisão caixa 1 para sistema de conservação /
Proposta di sistemazione per il sistema di conservazione / Рекомендации по сортировке для системы хранения /
保存系统的分类建议



Einzelteilübersicht
Spare parts list
Liste des pièces détachées

Onderdelenoverzicht
Lista da piezas
Resumo de peça individual

Singoli componenti
Отдельные детали
零件概览

	31 010 2 x		32 064 6 x		35 214 2 x		37 783 2 x
	31 011 6 x		32 330 4 x		35 945 2 x		37 869 3 x
	31 021 4 x		32 698 1 x		35 969 5 x		38 216 4 x
	31 058 4 x		32 850 4 x		35 975 2 x		38 241 5 x
	31 060 6 x		32 879 17 x		36 119 1 x		38 242 2 x
	31 061 4 x		32 881 9 x		36 336 4 x		38 259 4 x
	31 330 2 x		35 031 4 x		36 437 1 x		38 423 2 x
	31 336 28 x		35 049 1 x		36 443 1 x		38 464 2 x
	31 337 25 x		35 063 2 x		36 921 4 x		78 238 2 x
	31 360 1 x		35 064 4 x		36 922 4 x		104 574 2 x
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	31 790 58 x		35 079 1 x		37 034 1 x		128 598 1 x
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Montagetipps
Tips for assembly
Tuyaux pour le montage

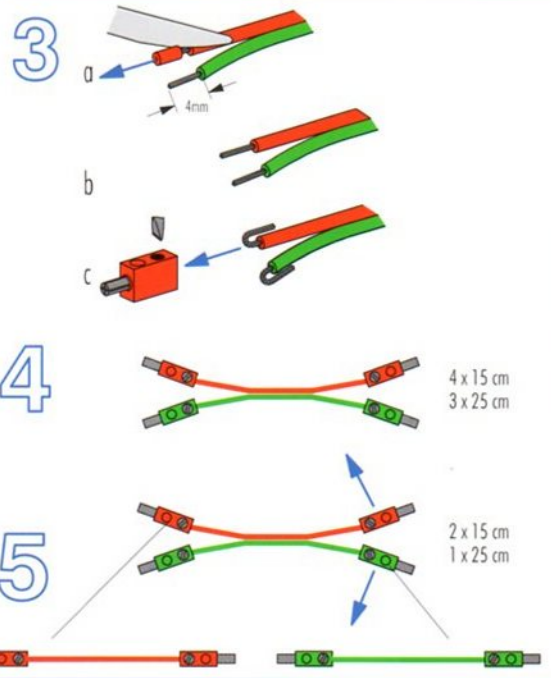
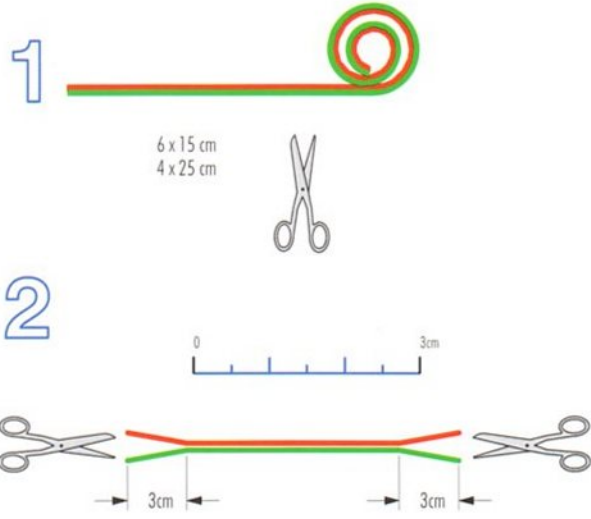
Montagetipps
Consejos para el montaje
"Dicas" para montagem

Consigli per il montaggio
Советы по сборке
装配建议

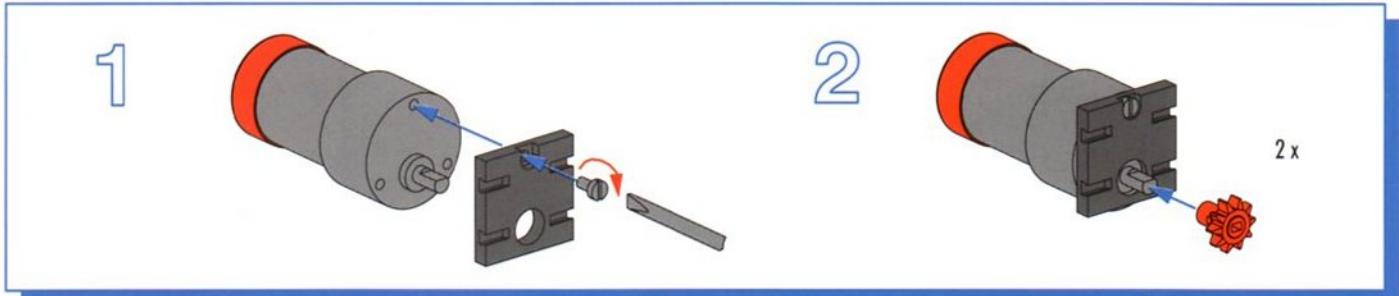
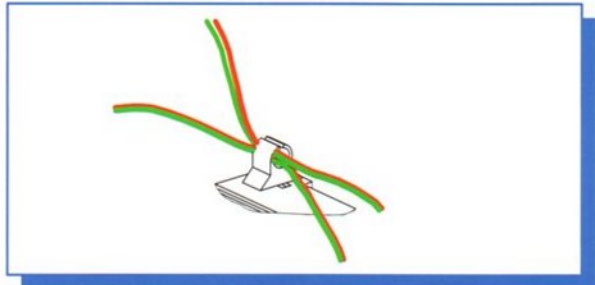
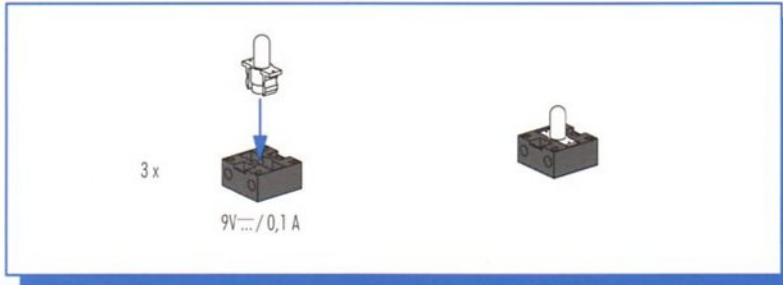
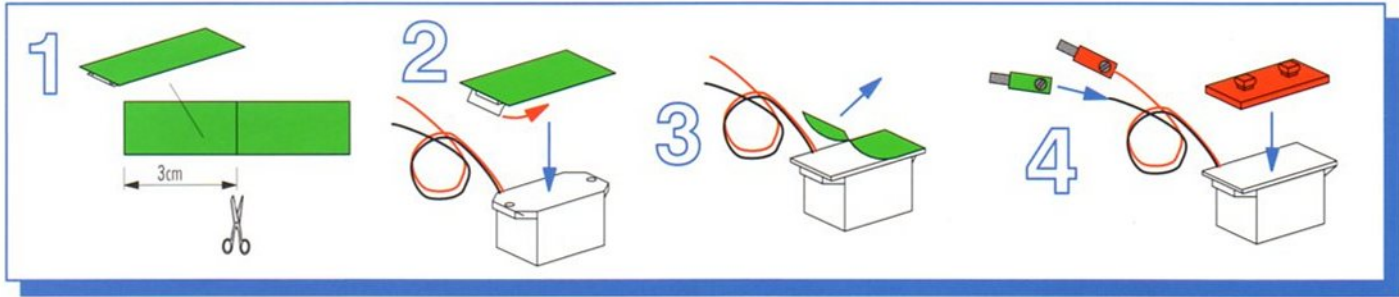
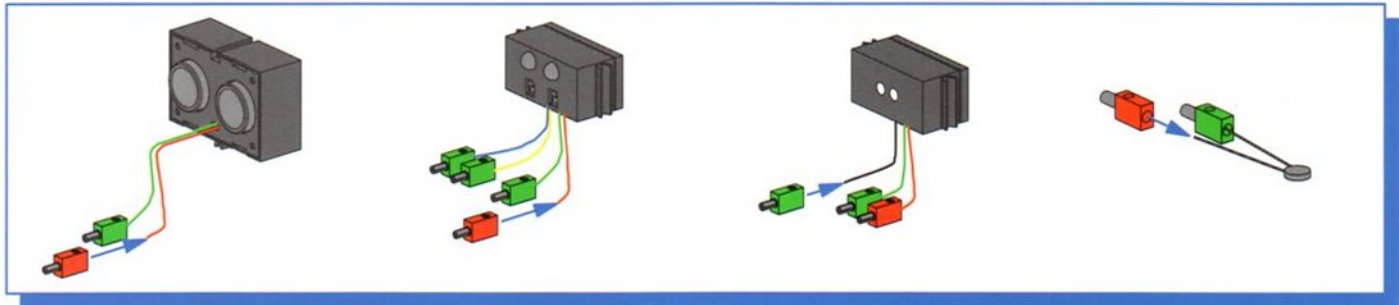
Kabel und Stecker
 Plugs and cables
 Fiches et des câbles

Stekkers en cables
 Enchufes en cables
 Cabos e contatos

Cavi e connettori
 Провода и штекеры
 电缆和插头



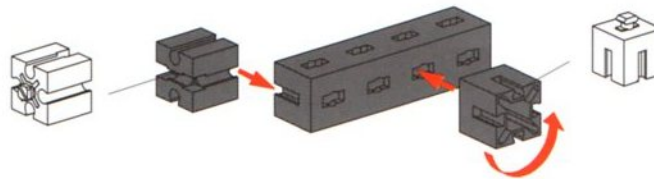
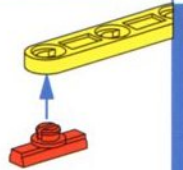
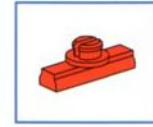
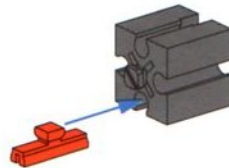
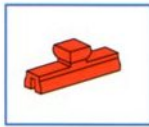
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20 cm
15 cm
10 cm
5 cm
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Montagetipp
Tips for assembly
Tuyaux pour le montage

Montagetipp
Consejos para el montaje
"Dicas" para montagem

Consigli per il montaggio
Советы по сборке
装配建议



- 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.

- 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 a pointes vives indispensables au bon fonctionnement!
- Let op
U kunt zich bezeren aan bouwstenen met scherpe randen of punten!

- 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。

- Attenzione
Esiste il pericolo di lesione con i pezzi di costruzione che hanno bordi e punte spigolosi necessari per la funzionalità del pezzo!
- Atenção
Perigo de ferimentos em peças componentes com cantos vivos e pontas obrigatórios para o funcionamento!
- Attention
Pericolo di lesioni dovute a componenti con spigoli vivi e punte per motivi funzionali!
- Будьте осторожны
Об острые края деталей и и наконечники можно обрезать!
- 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！

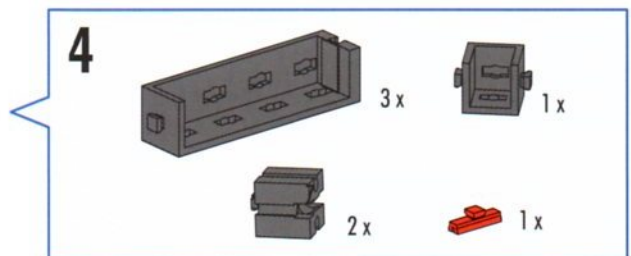
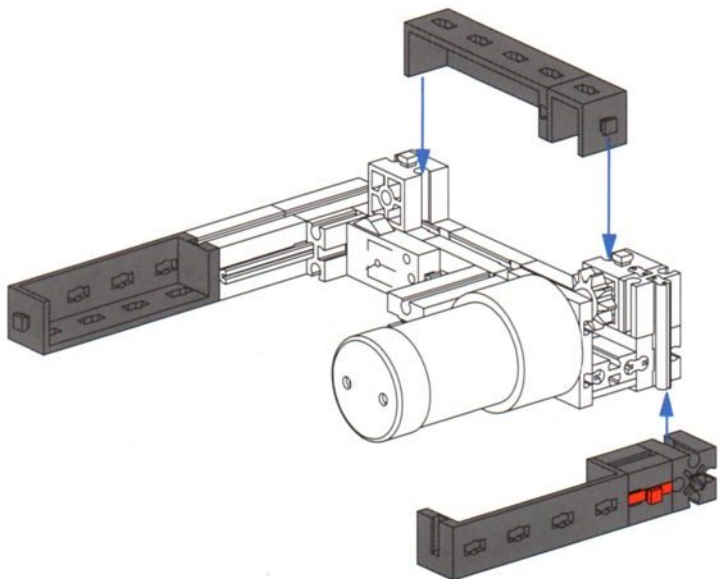
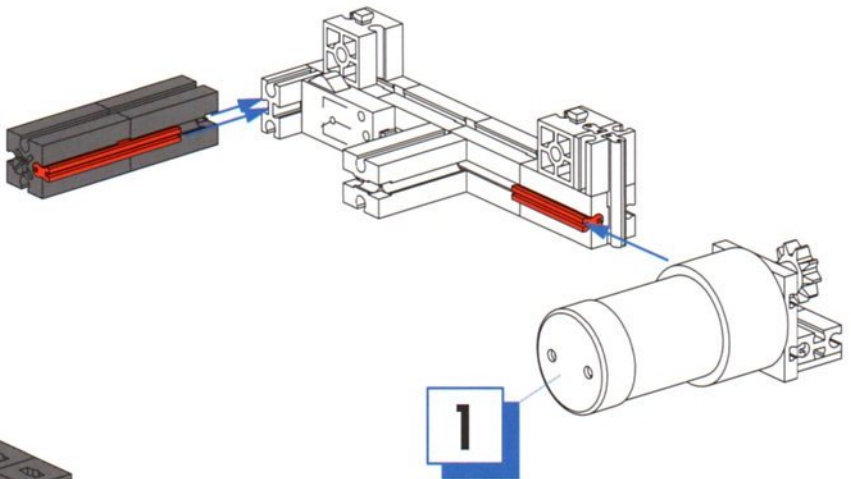
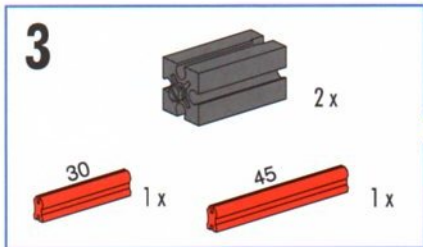
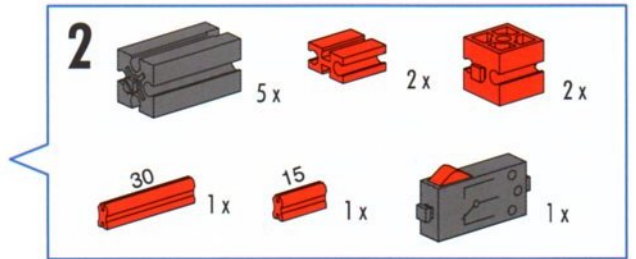
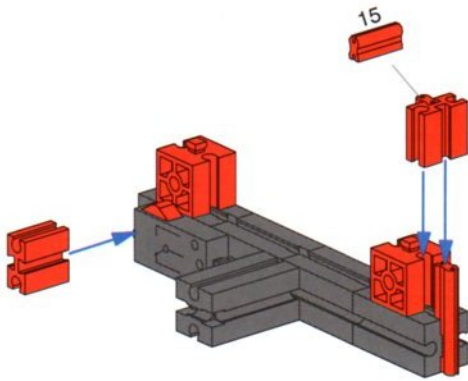
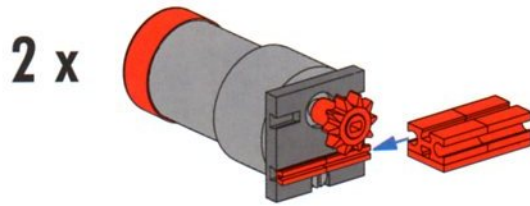
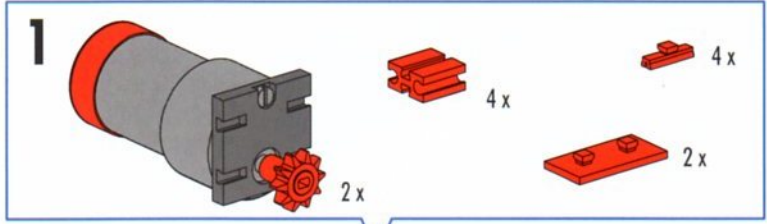
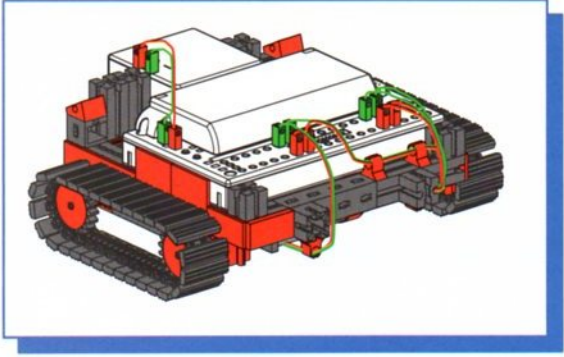
Software • Logiciel • Software • Программное обеспечение • 软件

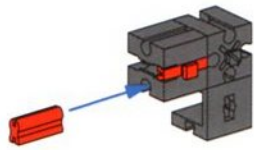
- **Wichtig!!** Für den Baukasten ROBO Explorer benötigst du die ROBO PRO Version 1.2.1.30. Falls du eine ältere Version der Software besitzt, kannst du sie kostenlos updaten entweder über das Hilfe-Menü in ROBO PRO - Neue Version downloaden oder unter www.fischertechnik.de/robopro/update.html. Dazu muss dein Rechner mit dem Internet verbunden sein. In der ROBO Pro Version 1.2.1.30 sind Beispielprogramme für alle Modelle enthalten.
- **Important!!** For the construction kit, ROBO Explorer, you need the ROBO PRO version 1.2.1.30. If you have an older version of the software, you can update this at no cost with the Help menu in ROBO PRO: download the new version or at www.fischertechnik.de/robopro/update.html. To do this your computer must be connected to the Internet. ROBO PRO Version 1.2.1.30 contains example programs for all models.
- **Important!!** Pour le coffret ROBO Explorer, vous avez besoin de la version ROBO PRO 1.2.1.30. Si vous avez une version antérieure du logiciel, vous pouvez la mettre à jour gratuitement soit par l'intermédiaire du menu Aide dans ROBO PRO - Télécharger nouvelle version ou sous www.fischertechnik.de/robopro/update.html. Pour cela, il faut que votre ordinateur soit connecté sur l'Internet. La version ROBO Pro 1.2.1.30 contient des programmes servant d'exemples pour tous les modèles.
- **Belangrijk!!** Voor de module ROBO Explorer heb je de ROBO PRO versie 1.2.1.30 nodig. Als je over een oudere softwareversie beschikt, kun je die gratis updaten via het Help-menu in ROBO PRO - Nieuwe versie downloaden of onder www.fischertechnik.de/robopro/update.html. In dat geval moet je computer met internet verbonden zijn. In de ROBO Pro versie 1.2.1.30 zijn voorbeeldprogramma's voor alle modellen opgenomen.
- **¡¡Importante!!** Para la unidad modular ROBO Explorer necesitas la versión 1.2.1.30 de ROBO PRO. Si tienes una versión más antigua del software, la podrás actualizar gratuitamente ya sea por el menú Ayuda en ROBO PRO - Bajar nueva versión o en www.fischertechnik.de/robopro/update.html. Para esto tendrá que estar conectado tu ordenador con el Internet. La versión 1.2.1.30 de ROBO Pro contiene programas de ejemplo para todos los modelos.
- **Importante!!** Para o módulo ROBO Explorer irá necessitar o ROBO PRO, versão 1.2.1.30. Caso possua uma versão mais antiga do software, poderá atualizá-lo gratuitamente através do menu Ajuda no ROBO PRO - Downloadar nova versão ou em www.fischertechnik.de/robopro/update.html. Para isso, o seu computador deve estar conectado na Internet. Na ROBO PRO, versão 1.2.1.30, estão contidos programas de exemplo para todos os modelos.
- **Importante!!** Per la scatola di montaggio ROBO Explorer devi usare la versione 1.2.1.30 di ROBO PRO. Se possiedi una versione precedente del software la puoi aggiornare gratuitamente dal menu della Guida di ROBO PRO - Scarica la nuova versione oppure vai al sito www.fischertechnik.de/robopro/update.html. Naturalmente il tuo computer deve essere connesso a Internet. La versione 1.2.1.30 di ROBO Pro contiene esempi di programmi per tutti i modelli.
- **Важно!!** Для конструктора ROBO Explorer тебе понадобится ROBO PRO версии 1.2.1.30. Если у тебя есть более старая версия этой программы, то ты можешь бесплатно обновить ее - загрузить из меню помощи в ROBO PRO или из интернета по адресу www.fischertechnik.de/robopro/update.html. Для этого твой компьютер должен быть подключен к интернету. В ROBO Pro версии 1.2.1.30 имеются примеры программ для всех моделей.
- **重要！！** 你需要为 ROBO Explorer 组件使用 ROBO PRO 版本 1.2.1.30 若你拥有较老版本的软件，可以通过ROBO PRO 中的帮助菜单或在 www.fischertechnik.de/robopro/update.html 下免费下载新的版本。为此你的电脑必须能够上网。在 ROBO Pro 版本1.2.1.30 中有所有模型的样板程序。

Basismodell
Basic Model
Maquette de base





Basismodel
Modelo básico
Modelo básico

Modello base
Базовая модель
基本模型






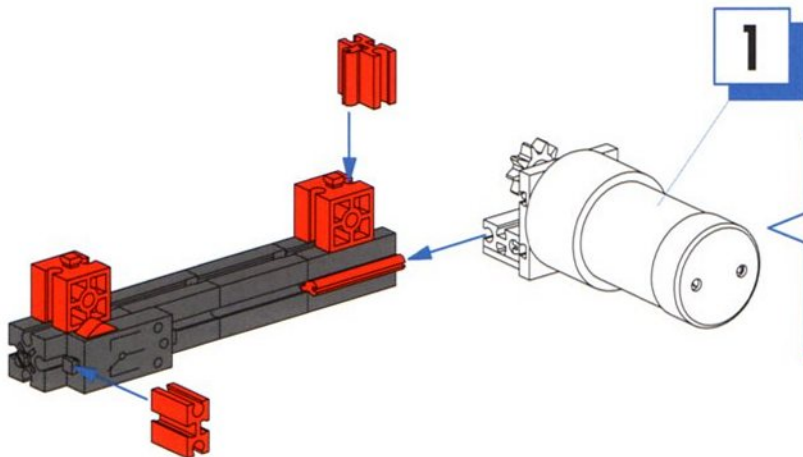
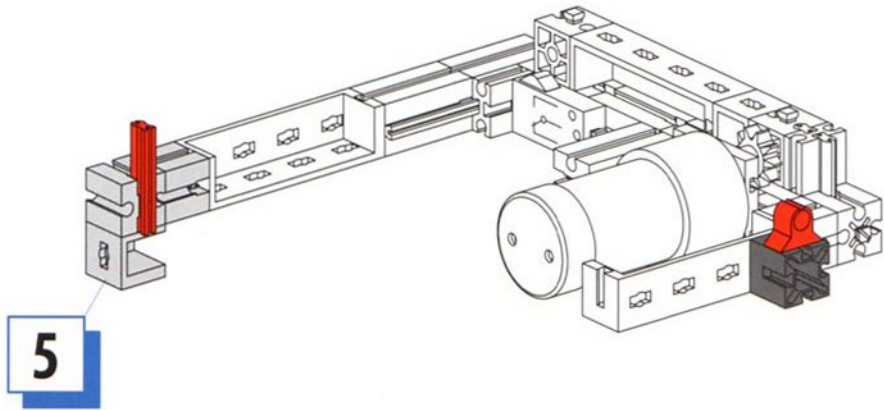


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

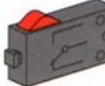
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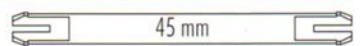
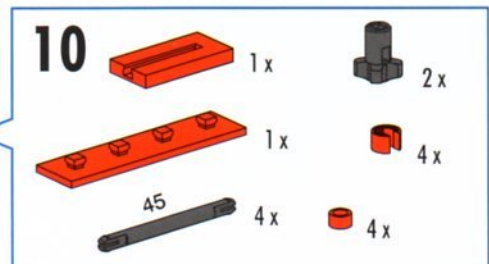
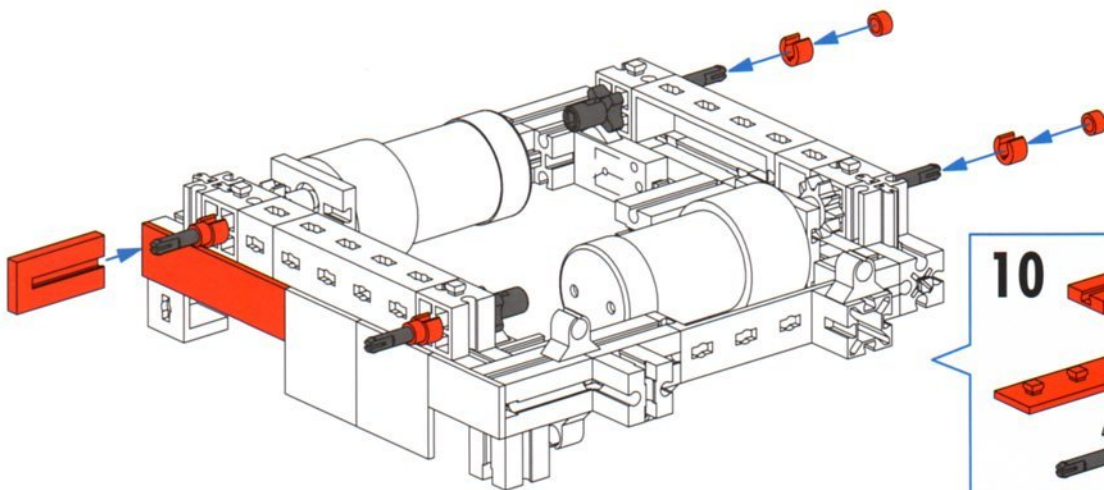
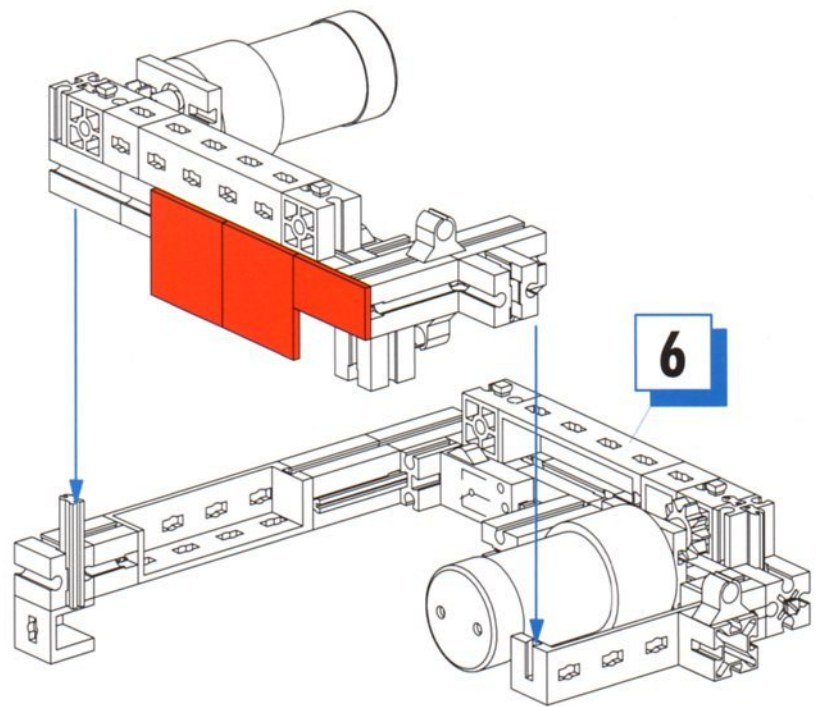
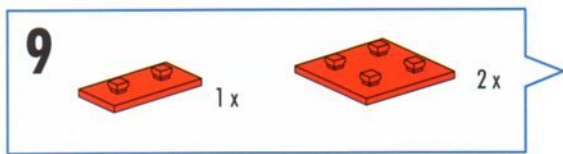
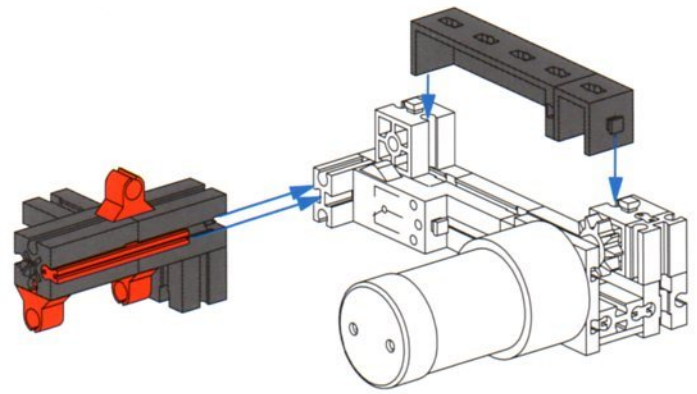
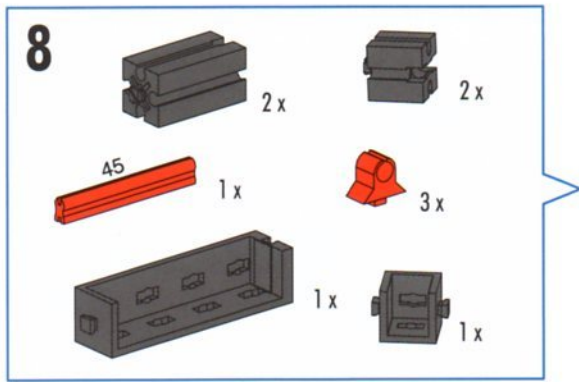
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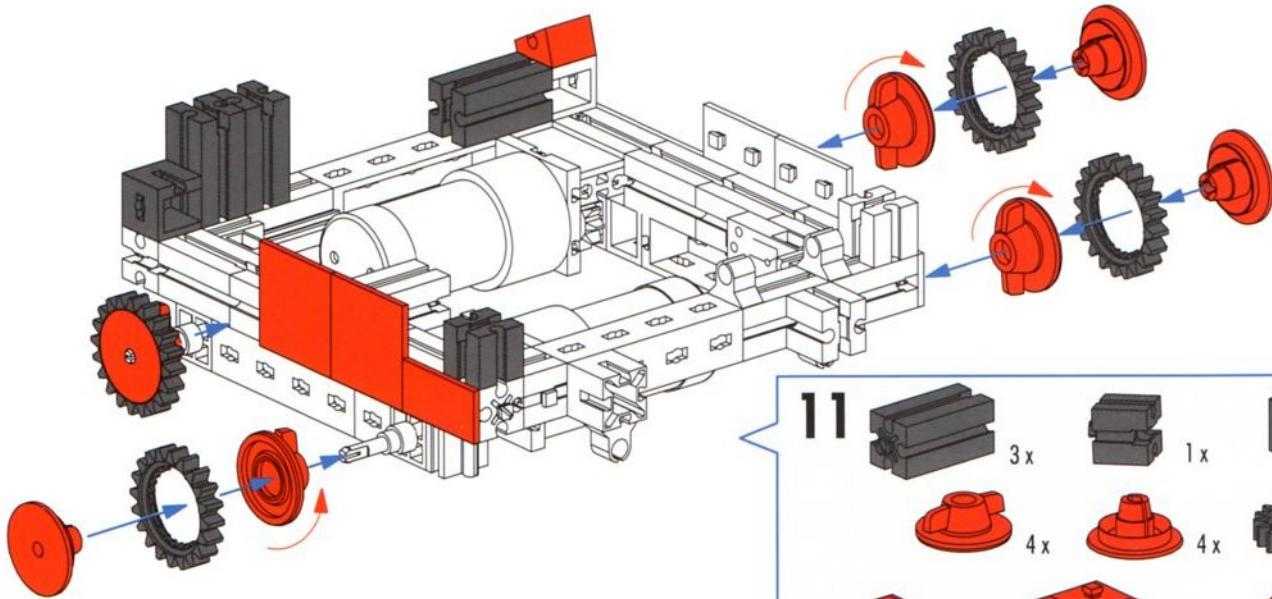
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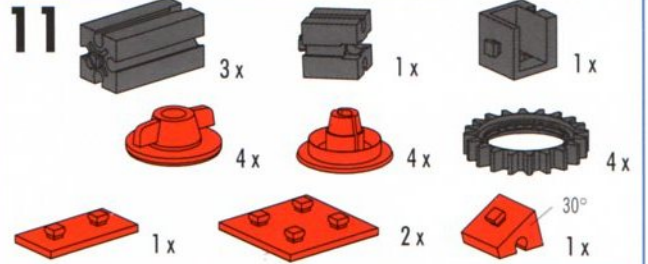
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- Nabenmuttern festdrehen
- Fasten the hub nuts
- Serrer les écrous de moyeu
- Draal de naafmoeren vast
- Atornillar las tuercas laterales
- Apertar bem as porcas de cubo
- Stringere i dadi dei mozzi
- Затянуть гайки ступиц
- 拧紧

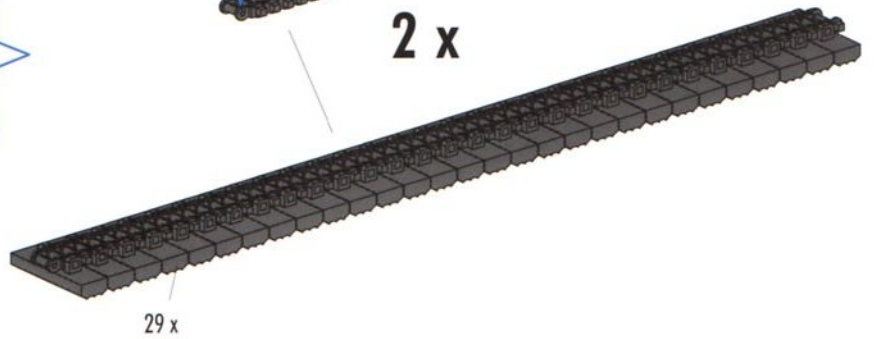
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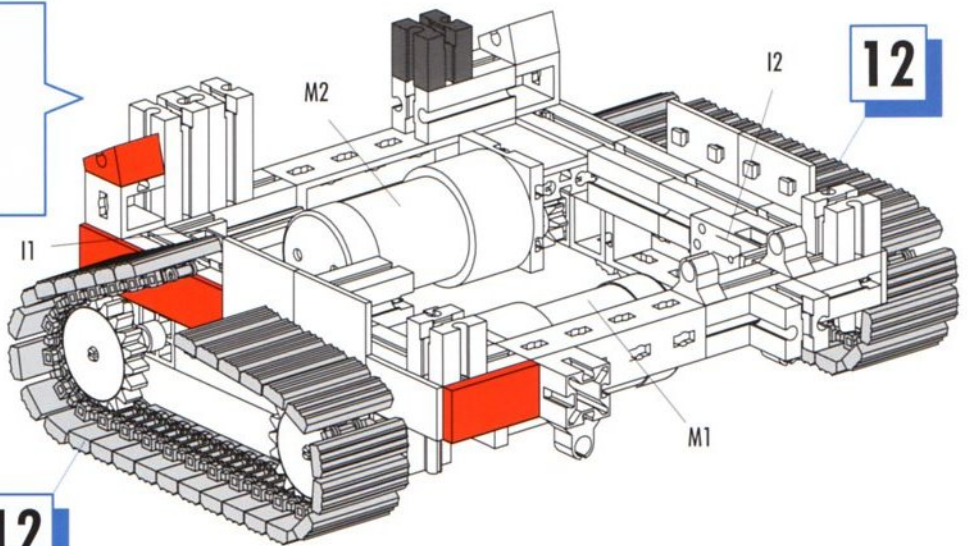
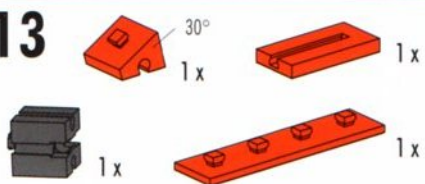
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2 x

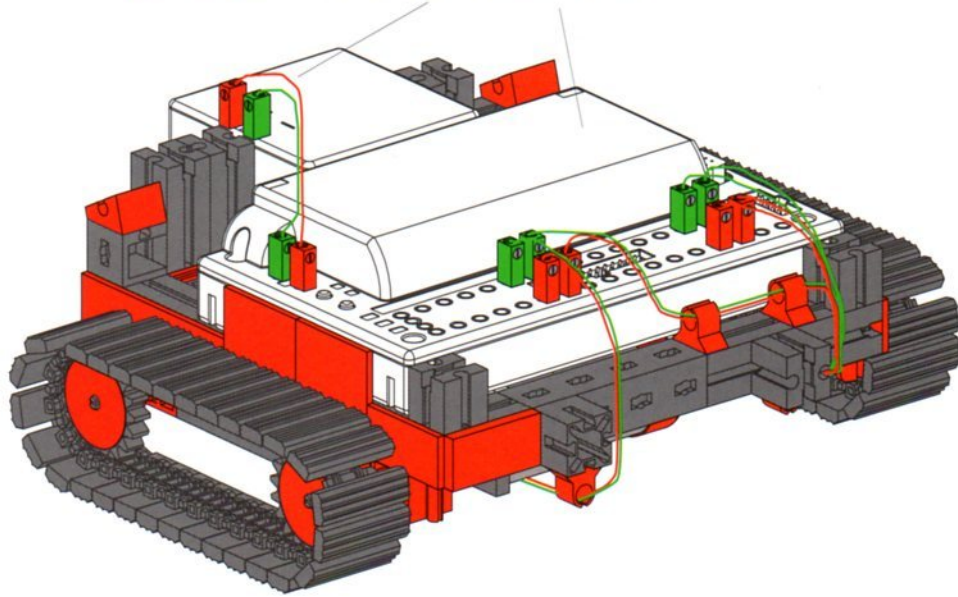


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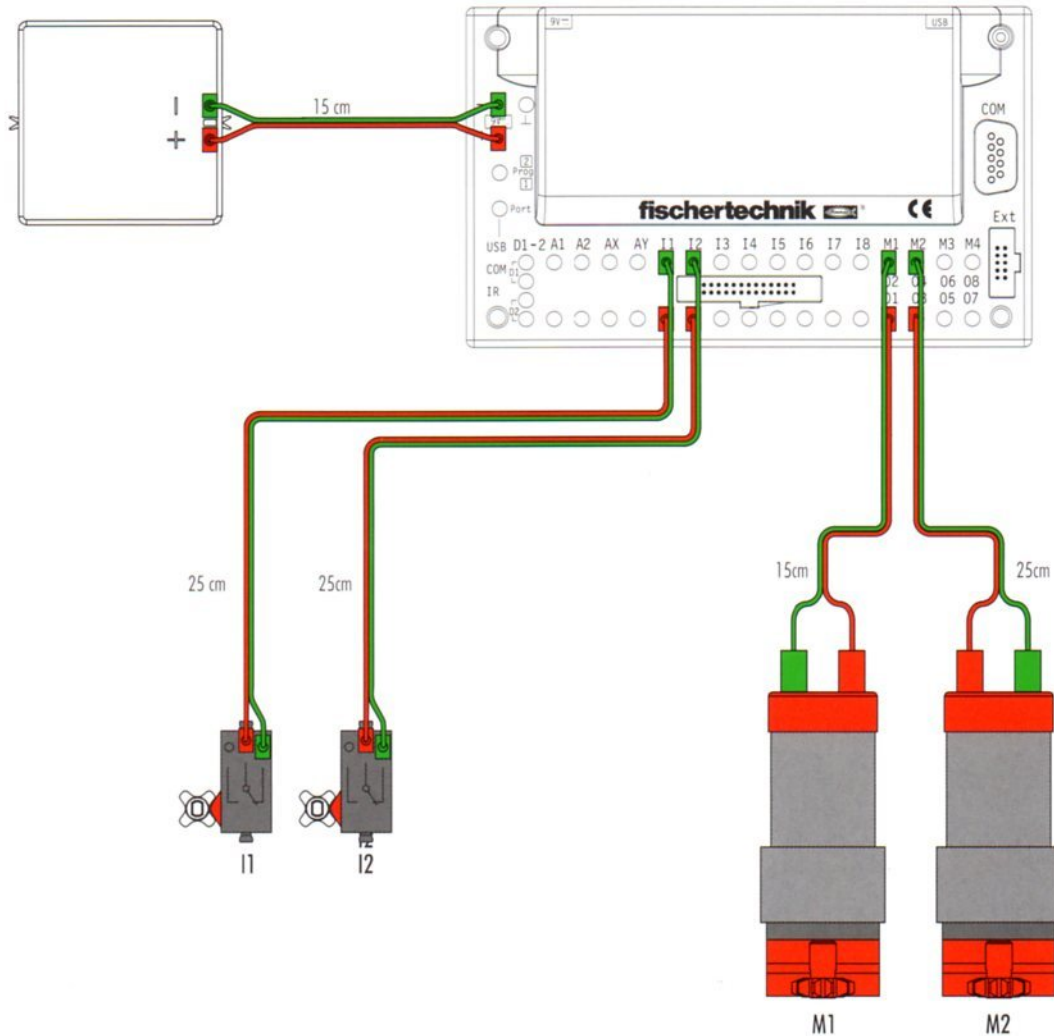
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- Accu Set (Art. No. 34 969) and ROBO Interface (Art.-Nr. 93 293) not included in the modular kit
- Accu Set (réf. 34 969) et ROBO Interface (réf. 93 293) n'est pas contenue dans le kit
- Accu Set (art.-nr. 34 969) en ROBO Interface (art.-nr.93 293) niet in de bouwdoos opgenomen
- Accu Set (art. n° 34 969) y ROBO Interface (art. n° 93 293) no está incluido en el conjunto
- Accu Set (N° de prod. 34 969) e ROBO Interface (N° de prod. 93 293) não contido no sistema de construção por blocos
- Accu Set (cod. prod. 34 969) e ROBO Interface (cod. prod. 93 293) non inclusi nella scatola di montaggio
- Аккумулятор Accu Set (арт.№ 34 969) и ROBO Interface (арт.№ 93 293) не входят в комплект конструктора
- 电池套件(产品号 34 969)和 ROBO 接口 (产品号 93 293) 不包含在组件中



Schaltplan
Circuit diagram
Plan électrique

Schakelschema
Diagrama de circuitos
Plano elétrico de ligação

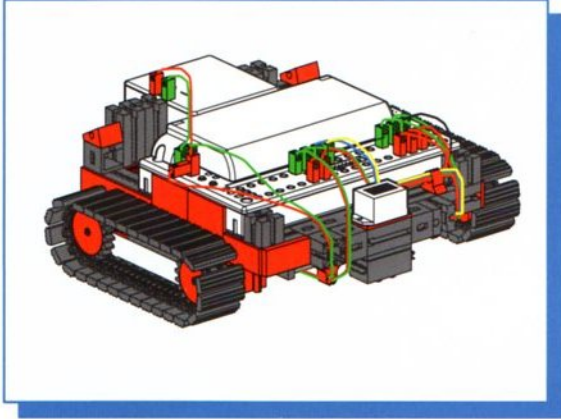
Schema elettrico
Электросхема
电路图



Spursucher
Trail Searcher
Dépisteur

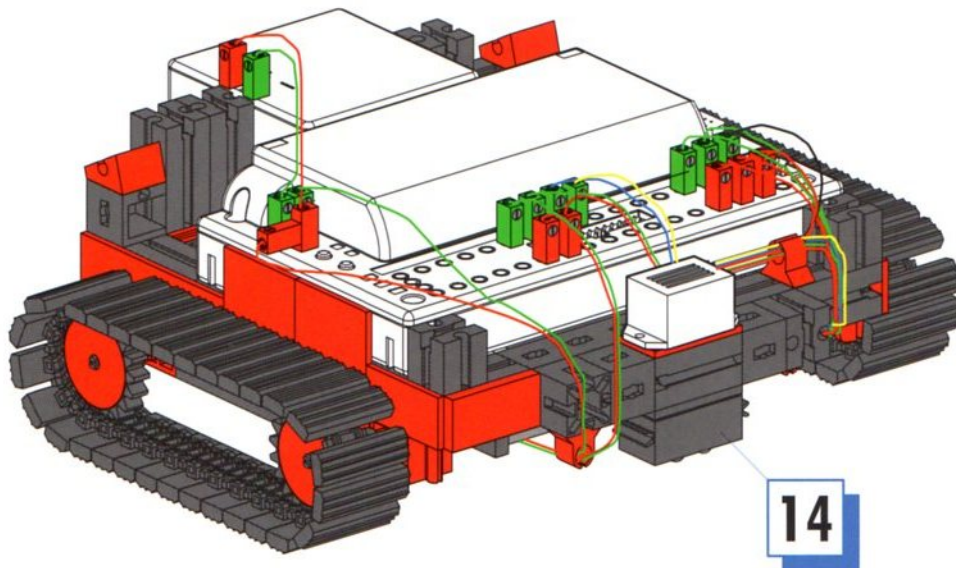
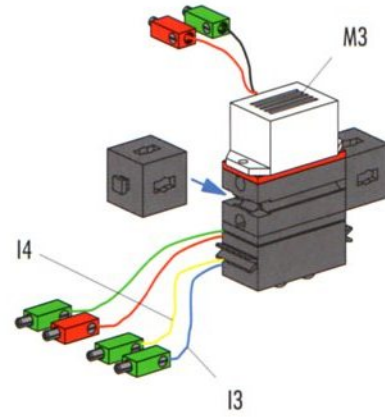
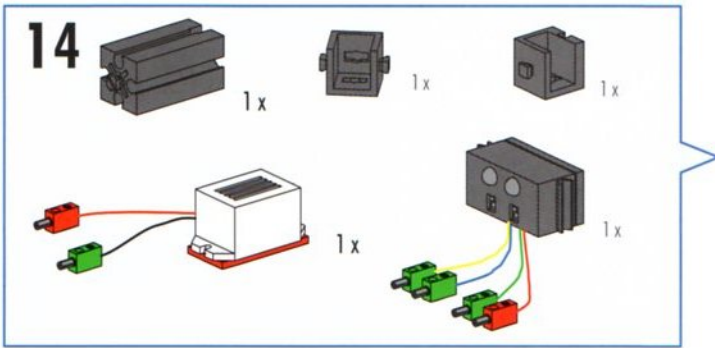
Spoorzoeker
Buscador de pistas
Dispositivo de rastreamento

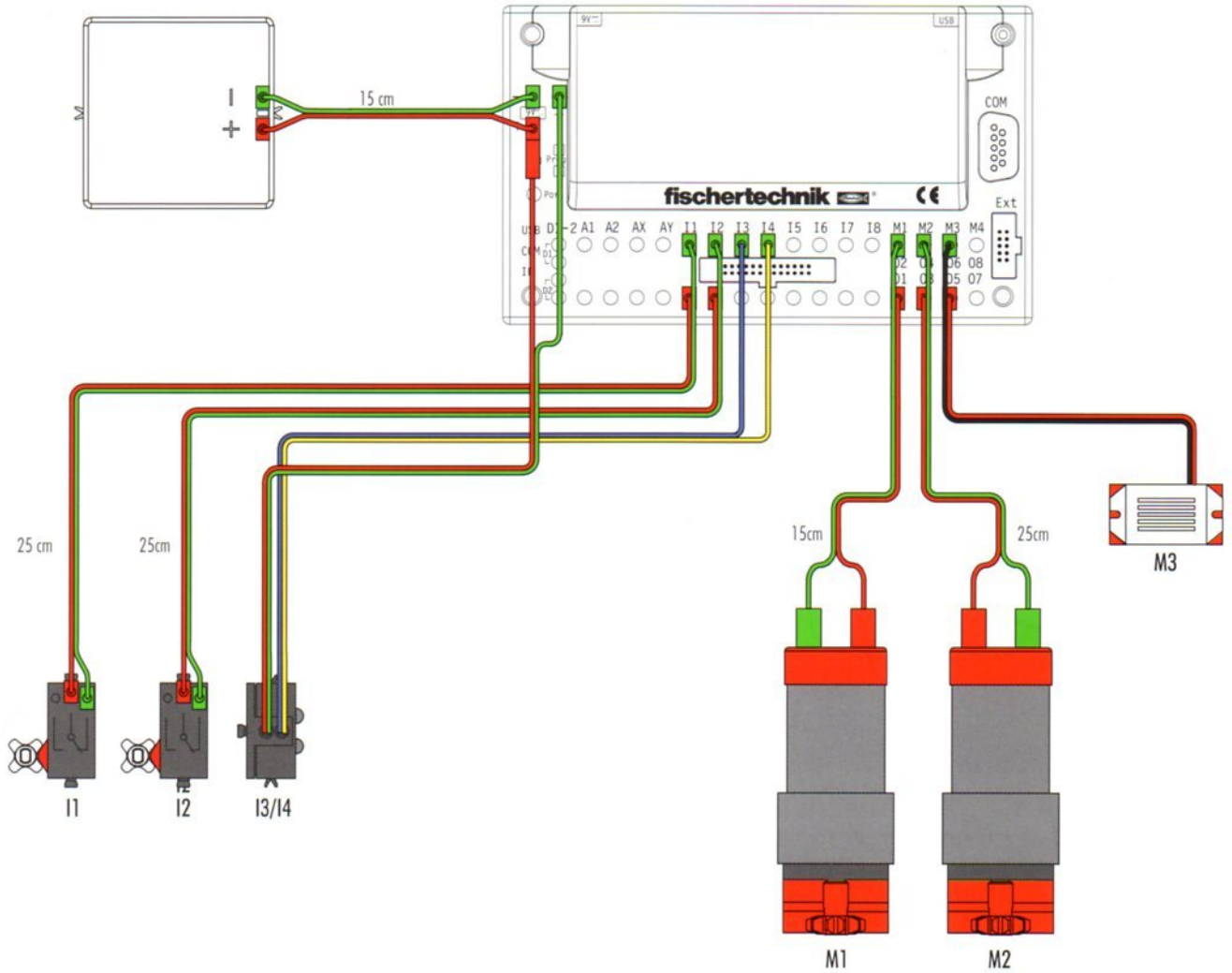
Esploratore di pista
Следопыт
踪迹搜寻机



1-13

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Page 4
Bladzijde 4
Página 4
Página 4
Página 4
Страница 4
页次 4

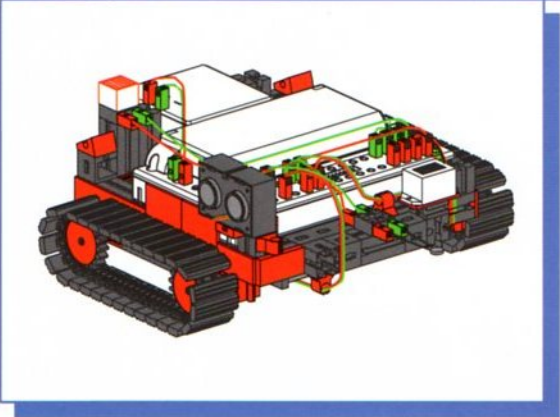




Tunnelroboter
Tunnel Robot
Robots pour tunnels

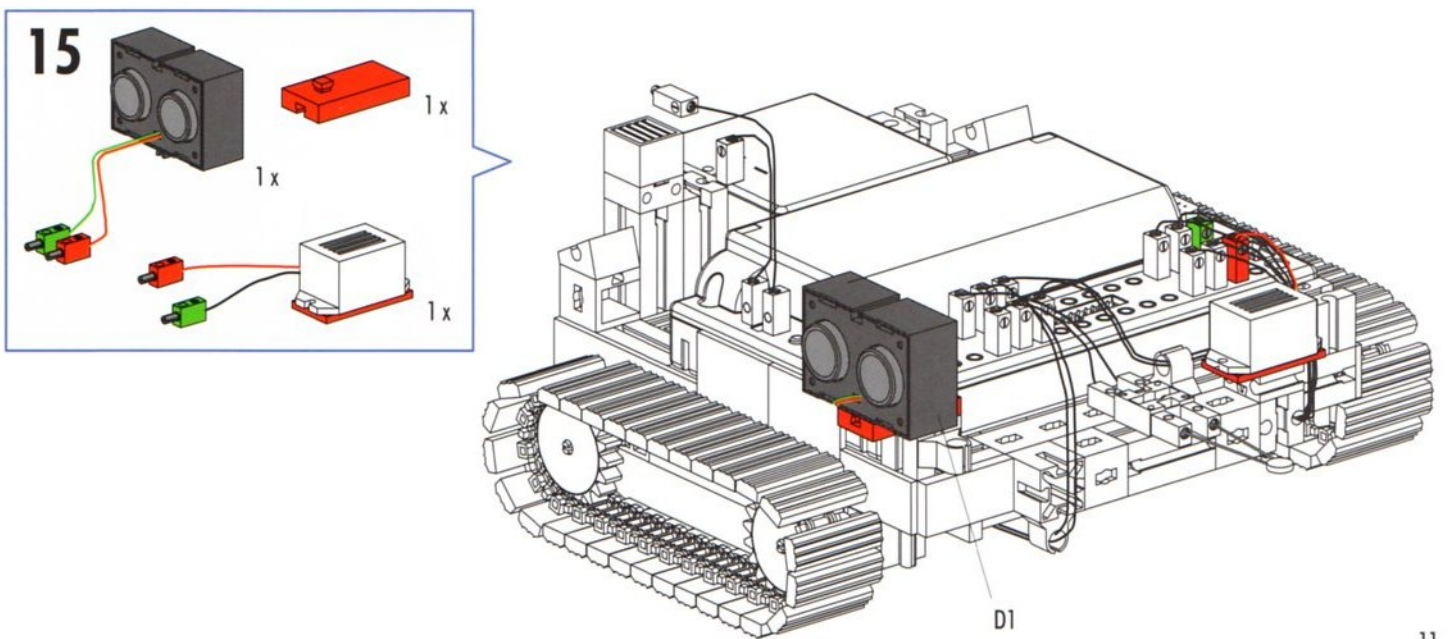
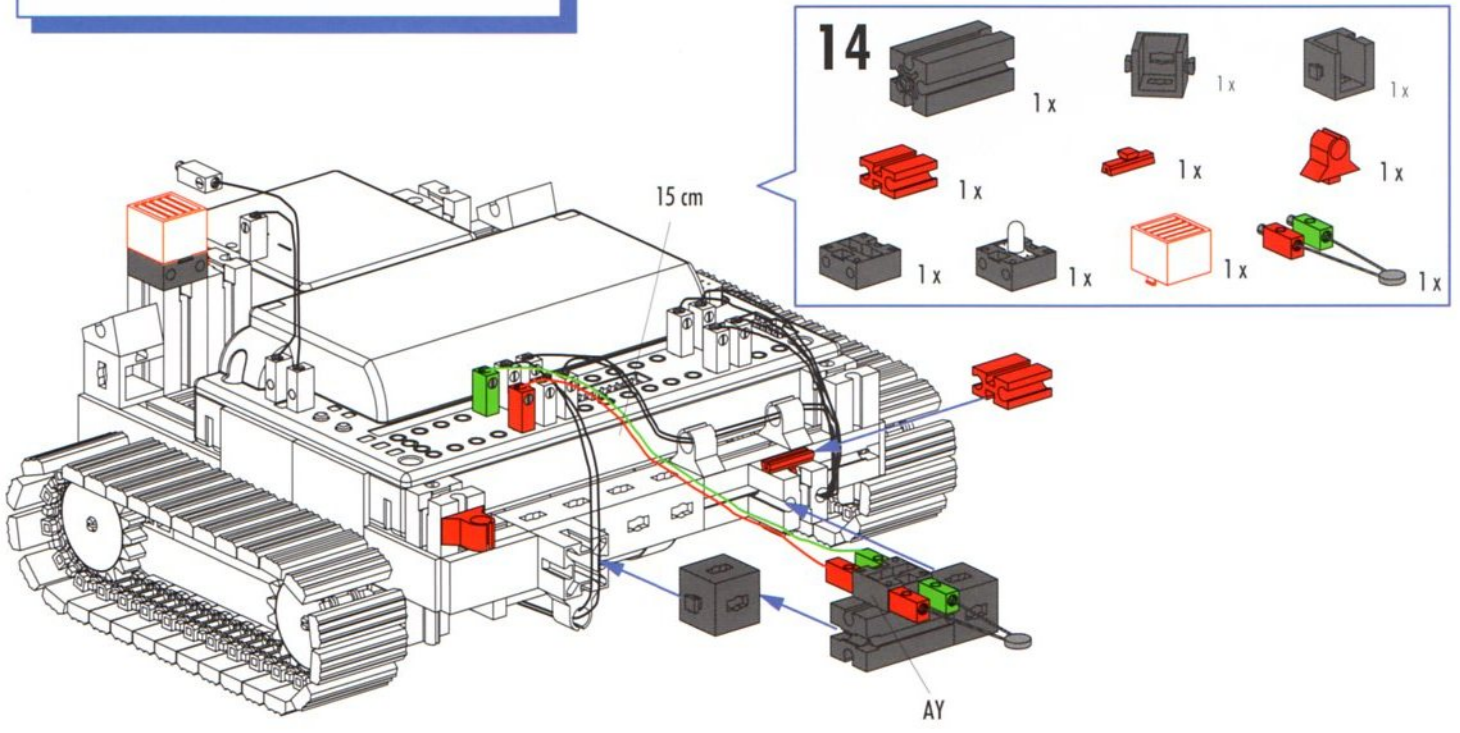
Tunnelrobot
Robot de túnel
Robo de túnel

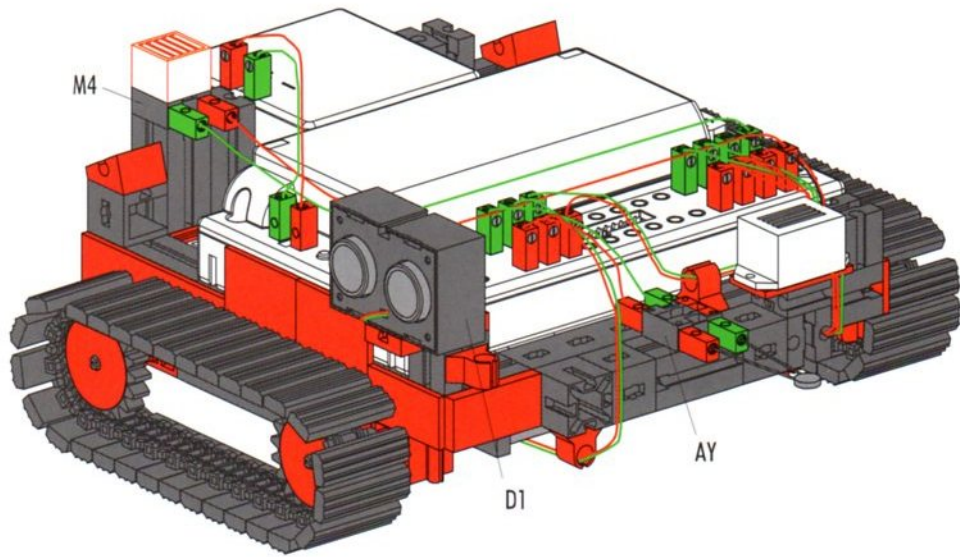
Robot da tunnel
Туннельный робот
隧道机器人



1-13

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Página	4
Página	4
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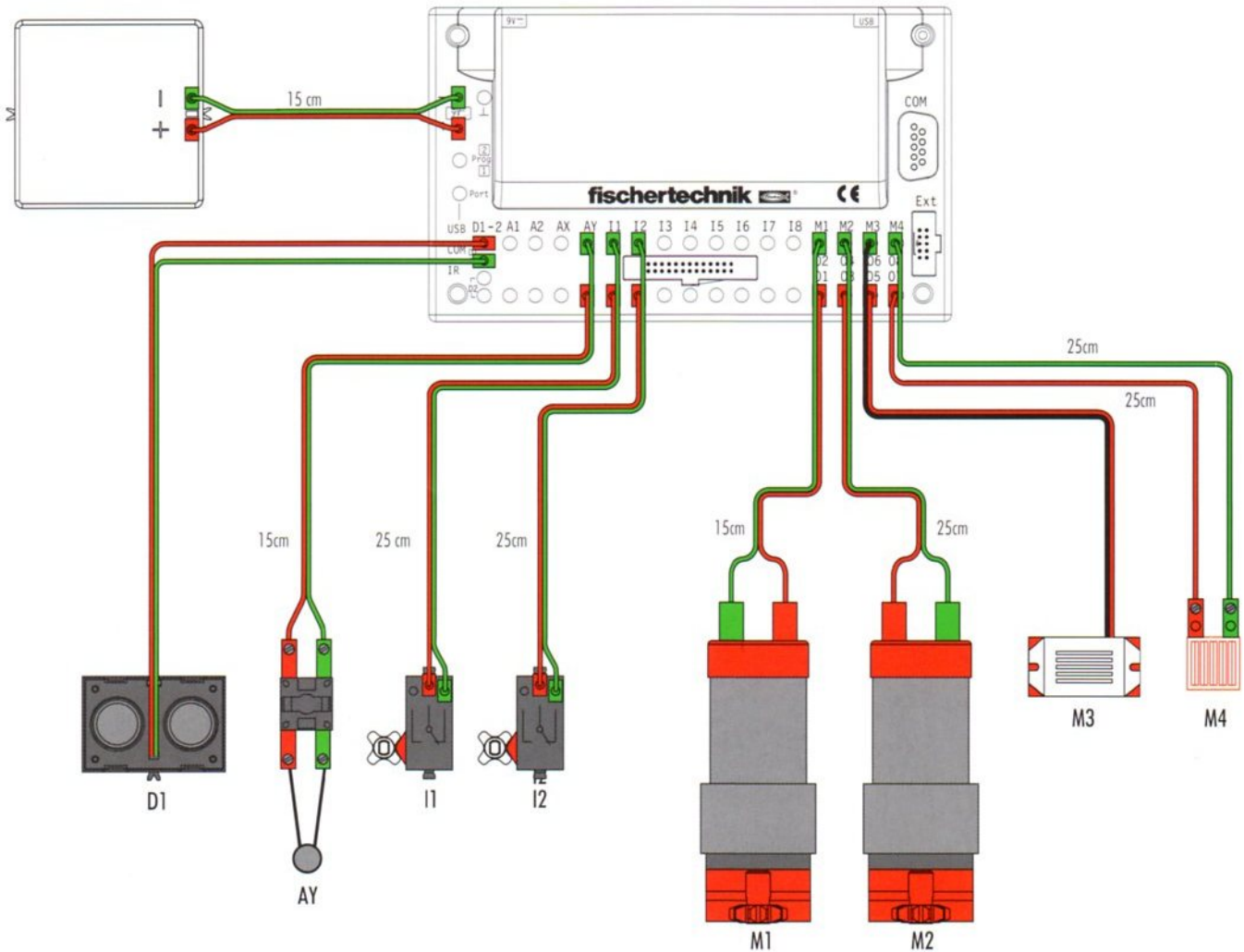


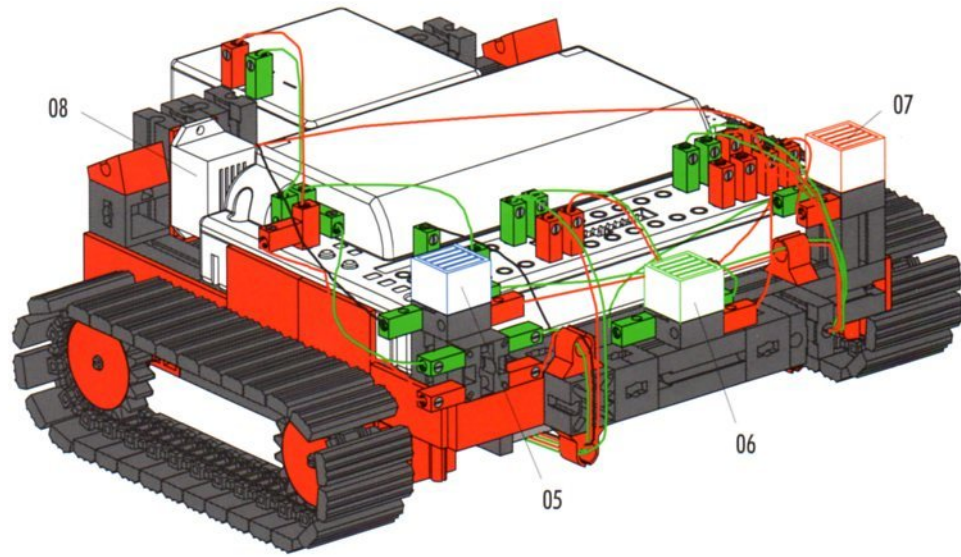


Schaltplan
Circuit diagram
Plan électrique

Schakelschema
Diagrama de circuitos
Plano elétrico de ligação

Schema elettrico
Электросхема
电路图

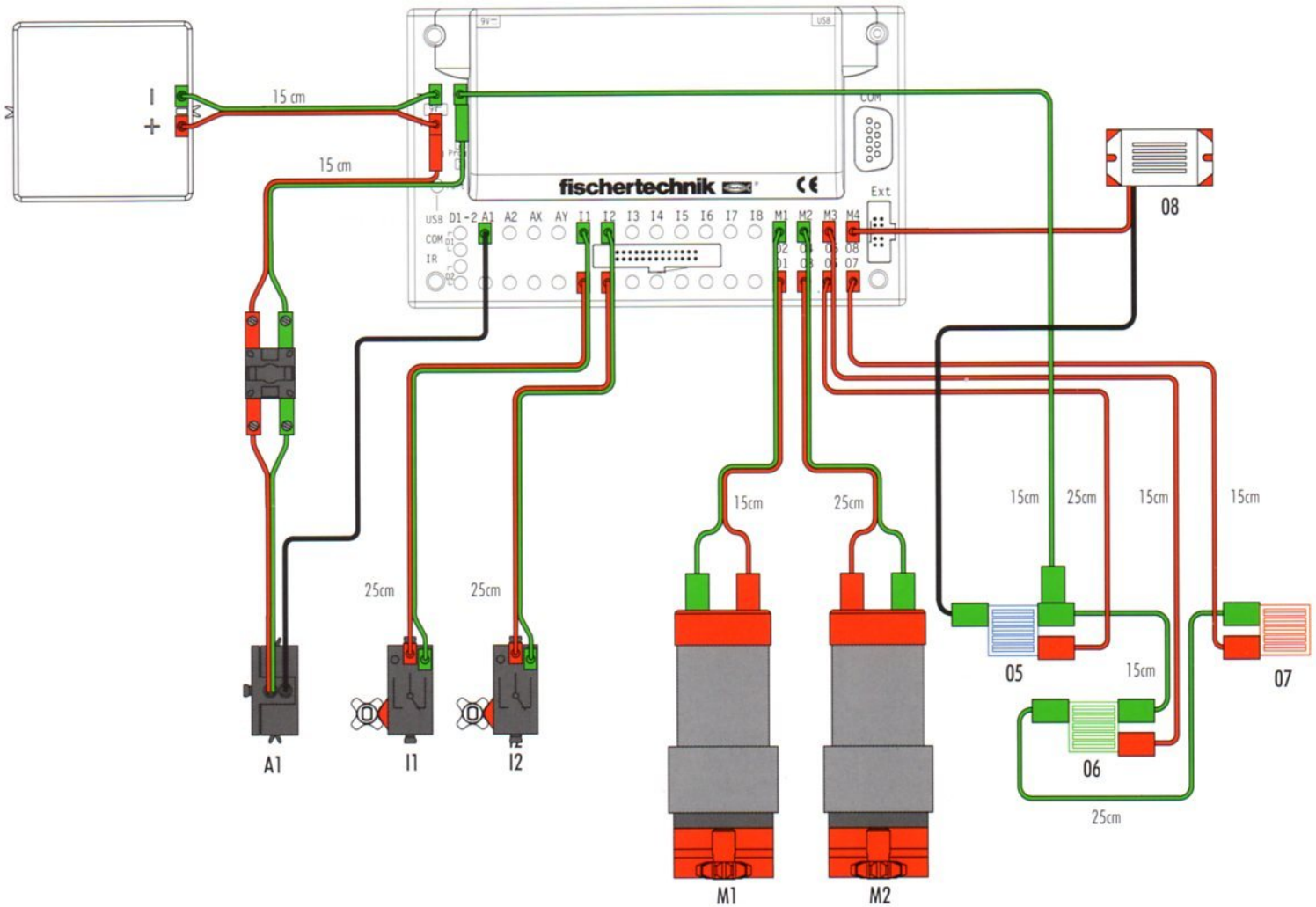


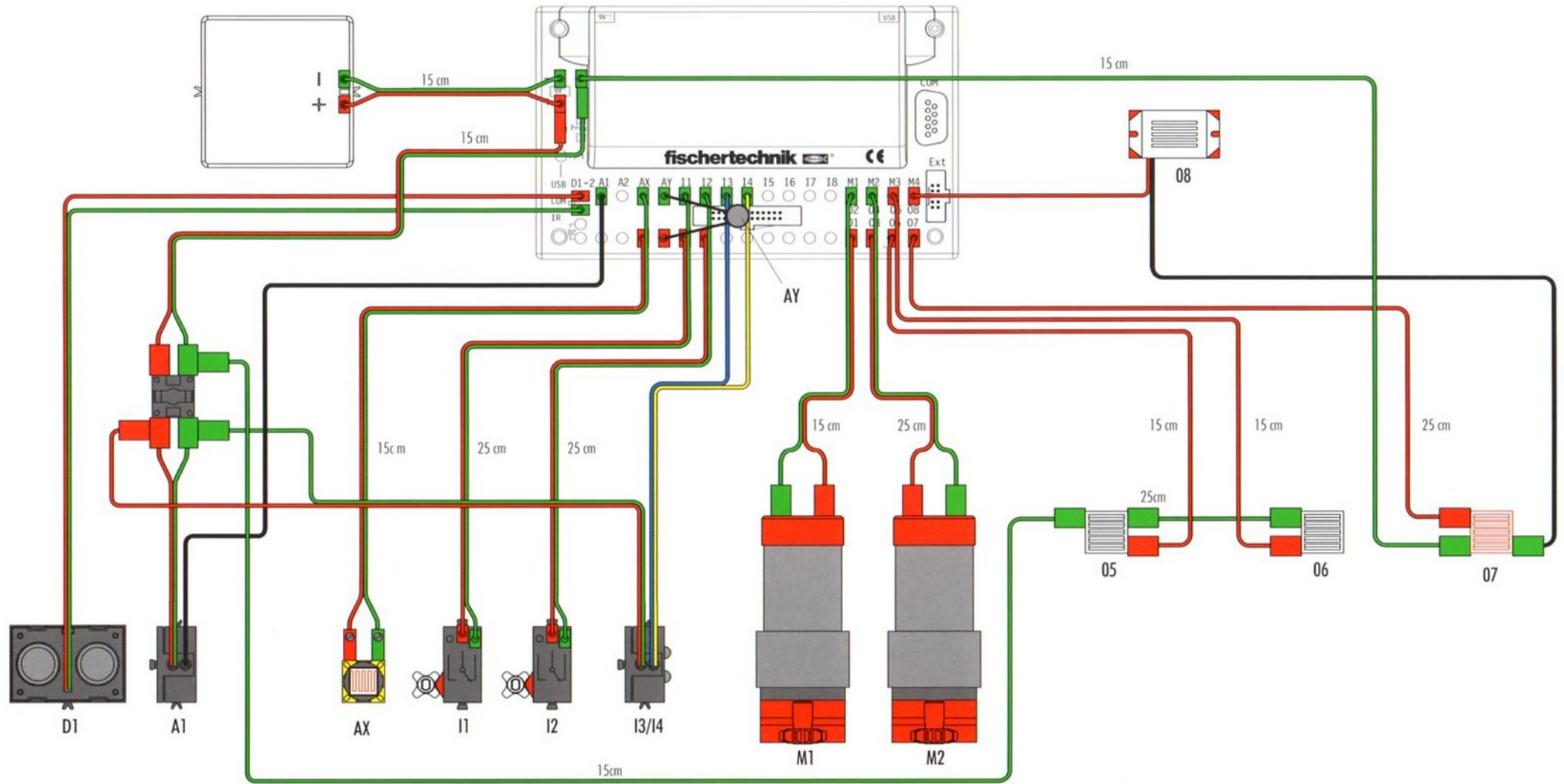


Schaltplan
Circuit diagram
Plan électrique

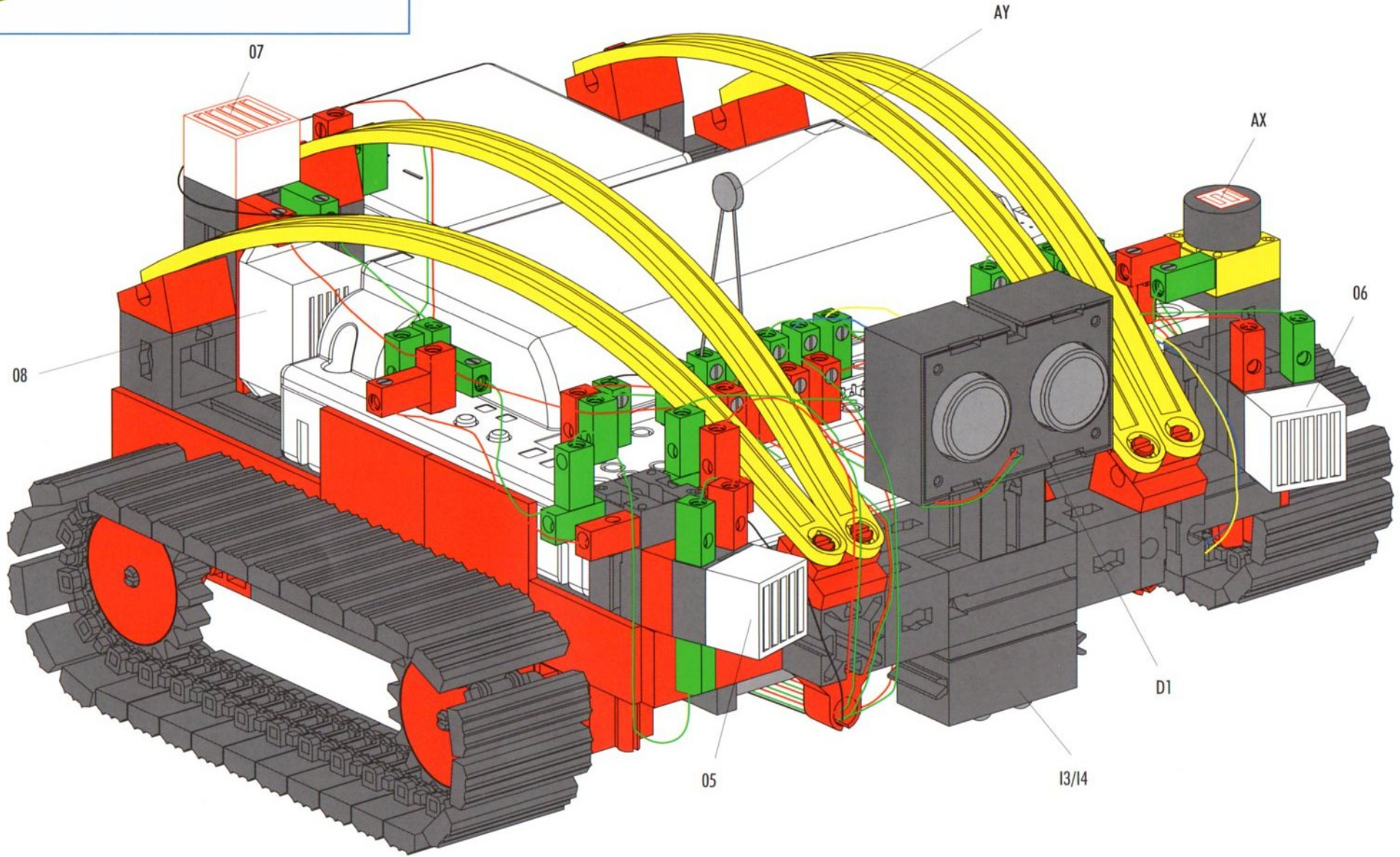
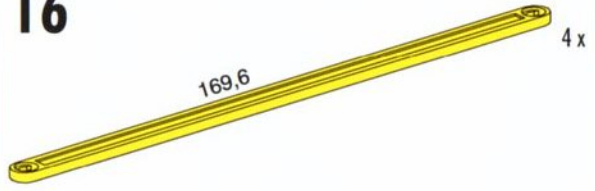
Schakelschema
Diagrama de circuitos
Plano elétrico de ligação

Schema elettrico
Электросхема
电路图





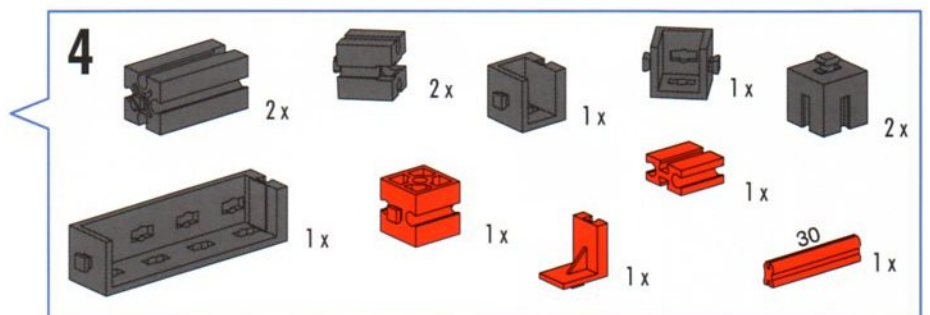
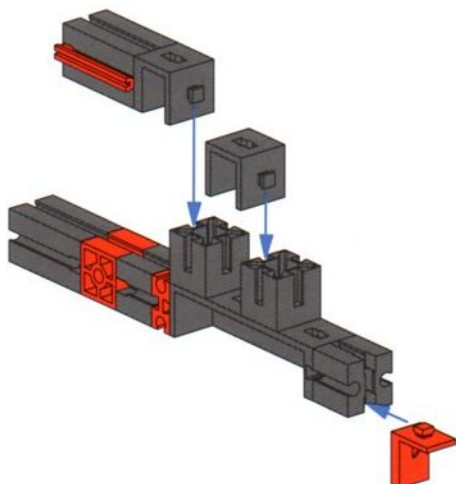
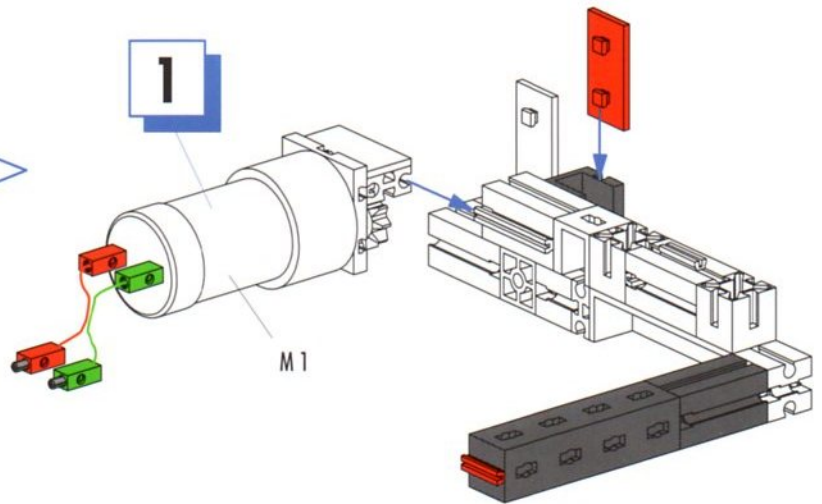
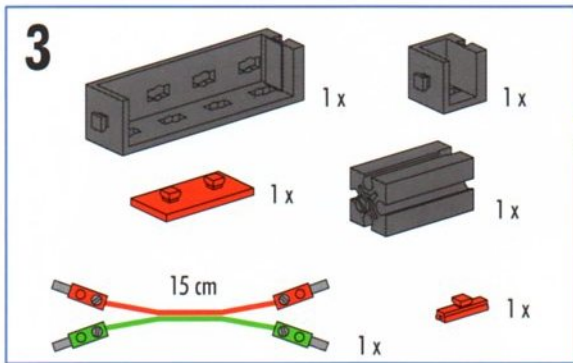
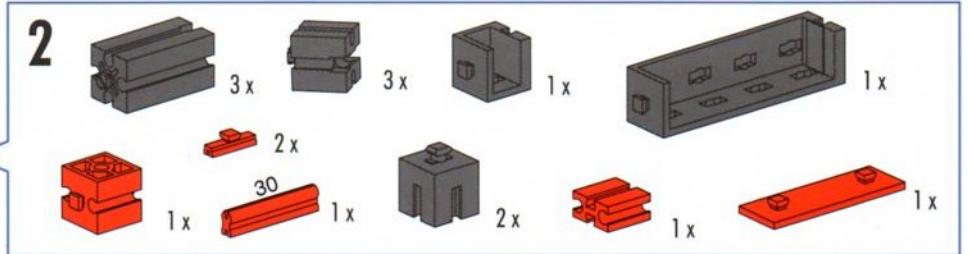
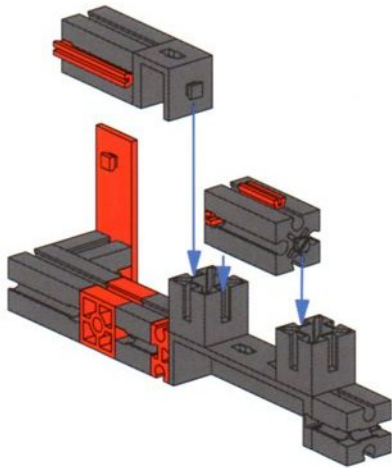
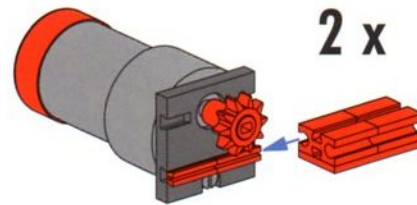
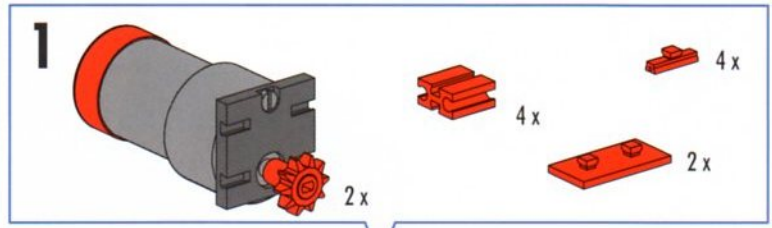
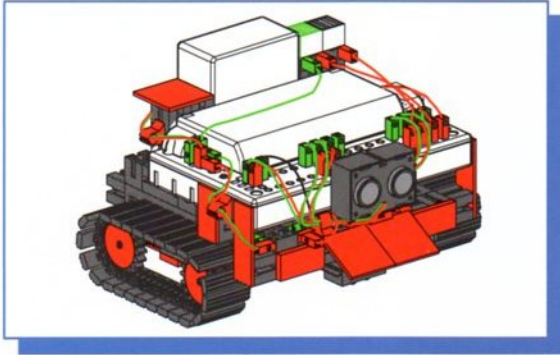
16

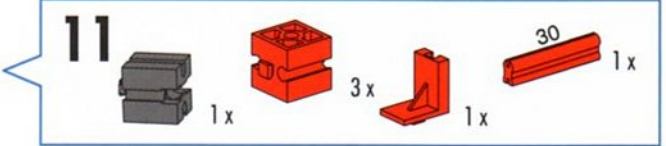
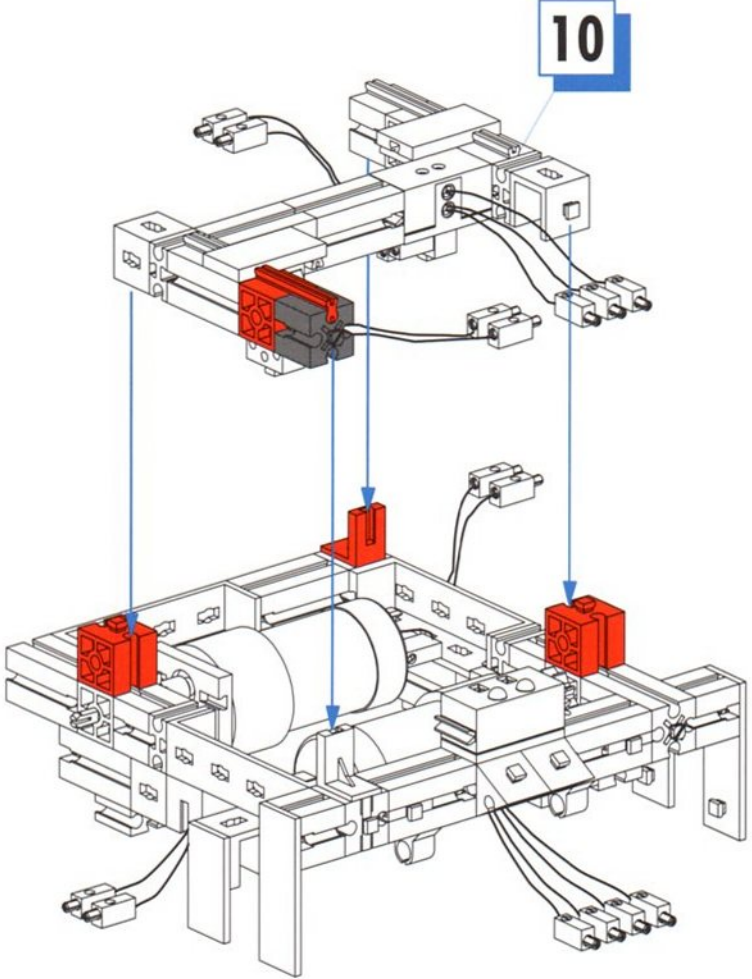
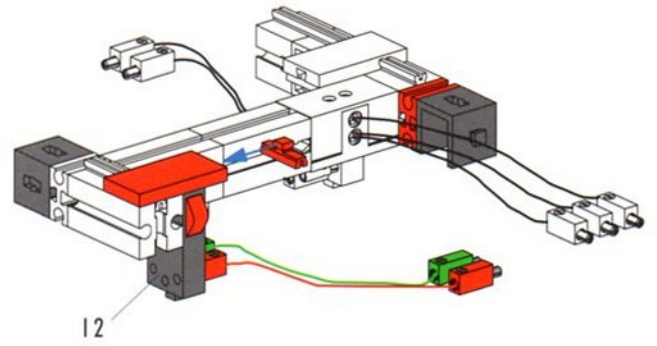
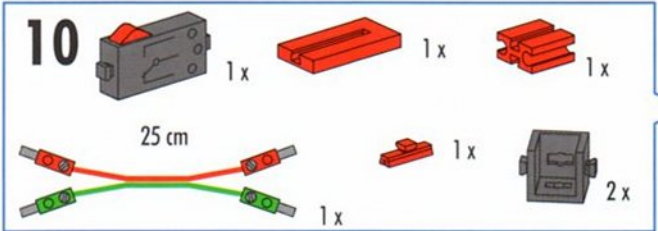
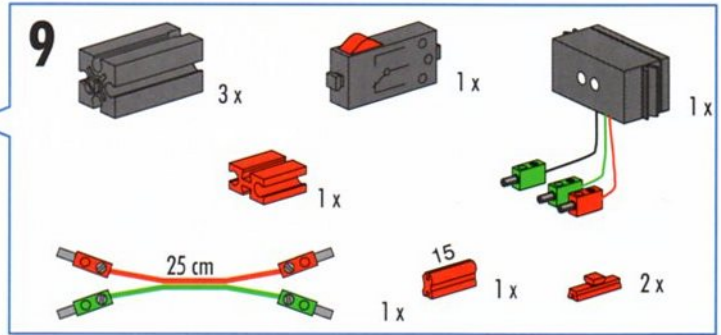
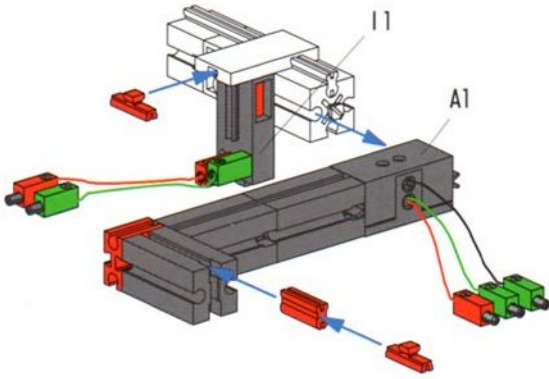


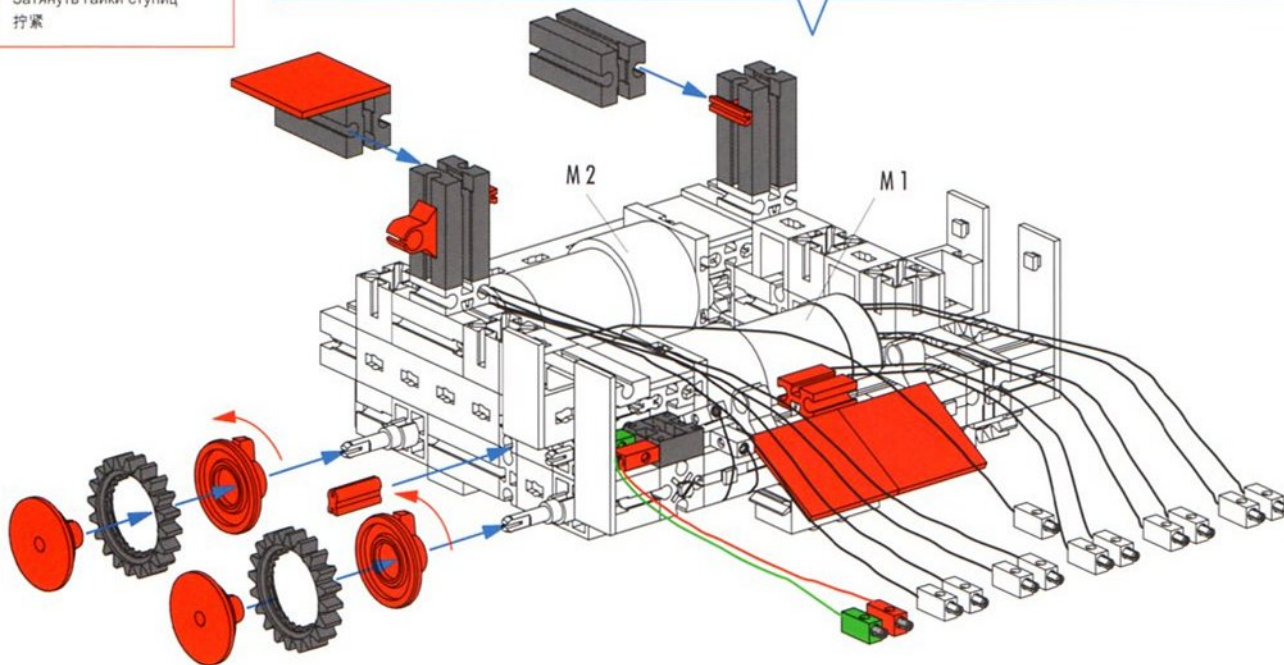
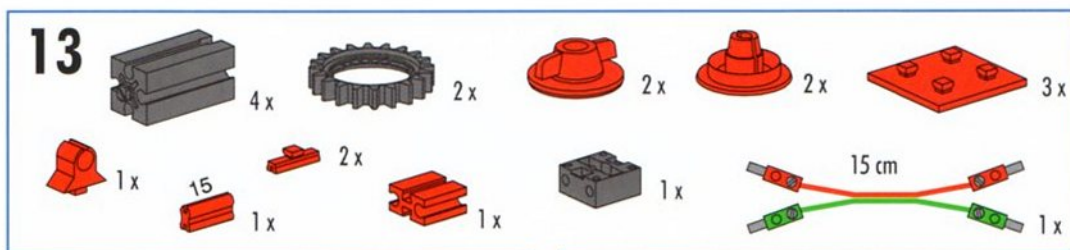
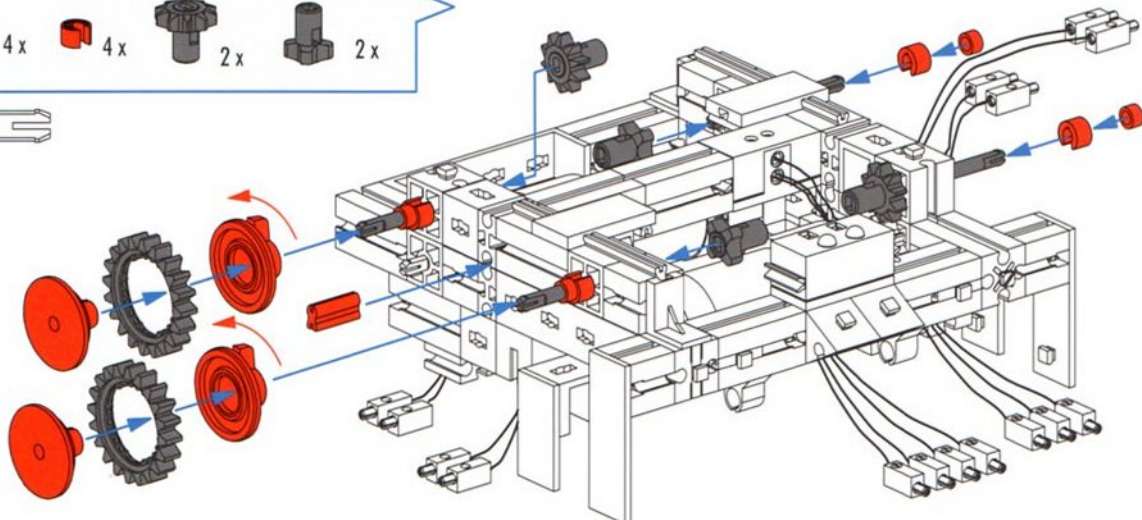
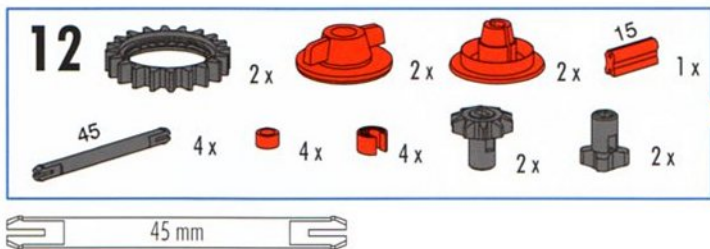
Rescue Robot
Rescue Robot
Robot de sauvetage

Rescue Robot
Rescue Robot
Robô de salvamento

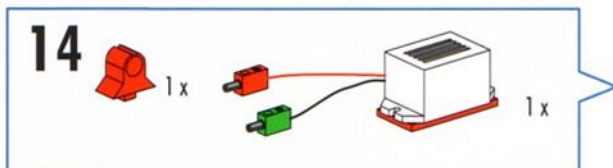
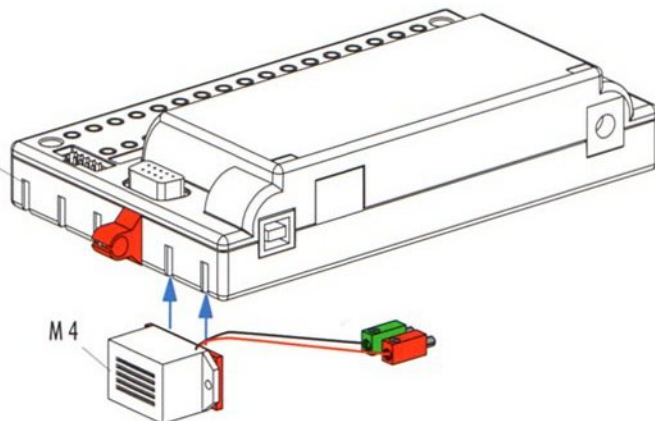
Rescue Robot
Робот-спасатель
营救机器人

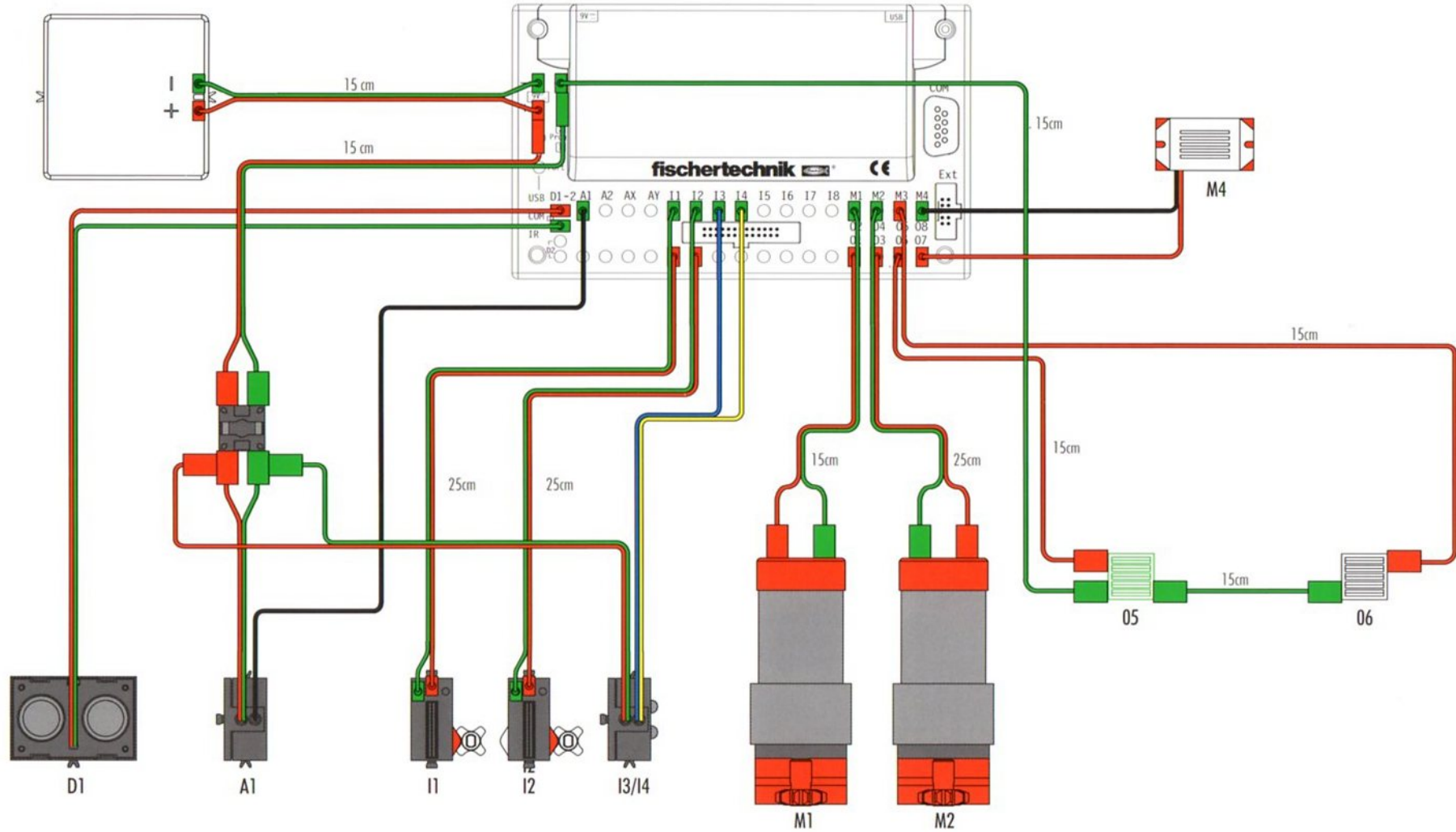






- ROBO Interface (Art.-Nr. 93 293) nicht im Baukasten enthalten
- ROBO Interface (Art.-Nr. 93 293) not included in the modular kit
- ROBO Interface (Art.-Nr. 93 293) n'est pas contenue dans le kit
- ROBO Interface (Art.-Nr. 93 293) niet in de bouwdoos opgenomen
- ROBO Interface (Art.-Nr. 93 293) no está incluido en el conjunto
- ROBO Interface (Art.-Nr. 93 293) não contido no sistema de construção por blocos
- ROBO Interface (cod. prod. 93 293) non inclusa nella scatola di montaggio
- ROBO Interface (арт.№ 93 293) не входит в комплект конструктора
- ROBO 接口 (产品号 93 293) 不包含在组件中







■ 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'imballaggio 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。等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。

Sortiervorschlag Box 1 für Aufbewahrungssystem Art.-Nr. 94828

Storage suggestion box 1 for storage system Art No. 94828

Suggestion de classement Boîte 1 pour le système de stockage Art n° 94828

Sorteervoorstel box 1 voor bewaarsysteem art.-nr. 94828

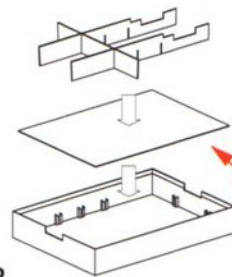
Propuesta de clasificación Caja 1 para almacenamiento Art. Nº 94828

Proposta de divisão caixa 1 para sistema de conservação n.º de art. 94828

Proposta di sistemazione Box 1 per il sistema di conservazione, cod. prod. 94828

Рекомендации по сортировке коробки 1 для системы хранения арт.№ 94828

用于产品号为94828的保存系统的1号盒分类建议



Zum Ausschneiden und Einlegen
For cutting out and inserting
A découper et à poser
Uitknippen en aanbrengen
Para cortar y montar
Para cortar e colocar
Da tagliare e inserire
Вырезать и вложить
用于剪下和放入

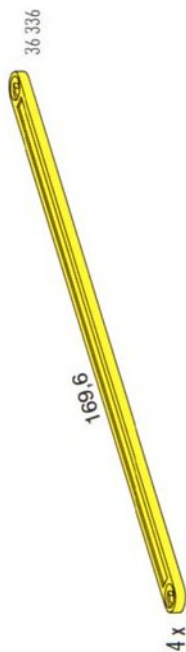


58 x



116 x

128 659



36 336

169 6

4 x



36 443

1 x



32 879

17 x



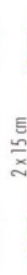
4 x 15 cm



3 x 25 cm



2 x 15 cm



2 x 15 cm



1 x 25 cm



1 x 25 cm



37 783

2 x



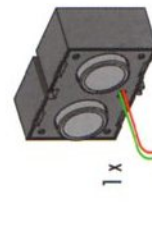
32 698

1 x



38 216

1 x



35 049

1 x



32 330

4 x



36 922

4 x



35 969

5 x

Sortiervorschlag Box 2 für Aufbewahrungssystem Art.-Nr. 94828

Storage suggestion box 2 for storage system Art No. 94828

Suggestion de classement Boîte 2 pour le système de stockage Art n° 94828

Sorteervoorstel box 2 voor bewaarsysteem art.-nr. 94828

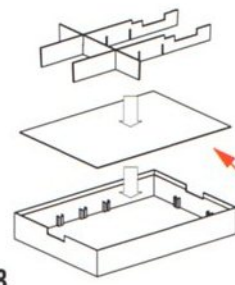
Propuesta de clasificación Caja 2 para almacenamiento Art. N° 94828

Proposta de divisão caixa 2 para sistema de conservação n.º de art. 94828

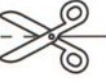
Proposta di sistemazione Box 2 per il sistema di conservazione, cod. prod. 94828

Рекомендации по сортировке коробки 2 для системы хранения арт.№ 94828

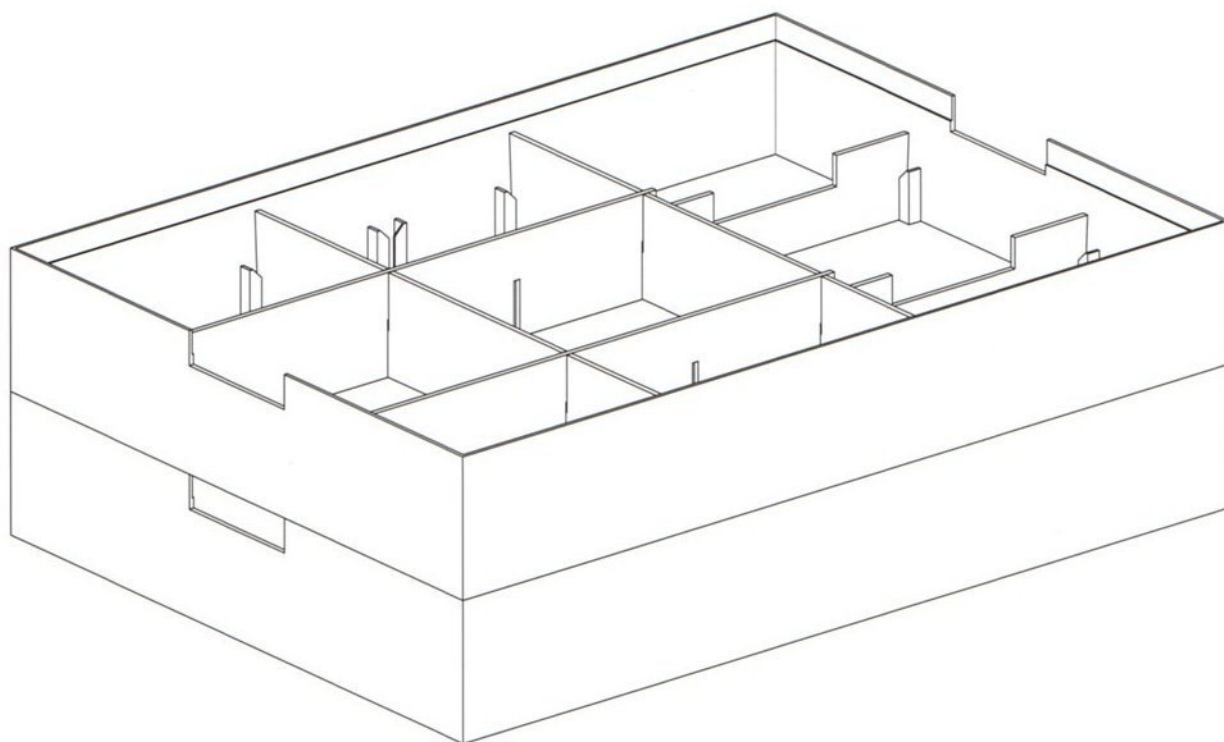
用于产品号为94828的保存系统的2号盒分类建议

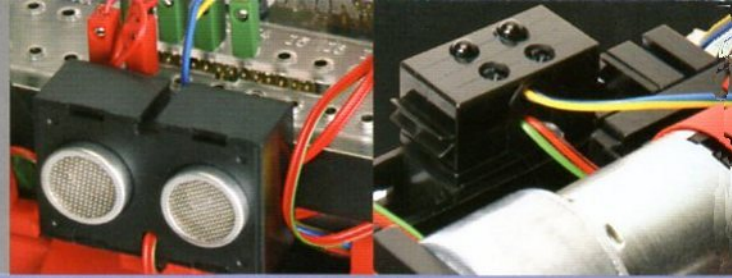


Zum Ausschneiden und Einlegen
For cutting out and inserting
A découper et à poser
Uitknippen en aanbrengen
Para cortar y montar
Para cortar e colocar
Da tagliare e inserire
Вырезать и вложить
用于剪下和放入



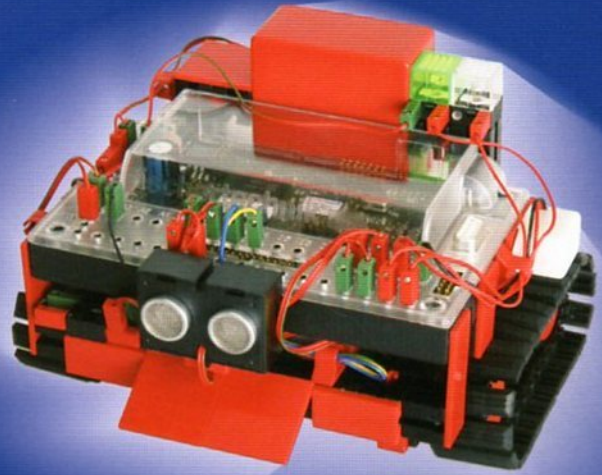
Empfohlene Aufbewahrung:	2 x Aufbewahrungssystem Art.-Nr. 94828
Recommended storage:	2 x storage system Art No. 94828
Stockage conseillé :	2 x système de stockage Art n° 94828
Bewaardvies:	2 x bewaarsysteem art.-nr. 94828
Consejos para guardar el producto:	2 x almacenamiento Art. N° 94828
Conservação recomendada:	2 x sistema de conservação n.º de art. 94828
Conservazione consigliata:	2 sistemi di conservazione, cod. prod. 94828
Рекомендуемое хранение:	2 системы хранения арт.№ 94 828
推荐的保存方式 :	2 个产品号为 94 828 的保存系统





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ROBO EXPLORER

6 MODELS

128 960 · Printed in Germany · Technische Änderungen vorbehalten · Subject to technical modifications