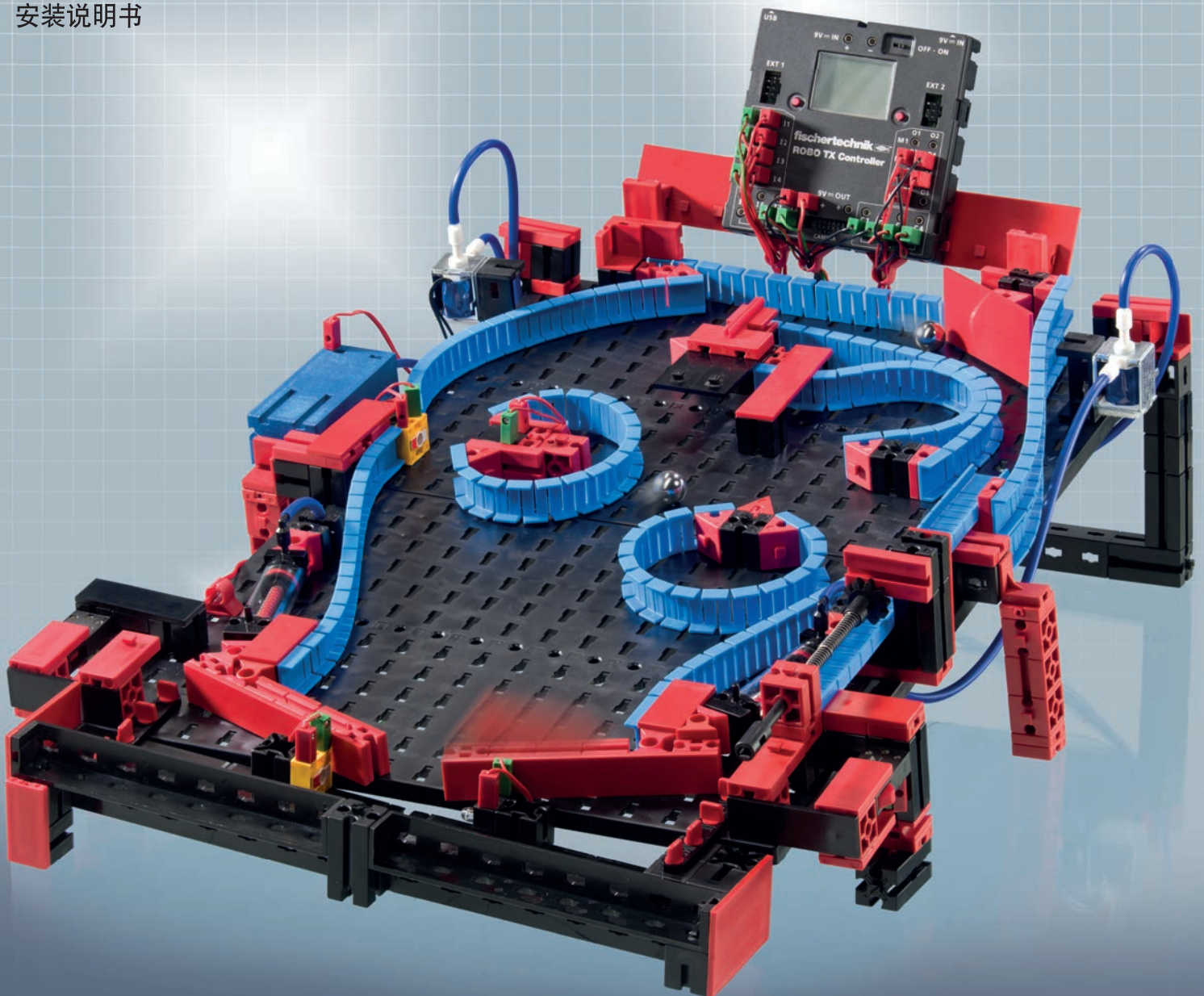


fischertechnik 

ROBOTICS

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 TX *ElectroPneumatic*

4 MODELS
MODEL 2

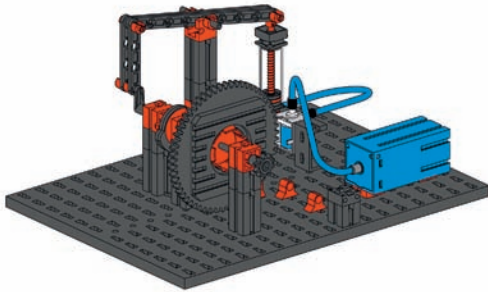
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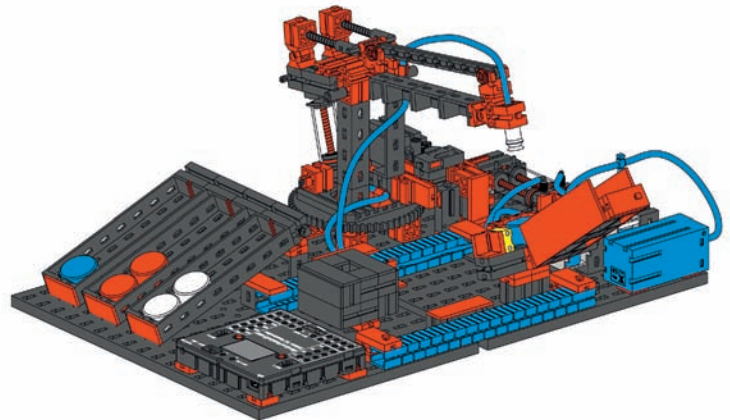
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Singoli componenti / Перечень деталей / 零件概览 1

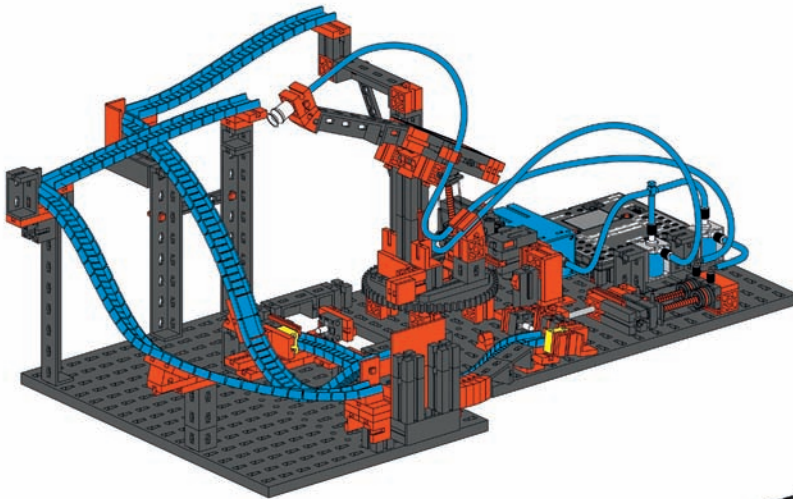
Montagetipps / Tips for assembly / Tuyaux pour le montage / Montagetips / Consejos para el montaje / "Dicas" para montagem /
Consigli per il montaggio / Советы по сборке / 装配建议 2



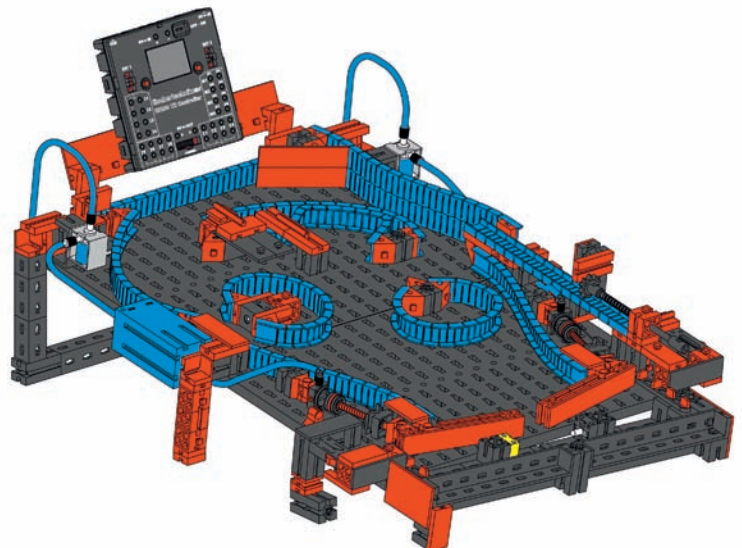
Druckluftmotor / Compressed air motor / Moteur
pneumatique / Persluchtmotor / Motor de aire comprimido /
Motor de ar comprimido / Motore ad aria compressa /
пневмомотор / 压缩空气马达 5



Farbsortierroboter / Color sorting robot / Robot de triage
des couleurs / Kleurensorteerrobot / Robot clasificador por
colores / Robo seleccionador de cores / Robot assortitore di
colori / Робот-цветосортировщик /
辨色分选机器人 9



Kugelparcours mit Vakuumgreifer / Ball obstacle course
with vacuum picker arm / Parcours à billes avec grappin
pneumatique / Kogelparcour met vacuümgreijper /
Pista de recorrido de bola con manipulador de vacío /
Circuito de esferas com agarrador a vácuo / Percorso
sfere con pinza a ventosa / Трасса для
шарика с вакуумным захватом /
配分选机器人的滚珠弯道 21









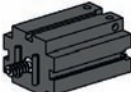


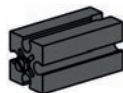
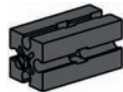


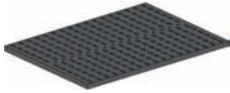



Flipper / Pinball machine / Flipper / Flipper /
Pinball / Flipper / Flipper / пинбол-машина /
弹球机 33


















Einzelteilübersicht
Spare parts list
Liste des pièces détachées


















Onderdelenoverzicht
Lista da piezas
Resumo de peça individual

Singoli componenti
Перечень деталей
零件概览

	31 010 10 x
	31 011 4 x
	31 040 1 x
	31 058 2 x
	31 060 5 x
	31 061 5 x
	31 078 1 x
	31 082 1 x
	31 330 2 x
	31 336 19 x
	31 337 20 x
	31 390 1 x
	31 391 1 x
	31 422 1 x
	31 426 6 x
	31 436 6 x
	31 597 2 x

	31 642 2 x
	31 690 2 x
	31 981 4 x
	31 982 25 x
	32 064 17 x
	32 071 13 x
	32 293 1 x
	32 330 5 x
	32 850 7 x
	32 879 10 x
	32 880 2 x
	32 881 24 x
	32 882 6 x
	32 985 2 x
	35 031 2 x
	35 049 23 x
	35 063 1 x

	35 065 5 x
	35 066 1 x
	35 073 2 x
	35 088 1 x
	35 327 2 x
	35 328 5 x
	35 945 2 x
	35 969 3 x
	36 134 2 x
	36 227 2 x
	36 293 6 x
	36 323 8 x
	36 334 2 x
	36 443 1 x
	36 532 1 x
	36 911 2 x
	36 913 2 x

	36 915 3 x
	36 920 11 x
	36 921 2 x
	36 922 3 x
	36 950 4 x
	36 952 1 x
	37 034 1 x
	37 157 1 x
	37 237 28 x
	37 238 3 x
	37 468 18 x
	37 636 2 x
	37 679 6 x
	37 727 2 x
	37 783 2 x
	37 875 2 x
	38 216 2 x

Einzelteilübersicht
Spare parts list
Liste des pièces détachées

	38 240 7 x
	38 241 7 x
	38 242 3 x
	38 245 2 x
	38 246 3 x
	38 248 2 x
	38 251 2 x

Onderdelenoverzicht
Lista da piezas
Resumo de peça individual

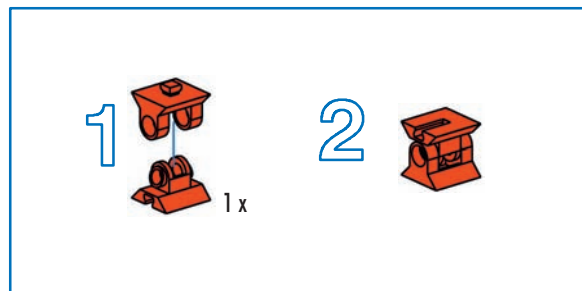
	38 261 6 x
	38 414 1 x
	38 423 3 x
	38 428 3 x
	38 464 2 x
	38 546 2 x
	121 470 1 x

	121 640 1 x
	121 641 11 x
	122 363 1 x
	122 409 1 x
	128 599 1 x
	132 875 2 x
	133 027 3 x

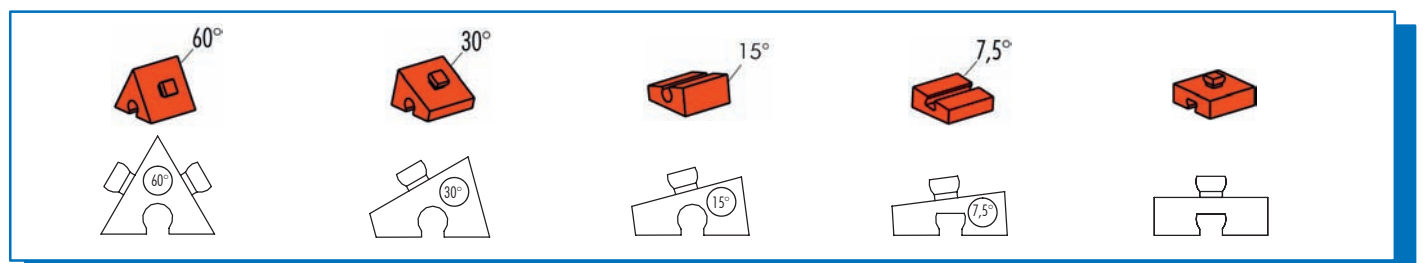
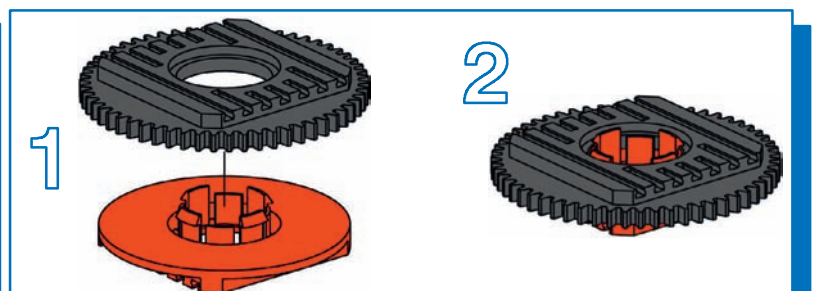
Singoli componenti
Перечень деталей
零件概览

	133 028 1 x
	133 200 2 x
	133 201 2 x
	133 202 2 x
	144 262 2 x

Montagetipps
Tips for assembly
Tuyaux pour le montage



Montagetipps
Consejos para el montaje
"Dicas" para montagem



Erfinder Flexprofil Art.-Nr. 121 641:
 Design und Konzeption Andreas Lehrberger



Montagetipps
Tips for assembly
Tuyaux pour le montage

Montagetips
Consejos para el montaje
"Dicás" para montagem

Consigli per il montaggio
Советы по сборке
装配建议

<p>Kabel und Stecker Plugs and cables Fiches et des câbles</p>	<p>Stekkers en cables Enchufes en cables Cabos e contatos</p>	<p>Cavi e connettori Провода и штекеры 电缆和插头</p>	
<p>1</p>			<p>4</p>
<p>2</p>			<p>5</p>
<p>3</p>			

<p>3/2-Wege-Magnetventil 3/2 Way Magnetic Valve Distributeur électromagnétique à 3/2 voies</p>	<p>3/2-weg magneetklep Válvula electromagnética de 3/2 vías Válvula magnética de 3/2 vías</p>	<p>Distributore elettromagnetico a 3/2 vie 3/2-ходовой электромагнитный клапан 两位三通电磁阀</p>
<p>1</p>	<p>2</p>	<p>3</p>
<p>4</p>	<p>5</p>	<p>9-12 V DC / 130 mA</p>

<p>Schlauchzuschnitte Hose cut to length Découpes de tuyau</p>	<p>Slangdelen Recortes de tubos flexibles Recortes de mangueira</p>	<p>Spezzoni di tubo Штуцеры 软管段</p>	<p>1 x 2 cm 2 x 7 cm 2 x 15 cm 2 x 30 cm 2 x 40 cm 1 x 50 cm</p>
<p>1</p>	<p>2</p>	<p>3</p>	



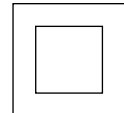
Sicherheitshinweise Safety Information Consignes de sécurité

Veiligheidsrichtlijnen Indicaciones de seguridad Observações sobre segurança

Informazioni per la sicurezza Указания по технике безопасности 安全指南

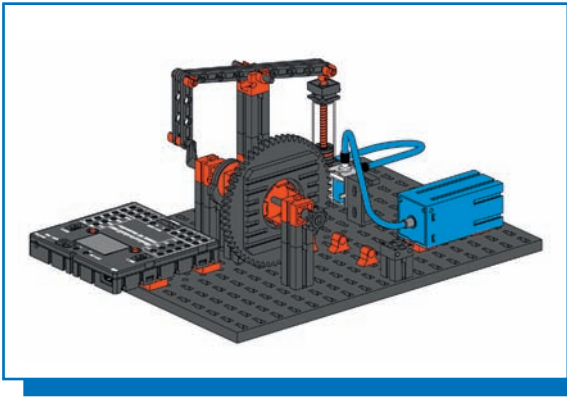
- Die Anschlussklemmen dürfen nicht kurzgeschlossen werden.
 - Drähte nicht in Steckdose einführen!
 - Ladegerät regelmäßig auf Schäden überprüfen. Bei einem Schaden darf das Ladegerät bis zur vollständigen Reparatur nicht mehr verwendet werden.
 - Alle elektrischen Bauteile (Motoren, Lampen, ROBO TX Controller) dürfen ausschließlich an Stromversorgungen von Fischertechnik angeschlossen werden.
- Do not short circuit the connecting terminals!
 - Do not insert the wires into an outlet!
 - Regularly inspect battery charger for damage. If the battery charger has been damaged, it should not be used further until fully repaired.
 - No electrical components (motors, lamps, ROBO TX Controller) are to be connected to any other power supply than that provided by Fischertechnik.
- Il est interdit de court-circuiter les bornes de raccordement.
 - Contrôlez régulièrement le chargeur en vue d'éventuelles détériorations
 - En cas de détérioration, il est interdit d'utiliser le chargeur jusqu'à ce qu'il ait été intégralement réparé
 - Tous les composants électriques (moteurs, lampes, ROBO TX Controller) ne doivent être branchés aux alimentations électriques uniquement que par la société Fischertechnik.
- De aansluitklemmen mogen niet worden kortgesloten.
 - Geen draden in de contactdoos steken!
 - Laadtoestel regelmatig controleren op schade. Bij schade mag het laadtoestel niet meer gebruikt worden tot het volledig hersteld is.
 - Alle elektrische componenten (motoren, lampen, ROBO TX Controller) mogen uitsluitend op stroomvoorzieningen van Fischertechnik worden aangesloten.
- Los bornes de conexión no pueden ser puestas en cortocircuito.
 - No introducir hilos en la toma de corriente!
 - Comprobar con regularidad si el cargador presenta daños. En caso de presentar daños, el cargador no debe volver a ser utilizado hasta que esté completamente reparado.
 - Todos los componentes eléctricos (motores, luces, ROBO TX Controller) deben conectarse a la alimentación de corriente de la técnica Fischer exclusivamente.
- Os terminais de conexão não devem ser curto-circuitados.
 - Nunca introduzir fios na tomada!
 - Verificar regularmente se o carregador apresenta danos. Em caso de dano, o carregador não deverá ser utilizado enquanto não estiver plenamente consertado.
 - Todas as peças componentes elétricas (motores, lâmpadas, ROBO TX Controller) só podem ser exclusivamente conectadas em abastecimentos de corrente da Fischertechnik.
- I morsetti di allacciamento non devono essere cortocircuitati.
 - Non inserire i fili nella presa elettrica.
 - Controllare periodicamente se il caricabatterie presenta dei danni. In caso di danni, il caricabatterie non deve più essere utilizzato fino alla riparazione.
 - Tutti i componenti elettrici (motori, lampadine, ROBO TX Controller) devono essere collegati esclusivamente ad alimentatori Fischertechnik.
- Не замыкайте накоротко соединительные клеммы.
 - Не вставляйте в розетку провода!
 - Регулярно проверяйте зарядное устройство на отсутствие повреждений. При наличии повреждений использовать зарядное устройство до выполнения его полного ремонта не разрешается.
 - Все электрические детали (электромоторы, лампочки.) можно подключать только к источникам электропитания от Fischertechnik.
- 接线柱不允许被短路。
 - 禁止将金属丝插入插座！
 - 经常检查充电器是否有损坏情况。如果充电器有损，直到完全修好为止不可以再使用。
 - 只允许将所有电气部件（传感器，电机）与慧鱼技术产品的电源装置相连接

- Die Modelle dürfen nur an Geräte der Schutzklasse II angeschlossen werden, die mit dem entsprechenden Symbol gekennzeichnet sind.
- Ensure that the models are connected only to equipment rated in protection category II and marked with the appropriate symbol.
- Le raccordement des maquettes est uniquement permis à des appareils dotés de la catégorie de protection II qui portent le pictogramme respectif.
- De modellen mogen alleen op apparaten uit beschermingsklasse II worden aangesloten, die zijn voorzien van het bijbehorende symbol.
- Los modelos sólo pueden ser conectados a aparatos de clase de protección II que están identificados con el símbolo correspondiente.
- Os modelos somente devem ser conectados nos aparelhos da classe de proteção II, que são identificados com o símbolo correspondente.
- I modelli devono essere collegati solo ad apparecchi della classe di protezione II, contrassegnati con il relativo simbolo.
- Модели можно подключать только к приборам класса защиты II, обозначенным соответствующим знаком.
- 这些模型只允许连接到具有防护等级 II 的装置上，这类装置被用相应的符号进行了标识。



- Achtung! Verletzungsgefahr an Bauteilen mit funktionsbedingten scharfen Kanten und Spitzen!
- Atenção! Perigo de ferimentos em peças componentes com cantos vivos e pontas obrigatórias para o funcionamento!
- Caution! Be careful not to hurt yourself on components with sharp or pointed edges!
- Attenzione! Pericolo di lesioni dovute a componenti con spigoli vivi e punte per motivi funzionali!
- Attention! Risque de blessure sur les éléments comportant des arêtes et o pointes vives indispensables au bon fonctionnement!
- Будьте осторожны! Об острые края деталей и и наконечники можно порезаться!
- Let op! U kunt zich bezeren aan bouwstenen met spherpe randen of punten!
- 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！
- Attenzione! Esiste il pericolo di lesione con i pezzi di costruzione che hanno bordi e punte spigolosi necessari per la funzionalità del pezzo!

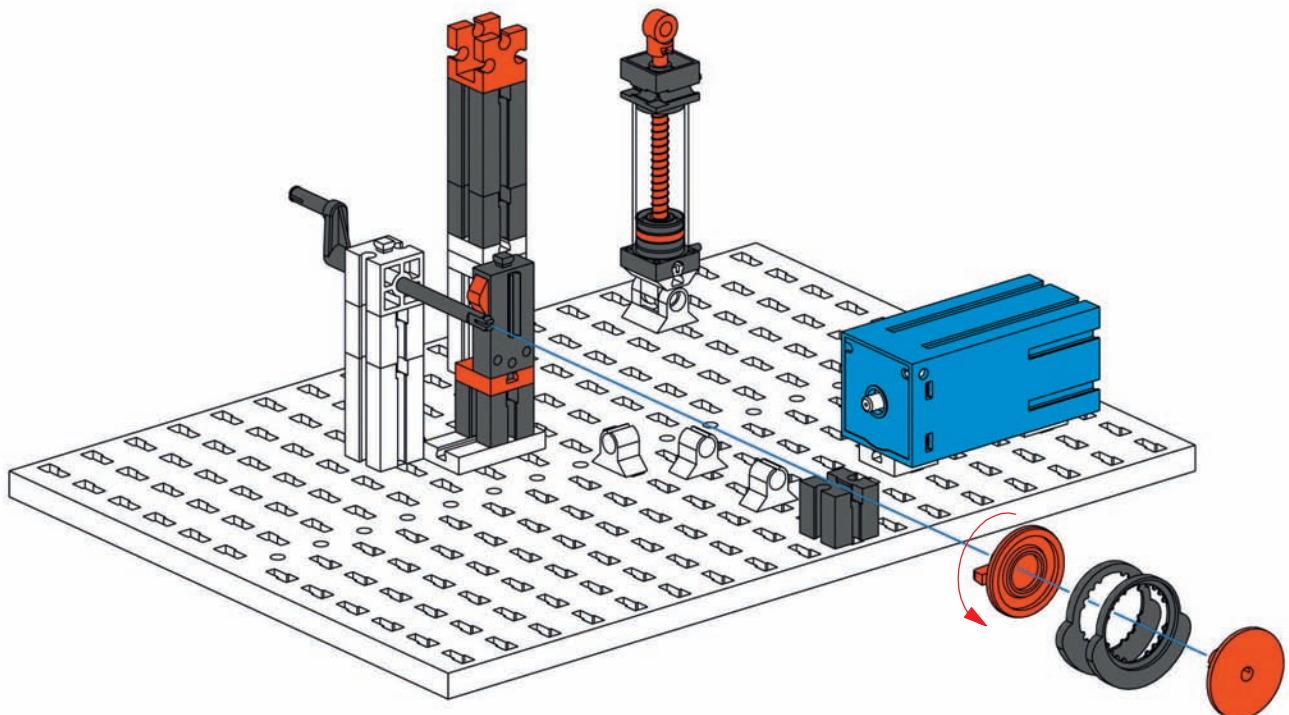
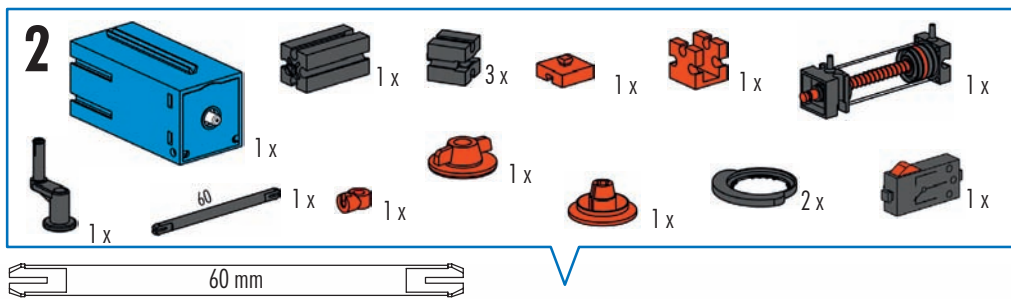
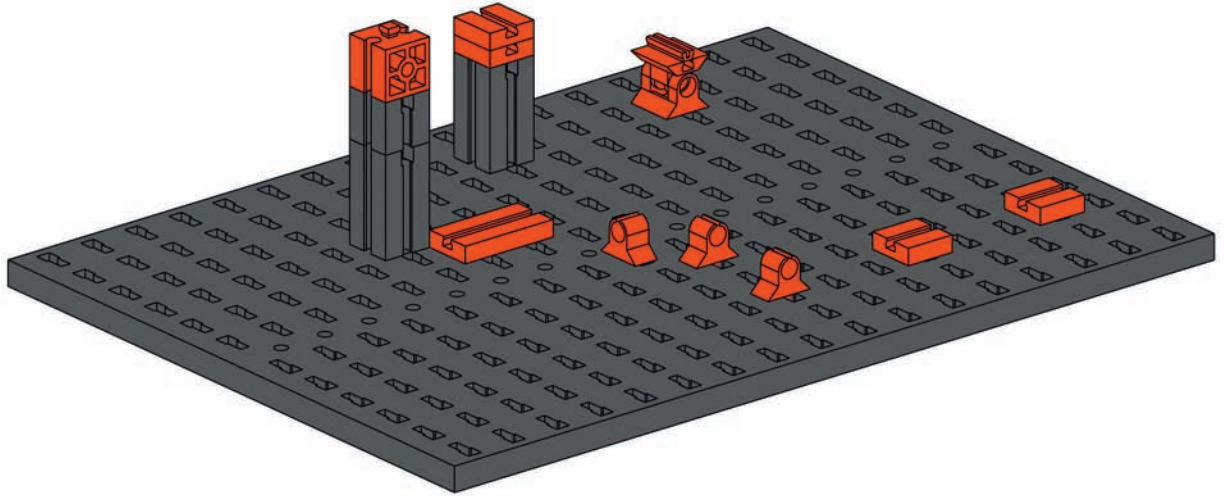
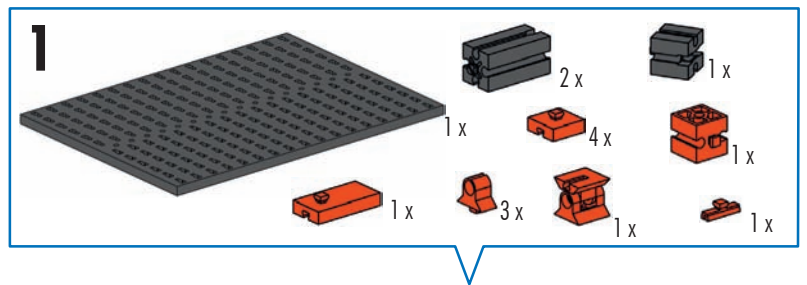
- Alle Einzelteile, insbesondere bewegliche Teile sind falls notwendig zu warten und zu reinigen.
- Caso necessário, todas as peças individuais, especialmente peças móveis, tem que ser submetidas à manutenção e ser limpadas.
- All components, especially moving parts, should be maintained and cleaned as necessary.
- Se necessario, tutti i singoli componenti, soprattutto le parti mobili, si devono eventualmente sottoporre a manutenzione e pulizia.
- Toutes les pièces détachées et en particulier les pièces mobiles, sont, si nécessaire, à entretenir et à nettoyer.
- Все детали, особенно подвижные, требуют ухода и чистки.
- Alle onderdelen, vooral de bewegende delen, kunnen, indien noodzakelijk, onderhouden en gereinigd worden.
- 必要时应保养和清洁所有零件，尤指运动部件。
- Es necesario limpiar y mantener en buen estado todas las diferentes piezas - especialmente las piezas móviles.

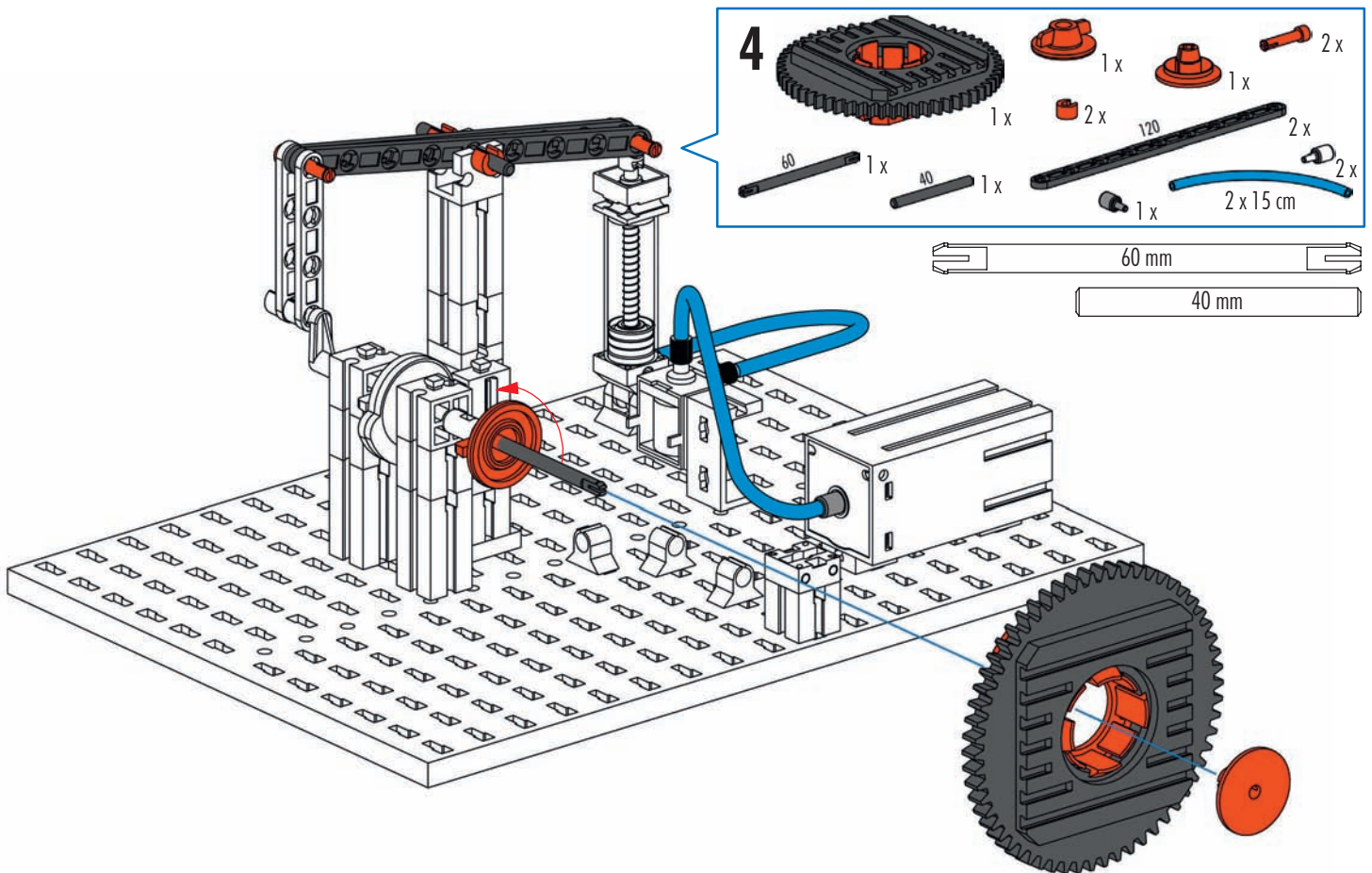
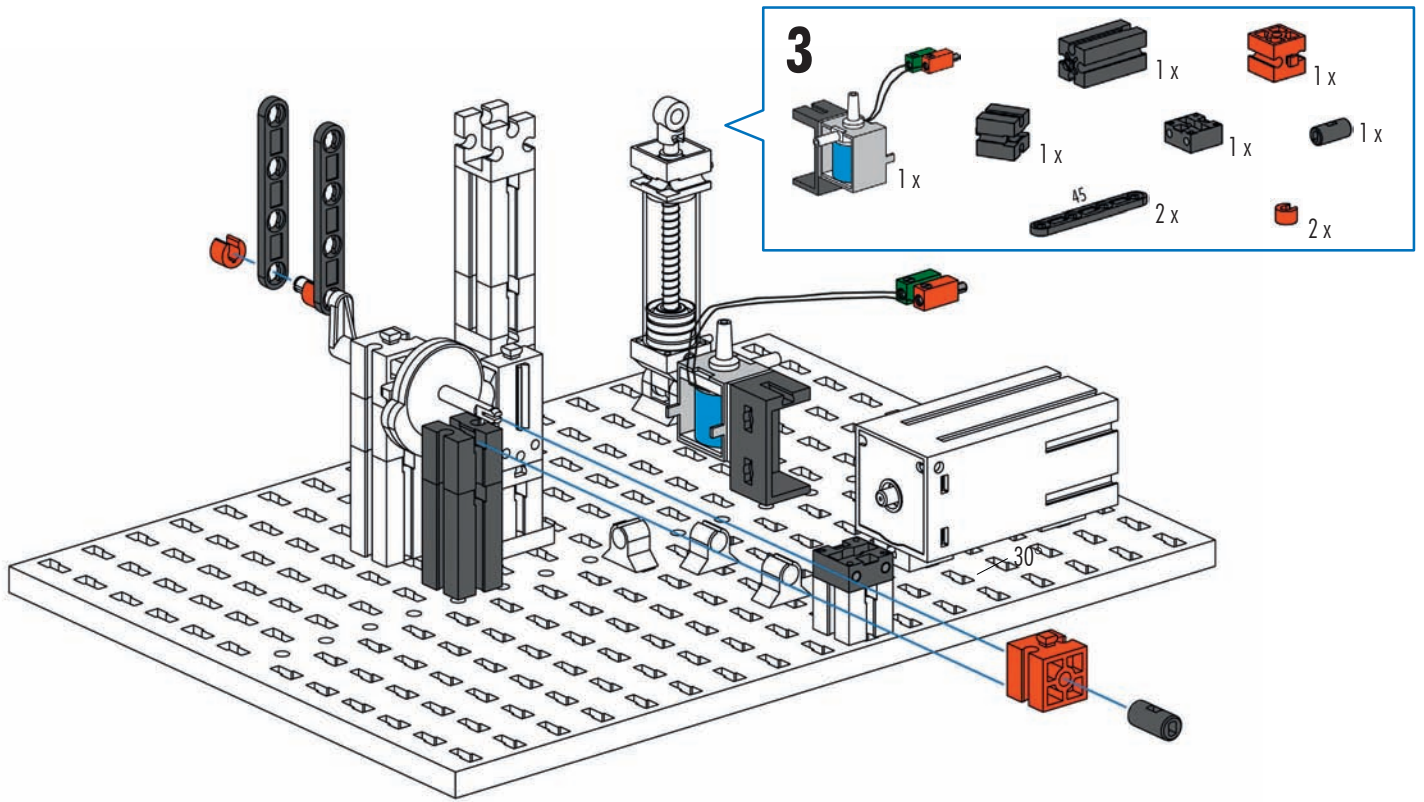


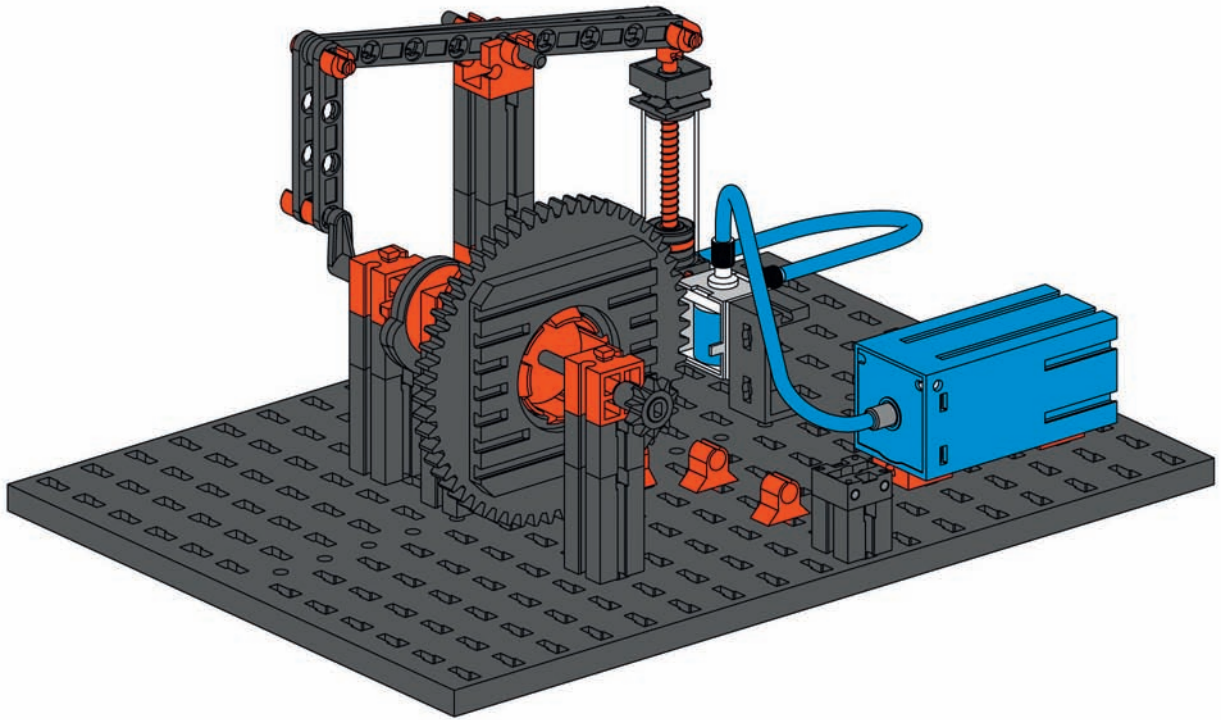
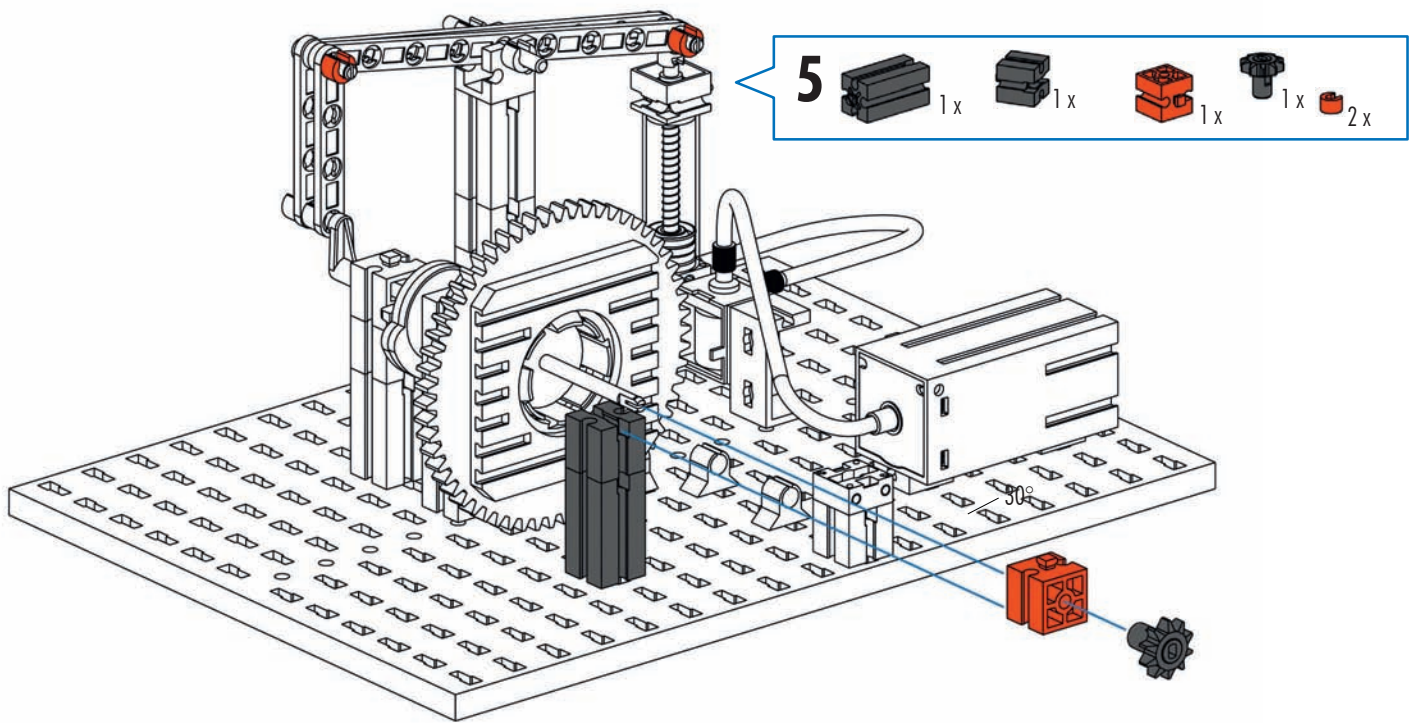
Druckluftmotor
Compressed air motor
Moteur pneumatique

Persluchtmotor
Motor de aire comprimido
Motor de ar comprimido

Motore ad aria compressa
ПНЕВМОМОТОР
压缩空气马达



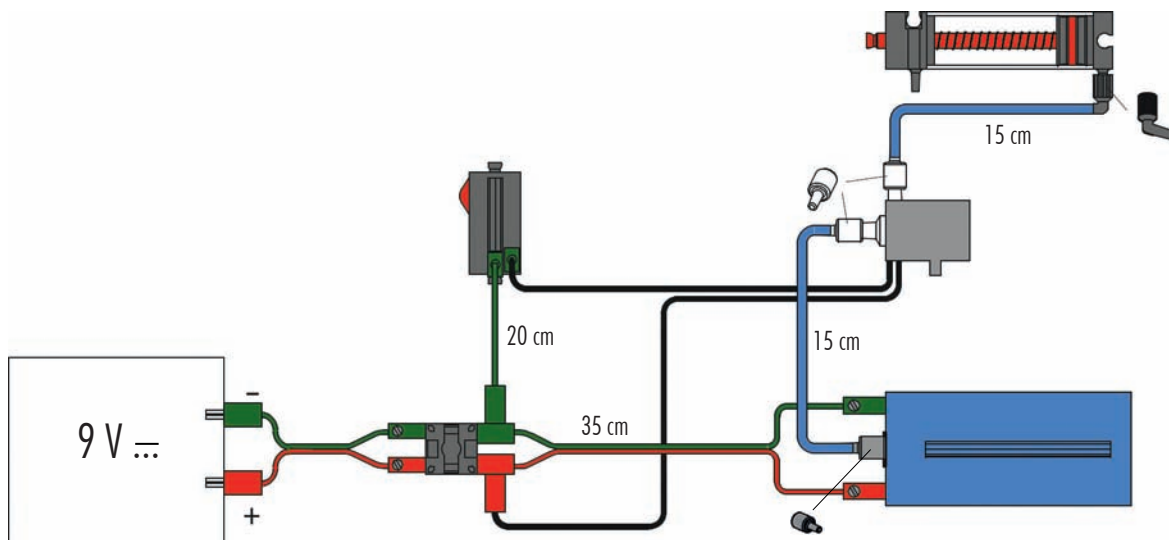


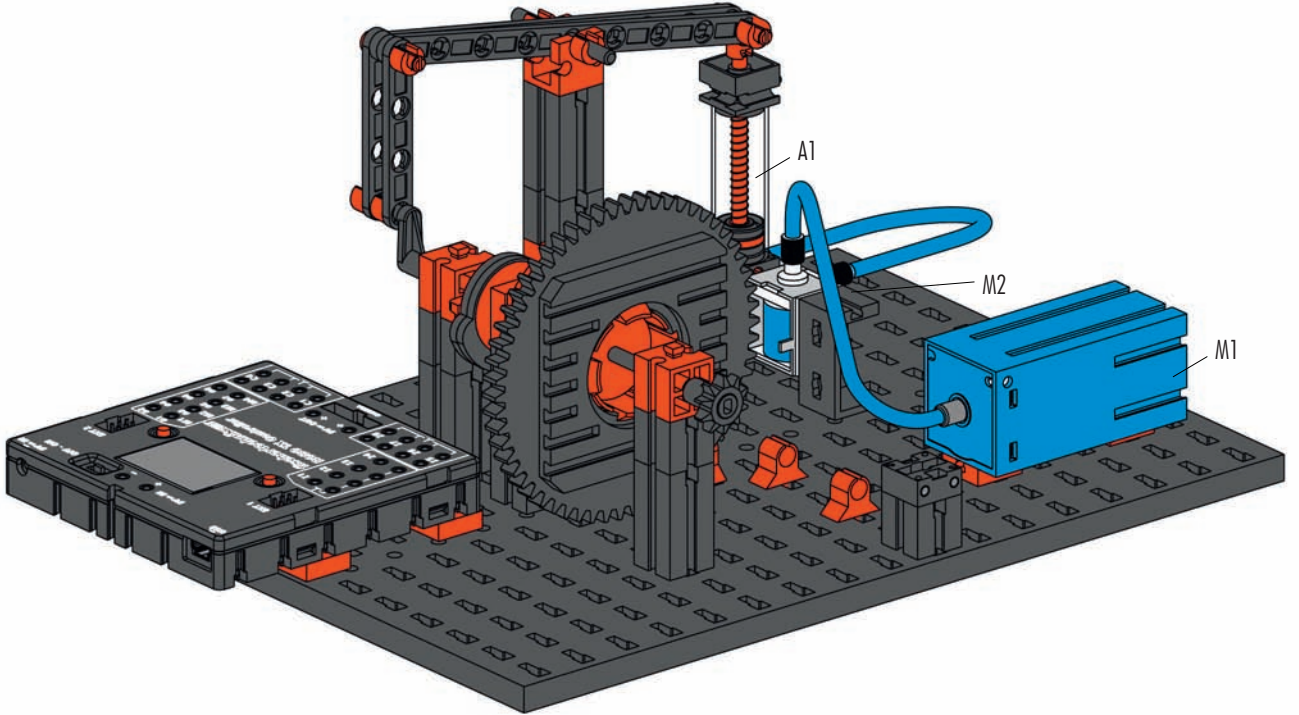
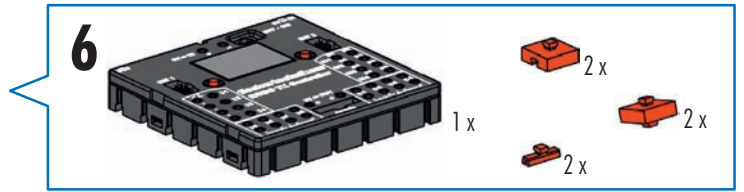
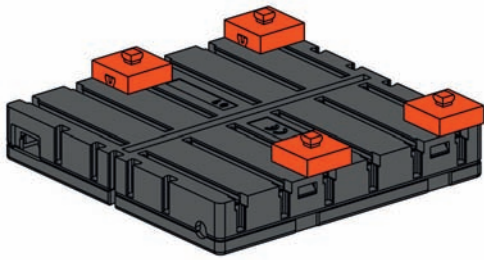


Schaltplan A
Circuit diagram A
Plan électrique A

Schakelschema A
Diagrama de circuitos A
Plano elétrico de ligação A

Schema elettrico A
Схема подключения A
电路图 A

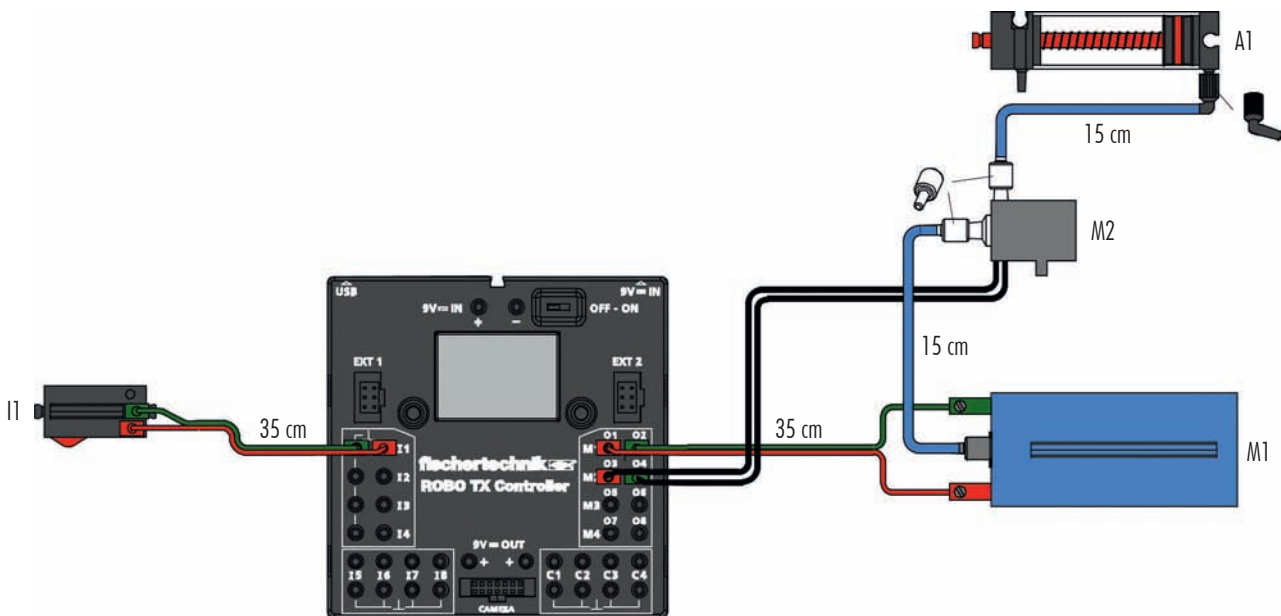




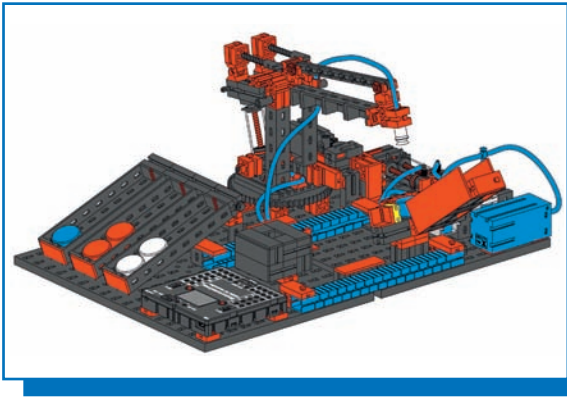
Schaltplan B
Circuit diagram B
Plan électrique B

Shakelschema B
Diagrama de circuitos B
Plano elétrico de ligação B

Schema elettrico B
Схема подключения B
电路图 B



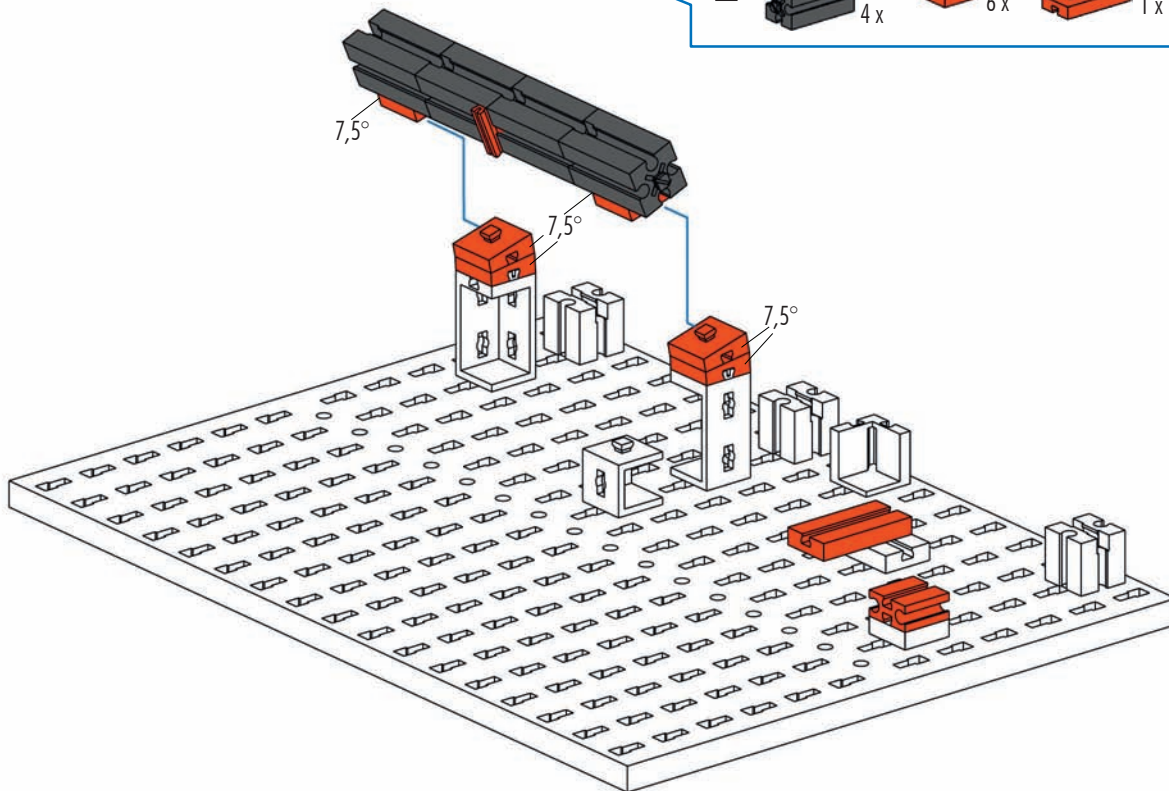
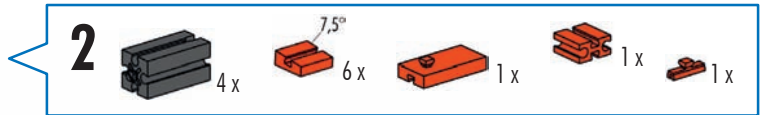
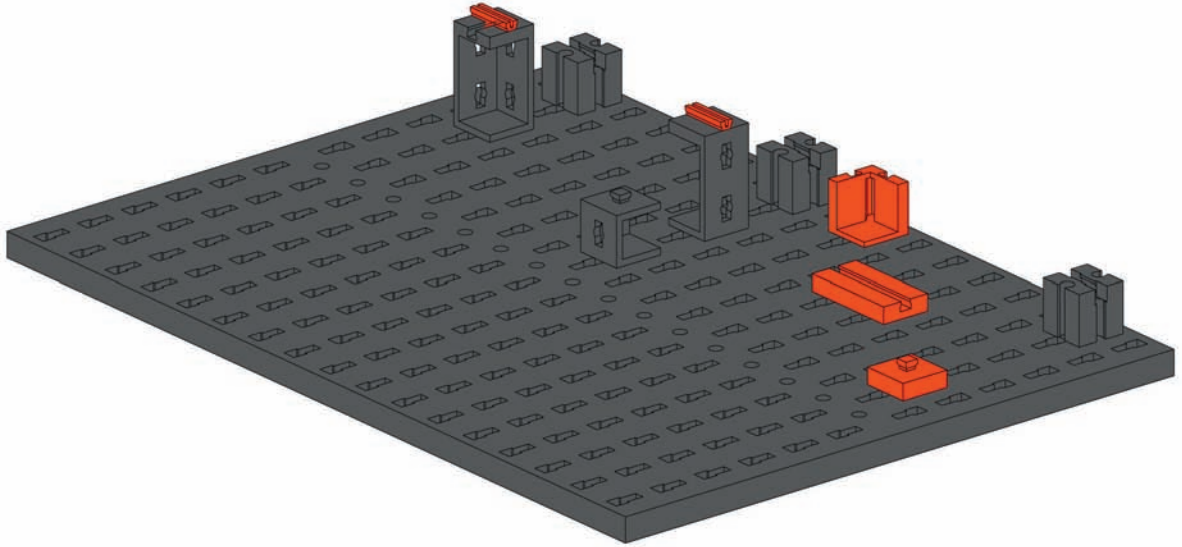
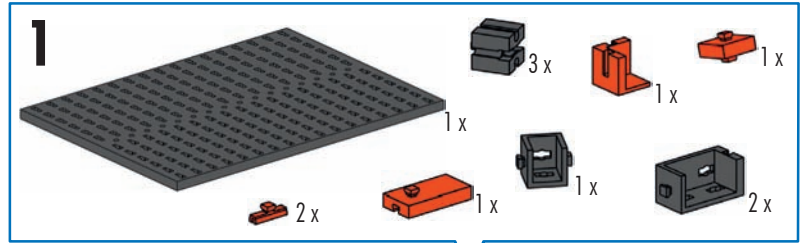
- Informationen zur Programmierung des Modells: Siehe didaktisches Begleitmaterial auf CD-ROM.
- Information on programming model: See related instructional material on CD-ROM.
- Informations concernant la programmation de la maquette : voir le matériel d'accompagnement didactique sur le CD-ROM.
- Informatie over de programmering van het model: Zie het didactisch begeleidend materiaal op CD-ROM.
- Informaciones sobre la programación del modelo: Véase material didáctico adjunto en el CD-ROM.
- Informações sobre a programação do modelo: ver o material didático de acompanhamento no CD-ROM.
- Informazioni sulla programmazione del modello: vedi materiale didattico su CD-ROM.
- Информация о программировании модели: смотрите обучающий сопроводительный материал на CD.
- 有关该模型编程的信息：见 CD 光盘上的指导性说明资料。

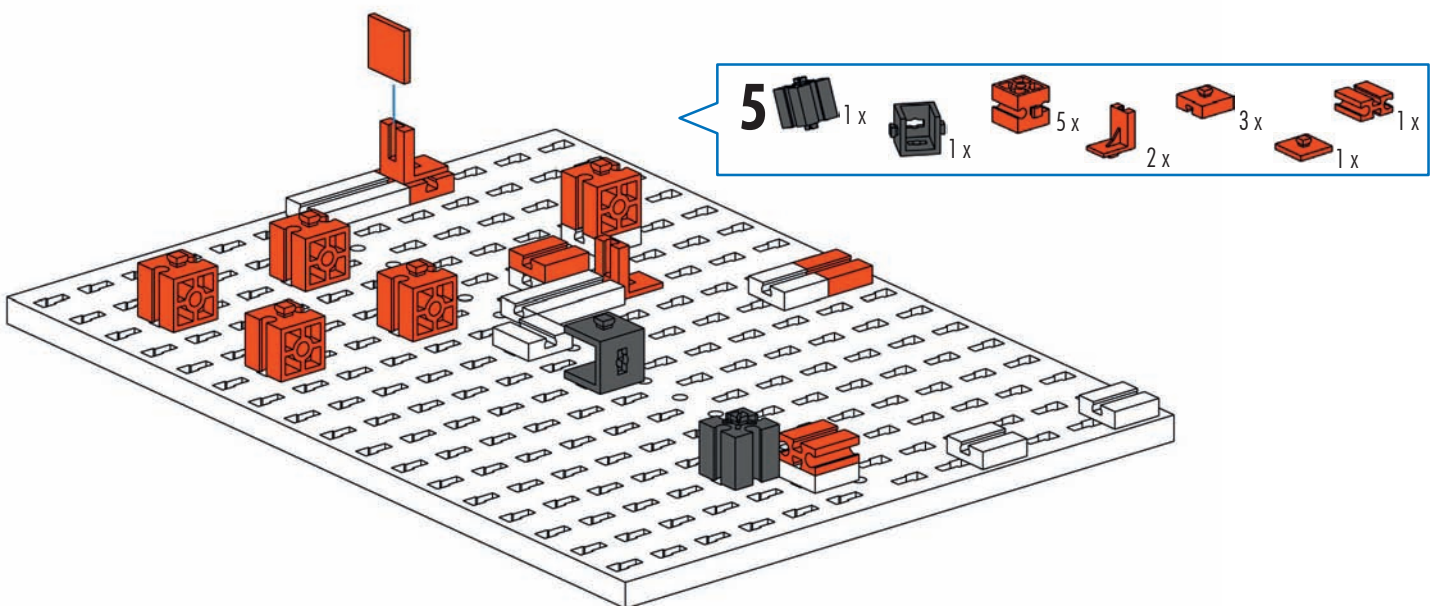
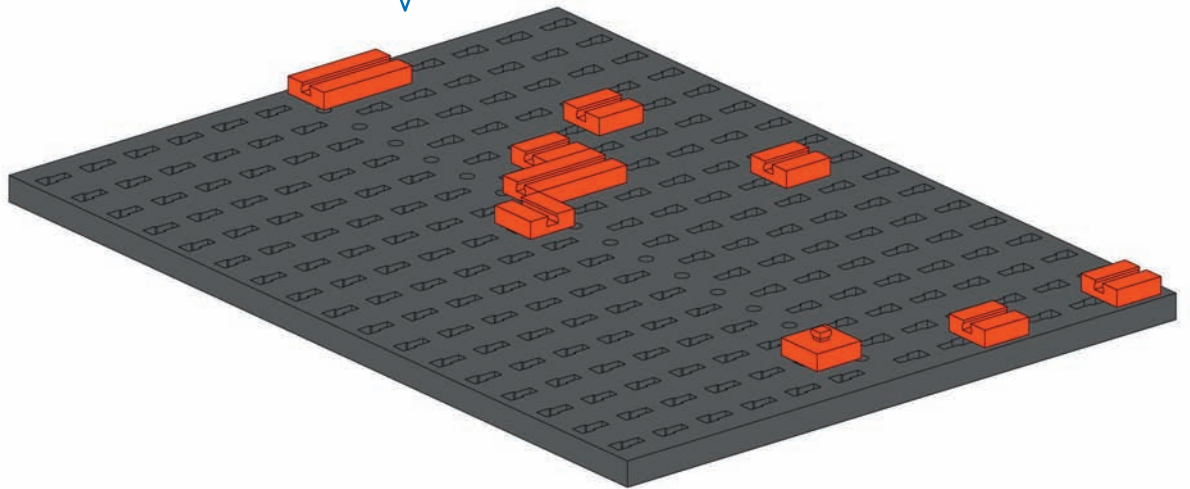
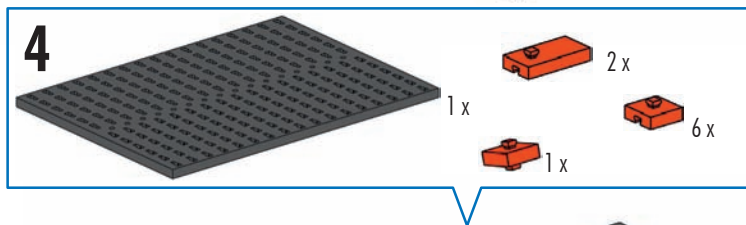
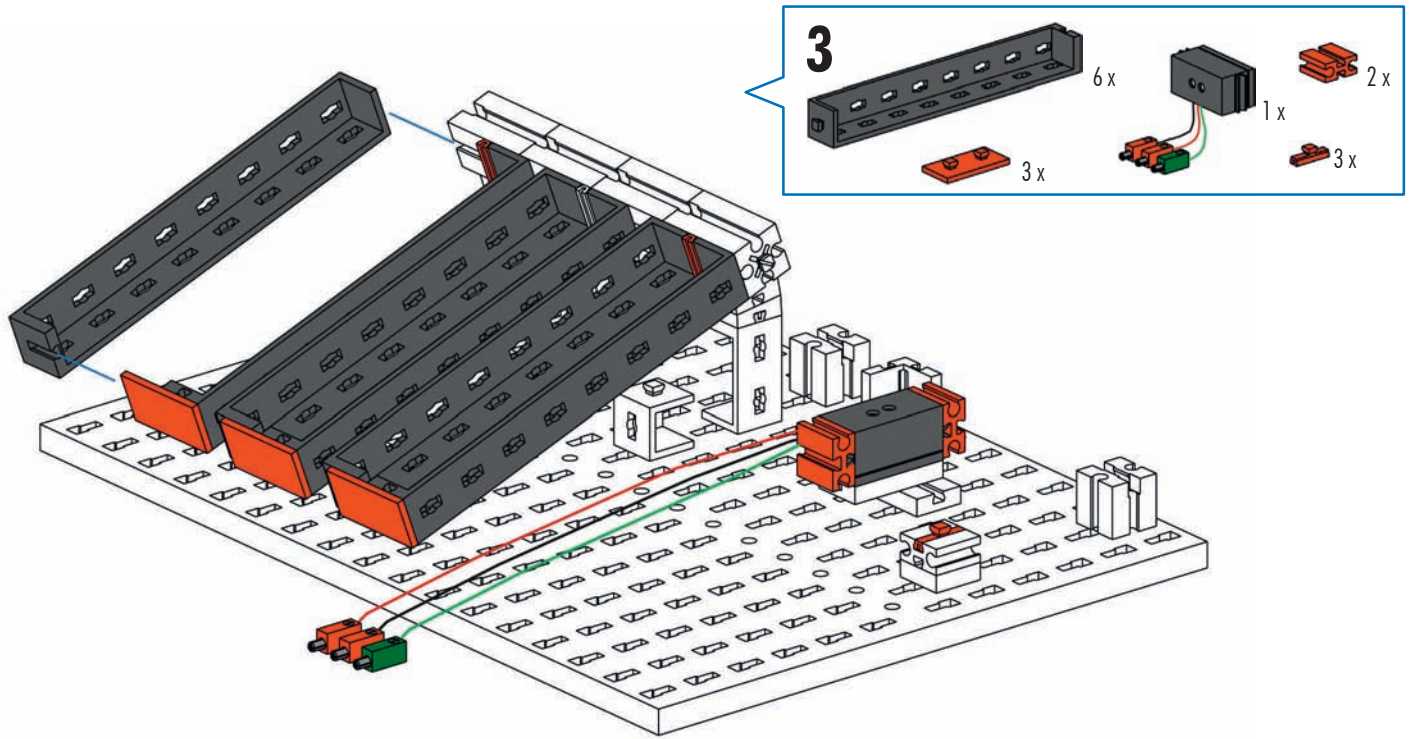


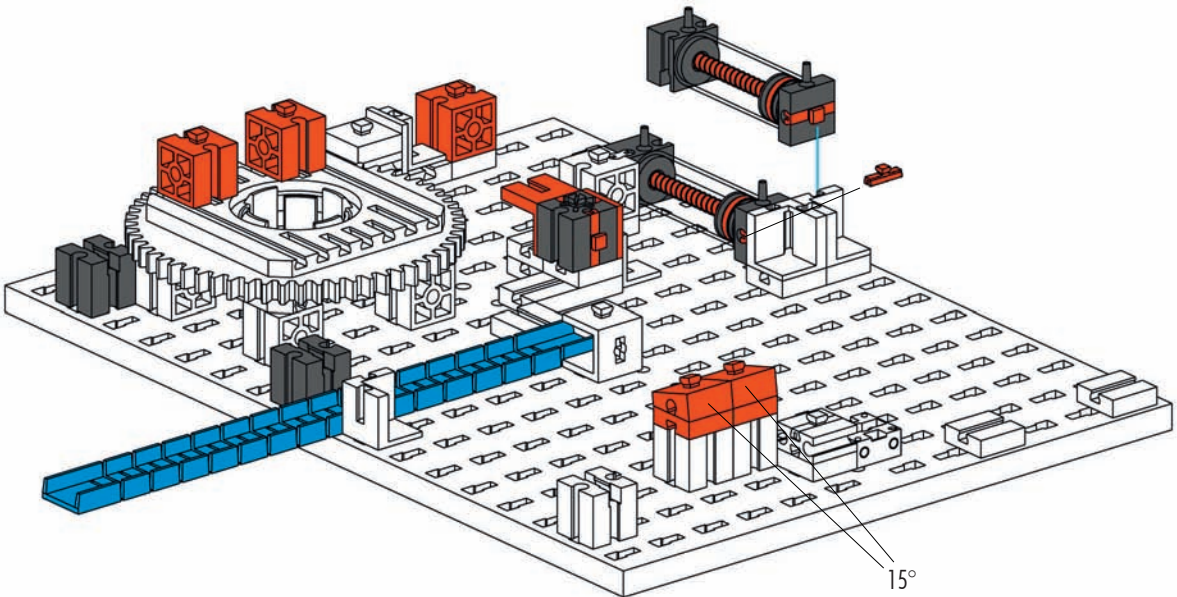
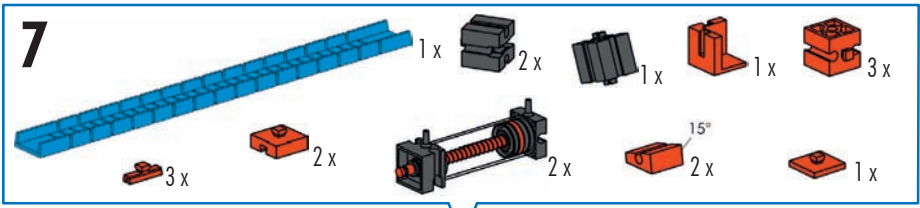
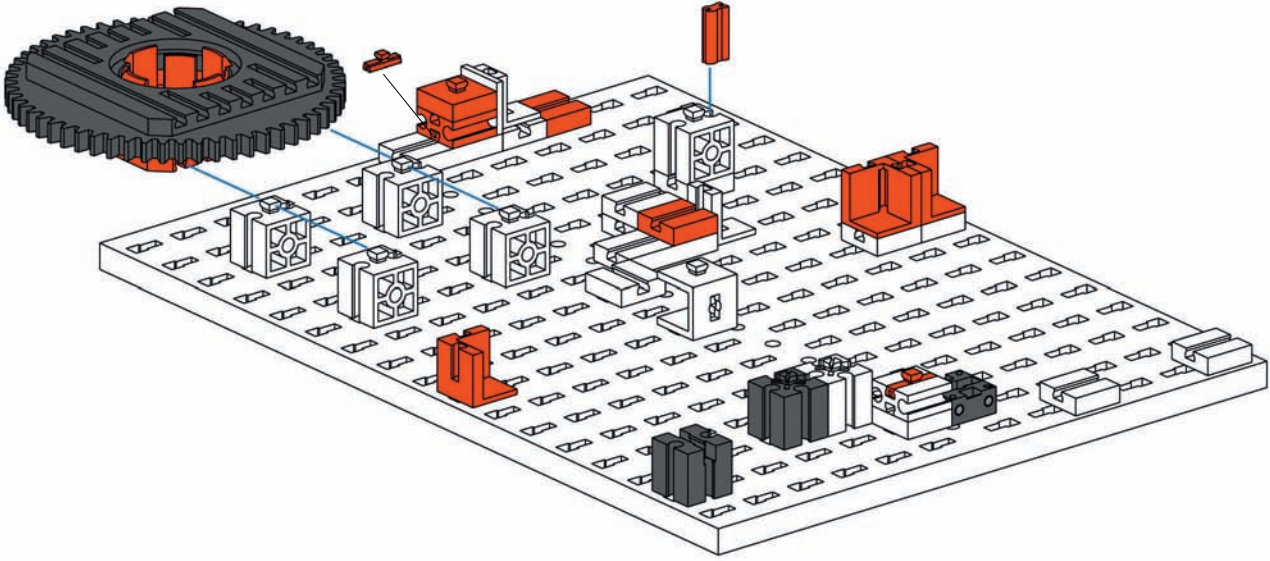
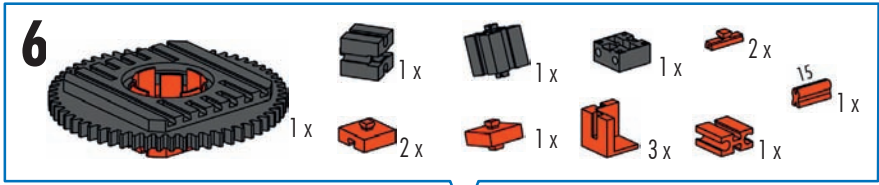
Farbsortierroboter
Color sorting robot
Robot de triage des couleurs

Kleurensorteerrobot
Robot clasificador por colores
Robo selecionador de cores

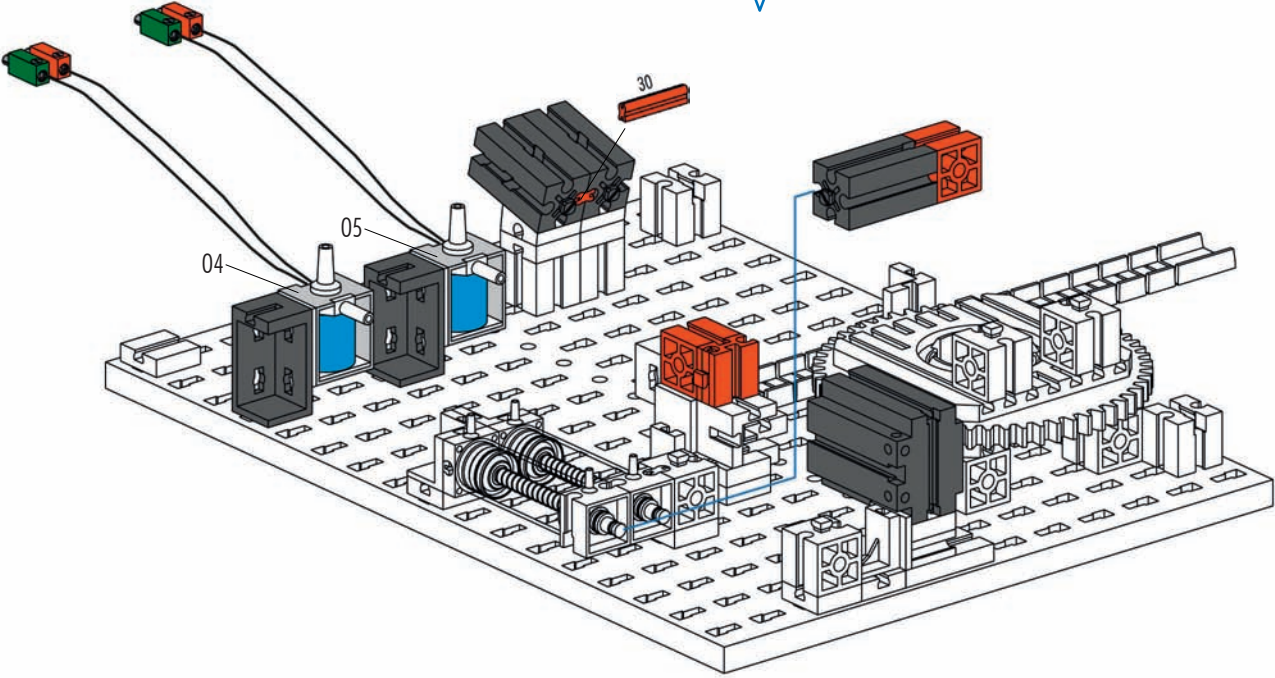
Robot assortitore di colori
Робот-цветосортировщик
辨色分选机器人



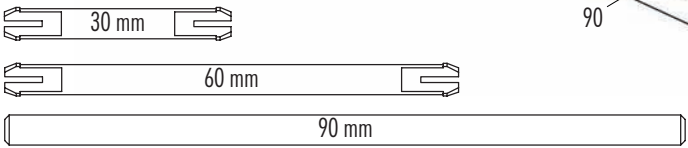
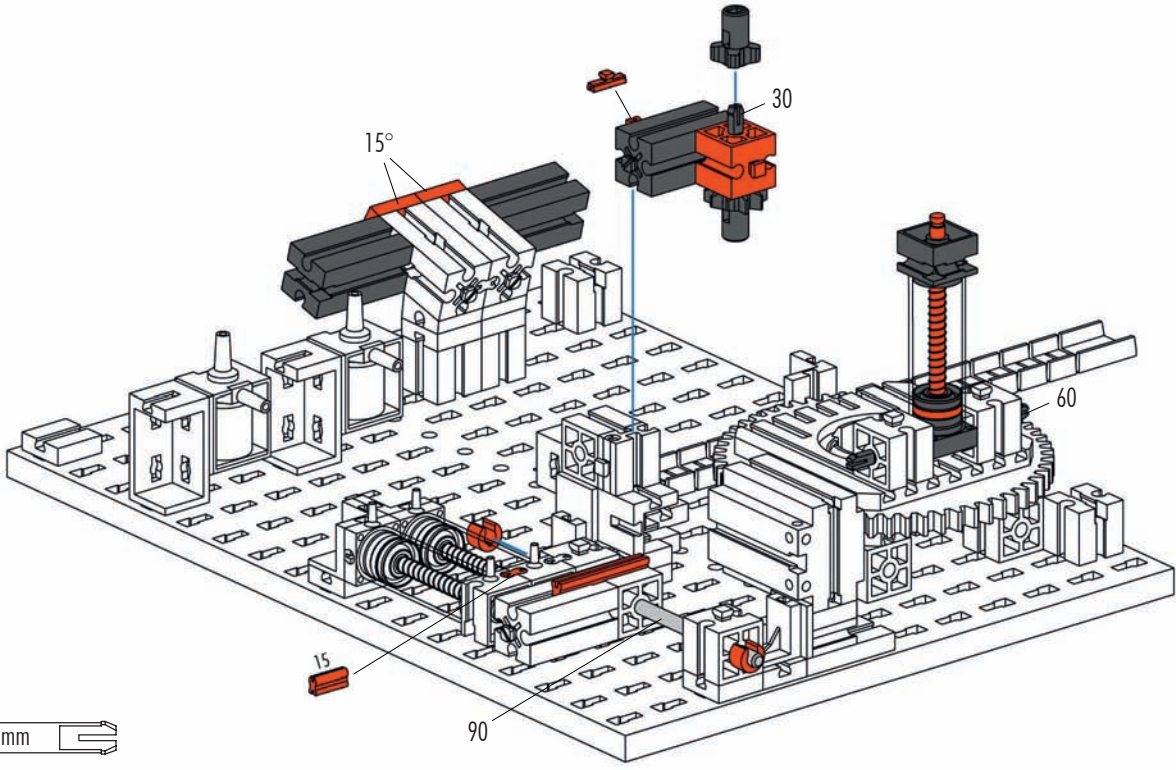


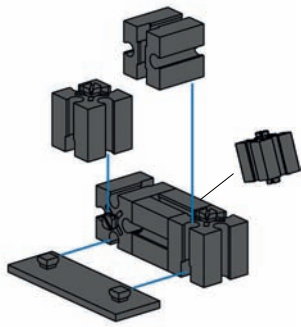


- 8**
- 2 x [Motor]
 - 2 x [Grey Beam]
 - 1 x [Grey Beam]
 - 1 x [Red Pin]
 - 1 x [Grey Beam]
 - 2 x [Red Connector]
 - 1 x [Red Beam 30]
 - 1 x [Red Connector]






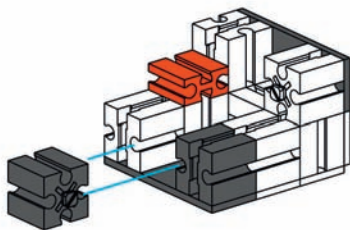
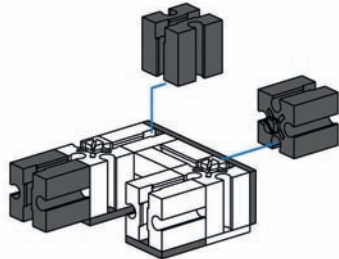
- 9**
- 3 x [Grey Beam]
 - 1 x [Red Connector]
 - 2 x [Red Beam 15°]
 - 1 x [Red Beam 30]
 - 1 x [Red Beam 15]
 - 2 x [Red Pin]
 - 1 x [Red Pin]
 - 1 x [Grey Beam 30]
 - 1 x [Grey Beam 60]
 - 1 x [Grey Beam 90]
 - 1 x [Grey Pin]
 - 1 x [Grey Pin]









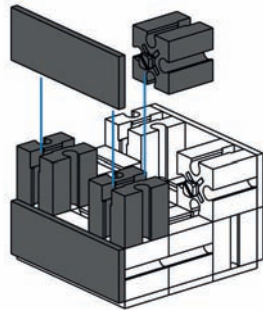
21  4x  1x  1x

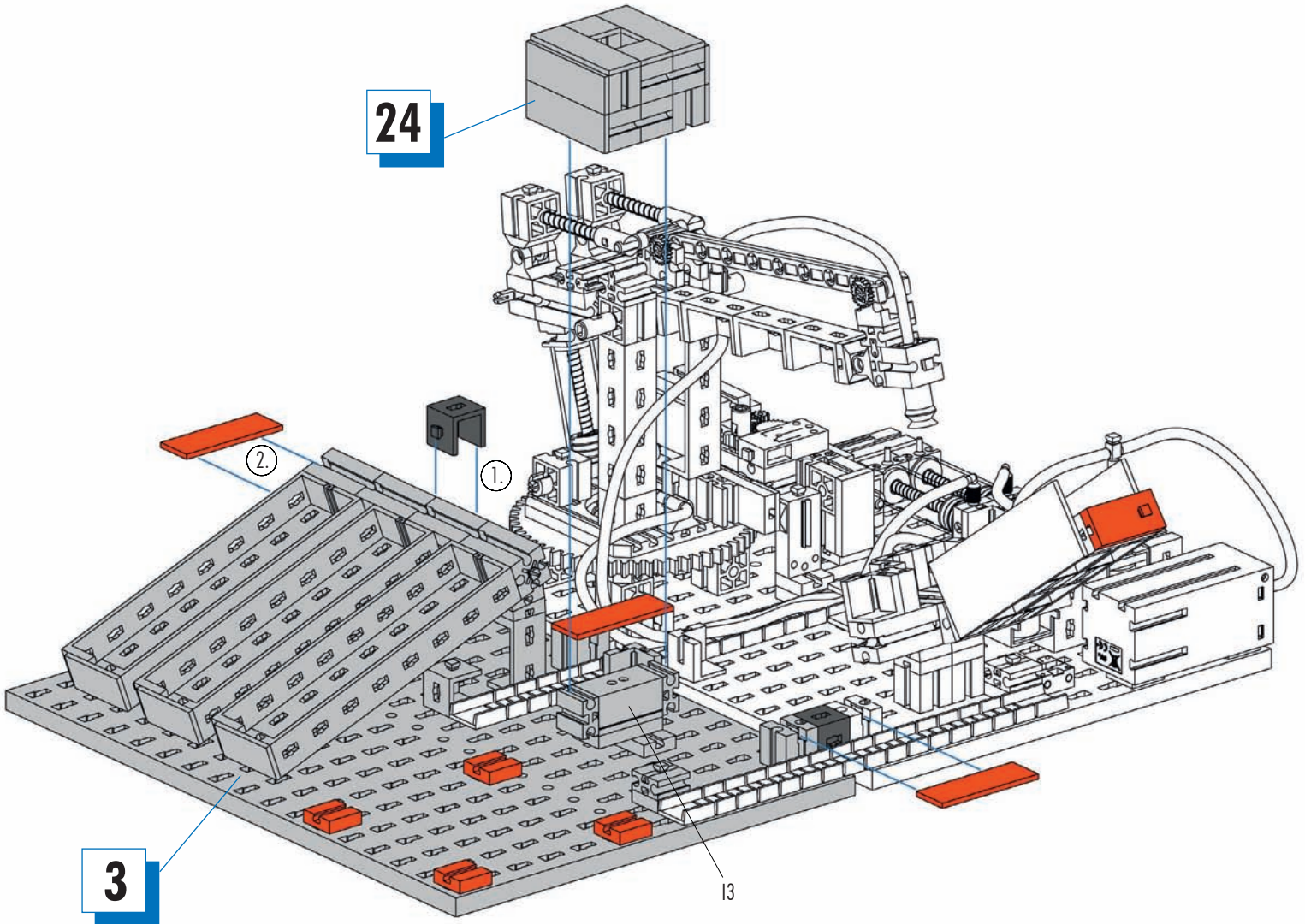
22  3x  1x  2x



23  1x  1x  2x  1x

24  3x  2x



25**24**

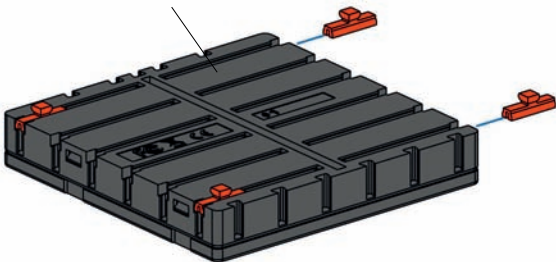
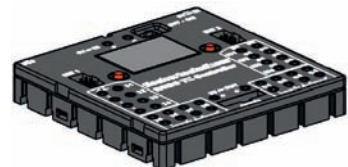
②

①

3

13

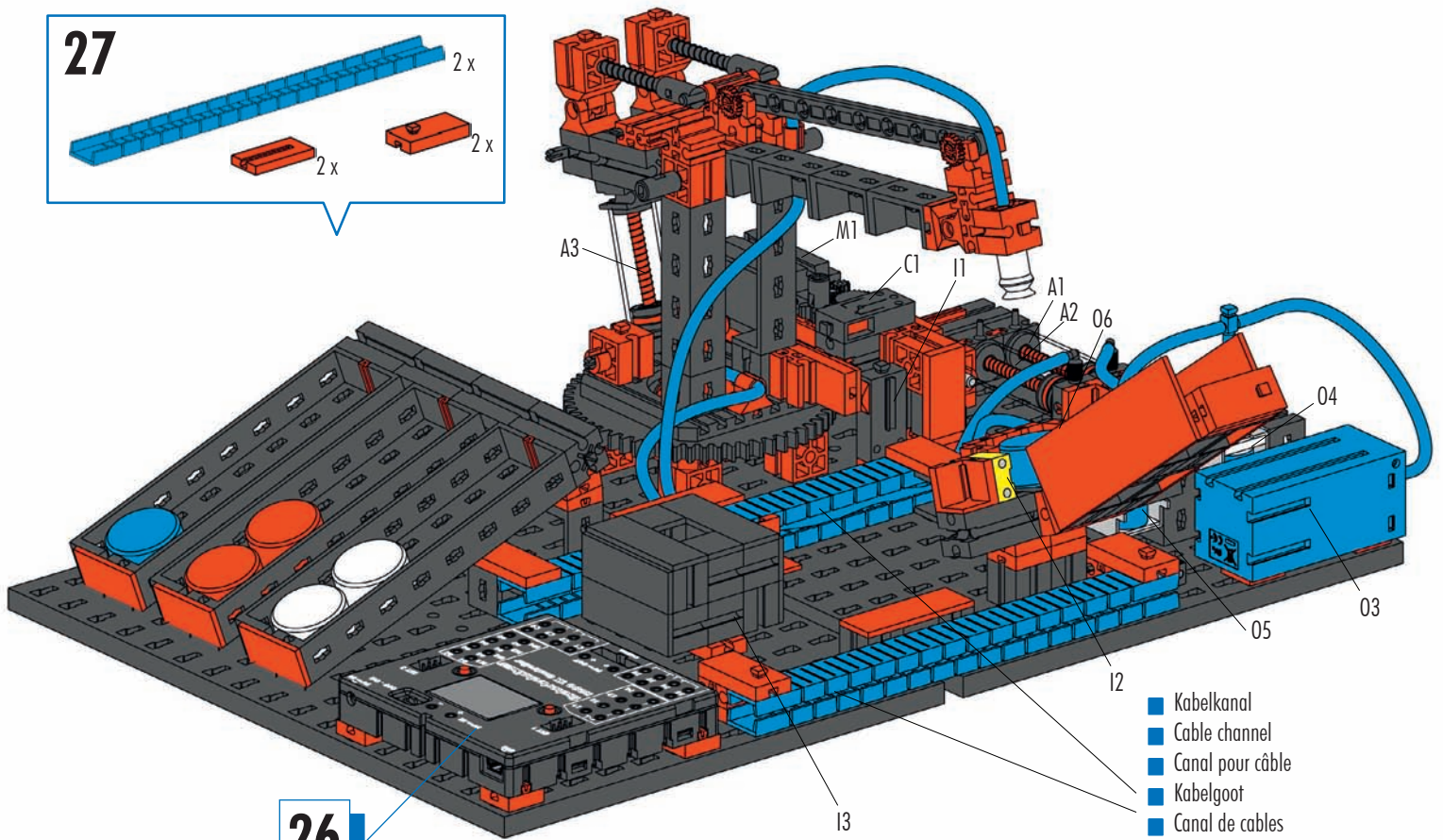
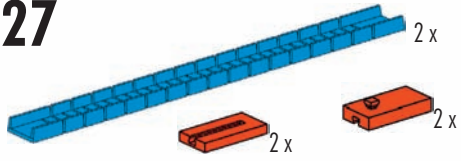
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**26**

4 x

1 x

27



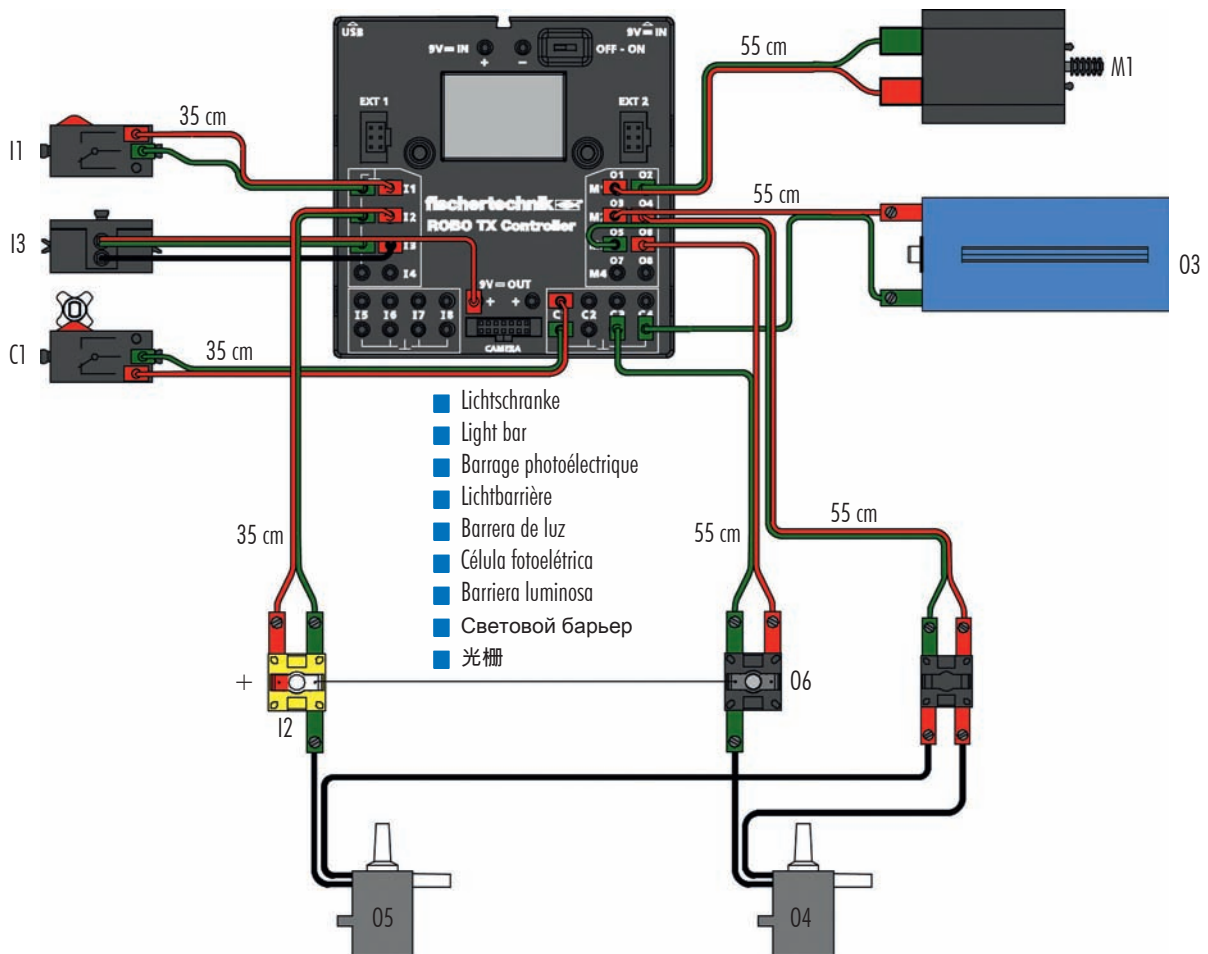
26

- Kabelkanal
- Cable channel
- Canal pour câble
- Kabelgoot
- Canal de cables
- Cabo duto
- Canalina per cavi
- кабельная траншея
- 电缆管道

Schaltplan
Circuit diagram
Plan électrique

Schakelschema
Diagrama de circuitos
Plano elétrico de ligação

Schema elettrico
Схема подключения
电路图

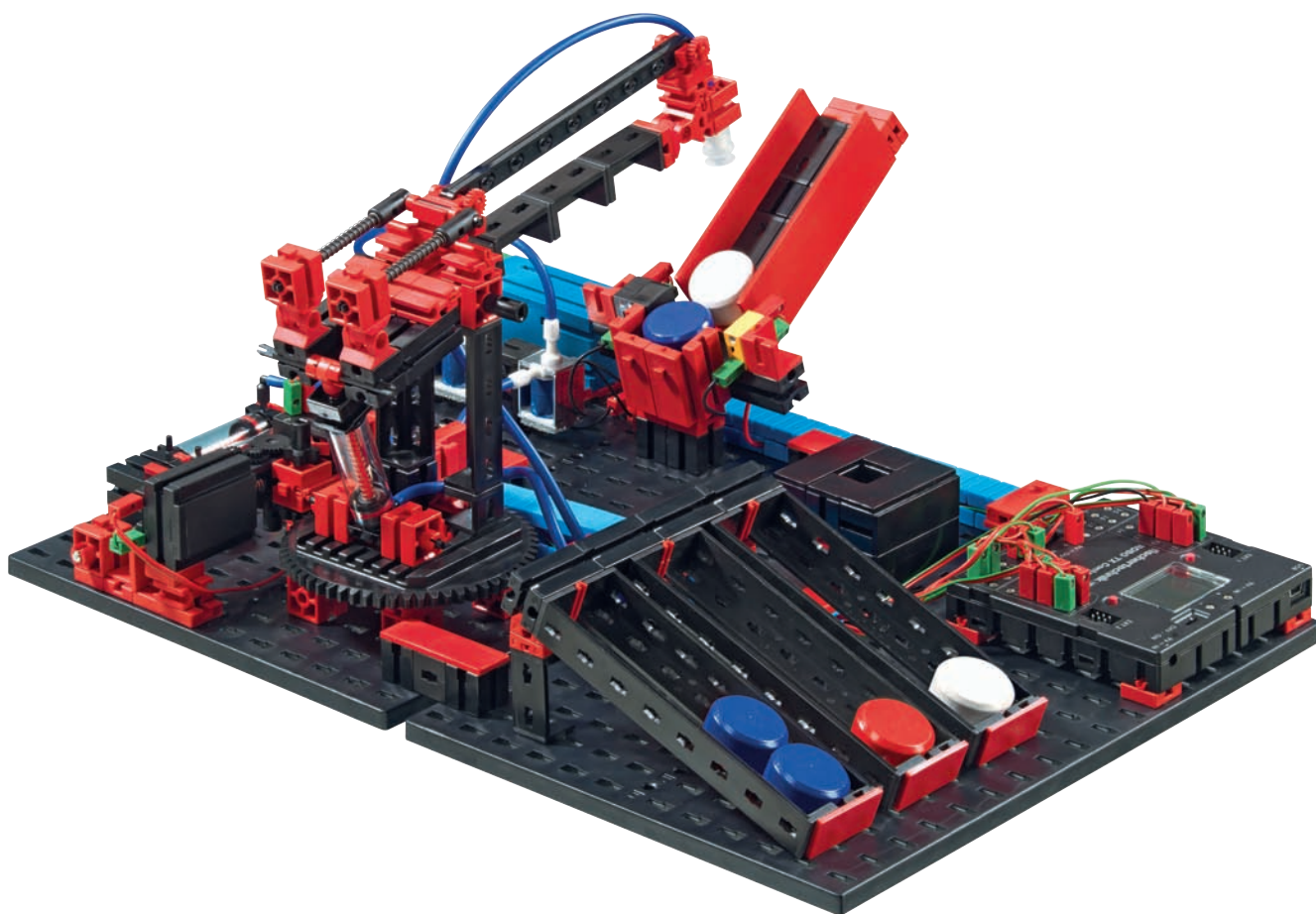
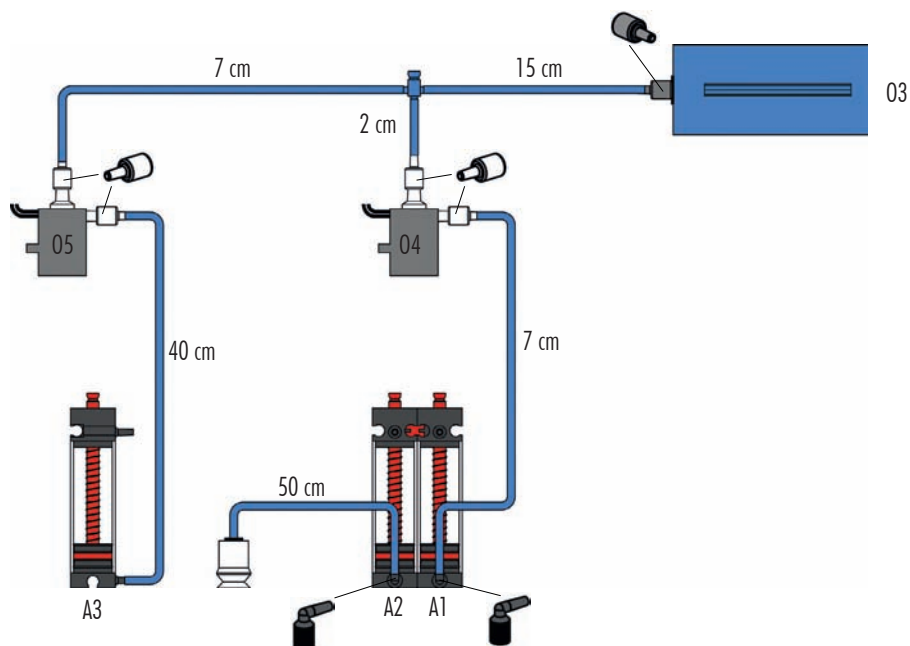


- Lichtschanke
- Light bar
- Barrage photoélectrique
- Lichtbarriere
- Barrera de luz
- Célula fotoelétrica
- Barriera luminosa
- Световой барьер
- 光栅

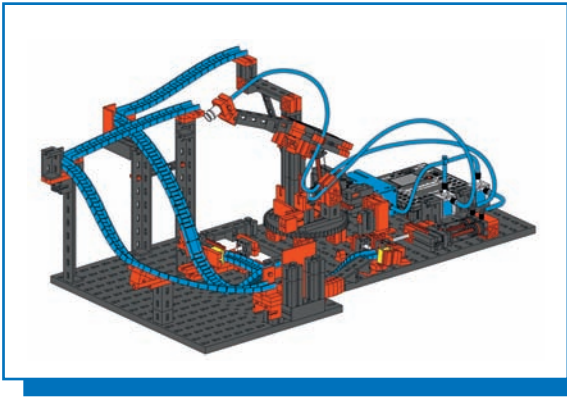
Schlauchanschlussplan
Air line layout plan
Plan de raccordement de conduits

Aansluitschema van slang
Racor de empalme
Plano de conexão de mangueira

Schema di allacciamento tubi
Схема подключения шлангов
软管连接图



- Informationen zur Programmierung des Modells: Siehe didaktisches Begleitmaterial auf CD-ROM.
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Kugelparcours mit Vakuumgreifer

Ball obstacle course with vacuum picker arm

Parcours à billes avec grappin pneumatique

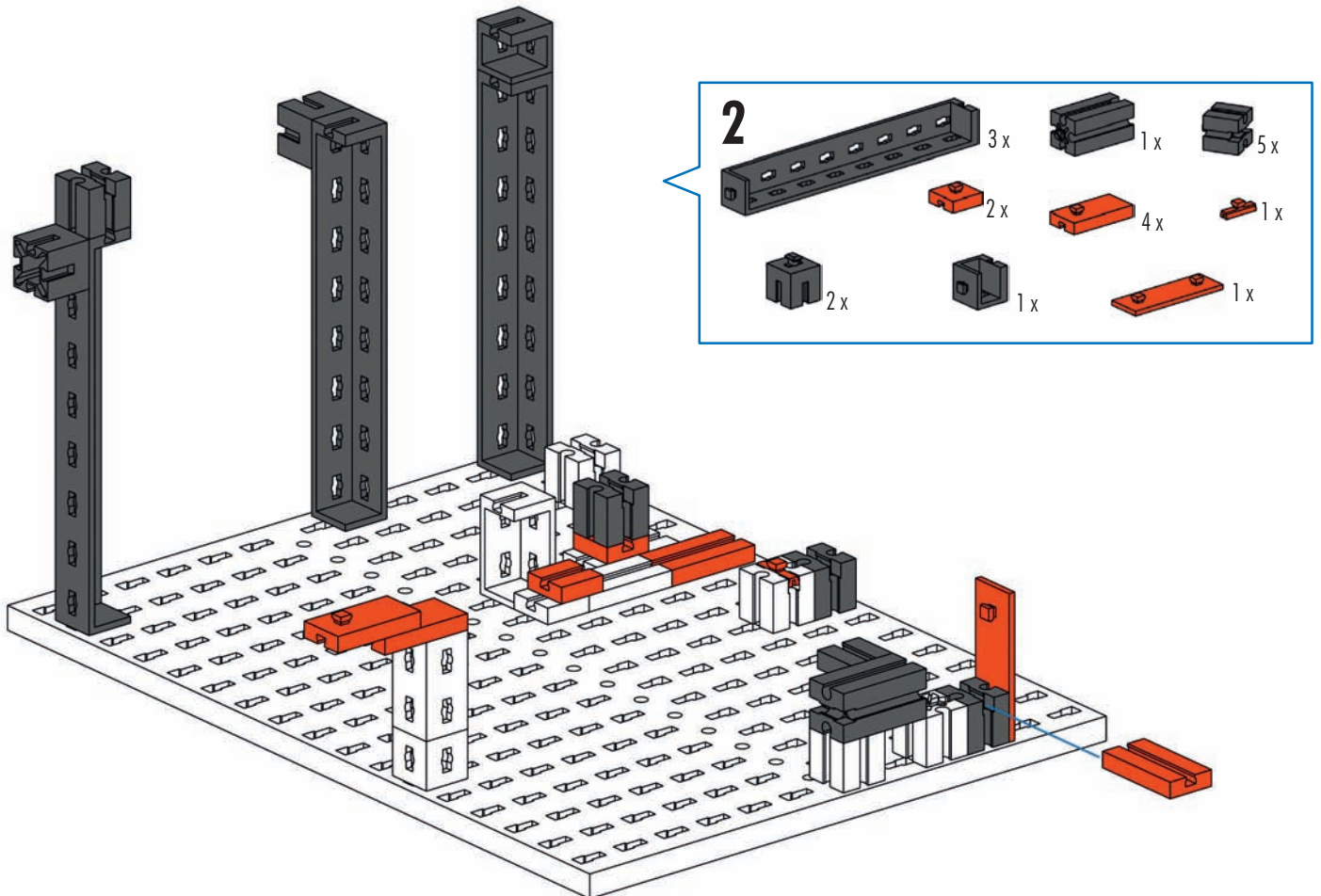
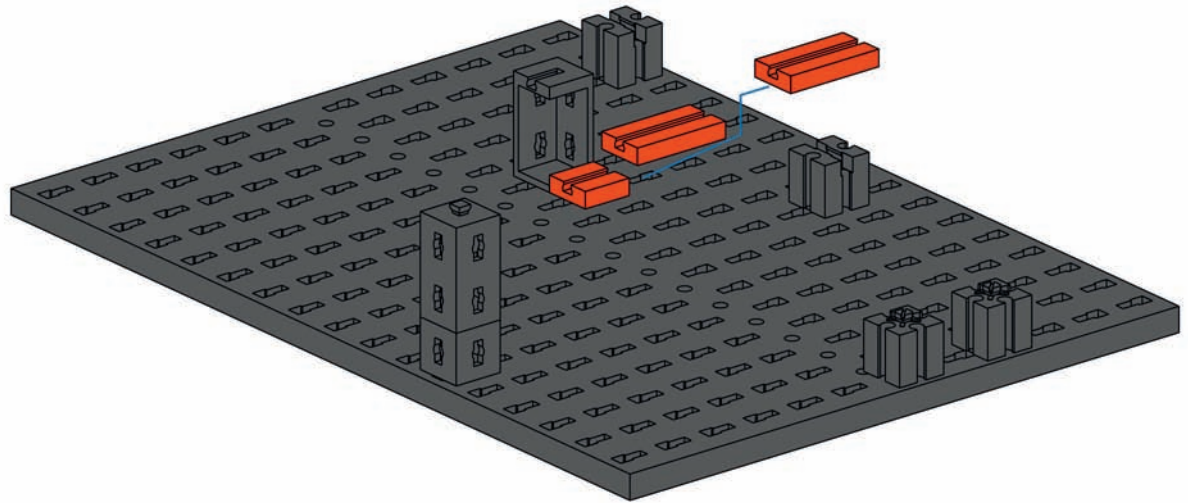
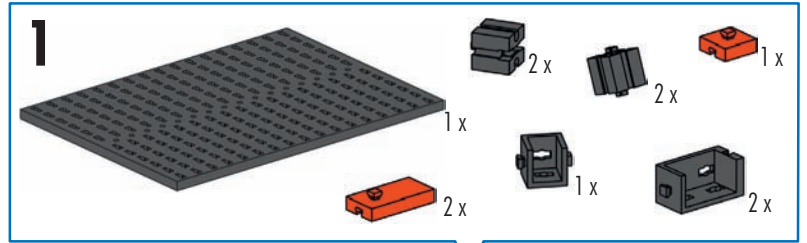
Kogelparcour met vacuümgreijer

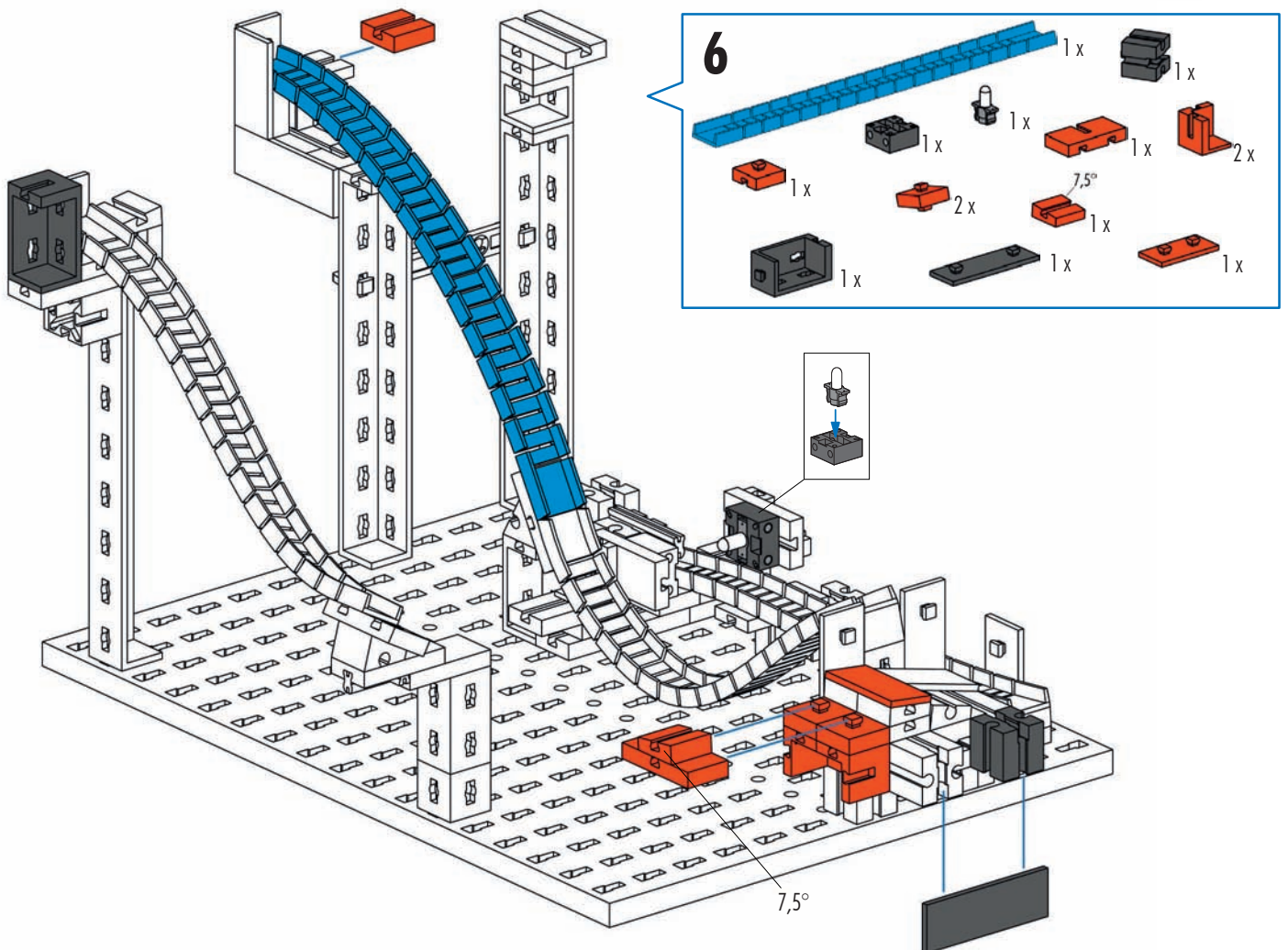
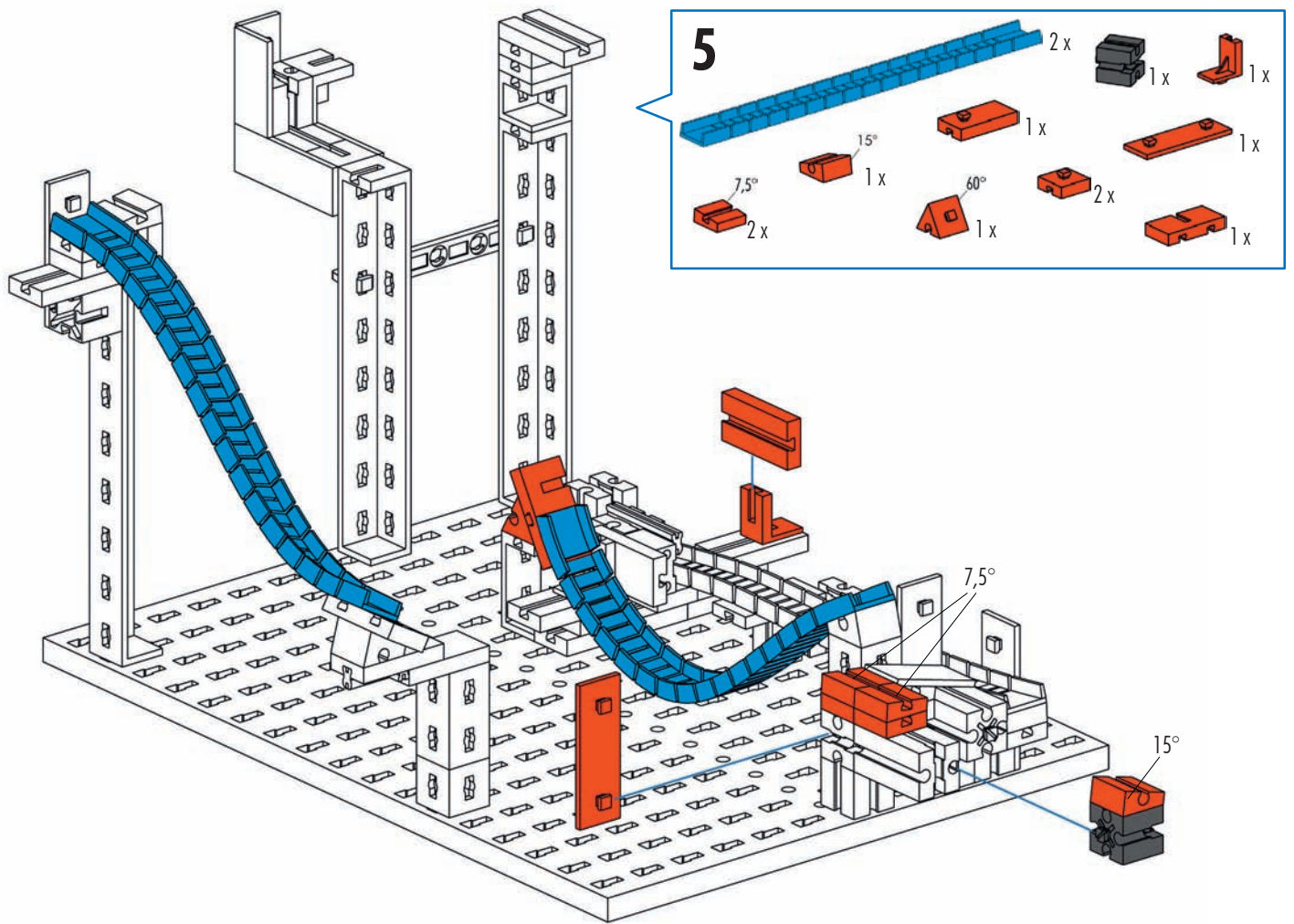
Pista de recorrido de bola con manipulador de vacío

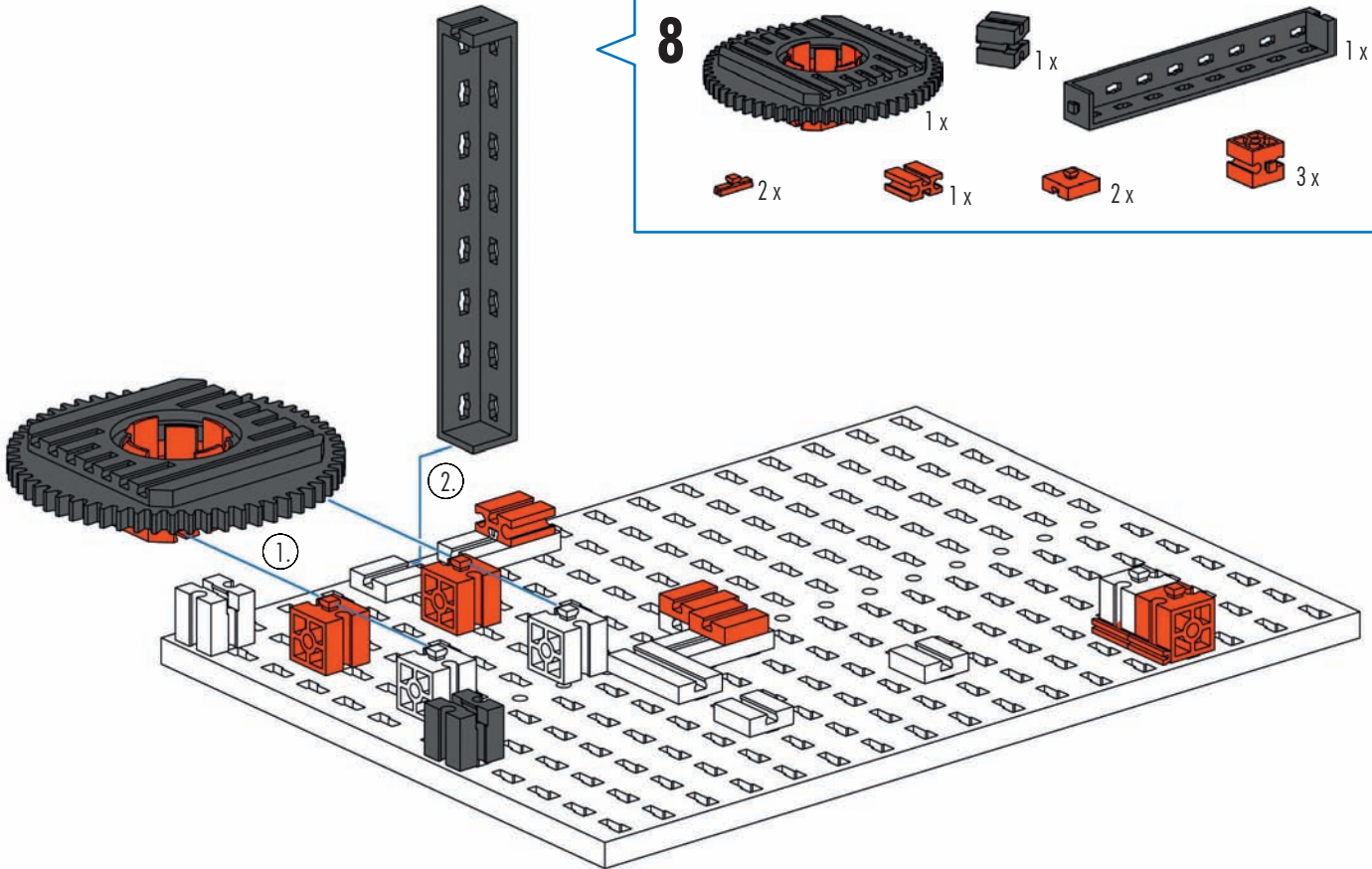
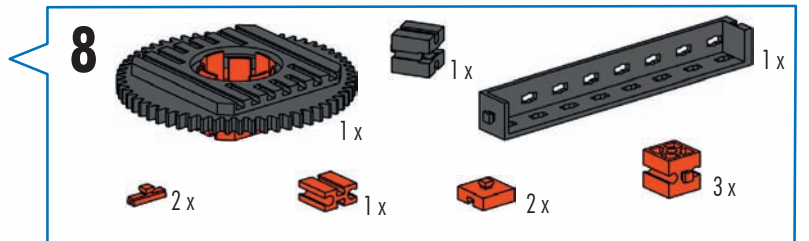
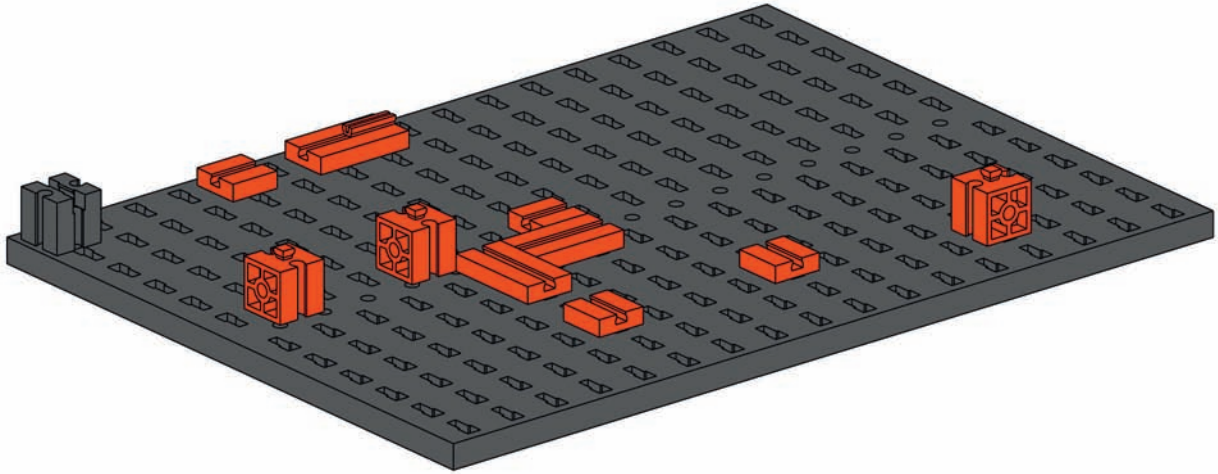
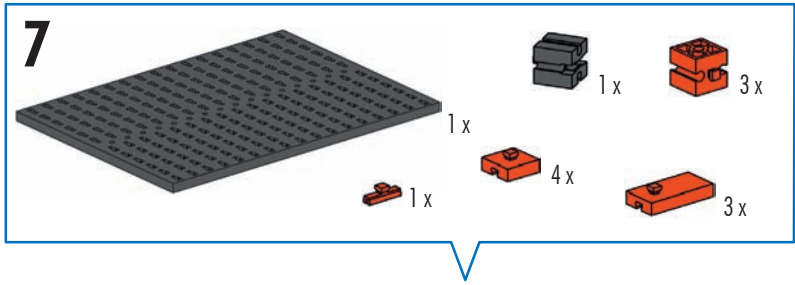
Circuito de esferas com agarrador a vácuo

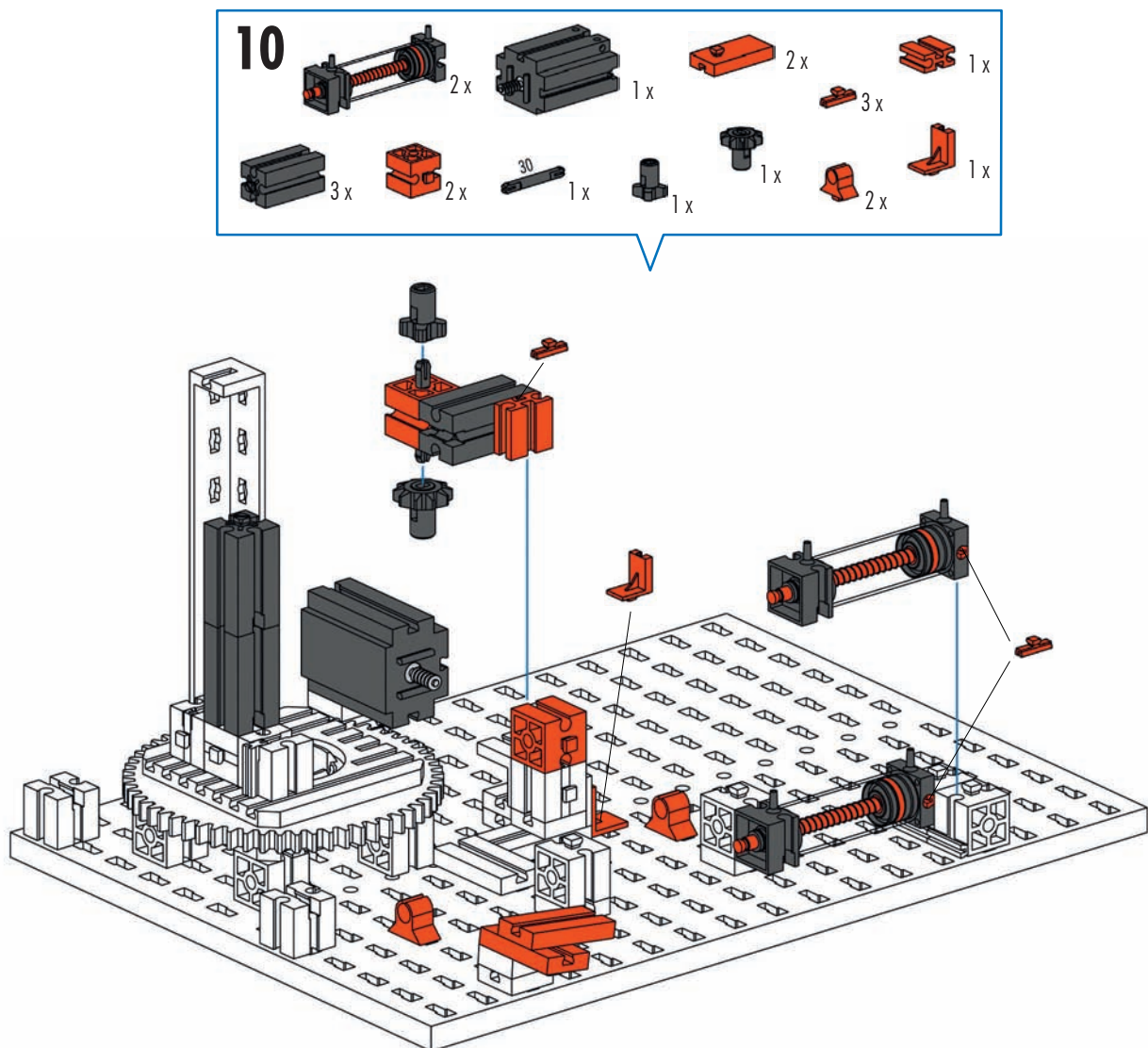
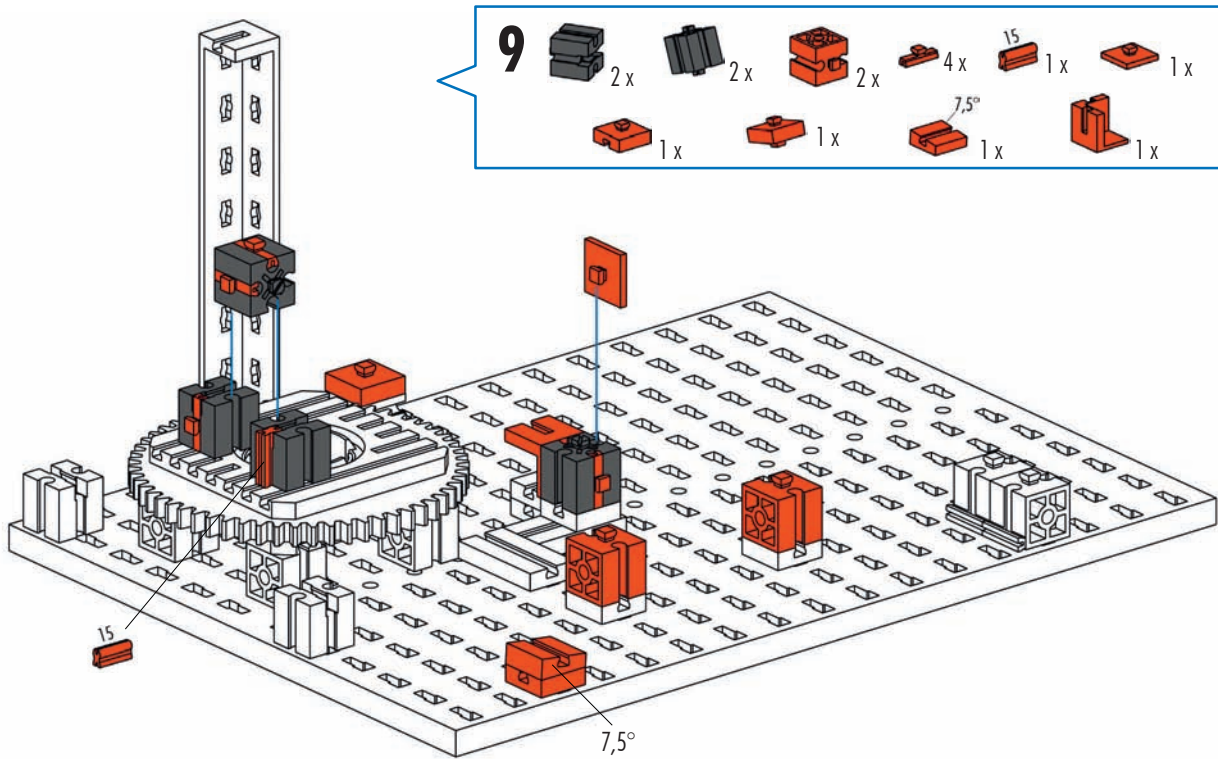
Percorso sfere con pinza a ventosa

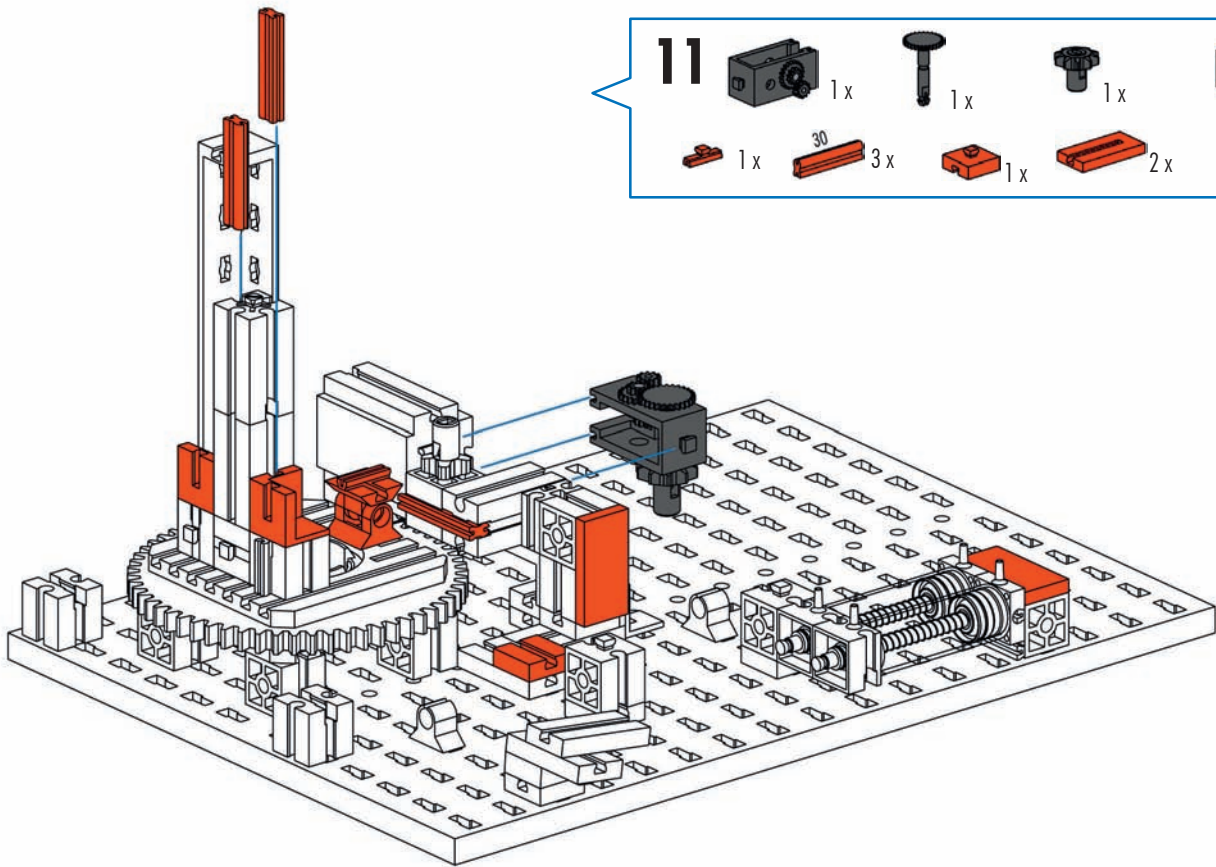
Трасса для шарика с вакуумным захватом
配分选机器人的滚珠赛道



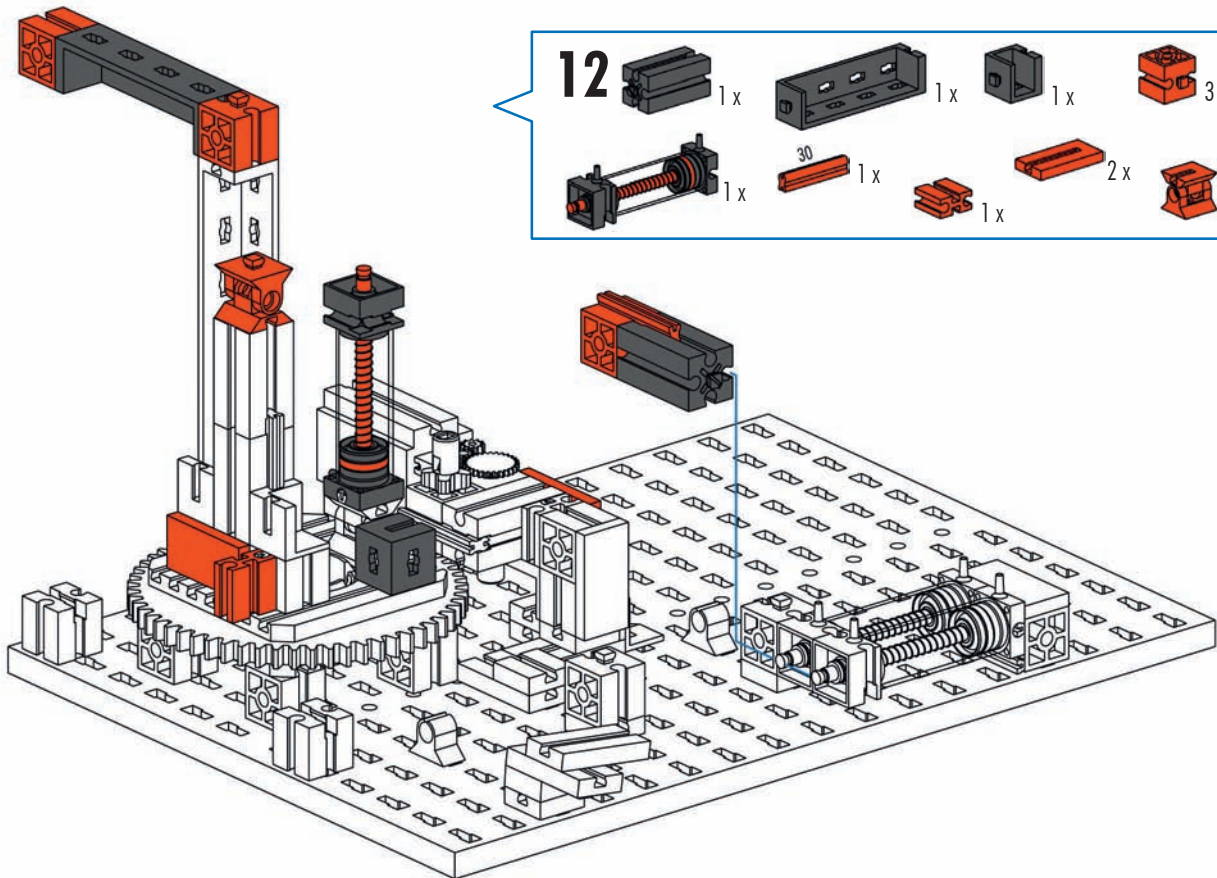






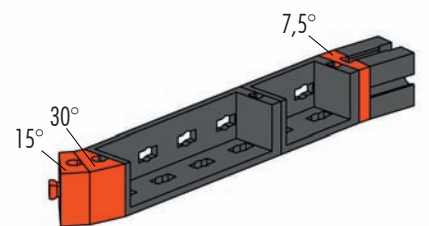


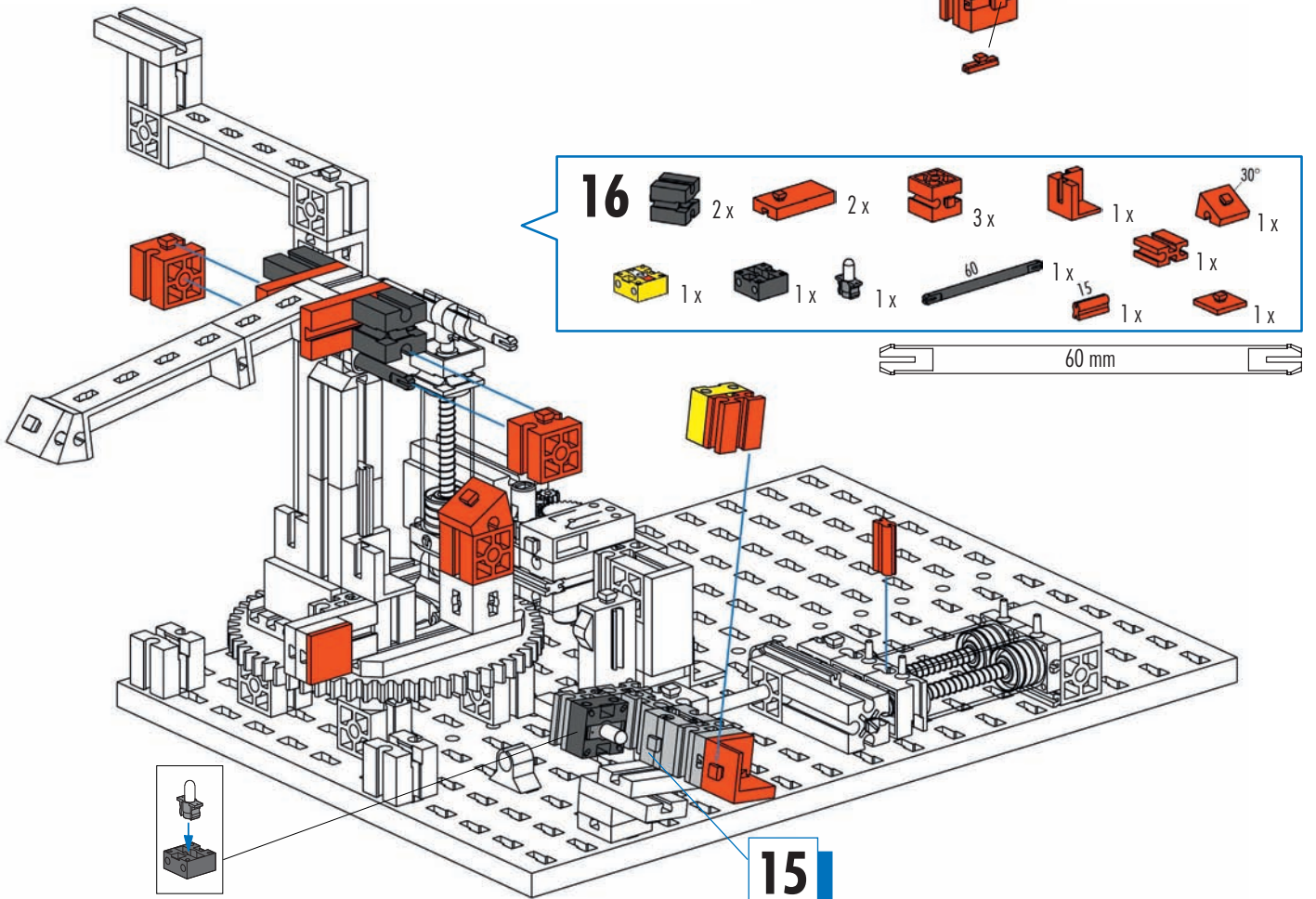
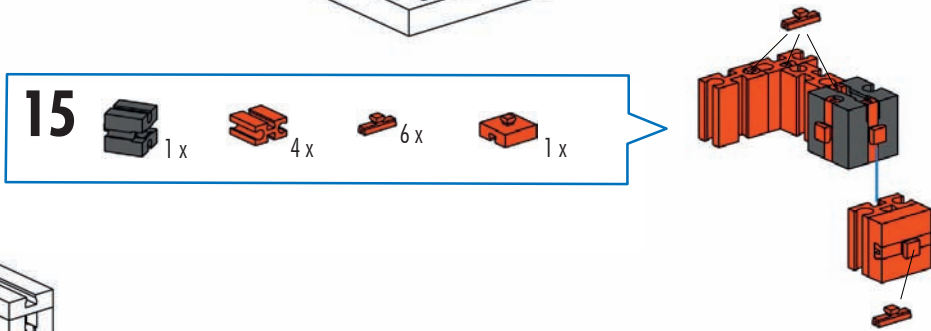
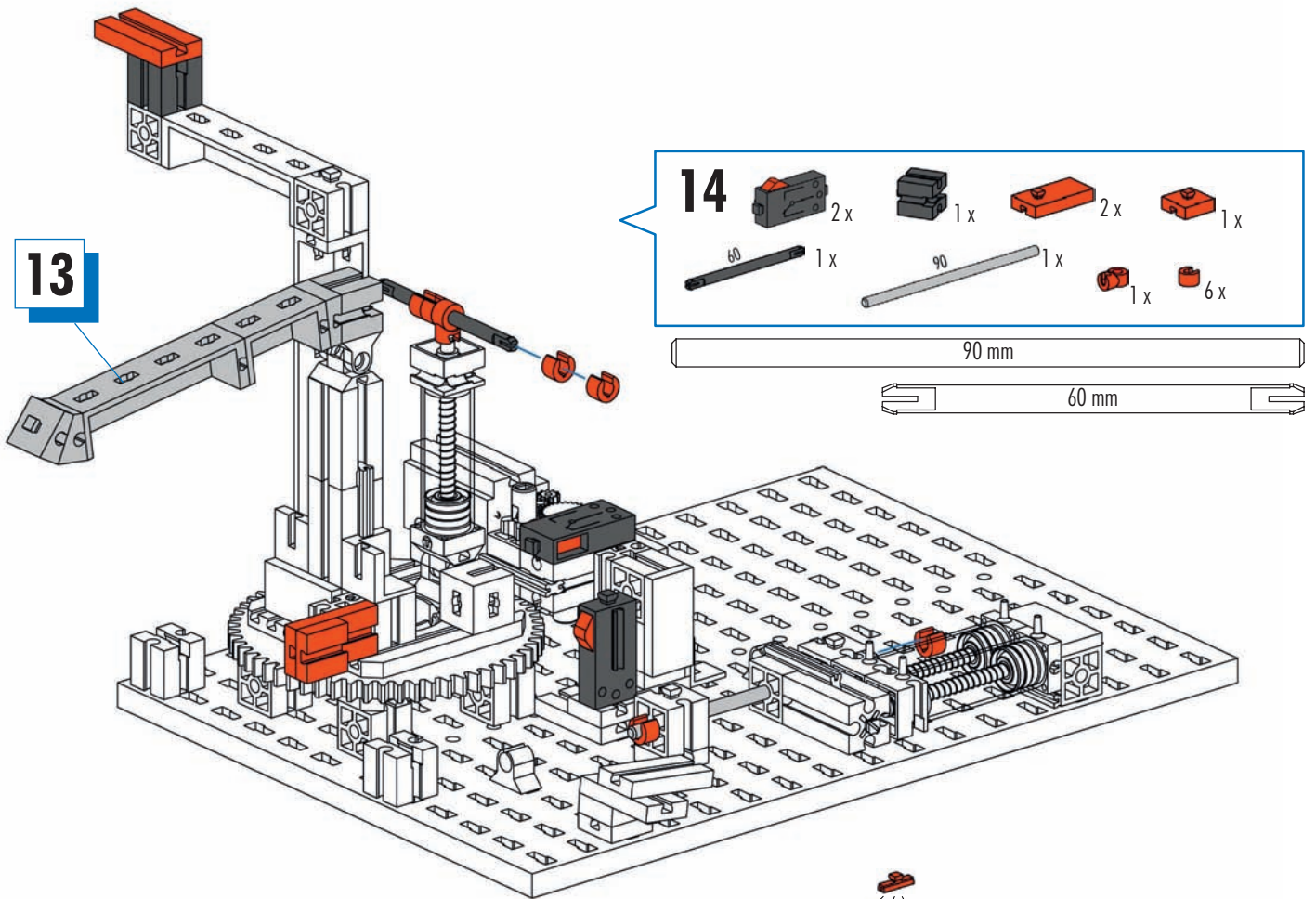
- 11**
- 1x [grey motor]
 - 1x [black gear]
 - 1x [grey axle]
 - 1x [grey bush]
 - 2x [orange L-shaped connector]
 - 1x [orange short connector]
 - 3x [orange 30° angled connector]
 - 1x [orange 15° angled connector]
 - 2x [orange 7.5° angled connector]
 - 1x [orange connector with hole]

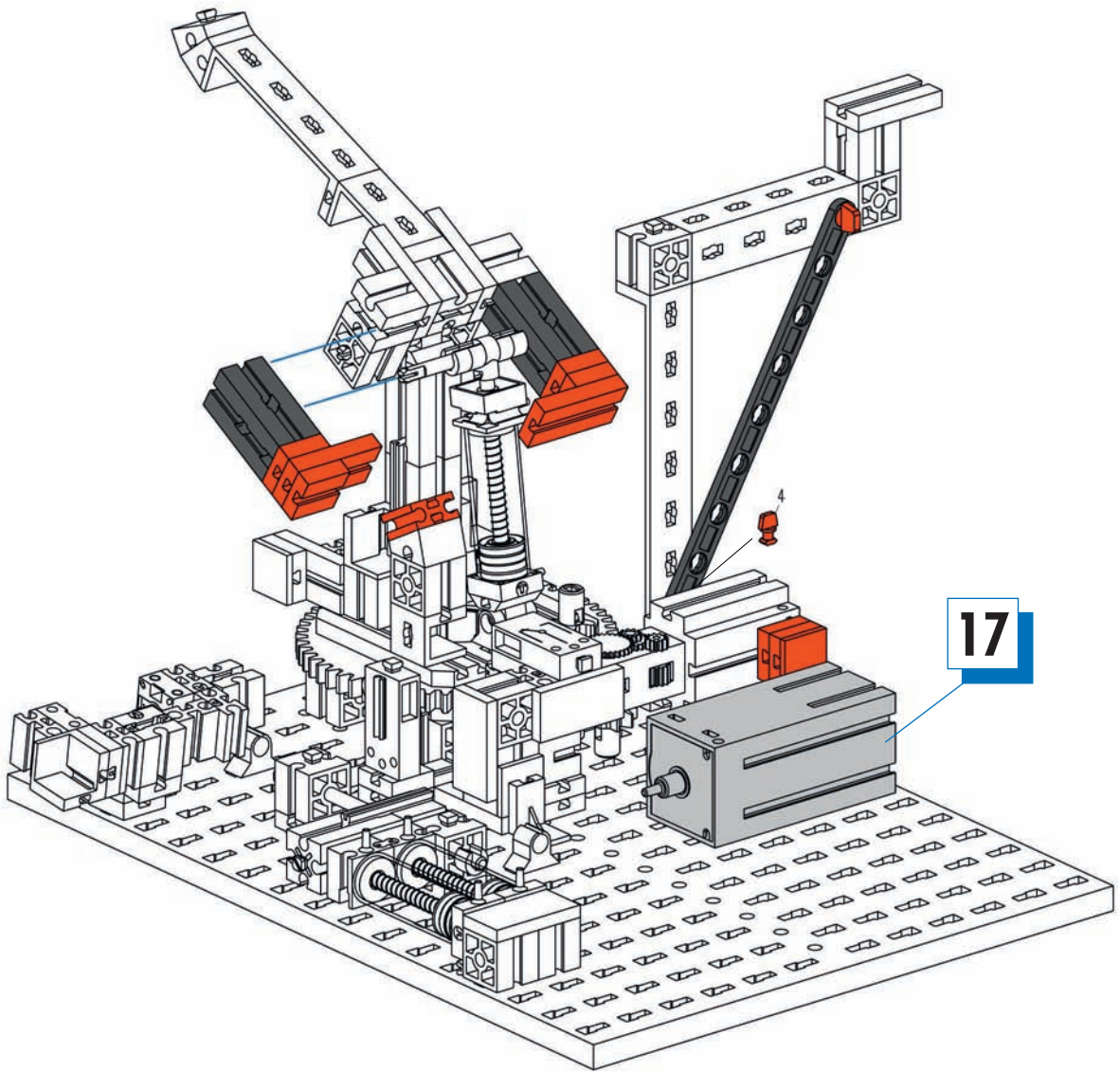
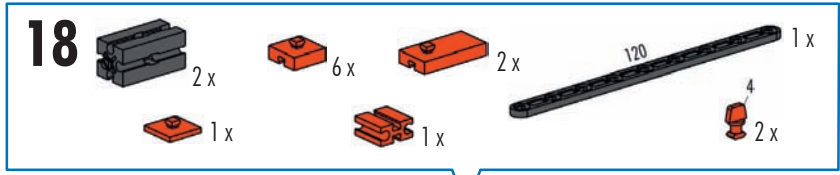
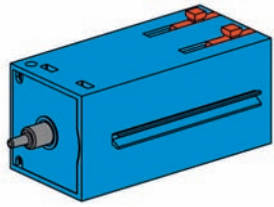
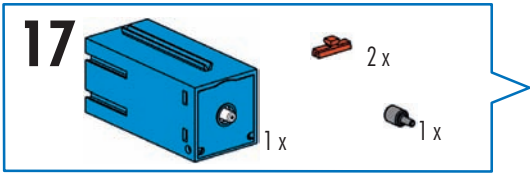


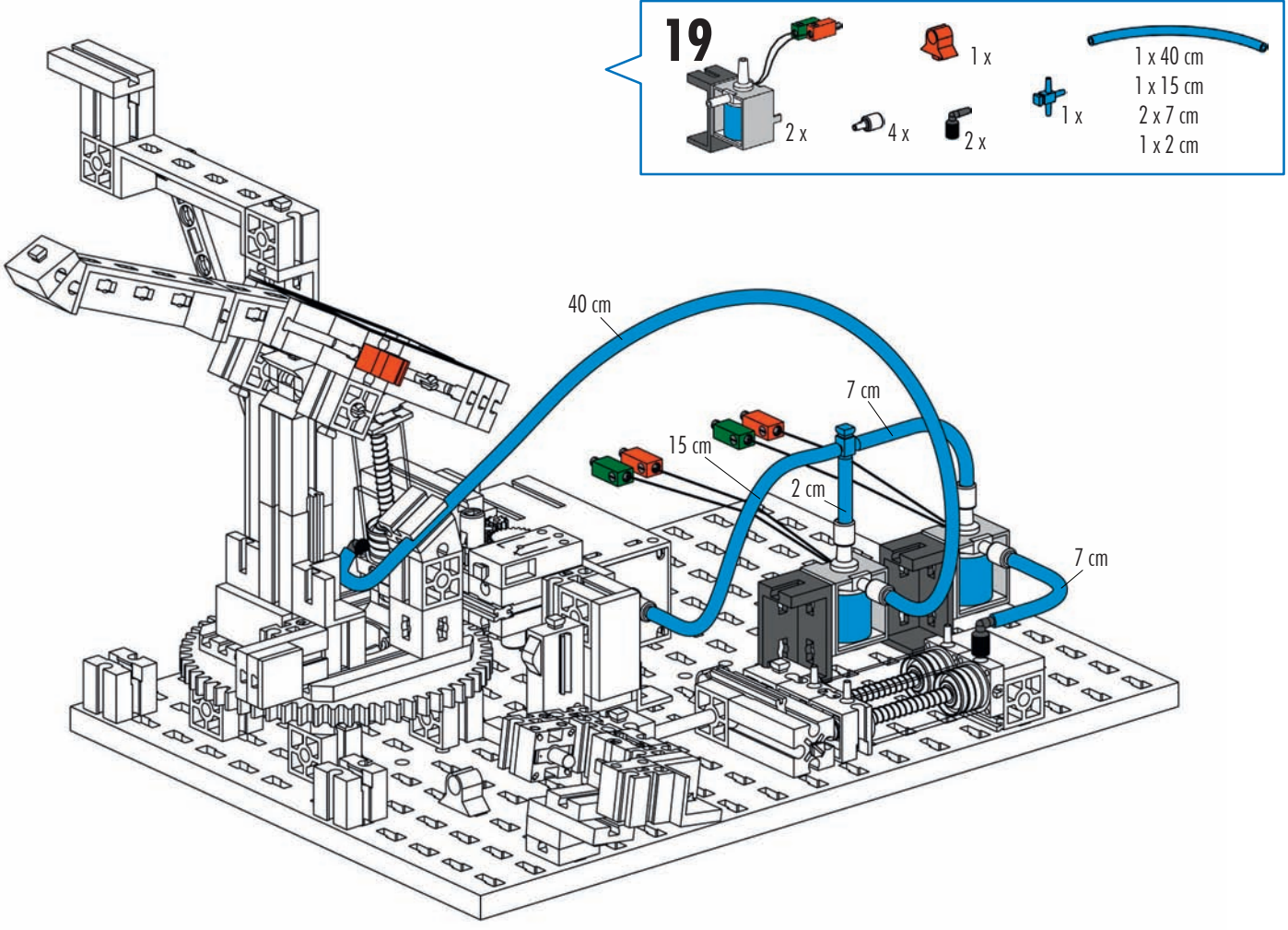
- 12**
- 1x [grey motor]
 - 1x [grey 30° angled connector]
 - 1x [grey 15° angled connector]
 - 1x [grey bush]
 - 3x [orange L-shaped connector]
 - 1x [grey axle]
 - 1x [orange 30° angled connector]
 - 1x [orange 15° angled connector]
 - 2x [orange 7.5° angled connector]
 - 1x [orange connector with hole]

- 13**
- 1x [grey 30-degree angled connector]
 - 1x [grey 15-degree angled connector]
 - 1x [grey bush]
 - 1x [orange 30-degree angled connector]
 - 1x [orange 15-degree angled connector]
 - 1x [orange 7.5-degree angled connector]







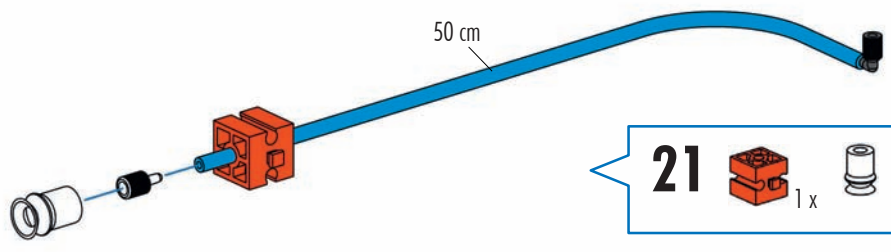
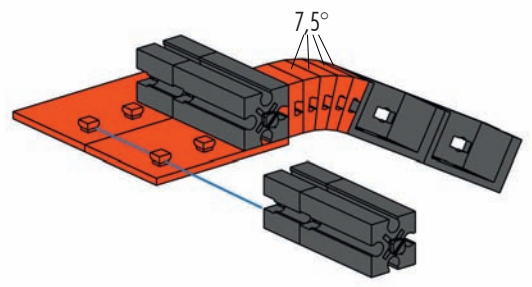


19

- 2 x (Motor assembly)
- 4 x (Pin)
- 2 x (Pin)
- 1 x (Bracket)
- 1 x (Cross)
- 1 x 40 cm (Cable)
- 1 x 15 cm (Cable)
- 2 x 7 cm (Cable)
- 1 x 2 cm (Cable)

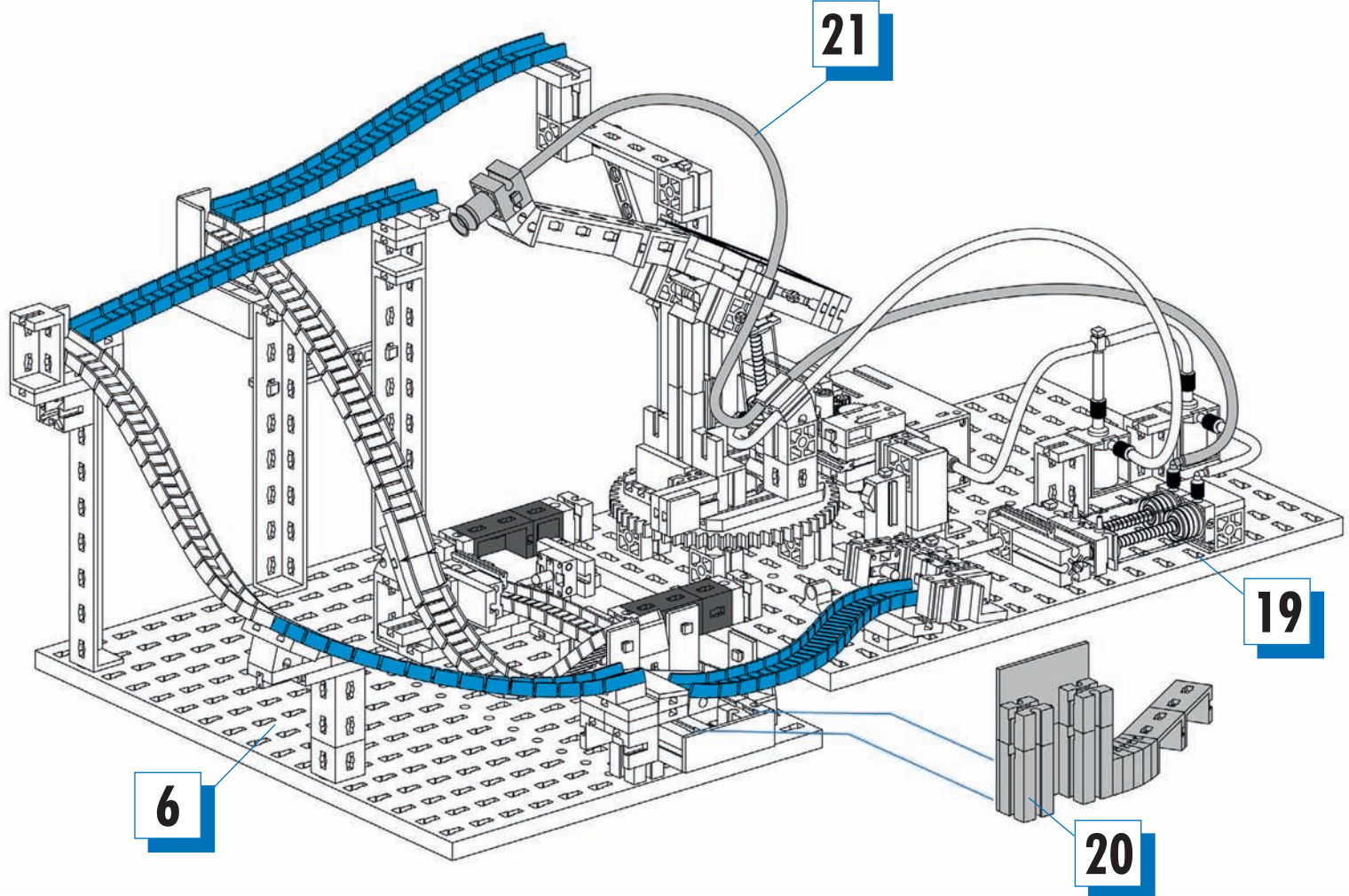
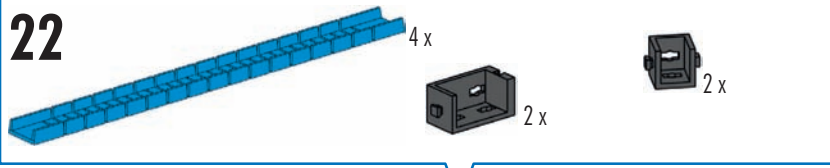
20

- 2 x (Grey Technic Beam)
- 2 x (Red Technic Plate)
- 1 x (Red Technic Bracket)
- 2 x (Grey Technic Pin)
- 2 x (Grey Technic Pin)
- 2 x (Grey Technic Bracket)
- 4 x (Red Technic Pin, 7.5°)

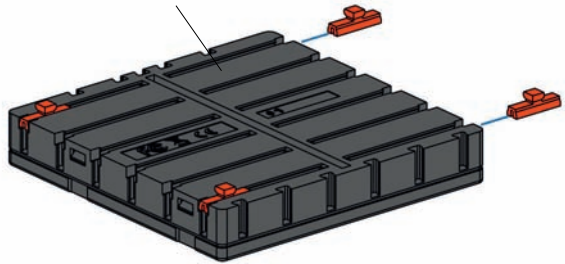
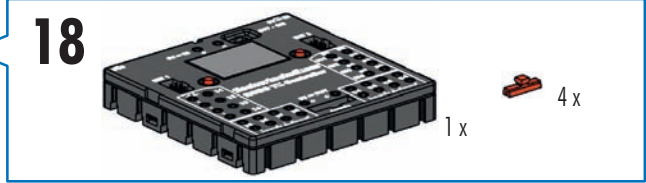


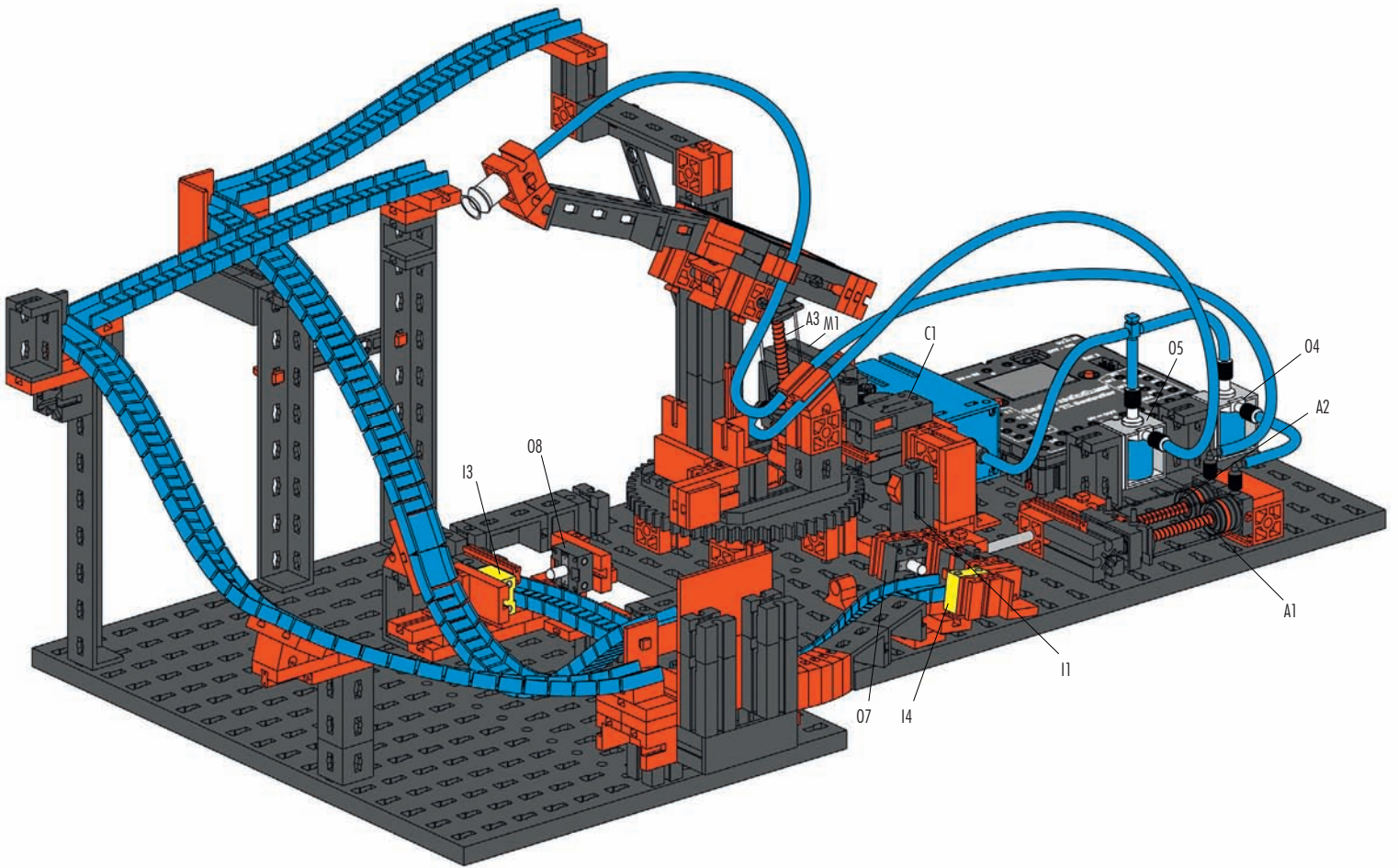
21

- 1 x (Red Technic Bracket)
- 1 x (Grey Technic Pin)
- 1 x (Grey Technic Pin)
- 1 x (Grey Technic Pin)
- 1 x (Grey Technic Pin)
- 1 x 50 cm (Cable)

22

- ROBO TX Controller (Art.-Nr. 500 995) nicht im Baukasten enthalten
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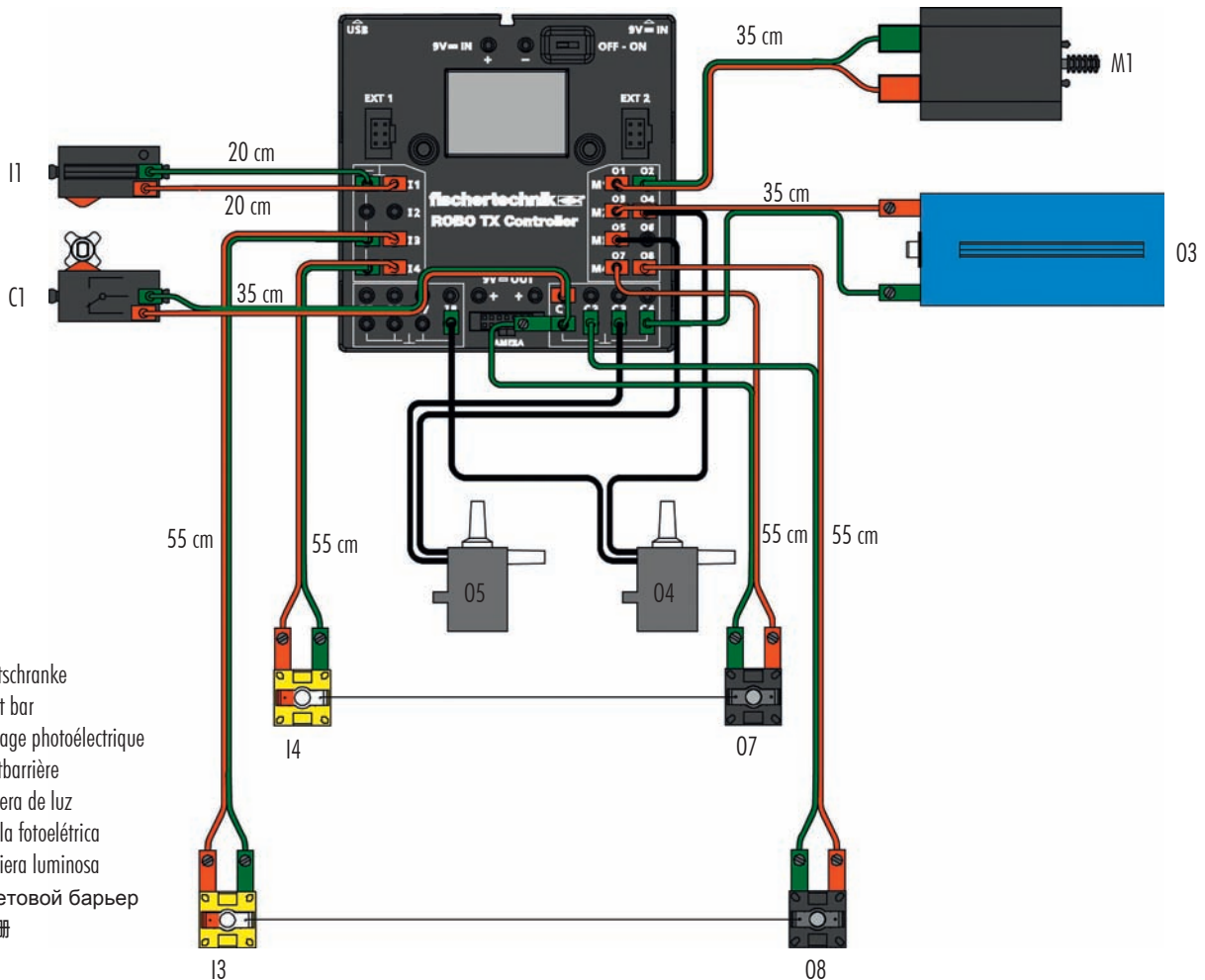
**18**



Schaltplan
Circuit diagram
Plan électrique

Shakelschema
Diagrama de circuitos
Plano elétrico de ligação

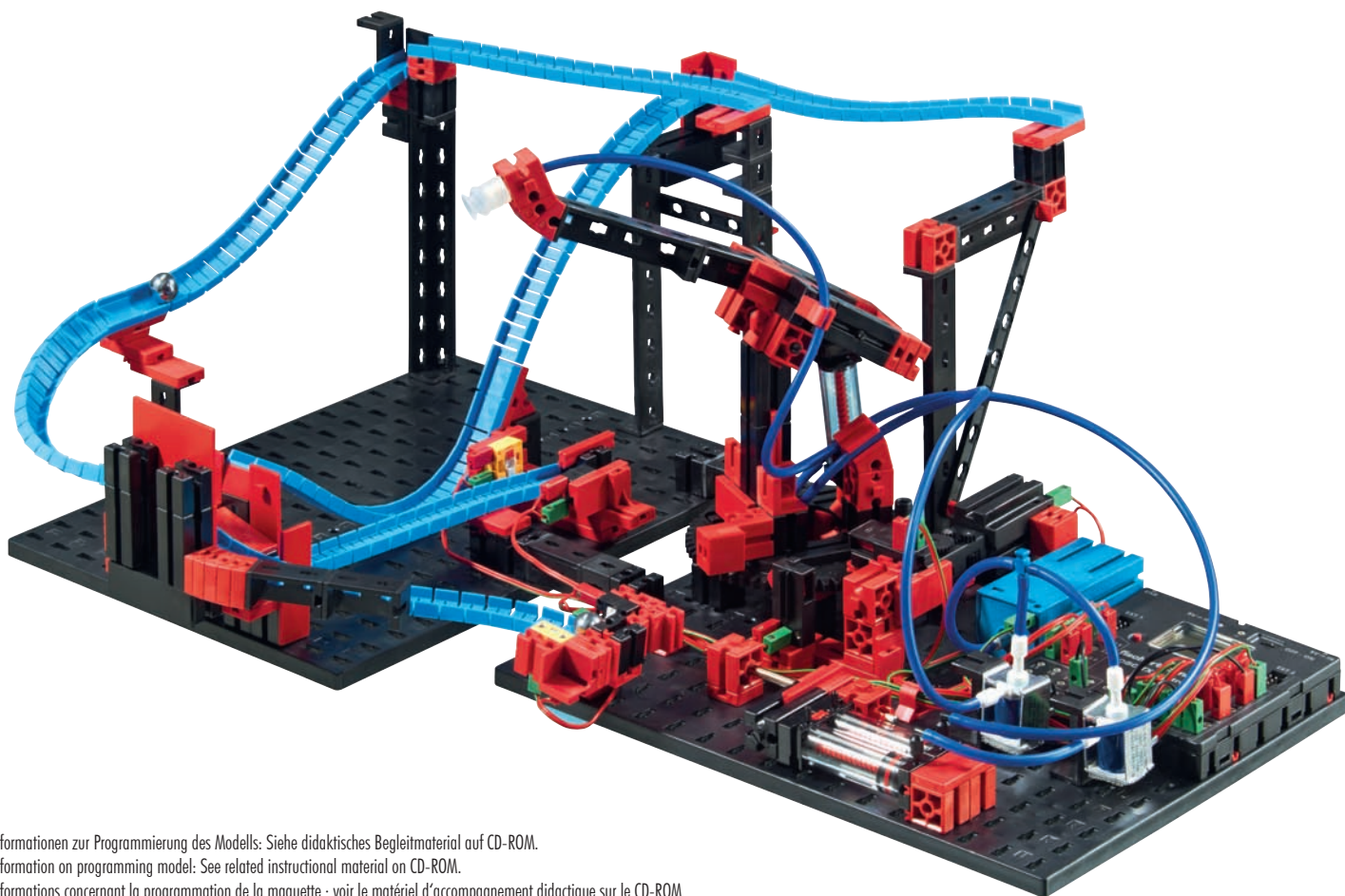
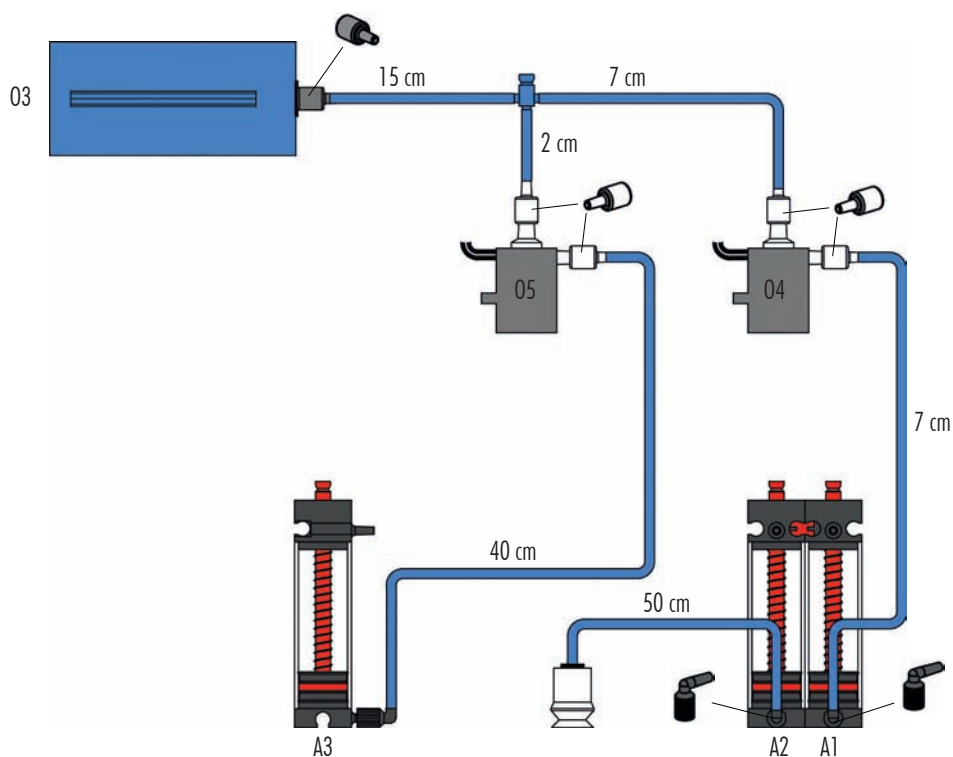
Schema elettrico
Схема подключения
电路图



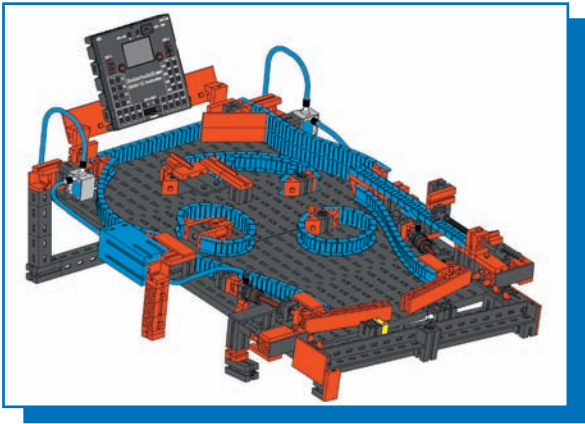
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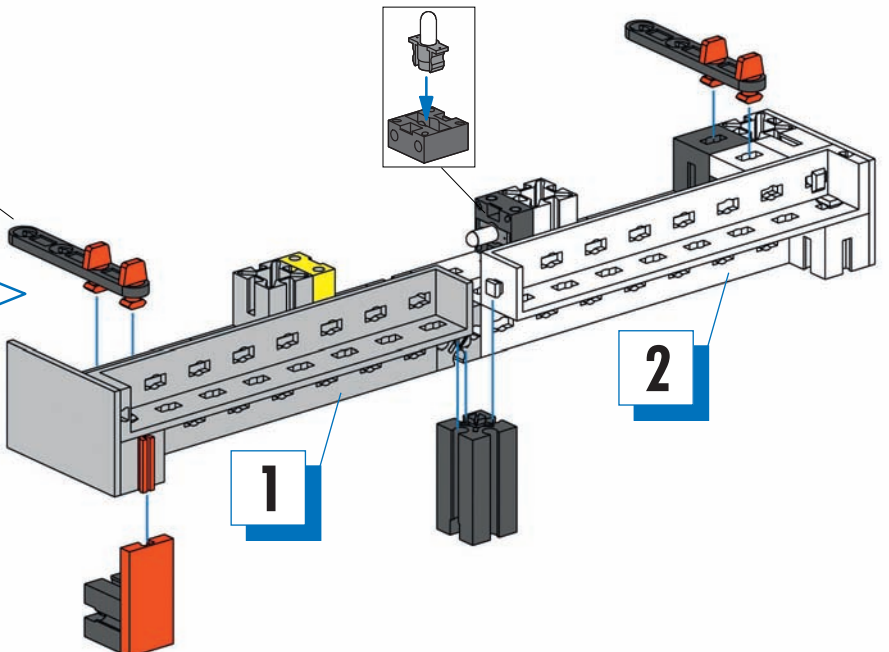
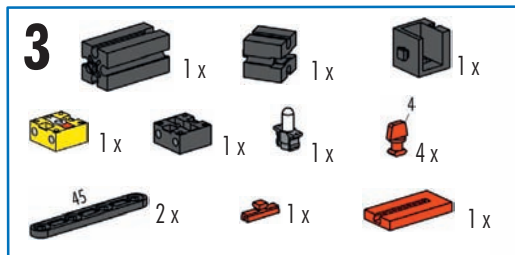
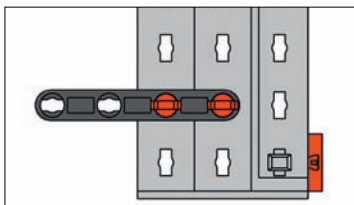
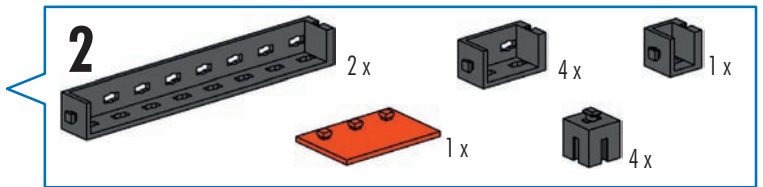
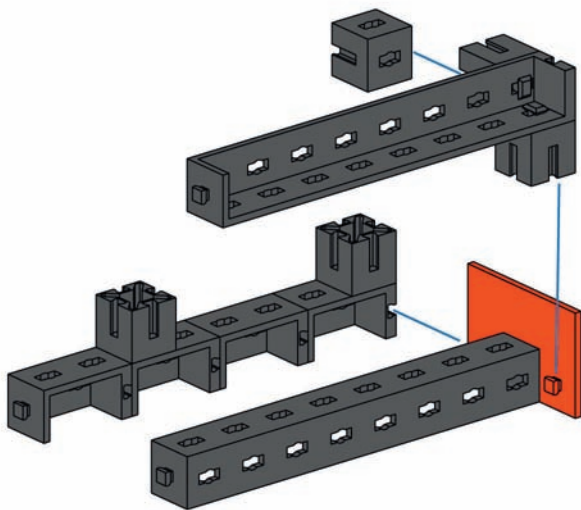
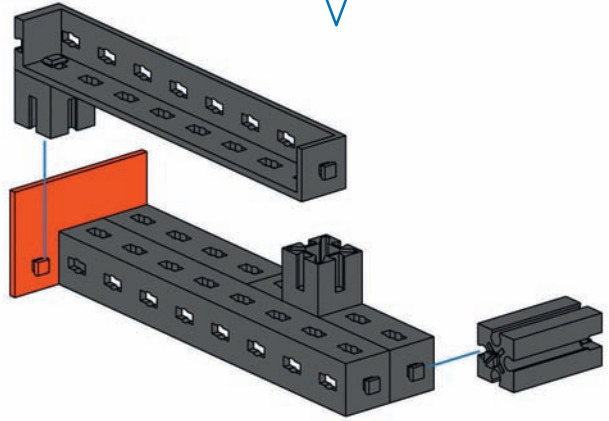
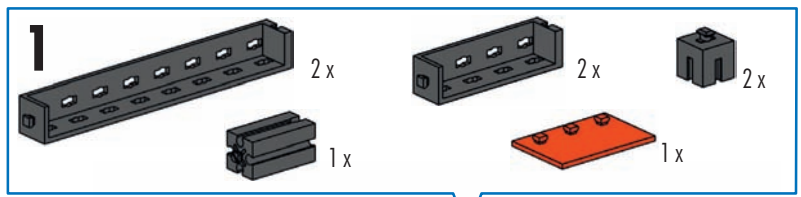
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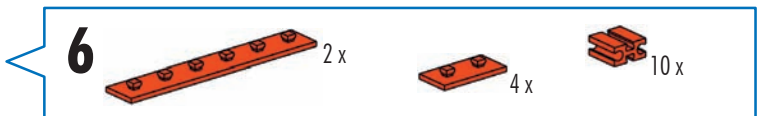
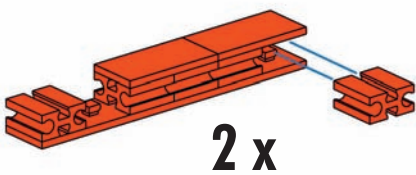
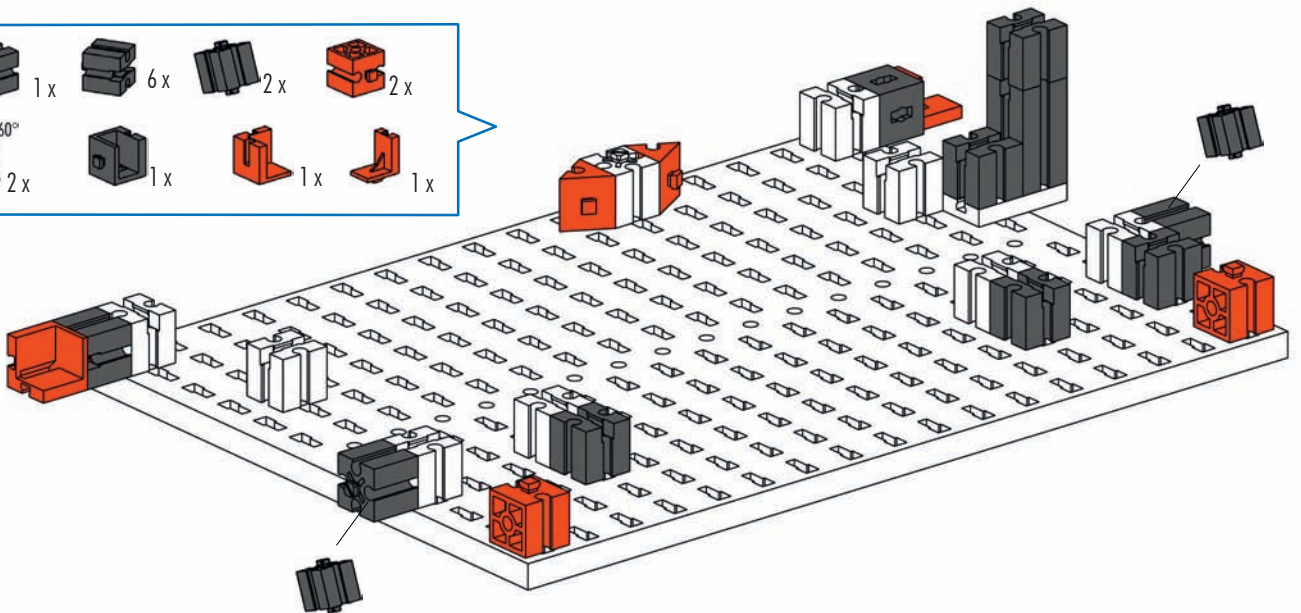
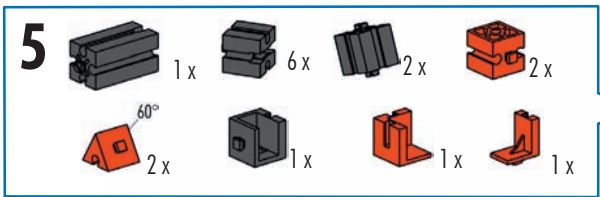
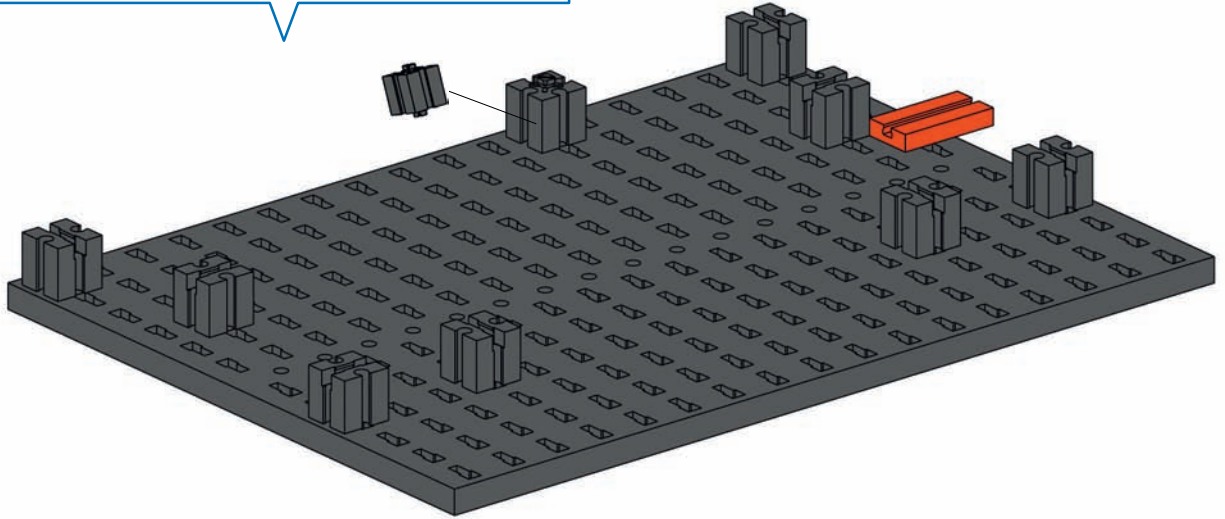
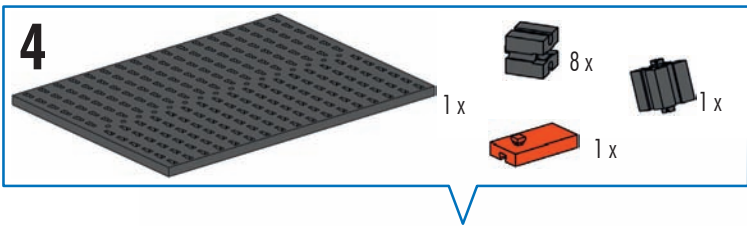


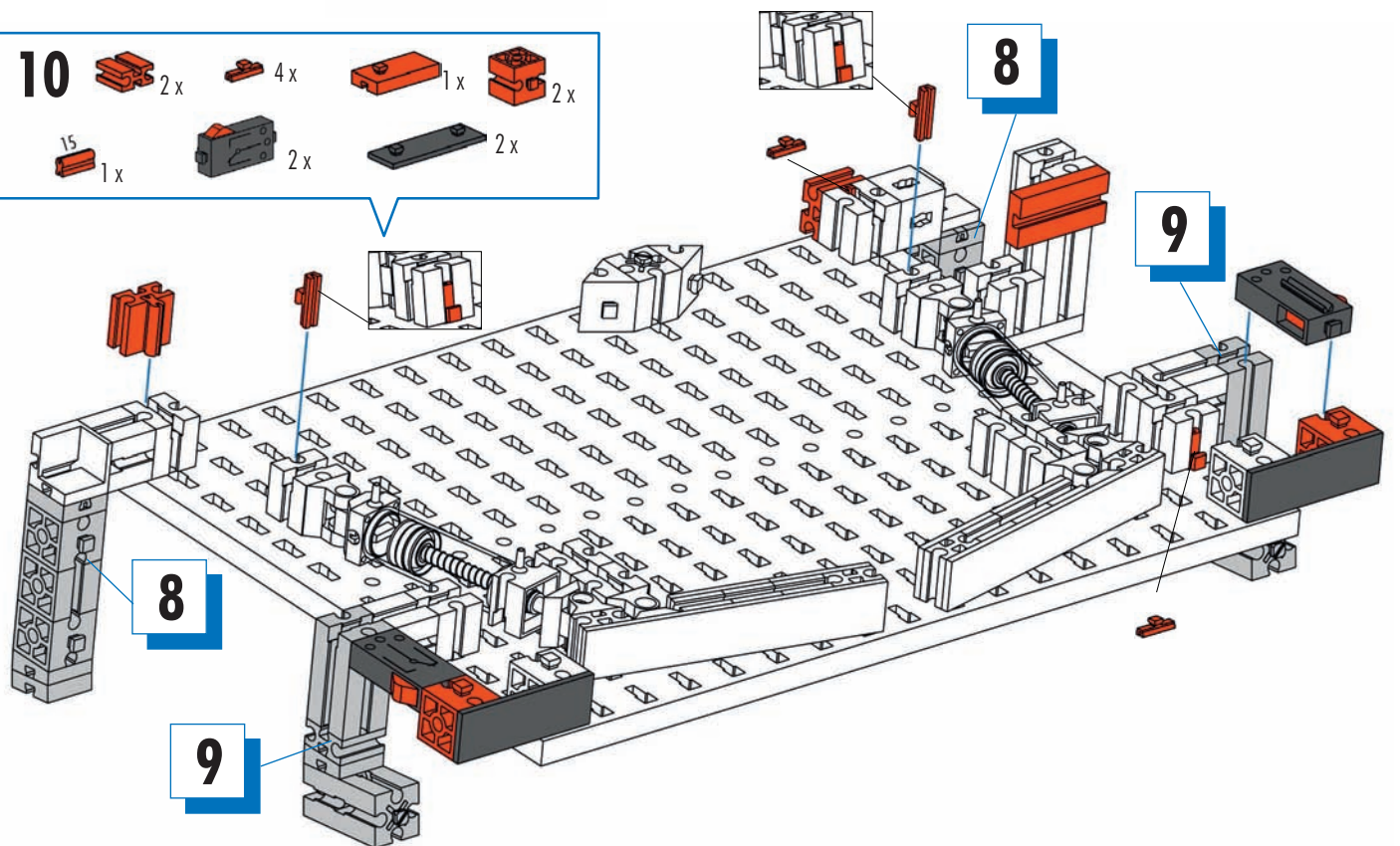
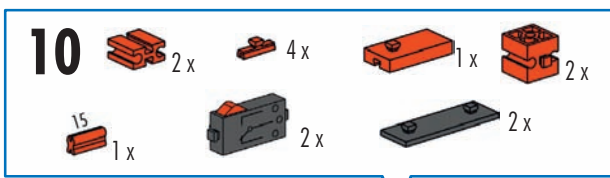
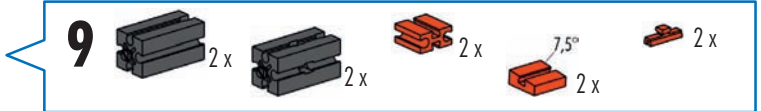
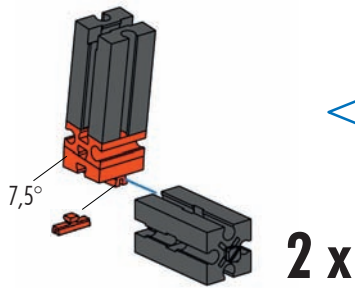
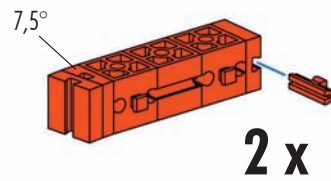
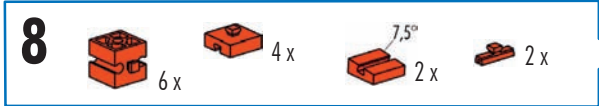
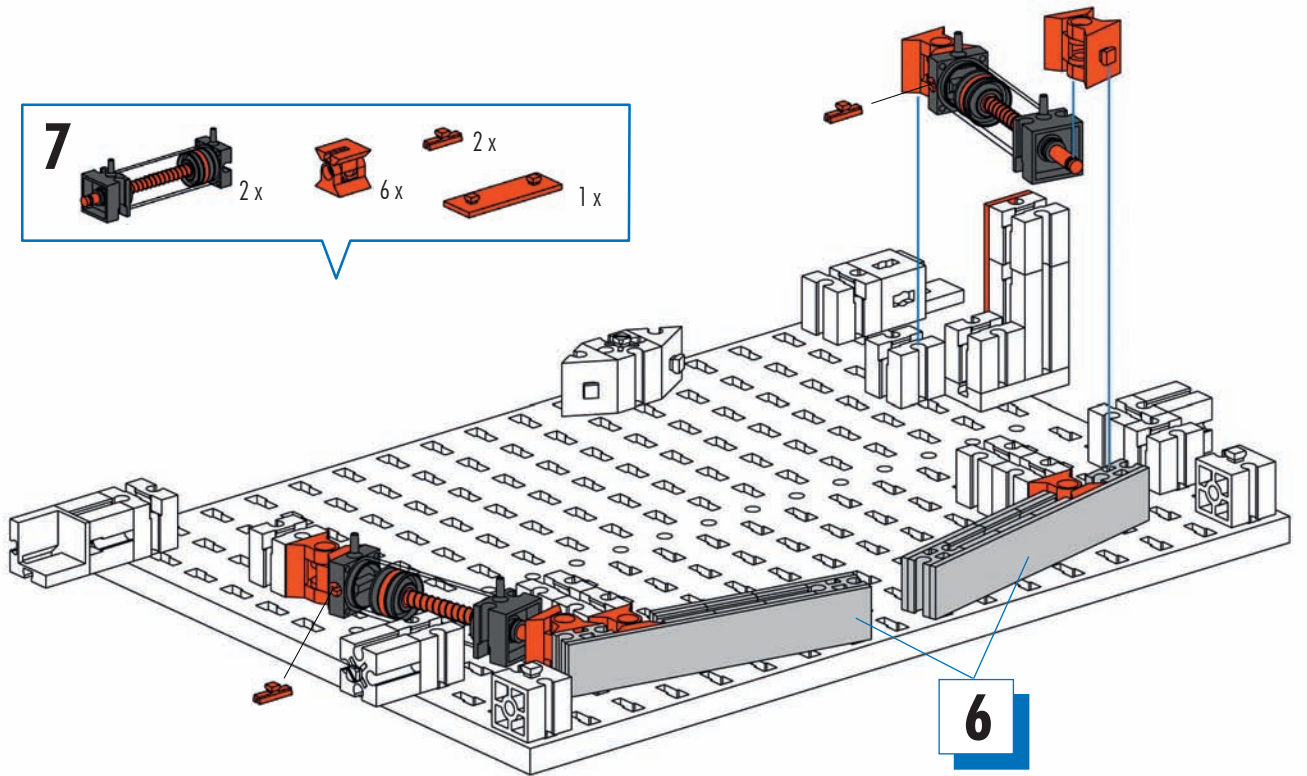
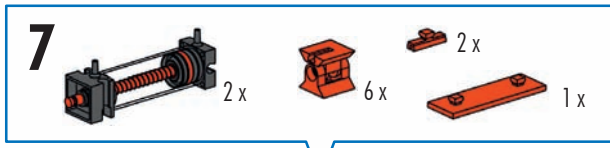
**Flipper
Pinball machine
Flipper**

**Flipper
Pinball
Flipper**

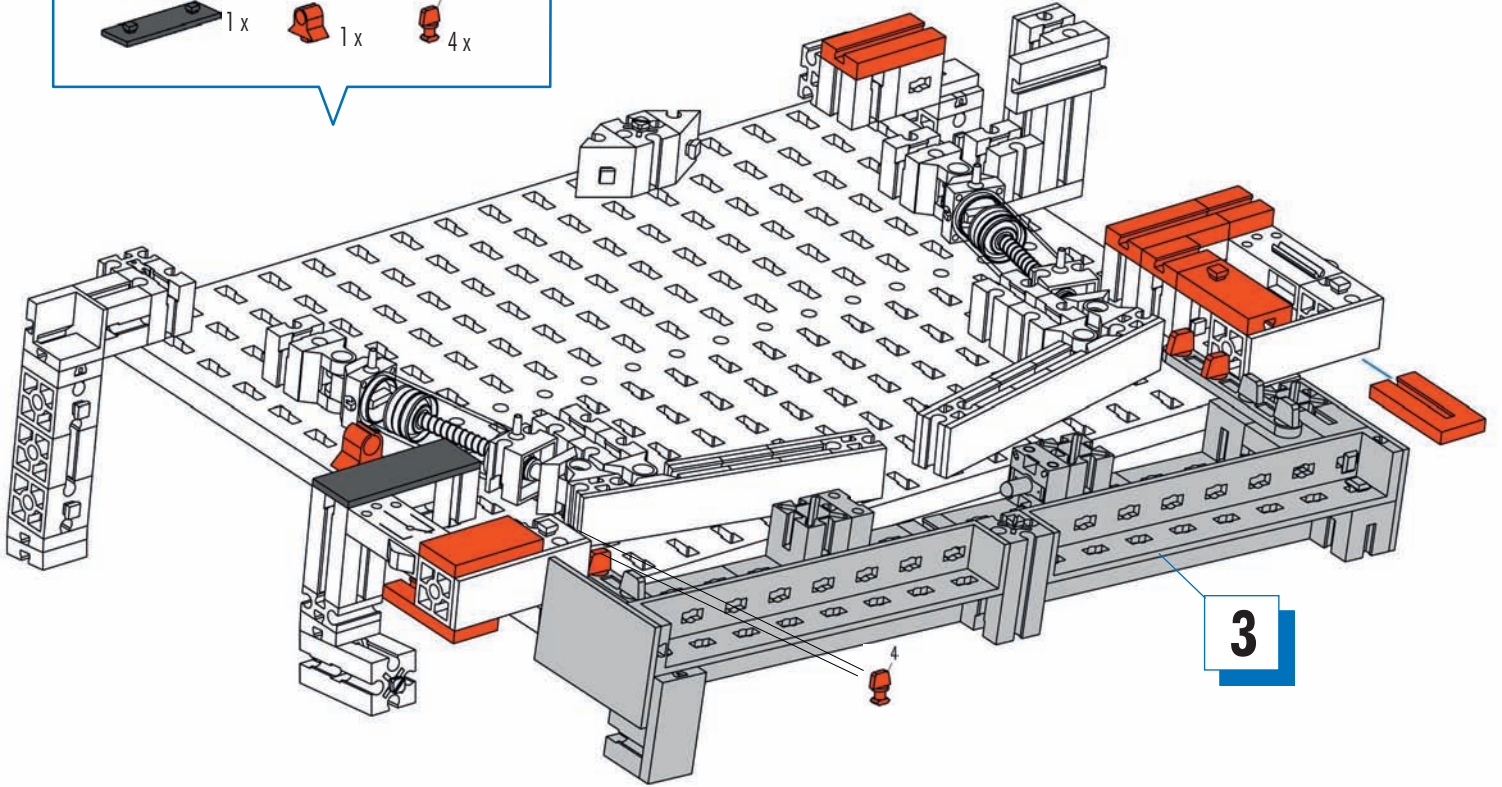
**Flipper
пинбол-машина
弹球机**



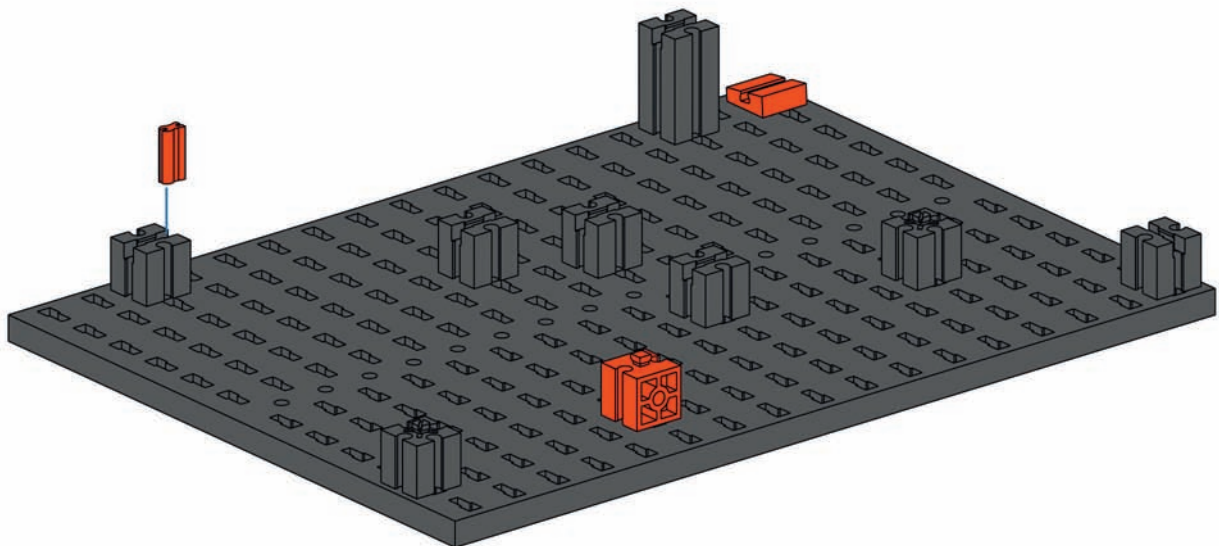




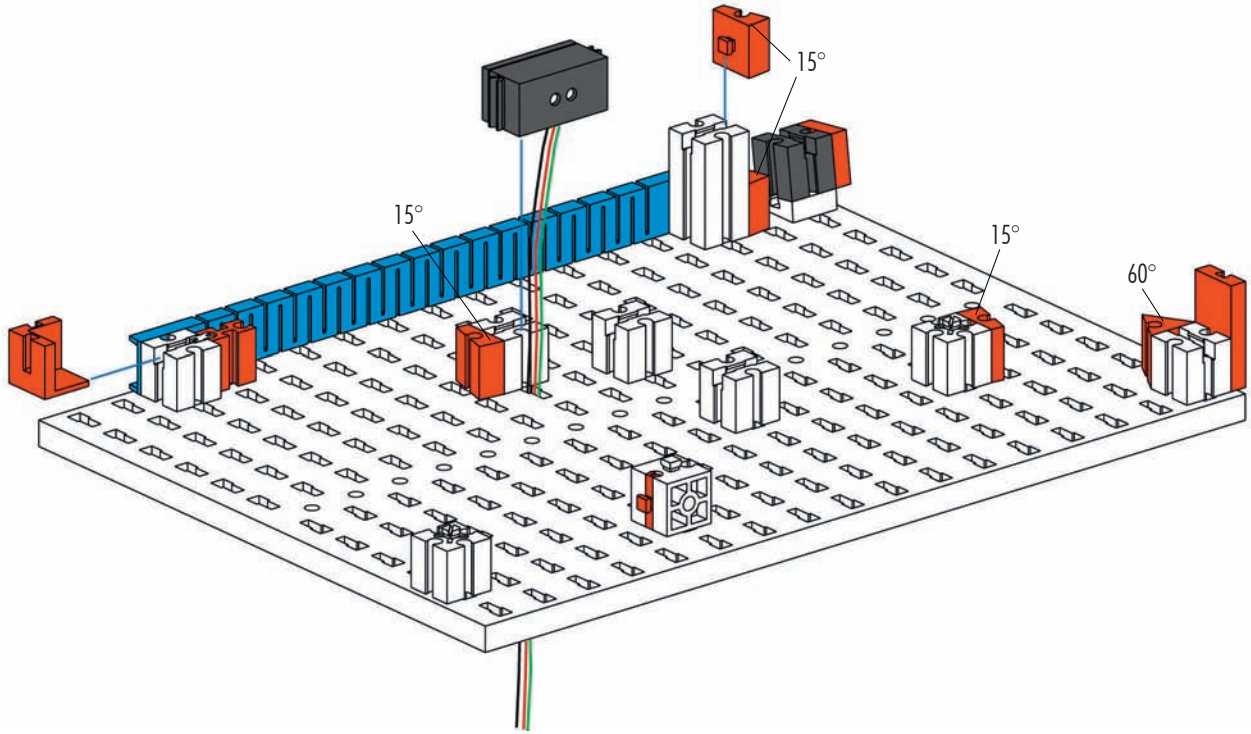
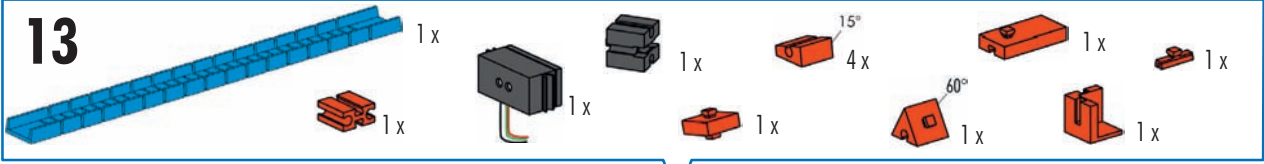
- 11**
- 3 x [Orange 1x3 Technic Beam]
 - 3 x [Orange 1x3 Technic Beam]
 - 2 x [Orange 1x2 Technic Beam]
 - 1 x [Black 1x5 Technic Beam]
 - 1 x [Orange 1x2 Technic Pin]
 - 4 x [Red 1x2 Technic Pin]



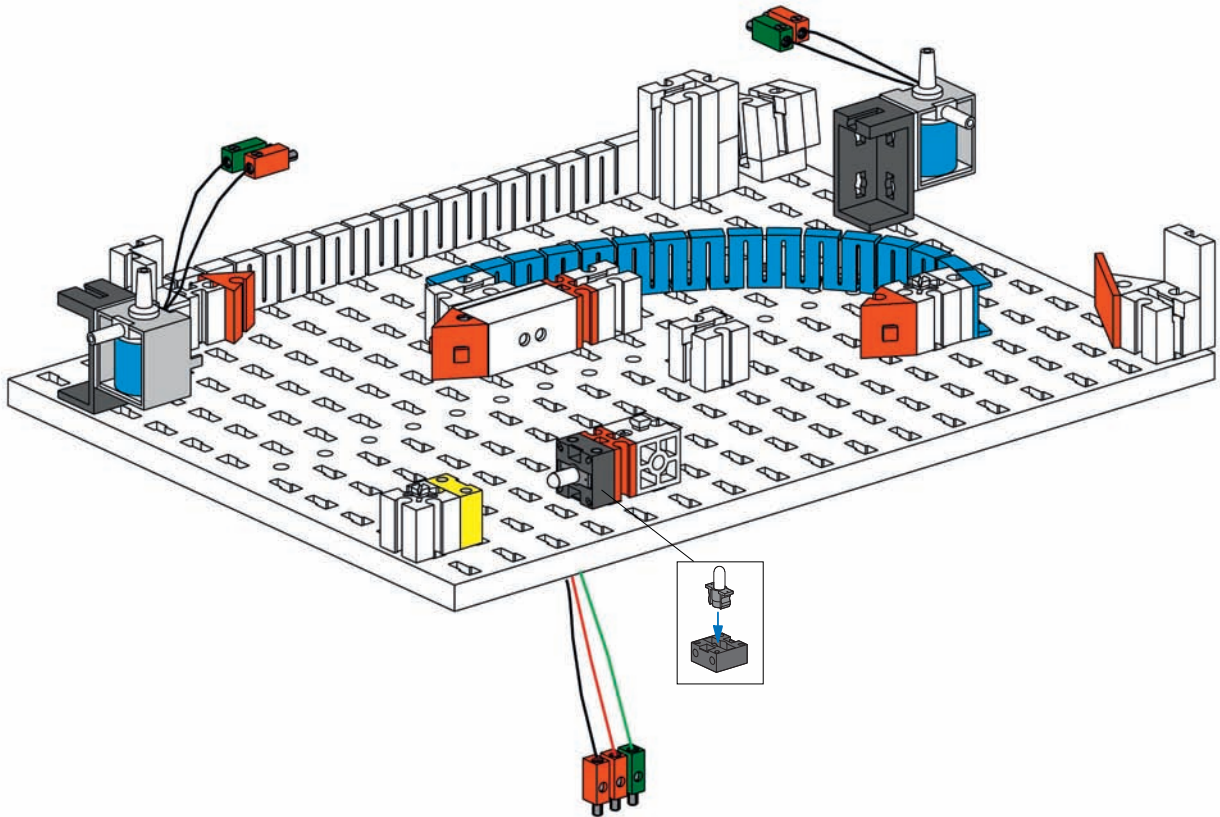
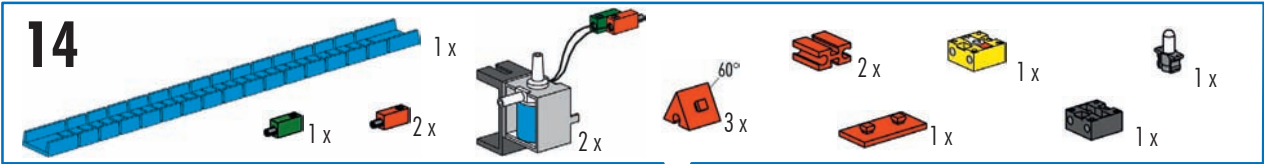
- 12**
- 1 x [Large Dark Grey Technic Plate]
 - 1 x [Black 1x3 Technic Beam]
 - 5 x [Black 1x3 Technic Beam]
 - 2 x [Black 1x3 Technic Beam]
 - 1 x [Orange 1x5 Technic Pin]
 - 1 x [Orange 1x2 Technic Pin]
 - 1 x [Orange 7.5° Technic Pin]



13

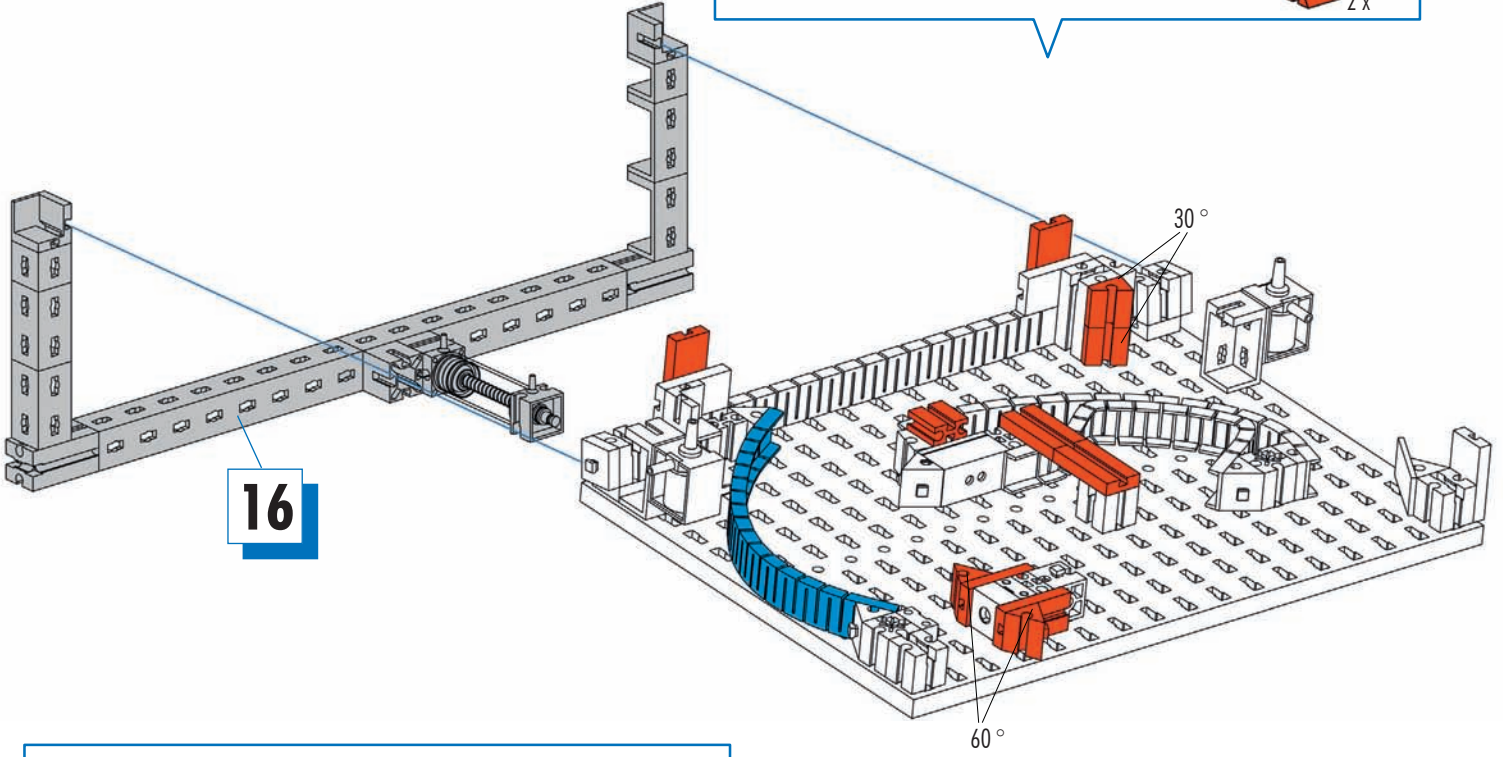


14



17

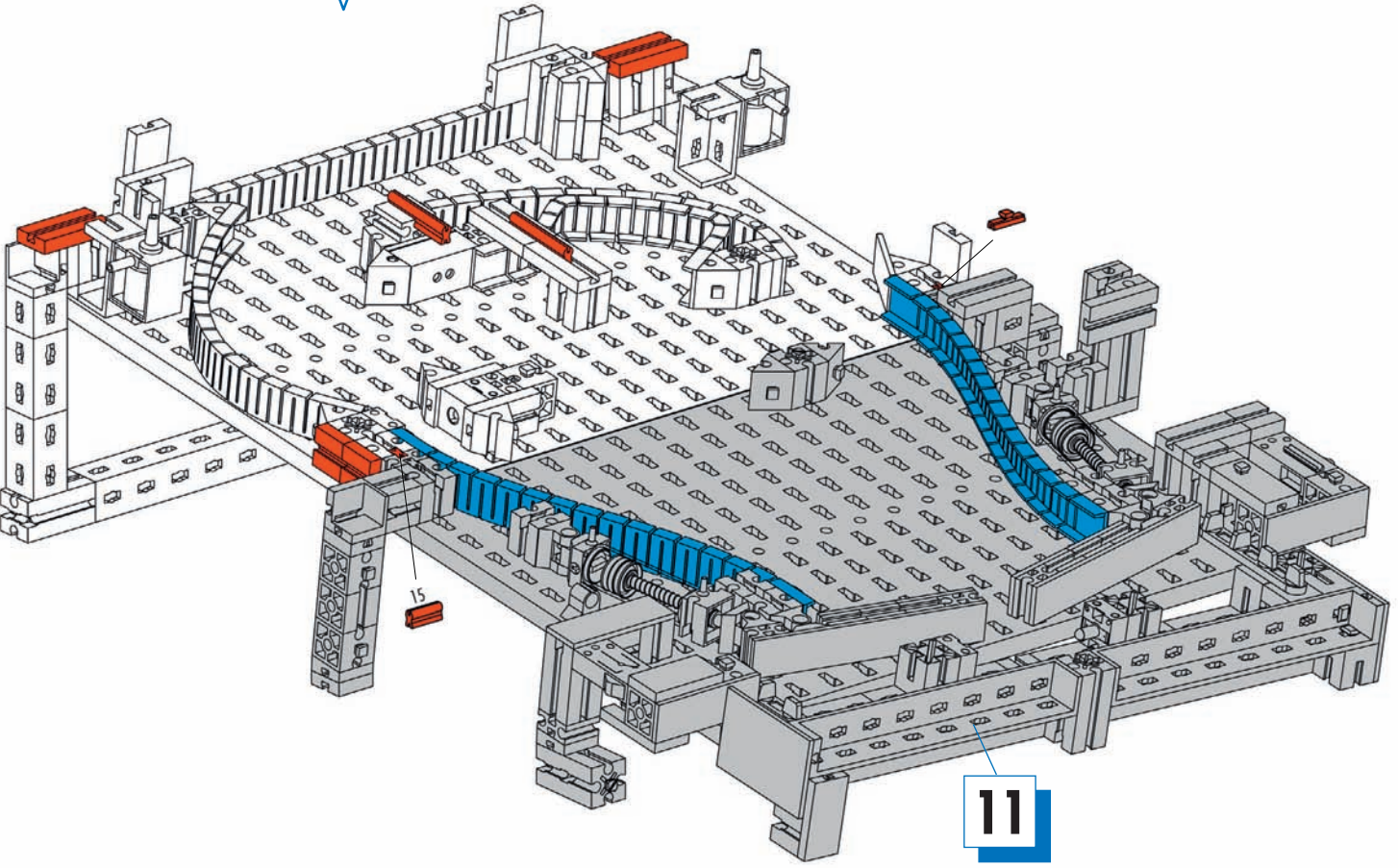
- 1 x (Blue Technic Beam 1x15)
- 1 x (Red Technic Pin)
- 6 x (Red Technic Pin)
- 1 x (Red Technic Pin)
- 2 x (Red Technic Pin 30°)
- 2 x (Red Technic Pin 60°)



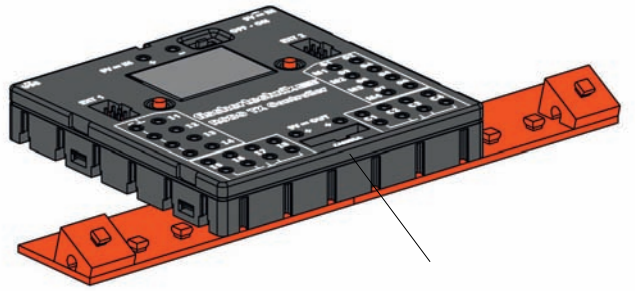
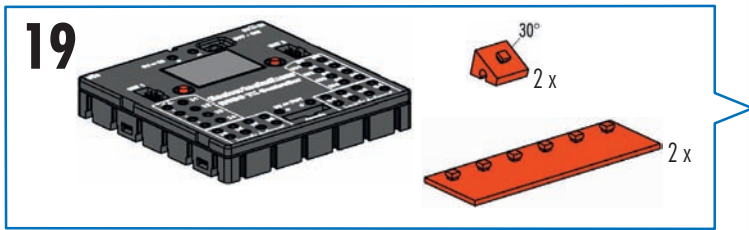
16

18

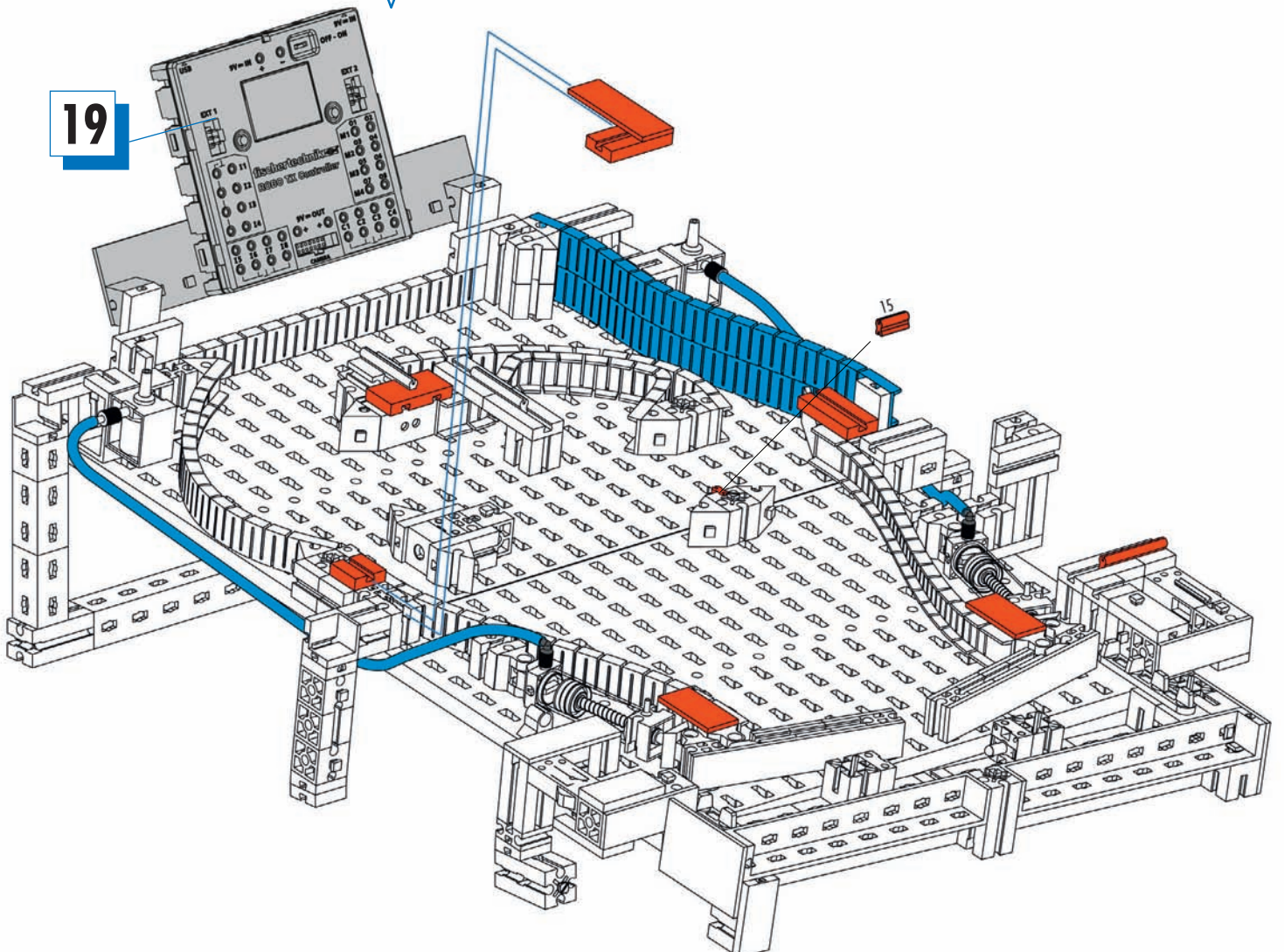
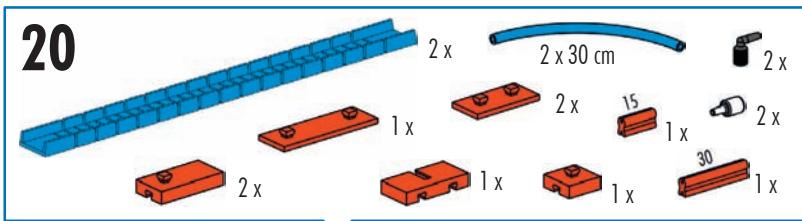
- 2 x (Blue Technic Beam 1x15)
- 2 x (Red Technic Pin)
- 1 x (Red Technic Pin 15)
- 2 x (Red Technic Pin 30)
- 2 x (Red Technic Pin)
- 1 x (Red Technic Pin)

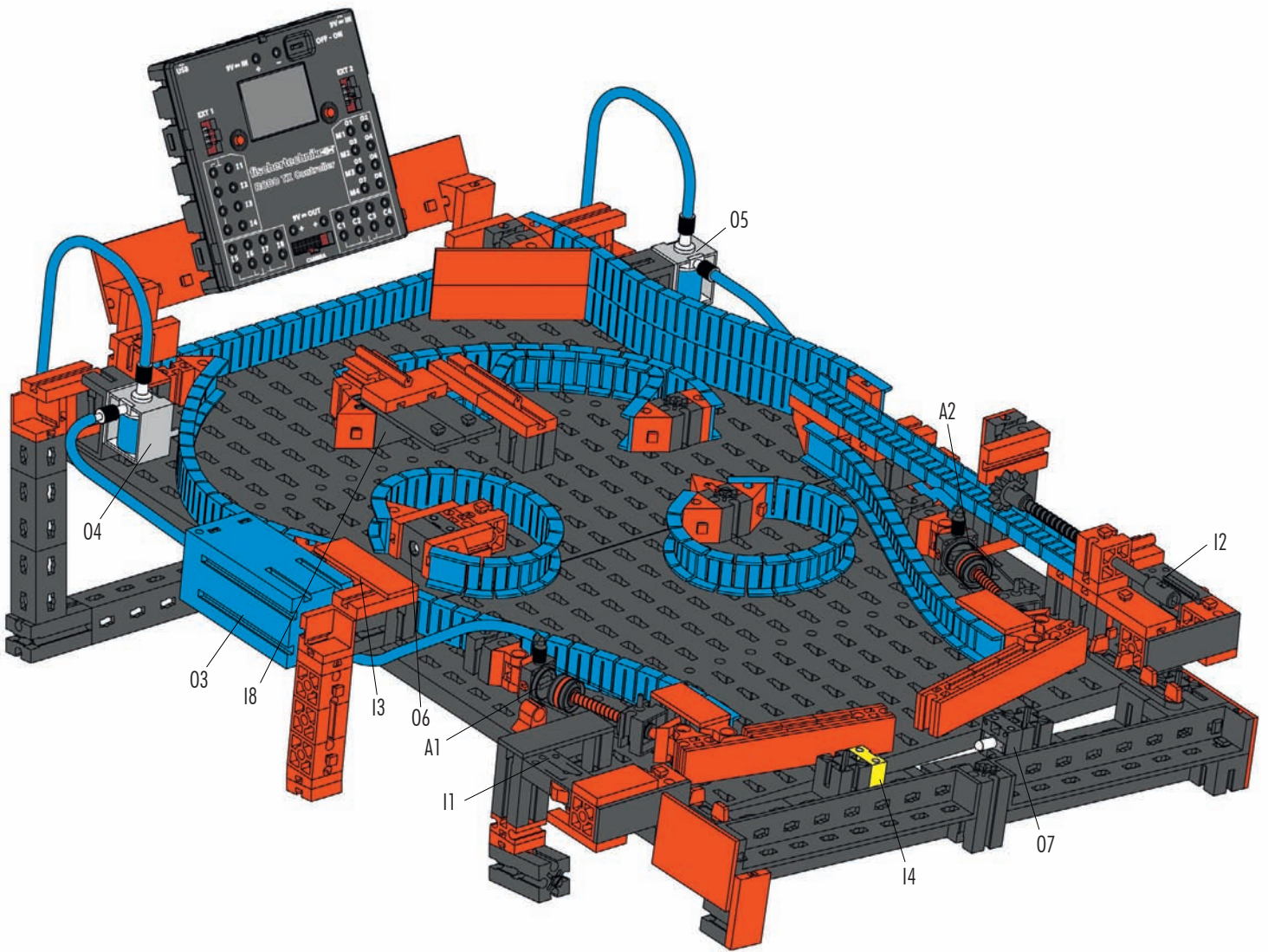


11



- ROBO TX Controller (Art.-Nr. 500 995) nicht im Baukasten enthalten
- ROBO TX Controller (Art.-Nr. 500 995) not included in the modular kit
- ROBO TX Controller (Art.-Nr. 500 995) n'est pas contenue dans le kit
- ROBO TX Controller (Art.-Nr. 500 995) niet in de bouwdoos opgenomen
- ROBO TX Controller (Art.-Nr. 500 995) no está incluido en el conjunto
- ROBO TX Controller (Art.-Nr. 500 995) não contido no sistema de construção por blocos
- ROBO TX Controller (Art.-Nr. 500 995) non incluso nella scatola di montaggio
- ROBO TX Controller (Art.-Nr. 500 995) не входит в комплект конструктора
- ROBO TX Controller (Art.-Nr. 500 995) 不包含在组件

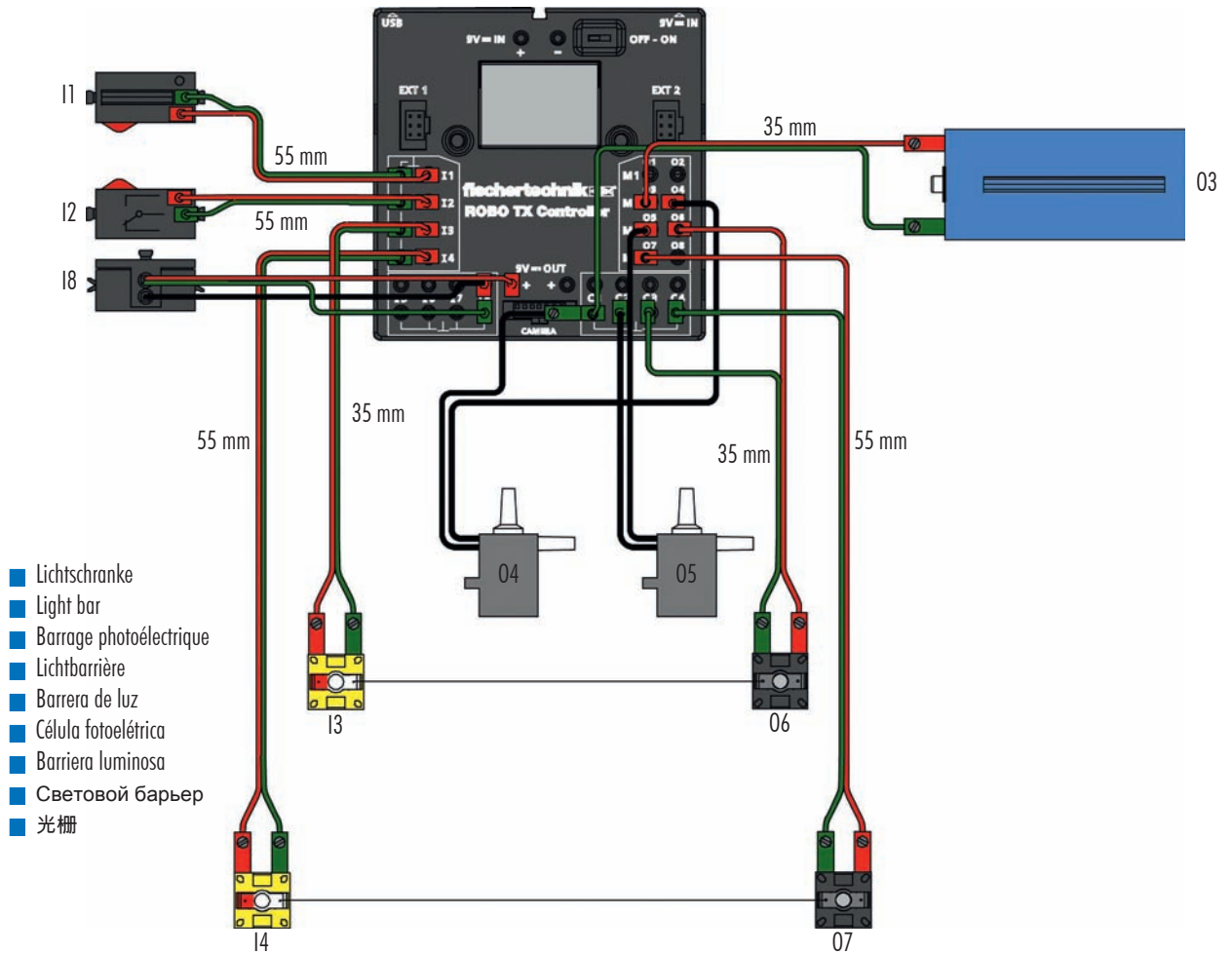




Schaltplan
Circuit diagram
Plan électrique

Schakelschema
Diagrama de circuitos
Plano elétrico de ligação

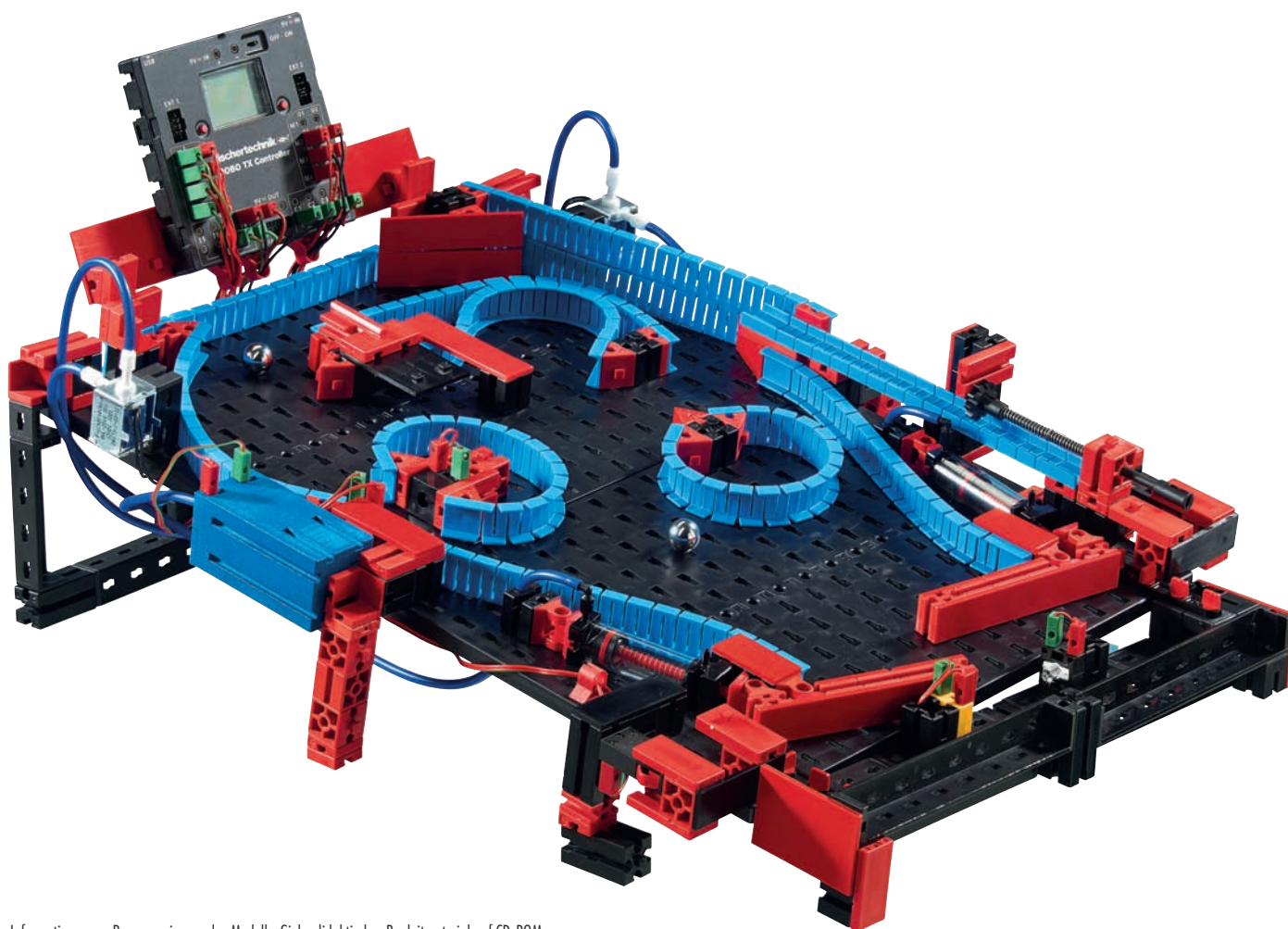
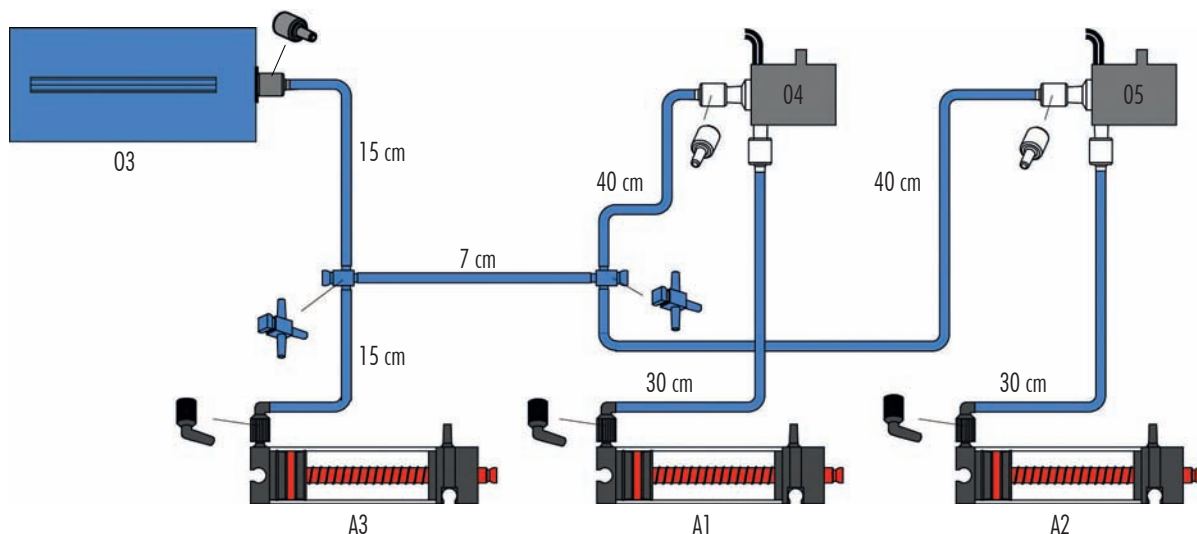
Schema elettrico
Схема подключения
电路图



Schlauchanschlussplan
Air line layout plan
Plan de raccordement de conduits

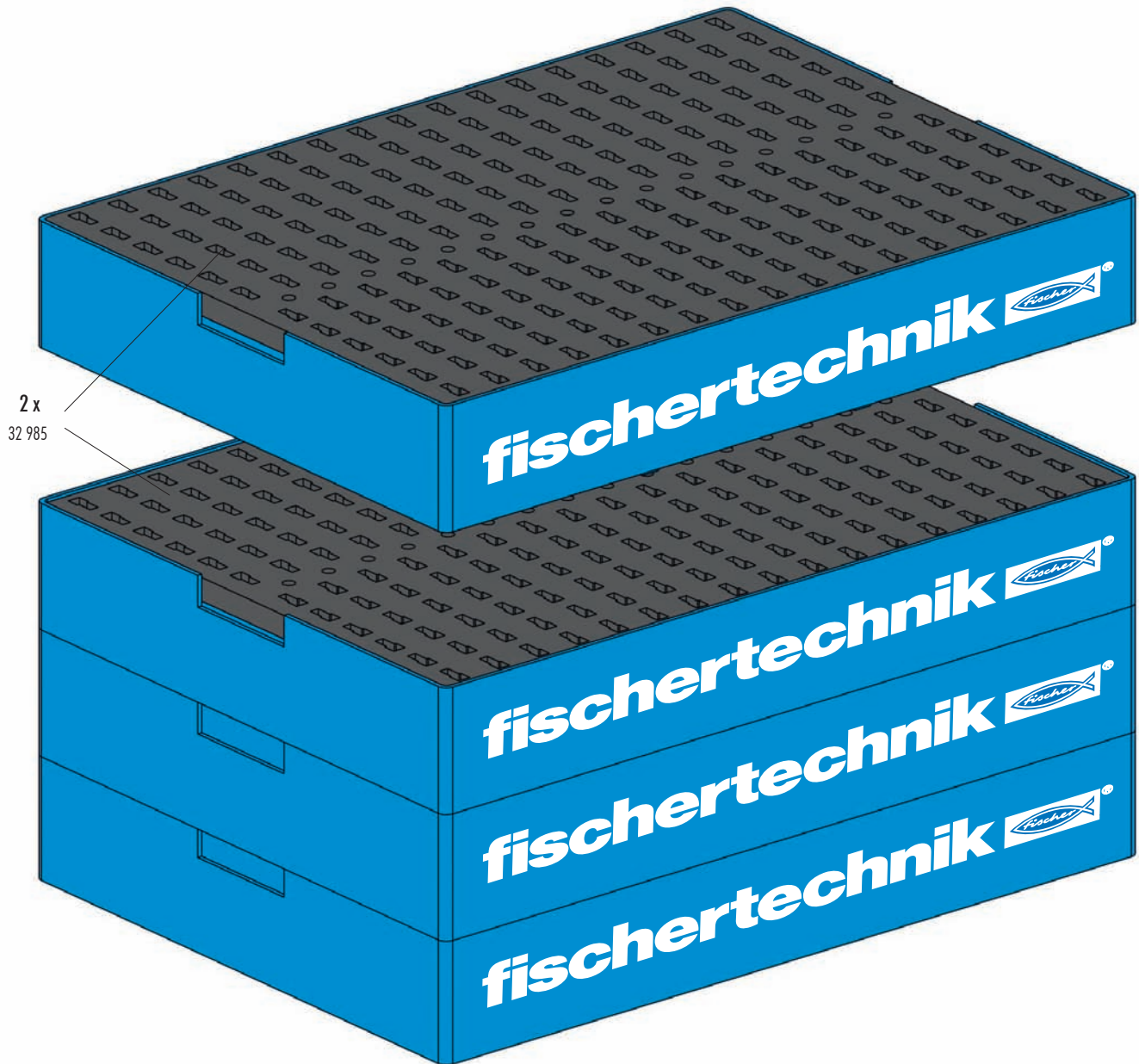
Aansluitschema van slang
Racor de empalme
Plano de conexão de mangueira

Schema di allacciamento tubi
Схема подключения шлангов
软管连接图



- Informationen zur Programmierung des Modells: Siehe didaktisches Begleitmaterial auf CD-ROM.
- Information on programming model: See related instructional material on CD-ROM.
- Informations concernant la programmation de la maquette : voir le matériel d'accompagnement didactique sur le CD-ROM.
- Informatie over de programmering van het model: Zie het didactisch begeleidend materiaal op CD-ROM.
- Informaciones sobre la programación del modelo: Véase material didáctico adjunto en el CD-ROM.
- Informações sobre a programação do modelo: ver o material didático de acompanhamento no CD-ROM.
- Informazioni sulla programmazione del modello: vedi materiale didattico su CD-ROM.
- Информация о программировании модели: смотрите обучающий сопроводительный материал на CD.
- 有关该模型编程的信息：见 CD 光盘上的指导性说明资料。

Empfohlene Aufbewahrung:	4 x Aufbewahrungssystem Art.-Nr. 94828
Recommended storage:	4 x storage system Art No. 94828
Stockage conseillé :	4 x système de stockage Art n° 94828
Bewaaradvies:	4 x bewaarsysteem art.-nr. 94828
Consejos para guardar el producto:	4 x almacenamiento Art. N° 94828
Conservação recomendada:	4 x sistema de conservação n.º de art. 94828
Conservazione consigliata:	4 sistemi di conservazione, cod. prod. 94828
Рекомендуемое хранение:	4 x бокса для хранения. Арт.№ 94 828
推荐的保存方式 :	4 个产品号为 94 828 的保存系统



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

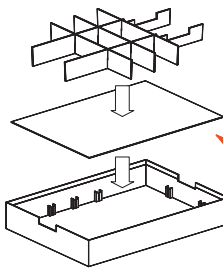
Propuesta de clasificación Caja 1 para almacenamiento Art. Nº 94828

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

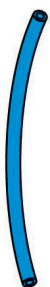
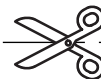
Proposta di sistemazione Box 1 per il sistema di conservazione, cod. prod. 94828

Рекомендации по сортировке: Бокс 1 для 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



- 1 x 2 cm
- 2 x 7 cm
- 2 x 15 cm
- 3 x 30 cm
- 1 x 40 cm
- 1 x 50 cm
- 1 x 60 cm



1 x



23 x 35 049



3 x 133 027



1 x 31 422



3 x 35 969



3 x 36 915



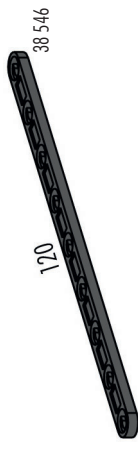
2 x 31 642



1 x 133 028



5 x 35 328



2 x 38 546



1 x 36 952



2 x 36 913



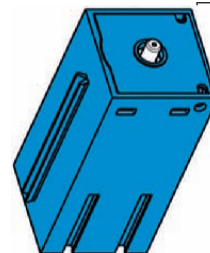
7 x 38 240



2 x 32 880



1 x 121 640



1 x 121 470



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

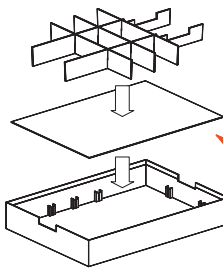
Propuesta de clasificación Caja 2 para almacenamiento Art. N° 94828

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: Бокс 2 для 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



Sortiervorschlag Box 3 für Aufbewahrungssystem Art.-Nr. 94828

Storage suggestion box 3 for storage system Art No. 94828

Suggestion de classement Boîte 3 pour le système de stockage Art n° 94828

Sorteervoorstel box 3 voor bewaarsysteem art.-nr. 94828

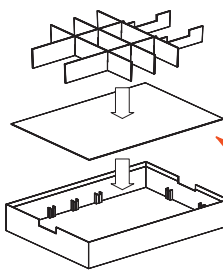
Propuesta de clasificación Caja 3 para almacenamiento Art. N° 94828

Proposta de divisão caixa 3 para sistema de conservação n.º de art. 94828







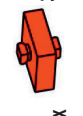



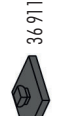






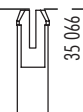
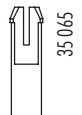
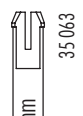
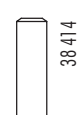




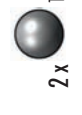


Proposta di sistemazione Box 3 per il sistema di conservazione, cod. prod. 94828

Рекомендации по сортировке: Бокс 3 для хранения арт. № 94828

用于产品号为94828的保存系统的3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

  2 x  2 x  2 x	 18 x	 2 x  3 x  6 x
 3 x  4 x  2 x  6 x  3 x  10 x  4 x  13 x	 1 x  1 x  5 x  1 x  1 x  2 x  2 x  2 x	 2 x  2 x  2 x  2 x

Sortiervorschlag Box 4 für Aufbewahrungssystem Art.-Nr. 94828

Storage suggestion box 4 for storage system Art No. 94828

Suggestion de classement Boîte 4 pour le système de stockage Art n° 94828

Sorteervoorstel box 4 voor bewaarsysteem art.-nr. 94828

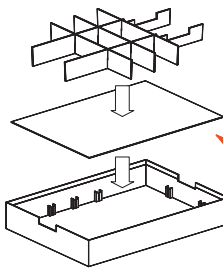
Propuesta de clasificación Caja 4 para almacenamiento Art. Nº 94828

Proposta de divisão caixa 4 para sistema de conservação n.º de art. 94828

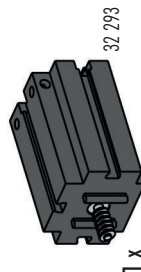
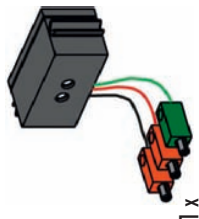
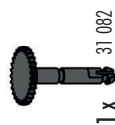
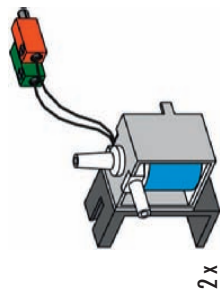
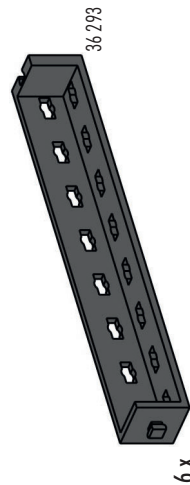
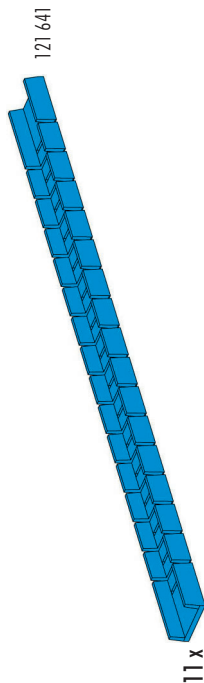
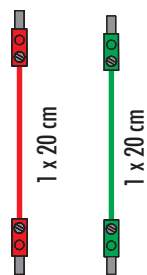
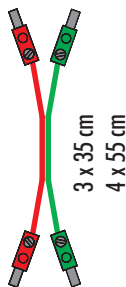
Proposta di sistemazione Box 4 per il sistema di conservazione, cod. prod. 94828

Рекомендации по сортировке: Бокс 4 для хранения арт. № 94828

用于产品号为94828的保存系统的4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



■ 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.

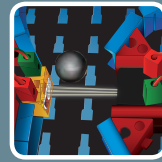
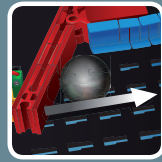
■ Указания по охране окружающей среды

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。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。





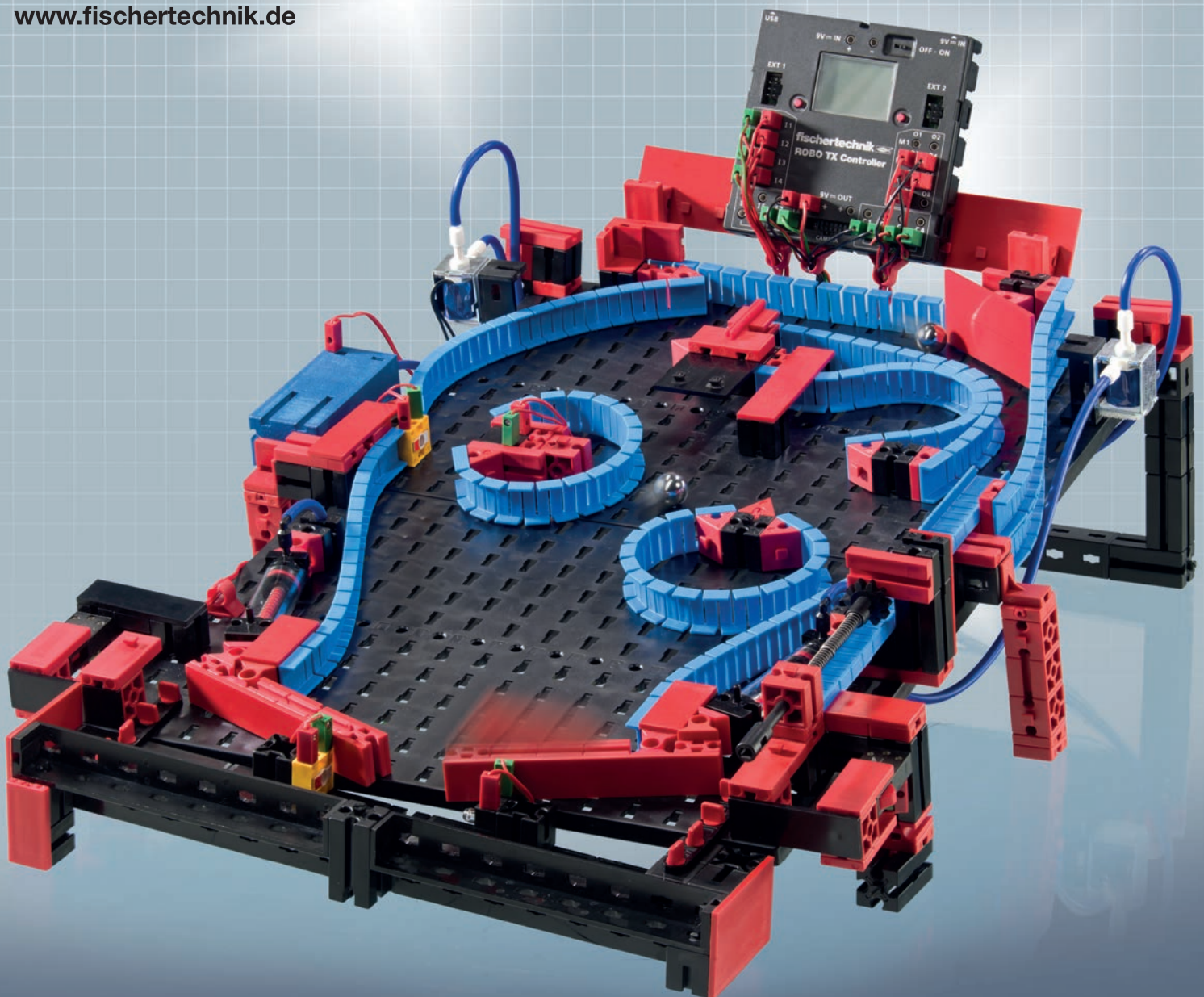
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ROBOTICS

fischertechnik GmbH
Weinhalde 14-18
72178 Waldachtal
Germany

Phone: +49 74 43/12-43 69
Fax: +49 74 43/12-45 91

info@fischertechnik.de
www.fischertechnik.de



121936 - Printed in Germany - Technische Änderungen vorbehalten - Subject to technical modifications

ROBO TX *ElectroPneumatic*

4 MODELS
MODEL 2