

# **U1**

**Pneumatic Power**



■ Mit dem fischertechnik eLearning-Portal geben wir dir die Möglichkeit, noch mehr Hintergrundwissen zum Thema des Baukastens zu erhalten. Über die Eingabe des eLearning-Codes bekommst du Zugang zu didaktischen Begleitinformationen mit spannenden Versuchen, Animationen und Fotos. So macht Lernen noch mehr Spaß - garantiert! Über [www.fischertechnik-elearning.com](http://www.fischertechnik-elearning.com) gelangst du direkt zum eLearning-Portal. Einfach auf den entsprechenden Baukasten klicken und den folgenden Code eingeben: **ft36u1**

■ The fischertechnik eLearning portal gives you the possibility of obtaining additional background information on the subject of the construction set. After entering the eLearning code you receive access to additional educational information with interesting experiments, animations and photographs. This makes learning fun - for sure! The eLearning portal can be reached directly at [www.fischertechnik-elearning.com](http://www.fischertechnik-elearning.com). Simply click on the construction set in question and enter the following code: **ft36u1**

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

Vous accédez directement au portail de l'apprentissage en ligne en cliquant sur [www.fischertechnik-elearning.com](http://www.fischertechnik-elearning.com). Cliquez sur la boîte de construction qui vous intéresse et saisissez le code : **ft36u1**

■ Met het fischertechnik eLearning-portaal bieden wij jou de mogelijkheid om nog meer achtergrondkennis over het onderwerp van de bouwdoos op te doen. Door het invoeren van de eLearning-code krijg je toegang tot leerzame informatie met spannende testen, animaties en foto's. Zo is leren gegarandeerd nog leuker! Via [www.fischertechnik-elearning.com](http://www.fischertechnik-elearning.com) ga je direct naar het eLearning-portaal. Klik simpelweg op de desbetreffende bouwdoos en voer de volgende code in: **ft36u1**

■ Con el portal eLearning de fischertechnik te ofrecemos la posibilidad de adquirir mayores conocimientos sobre el tema del kit de construcción. Introduciendo el código de eLearning obtendrás información didáctica adicional con interesantes experimentos, animaciones y fotos. Así, aprender será mucho más divertido. En [www.fischertechnik-elearning.com](http://www.fischertechnik-elearning.com) accedes directamente al portal de eLearning. Solo debes hacer clic en el kit de construcción correspondiente e introducir el siguiente código: **ft36u1**

■ Com o portal eLearning da fischertechnik, oferecemos a você a possibilidade de obter ainda mais conhecimentos básicos sobre o tema dos módulos. Ao digitar o código de eLearning, você vai acessar informações didáticas adicionais, com experimentos empolgantes, animações e fotos. Assim, aprender se torna muito mais divertido! Através do site [www.fischertechnik-elearning.com](http://www.fischertechnik-elearning.com) você acessa diretamente o portal eLearning. Basta clicar no módulo correspondente e inserir o seguinte código: **ft36u1**

■ Con il portale di e-learning di fischertechnik hai la possibilità di approfondire ulteriormente gli argomenti del set di costruzione. Immettendo il codice per l'e-learning, potrai accedere alle informazioni didattiche con fantastici esperimenti, animazioni e foto. Imparare sarà ancora più divertente, te lo garantiamo! Per accedere al portale di e-learning basta visitare la pagina [www.fischertechnik-elearning.com](http://www.fischertechnik-elearning.com). Quindi fai clic sul set di costruzione corrispondente e immetti il seguente codice: **ft36u1**

■ Портал eLearning даёт тебе возможность получить ещё больше знаний по теме набора fischertechnik. Введи код eLearning, и ты получишь доступ к обучающей сопроводительной информации с увлекательными опытами, анимациями и фотографиями. Так обучение доставит ещё больше удовольствия - мы гарантируем это! Через [www.fischertechnik-elearning.com](http://www.fischertechnik-elearning.com) ты попадёшь прямо на портал eLearning. Просто щёлкни по соответствующему набору и введи следующий код: **ft36u1**

■ 通过慧鱼 (fischertechnik) 网络学习门户，你能够获得更多与标准构件相关的背景知识。输入网络学习代码你就能获得指导性的安装信息，且配有引人入胜的实验、动画和图片。所以保证学起来更有兴趣！通过 [www.fischertechnik-elearning.com](http://www.fischertechnik-elearning.com) 直接进入网络学习门户。点击相应的标准构件，并输入以下代码：**ft36u1**

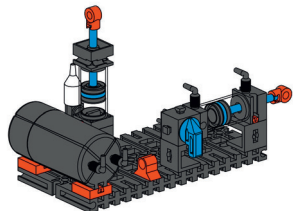
**Inhalt**  
**Contents**  
**Contenu**

**Inhoud**  
**Contenido**  
**Conteúdo**

**Contenuto**  
**Содержание**  
**目录**

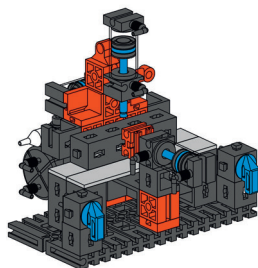
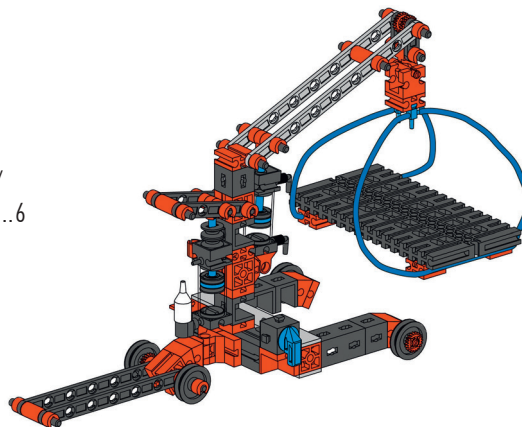
Einzelteilübersicht / Spare parts list / Liste des pièces détachées / Onderdelenoverzicht / Lista da piezas / Resumo de peça individual /  
Singoli componenti / Перечень деталей / 零件概览 ..... 2

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



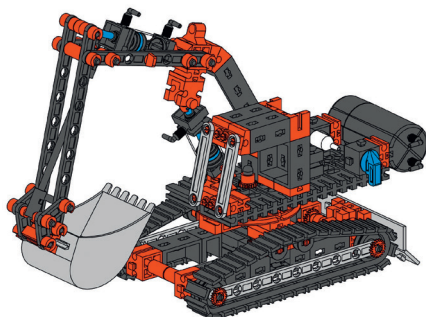
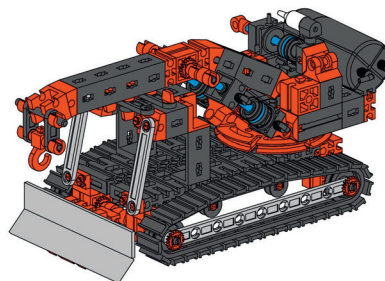
Funktionsmodell / Function model / Maquette fonctionnelle / Functiemodel /  
Modelo funcional / Modelo funcional / Modello di funzionamento /  
Действующая модель / 功能模型 ..... 4

Werkstattkran / Workshop crane / Grue d'atelier / Werkplaatskraan /  
Grúa de taller / Guincho para oficina / Gru da oficina / Цеховой кран /  
车间吊机 ..... 6

















Stanzmaschine / Punch press / Découpeuse / Stansmachine /  
Punzonadora / Máquina de puncionar / Fustellatrice /  
Штамповочная машина / 冲床 ..... 11

Bergungsraupe / Track mounted recovery vehicle / Chenille de sauvetage /  
Bergingsvoertuig op rupsbanden / Oruga de salvamento / Lagarta de  
salvamento / Cingolato di salvataggio / Спасательный трактор /  
履带式抢险车 ..... 14




Bagger / Excavator / Pelle / Graafmachine / Excavadora / Escavadeira /  
Escavatore / Экскаватор / 挖掘机 ..... 19

**Einzelteilübersicht**  
**Spare parts list**  
**Liste des pièces détachées**

	31 011 2 x
	31 019 1 x
	31 057 2 x
	31 058 1 x
	31 422 3 x
	31 426 3 x
	31 436 3 x
	31 597 14 x
	31 642 2 x
	31 690 1 x
	31 981 3 x
	31 982 11 x
	31 983 3 x
	32 064 7 x

**Onderdelenoverzicht**  
**Lista da piezas**  
**Resumo de peça individual**

	32 870 1 x
	32 879 2 x
	35 031 1 x
	35 066 1 x
	35 129 1 x
	35 414 2 x
	35 797 4 x
	35 969 2 x
	35 975 4 x
	35 980 1 x
	36 227 2 x
	36 323 6 x
	36 334 15 x
	36 586 4 x

	36 913 2 x
	36 914 4 x
	36 915 6 x
	36 920 8 x
	36 921 1 x
	36 922 6 x
	36 934 2 x
	36 970 1 x
	37 237 6 x
	37 468 7 x
	37 636 1 x
	37 679 27 x
	38 225 1 x
	38 240 2 x

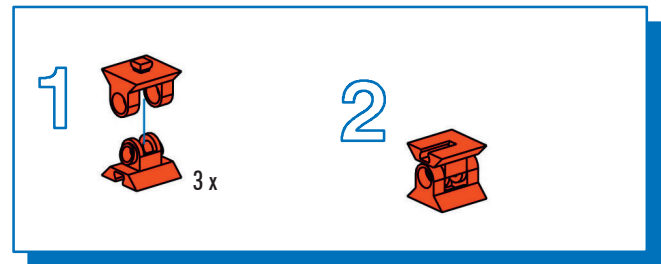
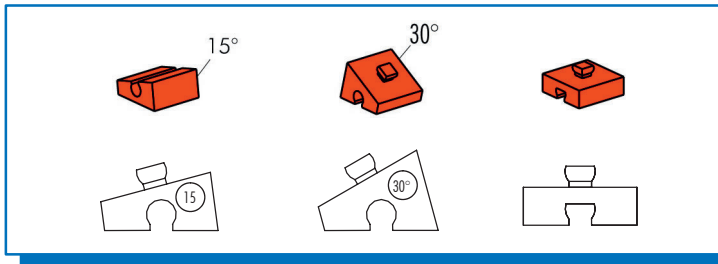
**Singoli componenti**  
**Перечень деталей**  
**零件概览**

	38 258 4 x
	38 411 1 x
	38 413 3 x
	38 414 6 x
	38 416 1 x
	38 543 2 x
	38 546 2 x
	122 641 3 x
	153 367 2 x
	156 104 1 x
	156 105 2 x
	156 106 2 x
	156 107 1 x
	156 493 1 x

**Montagetipps**  
**Tips for assembly**  
**Tuyaux pour le montage**

**Montagetips**  
**Consejos para el montaje**  
**"Dicas" para montagem**

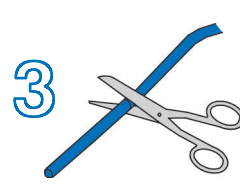
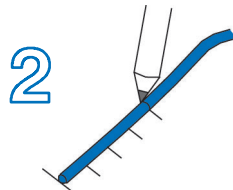
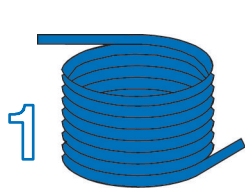
**Consigli per il montaggio**  
**Советы по сборке**  
**装配建议**



Schlauchzuschnitte  
 Hose cut to length  
 Découpes de tuyau

Slangdelen  
 Recortes de tubos flexibles  
 Recortes de mangueira

Spezzoni di tubo  
 Штуцеры  
 软管段



2 x 5 cm  
 2 x 10 cm  
 2 x 20 cm  
 2 x 25 cm

**Sicherheitshinweise**  
**Safety Information**  
**Consignes de sécurité**

**Veiligheidsrichtlijnen**  
**Indicaciones de seguridad**  
**Observações sobre segurança**

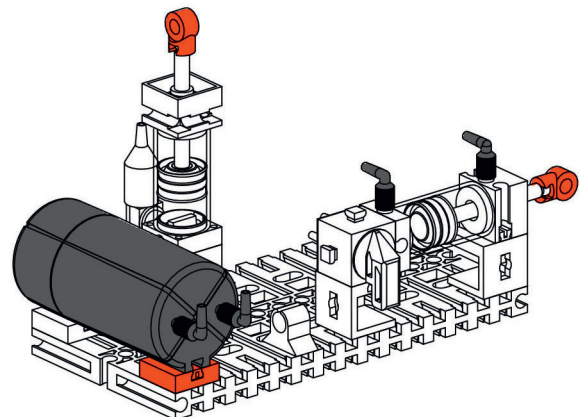
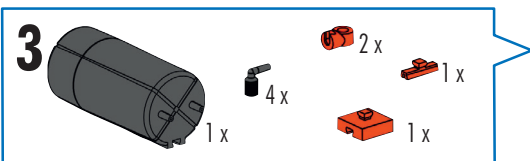
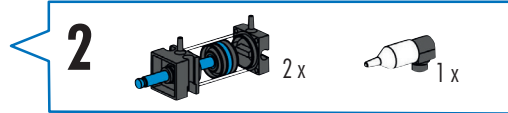
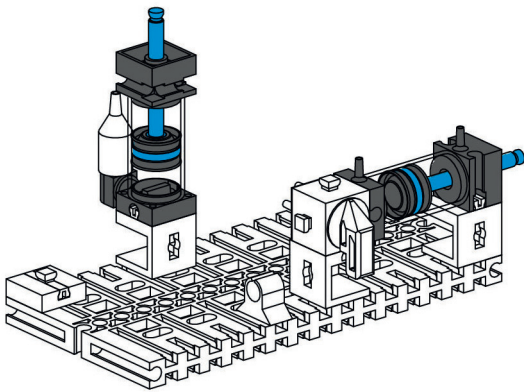
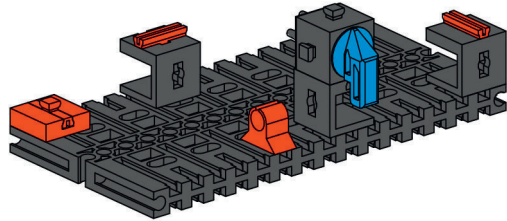
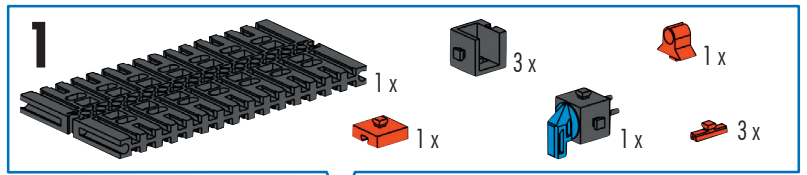
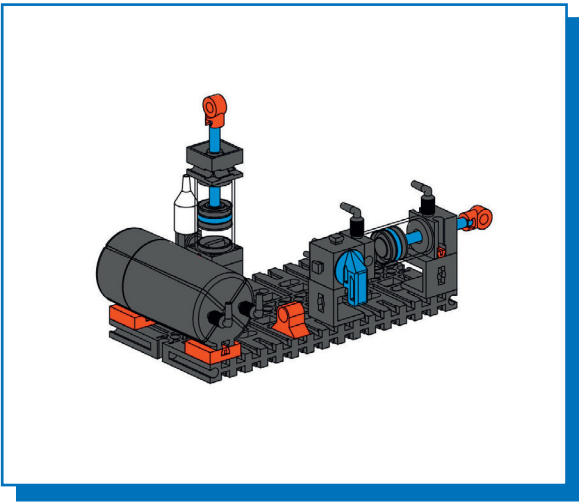
**Informazioni per la sicurezza**  
**Указания по технике безопасности**  
**安全指南**

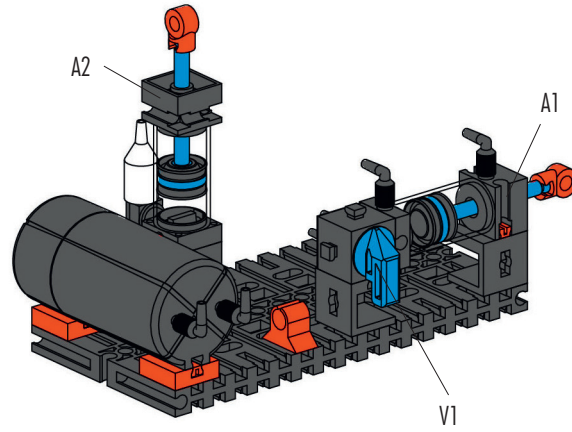
- Alle Einzelteile, insbesondere bewegliche Teile sind falls notwendig zu warten und zu reinigen.
- All components, especially moving parts, should be maintained and cleaned as necessary.
- Toutes les pièces détachées et en particulier les pièces mobiles, sont, si nécessaire, à entretenir et à nettoyer.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

Funktionsmodell  
Function model  
Maquette fonctionnelle

Funciemodel  
Modelo funcional  
Modelo funcional

Modello di funzionamento  
Действующая модель  
功能模型

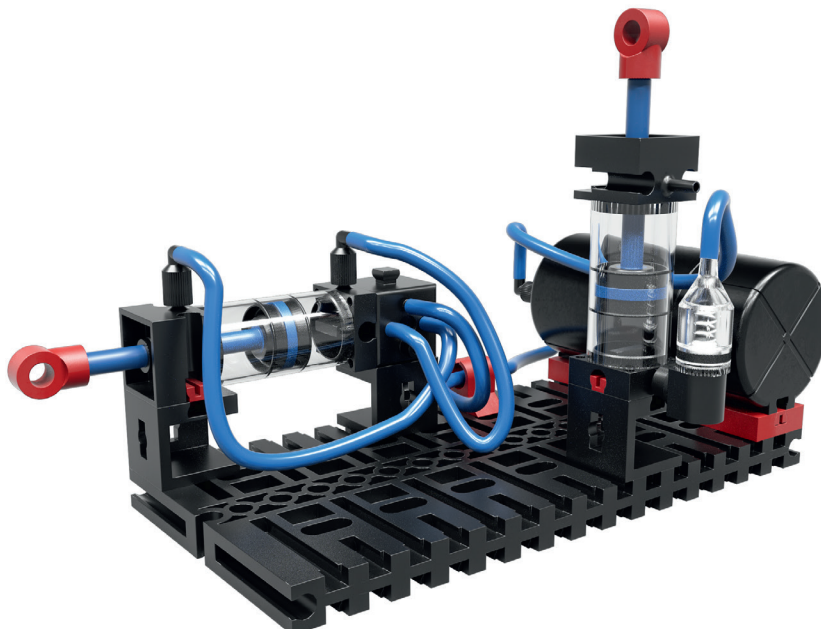
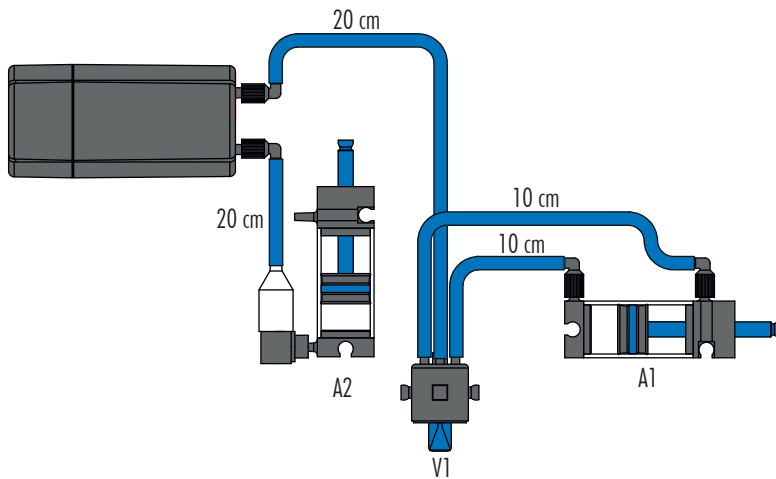


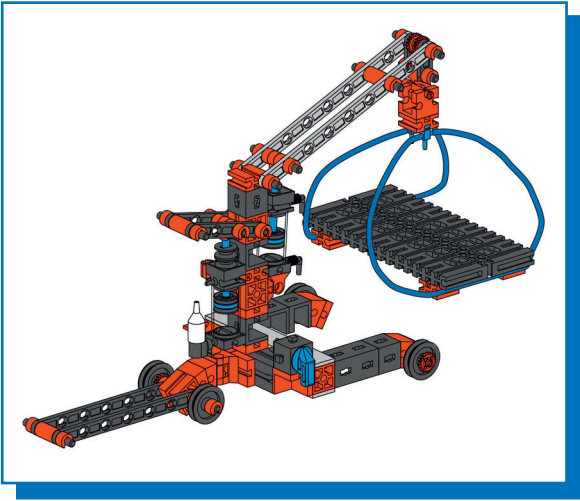


Schlauchanschlussplan  
Air line layout plan  
Plan de raccordement de conduits

Aansluitschema van slang  
Racor de empalme  
Plano de conexão de mangueira

Schema di allacciamento tubi  
Схема подключения шлангов  
软管连接图

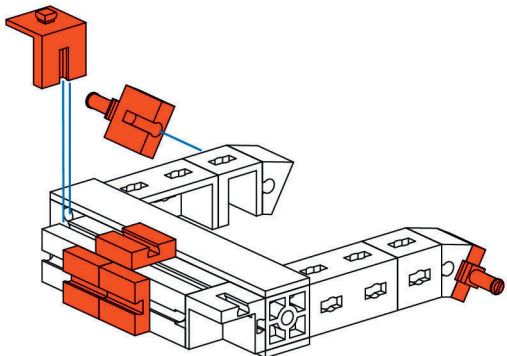
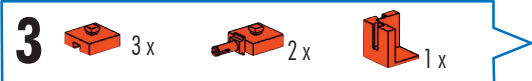
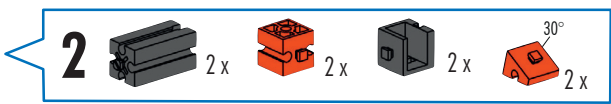
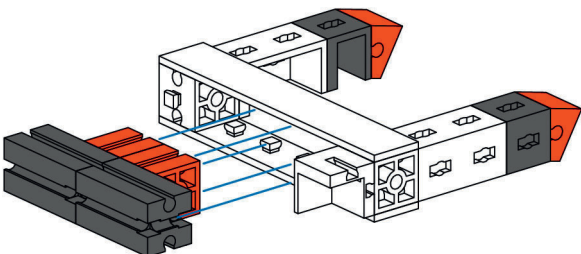
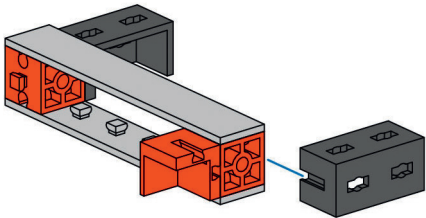
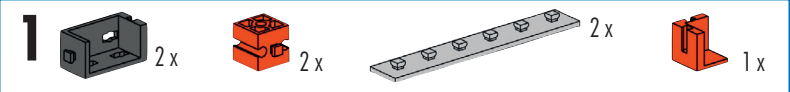




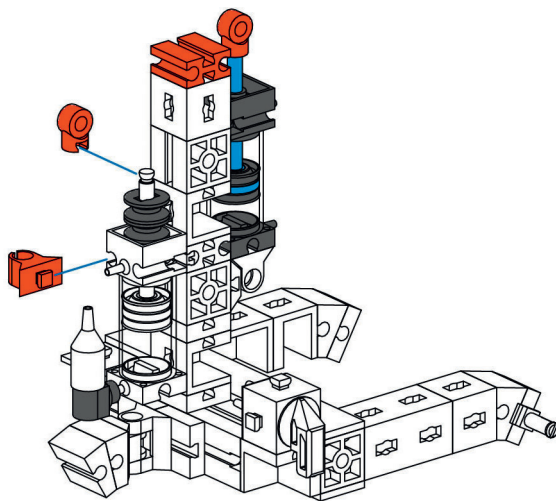
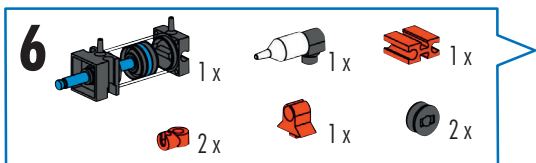
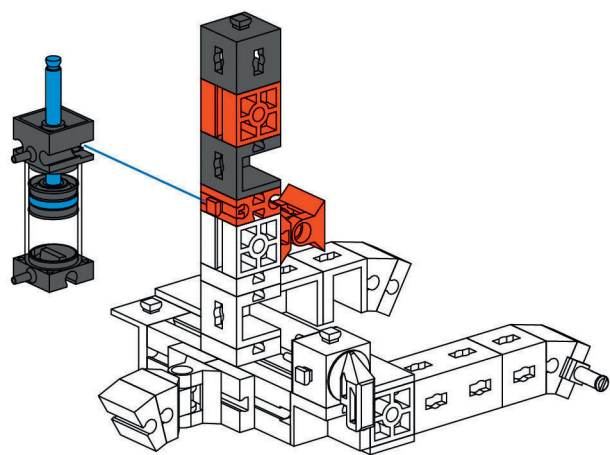
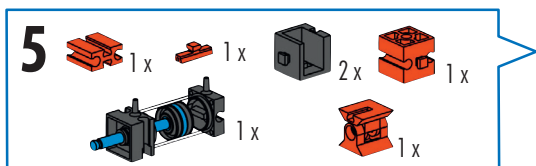
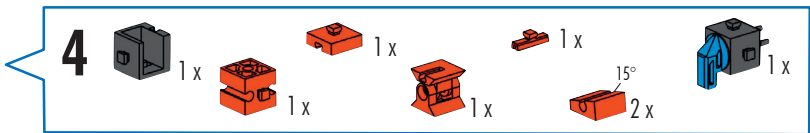
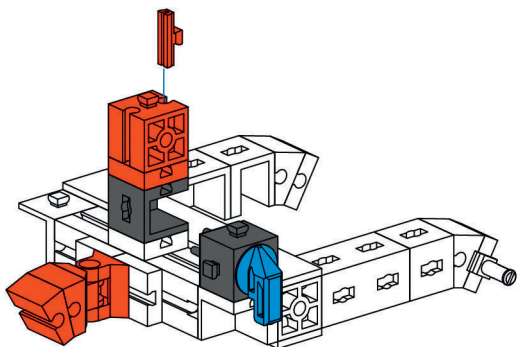
Werkstattkran  
Workshop crane  
Grue d'atelier

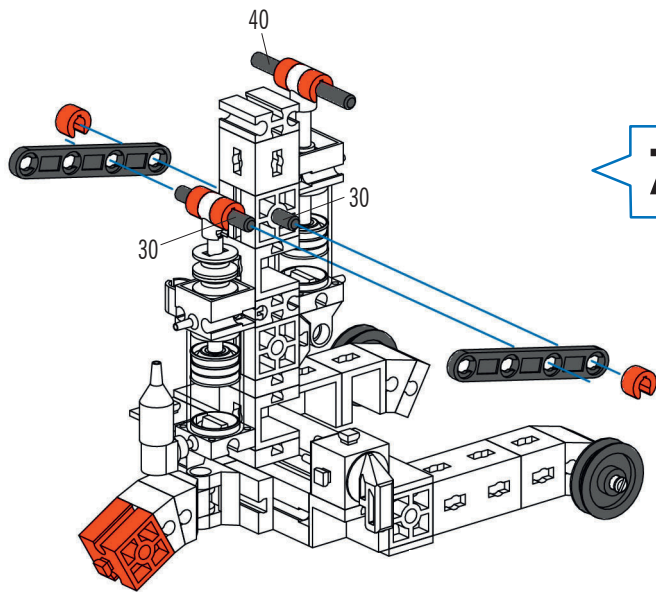
Werkplaatskraan  
Grúa de taller  
Guincho para oficina

Gru da officina  
Цеховой кран  
车间吊机



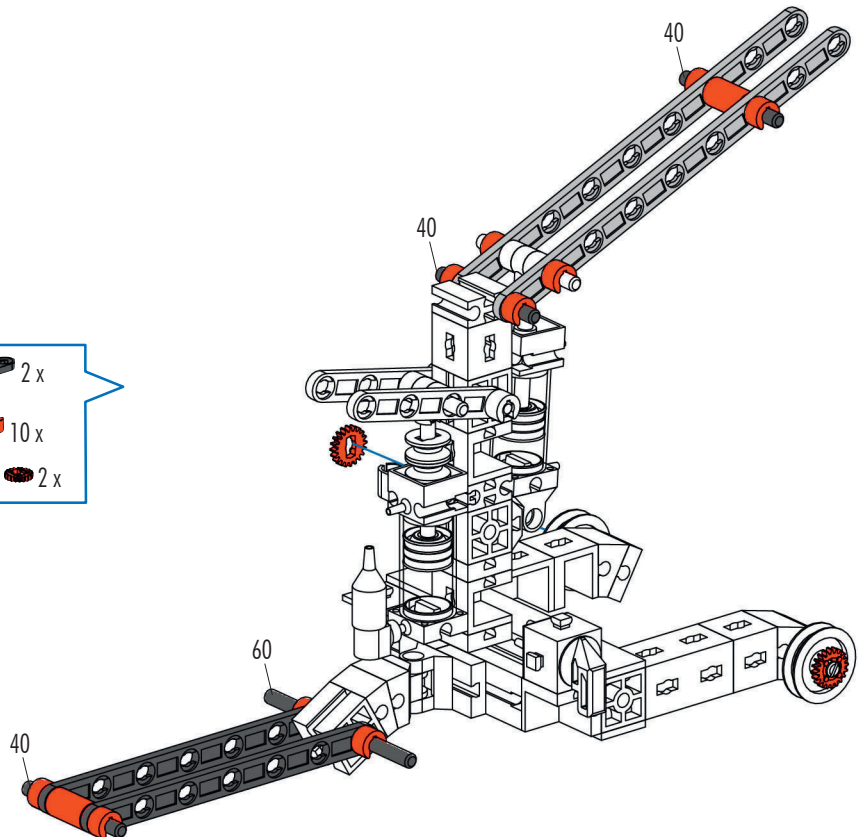




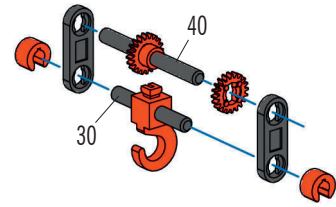


- 7**
- 1 x Red Connector
  - 2 x Black Axle
  - 6 x Red Bush
  - 2 x Black Technic Beam (45)
  - 2 x Black Technic Beam (30)
  - 1 x Black Technic Beam (40)
- 30 mm  
40 mm

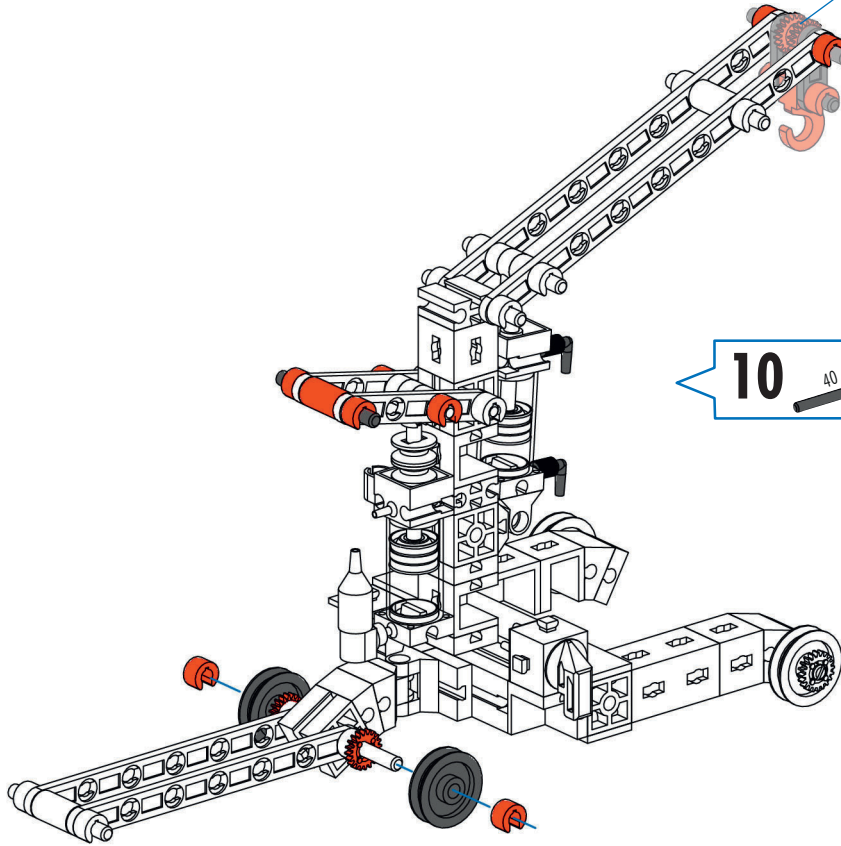
- 8**
- 2 x Black Technic Beam (120)
  - 2 x Black Technic Beam (90)
  - 1 x Black Technic Beam (60)
  - 2 x Red Bush
  - 3 x Black Technic Beam (40)
  - 10 x Red Bush
  - 2 x Black Axle
- 40 mm  
60 mm



- 9**
- 1 x Red Connector
  - 1 x Black Technic Beam (30)
  - 1 x Black Technic Beam (40)
  - 1 x Red Bush
  - 2 x Black Axle
  - 2 x Black Technic Beam (15)
  - 2 x Red Bush
- 30 mm  
40 mm



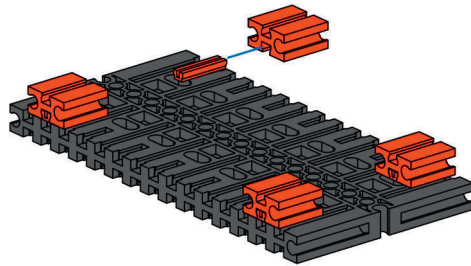
9



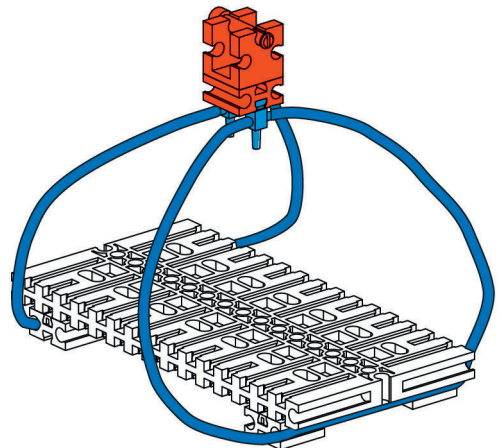
**10** 1x 8x 2x 2x 1x 2x

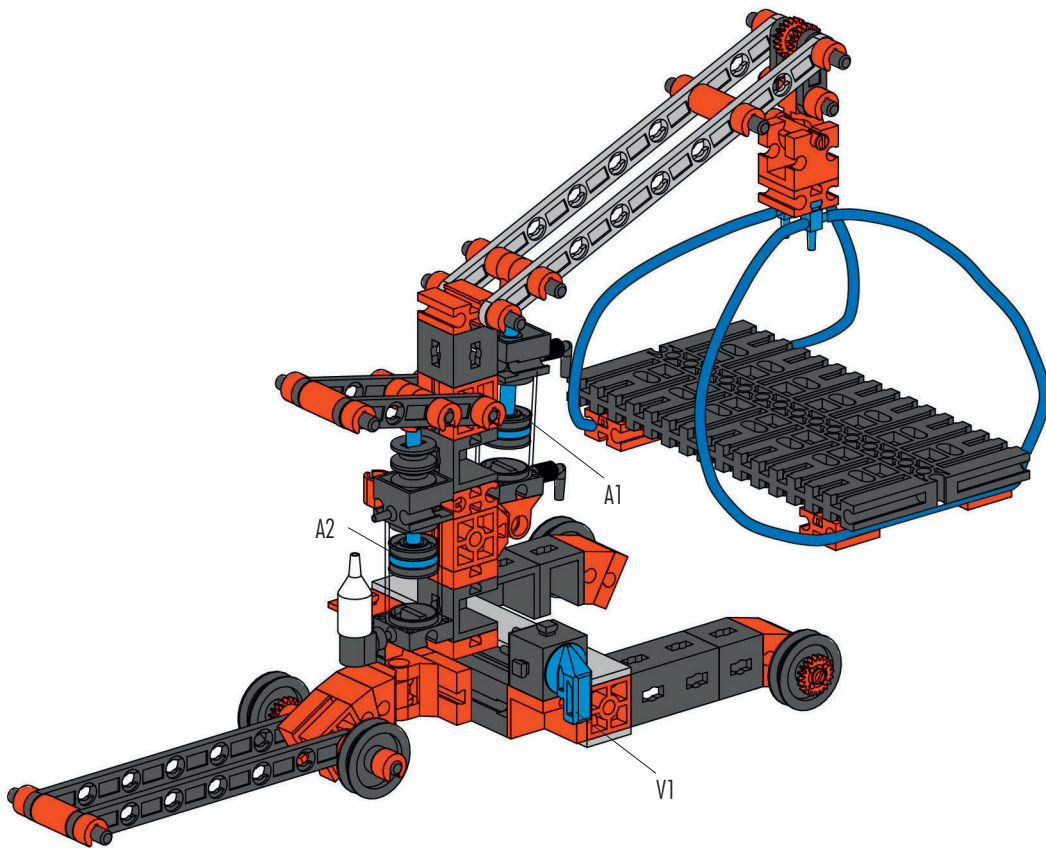
40 mm

**11** 1x 4x 4x



**12** 1x 1x 1x 2x 2x

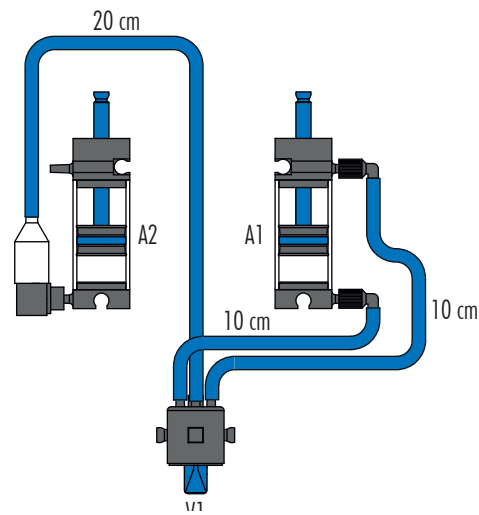


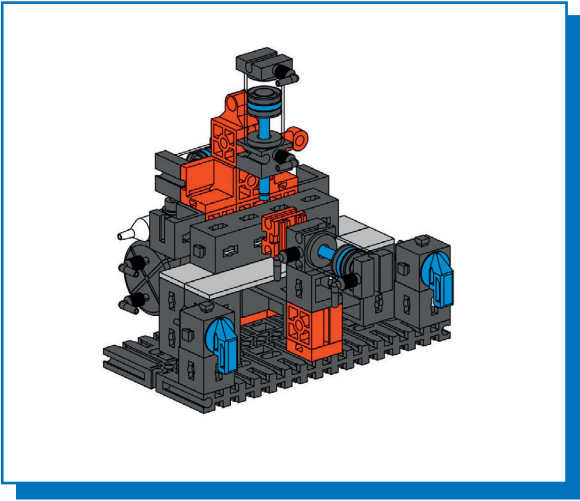


Schlauchanschlussplan  
Air line layout plan  
Plan de raccordement de conduits

Aansluitschema van slang  
Racor de empalme  
Plano de conexão de mangueira

Schema di allacciamento tubi  
Схема подключения шлангов  
软管连接图

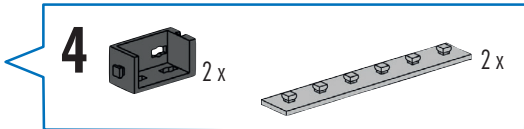
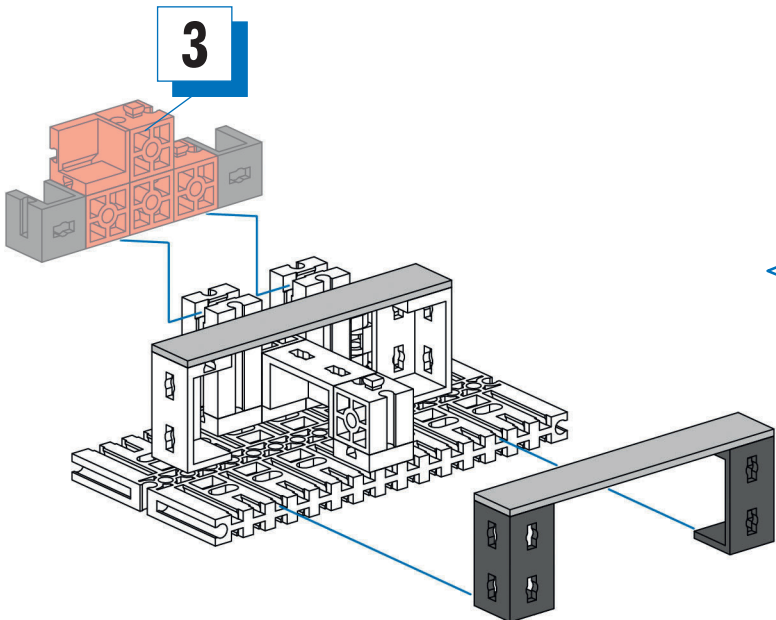
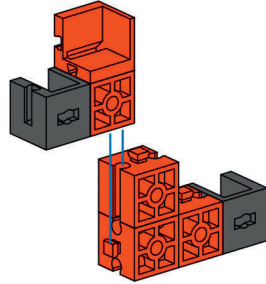
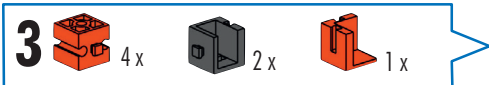
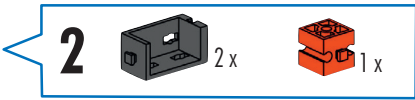
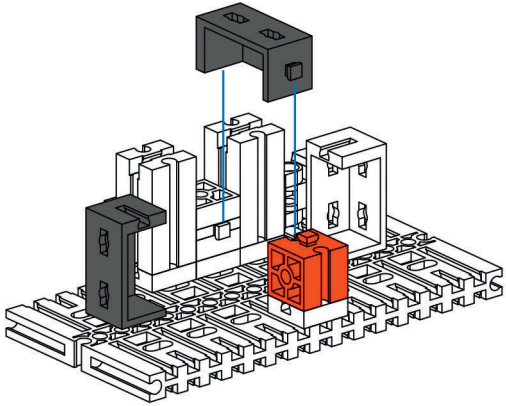
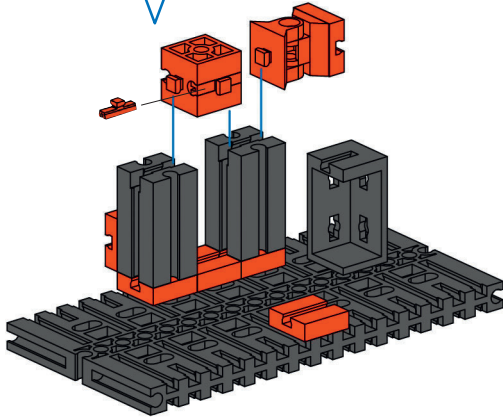
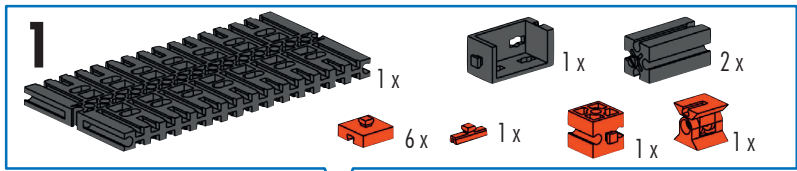




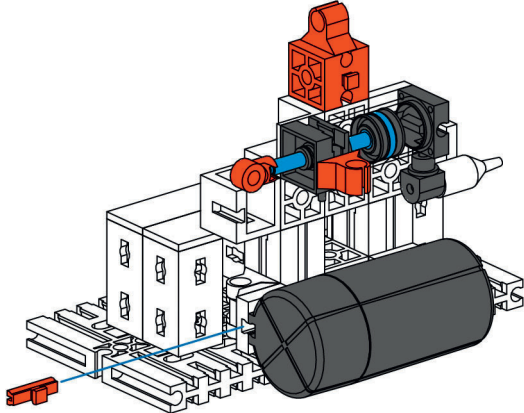
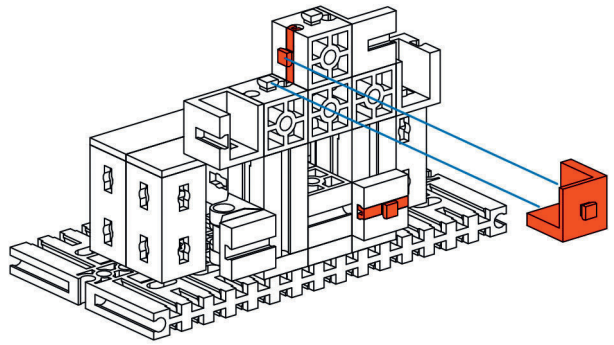
Stanzmaschine  
Punch press  
Découpeuse

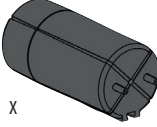


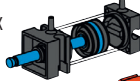



Stansmaschine  
Punzonadora  
Máquina de punchar


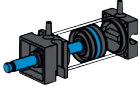

Fustellatrice  
Штамповочная машина  
冲床

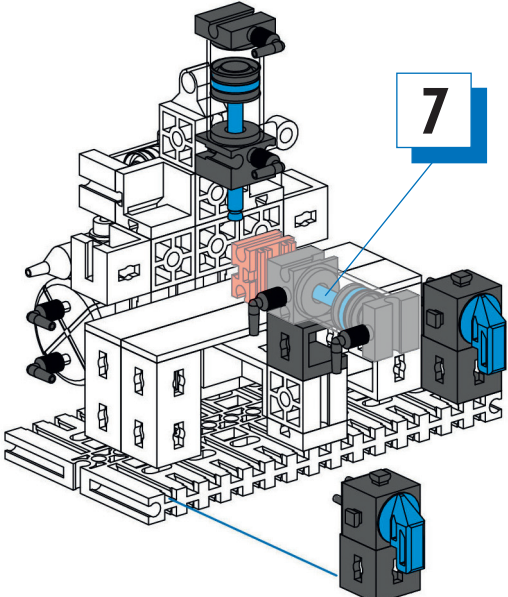
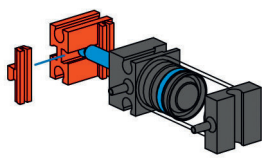


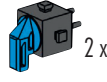


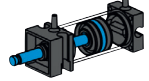
**5**  2x  1x

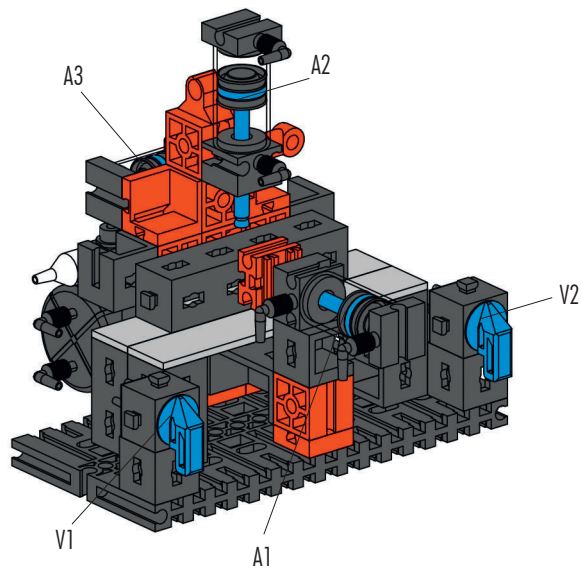


**6**  1x  1x  1x  1x  2x  1x  1x

**7**  1x  1x  2x



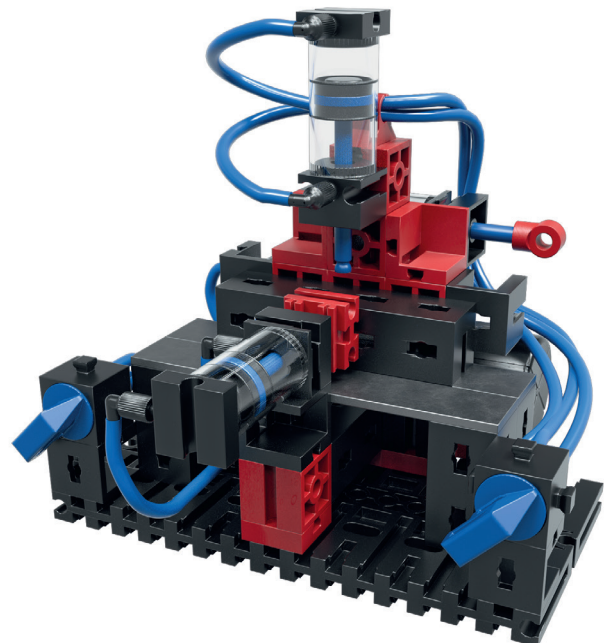
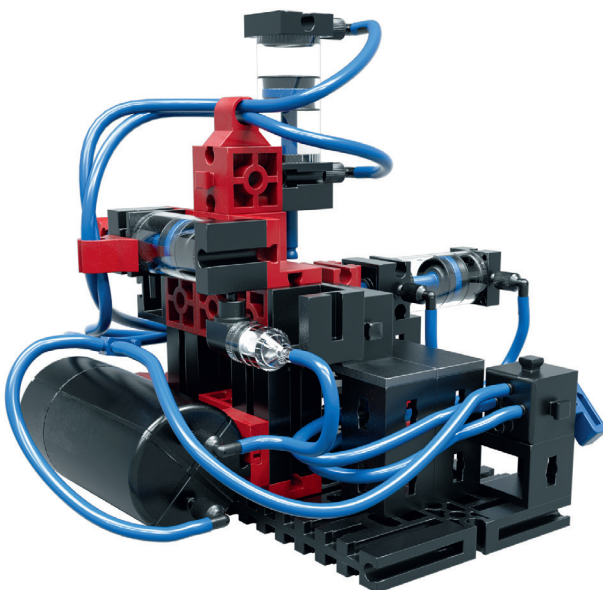
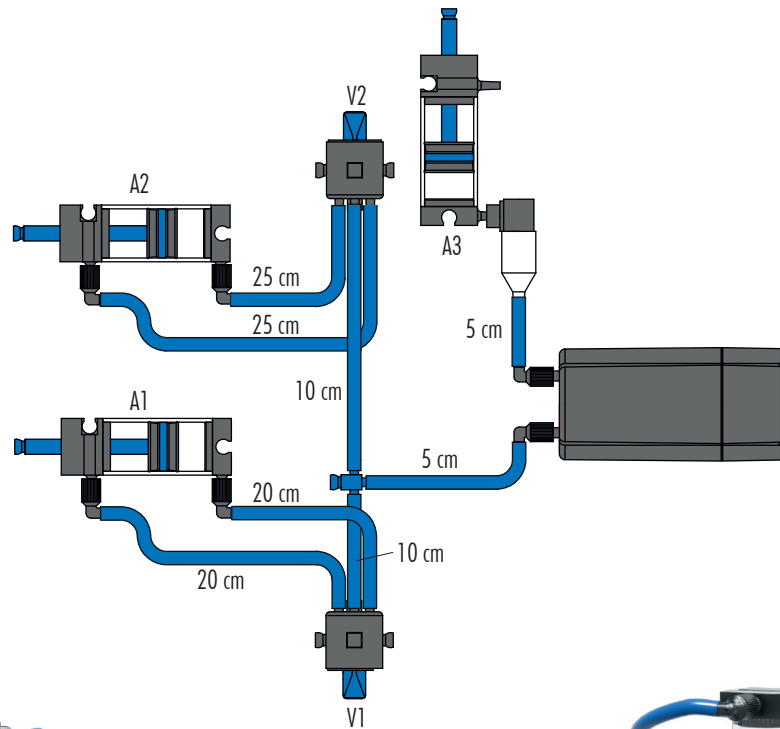
**8**  2x  3x  6x  1x

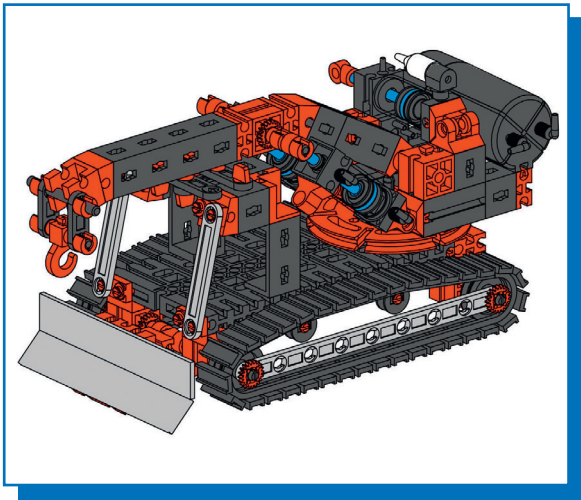


Schlauchanschlussplan  
Air line layout plan  
Plan de raccordement de conduits

Aansluitschema van slang  
Racor de empalme  
Plano de conexão de mangueira

Schema di allacciamento tubi  
Схема подключения шлангов  
软管连接图

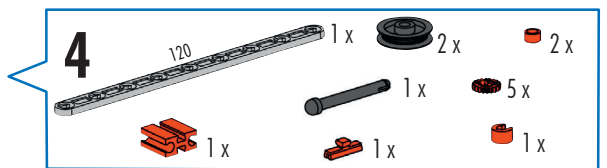
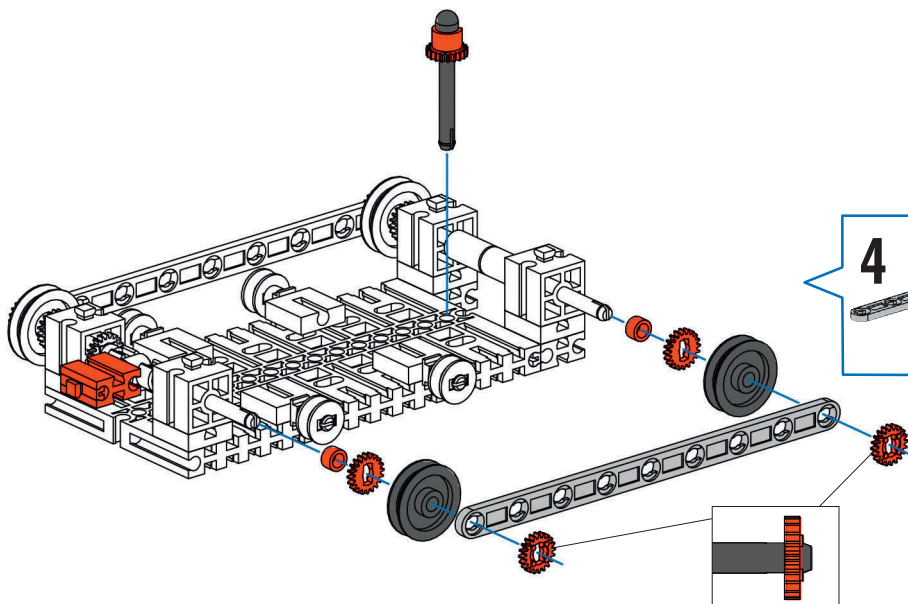
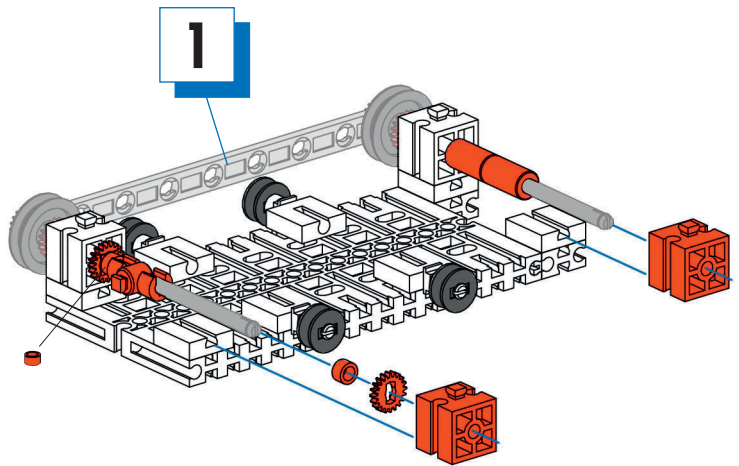
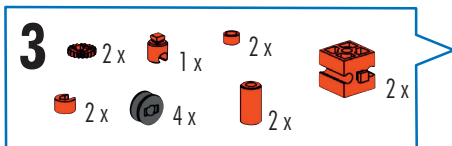
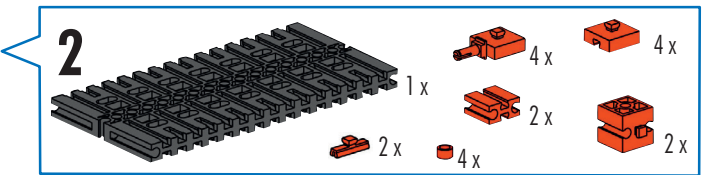
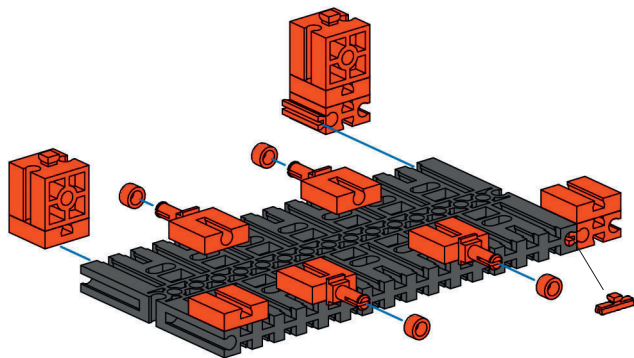
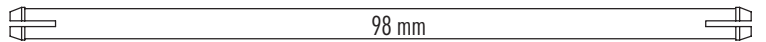
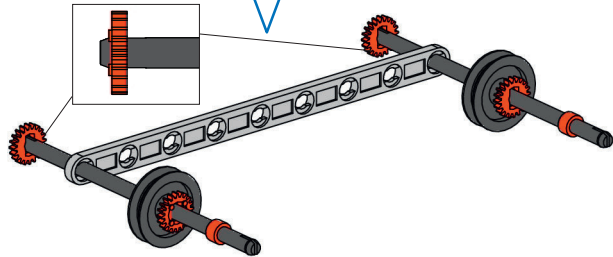
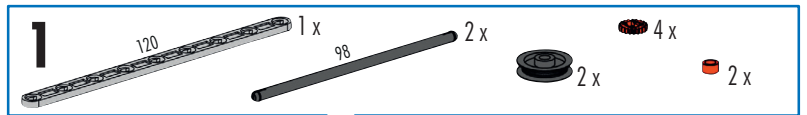




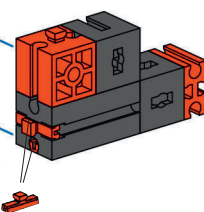
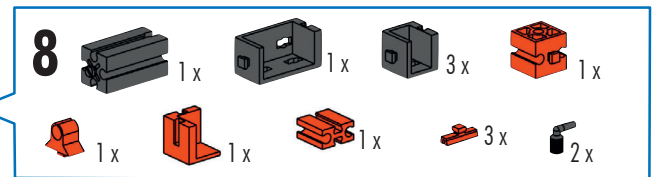
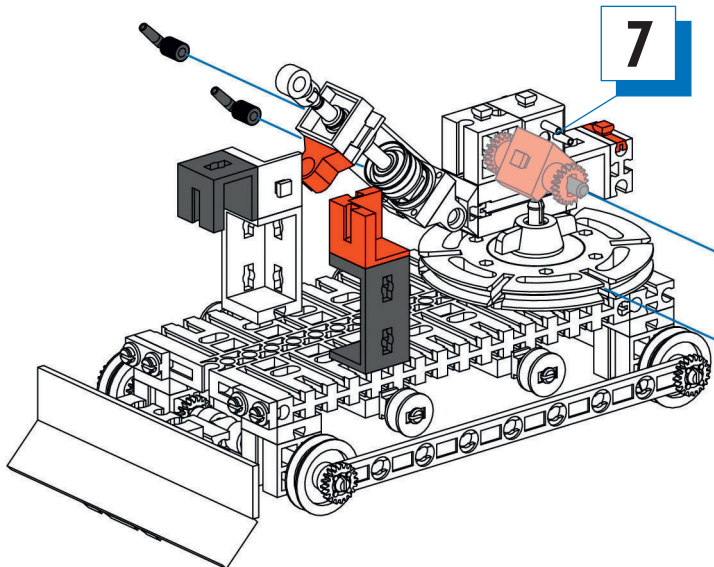
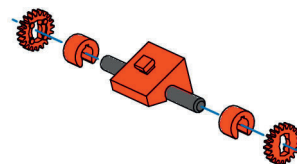
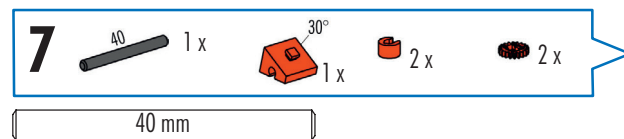
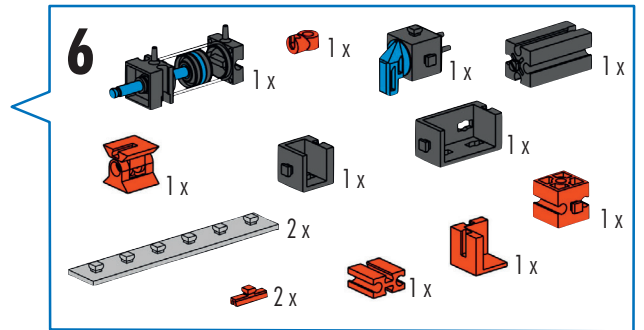
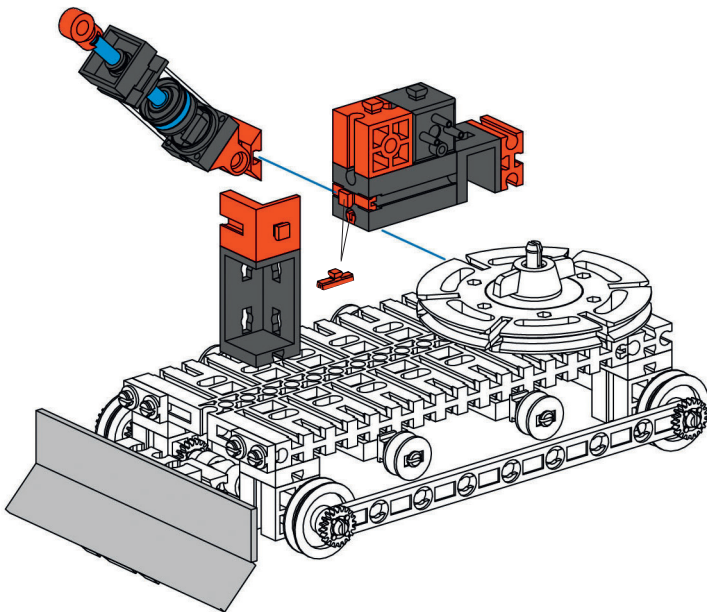
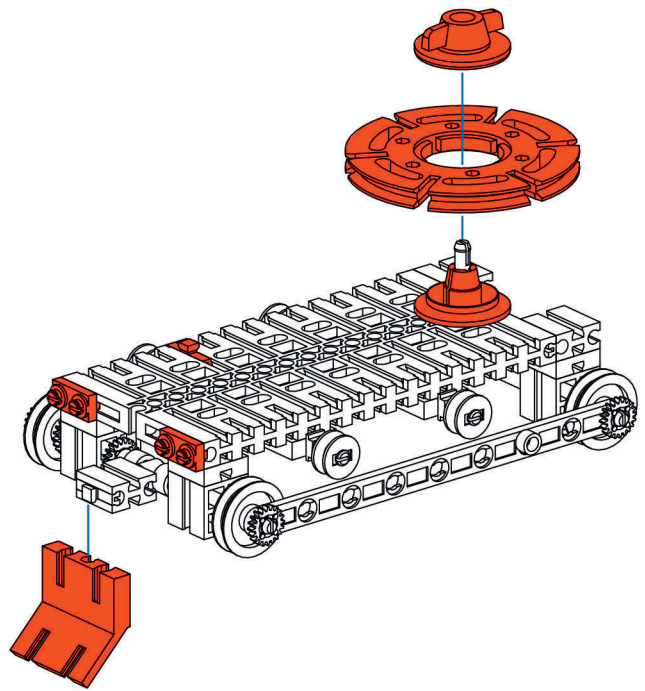
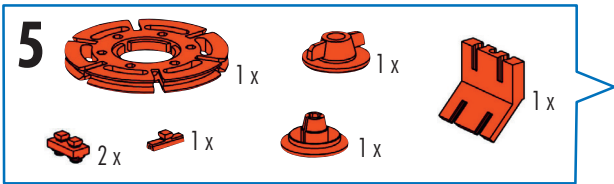
**Bergungsraupe**  
Track mounted recovery  
vehicle  
**Chenille de sauvetage**

**Bergingsvoertuig op rupsbanden**  
**Oruga de salvamento**  
**Lagarta de salvamento**

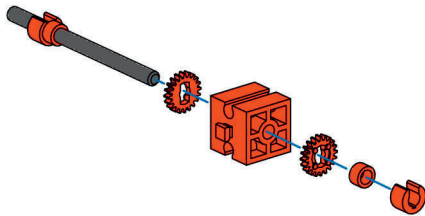
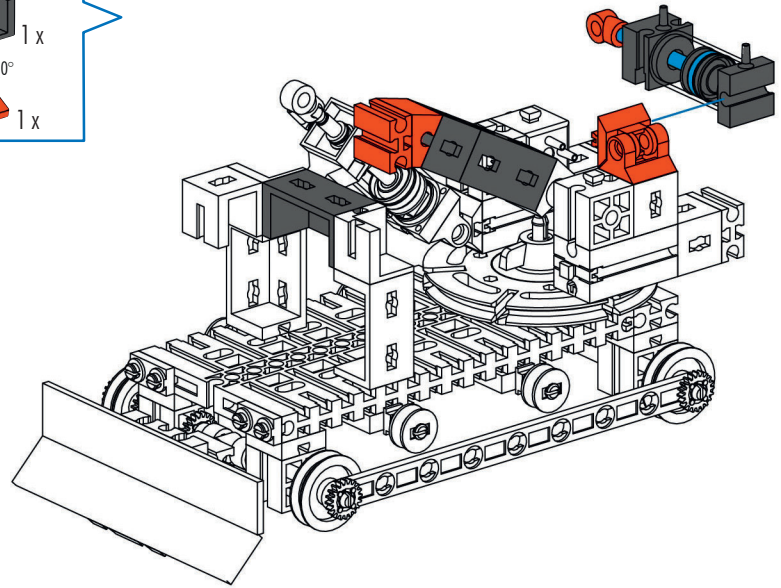
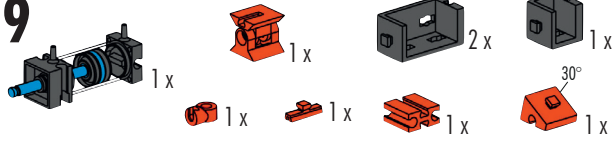
**Cingolato di salvataggio**  
Спасательный трактор  
履带式抢险车



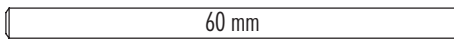




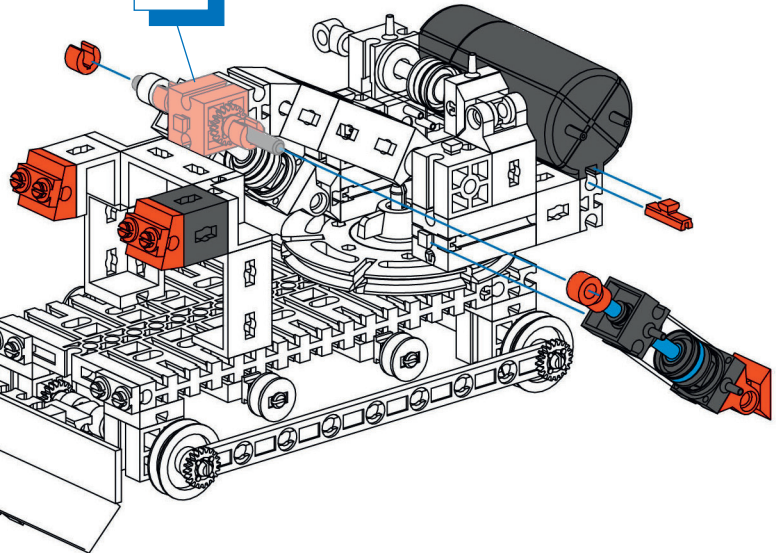
9



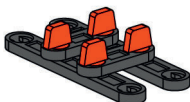
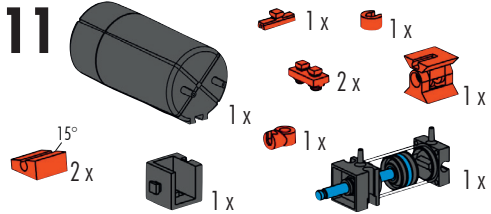
10



10



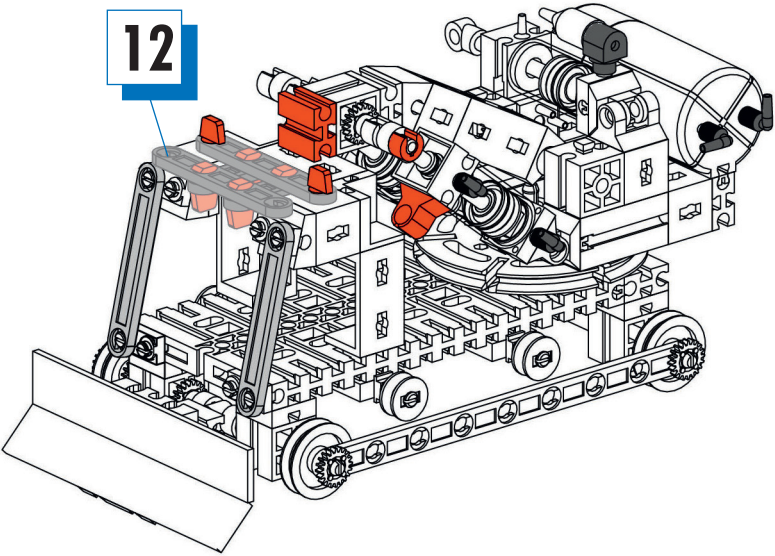
11



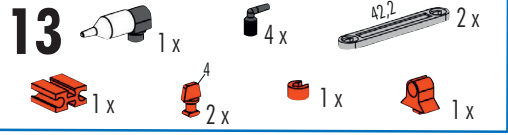
12



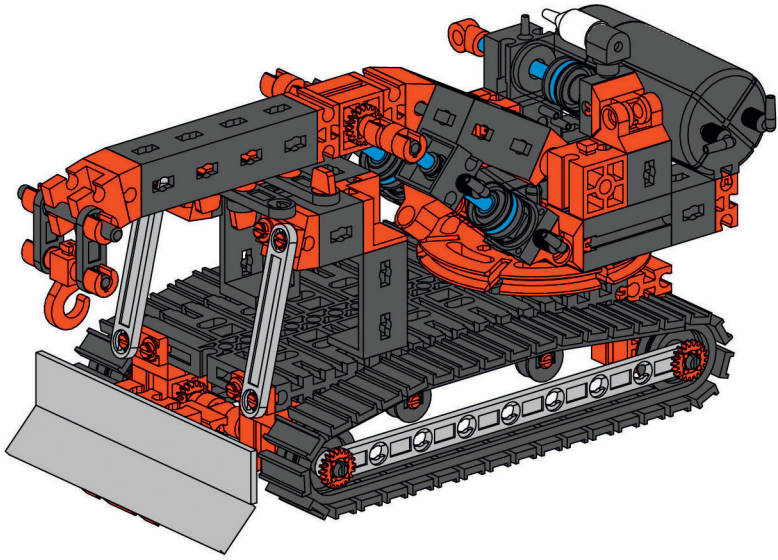
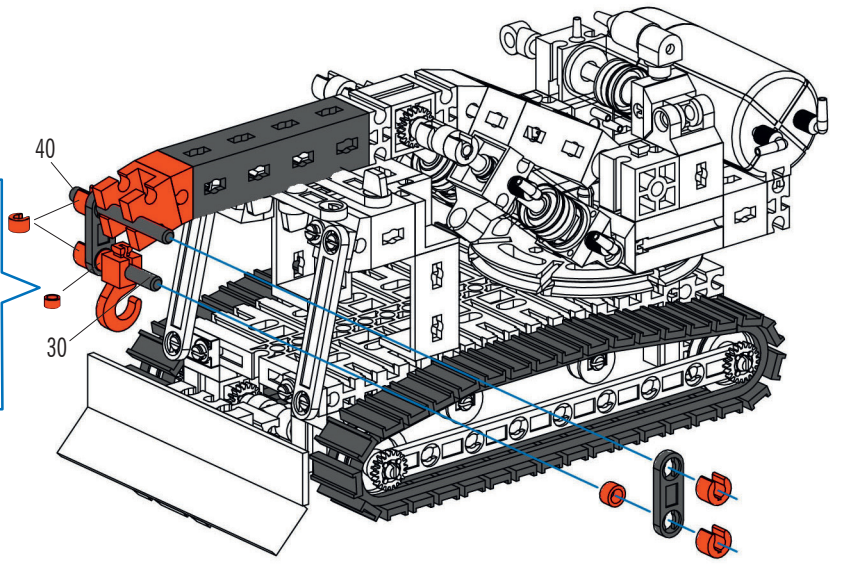
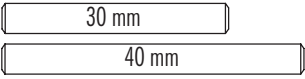
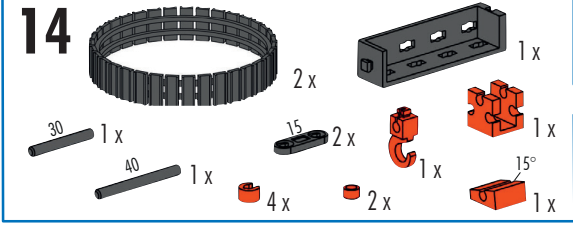
12



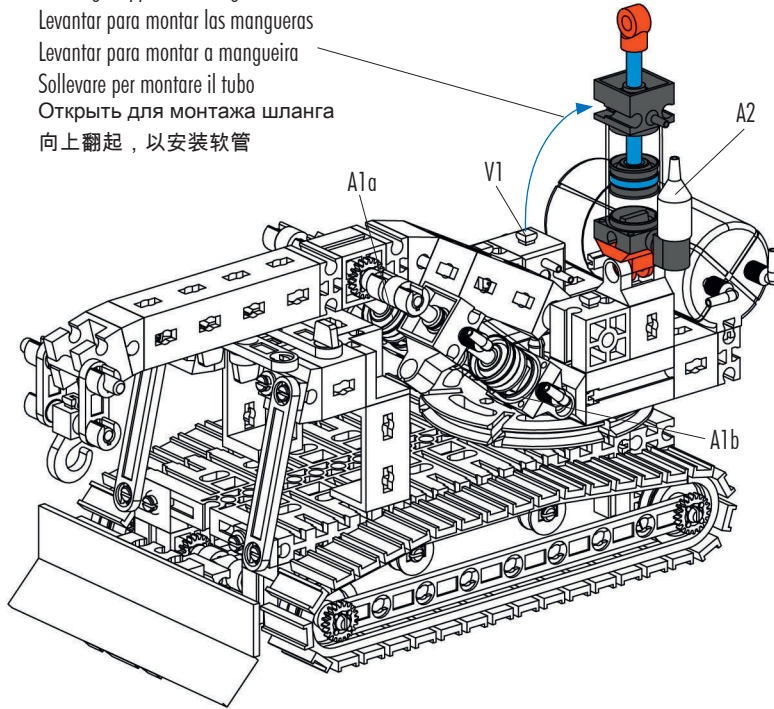
13



14



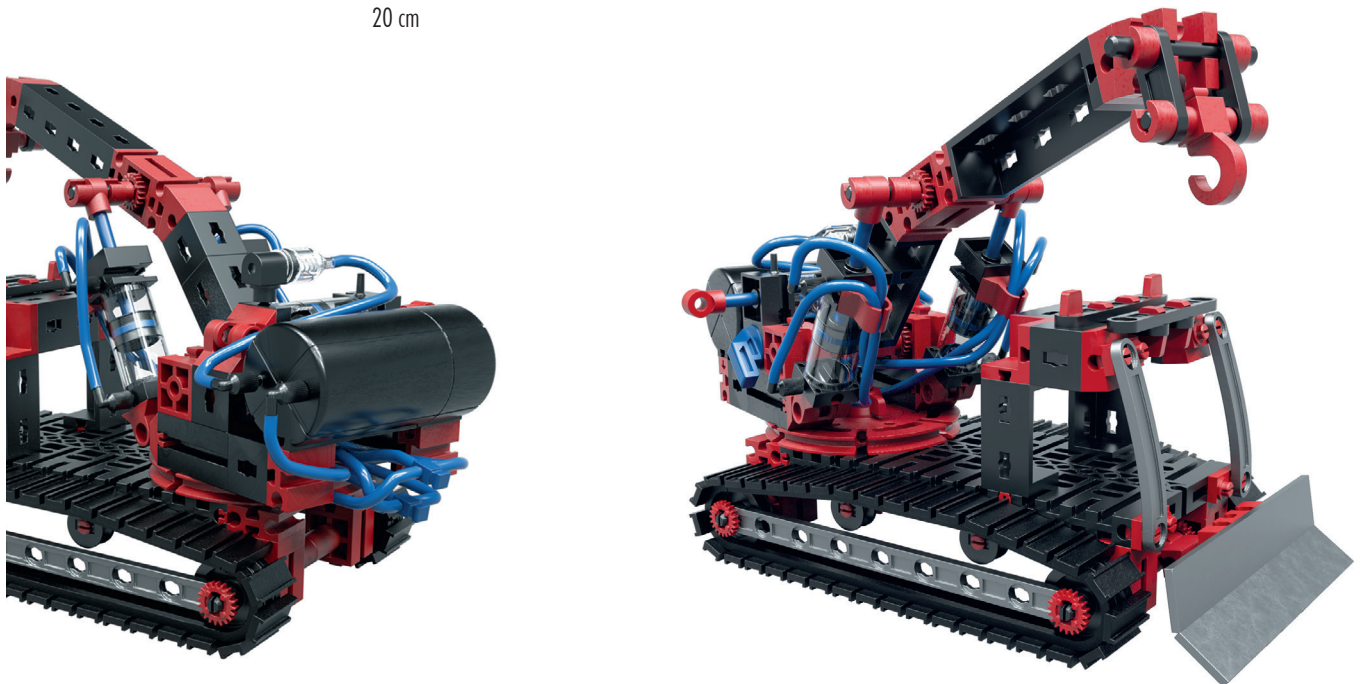
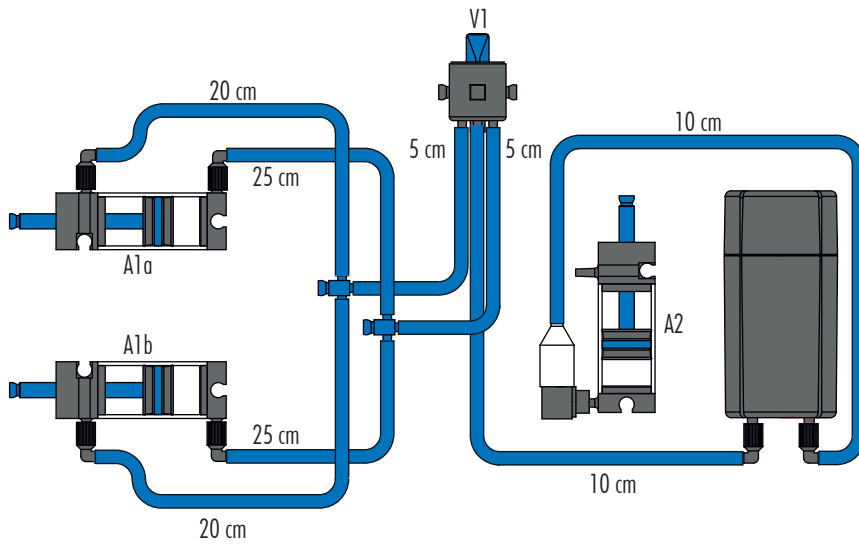
Hochklappen zur Schlauchmontage  
 Fold up to install hose  
 Replier vers le haut pour monter le tuyau  
 Omhoog klappen om slang te monteren  
 Levantar para montar las mangueras  
 Levantar para montar a mangueira  
 Sollevare per montare il tubo  
 Открыть для монтажа шланга  
 向上翻起，以安装软管

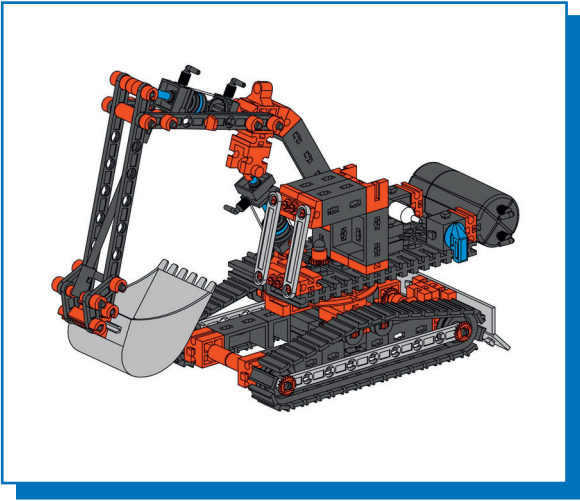


Schlauchanschlussplan  
 Air line layout plan  
 Plan de raccordement de conduits

Aansluitschema van slang  
 Racor de empalme  
 Plano de conexão de mangueira

Schema di allacciamento tubi  
 Схема подключения шлангов  
 软管连接图

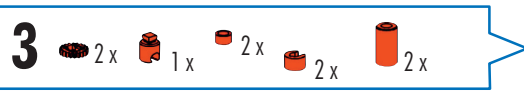
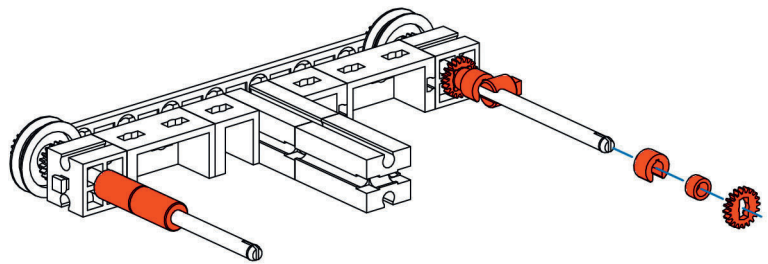
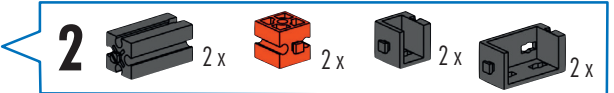
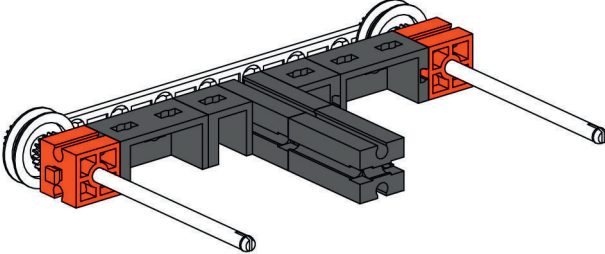
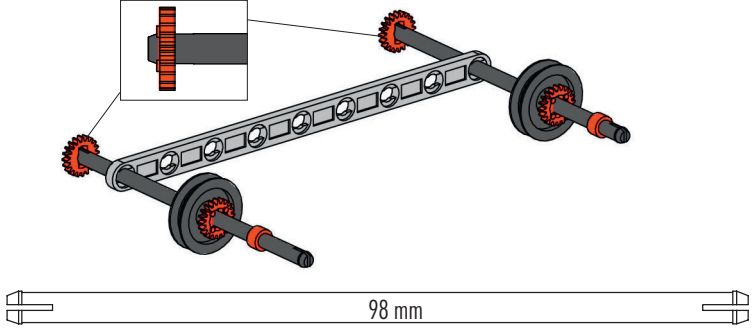
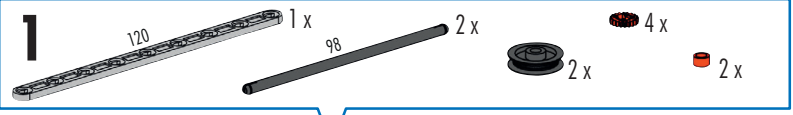


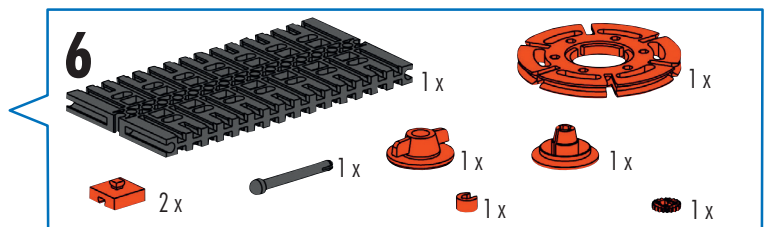
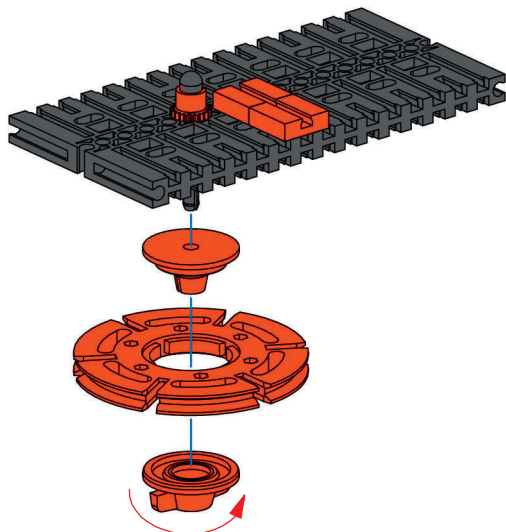
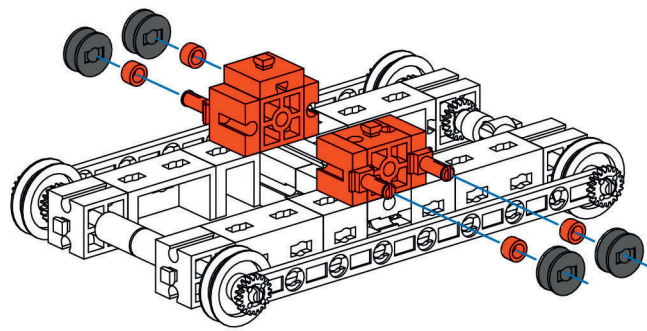
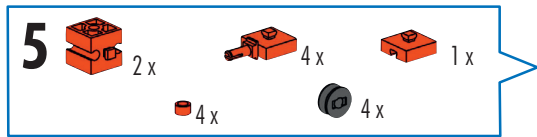
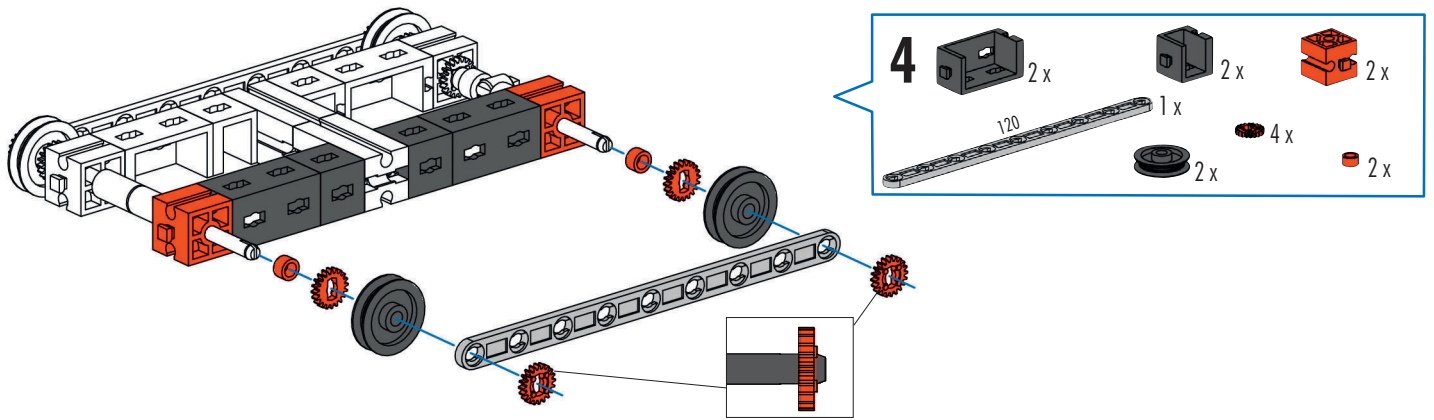


**Bagger**  
Excavator  
Pelle

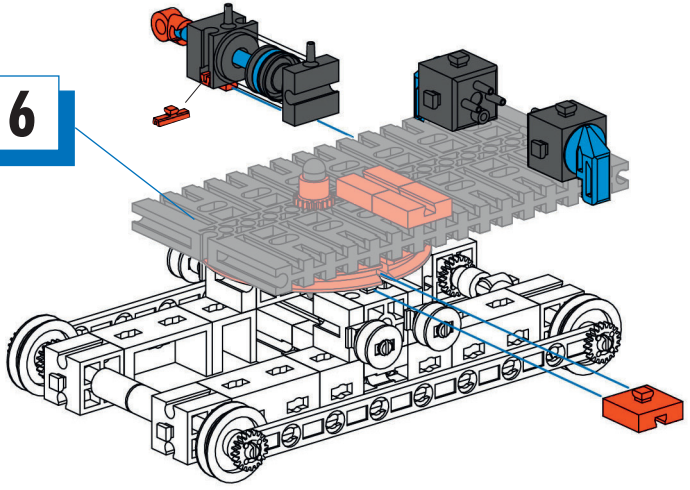
**Graafmachine**  
Excavadora  
Escavadeira

**Escavatore**  
Экскаватор  
挖掘机

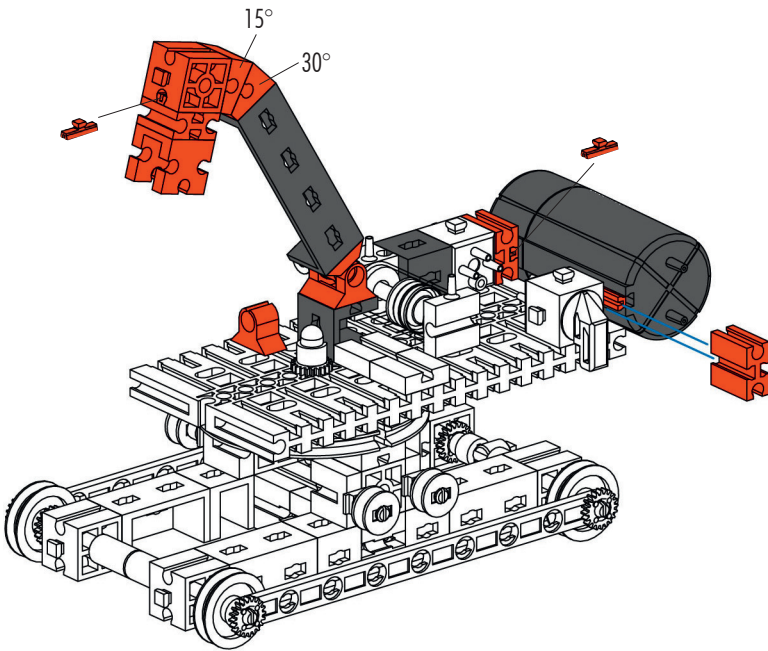
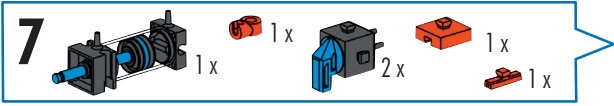




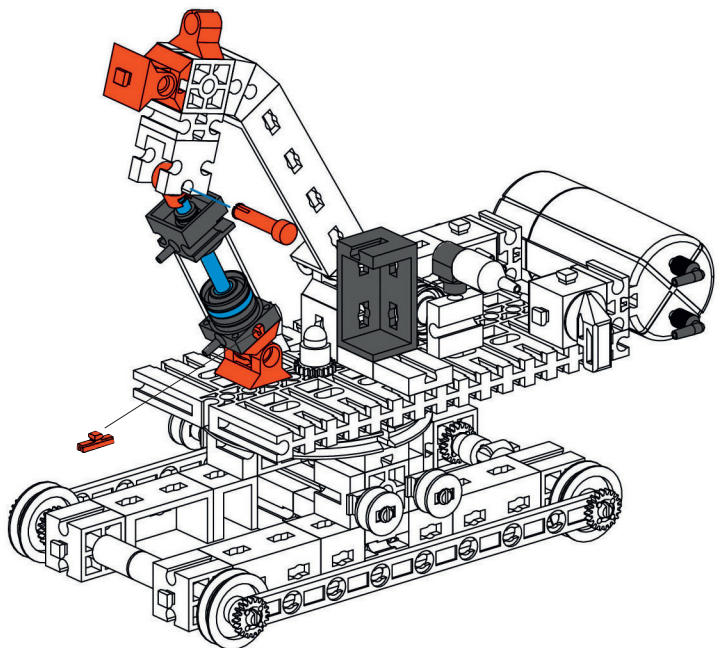
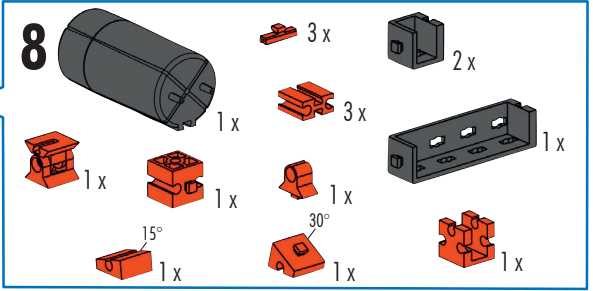
6



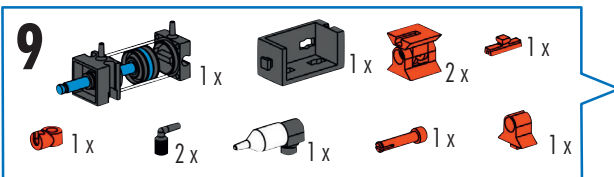
7

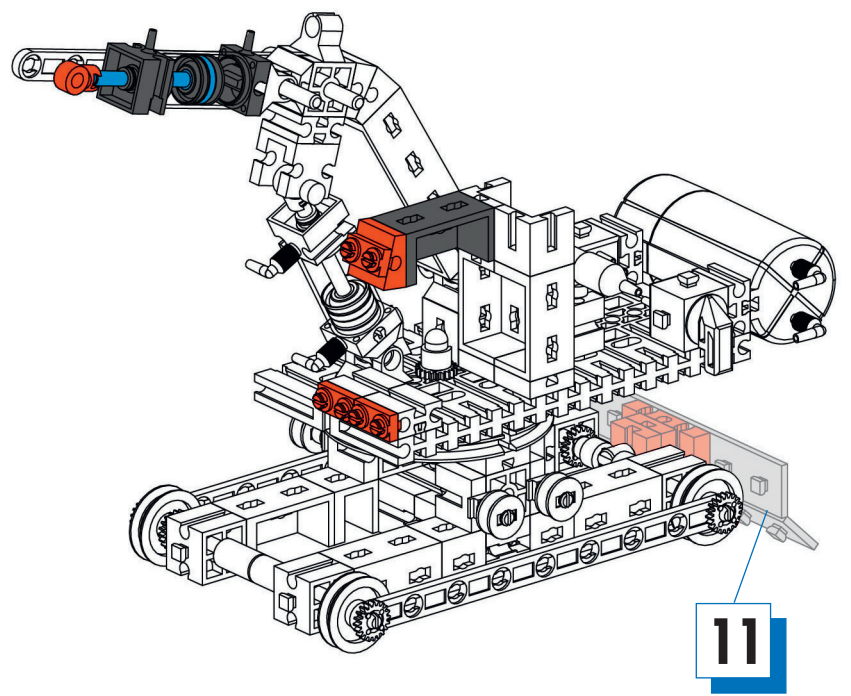
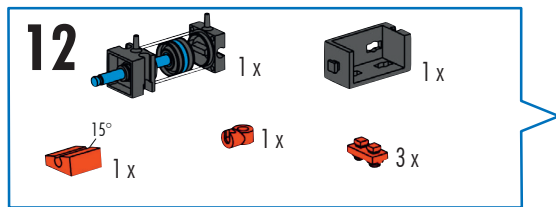
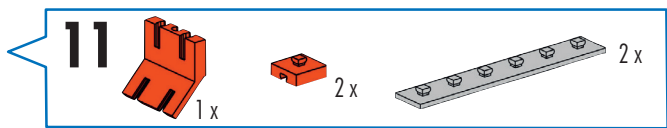
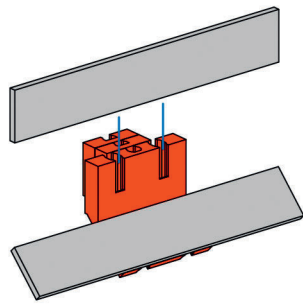
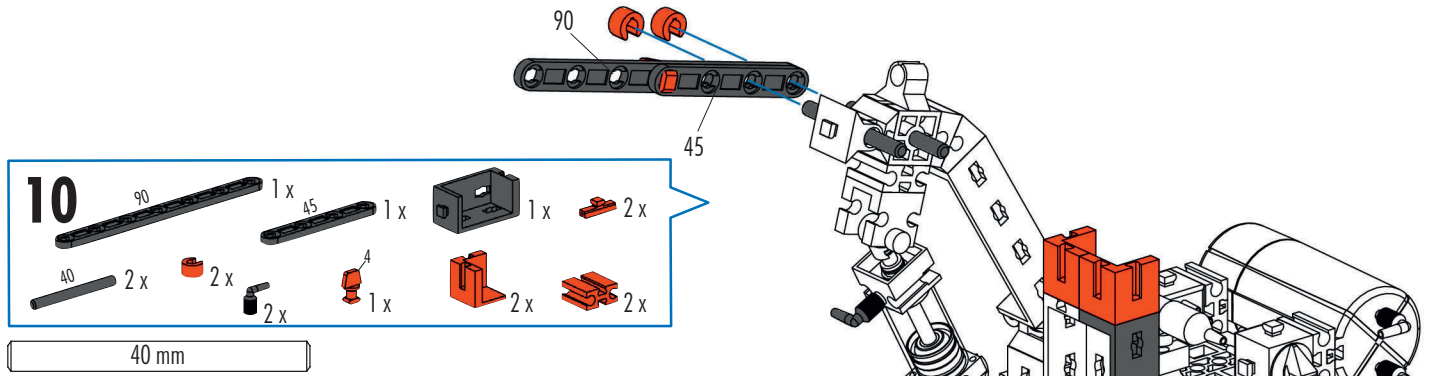


8

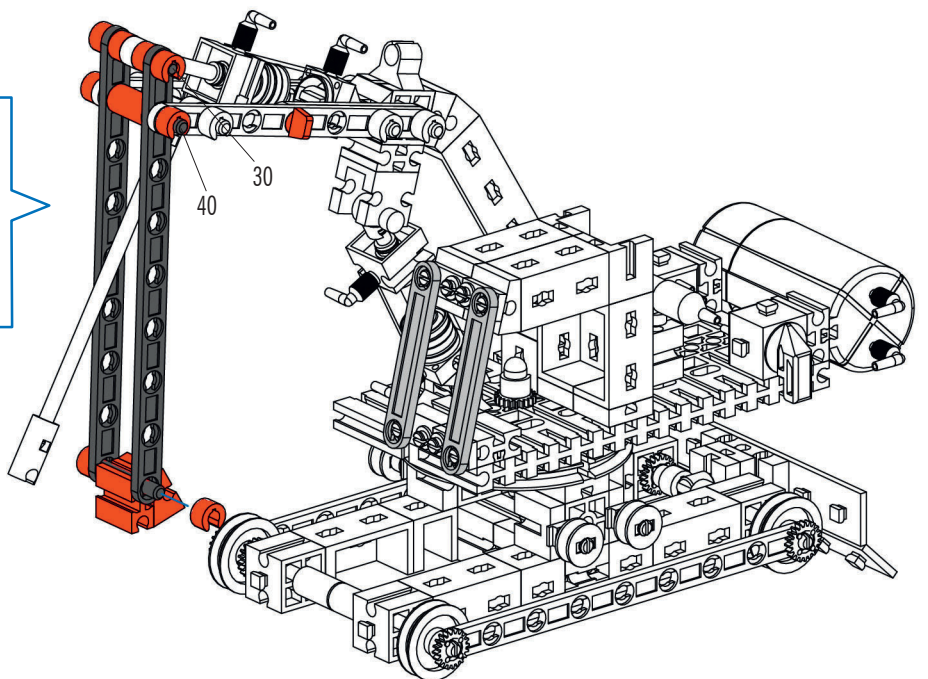
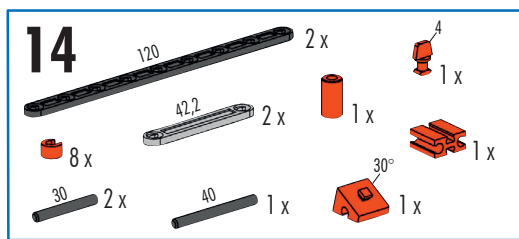
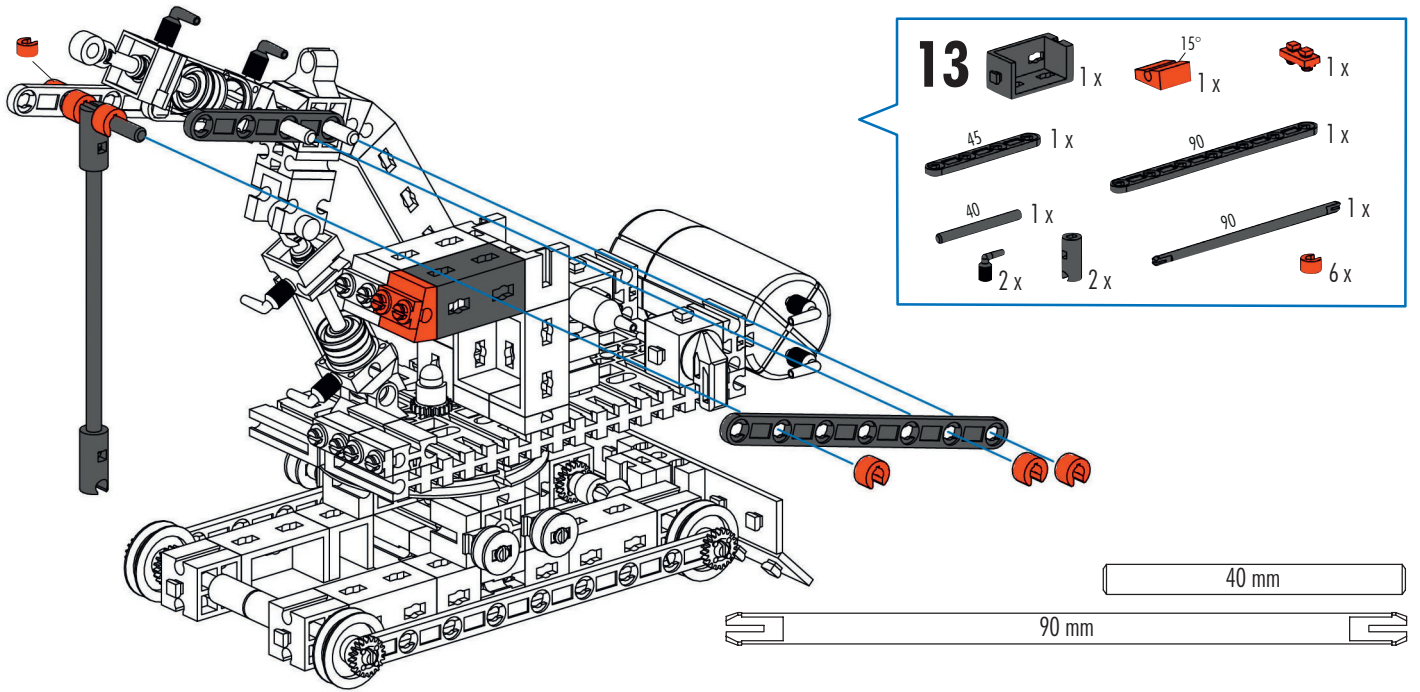


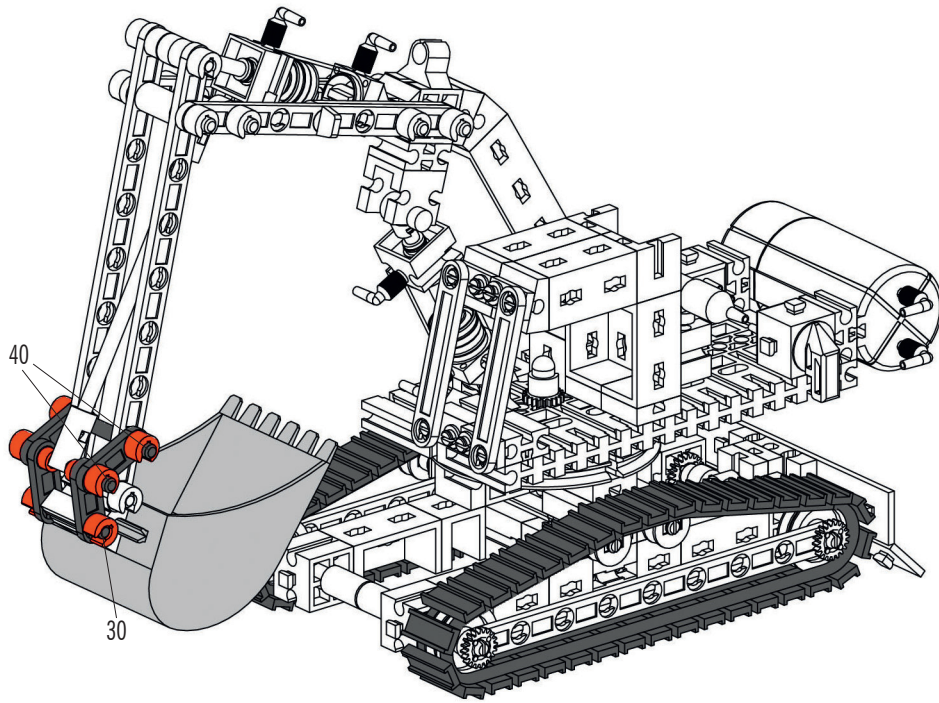
9




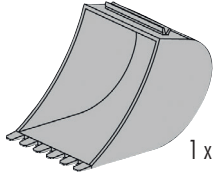







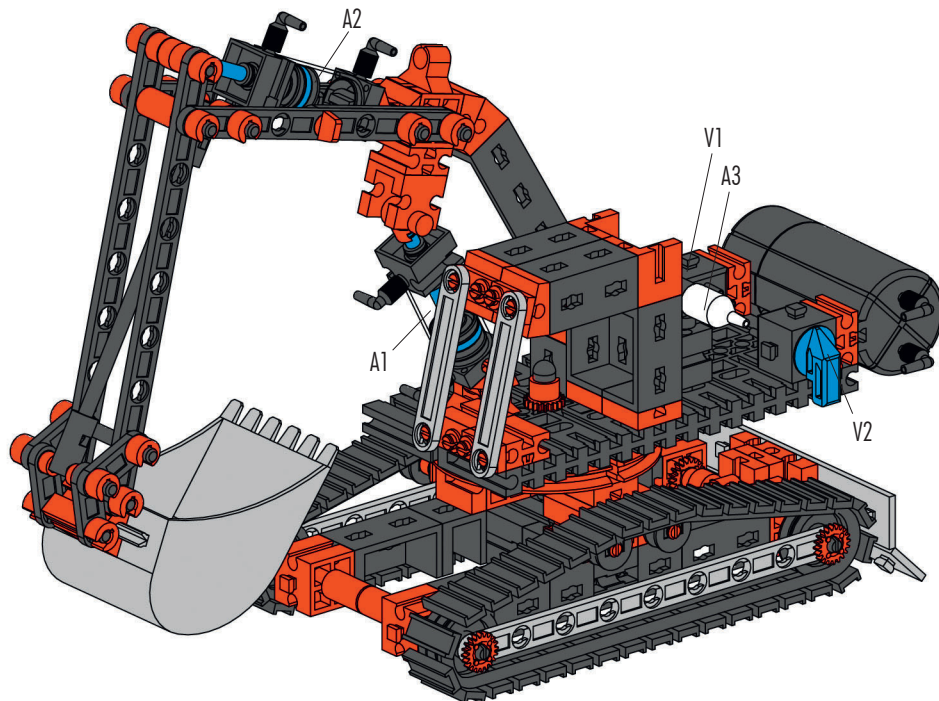






**15**

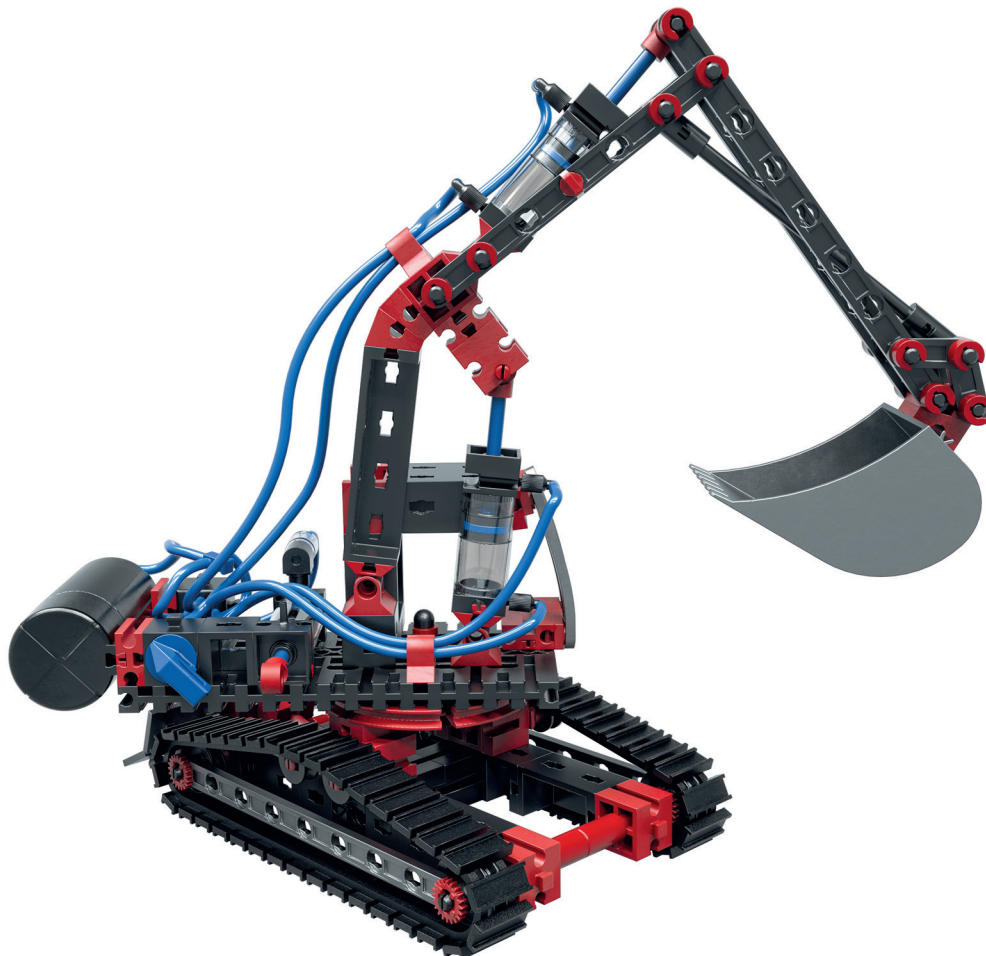
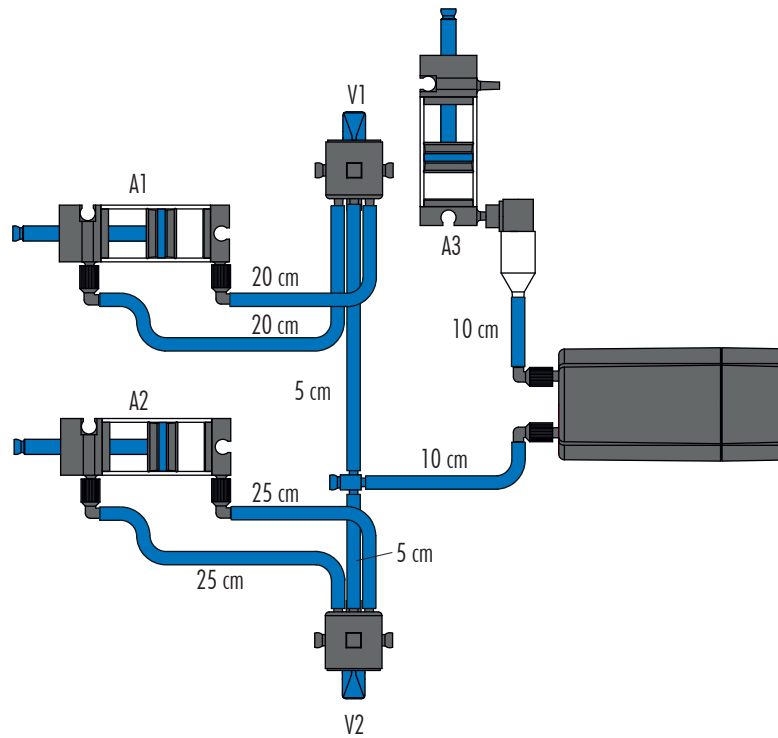
-  2 x
-  1 x
-  4 x
-  2 x
-  6 x
-  1 x
-  2 x



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



**U4**