Instructions
Notice de montage
Bauanleitung
istruzioni di montaggio
Instrucciones de montaje
Instruções de montagem
Monteringsanvisning
Kokoamisohje
Monterings instruktioner
Montagehandleiding
Οδηγίες συναρμολόγησης.
組立説明書

15+

#0528

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MECCANO by NIKKO

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メカノ キングギドラ 組み立て時の注意

この度は「メカノ キングギドラ」をお買い上げいただき誠にありがとうございます。

「メカノ キングギドラ」は対象年齢15才以上の組み立ての難しい商品で、組み立ての微妙なズレによりうまく作動しなくなってしまう事があります。正確に組み上げる事で問題なく作動致しますので、全ての部品を正確に組み立ててください。

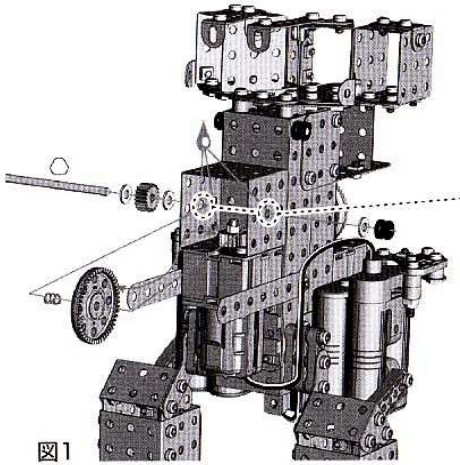


図1

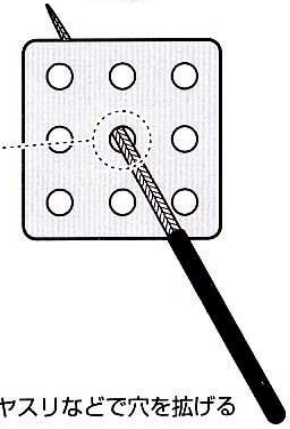


図2: 棒ヤスリなどで穴を拡げる

特にギアー部分の組み立ては正確に行ってください。図1のような複雑な組み立ての際は以下のポイントに注意してください。

★シャフトが穴に正確に通せるように部品の組み立てを正確に行ってください。

★それでもシャフトがうまく穴に入らない場合は、棒ヤスリなどで穴を少し削るなどしてスムーズに通るように工夫してください。(図2)

★ギアーをセットした時に無理なく作動するか手動で確認してください。

他の部品も図3のように部品と部品の穴の位置がずれないように組み立ててください。

図4のように部品と部品の穴の位置がずれている場合は、穴の位置が合うように、その部分を組み立て直してください。

どうしても穴の位置が合わない場合は、図5の点線部分を棒ヤスリなどで削るなどしてビスやシャフトが通るように工夫してください。

図3: 穴の位置が合っている

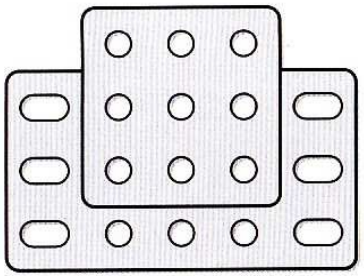


図4：穴の位置がずれている

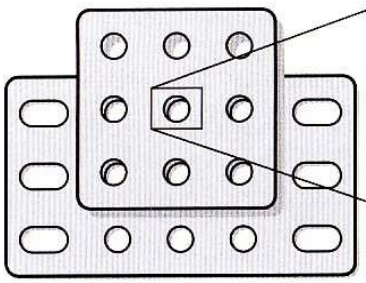
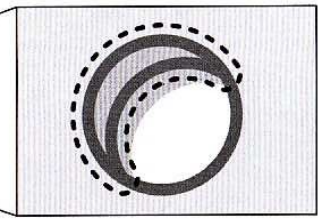


図5：合わない部分を削る



部品を正確な位置にずらすか、点線の部分を削る(図2)。

◎メカノ製品のモーターで駆動するアイテムの組み立ては、完成後に可動部分がスムーズに作動、回転するかチェックしてから電源スイッチを入れてください。

◎モーターの回転が無理な回転だったり途中で止まってしまう場合は、駆動部分の組み立てがきつくなっていたり、他の部品に接触していたり、取り付けビスのしめすぎなどの原因が考えられます。各部分を点検し、可動部分を組み直すなどしてください。

◎搭載モーターは正常な組み立てにてスムーズな作動が得られます。組み立て方で回転部に無理な負荷がかかるとモーターが止まって(ロック・停止)しまい、モーターが加熱して破損や思わぬ事故につながります。このような事故を防ぐために下記の事項を必ず守ってください。

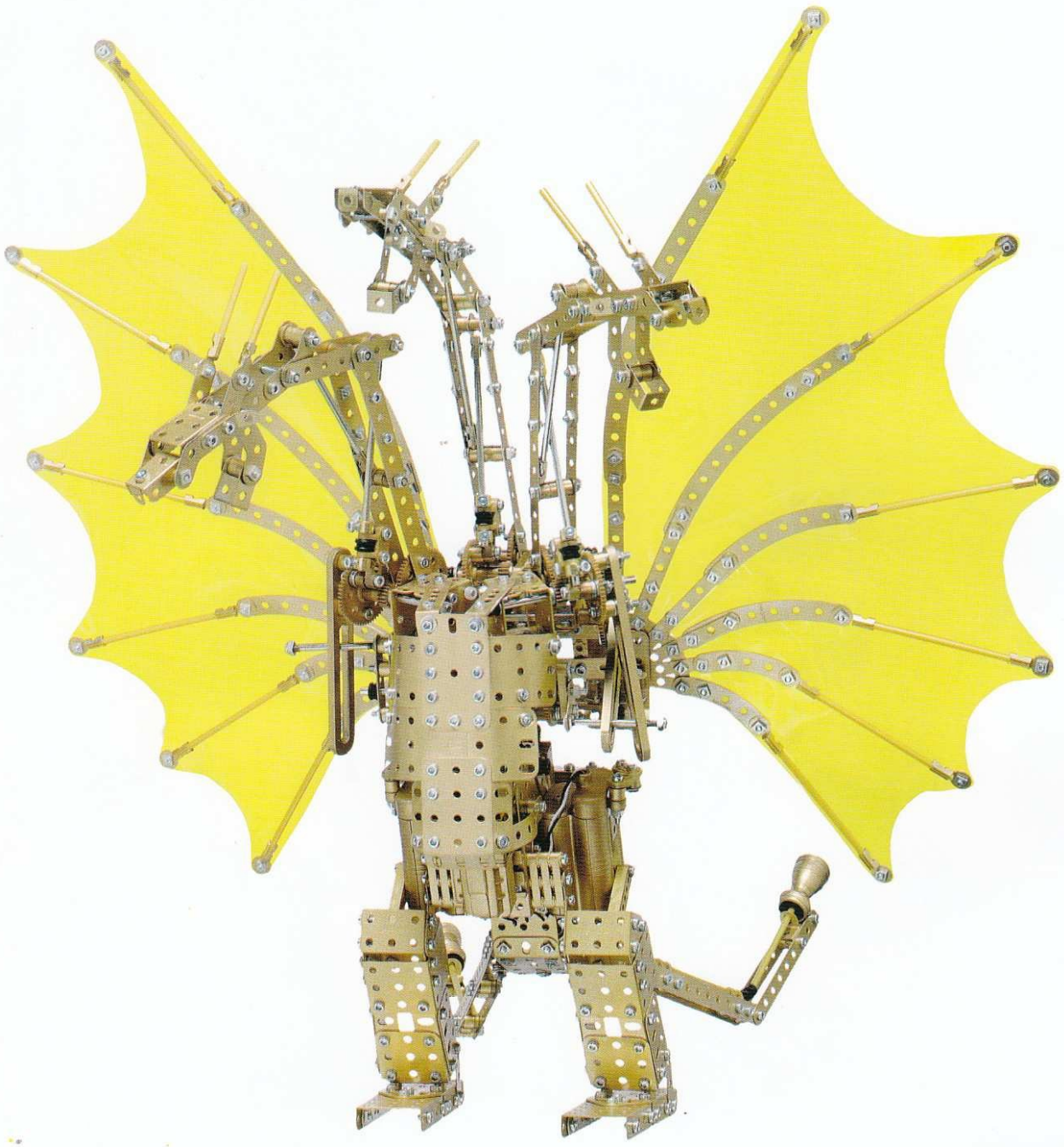
★回転がスムーズになっているか完成後に必ず手動でチェックしてください。

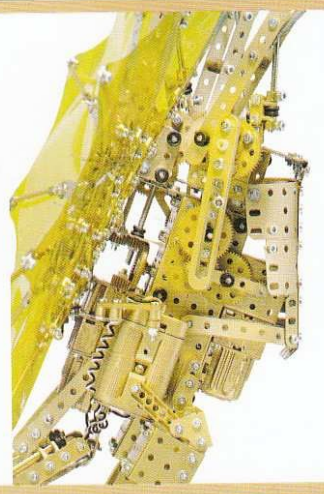
★スムーズに回っていても組み立て部が震動で変動する場合があります。スイッチをONにして動かしているときは商品から離れずに、停止した場合にすぐにスイッチをOFFにできるように注意してください。

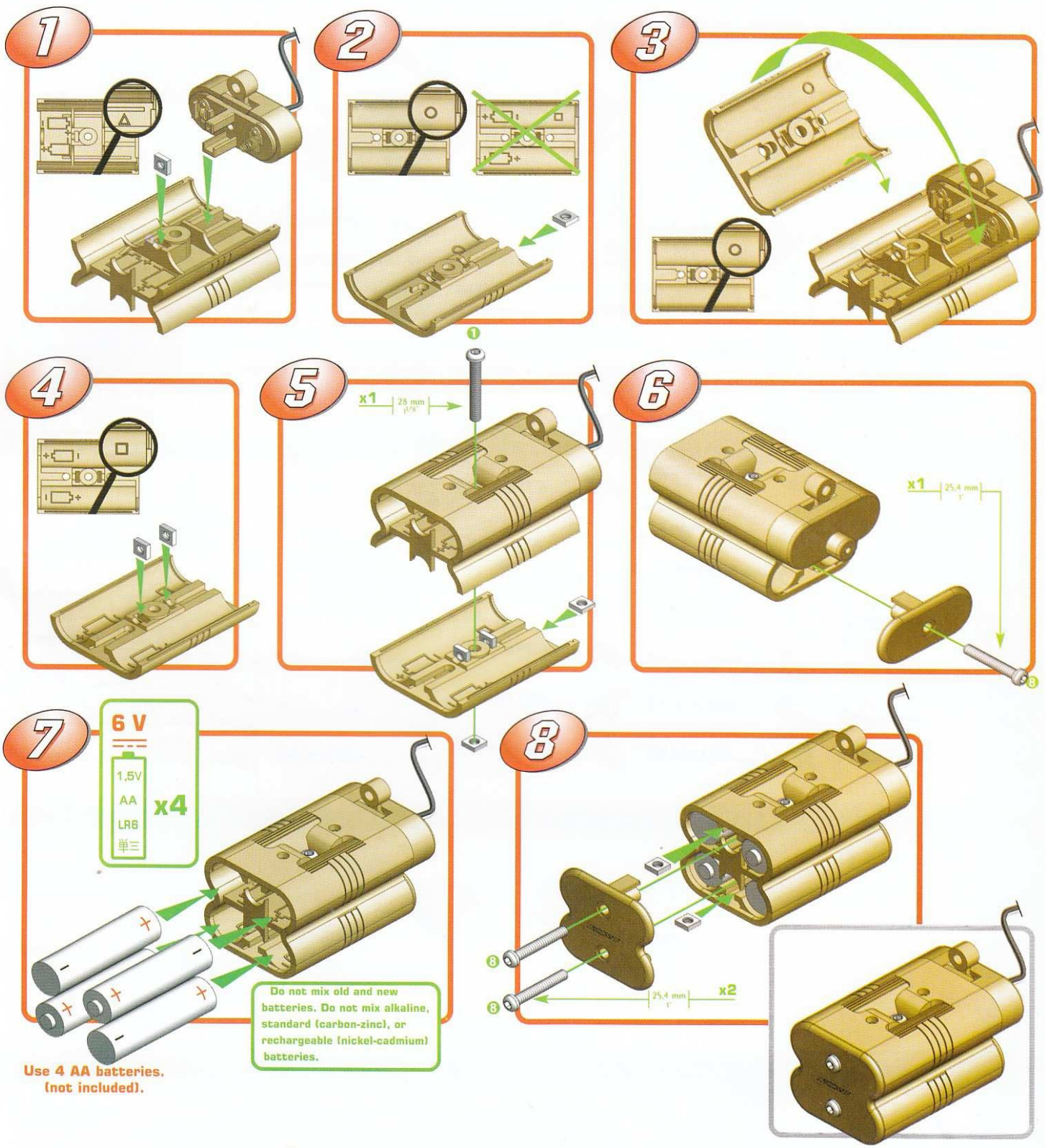
★スイッチをONの状態のまま放置しないでください。動いていても途中で止まる(ロック・停止)事がありますので必ずスイッチはOFFにしてから離れてください。

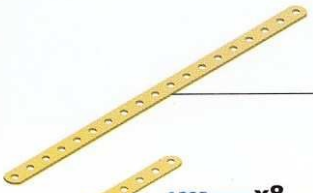
★作動している時に小さなお子様が手で触れるなどする場合がありますので、お子様の近くではスイッチを入れないでください。作動部に挟まれたり思わぬ事故につながります。

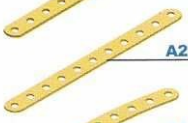
メカノ製品は組み立てる楽しさと創造性を高めるエデュケーショナルトーイとして多種多様な素材と構成を持った製品です。また物の構成や動作の原理を学ぶことができる組み立て式玩具で、完成させた後で長時間遊ぶのには適しておりません。ご了承ください。

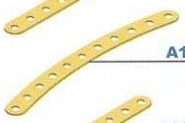





1
2
3
4
5
x1
28 mm
1 1/8"
1
6
x1
25,4 mm
1"
8
7
6 V
1,5V
AA
LR6
単三
x4
Do not mix old and new batteries. Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickel-cadmium) batteries.
Use 4 AA batteries. (not included).
8
8
8
25,4 mm
1"
x2


A801 (0001A) x4


A202 (0002) x8


A189 (0089) x4

A302 (0002A) x6

A415 (0235D) x6

B205 x4

A203 (0003) x20

B488 x2

A414 (0235B) x2

A413 (0235A) x4

A286 (0090) x6

A105 (0005) x7

A235 (0235) x6

B146 (0006) x6

A416 (0235G) x9

A806 (0806B) x12

A851 (0051G) x1

A173 (0073A) x5

A520 (0188) x5

A174 (0074) x12

A305 (0103G) x6

A307 (0103H) x1

A127 (0126A) x2

A233 (0133C) x38

A133 (0133A) x1

A713 (0012D) x2

A437 (0812D) x6

A812 (0812B) x3

A512 (0012B) x7

A012 (0012) x2

A360 (0160D) x2

A251 (0051F) x4

A160 (0160G) x4

A952 (0051D) x4

A551 (0051B) x7

A252 (0051A) x3

A602 (0009D) x4

A951 (0051C) x5

A721 (0011A) x3

A720 (0011) x3

A811 (0811) x2

A399 (0154A) x1

A431 (0154B) x1

A336 (0114) x4

B916 x1

B915 x1

B913 x1

B914 x2

B051 x3

A260 (0260J) x2

A128 (0028P3P) x2

A327(0027P3P) x12

A326 (0026P3P) x11

B091 x2

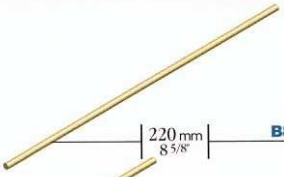
A419 (0260B) x9

A423 (0260F) x2

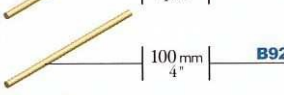
A420 (0260C) x20

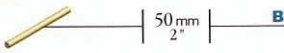
A538 (0038D) x3

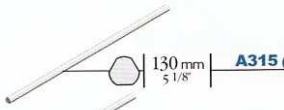
A409 (0213C) x2


220 mm 8 5/8" B817 x2

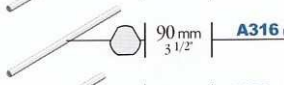
120 mm 4 3/4" A941 (0940B) x2


100 mm 4" B924 x12

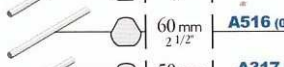

50 mm 2" B964 x6


130 mm 5 1/8" A315 (0315) x1

100 mm 4" A428 (0315B) x2


90 mm 3 1/2" A316 (0316) x2

75 mm 3" A429 (0316B) x5


60 mm 2 1/2" A516 (0316A) x6

50 mm 2" A317 (0317) x1

130 mm 5 1/8" A015 (0015) x1

115 mm 4 1/2" A715 (0015A) x3

100 mm 4" A815 (0015B) x2

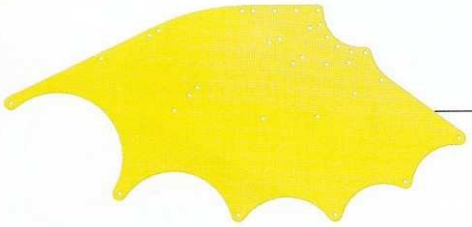
90 mm 3 1/2" A116 (0016) x2

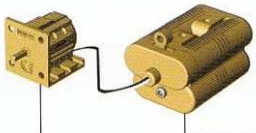
60 mm 2 1/2" A117 (0016A) x1

B917 x2

B115 (0115D) x1

A212 (0212) x39


B921 x2


A652 x2

A650 x2

A760 (0760) x3

A134 (0034) x2

A136 (0036C) x1

1 28 mm 1 1/8" A611 (0111D) x25

8 25,4 mm 1" A912 (0111E) x22

5 23 mm 29/32" A347 (0147G) x11

2 19 mm 3/4" A911 (0111) x32

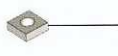
7 14,7 mm 37/64" A247 (0147D) x8

3 12 mm 1/2" A411 (0111A) x18

4 9,5 mm 3/8" A511 (0111C) x33

5,8 mm 15/64" A637 (0037B) x305

A737 (0037H) x36


A337 (0037A) x434

A138 (0038) x182

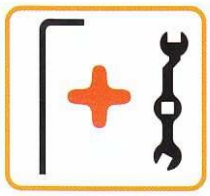
A249 (0059) x6

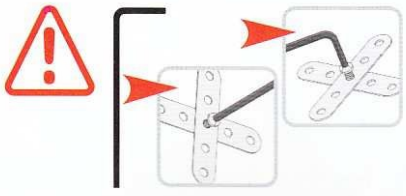
A623 (0023C3P) x48

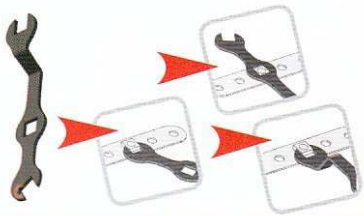
A238 (0038A) x105

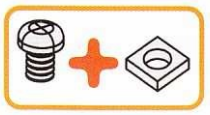
A338 (0038B) x55

A259 (0059C) x12









GB : Bend the spring steel parts, they will return to their original position.

F : Déforme les pièces en acier ressort, elles retrouvent leur position initiale.

D : Verbiege die Teile aus Federstahl, sie nehmen wieder ihre ursprüngliche Stellung ein.

I : Deformati i pezzi in acciaio elastico ritrovano la loro posizione iniziale.

E : Deforma las piezas de acero muelle, que recuperan su posición inicial.

JPN : フレキシブルプレートは、手で曲げたり戻したり出来ます。

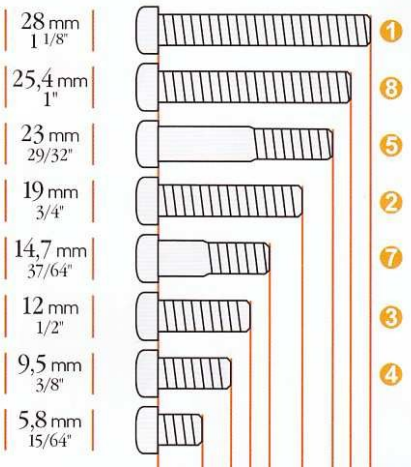
Oil Huile Ól
Olio Oleo Olie
Öljy Olie Óleo
Olja Λάδι オイル

Add oil on the moving parts.

Ajoute de l'huile sur les pieces en mouvements.

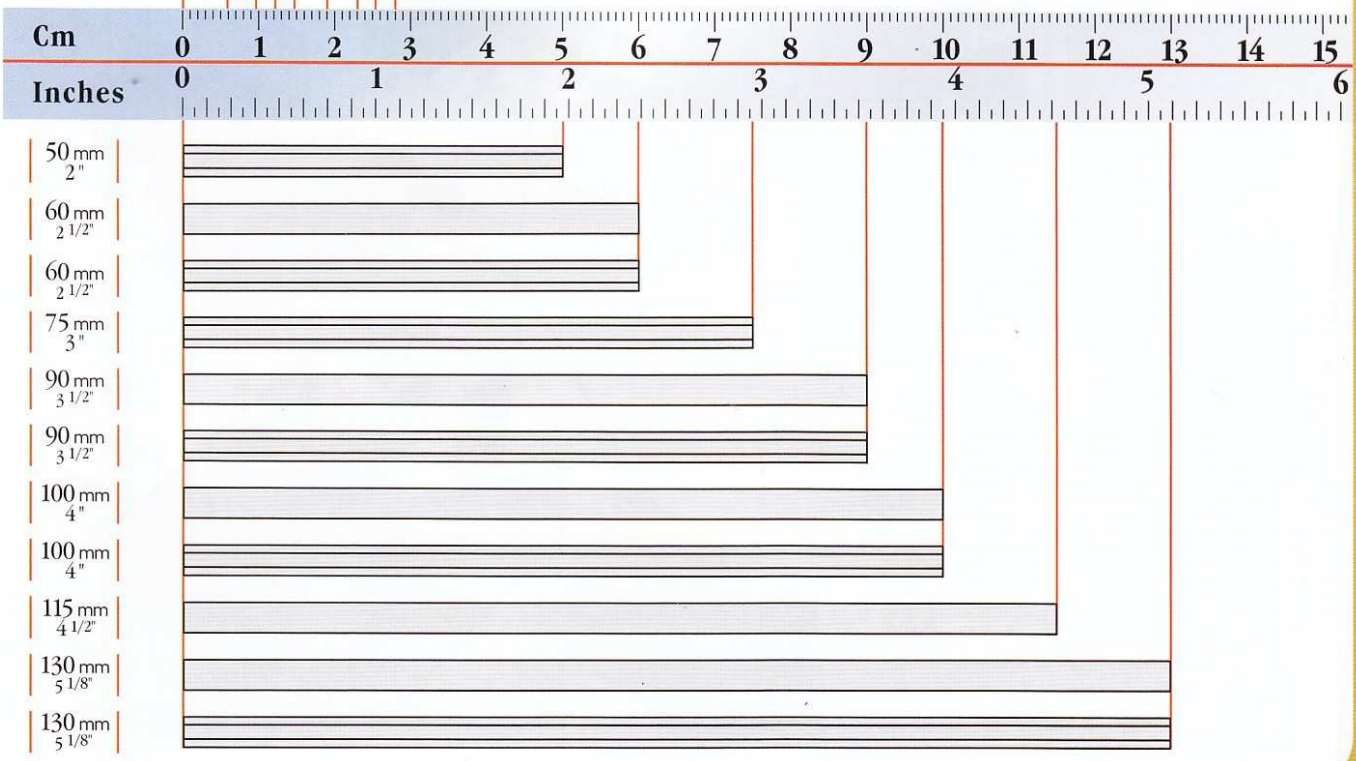
Aplica el aceite en las piezas del mecanismo.

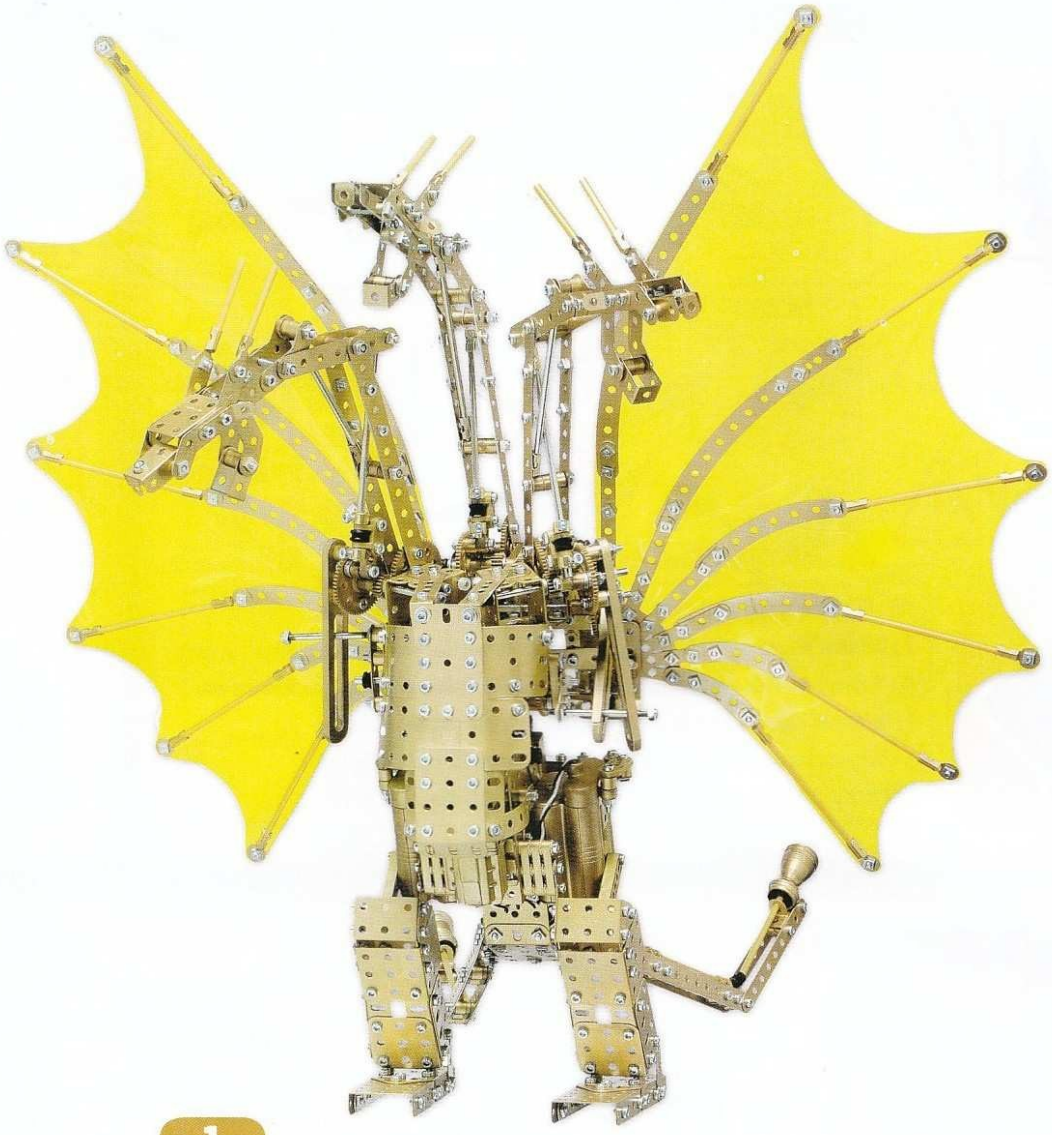
ギアーとシャフトの部分に関しては、市販のシリコンオイルを付けて下さい。



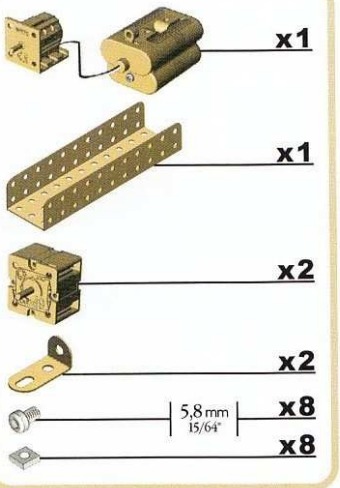
Scale Escala Mittakaava
Echelle Schaal Målestok
Maßstab Escala Κλ›μακα
Scala Skala スケール

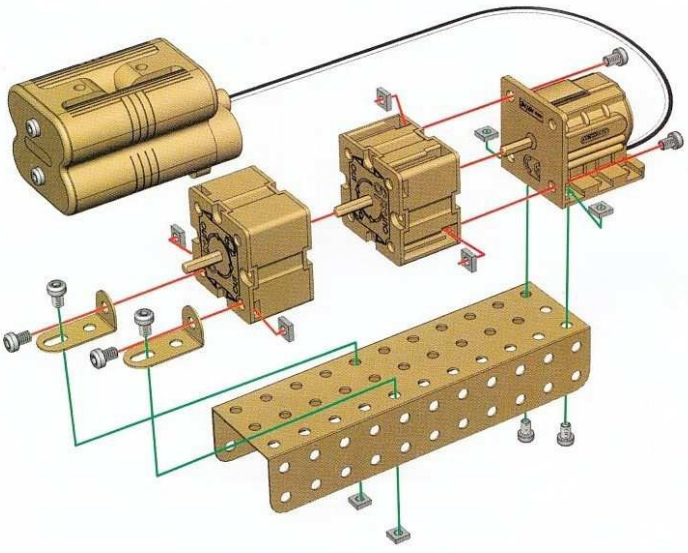
1:1





1





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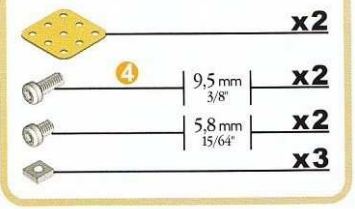
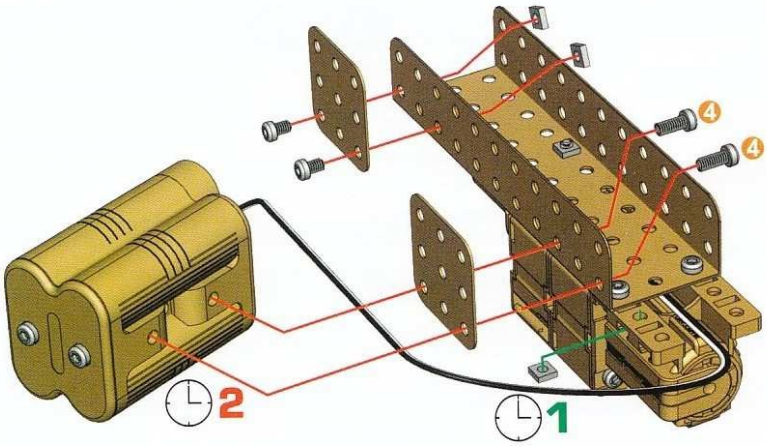
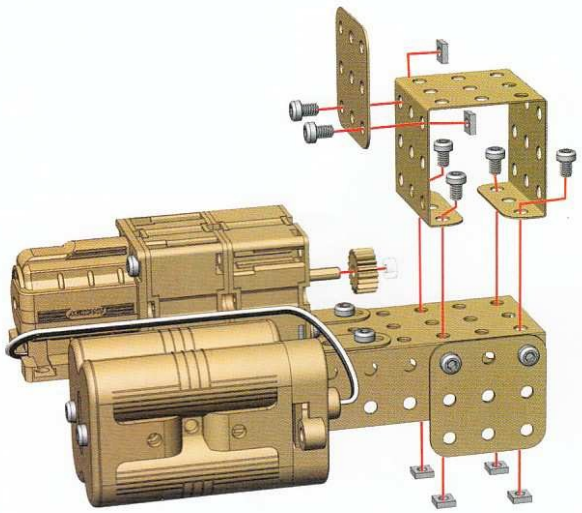
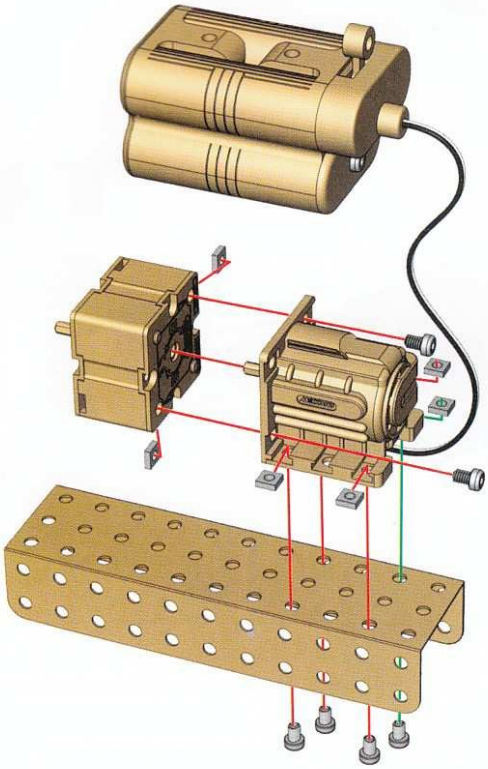






3

- x1
- x1
- x1
- x1
- 5,8 mm 15/64" — x6
- x6

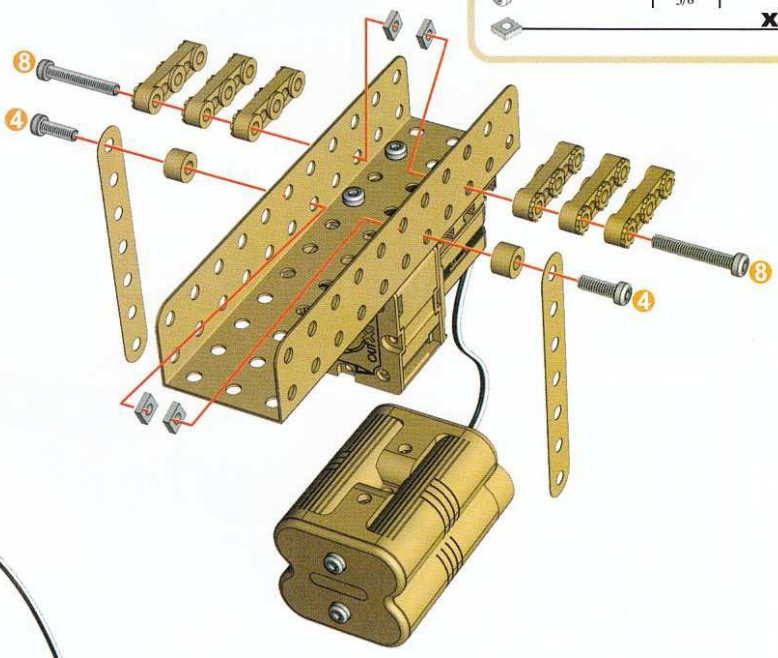


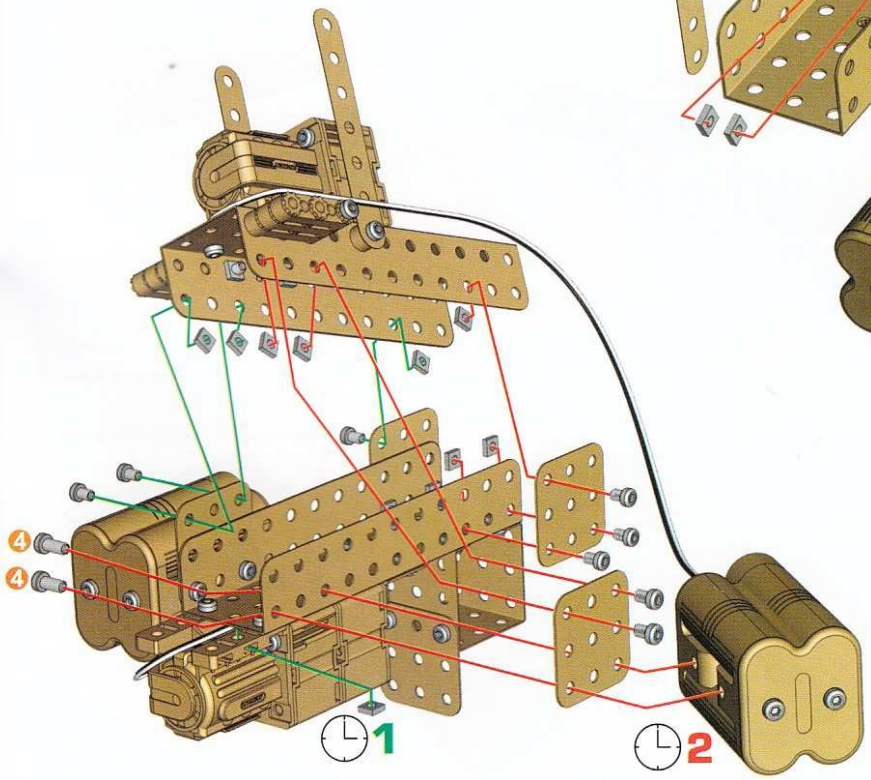
4

- x1
- x1
- x1
- 5,8 mm 15/64" — x6
- x6

5

- x2
- x6
- x2
- 8 — 25,4 mm 1" — x2
- 4 — 9,5 mm 3/8" — x2
- x4

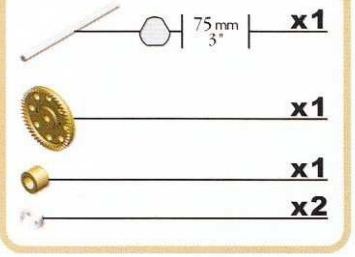


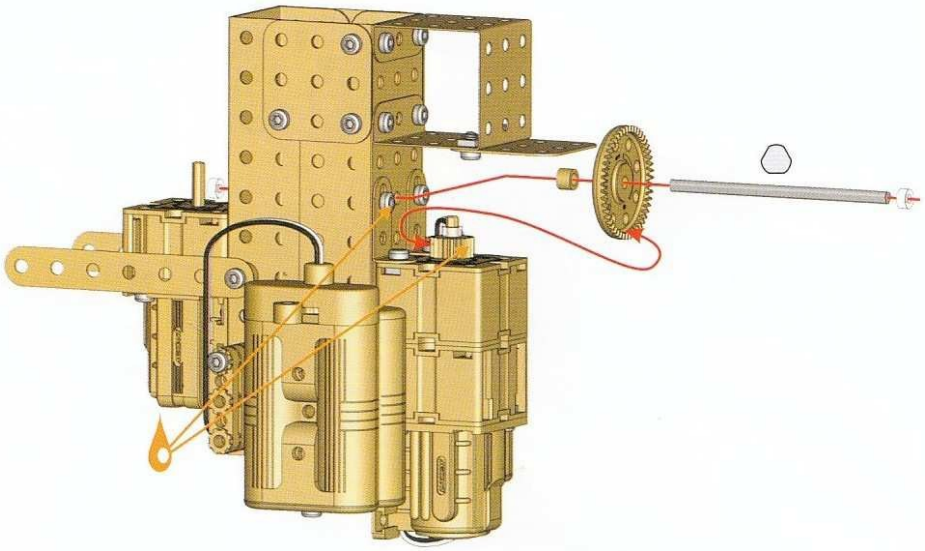


6 ③ + ⑤ +

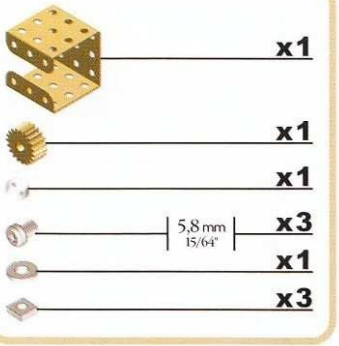
- x2
- 4 — 9,5 mm 3/8" — x2
- 5,8 mm 15/64" — x8
- x9

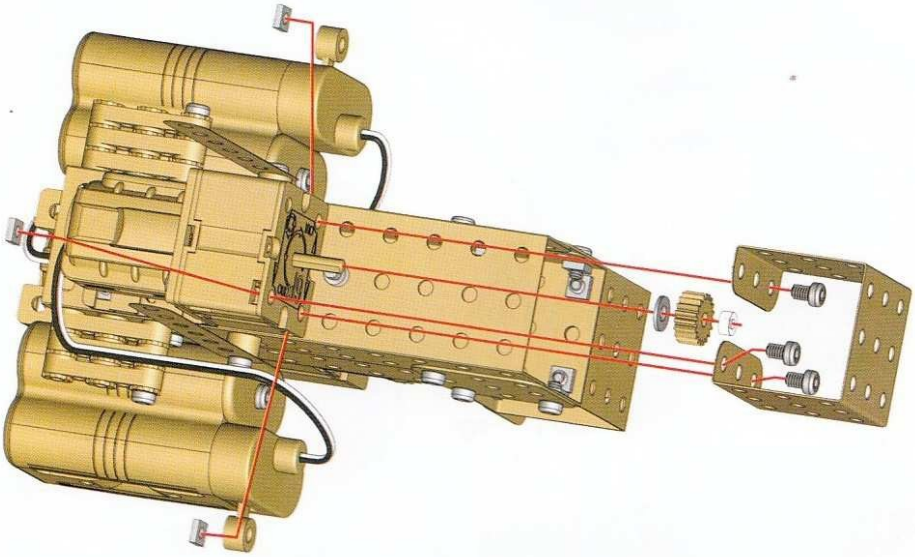
7


75 mm
3"
x1
x1
x1
x2

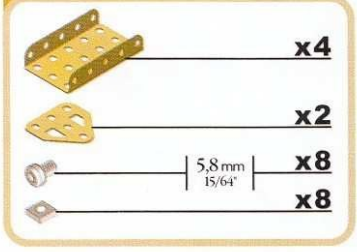


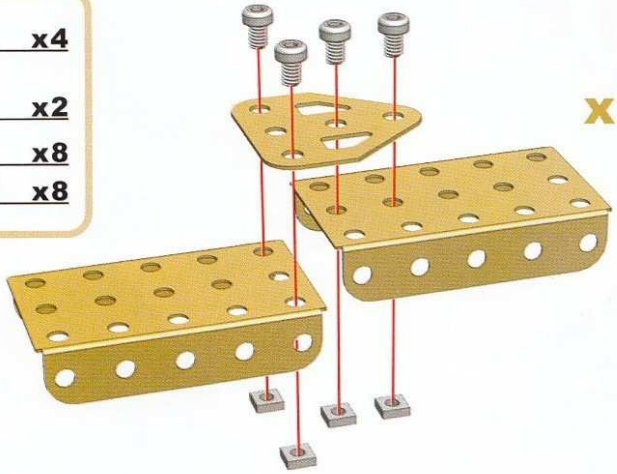
8


x1
x1
x1
5,8 mm
15/64"
x3
x1
x3



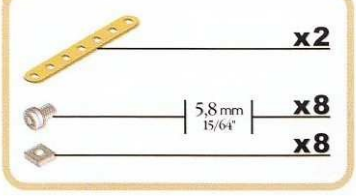
9

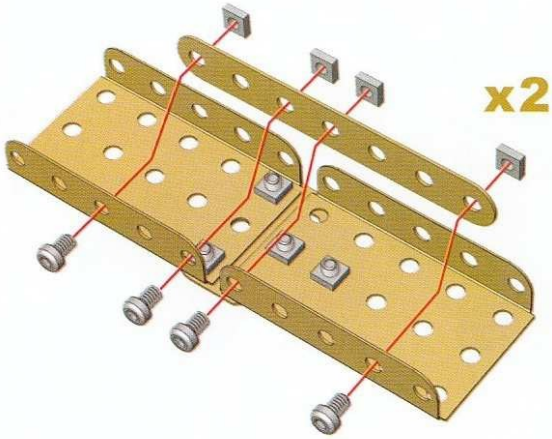

x4
x2
5,8 mm
15/64"
x8
x8



x2=

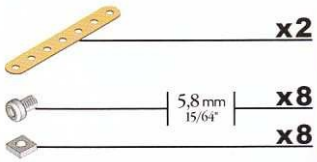
10

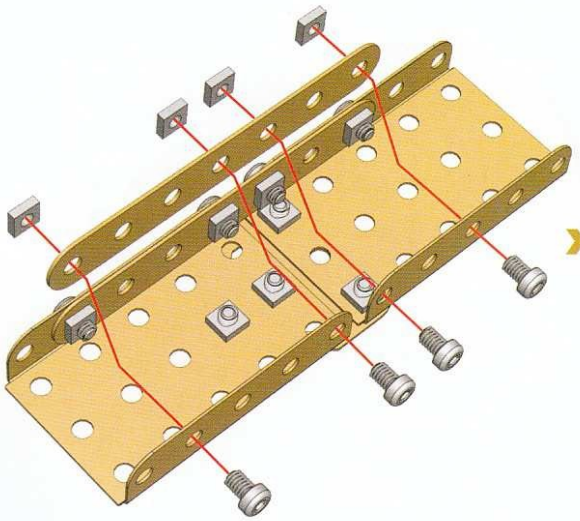

x2
5,8 mm
15/64"
x8
x8



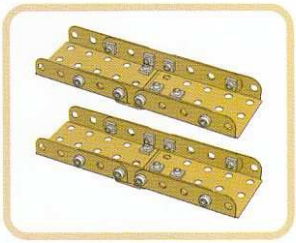
x2=

11

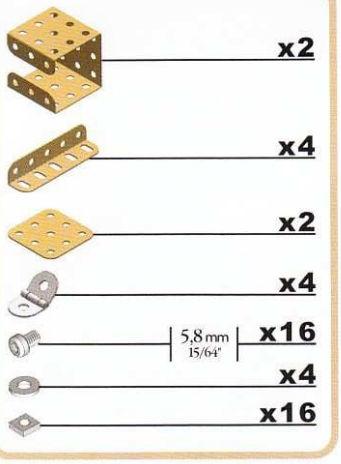


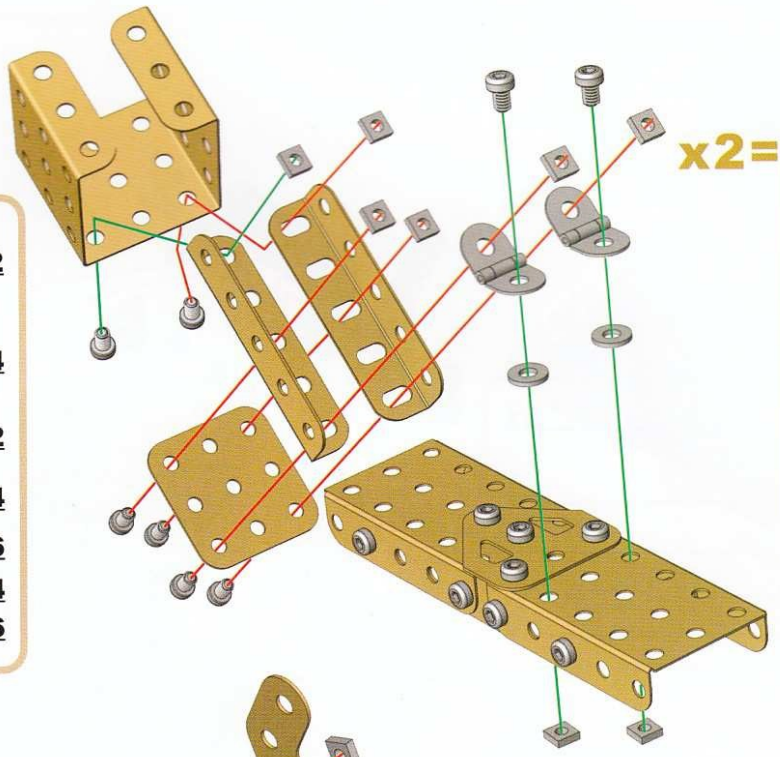


x2=

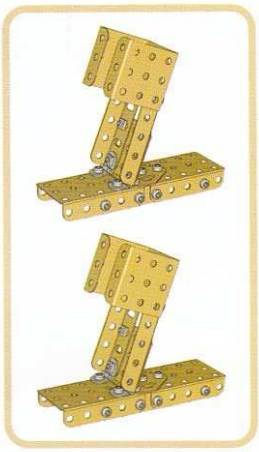


12

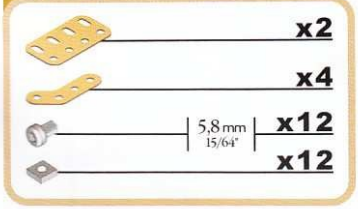


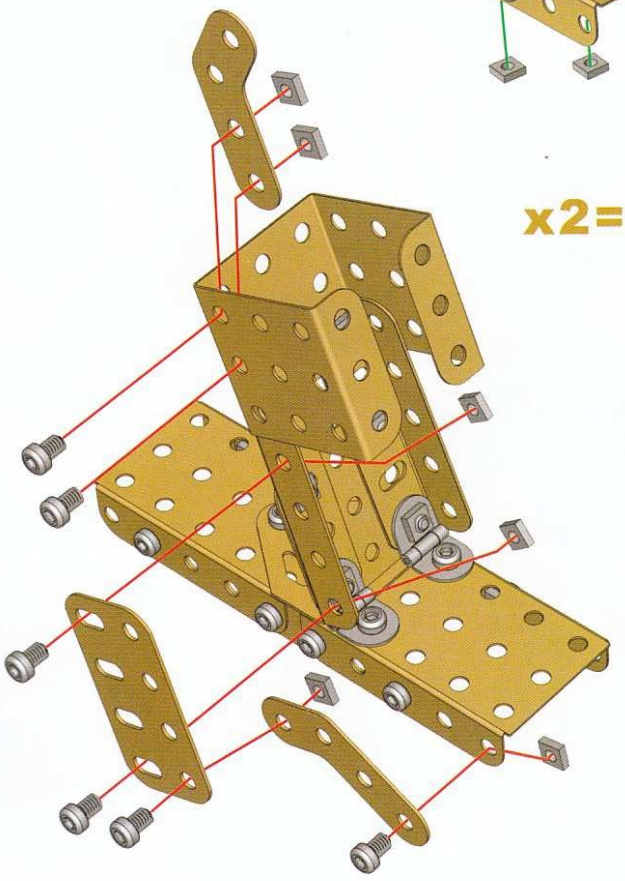


x2=

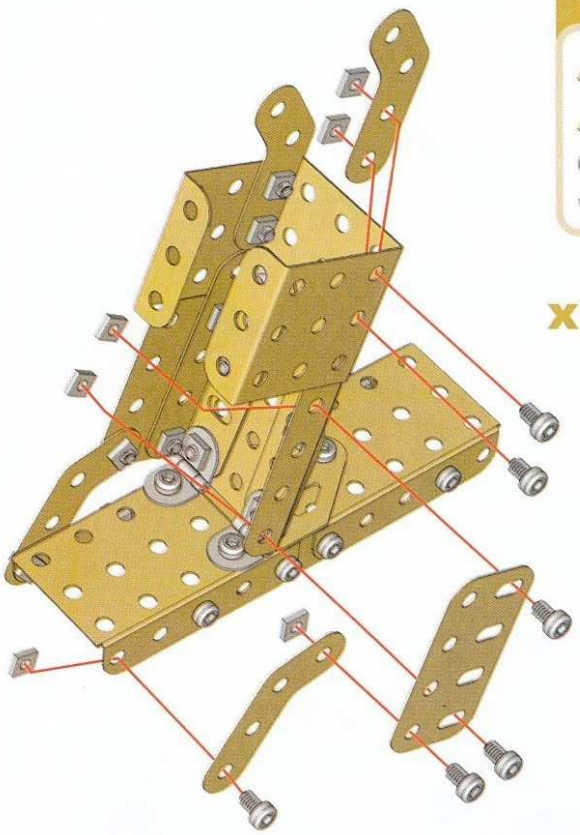


13

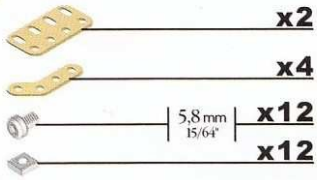




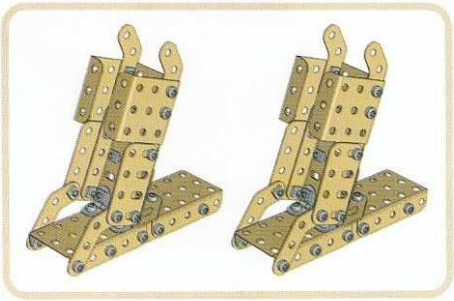
x2=

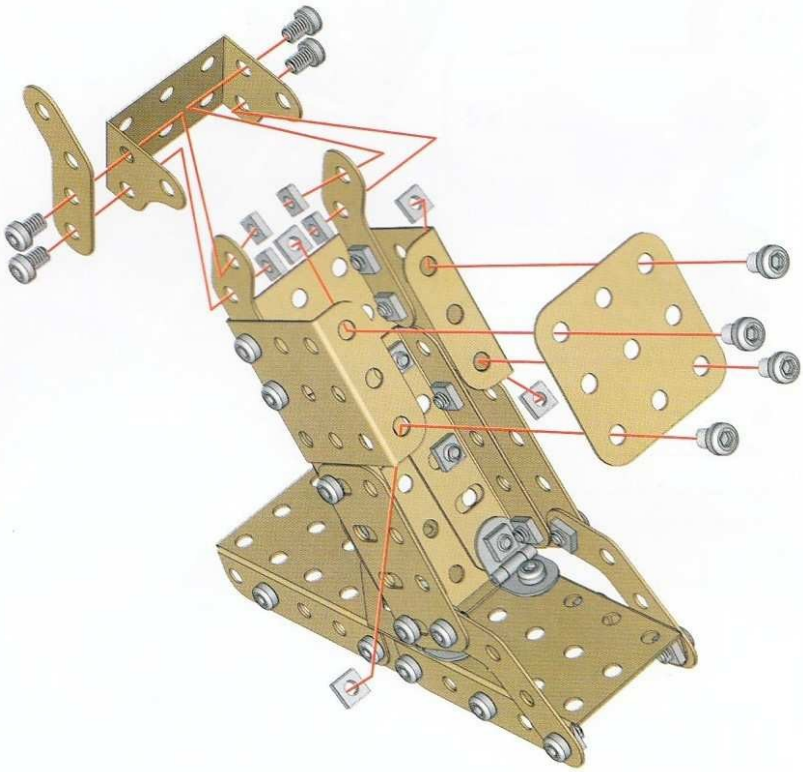


14

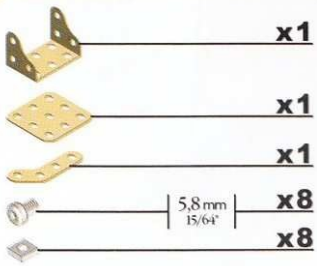

x2
x4
5,8 mm 15/64"
x12
x12

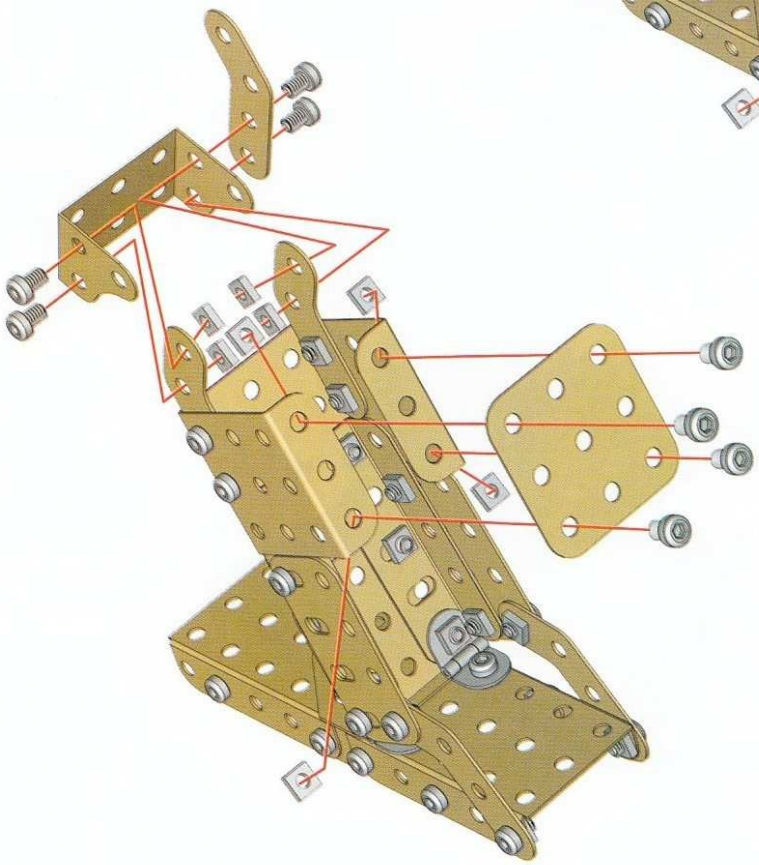
x2=



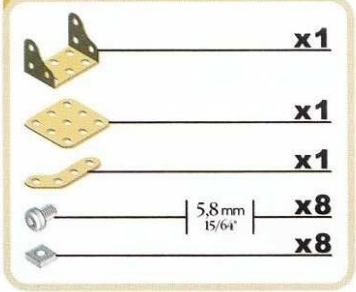


15


x1
x1
x1
5,8 mm 15/64"
x8
x8

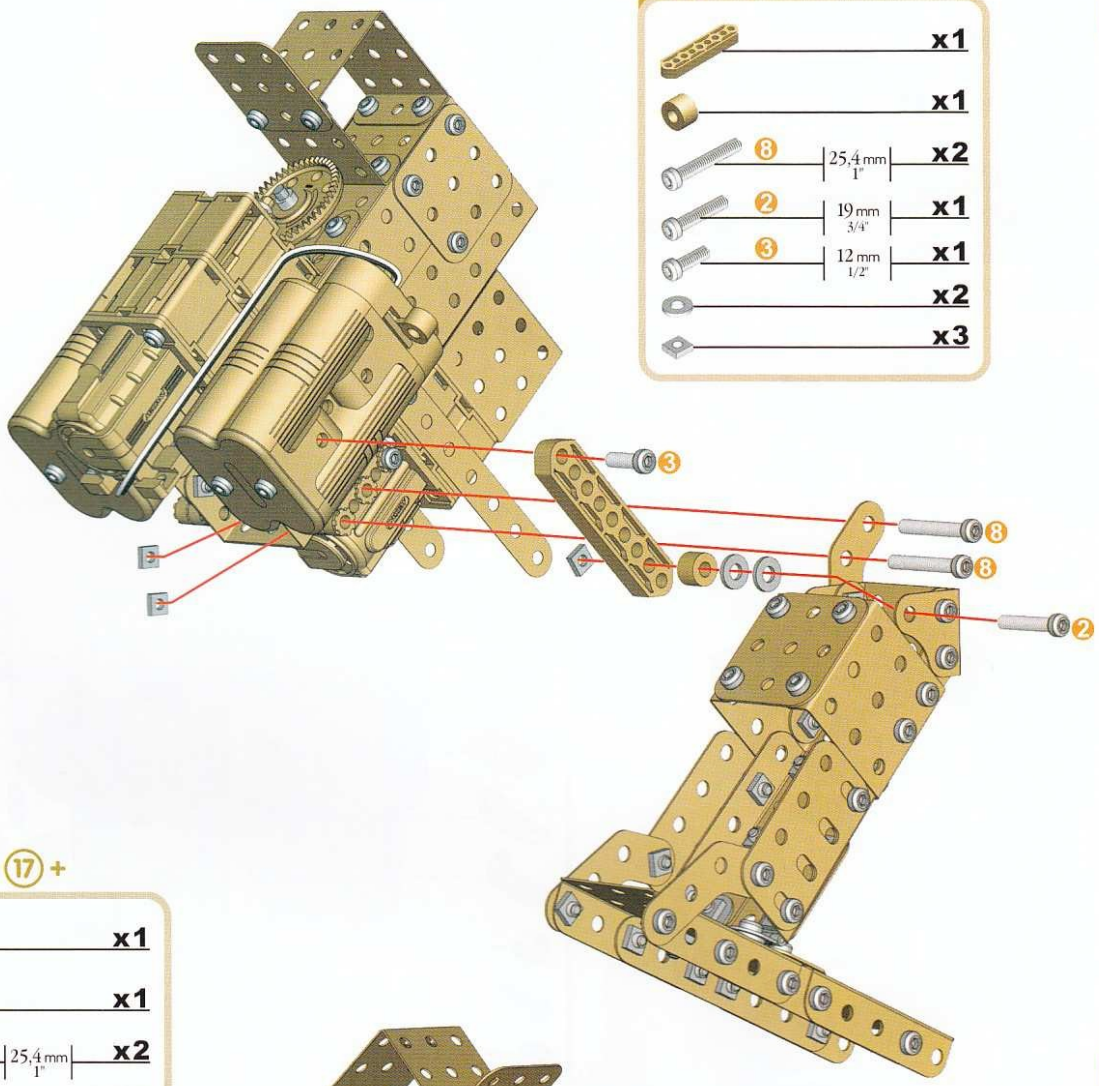


16


x1
x1
x1
5,8 mm 15/64"
x8
x8

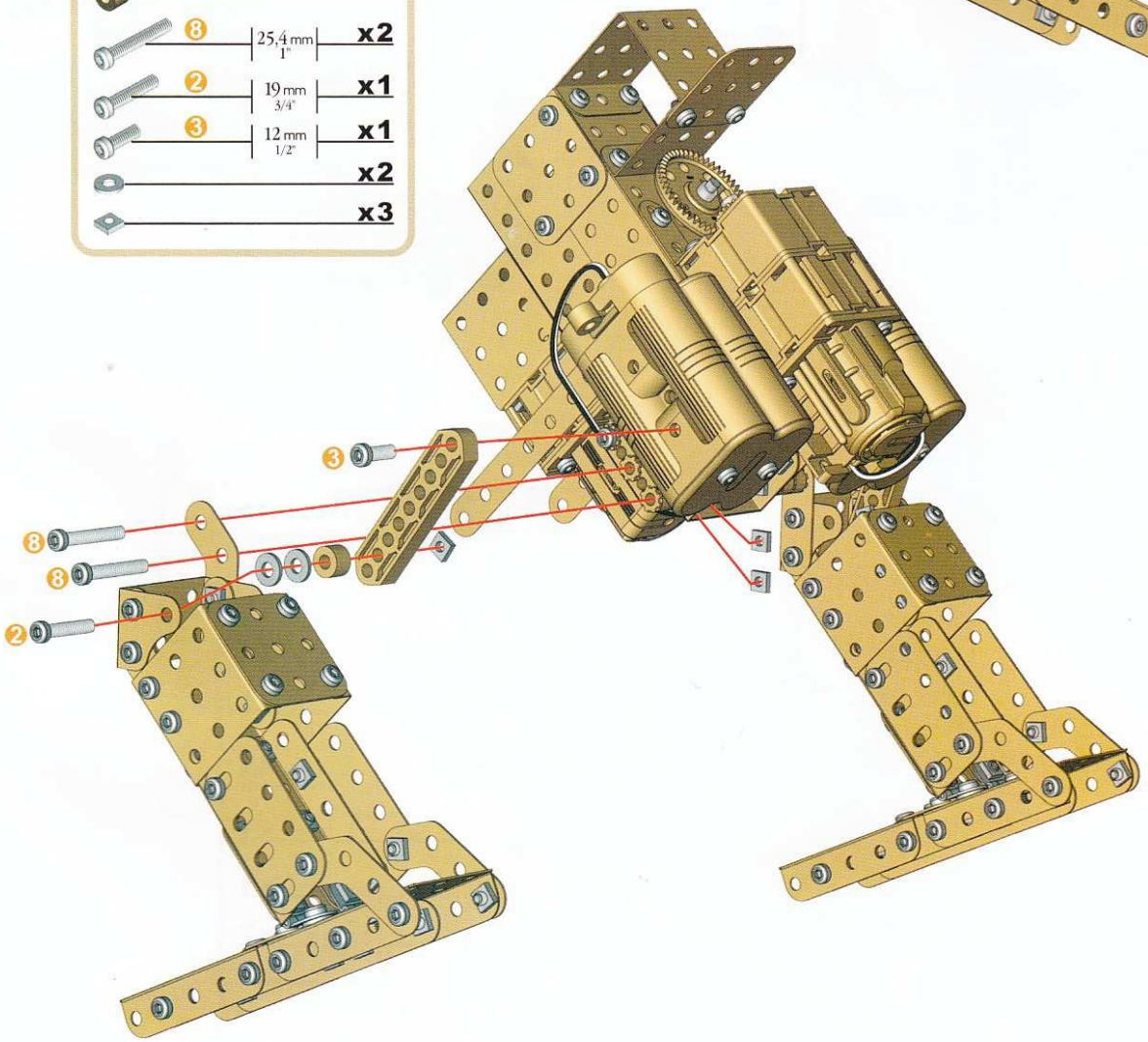
17 ⑧ + ⑮ +

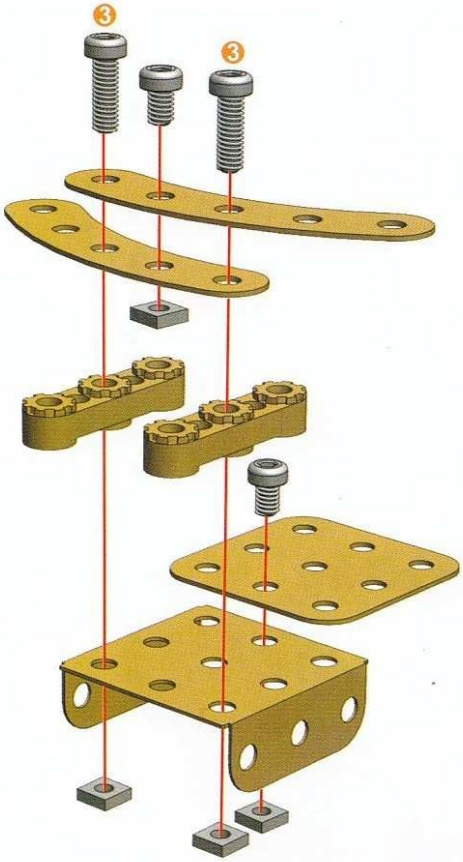
- x1
- x1
- ⑧ 25,4 mm 1" x2
- ② 19 mm 3/4" x1
- ③ 12 mm 1/2" x1
- x2
- x3



18 ⑯ + ⑰ +

- x1
- x1
- ⑧ 25,4 mm 1" x2
- ② 19 mm 3/4" x1
- ③ 12 mm 1/2" x1
- x2
- x3



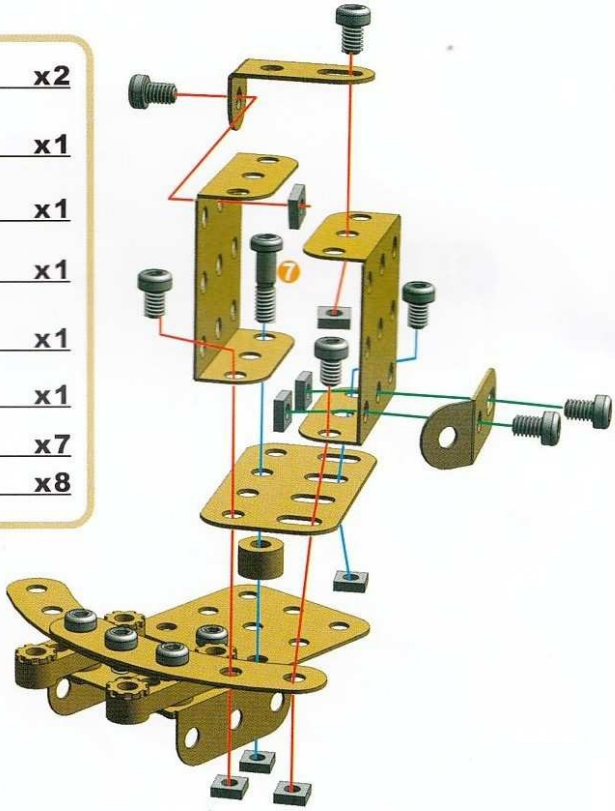


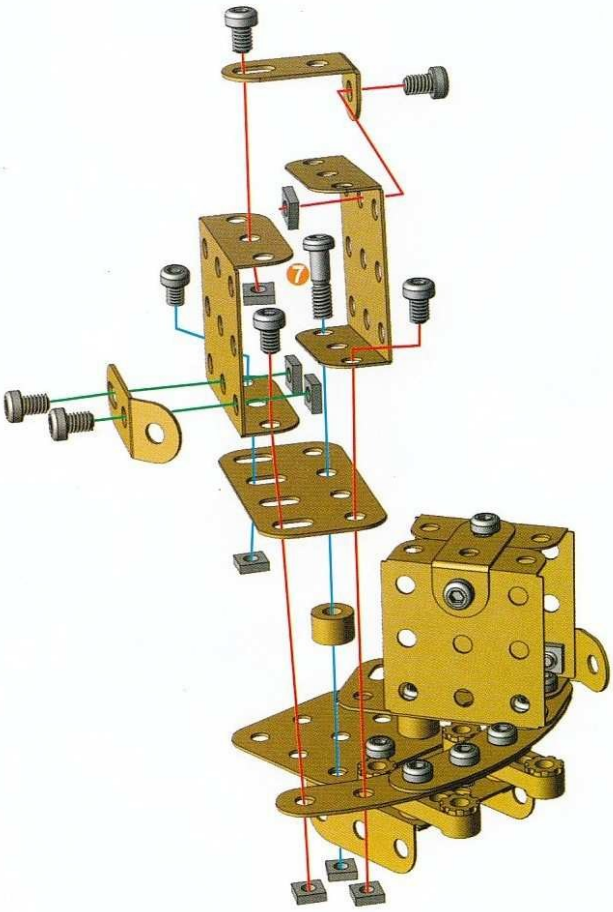
19

- x2
- x1
- x1
- x2
- 3 — 12 mm 1/2" — x2
- 5,8 mm 15/64" — x2
- x4

20

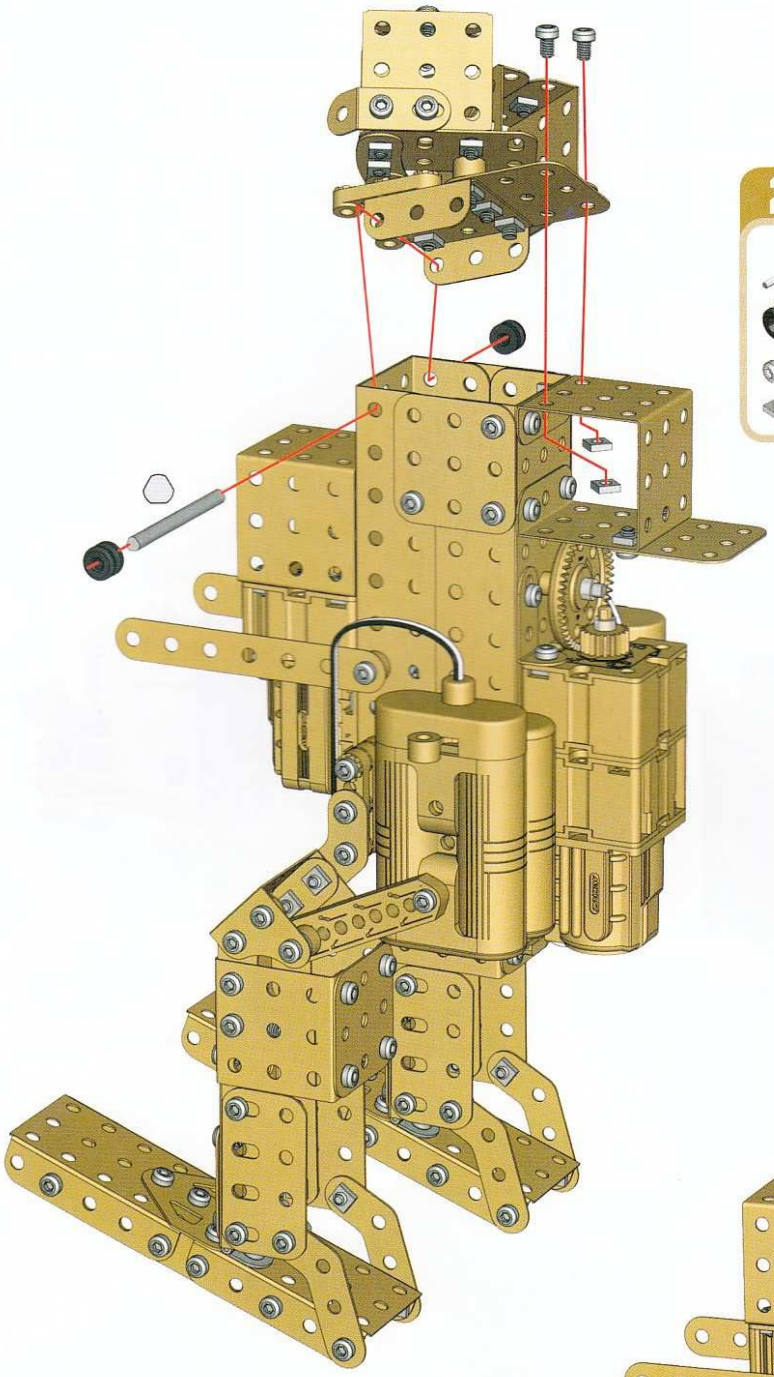
- x2
- x1
- x1
- x1
- x1
- 7 — 14,7 mm 37/64" — x1
- 5,8 mm 15/64" — x7
- x8





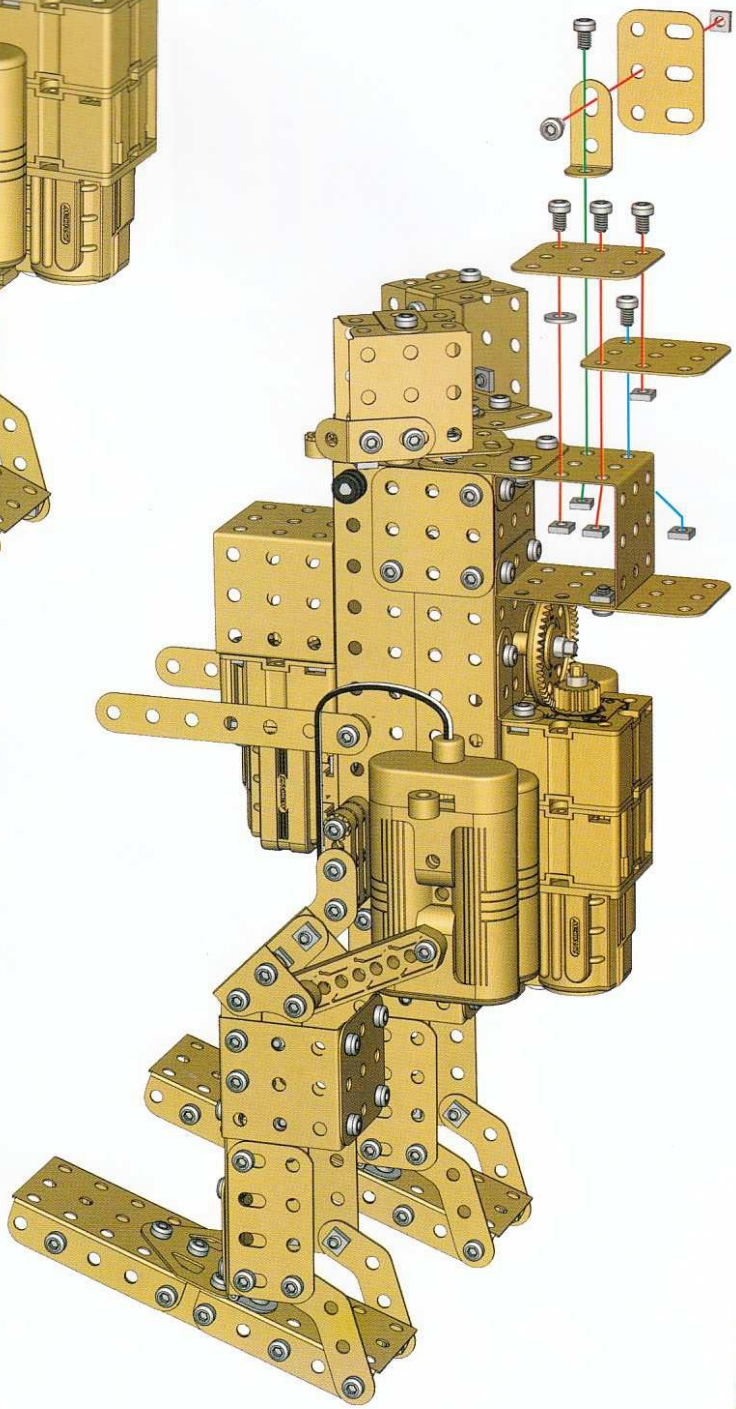
21

- x2
- x1
- x1
- x1
- x1
- 7 — 14,7 mm 37/64" — x1
- 5,8 mm 15/64" — x7
- x8



22 ⑱ + ㉑ +

- 50 mm / 2" — x1
- x2
- 5,8 mm / 15/64" — x2
- x2



23

- x2
- x1
- x1
- 5,8 mm / 15/64" — x6
- x6
- x1

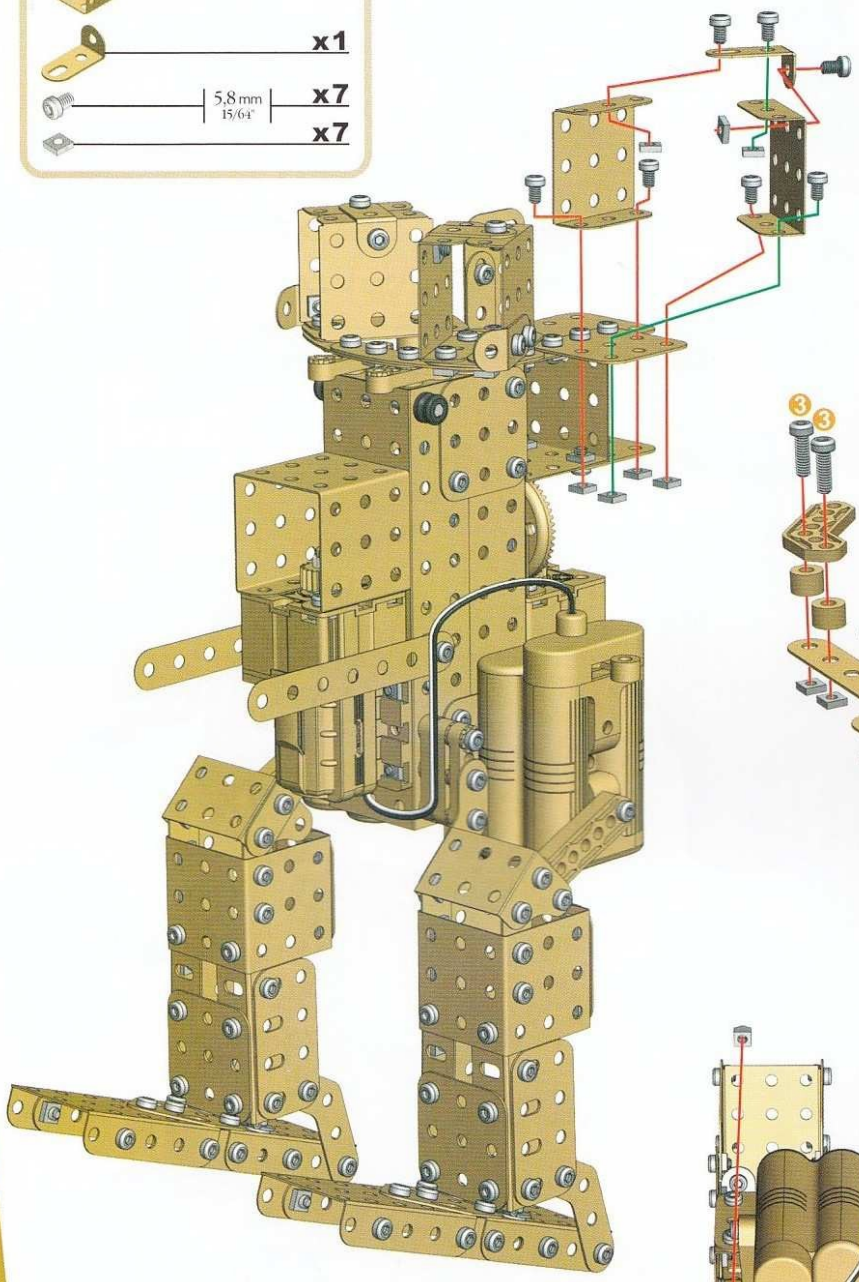
24

x2

x1

5,8 mm 15/64" x7

x7



25

60 mm 2 1/2" x1

x2

x2

x1

x2

x2

x4

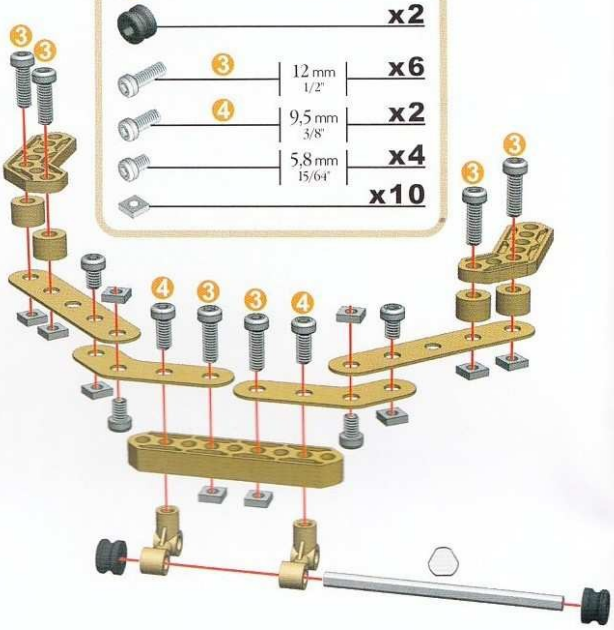
x2

3 12 mm 1/2" x6

4 9,5 mm 3/8" x2

5,8 mm 15/64" x4

x10

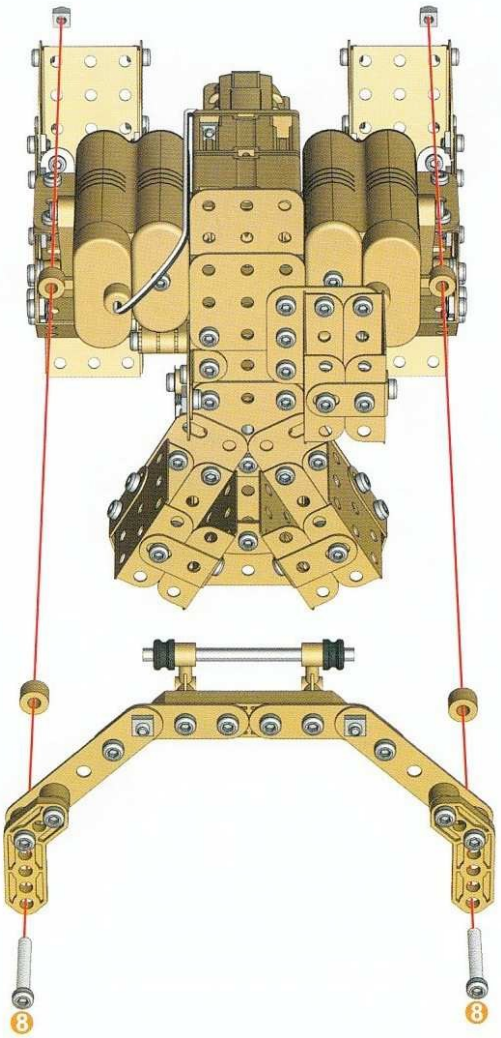


26 (24) + (25) +

x2

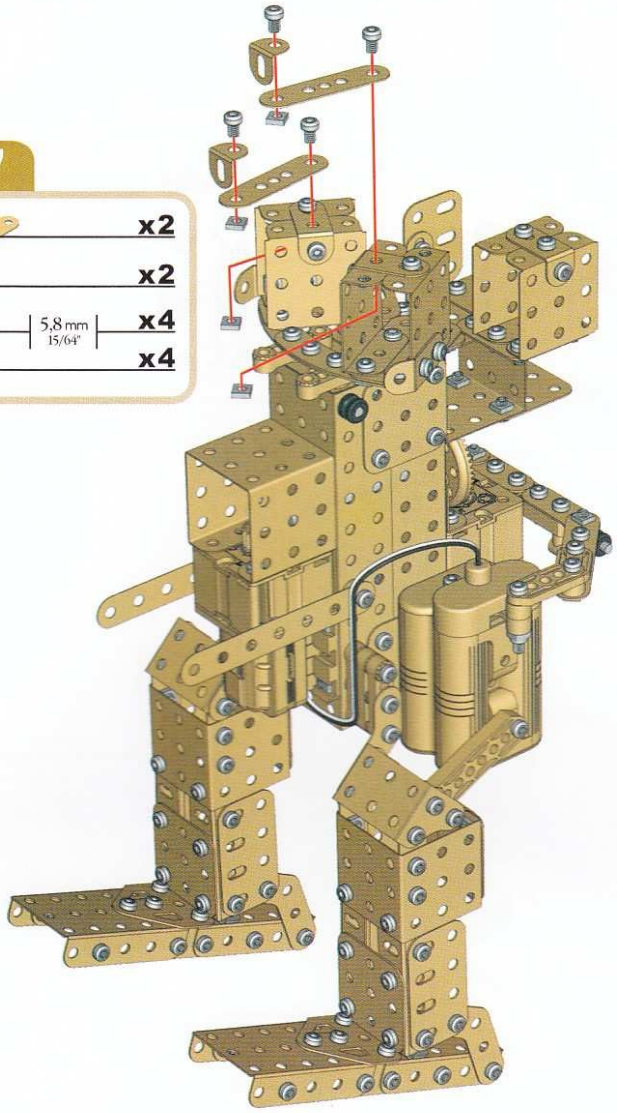
8 25,4 mm 1" x2

x2



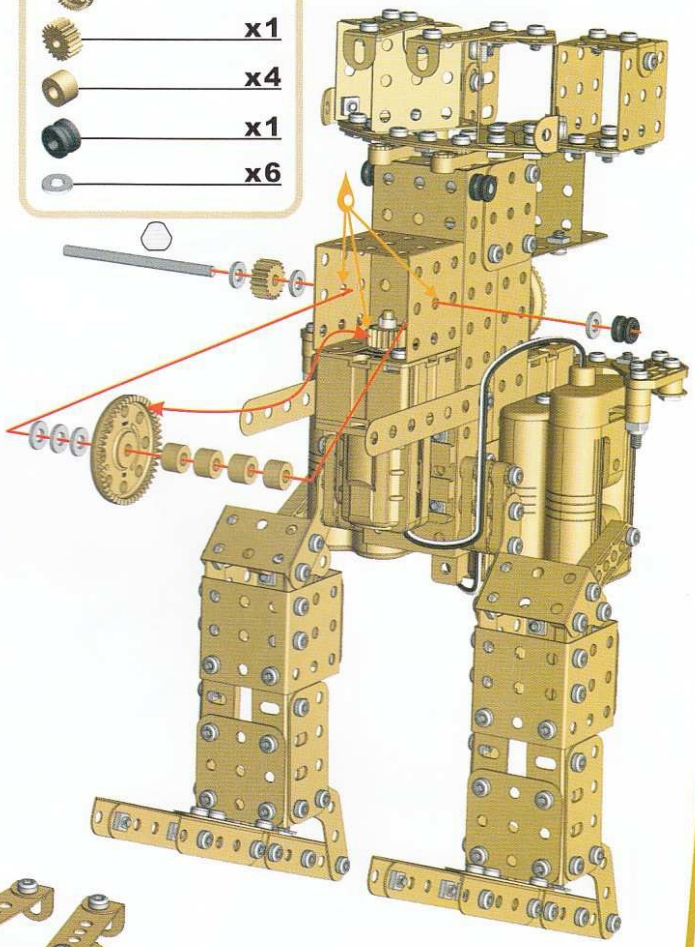
27

- x2
- x2
- 5,8 mm 15/64" — x4
- x4



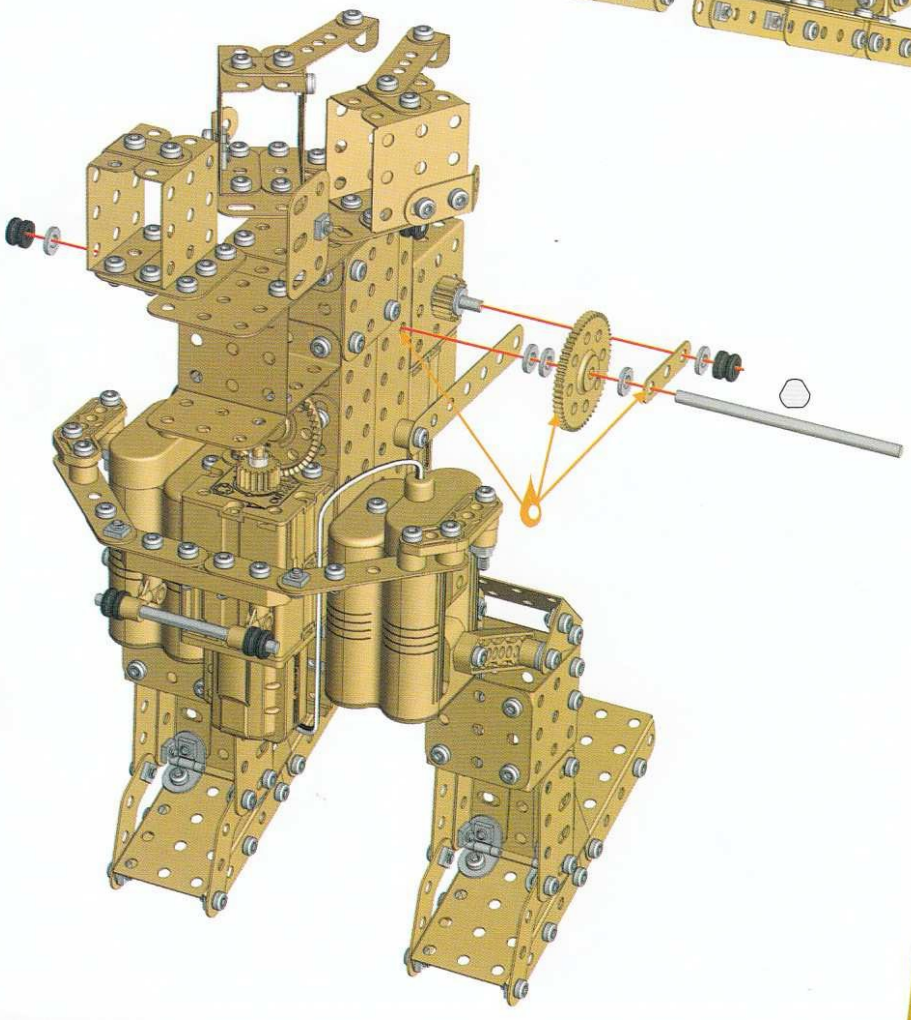
28

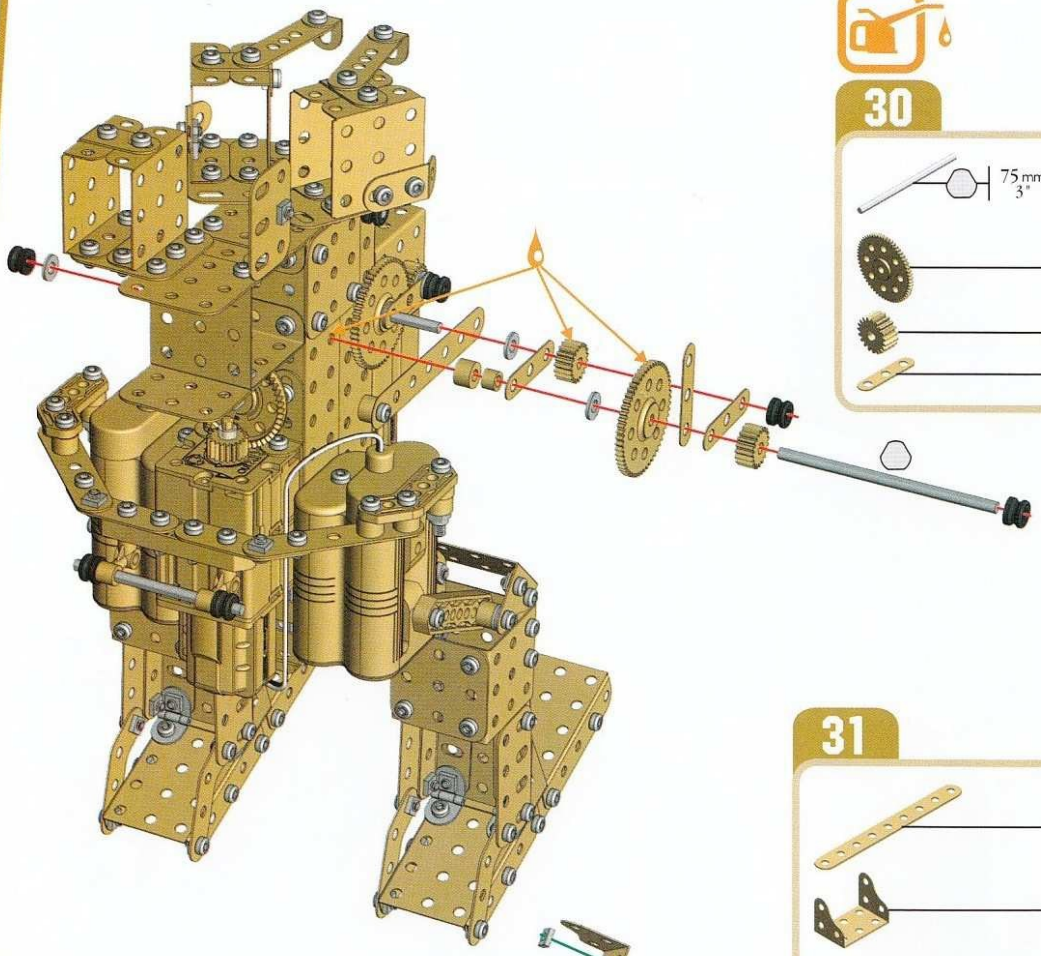
- 60 mm 2 1/2" — x1
- x1
- x1
- x4
- x1
- x6



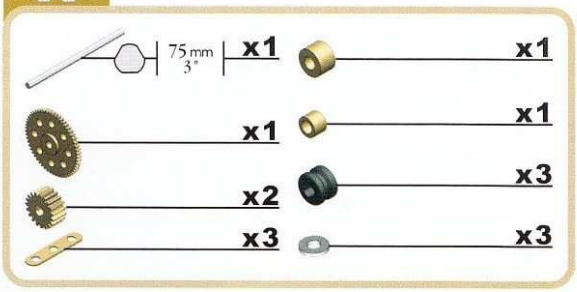
29

- 75 mm 3" — x1
- x1
- x1
- x2
- x5

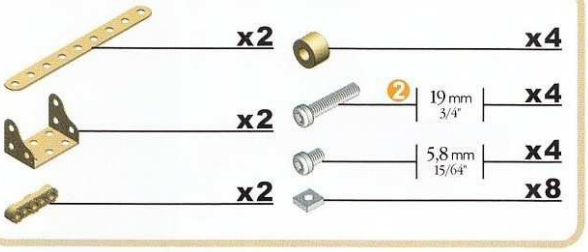


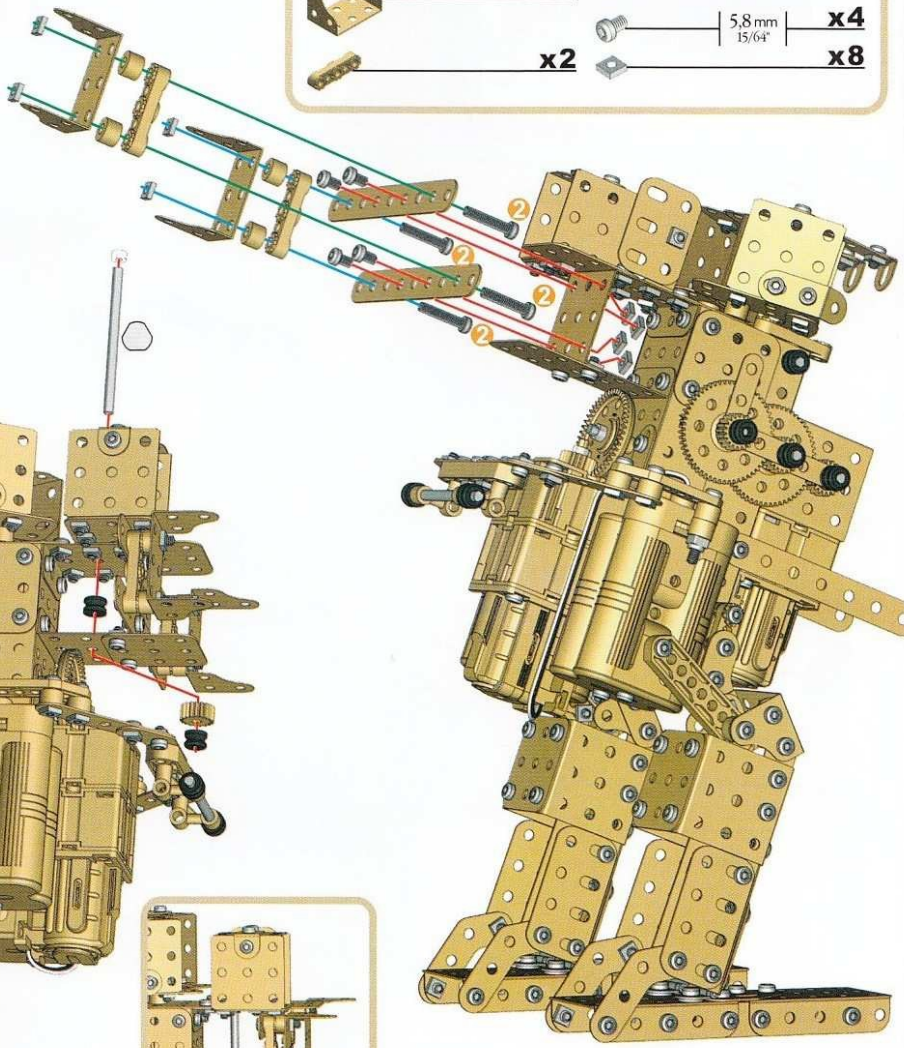


30

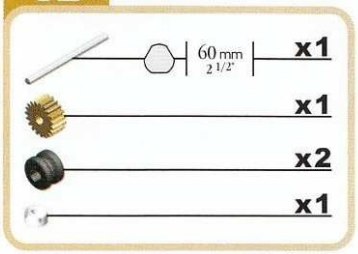

75 mm
3"
x1
x1
x1
x1
x2
x3
x3

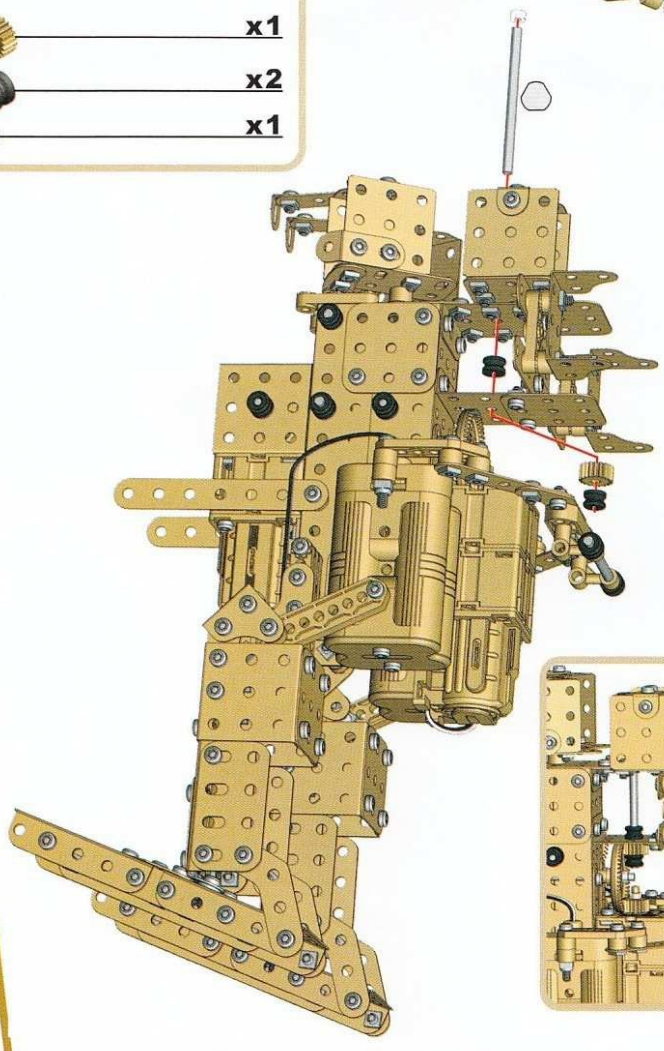
31

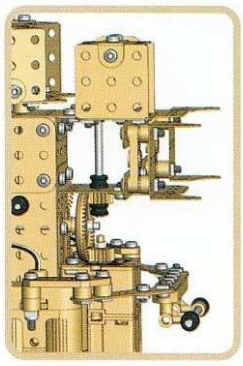

x2
x4
x2
19 mm
3/4"
x4
5,8 mm
15/64"
x4
x2
x8



32

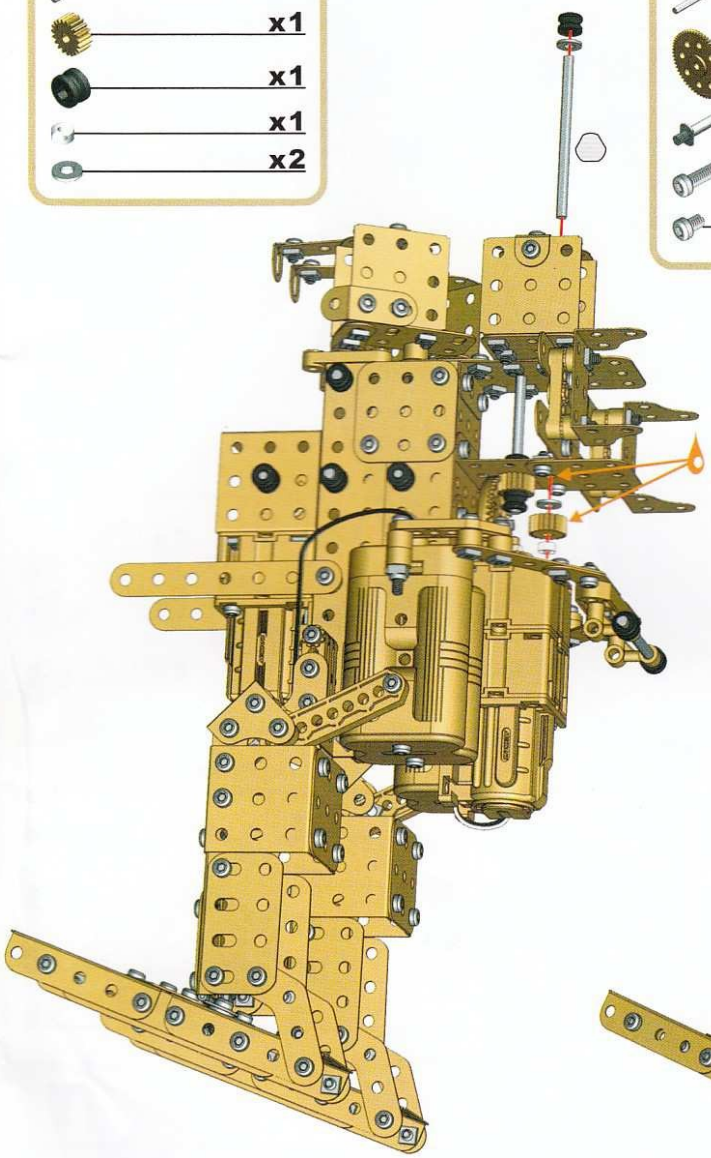

60 mm
2 1/2"
x1
x1
x2
x1





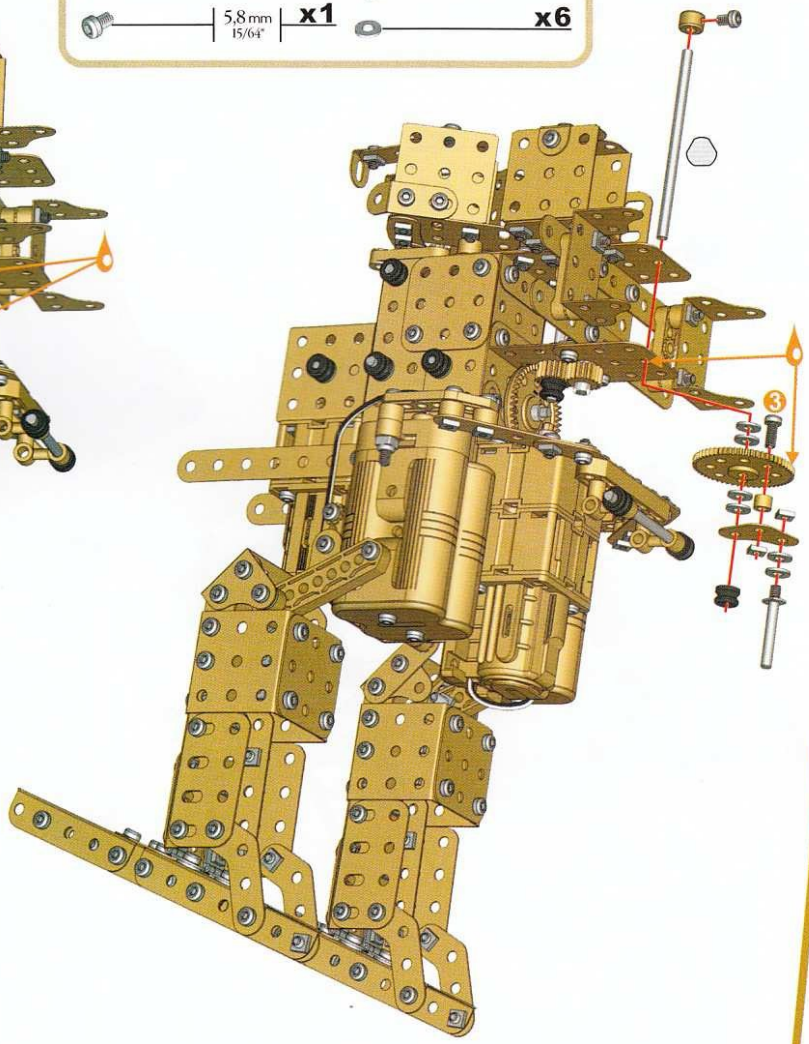
33

- 60 mm / 2 1/2" — x1
- x1
- x1
- x1
- x2



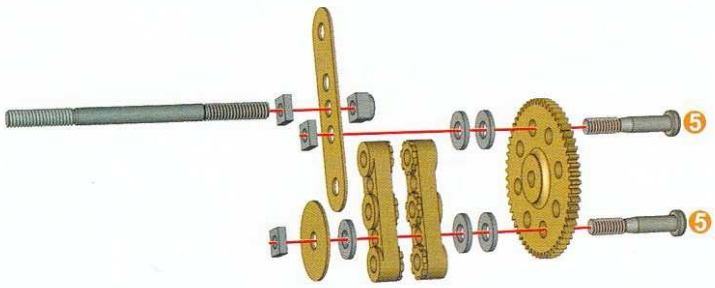
34

- 75 mm / 3" — x1
- x1
- x1
- x1
- ③ 12 mm / 1/2" — x1
- 5,8 mm / 15/64" — x1
- x1
- x1
- x1
- x2
- x6



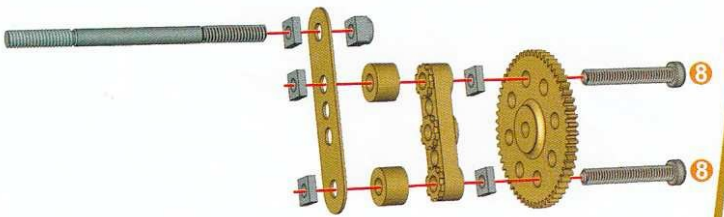
35

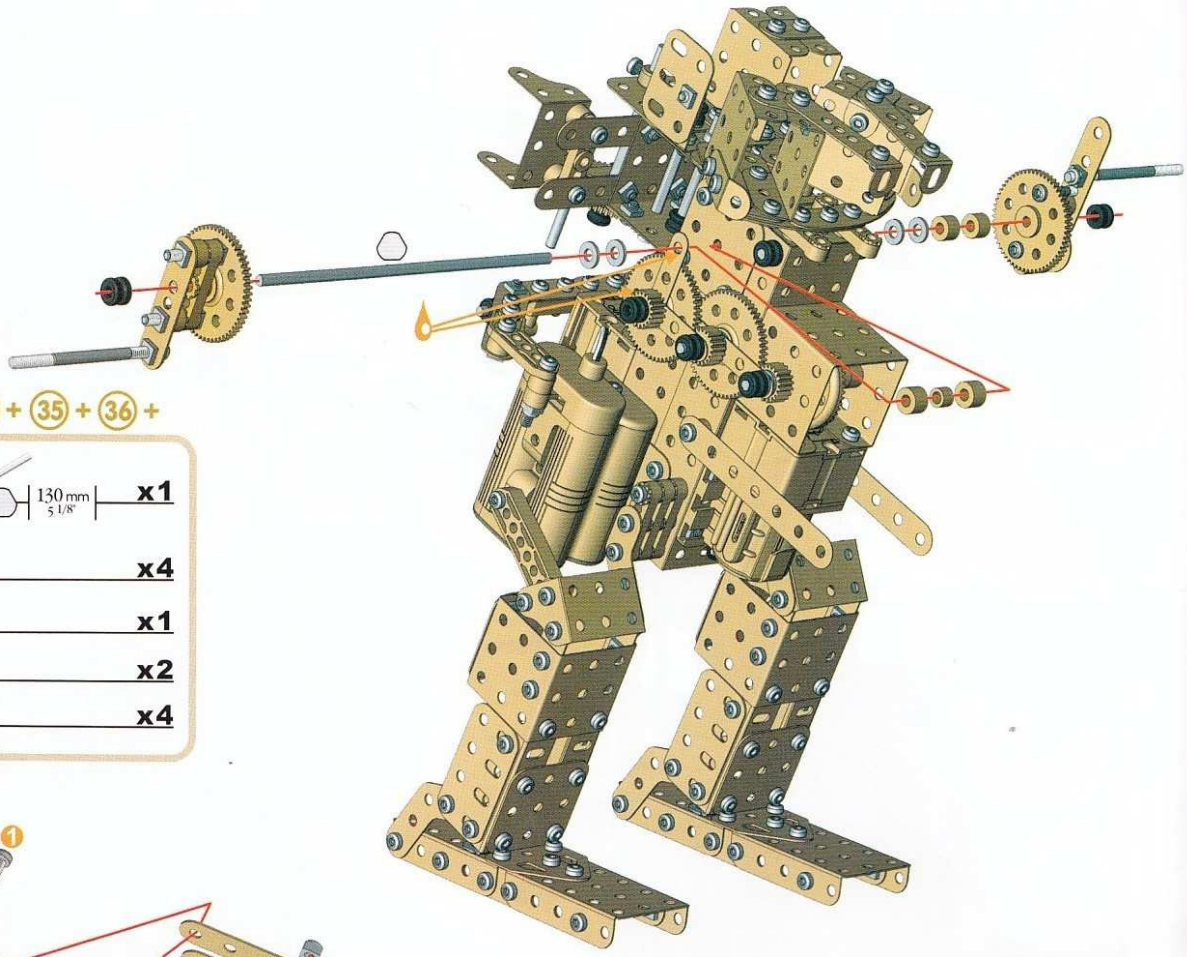
- x1
- x1
- x1
- x2
- x1
- ⑤ 23 mm / 29/32" — x2
- x1
- x3
- x5



36

- x1
- x1
- x1
- x1
- x2
- ⑧ 25,4 mm / 1" — x2
- x1
- x5

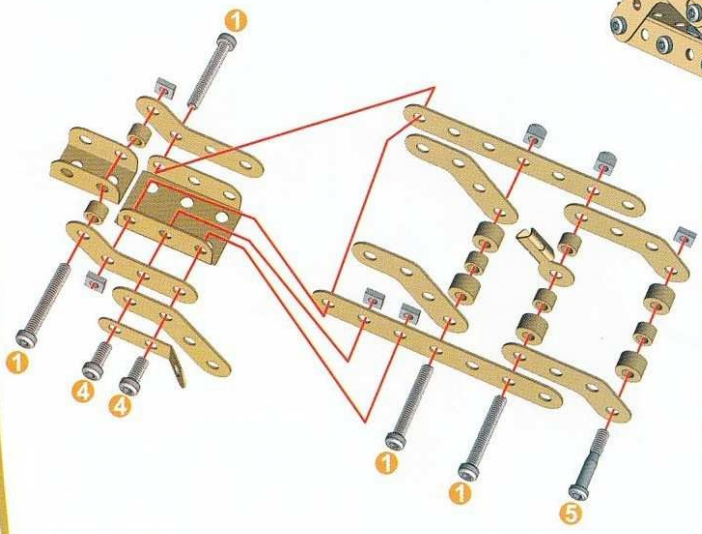




37

34 + 35 + 36 +

- 130 mm / 5 1/8" — x1
- x4
- x1
- x2
- x4

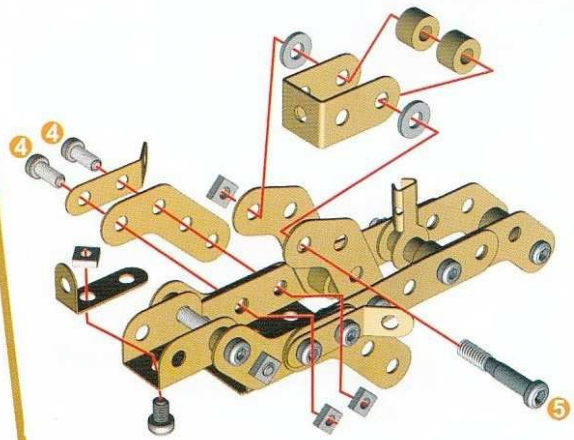


38

- x2
- x1
- x1
- x7
- x1
- x1
- x5
- x6
- x2
- 1 — 28 mm / 1 1/8" — x4
- 5 — 23 mm / 29/32" — x1
- 4 — 9,5 mm / 3/8" — x2
- x5

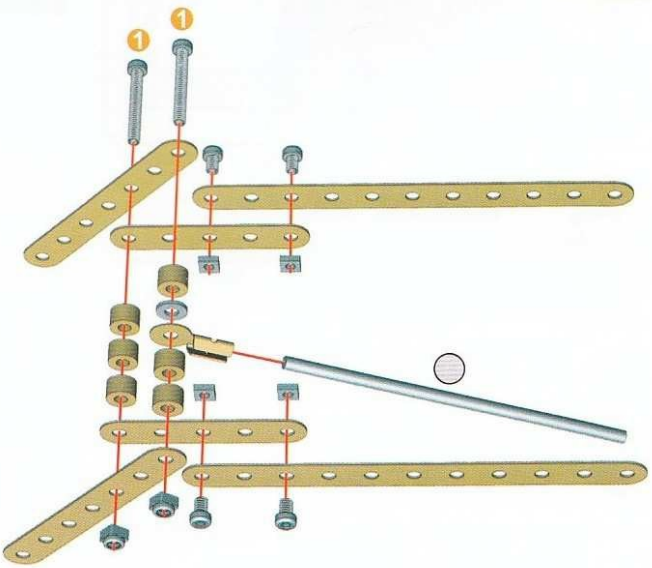
39

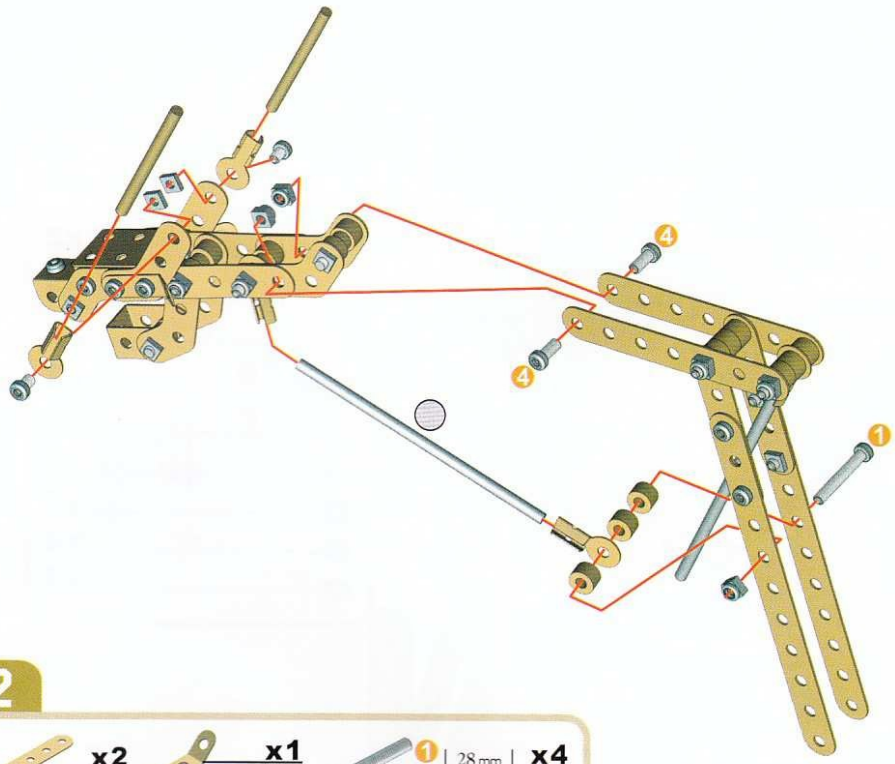
- x1
- x1
- x1
- x1
- x2
- 5 — 23 mm / 29/32" — x1
- 4 — 9,5 mm / 3/8" — x2
- 5,8 mm / 15/64" — x1
- x4
- x2



40

- x2
- x2
- x2
- x1
- 115 mm / 4 1/2" — x1
- 1 — 28 mm / 1 1/8" — x2
- 5,8 mm / 15/64" — x4
- x6
- x2
- x4
- x1



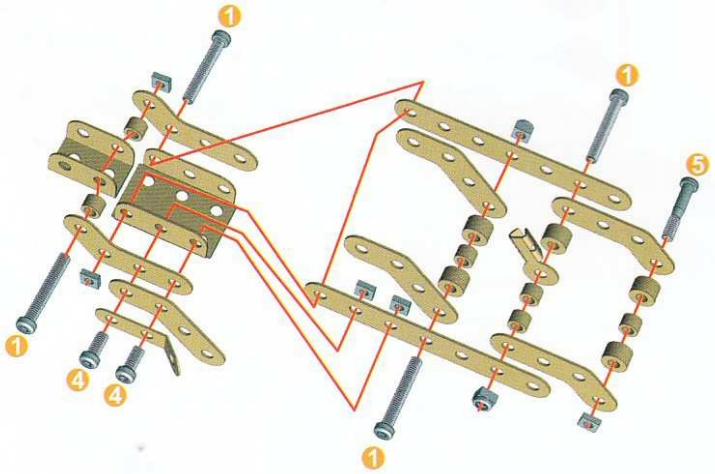


41 (39) + (40) +

- x1 — 100 mm / 4"
- x2 — 50 mm / 2"
- x3
- x3
- (1) x1 — 28 mm / 1 1/8"
- (4) x2 — 9,5 mm / 3/8"
- x2 — 5,8 mm
- x3
- x2

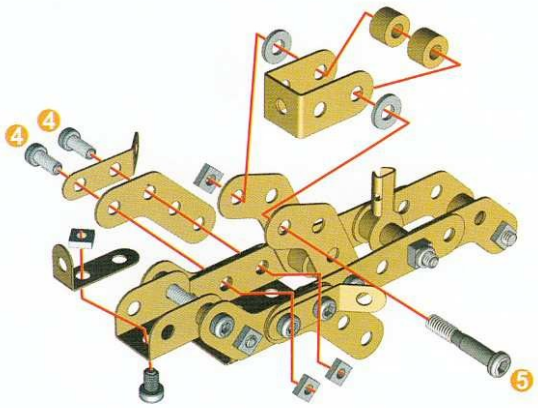
42

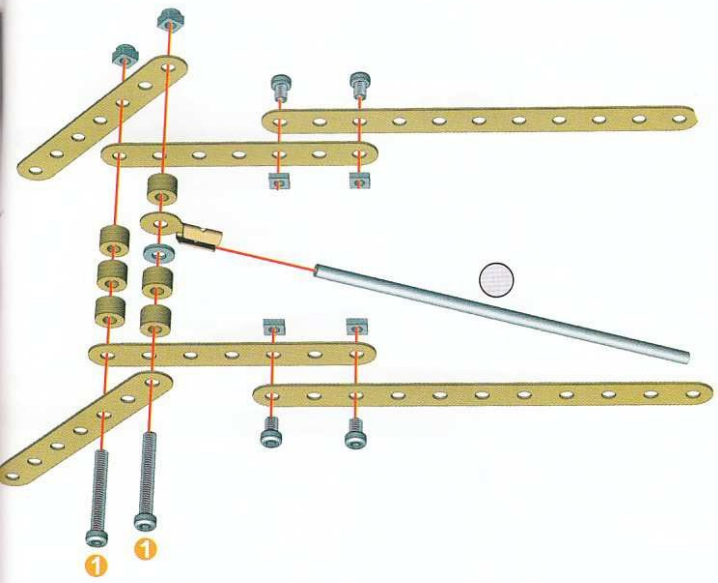
- x2
- x1
- x1
- x7
- x1
- x1
- x5
- x6
- x2
- (1) x4 — 28 mm / 1 1/8"
- (5) x1 — 23 mm / 29/32"
- (4) x2 — 9,5 mm / 3/8"
- x5



43

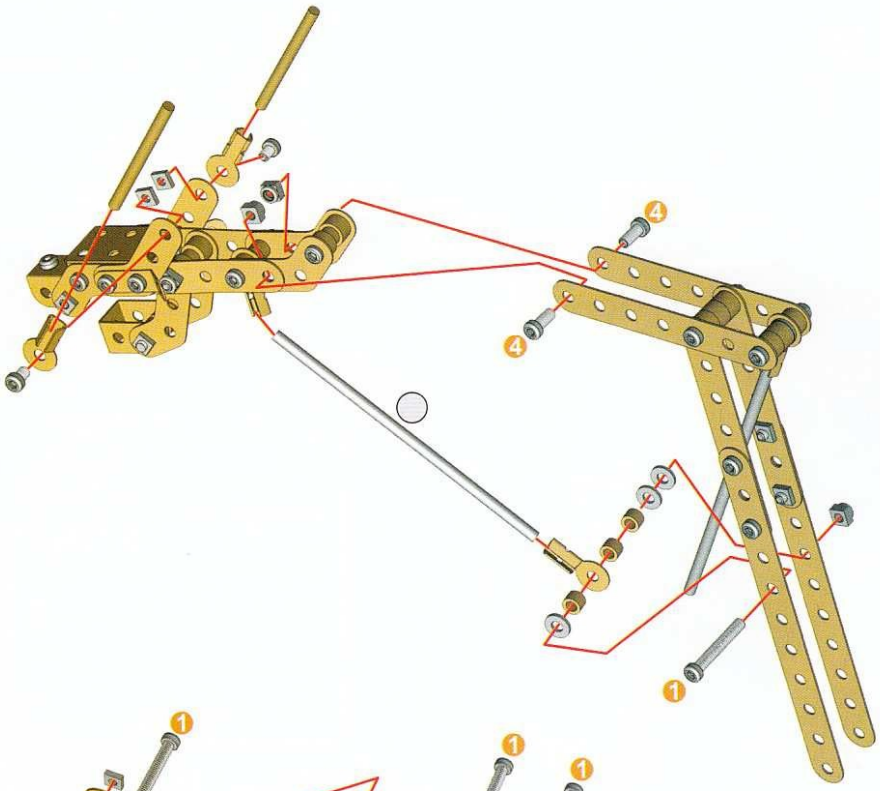
- x1
- x1
- x1
- x1
- x2
- (5) x1 — 23 mm / 29/32"
- (4) x2 — 9,5 mm / 3/8"
- x1 — 5,8 mm / 15/64"
- x4
- x2





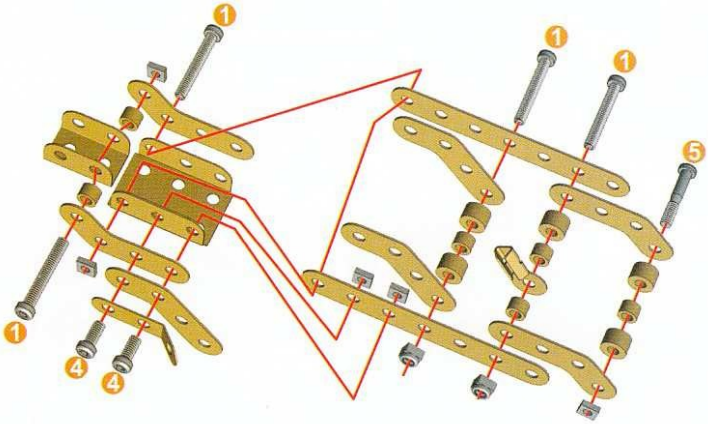
44

- x2
- x4
- x1
- x6
- x2
- x1 — 130 mm / 5 1/8"
- (1) x2 — 28 mm / 1 1/8"
- x4 — 5,8 mm / 15/64"
- x4
- x1



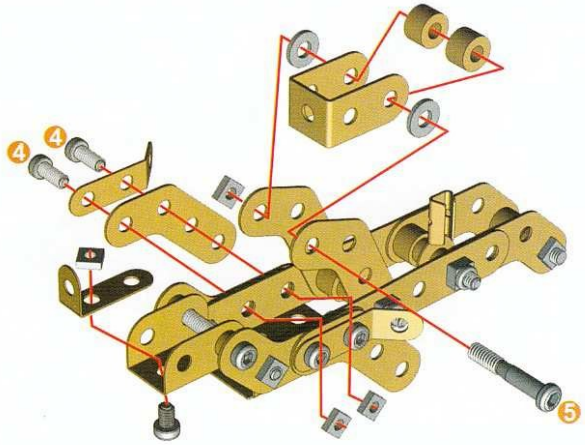
45 (43) + (44) +

115 mm 4 1/2"	x1
50 mm 2"	x2
	x3
	x3
28 mm 1 1/8"	x1
9,5 mm 3/8"	x2
5,8 mm	x2
	x3
	x2
	x3



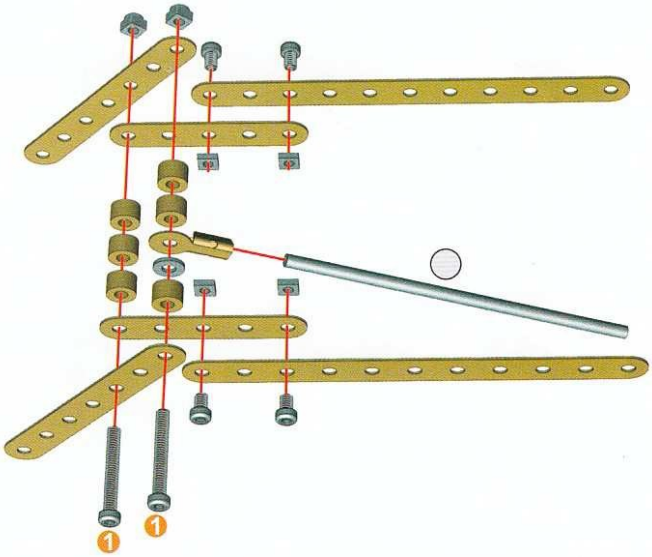
46

x2	x1	28 mm 1 1/8" x4
x1	x1	23 mm 29/32" x1
x1	x5	9,5 mm 3/8" x2
x7	x6	x5
	x2	



47

x1	23 mm 29/32"	x1
x1	9,5 mm 3/8"	x2
x1	5,8 mm 15/64"	x1
x1		x4
x2		x2

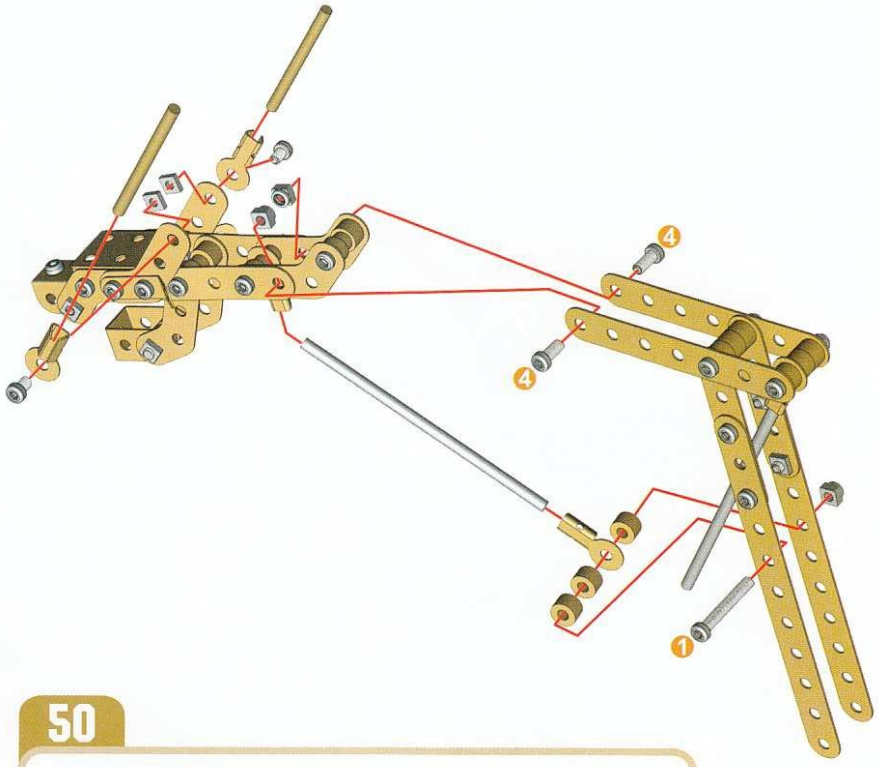


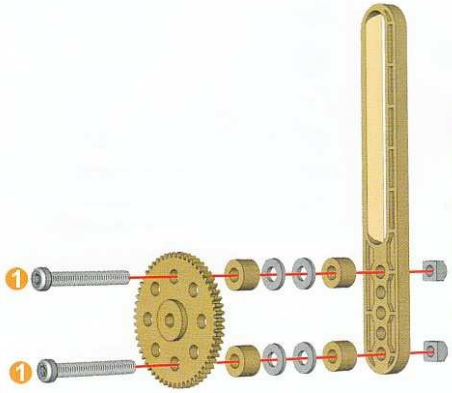
48

115 mm 4 1/2"	x1	x6
	x2	28 mm 1 1/8" x2
	x2	5,8 mm 15/64" x4
	x2	x2
	x1	x4
		x1

49 (47) + (48) +

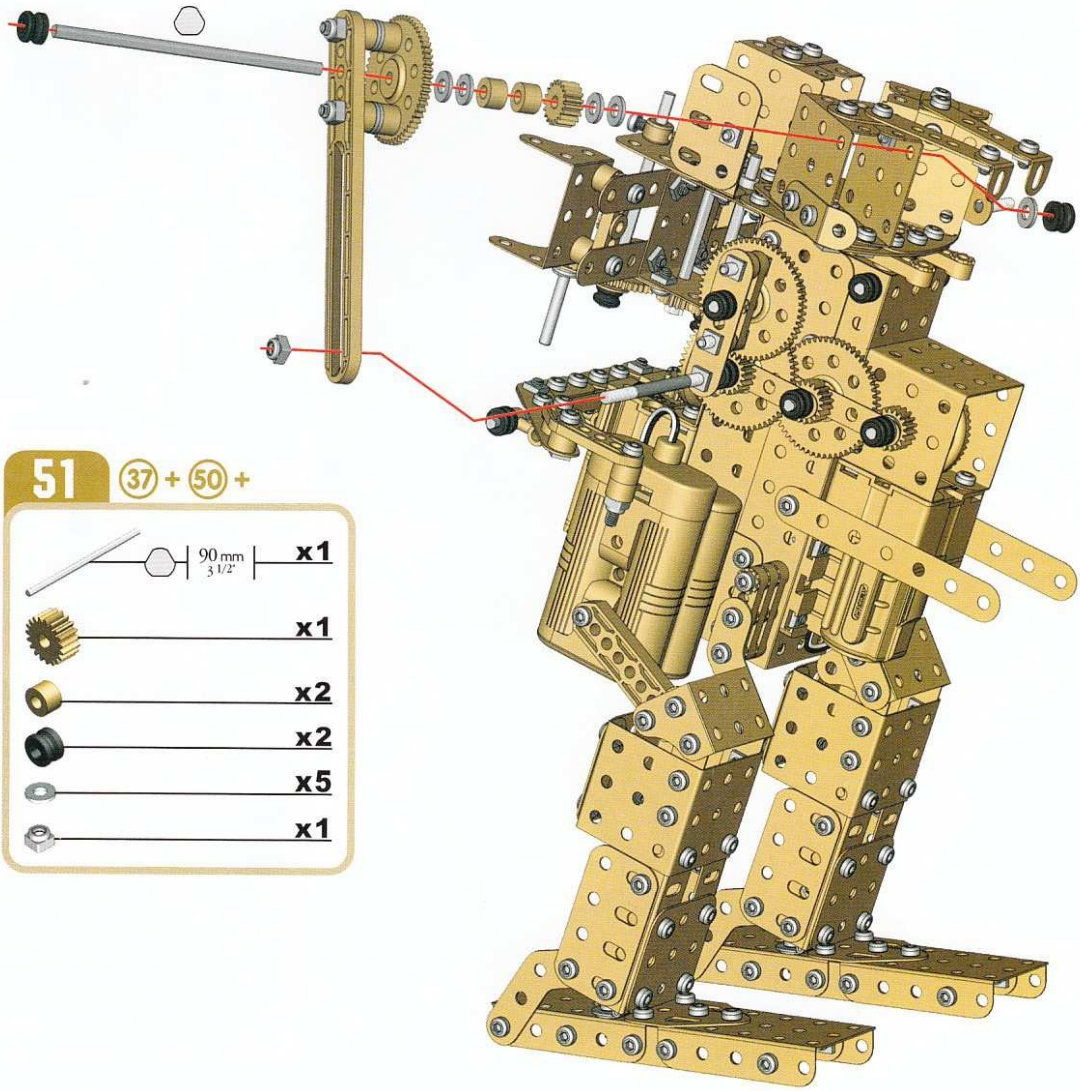
- 100 mm 4" — x1
- 50 mm 2" — x2
- x3
- x3
- 1 — 28 mm 1 1/8" — x1
- 4 — 9,5 mm 3/8" — x2
- 5,8 mm — x2
- x3
- x2





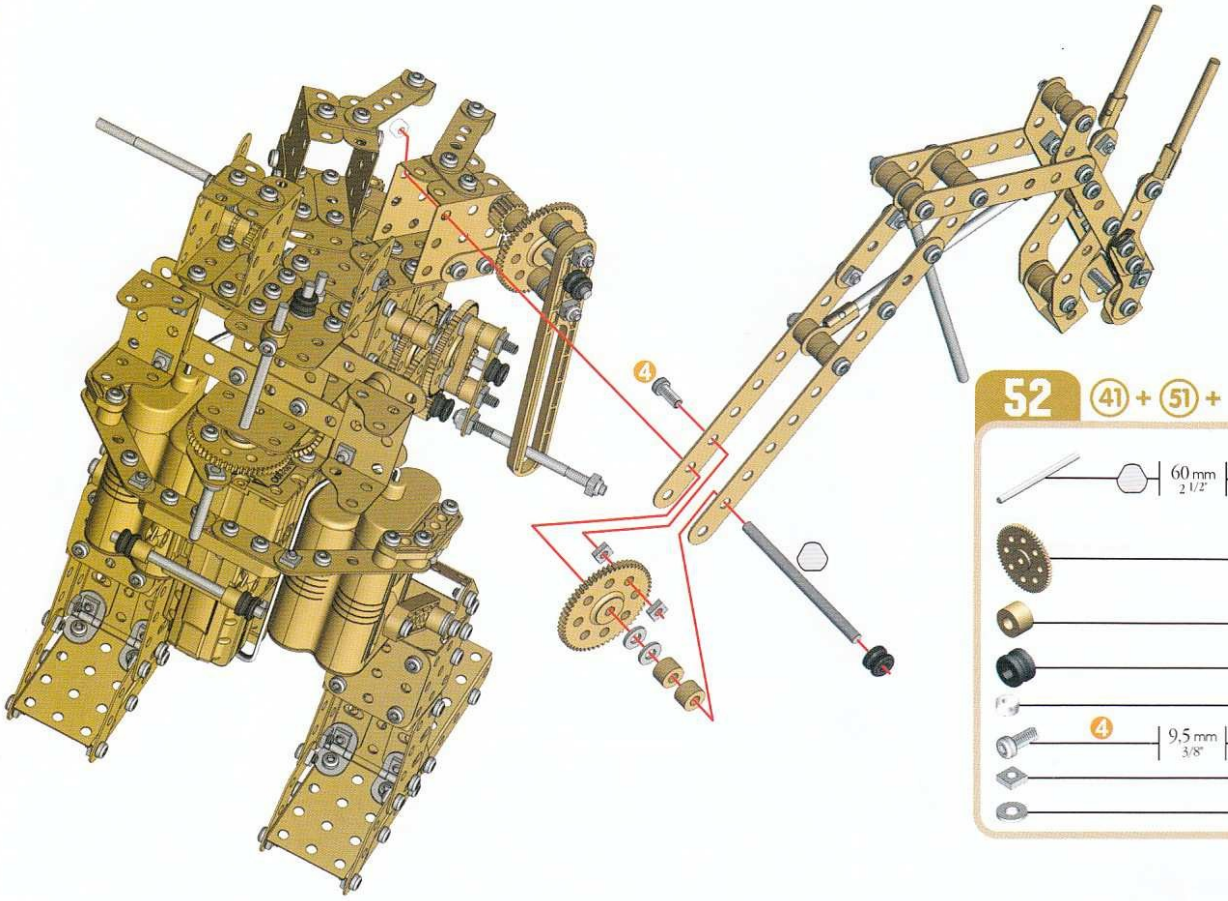
50

- B915 x1
- x1
- x4
- 1 — 28 mm 1 1/8" — x2
- x2
- x4



51 (37) + (50) +

- 90 mm 3 1/2" — x1
- x1
- x2
- x2
- x5
- x1



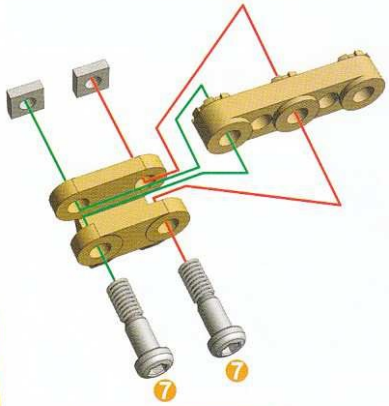
52

41 + 51 +

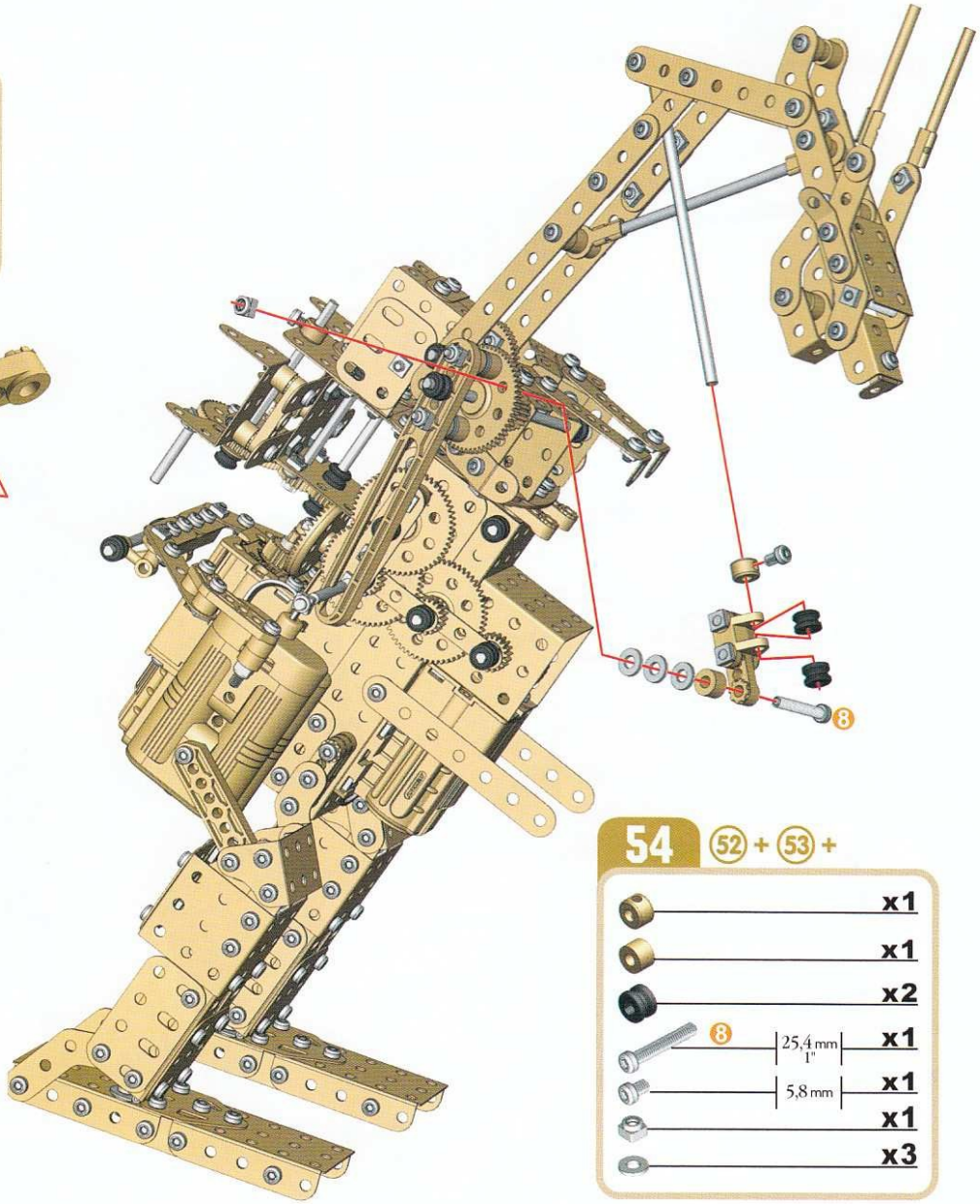
- 60 mm / 2 1/2" — x1
- x1
- x2
- x1
- x1
- 4 — 9,5 mm / 3/8" — x1
- x2
- x2

53

- x2
- x2
- 7 — 14,7 mm / 37/64" — x4
- x4



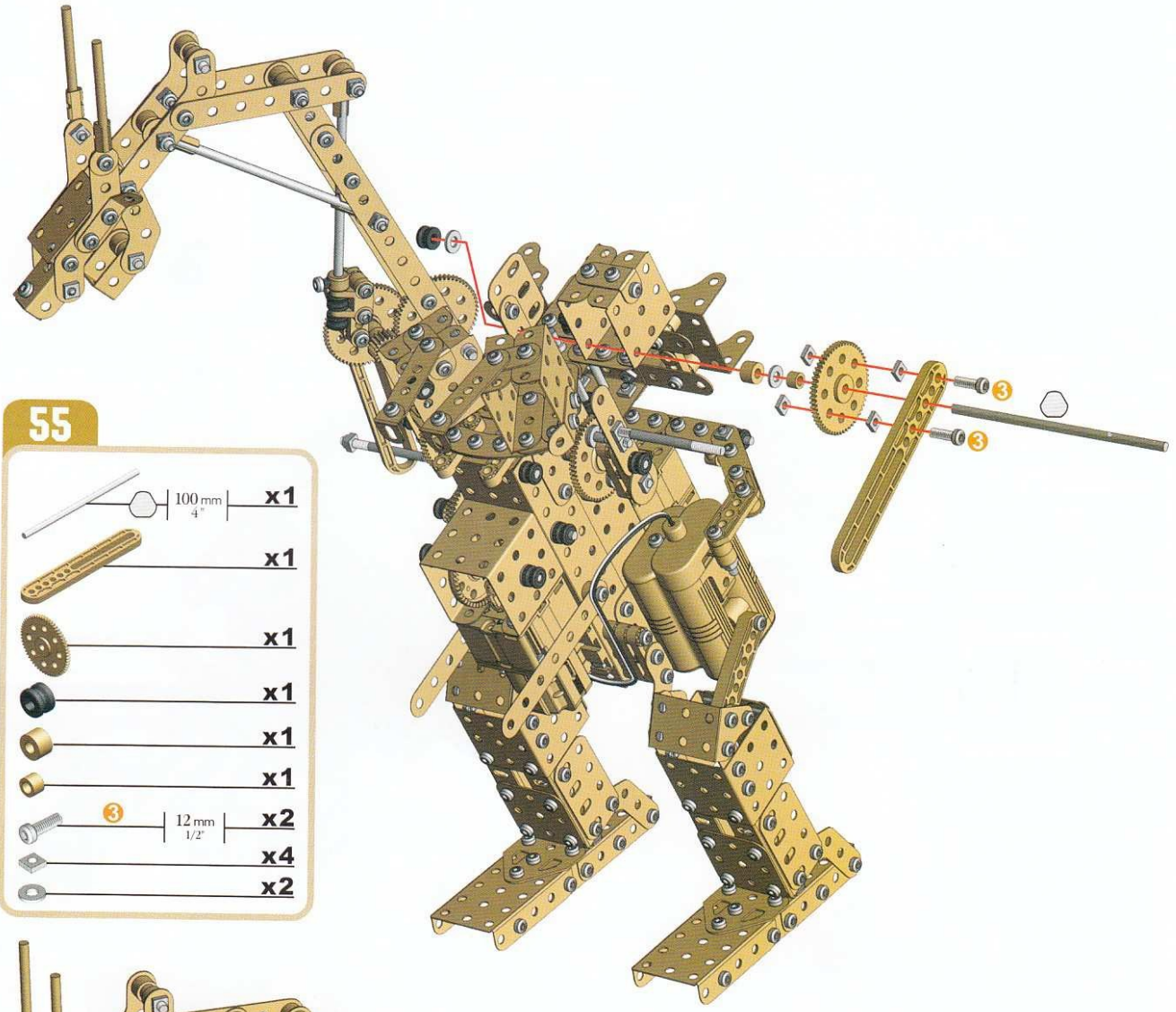
x2=



54

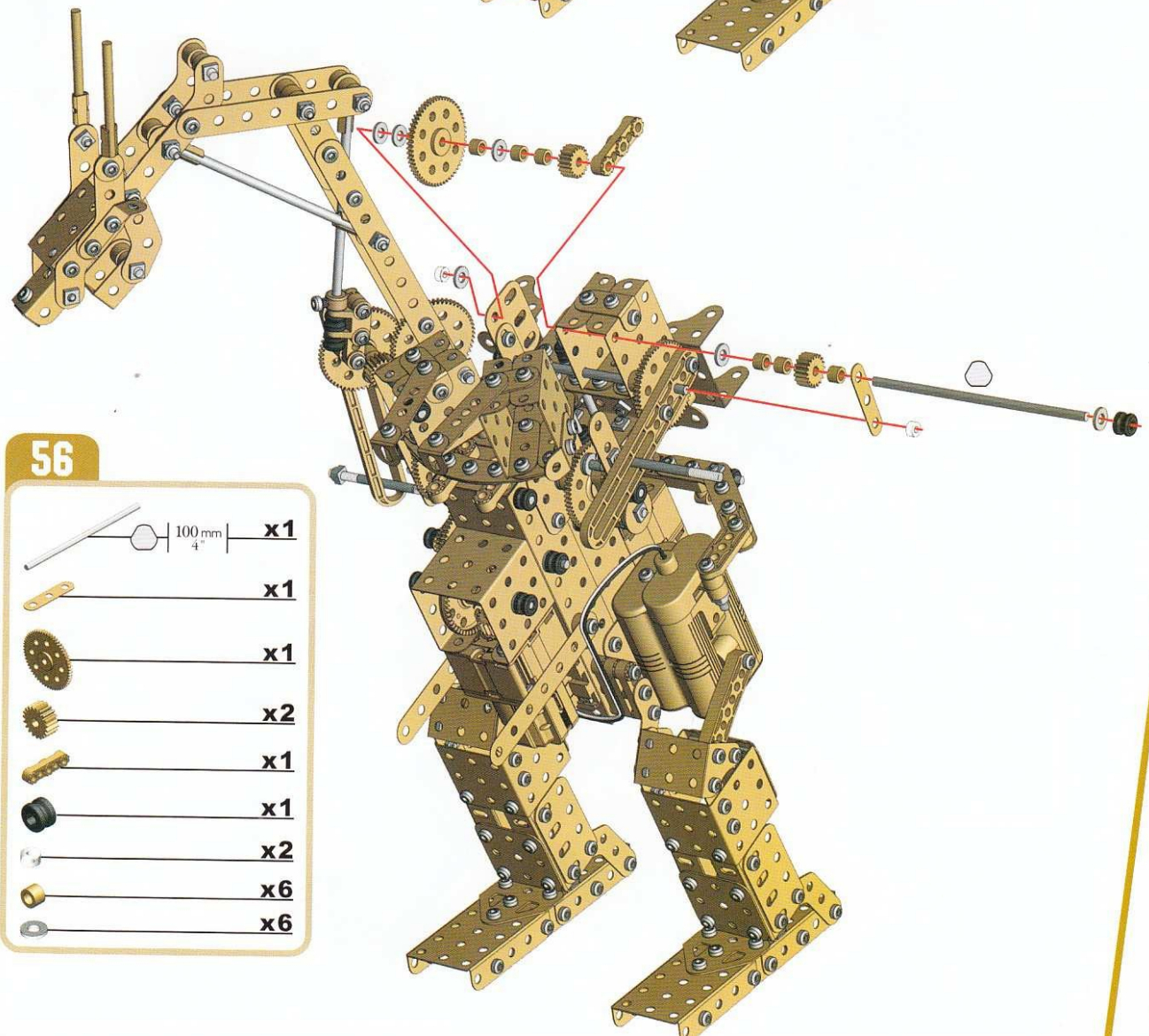
52 + 53 +

- x1
- x1
- x2
- 8 — 25,4 mm / 1" — x1
- 5,8 mm — x1
- x1
- x3



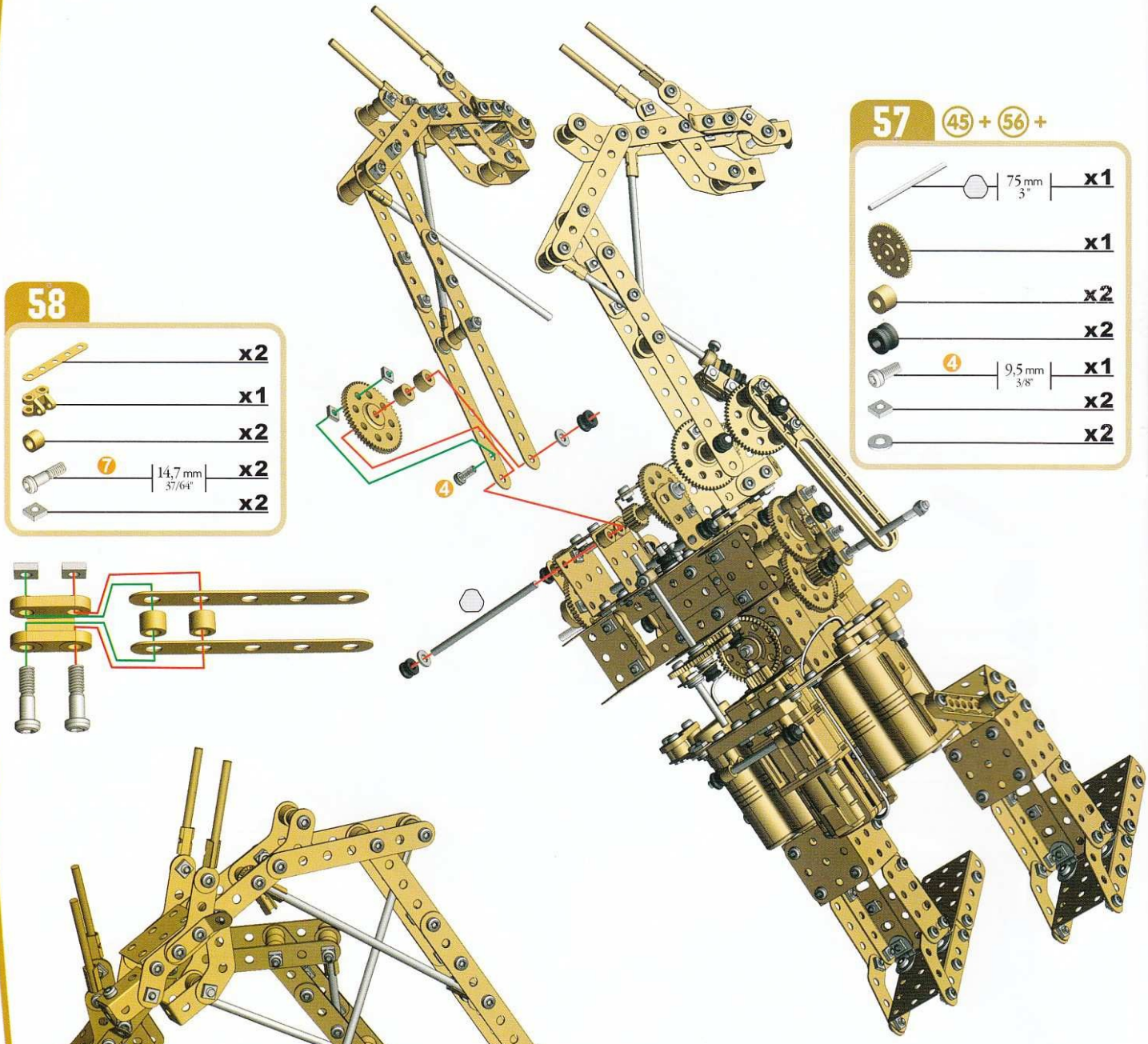
55

- 100 mm / 4" — x1
- x1
- x1
- x1
- x1
- x1
- ③ 12 mm / 1/2" — x2
- x4
- x2



56

- 100 mm / 4" — x1
- x1
- x1
- x2
- x1
- x1
- x2
- x6
- x6

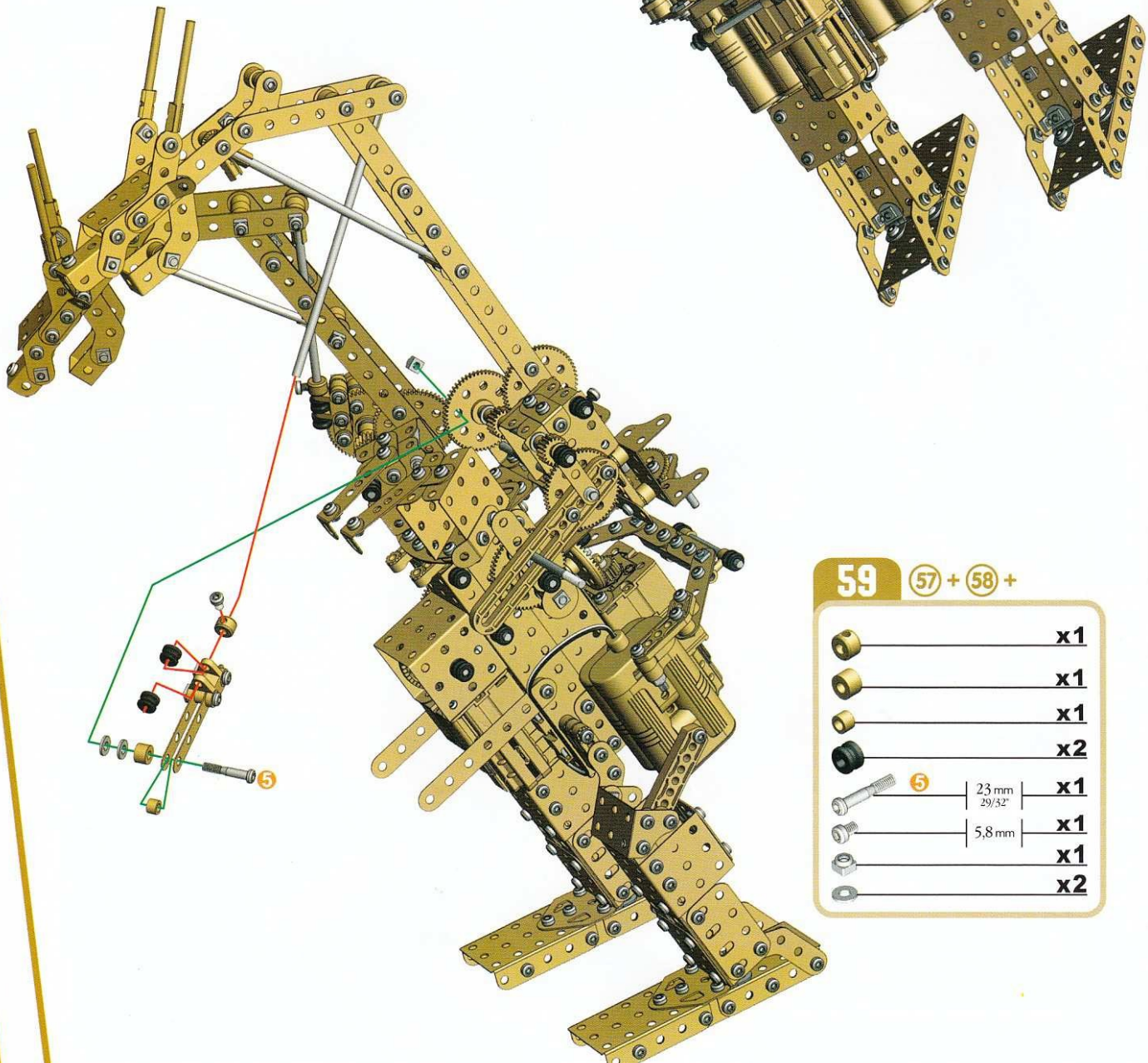


58

- x2
- x1
- x2
- 7 — 14,7 mm 37/64" — x2
- x2

57 (45) + (56) +

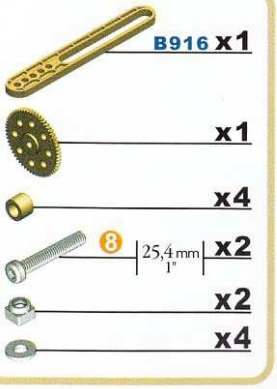
- 75 mm 3" — x1
- x1
- x2
- x2
- 4 — 9,5 mm 3/8" — x1
- x2
- x2

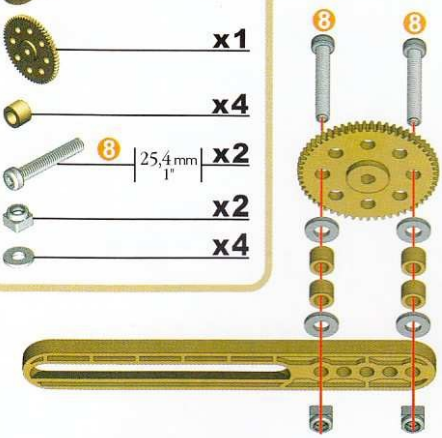


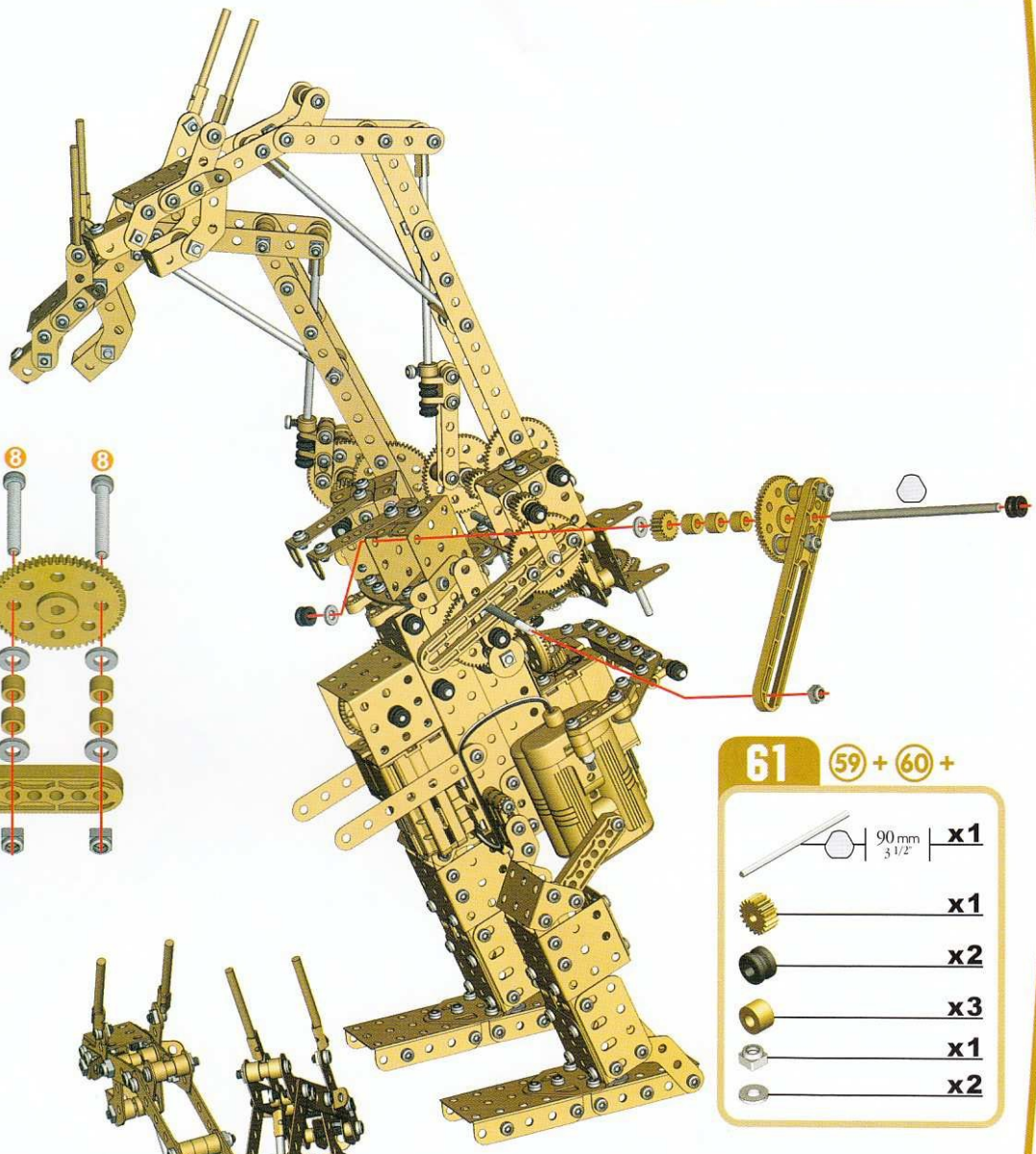
59 (57) + (58) +

- x1
- x1
- x1
- x2
- 5 — 23 mm 29/32" — x1
- 5,8 mm — x1
- x1
- x2

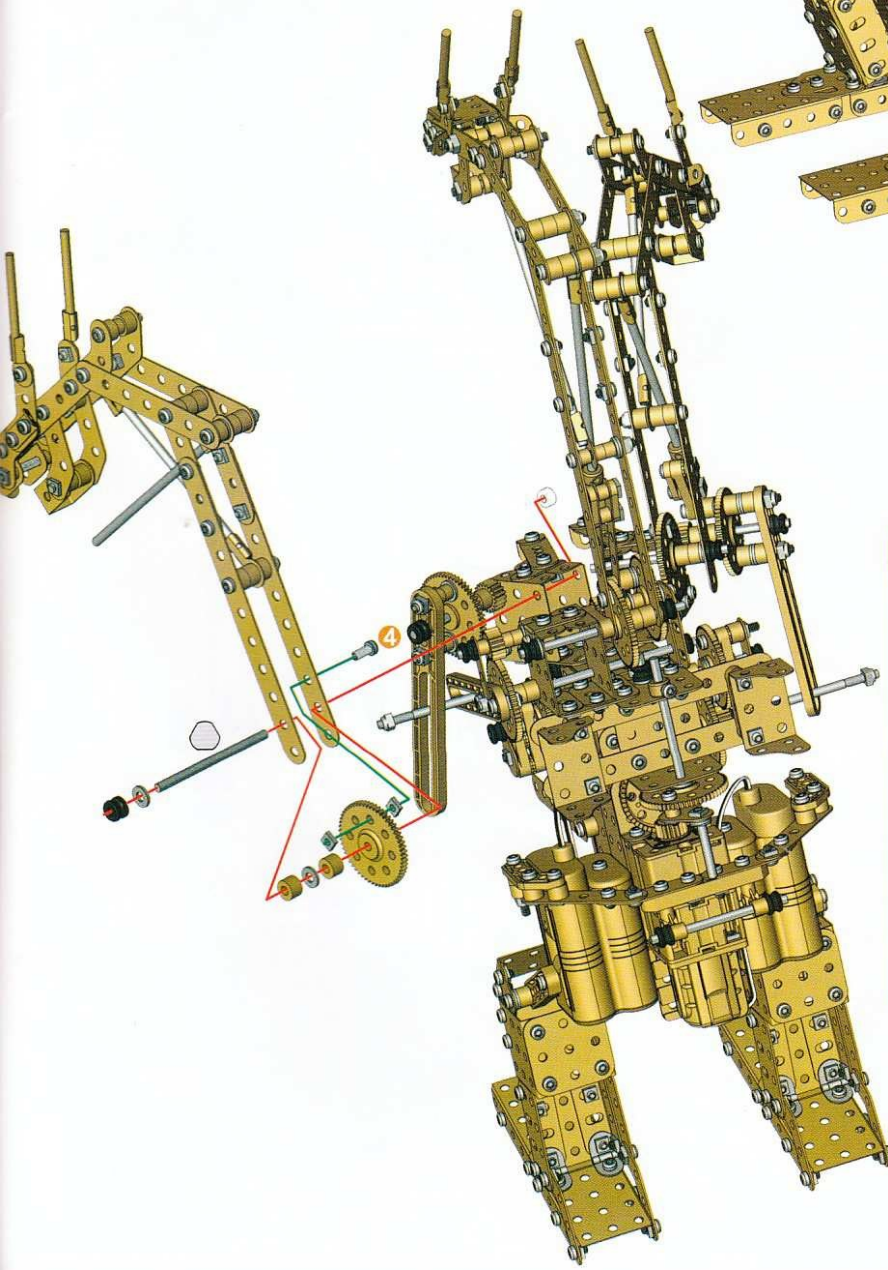
60



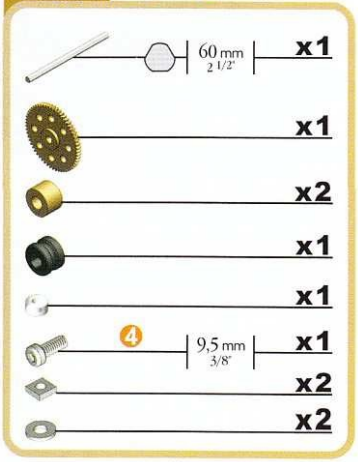


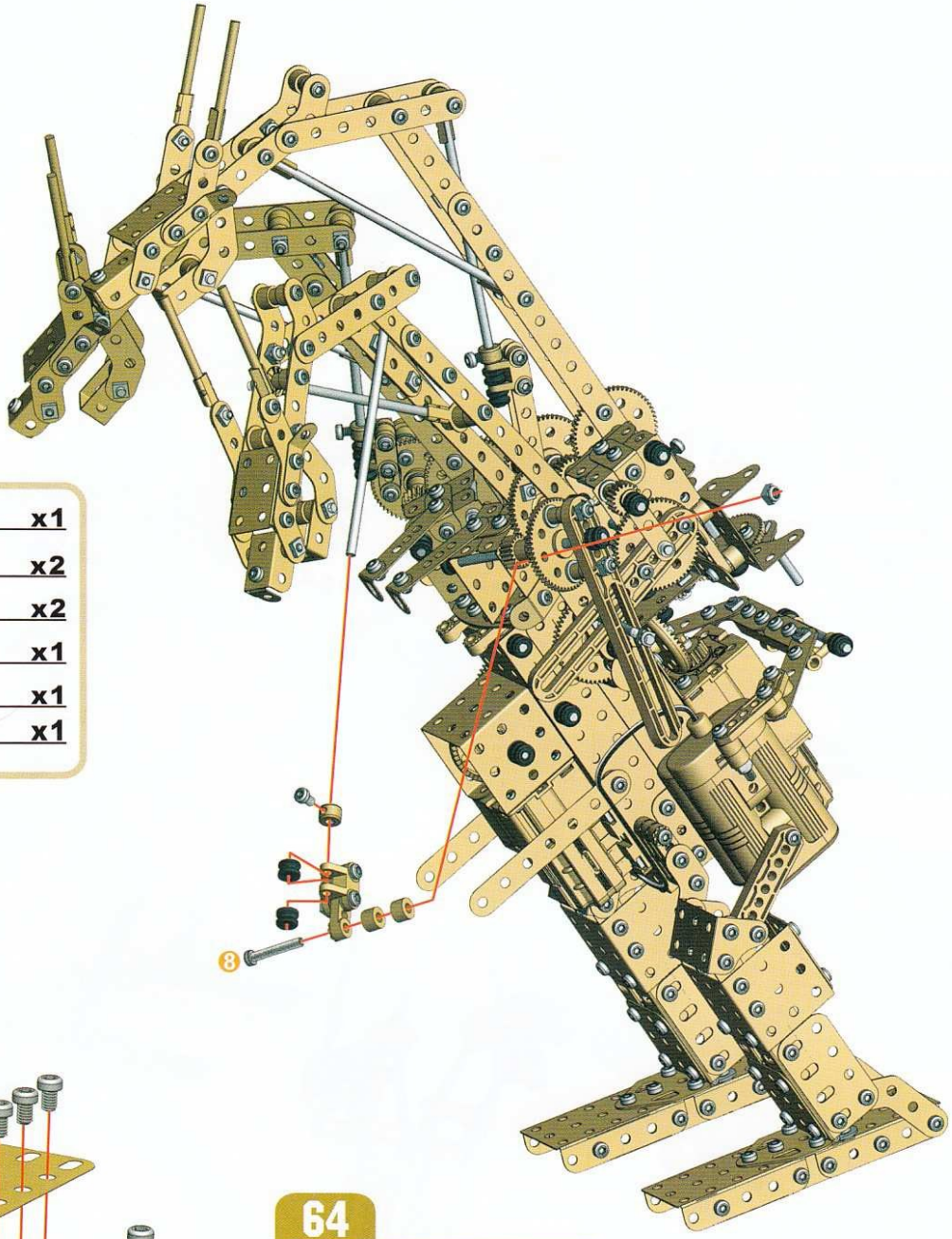


61 (59) + (60) +



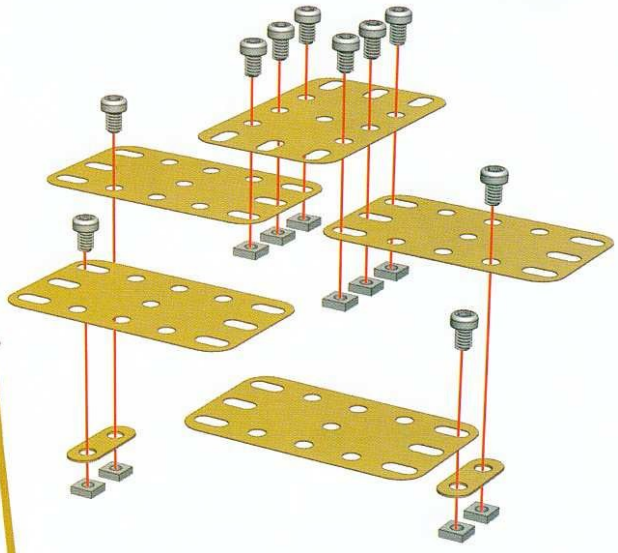
62 (49) + (61) +





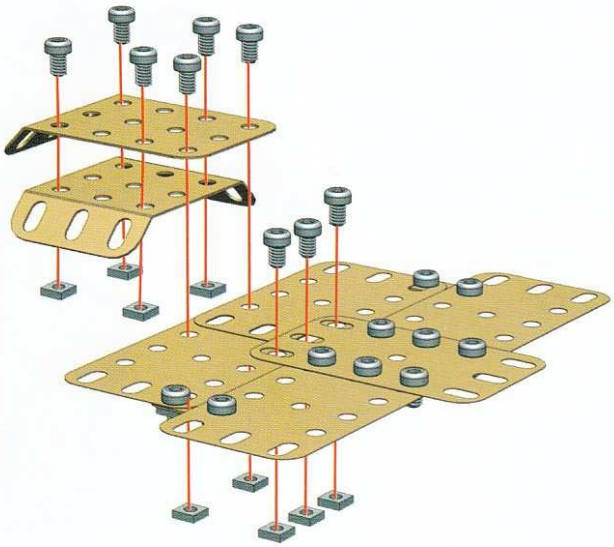
63 (53) + (62) +

- x1
- x2
- x2
- (8) 25,4 mm (1") x1
- 5,8 mm x1
- x1



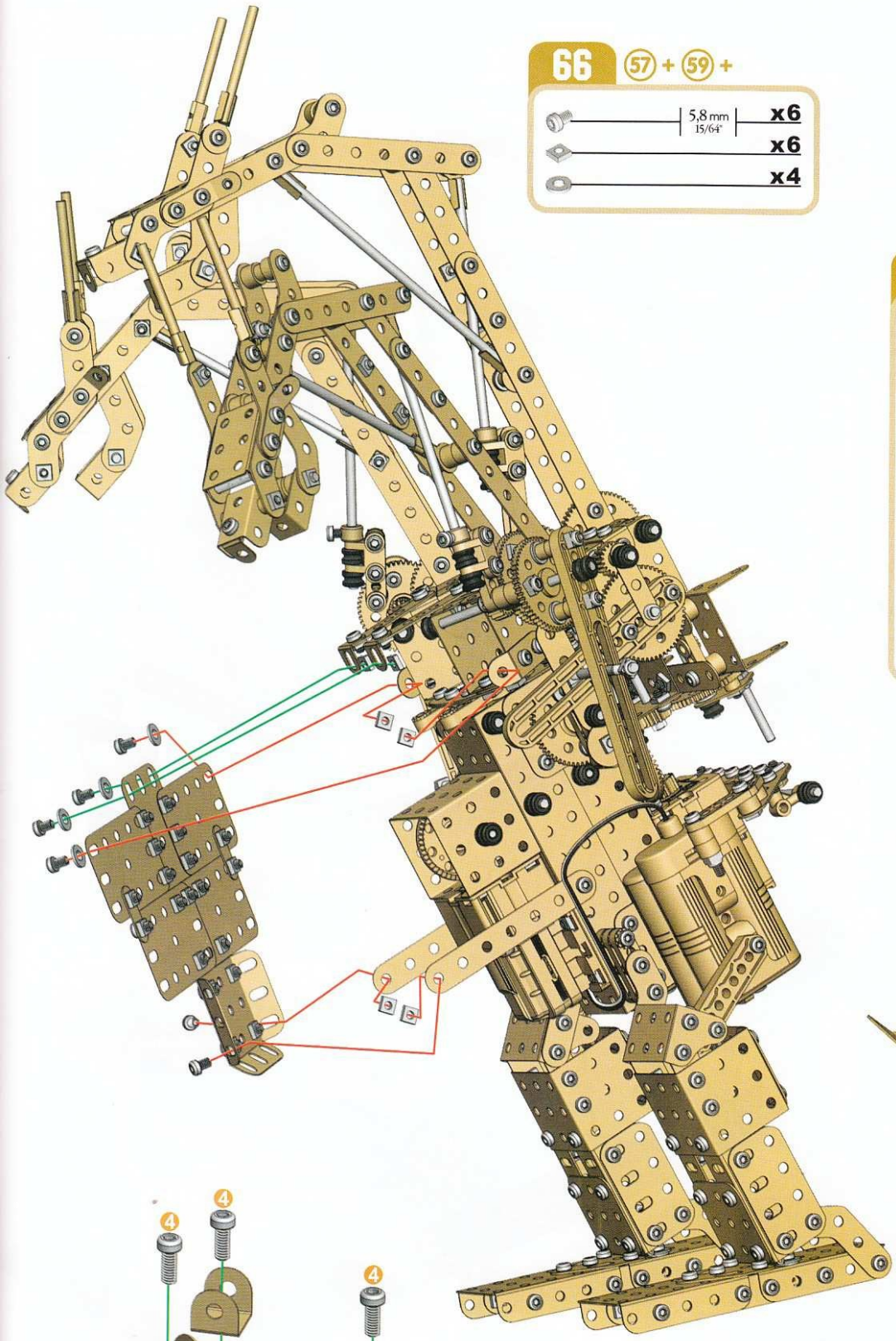
64

- x5
- x2
- 5,8 mm (15/64") x10
- x10



65

- x1
- x1
- 5,8 mm (15/64") x9
- x9

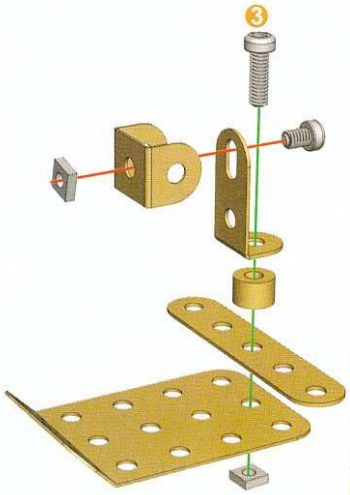


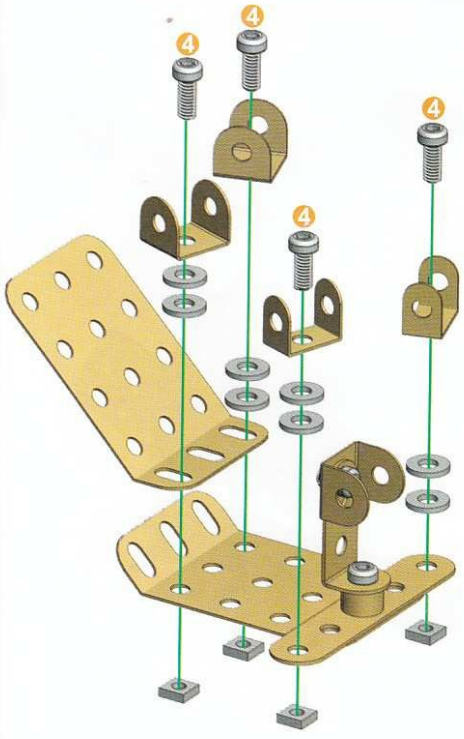
66 (57) + (59) +

- 5,8 mm 15/64" — x6
- x6
- x4

67

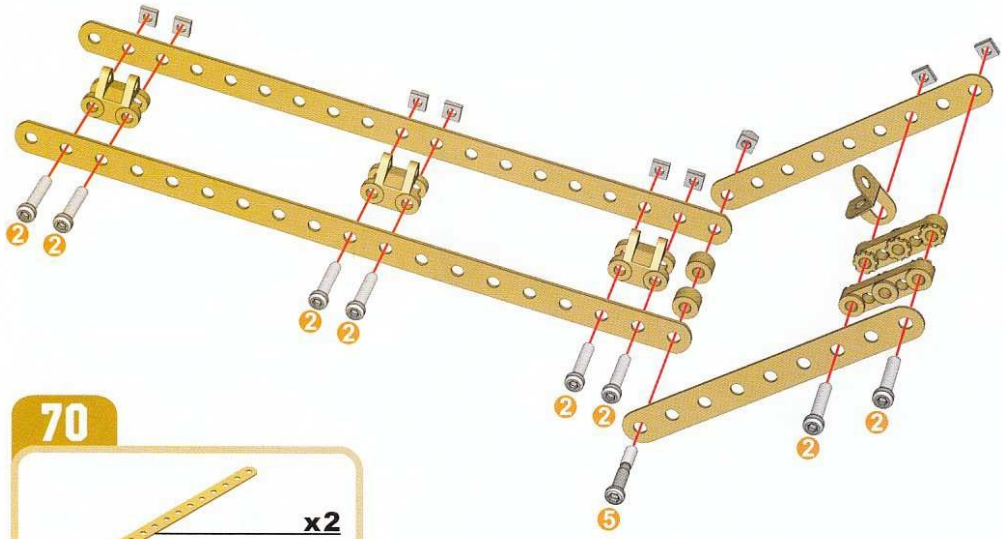
- x1
- x1
- x1
- x1
- x1
- 3 — 12 mm 1/2" — x1
- 5,8 mm 15/64" — x1
- x2



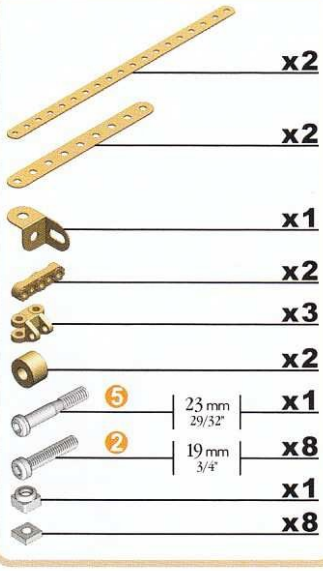


68

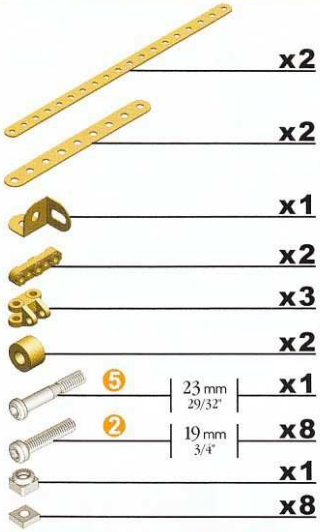
- x1
- x2
- x2
- 4 — 9,5 mm 3/8" — x4
- x4
- x8

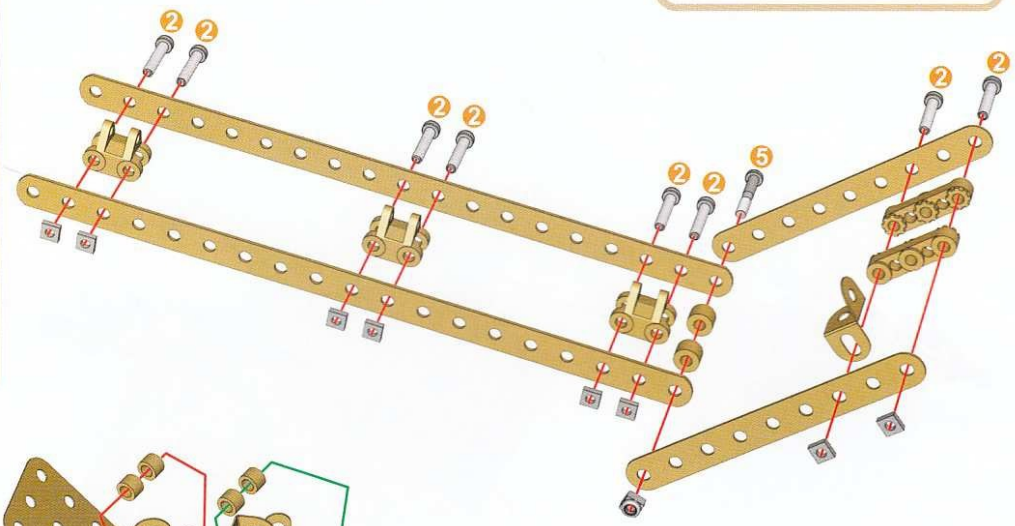


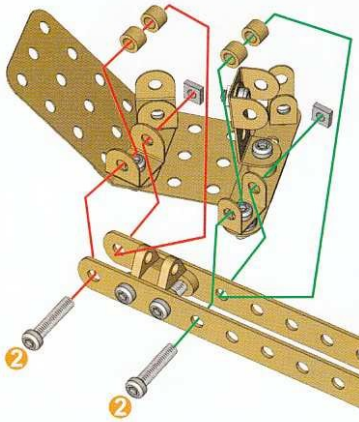
69



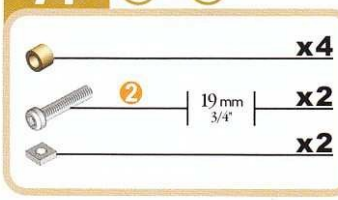
70

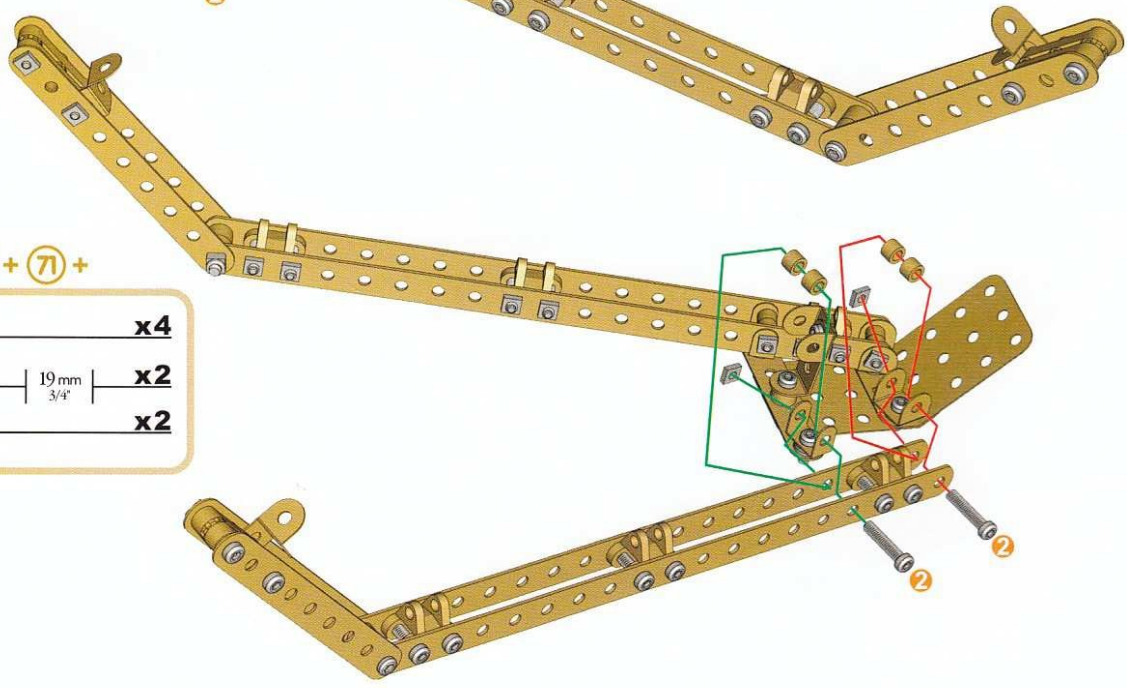




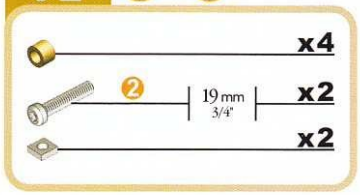


71 (68) + (69) +

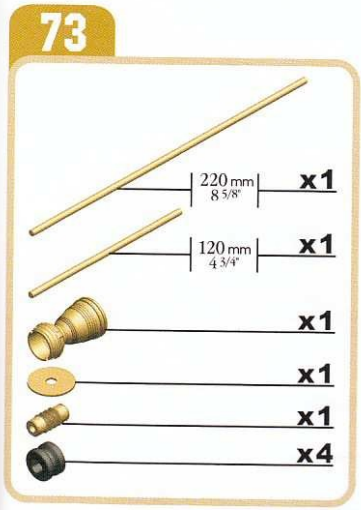


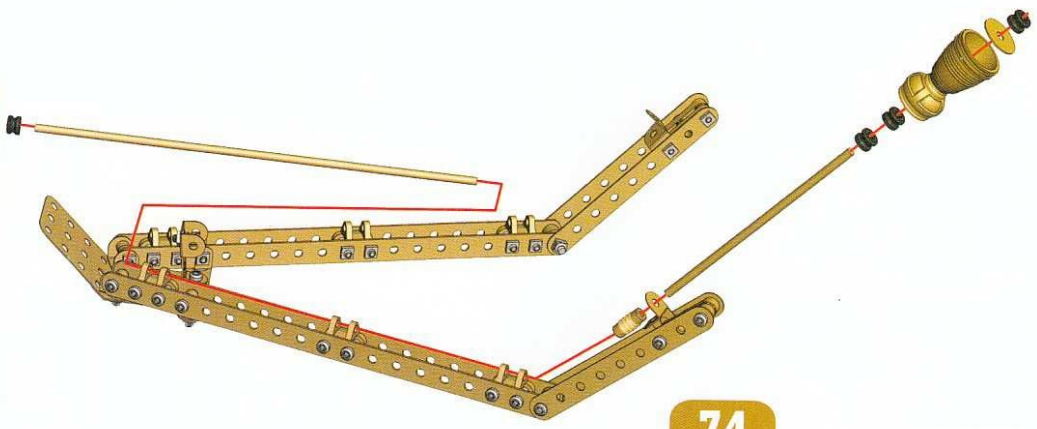


72 (70) + (71) +

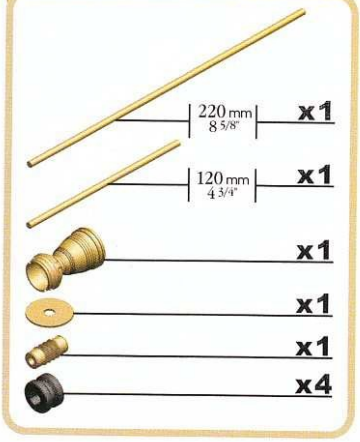


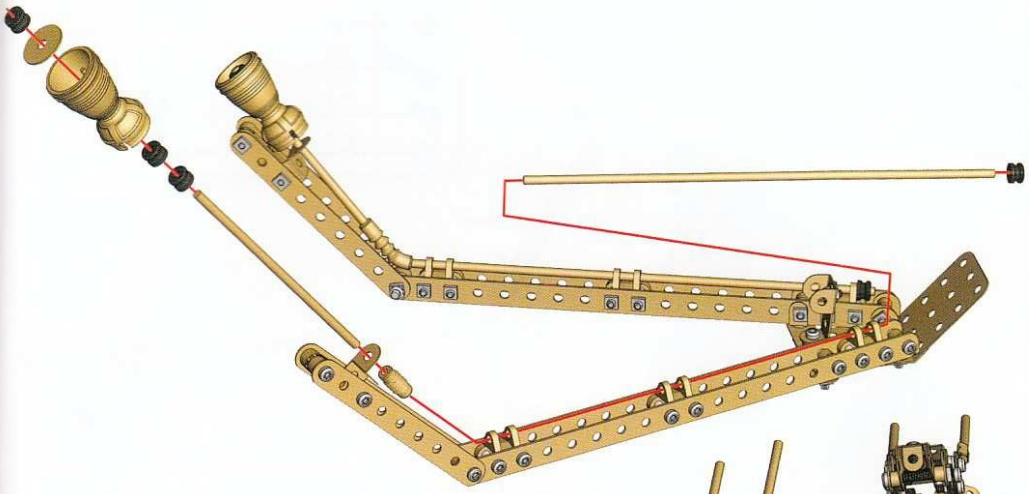
73


220 mm
8 5/8"
x1
120 mm
4 3/4"
x1
x1
x1
x1
x4



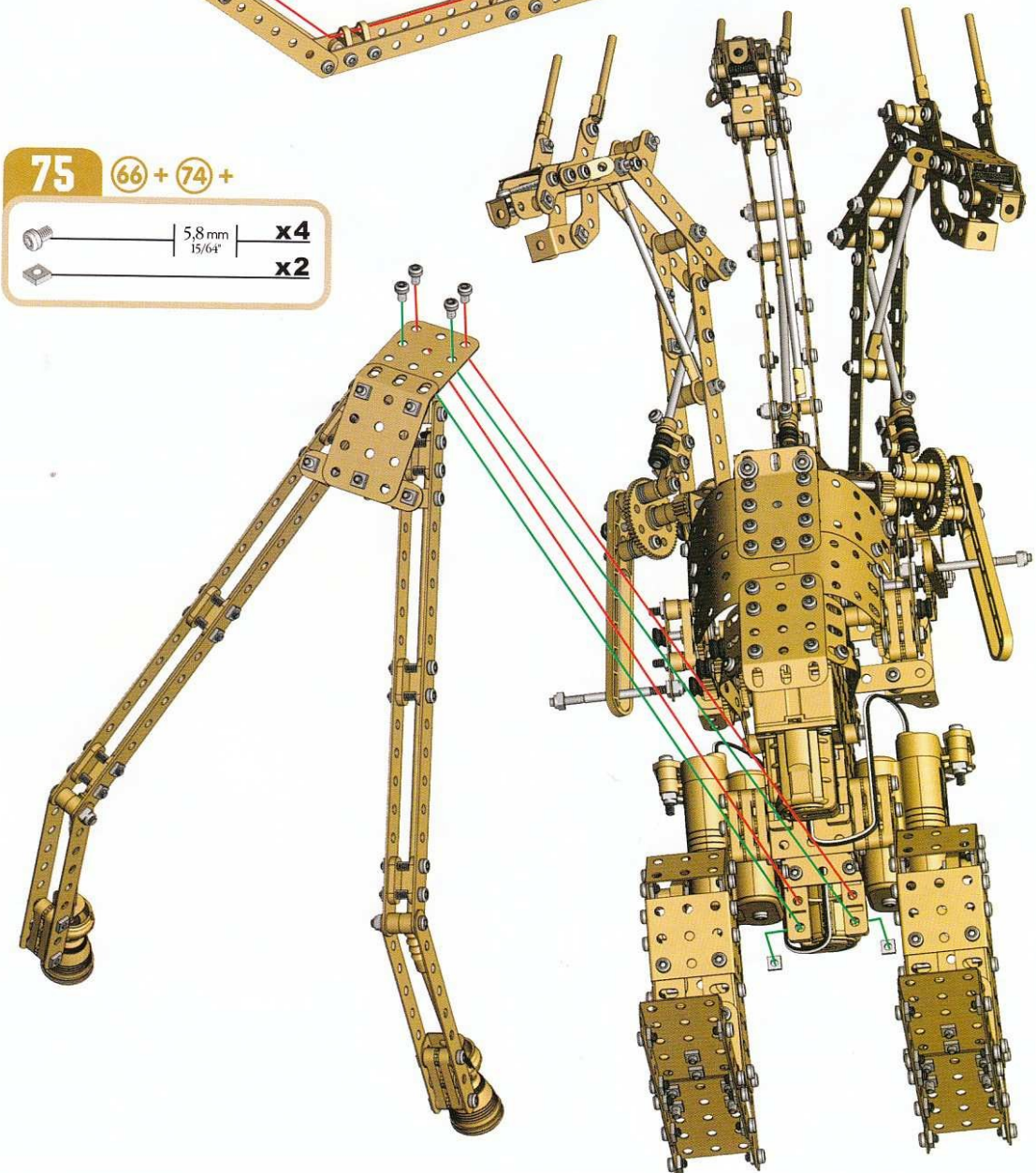
74

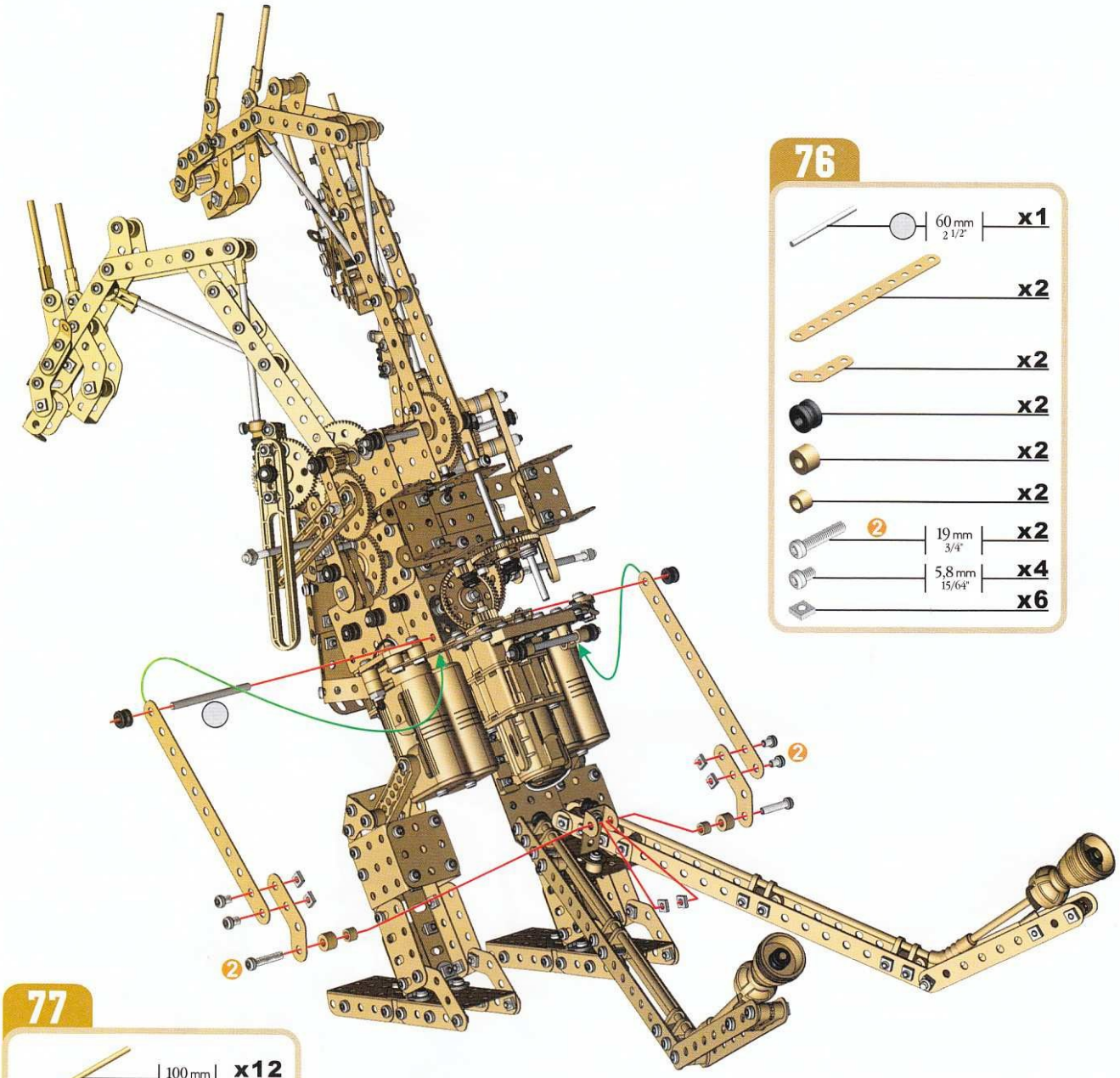

220 mm
8 5/8"
x1
120 mm
4 3/4"
x1
x1
x1
x1
x4



75 (66) + (74) +

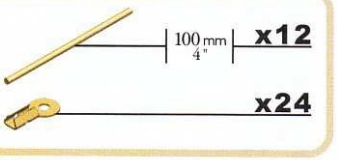
5,8 mm
15/64"
x4
x2



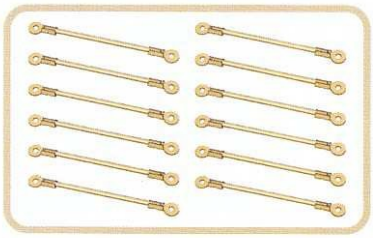


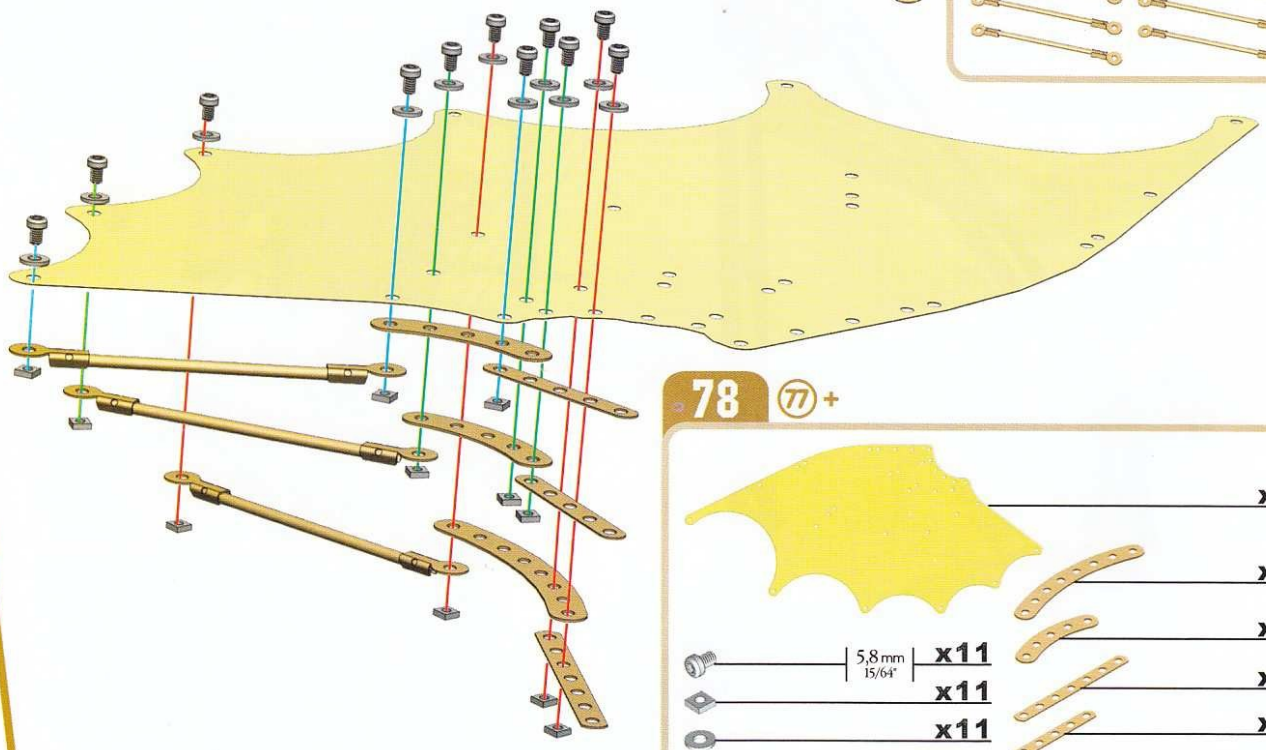
76

77

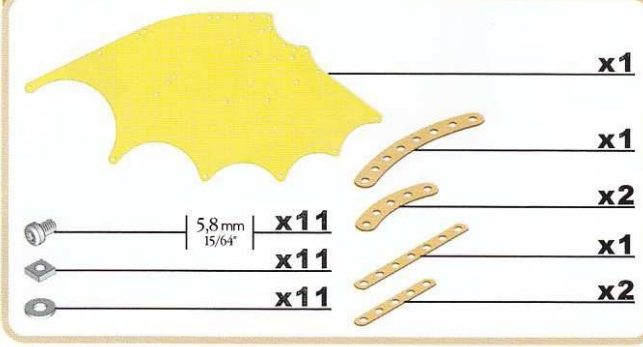


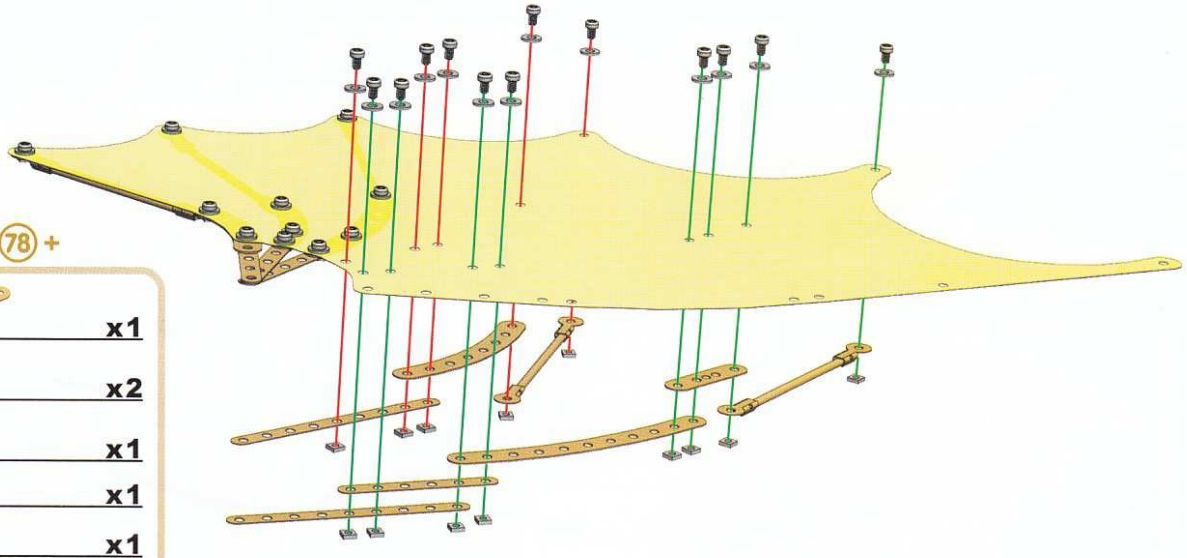
x12=





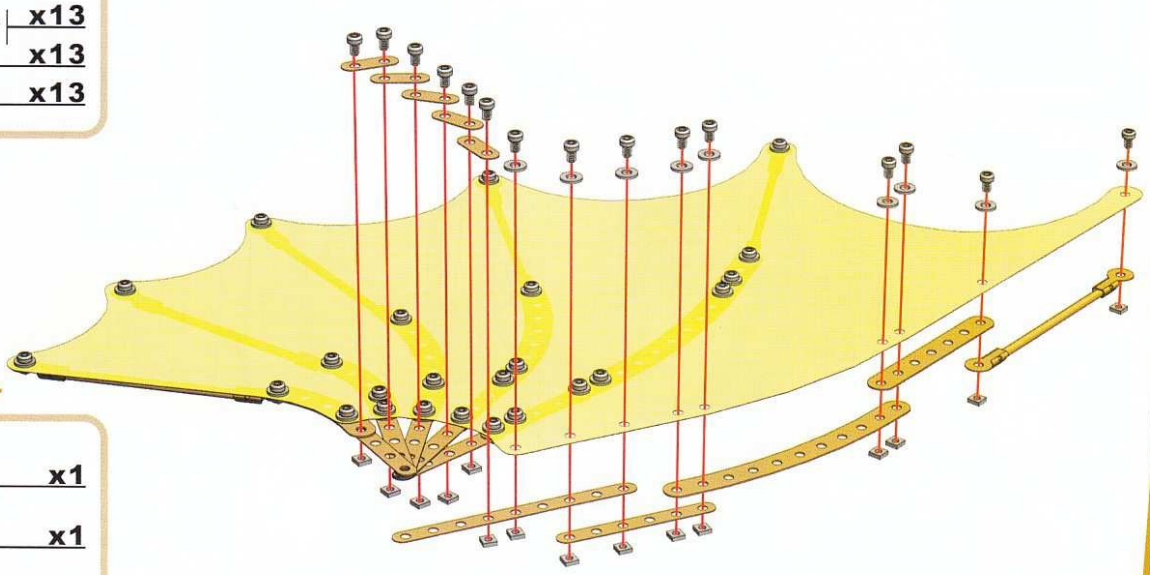
78 (77)+





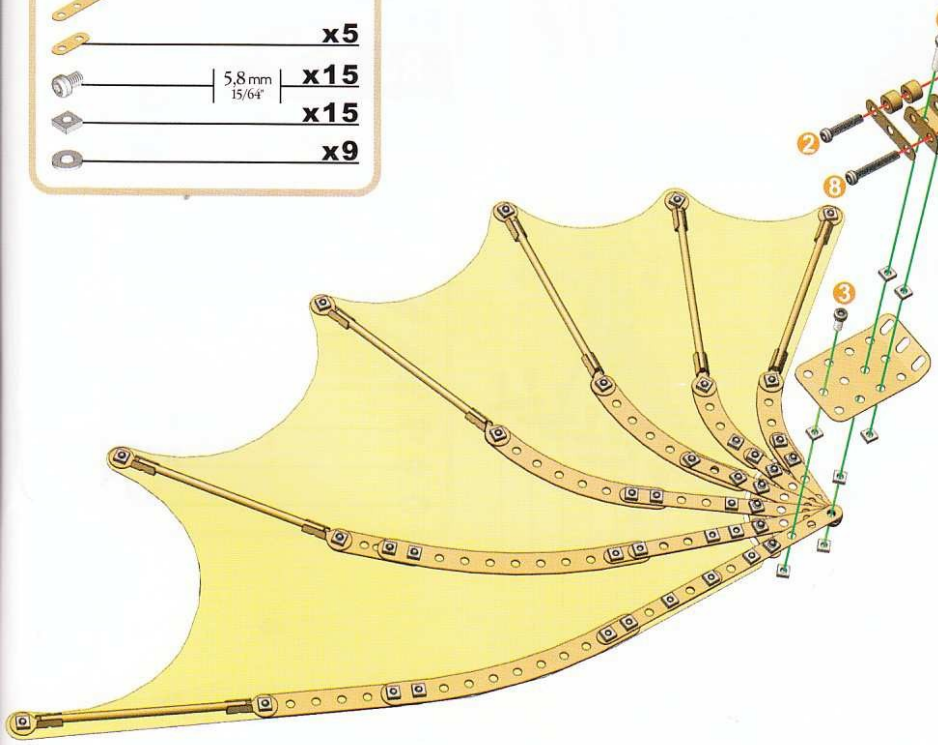
79 (77) + (78) +

- x1
- x2
- x1
- x1
- x1
- 5,8 mm 15/64" — x13
- x13
- x13



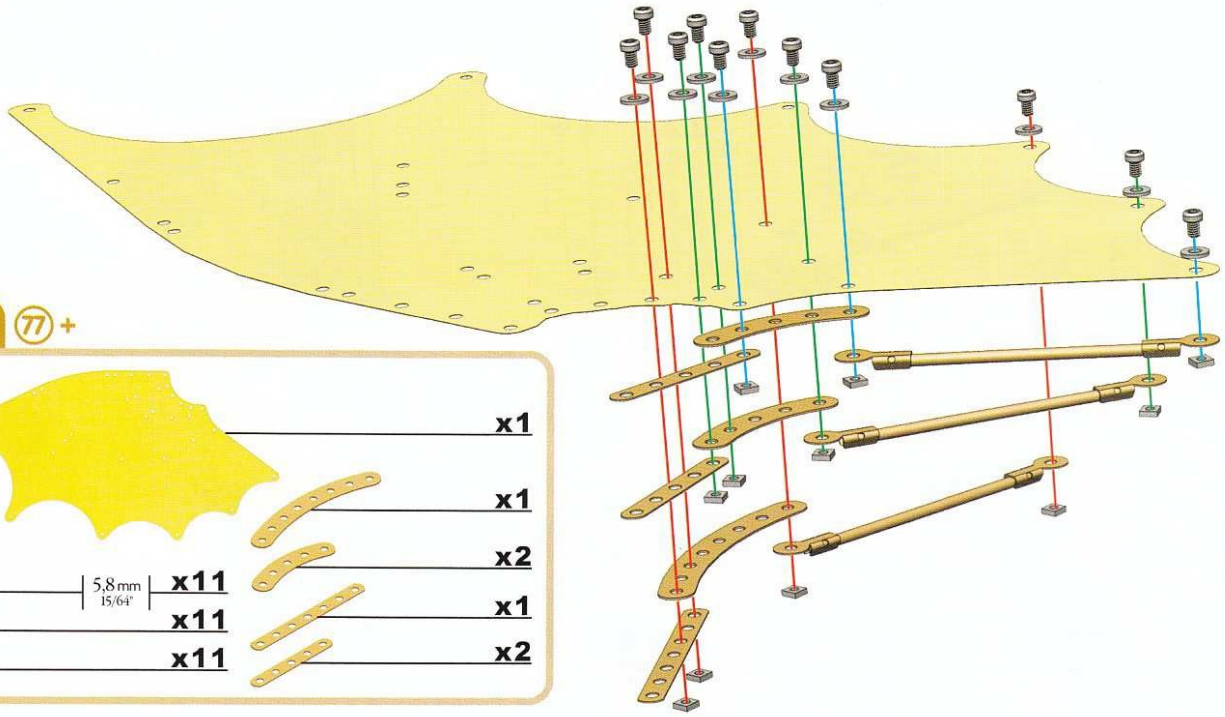
80 (77) + (79) +

- x1
- x1
- x1
- x1
- x5
- 5,8 mm 15/64" — x15
- x15
- x9

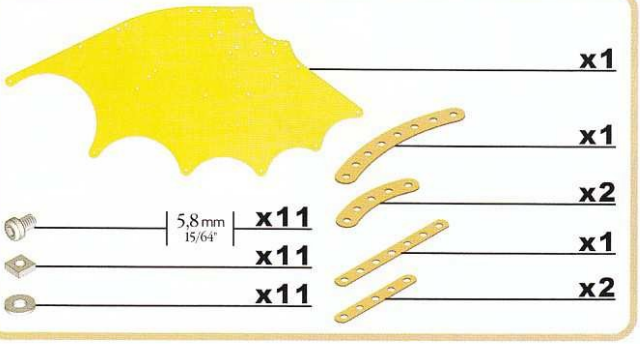


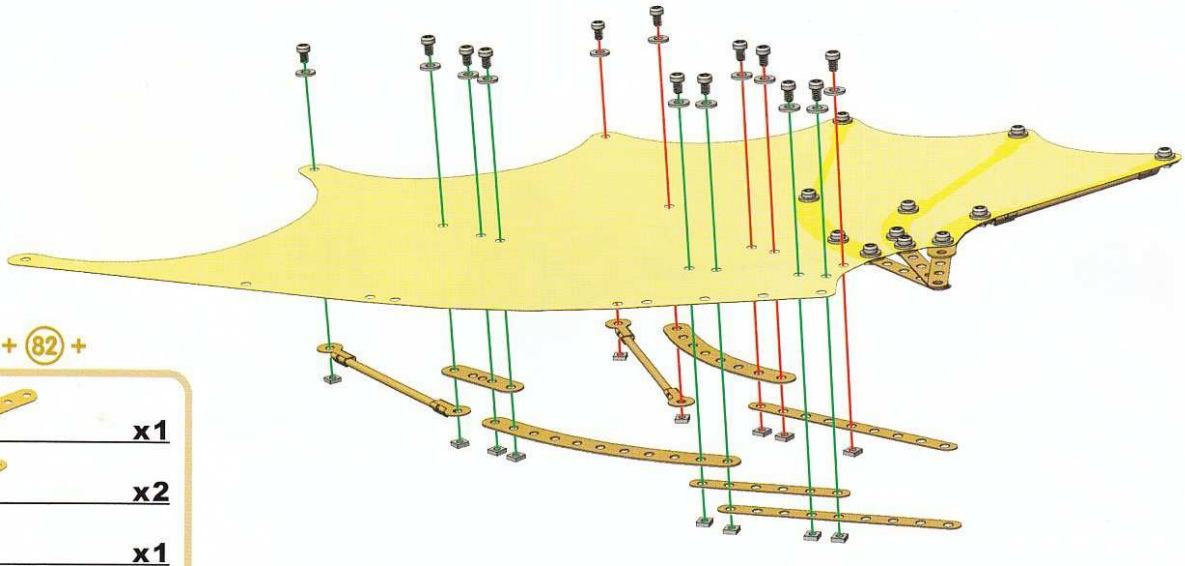
81

- x1
- x1
- x2
- x1
- x2
- x2
- 8 — 25,4 mm 1" — x1
- 2 — 19 mm 3/4" — x2
- 3 — 12 mm 1/2" — x2
- x9
- x5

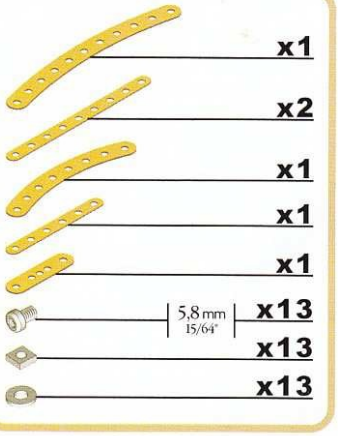


82 (77) +

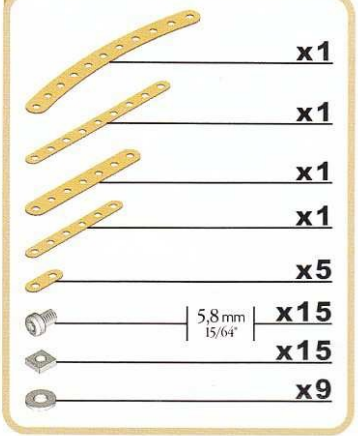


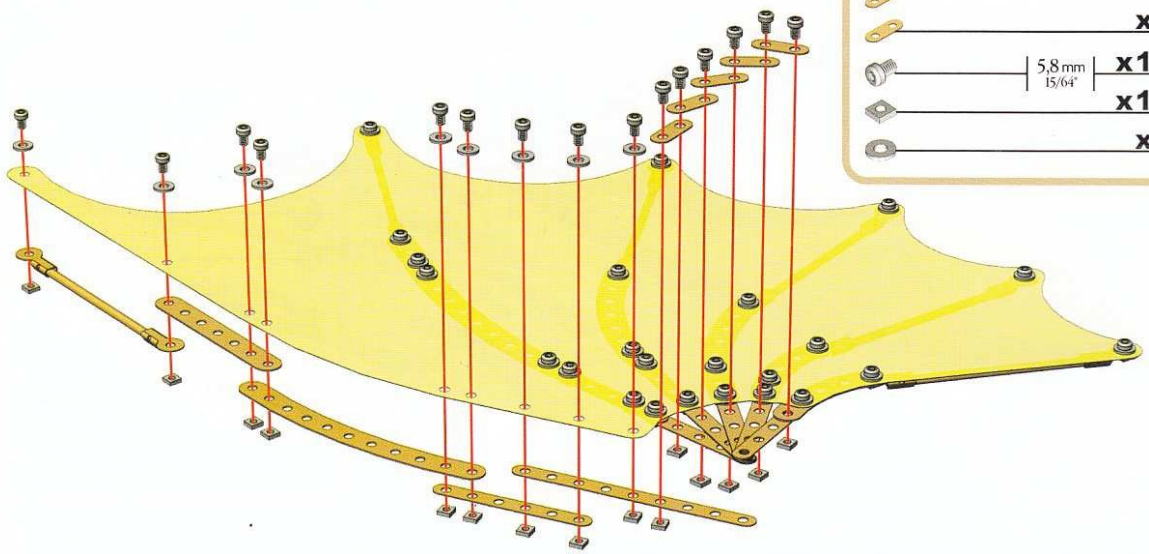


83 (77) + (82) +

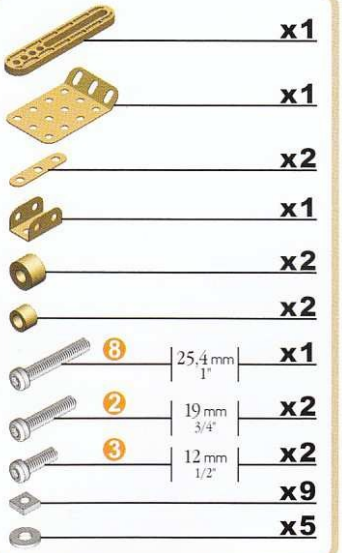


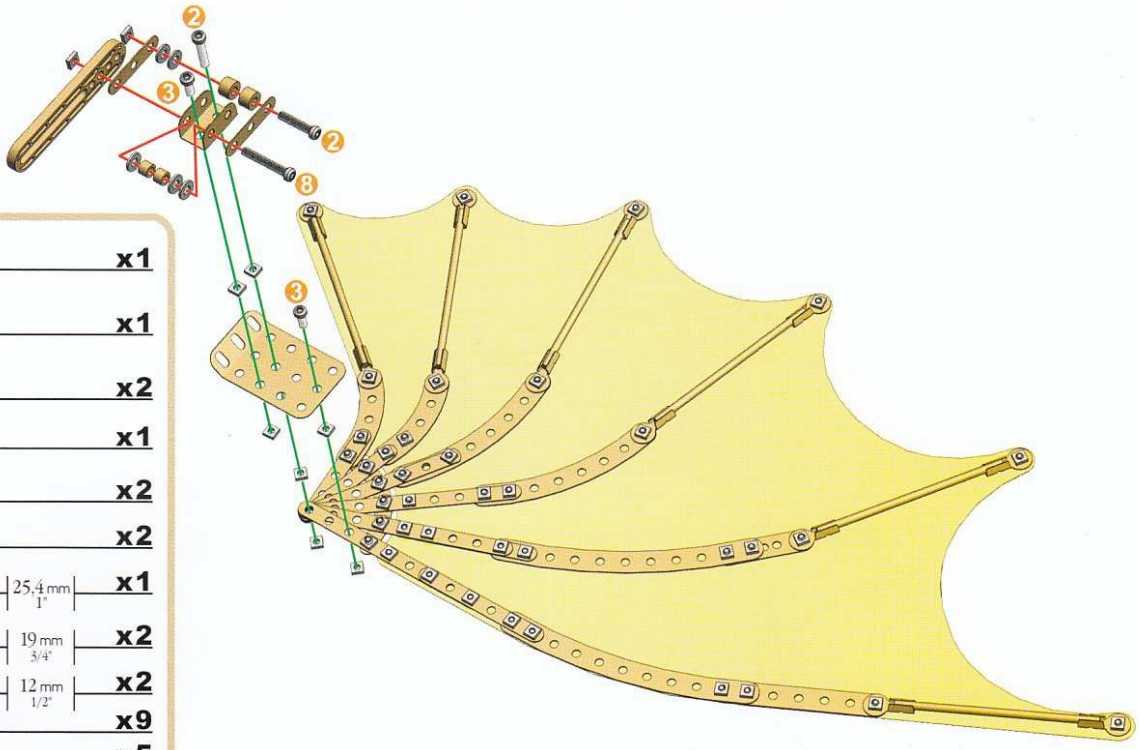
84 (77) + (83) +



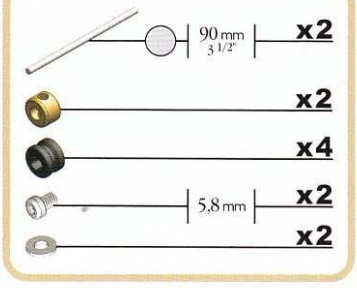
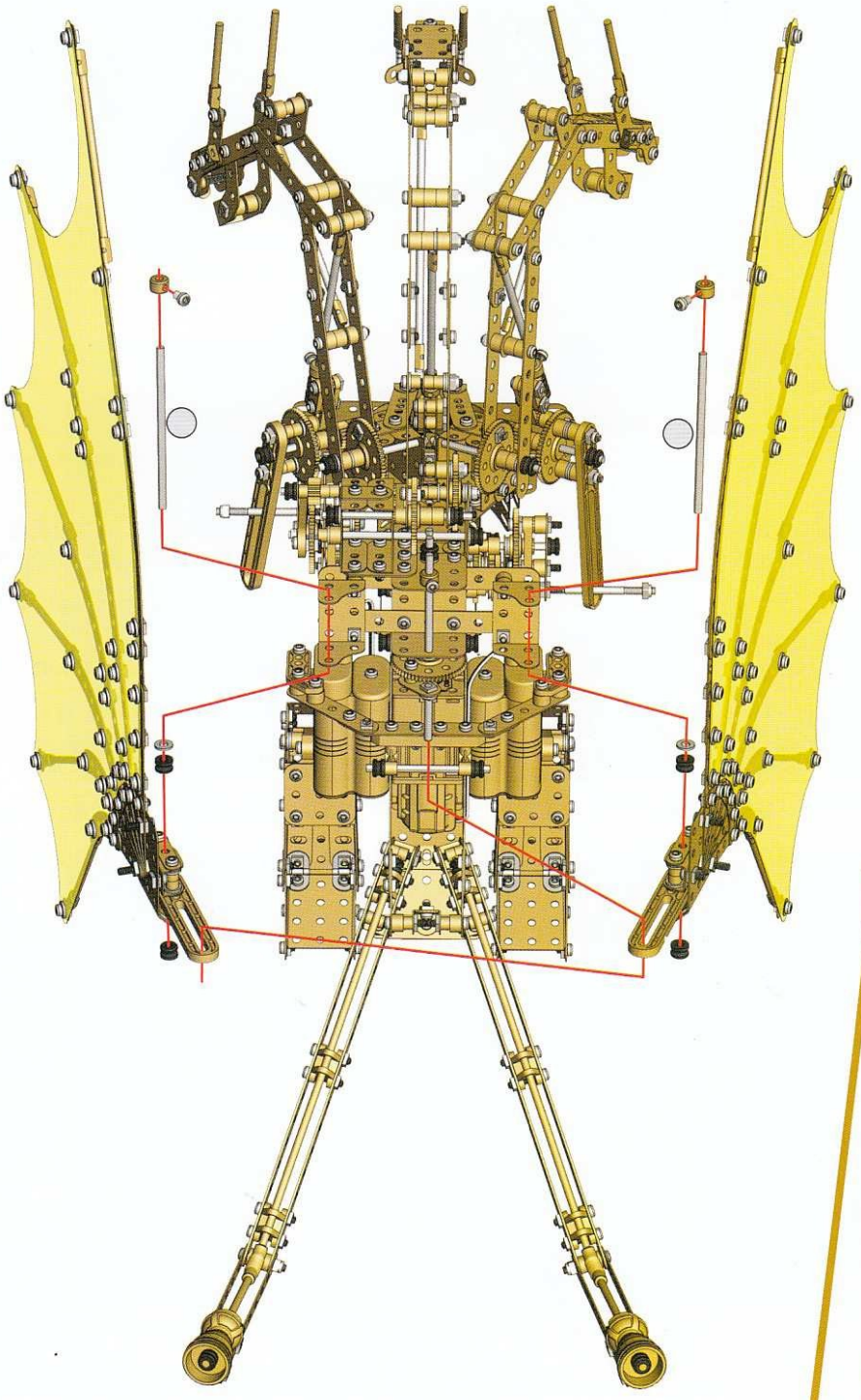


85


x1
x1
x2
x1
x2
x2
8
25,4 mm
1"
x1
2
19 mm
3/4"
x2
3
12 mm
1/2"
x2
x9
x5


2
3
2
8
3

86 (76) + (81) + (85) +


90 mm
3 1/2"
x2
x2
x4
5,8 mm
x2
x2