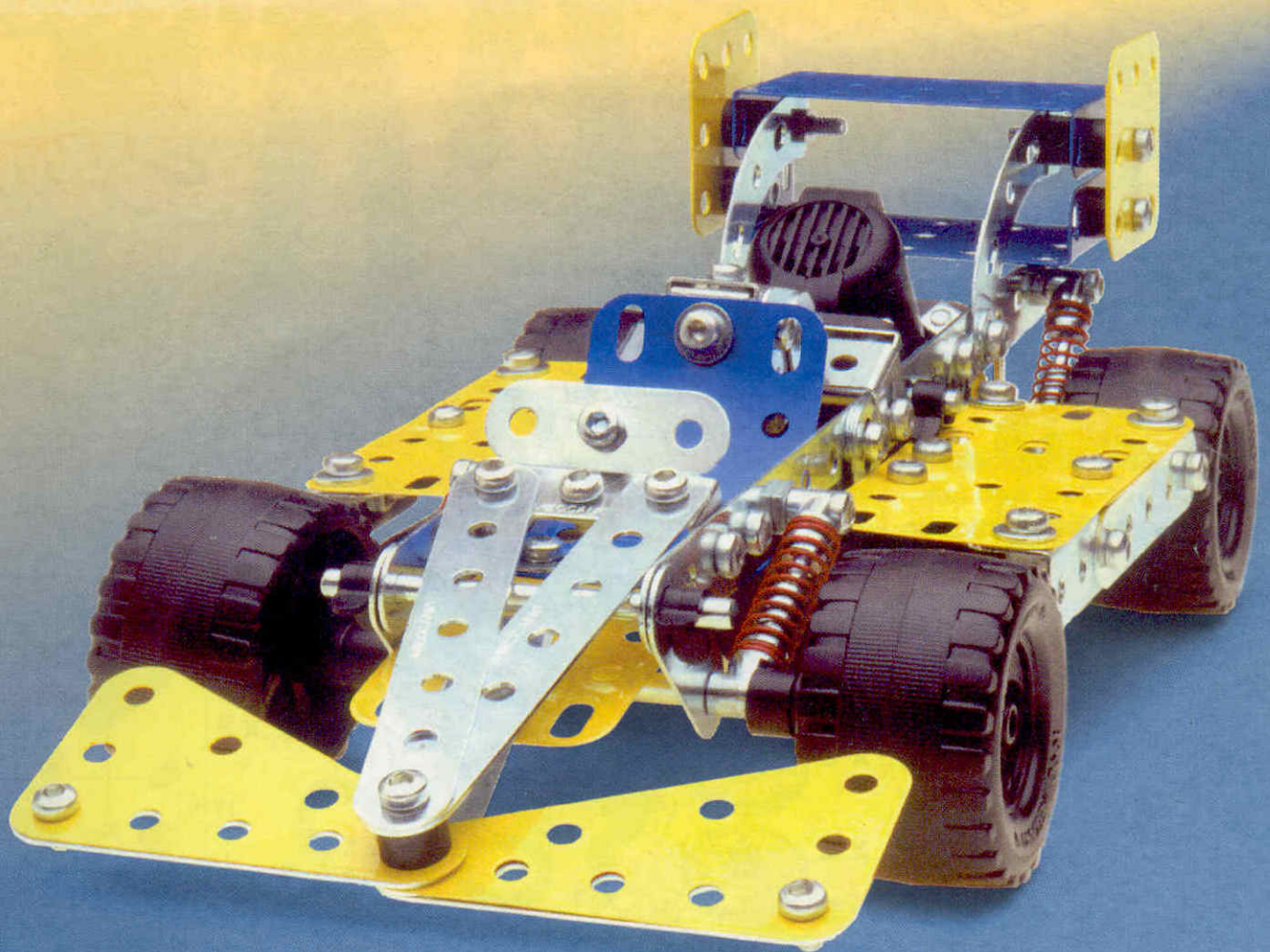
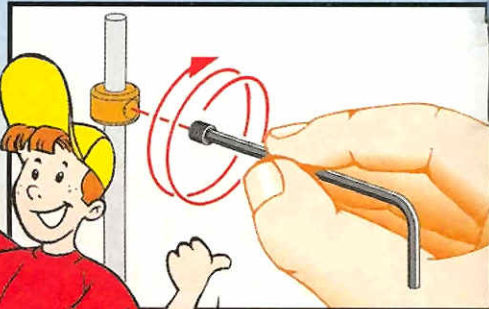
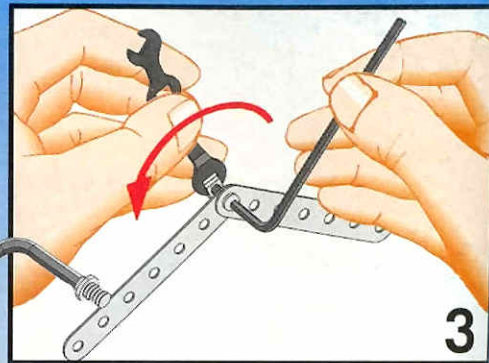
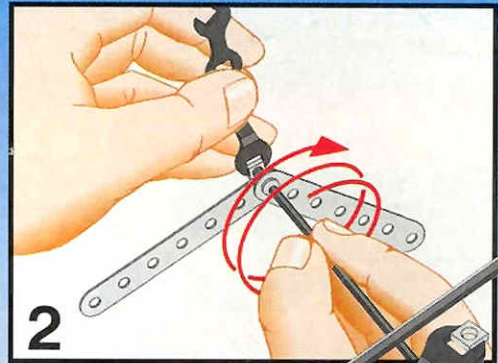
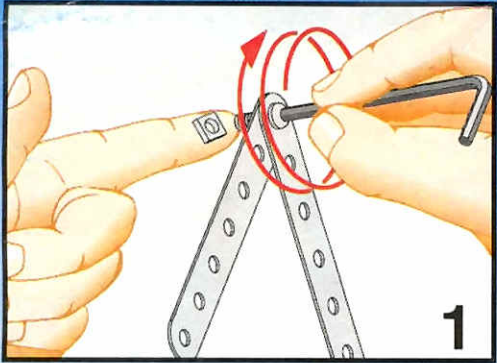


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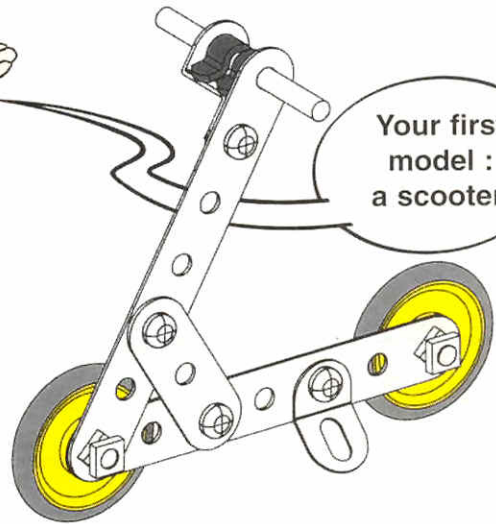
- [189] X 2
- [194a] X 2
- [194] X 2
- [193] X 2
- [188] X 4
- [51] X 2
- [221] X 2
- [74] X 2
- [126] X 2
- [2] X 2
- [2a] X 2
- [3] X 2
- [5] X 6
- [6a] X 4
- [90a] X 2
- [9e] X 2
- [11] X 2
- [11A] X 1
- [48] X 2
- [48a] X 6
- [133A] X 2
- [125] X 3
- [212] X 1
- [120d] X 4
- [120d] X 4
- [120d] X 4
- [12] X 12
- [12c] X 4
- [10] X 6
- [1] 28 mm [111d] X 1
- [2] 19 mm [111] X 0
- [3] 12 mm [111a] X 2
- [4] 9.5 mm [111c] X 5
- [7] 14.7 mm [147d] X 8
- [5] 23 mm [147g] X 2
- [37b] X 90
- [69a] X 4
- [38] X 27
- [37a] X 103
- [38a] X 13
- [35] X 8
- [24] X 1
- [28P] X 1
- [27] X 1
- [22ap] X 2
- [26N] X 1
- [26] X 1
- [32] X 1
- [700] X 1
- [40] X 1
- [19S] X 1
- [16] X 2
- [16a] X 2
- [17] X 2
- [18a] X 2
- [213] X 2
- [155] X 2
- [36c] X 1
- [36d] X 1
- [34] X 2
- [57b] X 1
- [720] X 1
- [710] X 1
- [331N] X 4
- [904] X 1



Discover the method of assembling with screws and nuts, the tools and their use, the set-up principles, the fun of building working models.

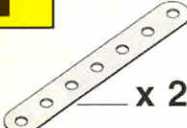






Follow the step by step assembly ; this progression will guide you and you will succeed in making the models.

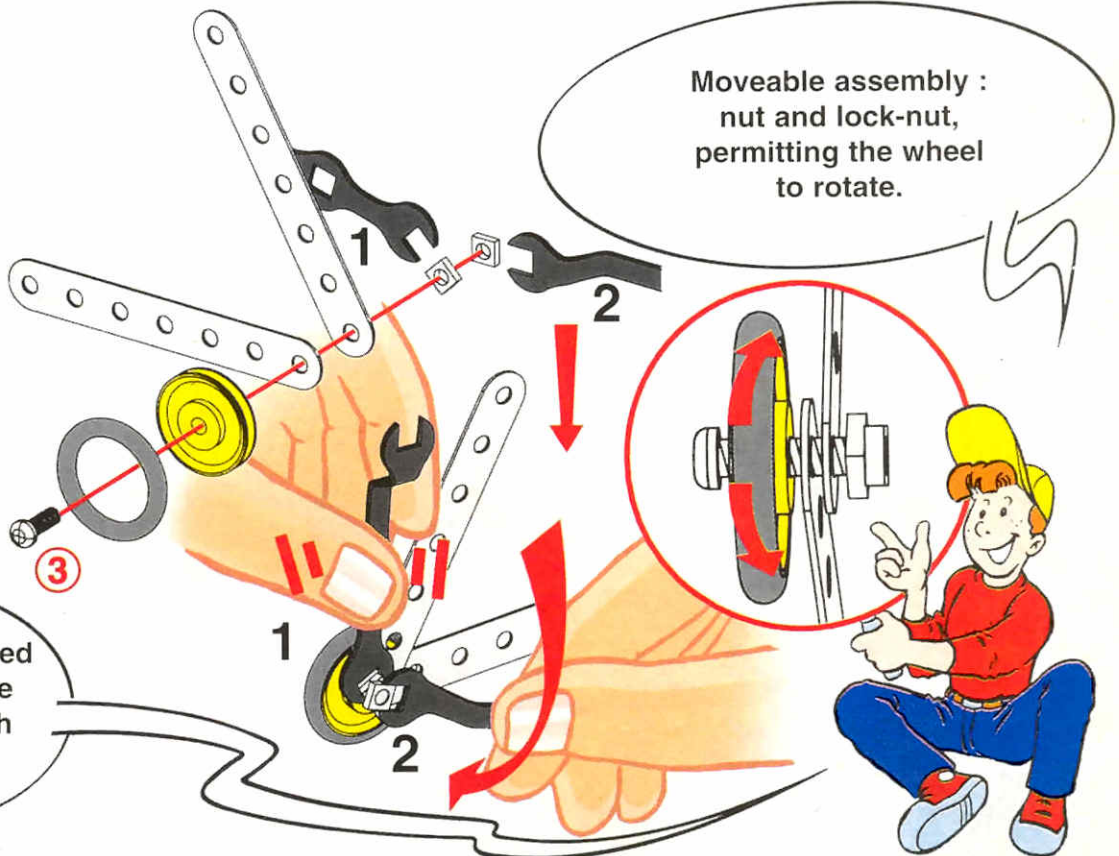
Choose the necessary parts by following each step.



Your first model : a scooter.

1

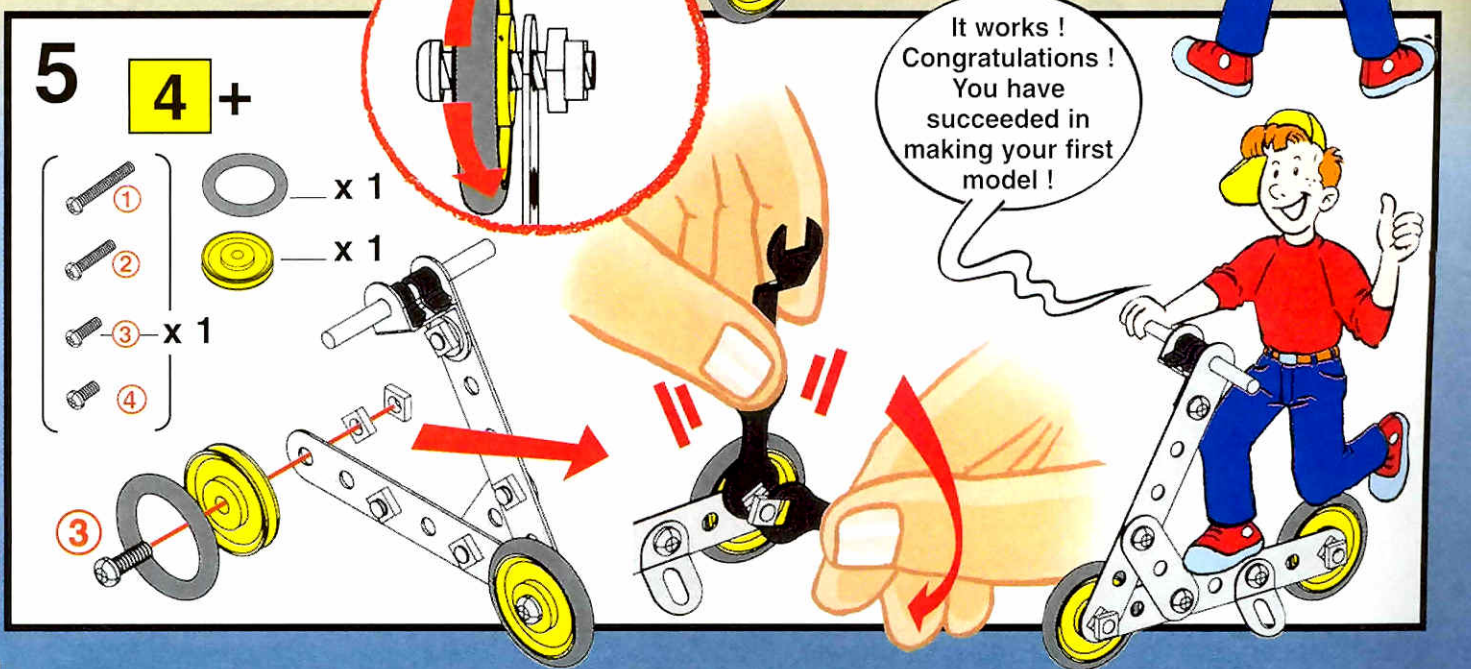
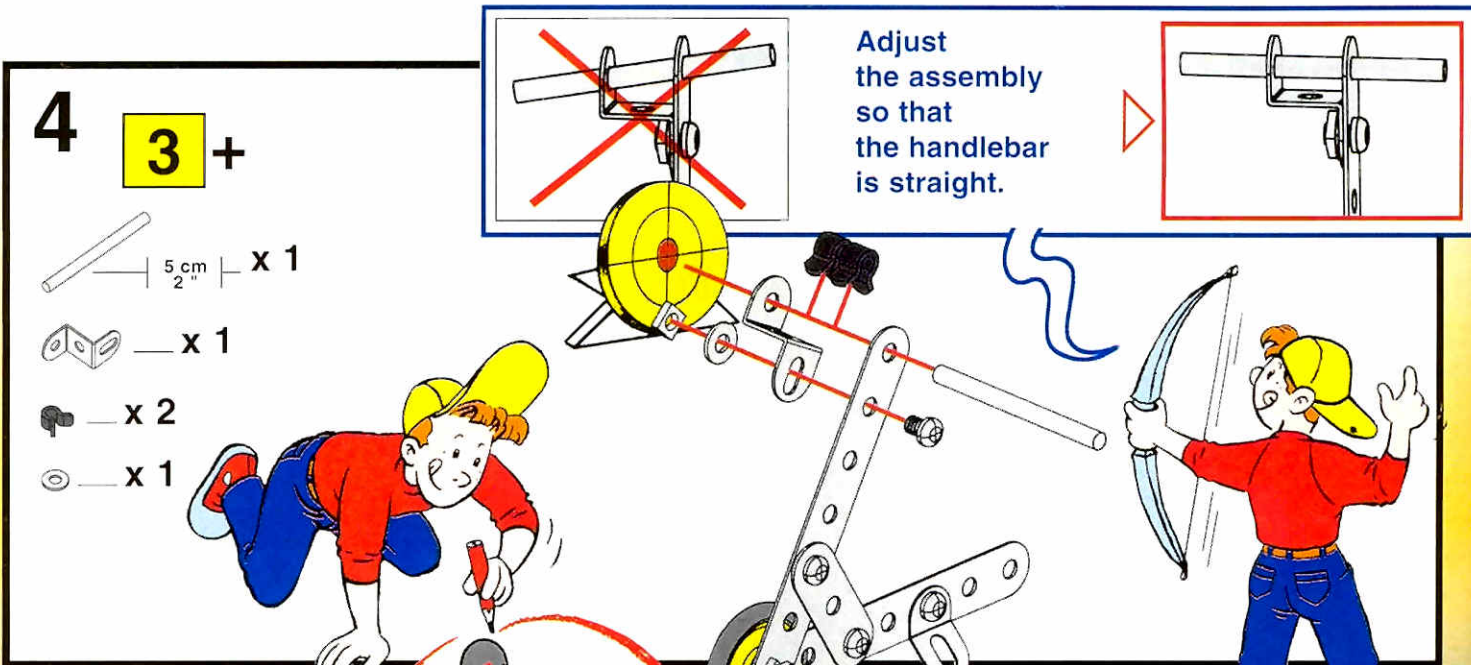
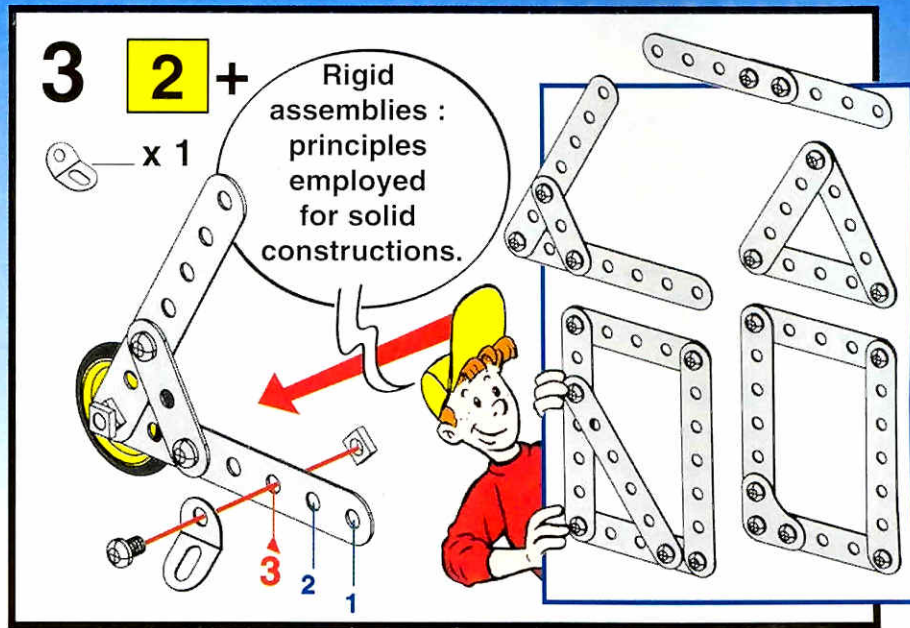
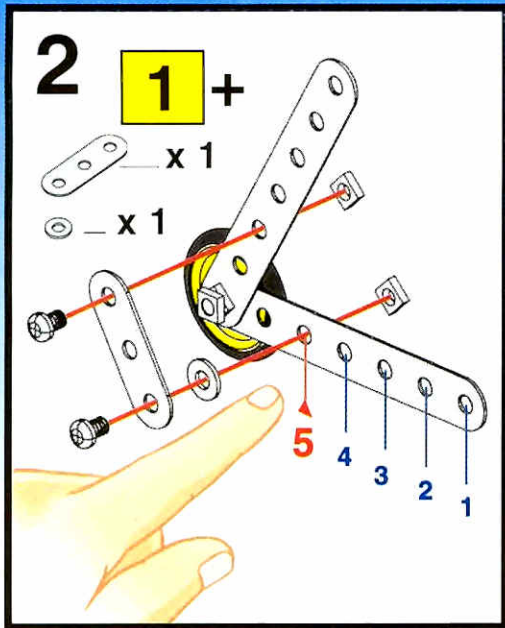
-  x 2
-  x 1
-  x 1
-  ①
-  ②
-  ③ x 1
-  ④

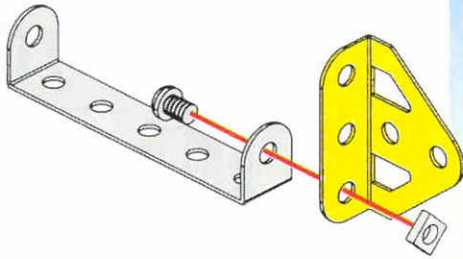
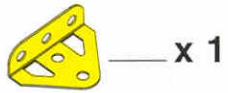
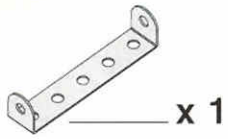


Moveable assembly : nut and lock-nut, permitting the wheel to rotate.

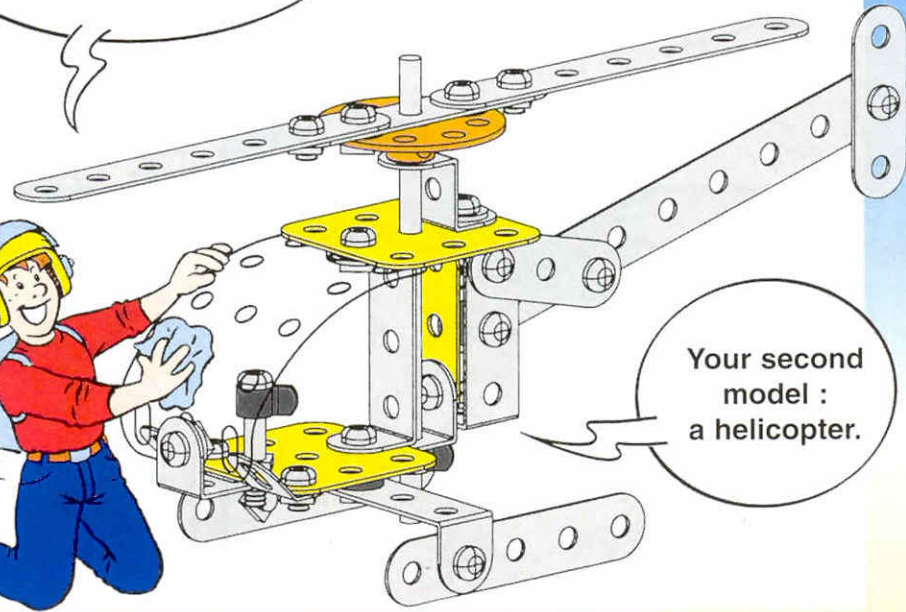
Put them together : the red line shows the order in which to assemble the parts.



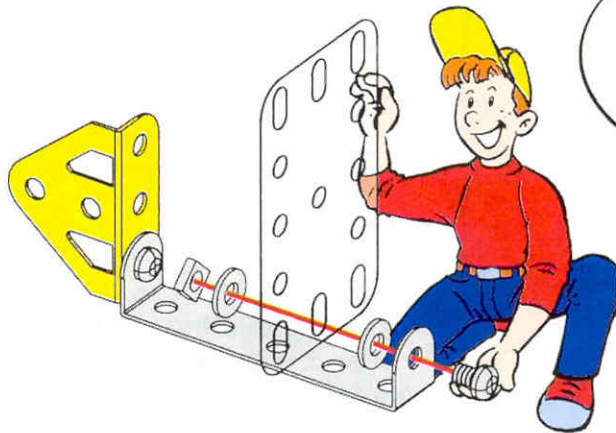
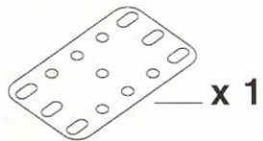


1

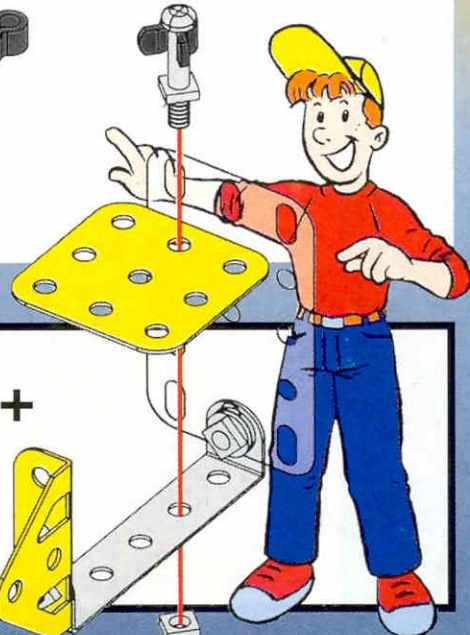
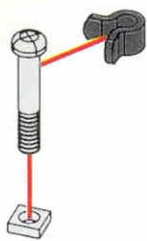
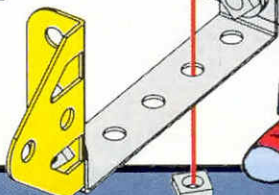
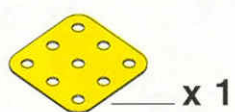
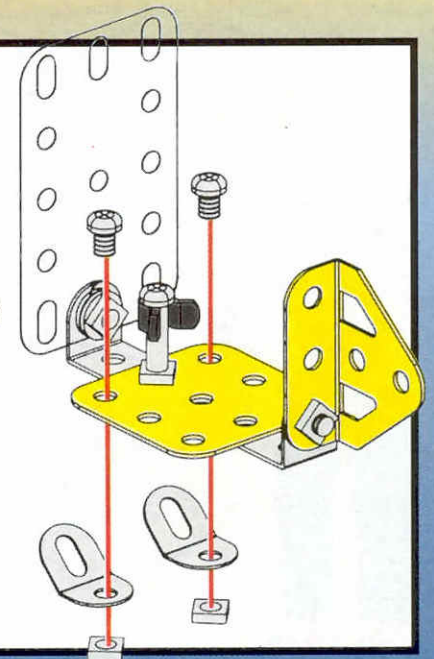
Now, let's fly !
Construct this model
following the step by
step diagrams.



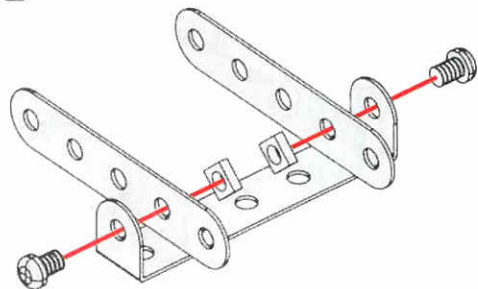
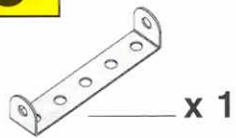
Your second
model :
a helicopter.

2**1** +

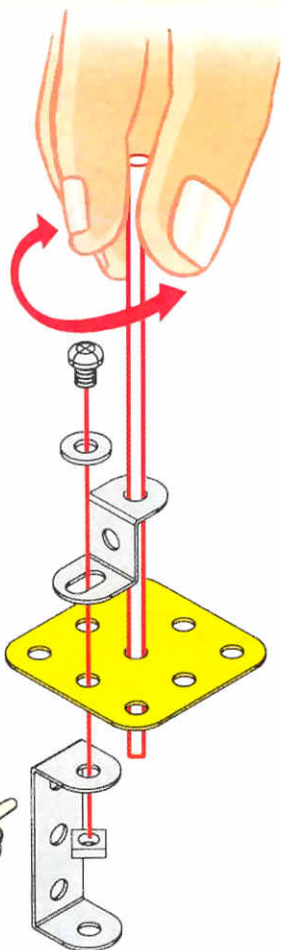
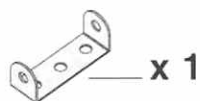
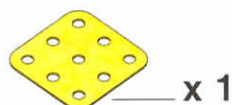
Don't forget the
washers : they are
necessary to shim
the parts.

3**4****2** + **3** +**5****4** +

6



8

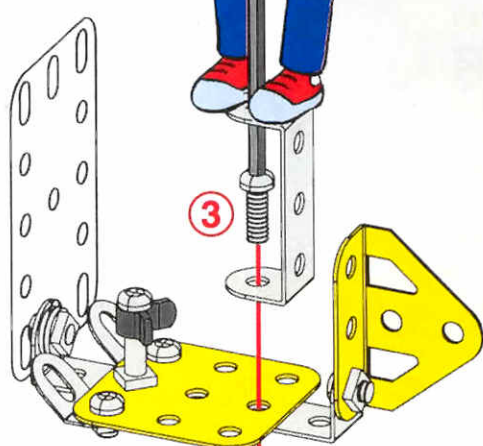
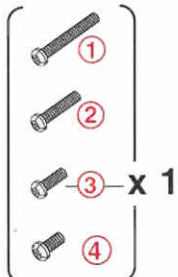
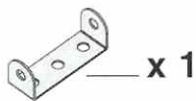


Use an axle for alignment : it will be a guide for an easier setting-up of the parts.

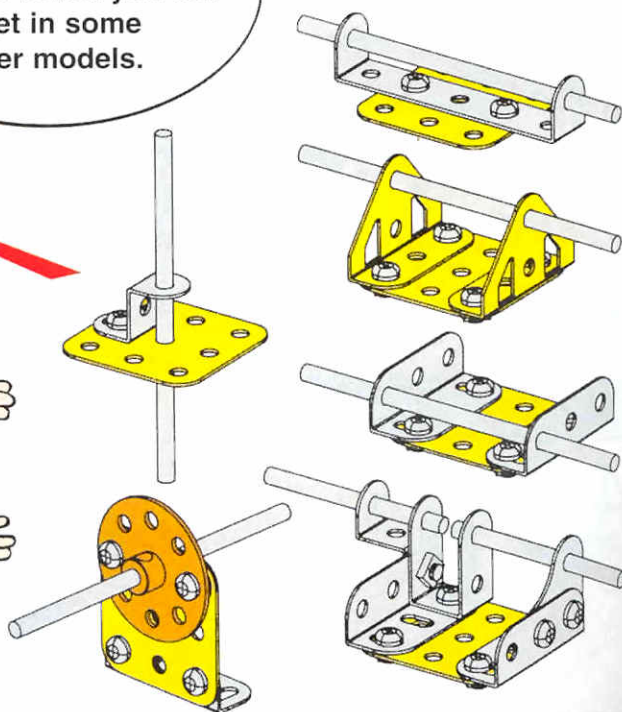
7

Easy ! Put the allen key into the hole for turning screws.

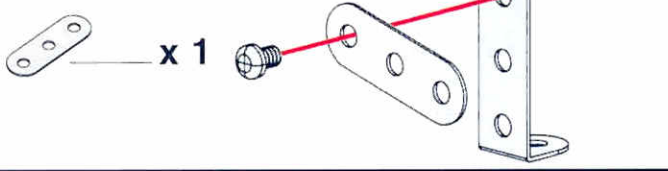
5 + 6 +



Axes or bearing supports : a few examples which you will meet in some other models.



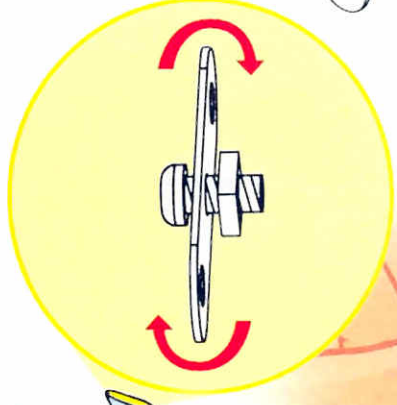
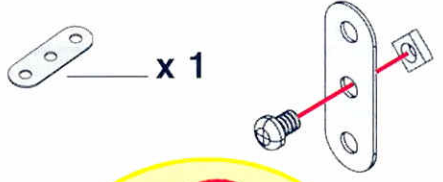
9 **8** +



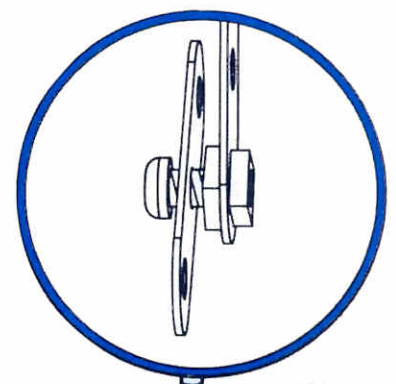
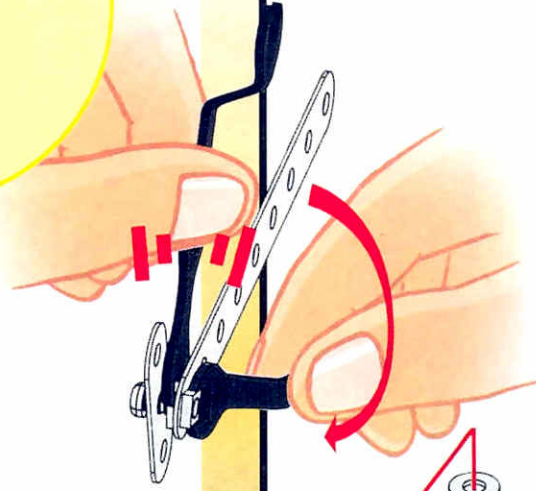
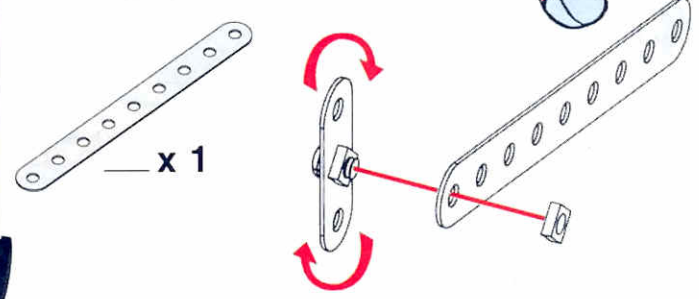
First, insert screws without tightening, as you will have to mount this assembly on some other parts.






10

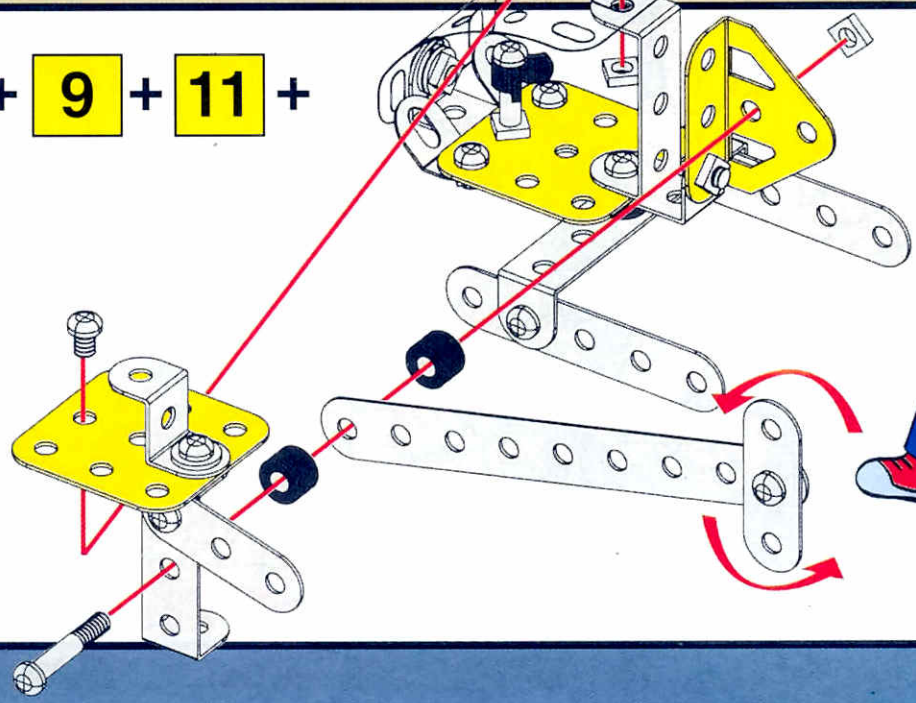


11 **10** +









12 **7** + **9** + **11** +

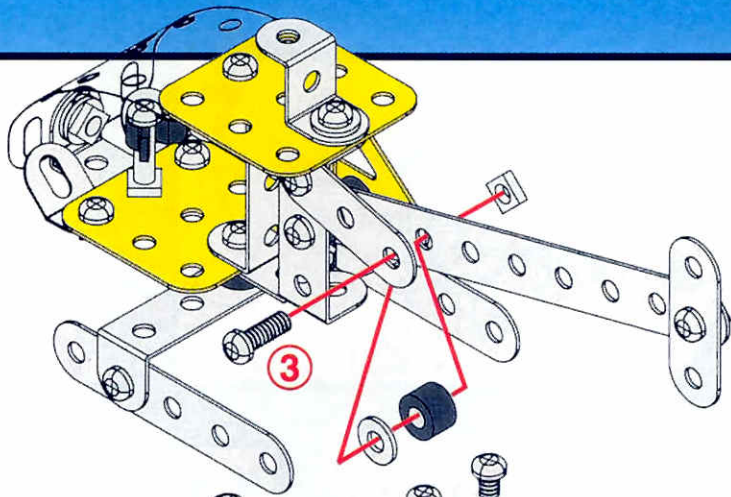
-  x 1
-  x 1
-  x 2



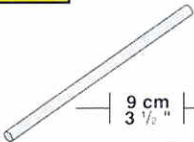
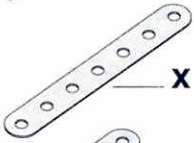

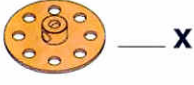

13

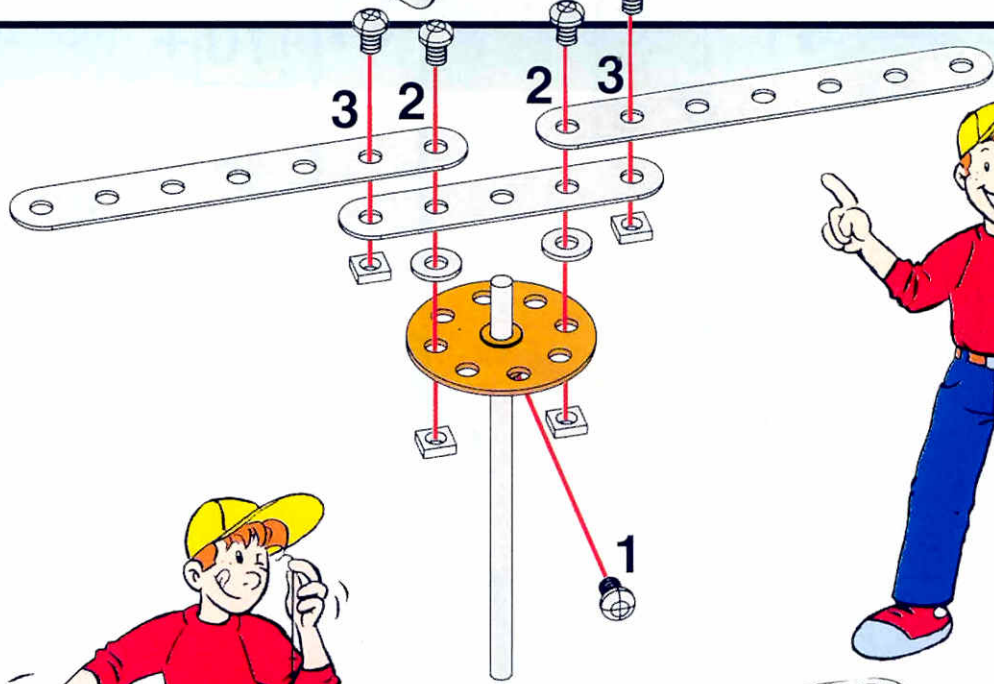
12+

-  ①
-  ②
-  ③ x 1
-  ④
-  — x 1
-  — x 1





14

-  $\frac{9\text{ cm}}{3\frac{1}{2}''}$ x 1
-  x 2
-  x 1
-  x 1
-  x 2

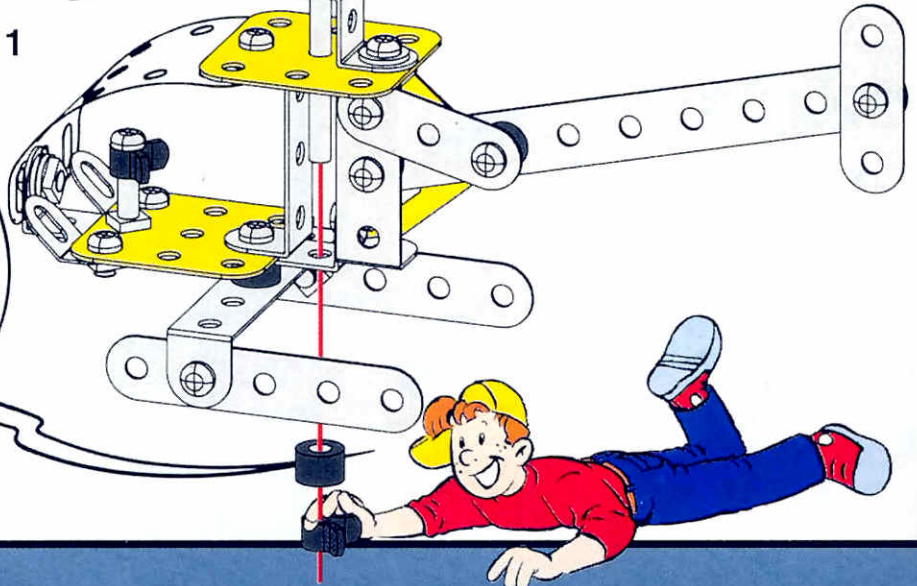


15

13+14+

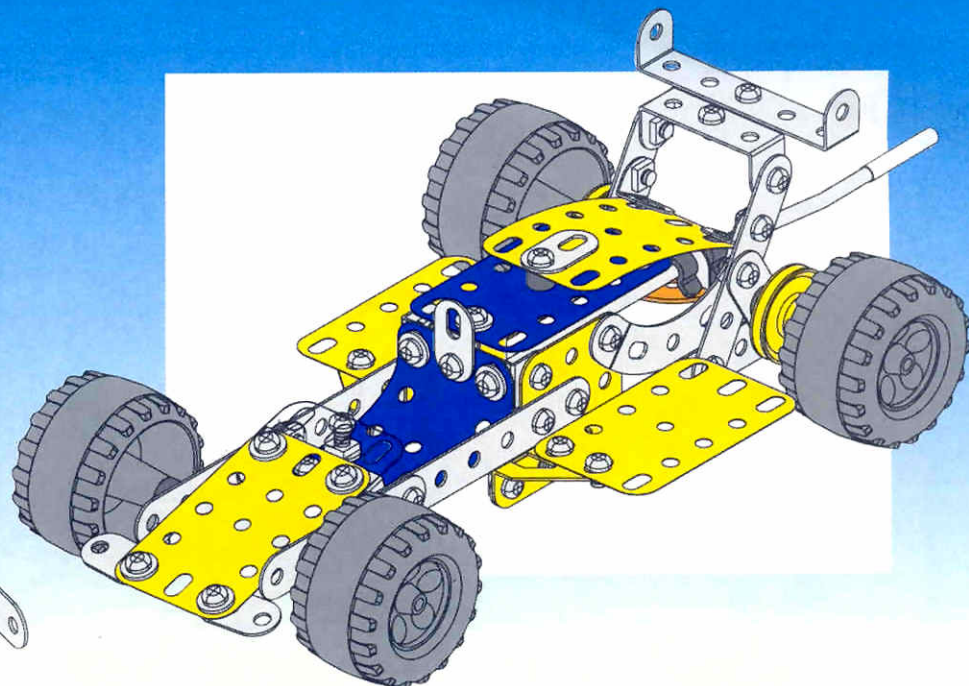
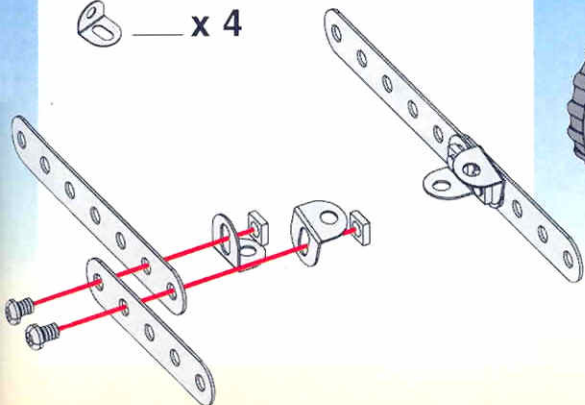
-  — x 1
-  — x 1

Align, adjust and tighten the screws and nuts. Your helicopter is completed, the blades are rotating, you have done it!

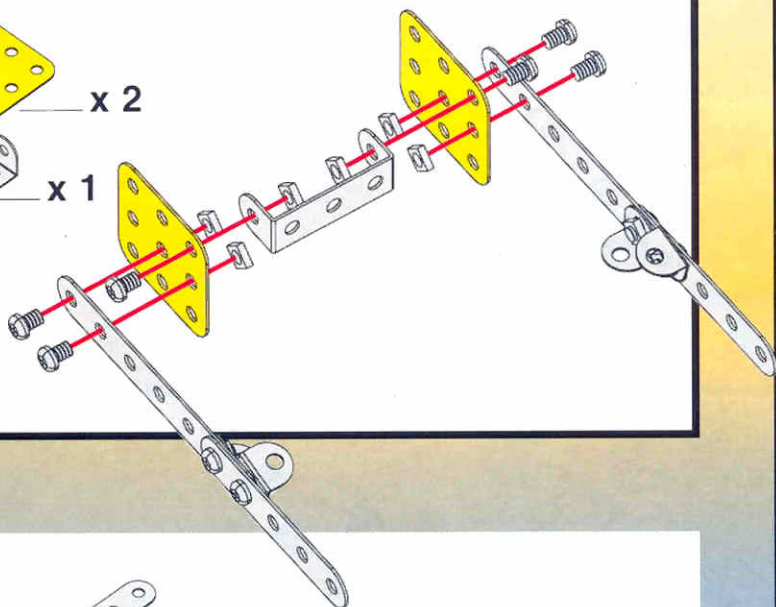


1

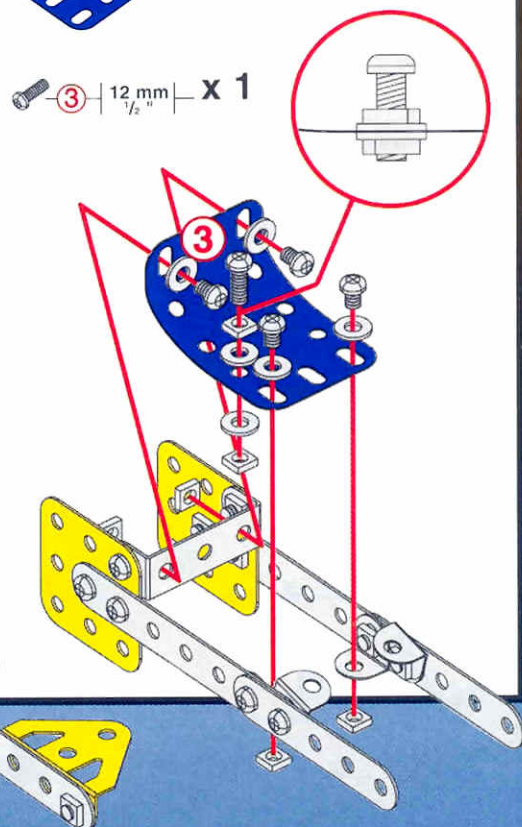
- x 2
- x 2
- x 4

**2** **1** +

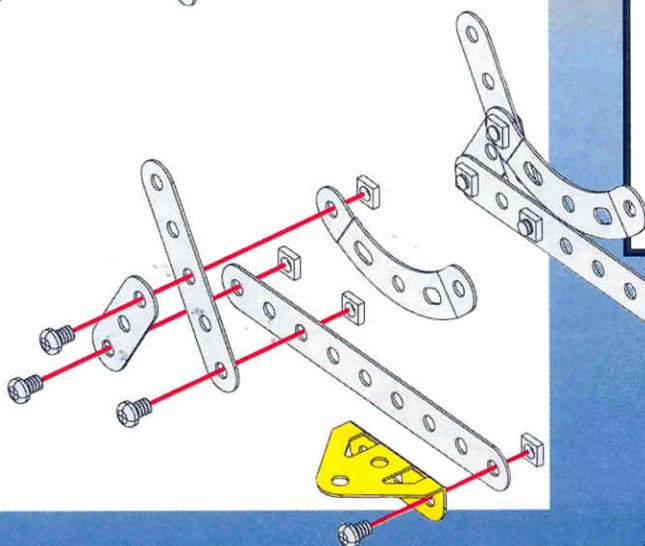
- x 2
- x 1

**3** **2** +

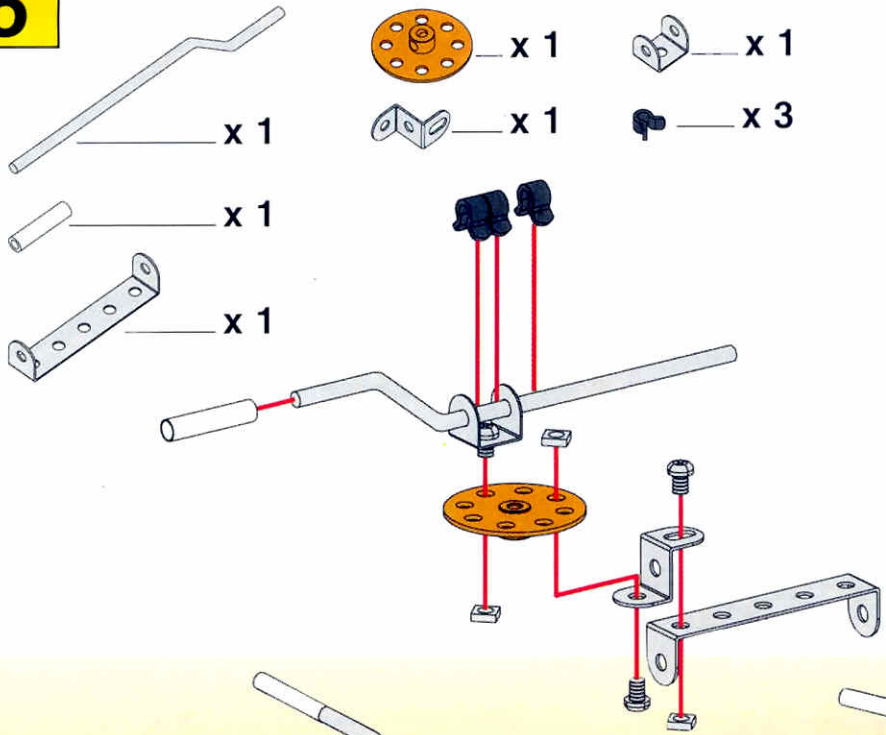
- x 1
- 12 mm $\frac{1}{4}$ " x 1

**4**

- x 2
- x 2
- x 2
- x 2
- x 2

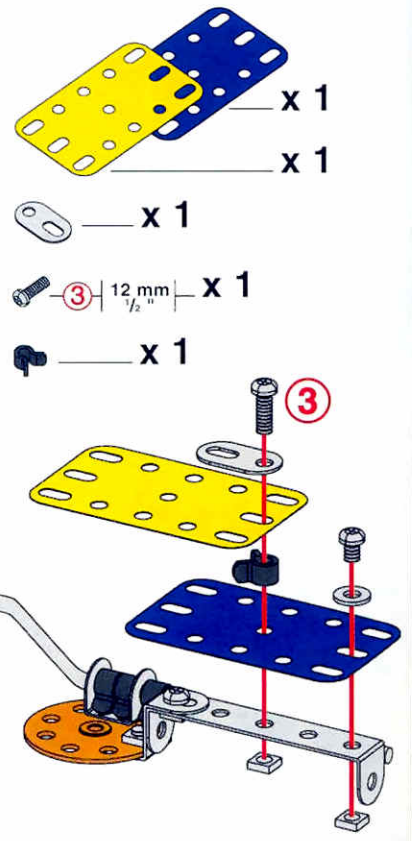


5



6

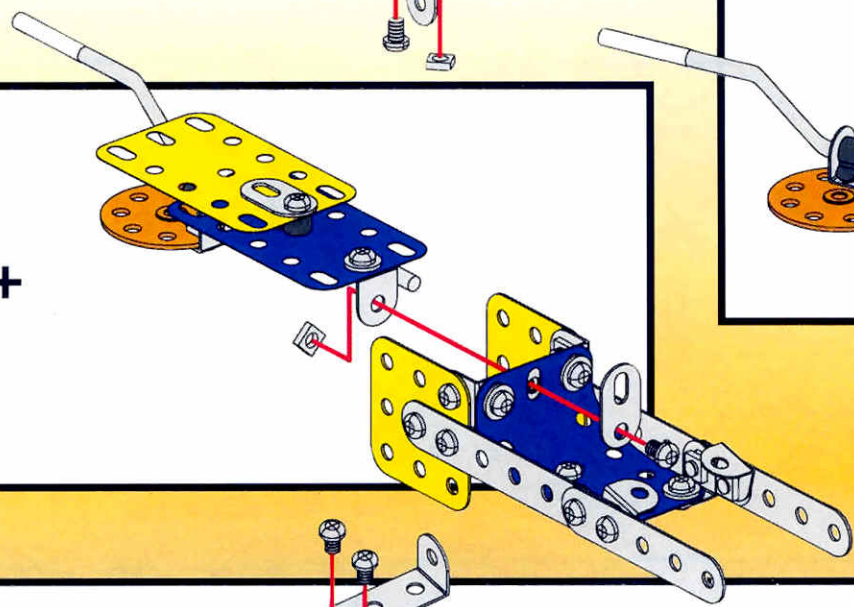
5+



7

3 + 6 +

x 1



8

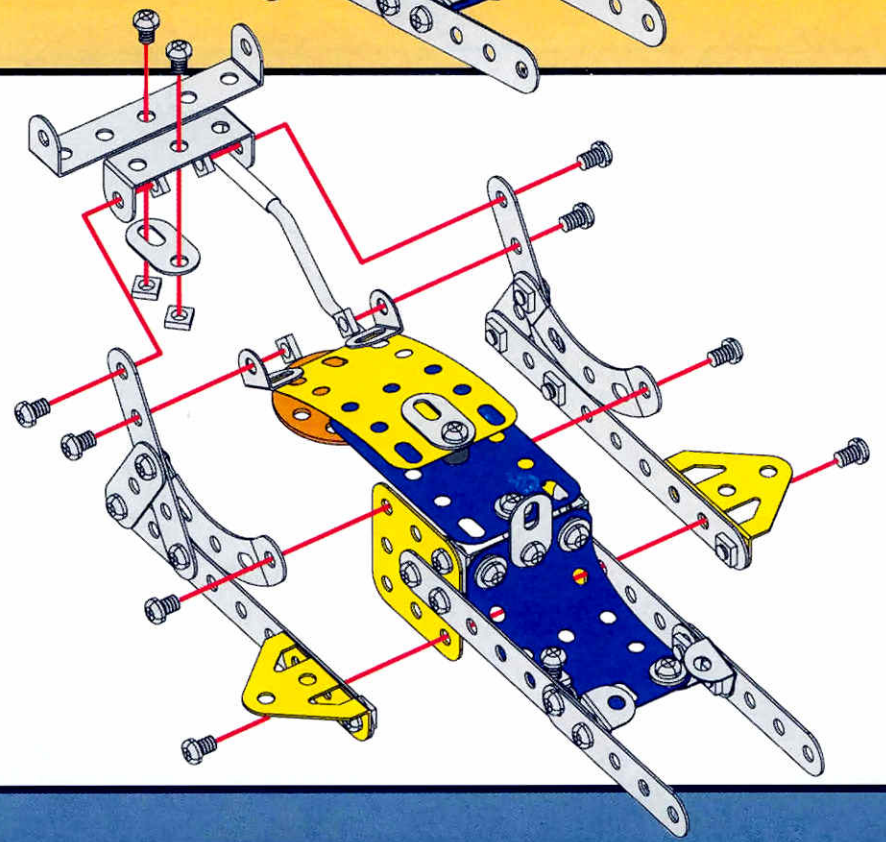
4 + 7 +

x 1

x 1

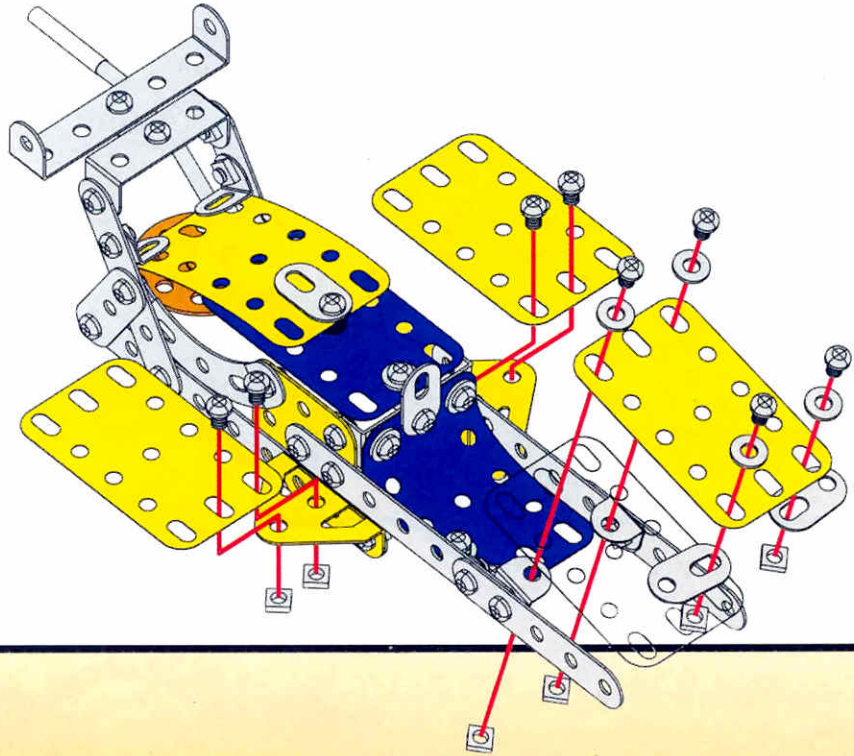
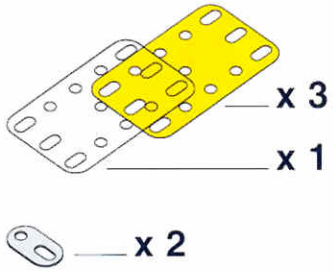
x 1

x 2



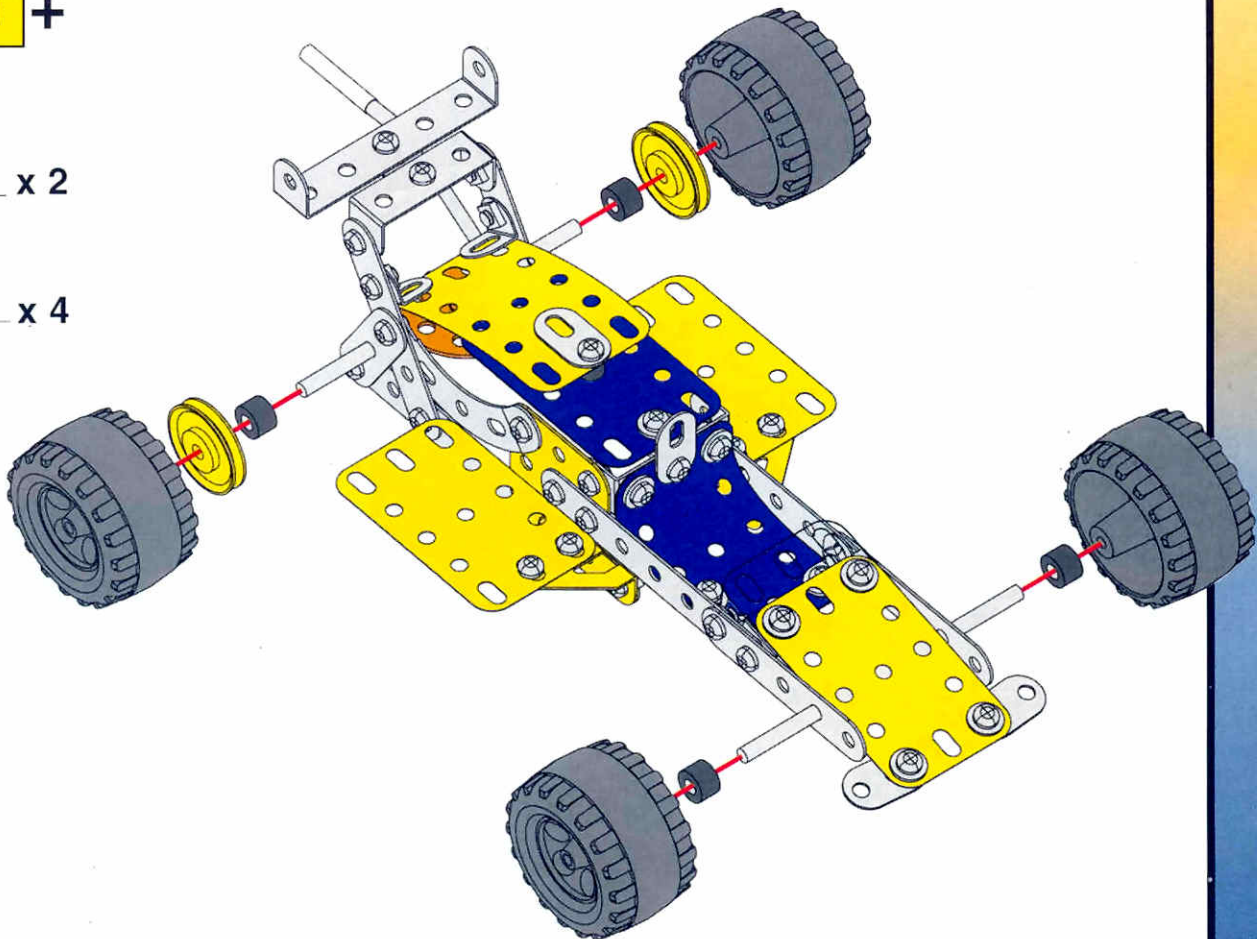
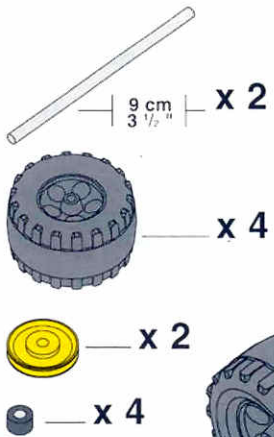
9

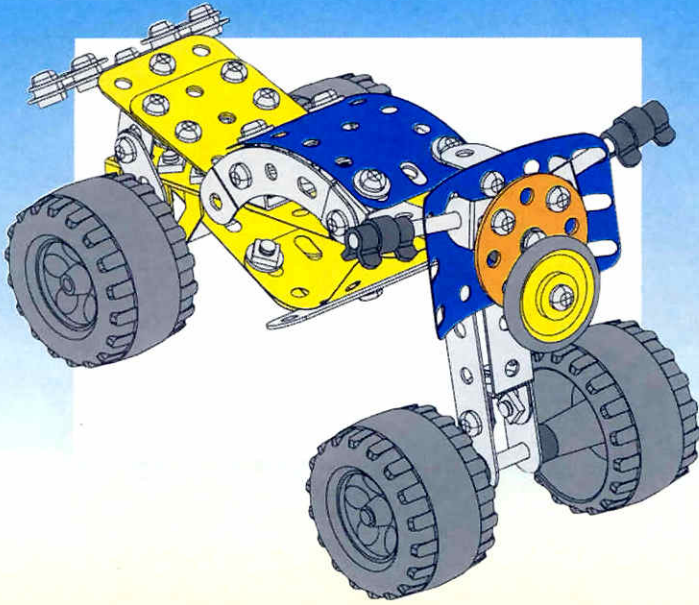
8+



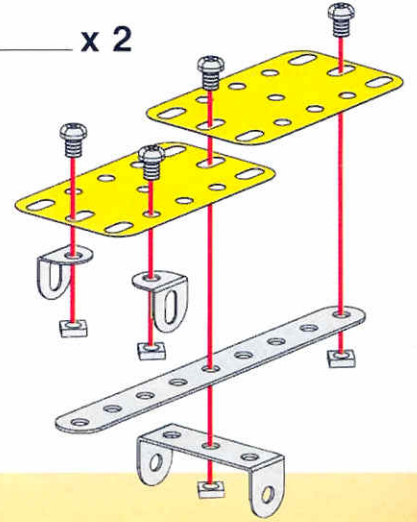
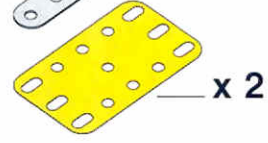
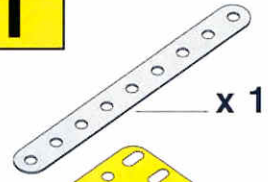
10

9+





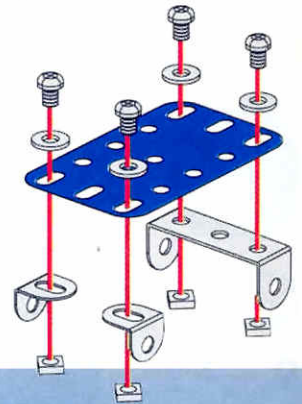
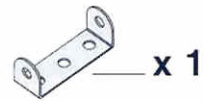
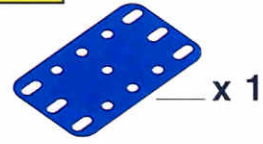
1



2

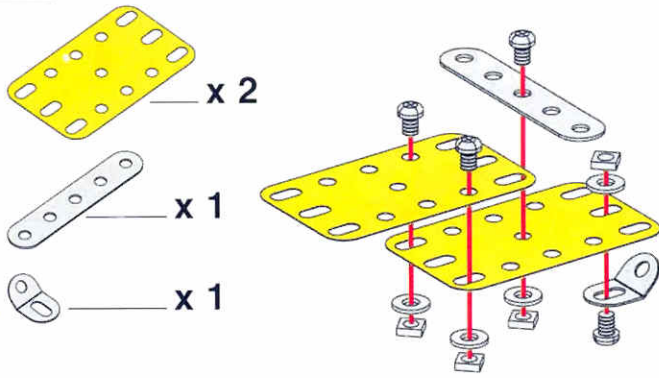
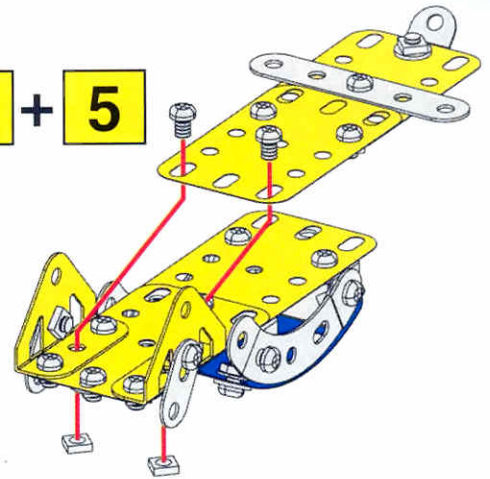
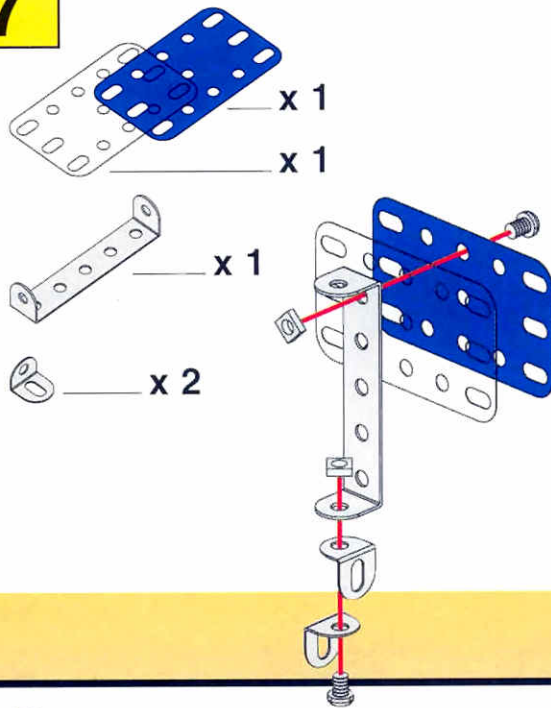
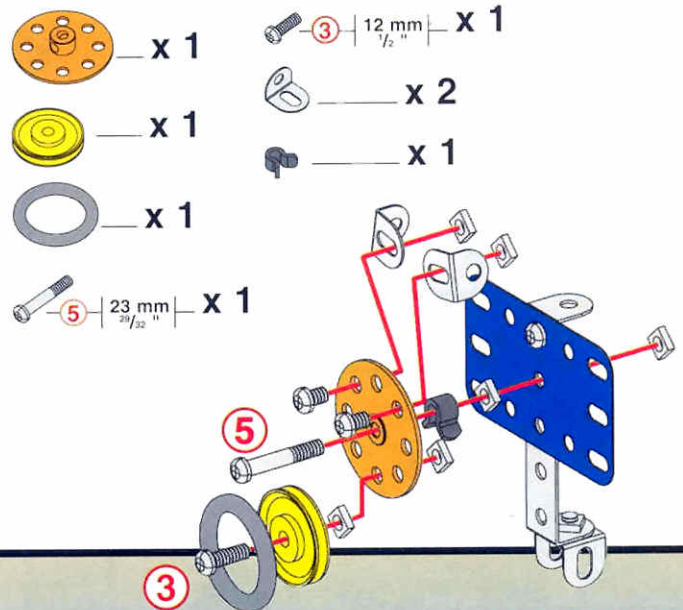
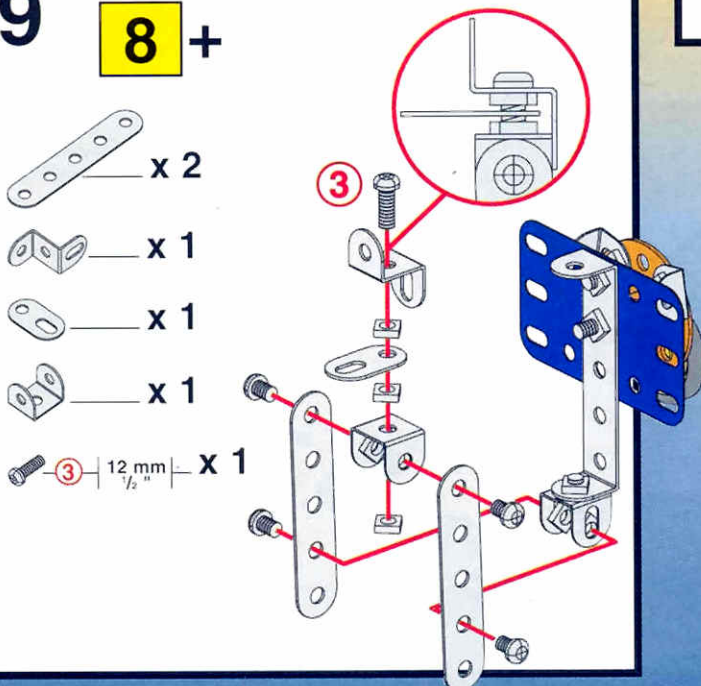
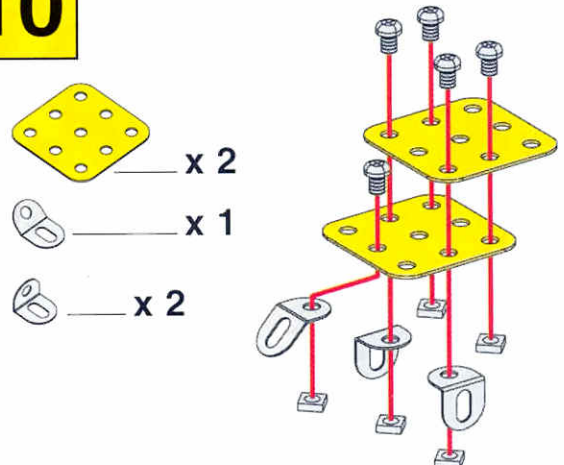
1 +

3

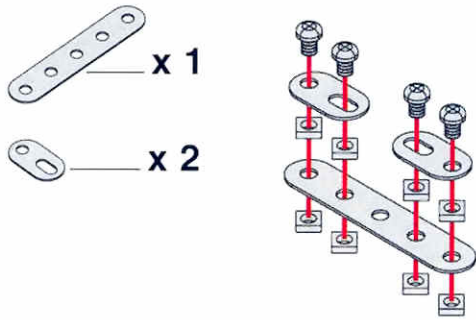


4

2 + **3** +

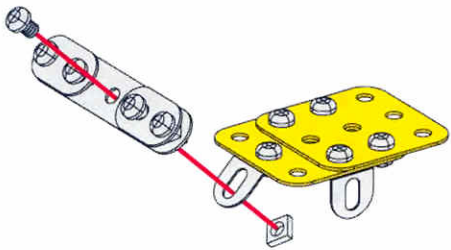
5**6****4 + 5****7****8****7 +****9****8 +****10**

11



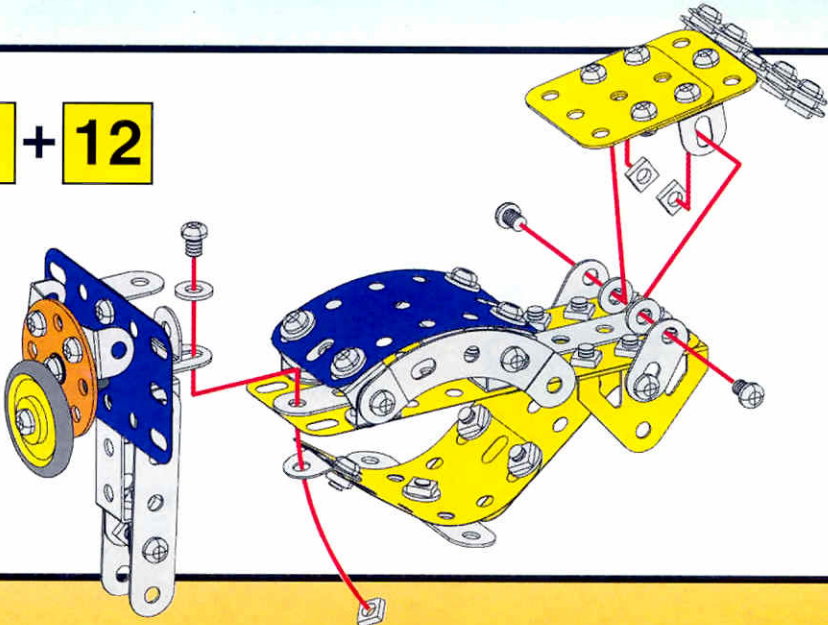
12

10 + 11



13

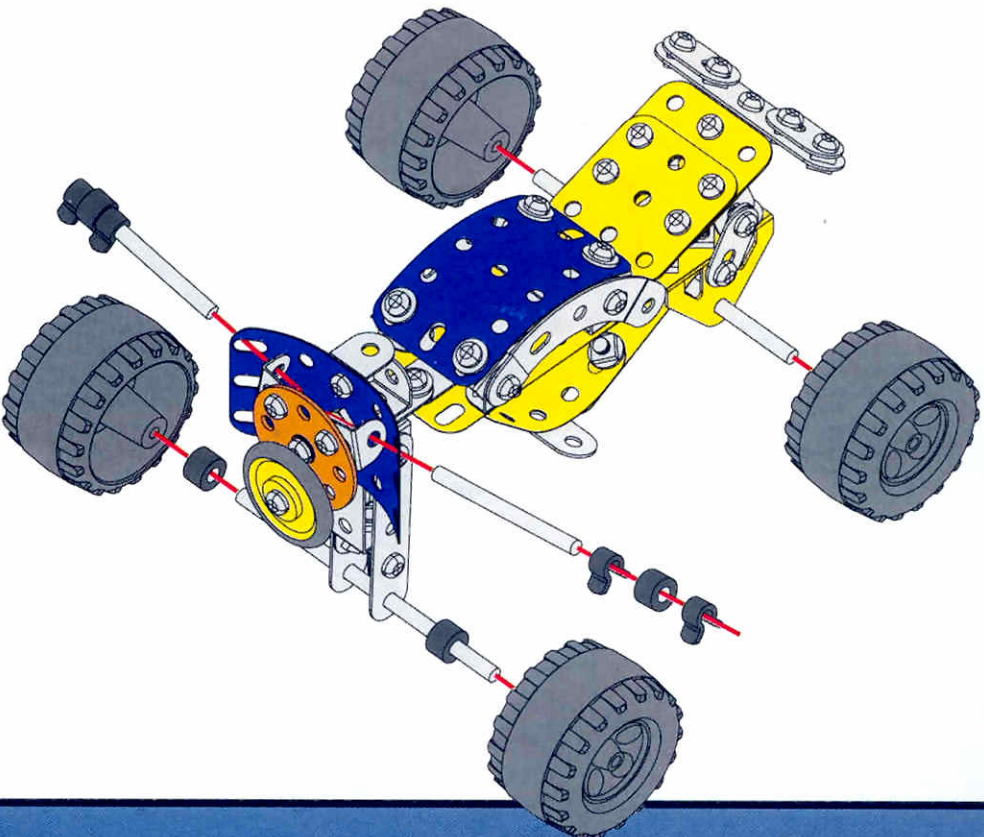
6 + 9 + 12

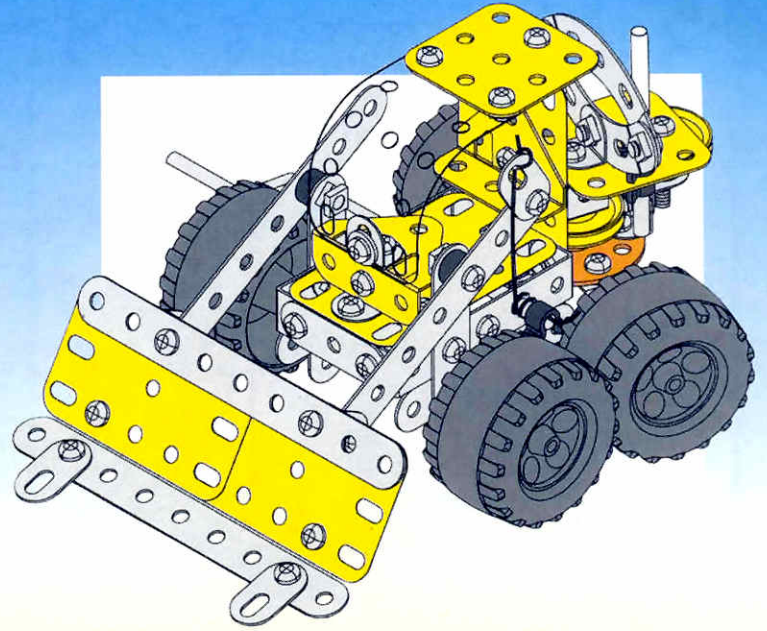
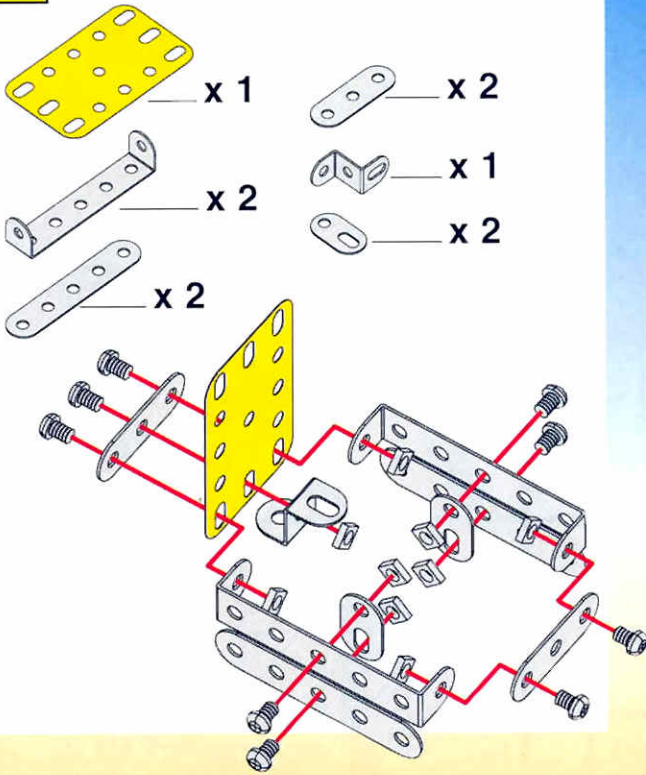
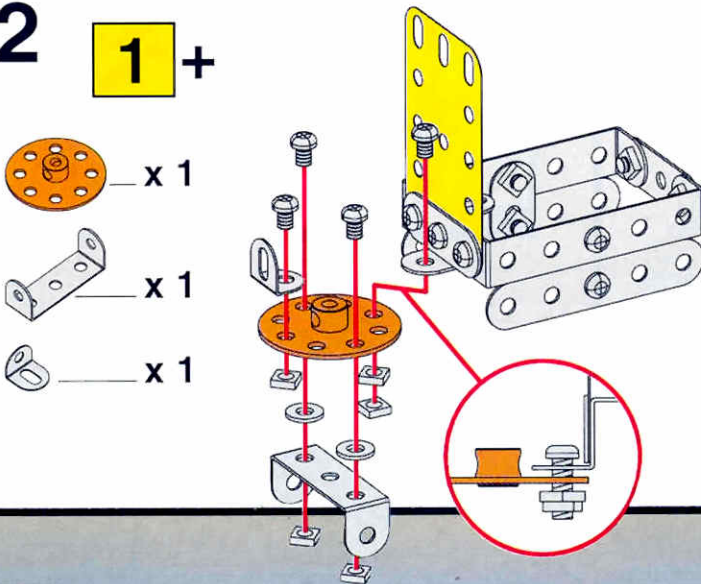
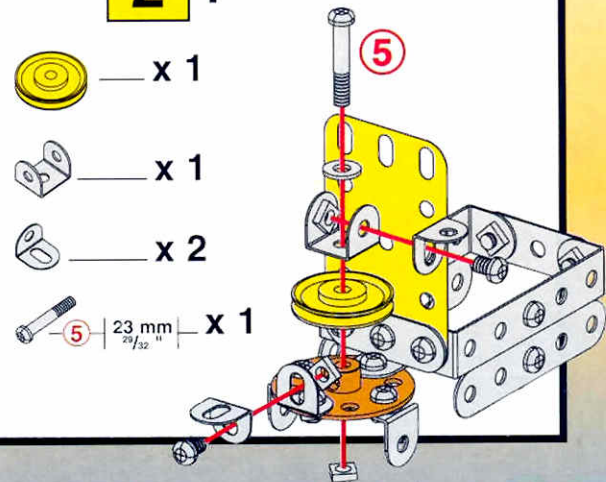
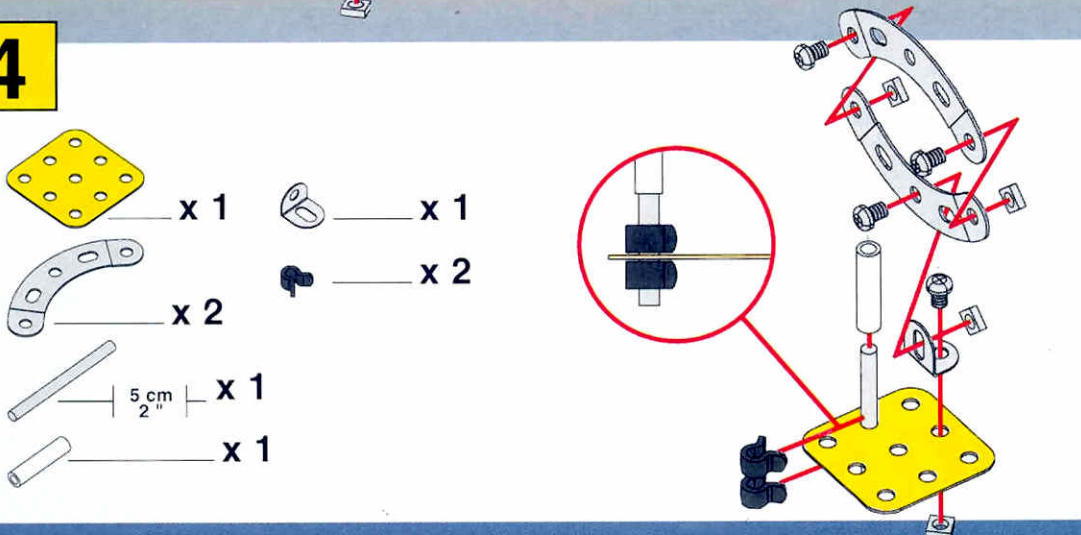


14

13 +

- 9 cm / 3 1/2" x 2
- 5 cm / 2" x 2
- x 4
- x 4
- x 4



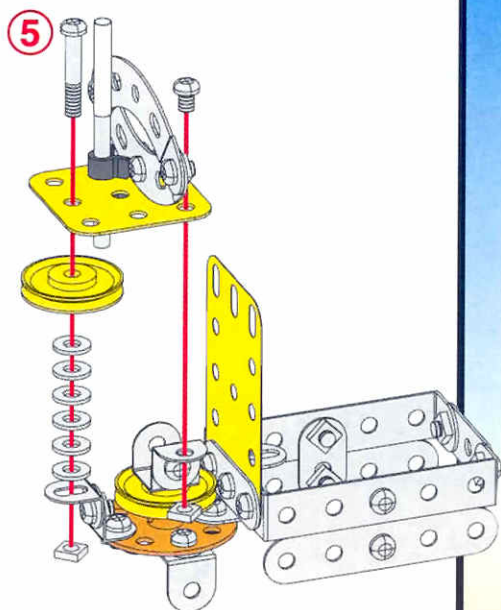
1**2** **1** +**3** **2** +**4**

5

3 + **4** +

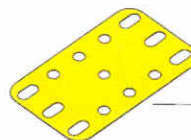
 x 1


 23 mm $\frac{29}{32}$ " x 1



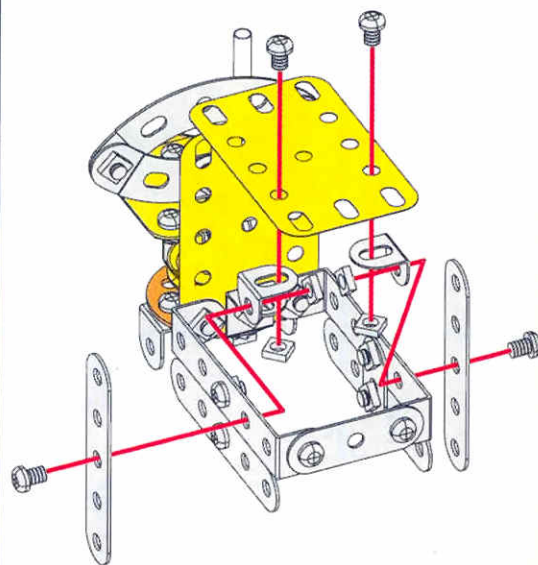
6

5 +

 x 1


 x 2

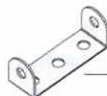
 x 2

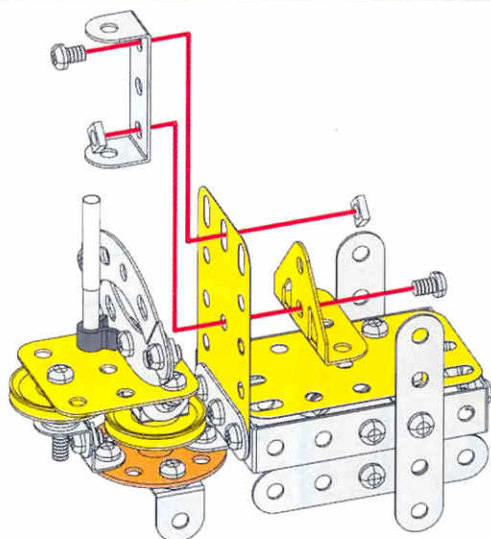


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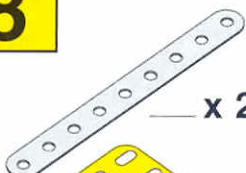
6 +

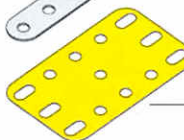
 x 1

 x 1



8

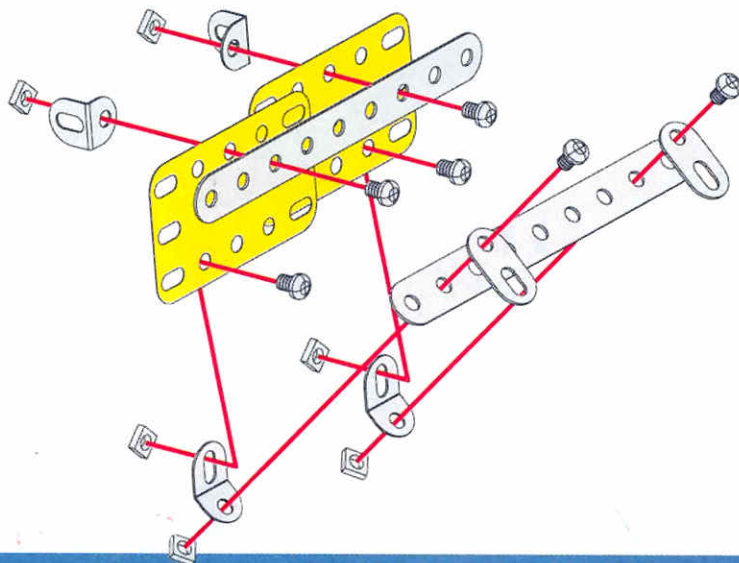
 x 2

 x 2

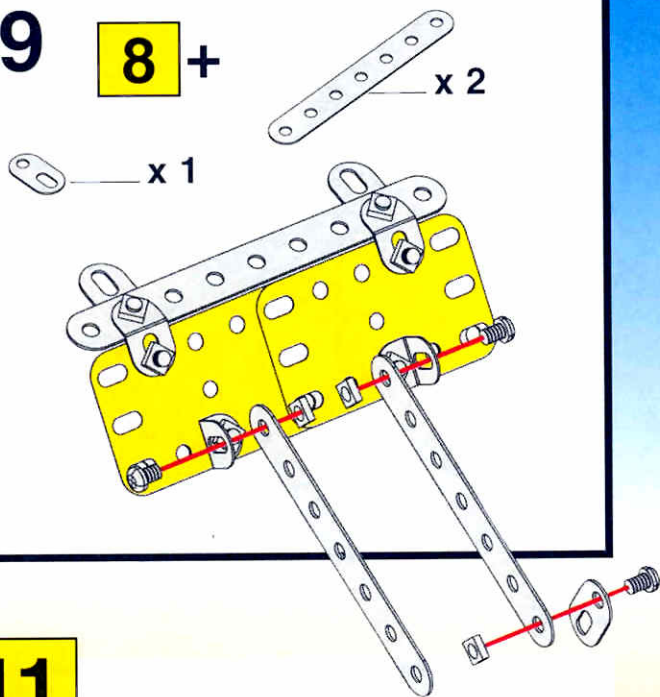
 x 2

 x 2

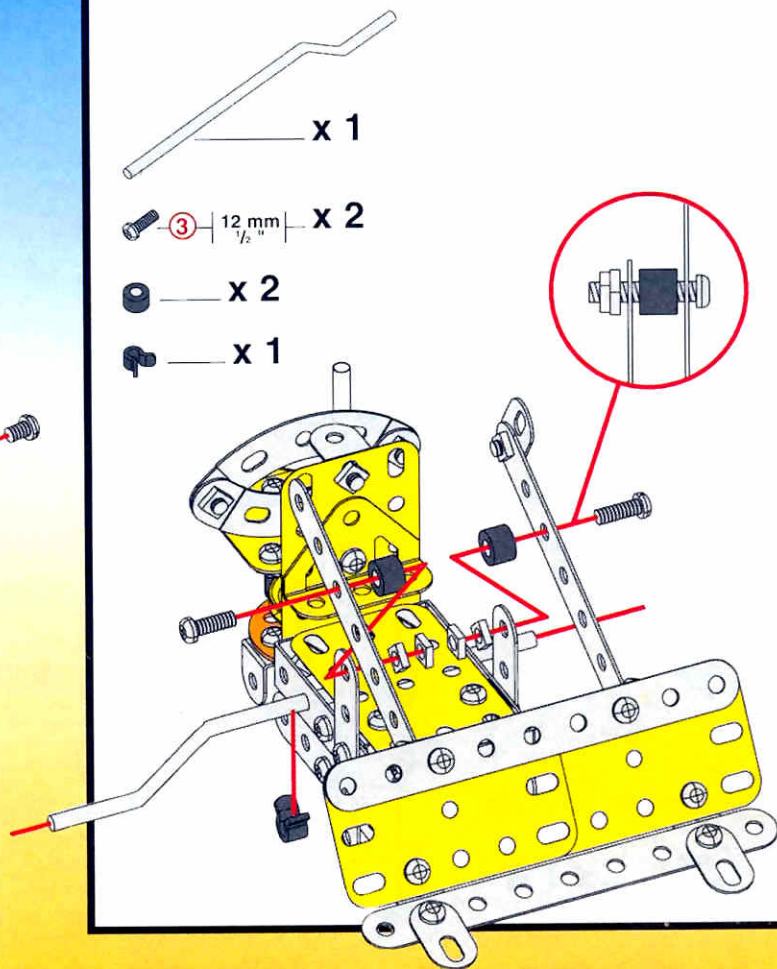
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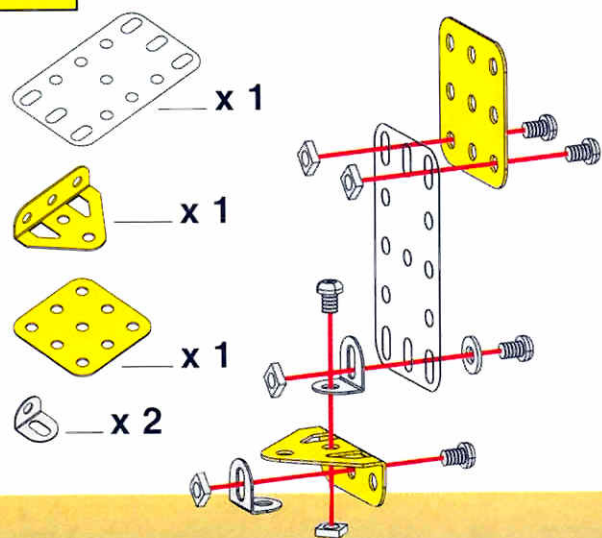
9 **8**+



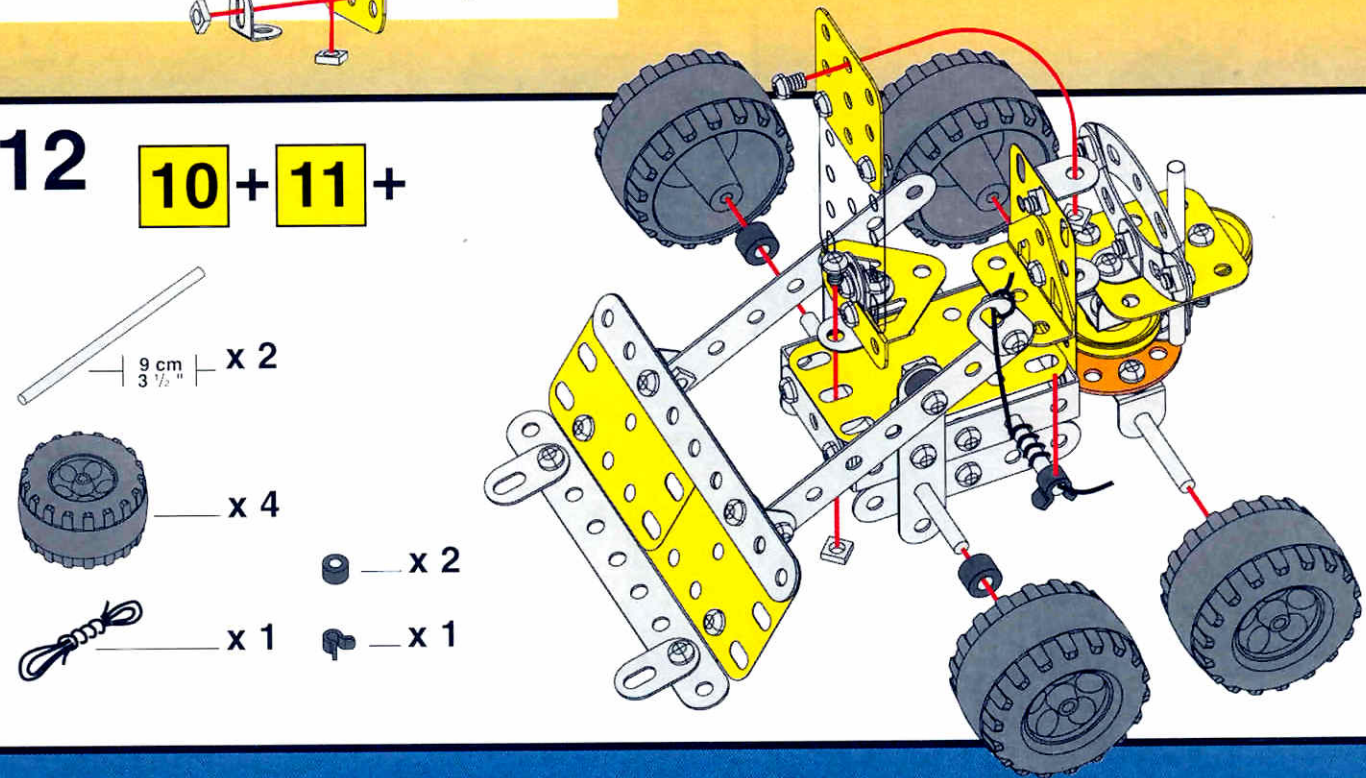
10 **7**+ **9**+

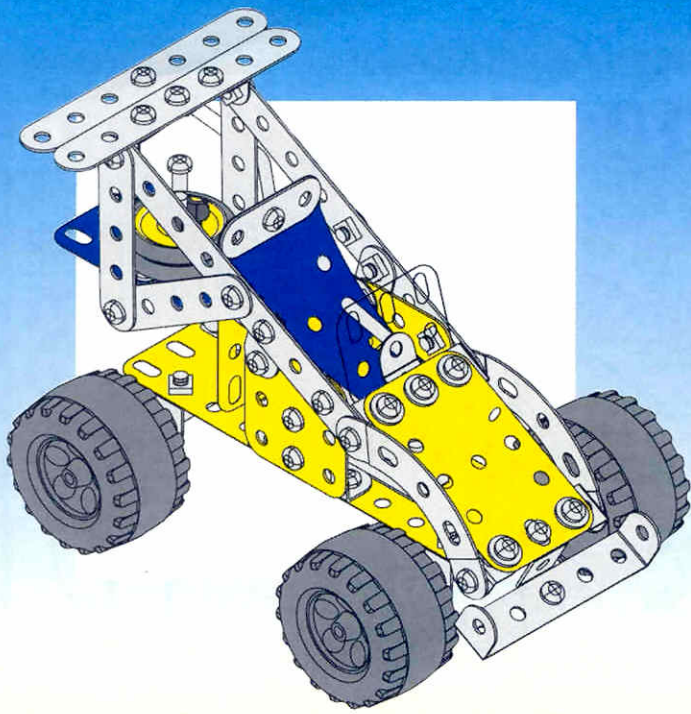


11

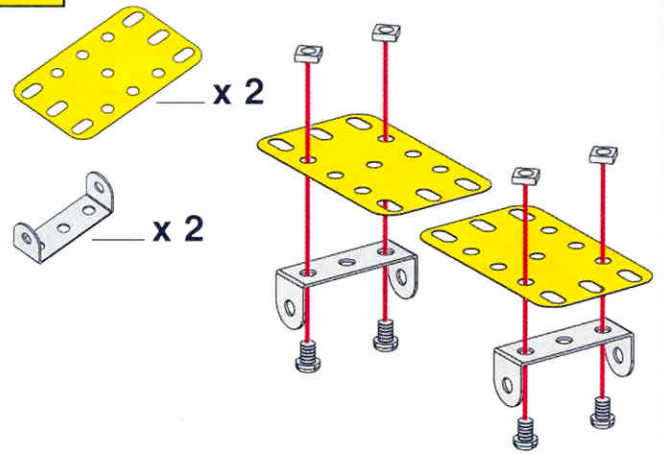


12 **10**+ **11**+

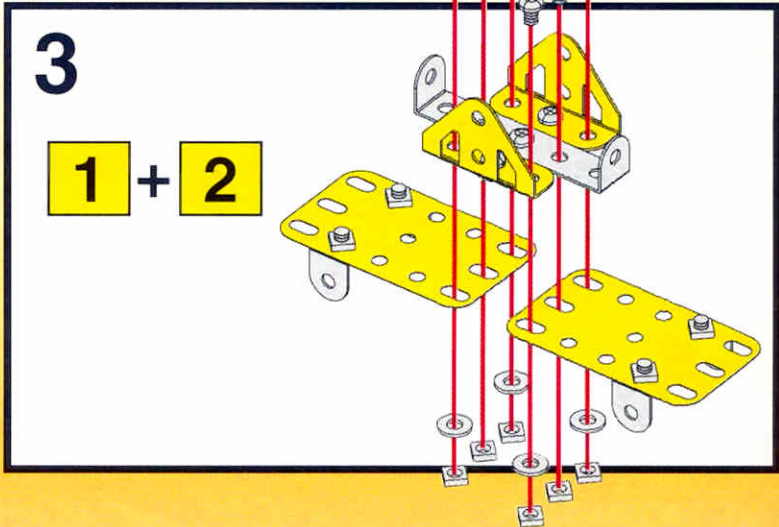
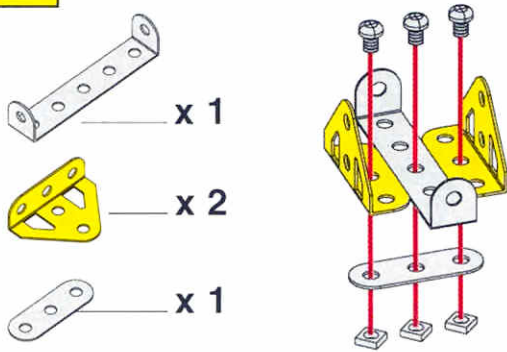




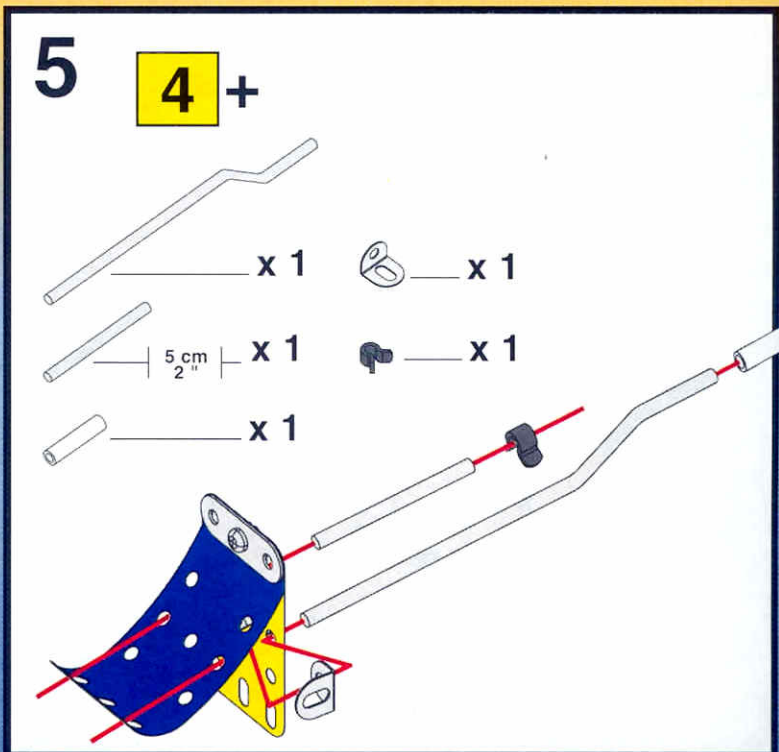
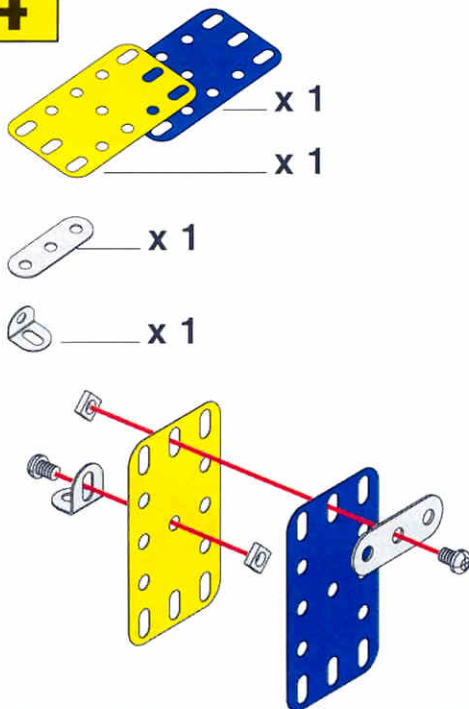
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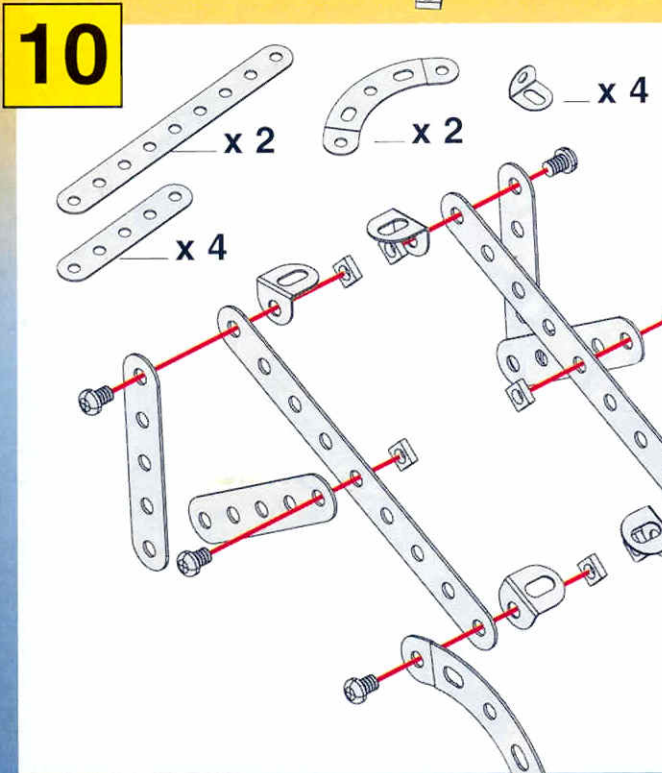
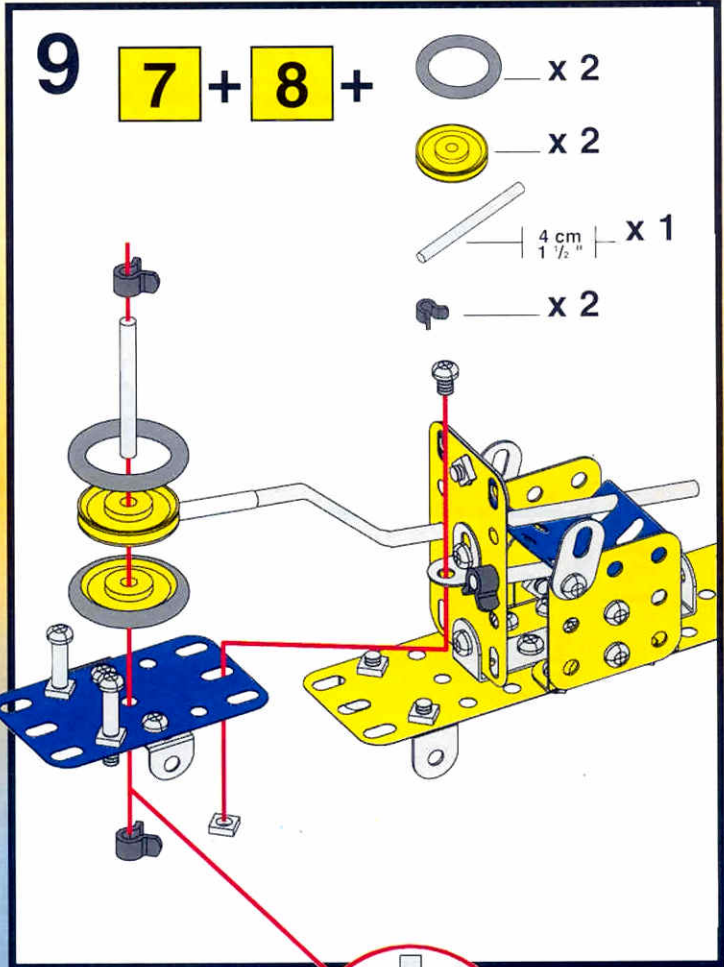
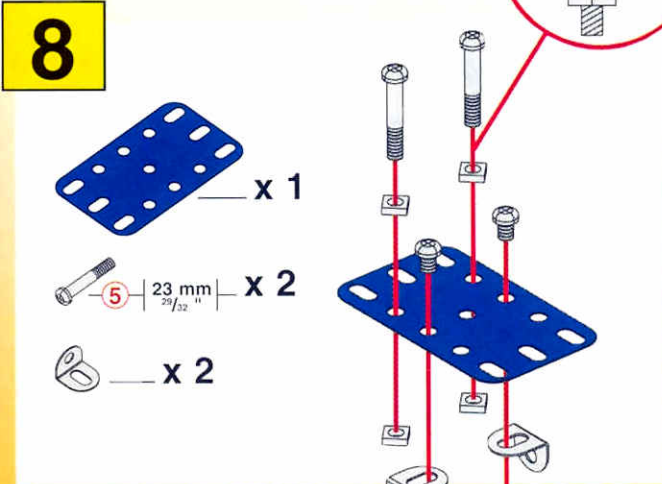
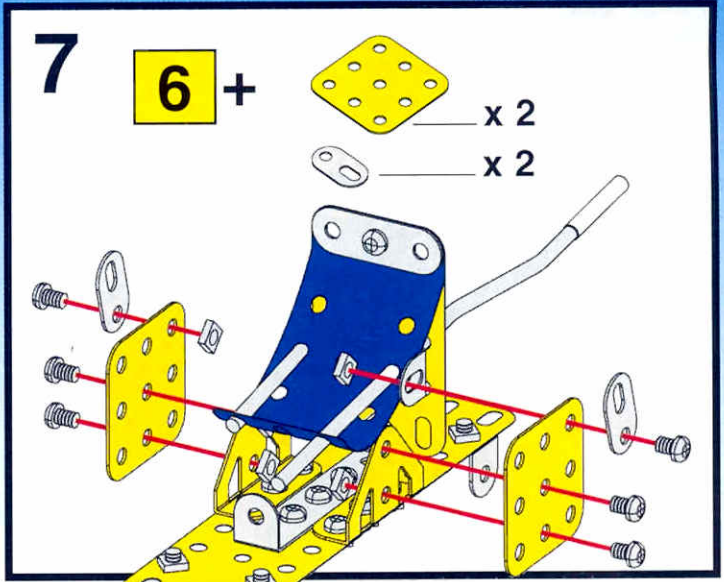
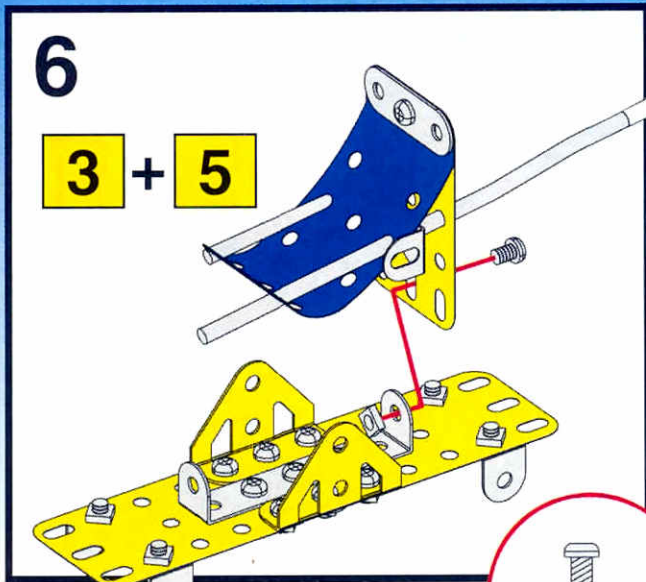


2

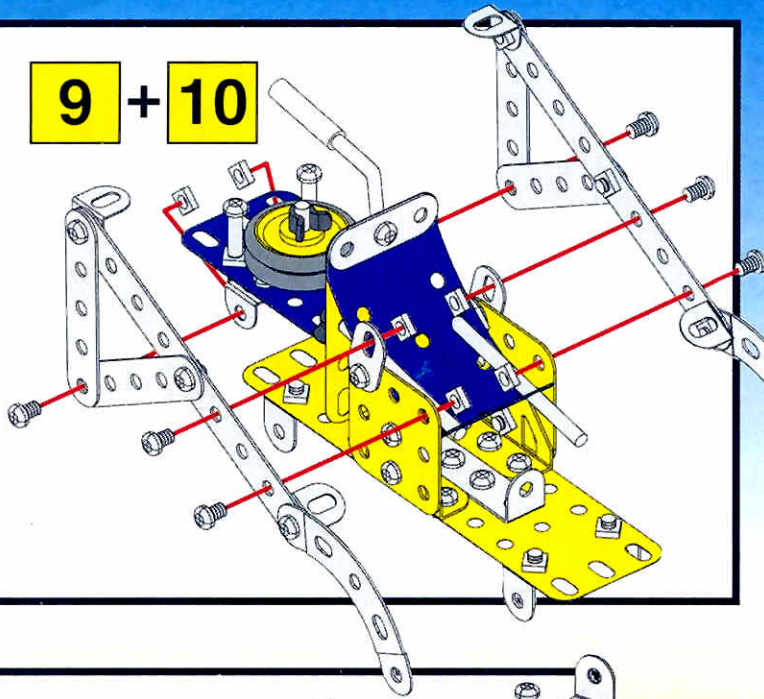


4

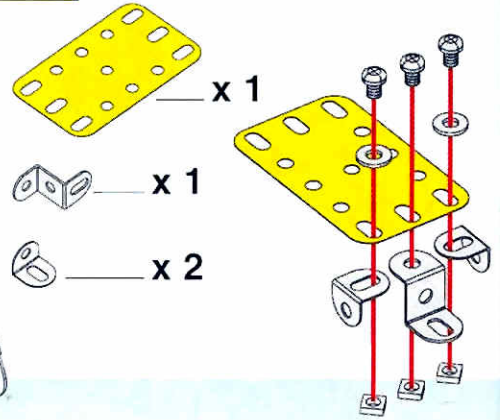




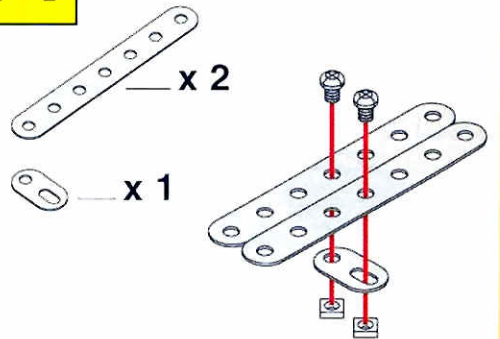
11 **9** + **10**



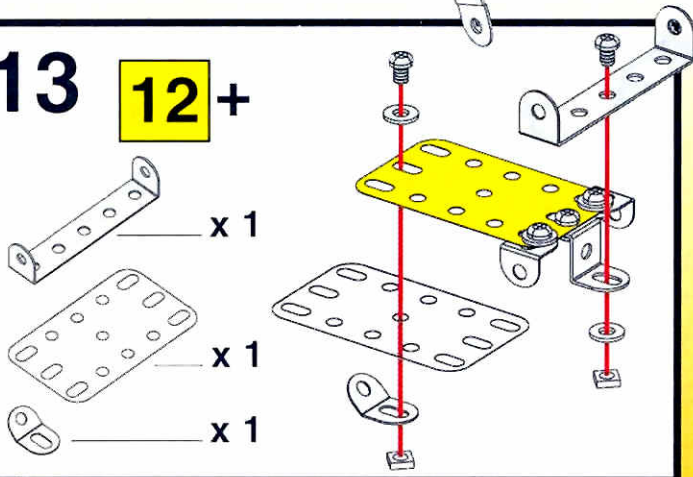
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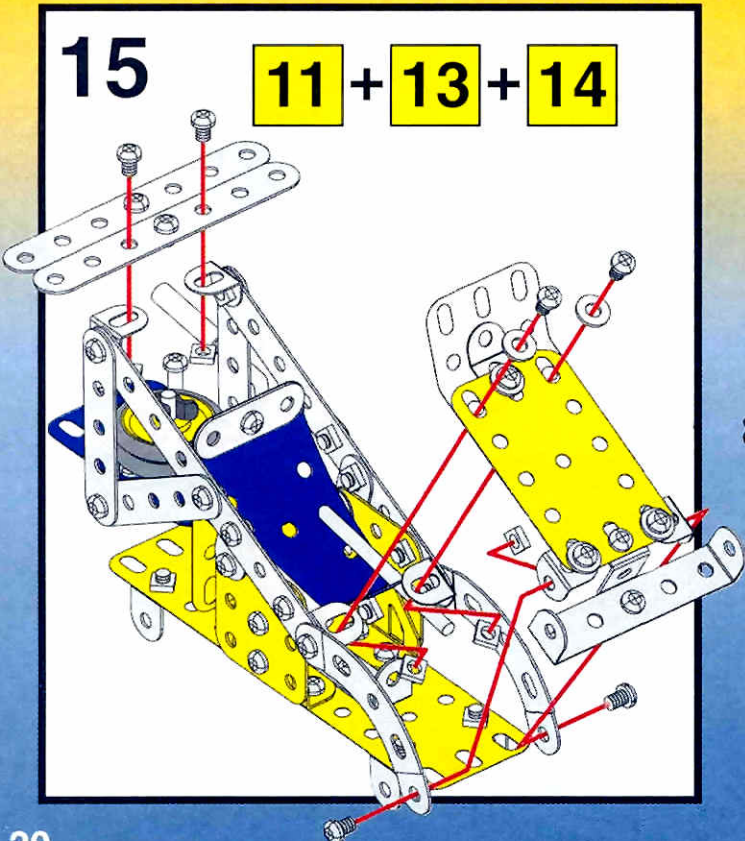
14



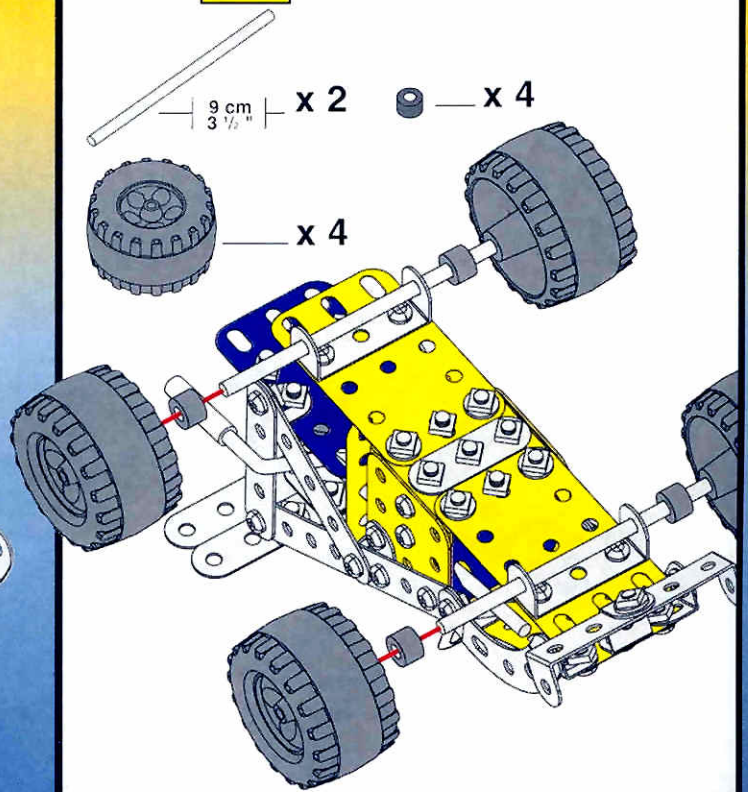
13 **12** +

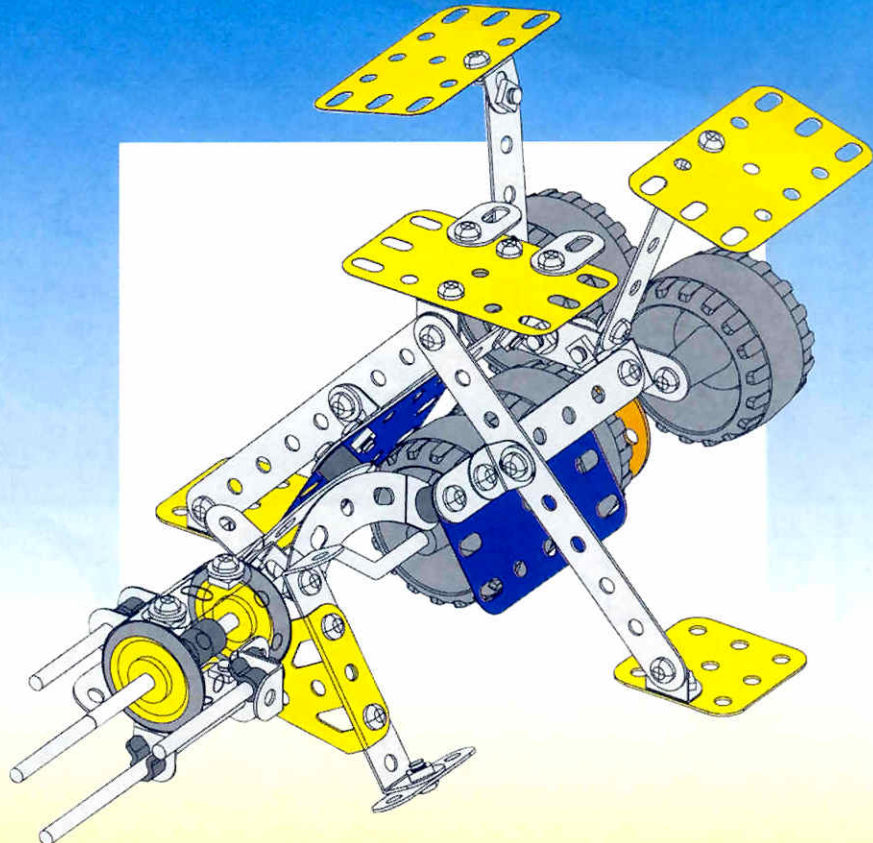
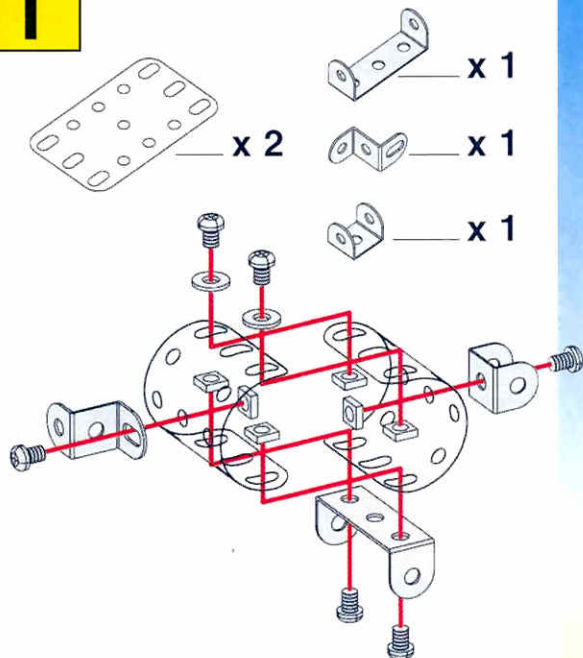
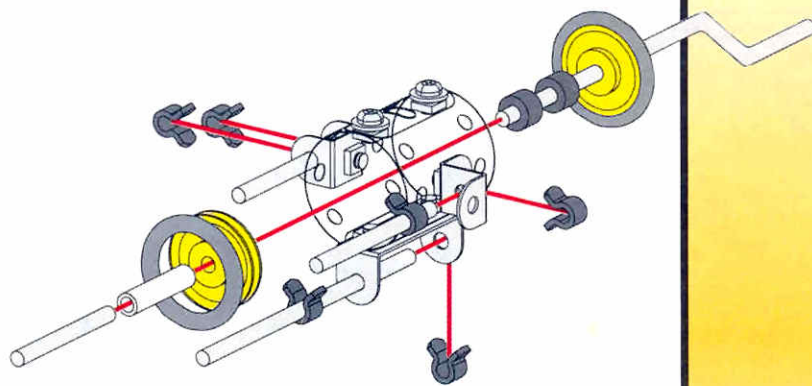
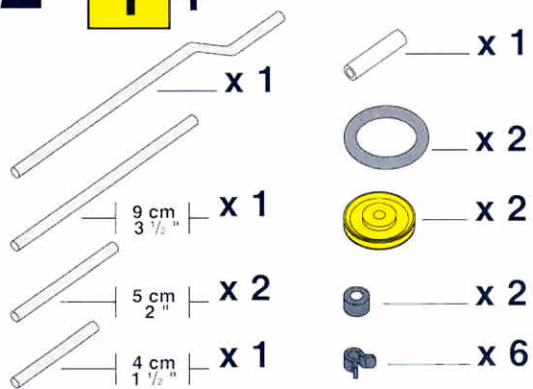
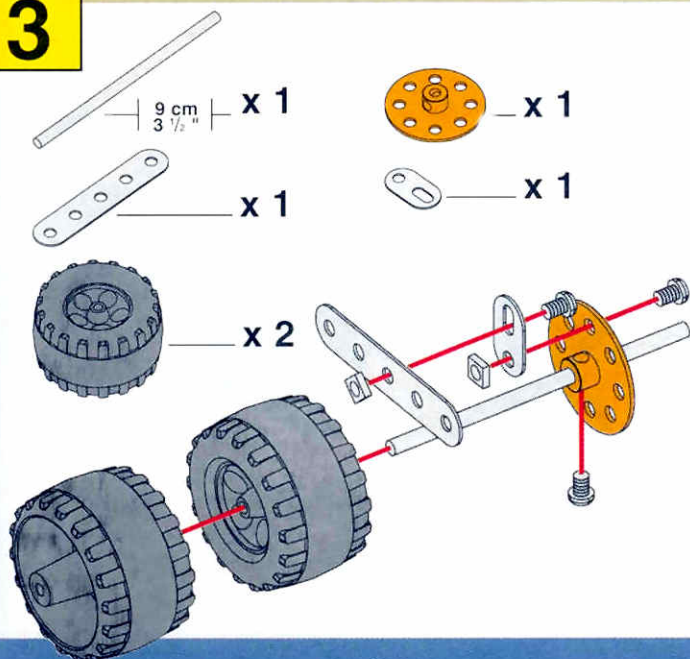
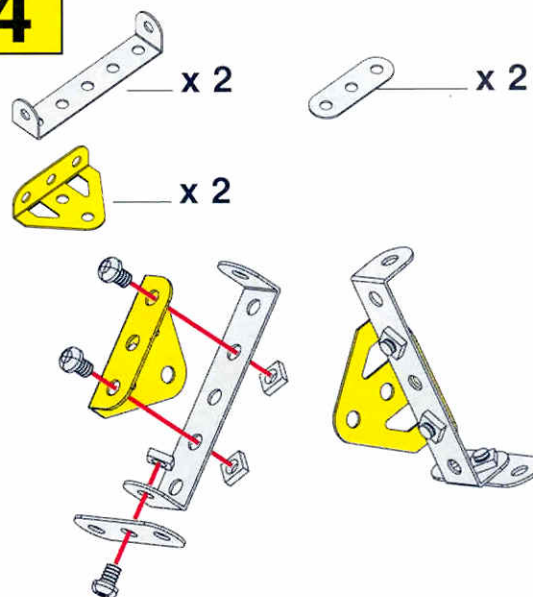


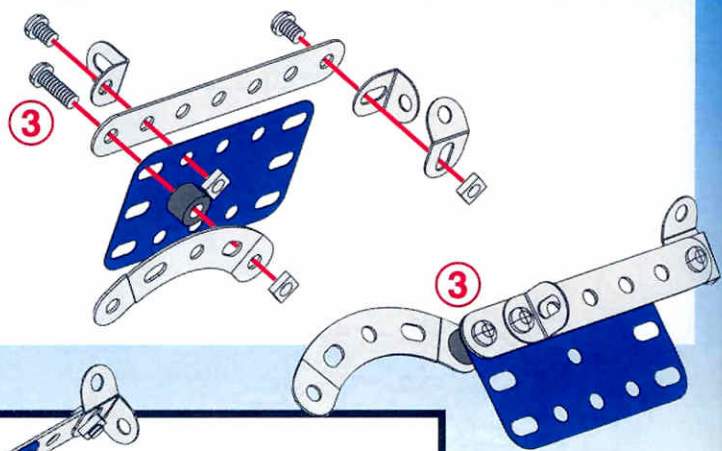
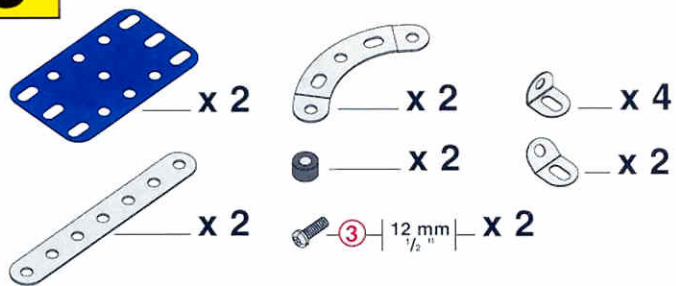
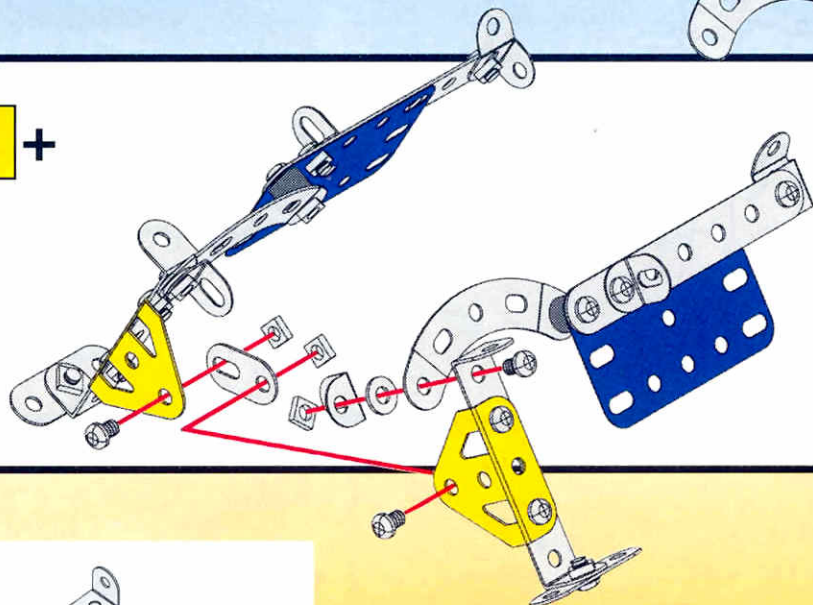
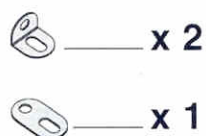
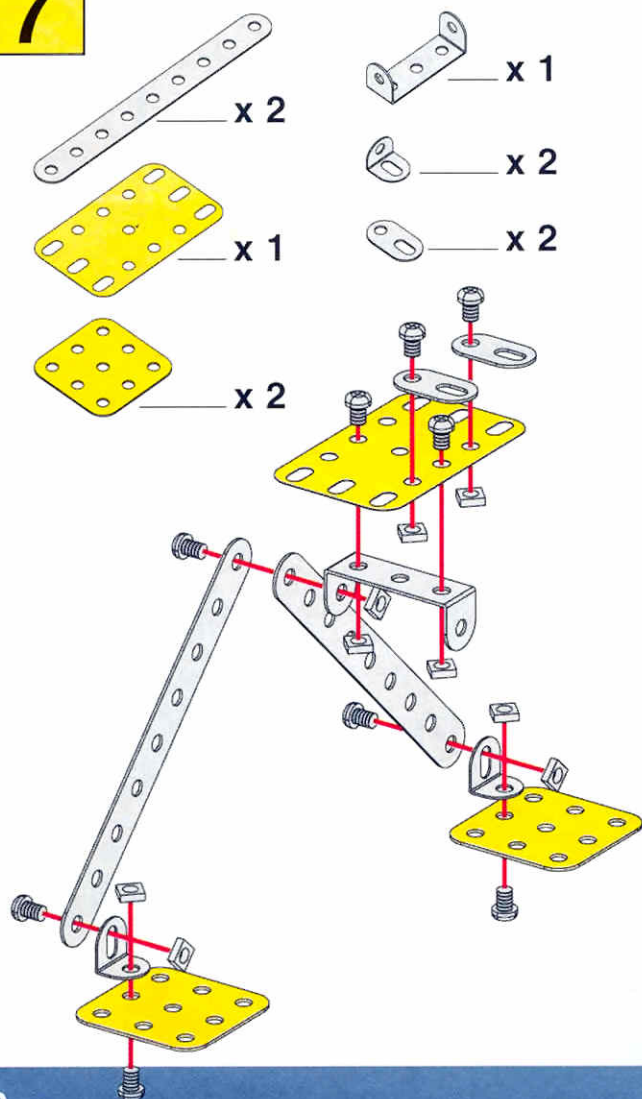
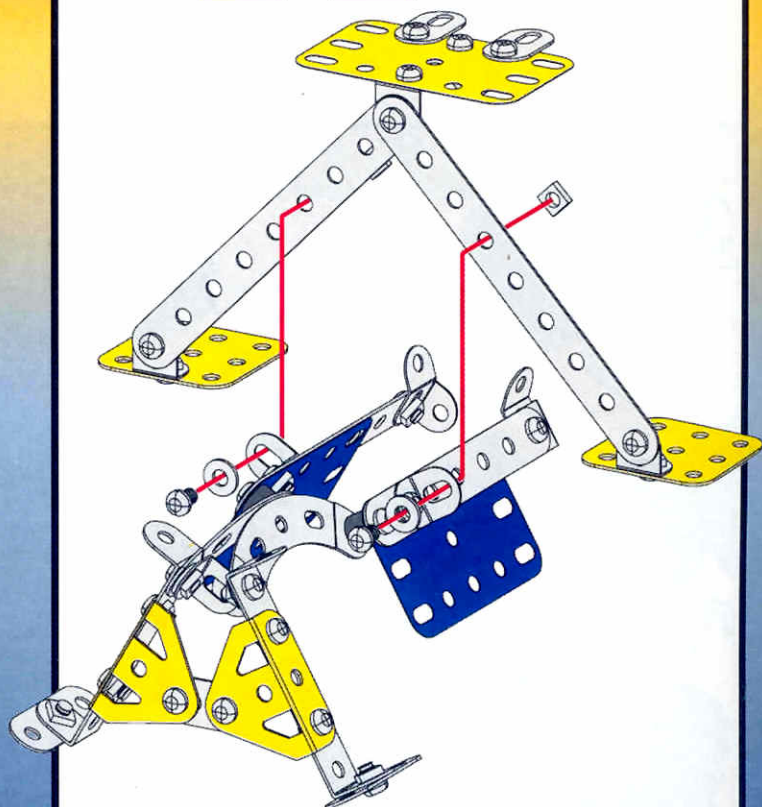
15 **11** + **13** + **14**



16 **15** +

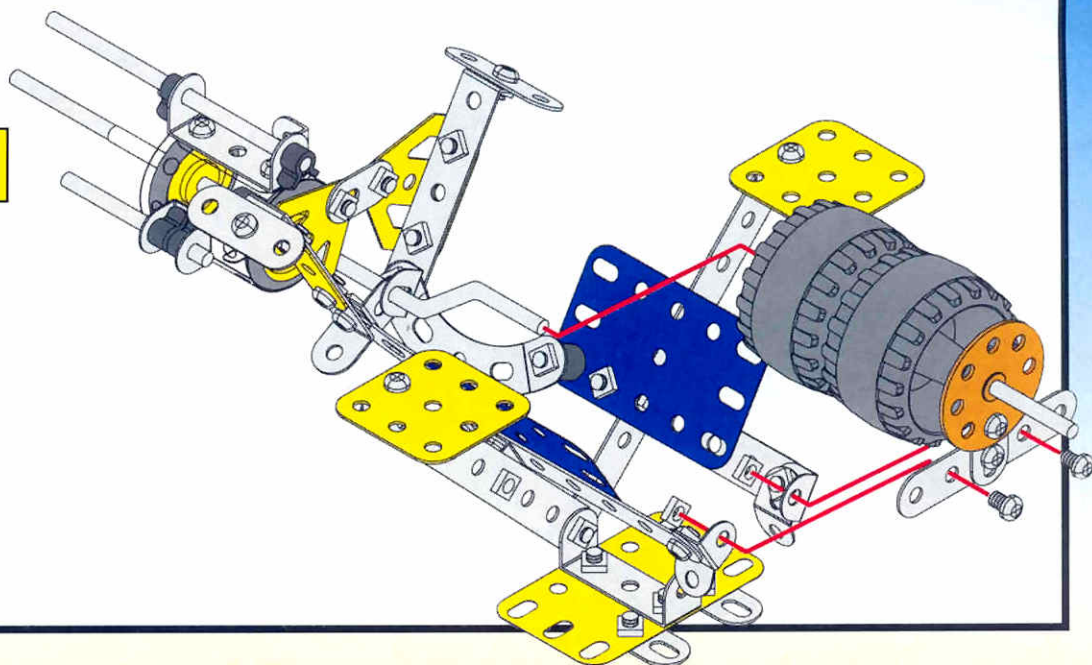


1**2** **1**+**3****4**

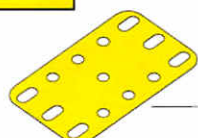


5**6****4 + 5 +****7****8****6 + 7 +**

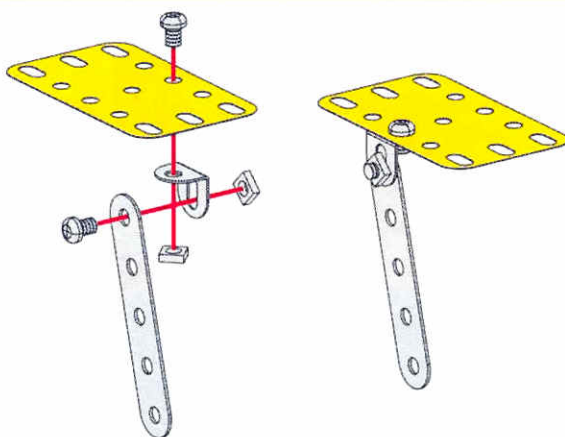
9

2 + 3 + 8




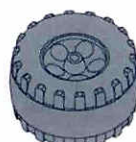
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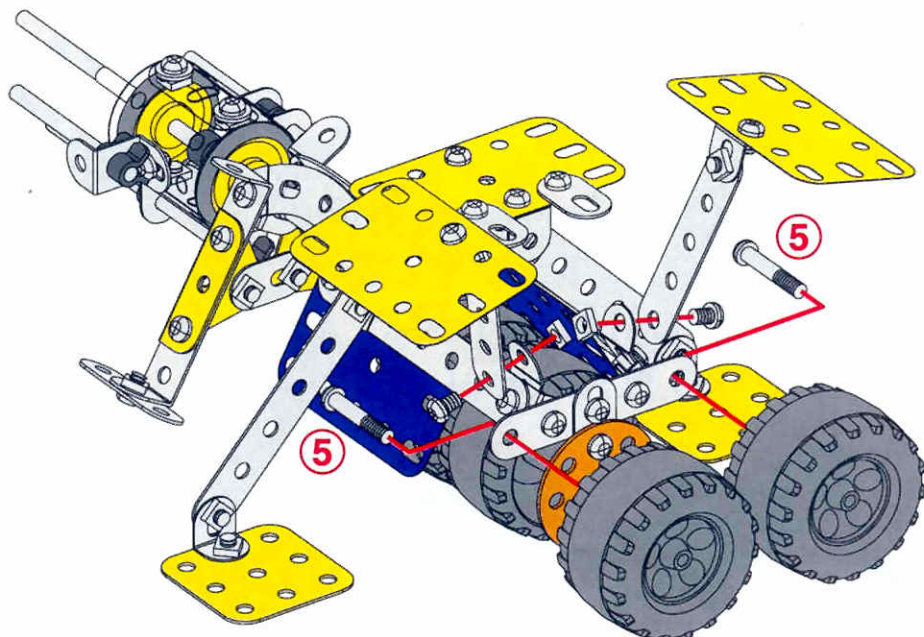
-  x 2
-  x 2
-  x 2



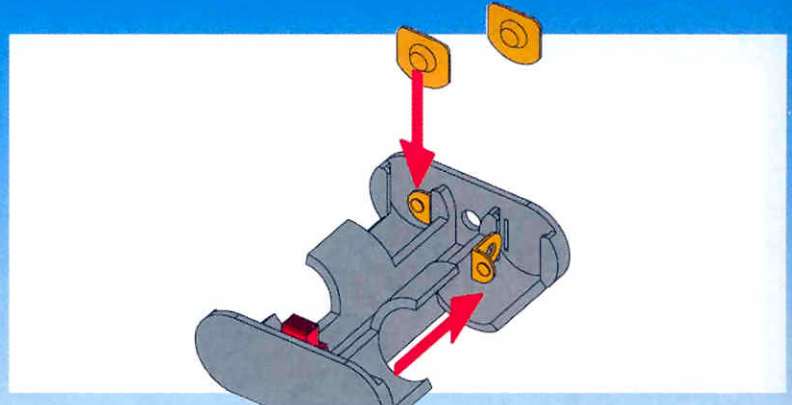
11

9 + 10 +

-  5 | 23 mm | $\frac{29}{32}$ " | x 2
-  x 2

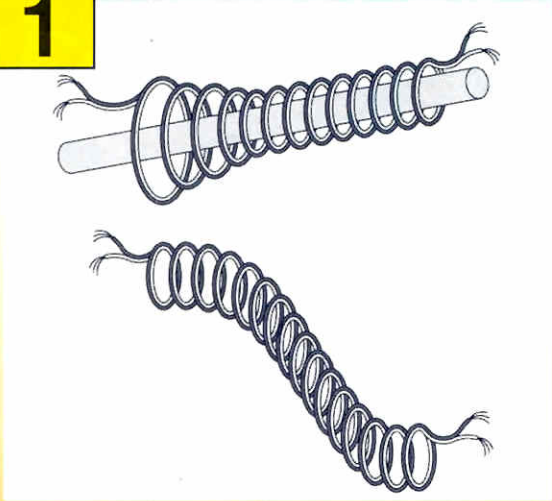


MOUNTING OF METAL STRIP TO BATTERY PACK

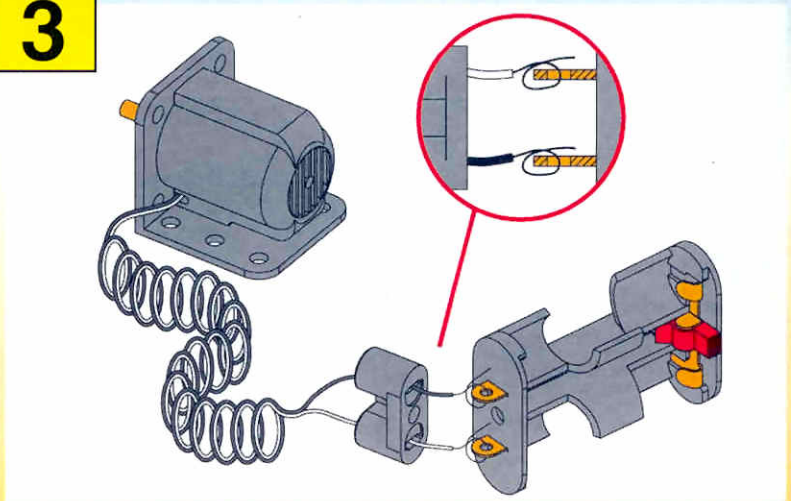


ELECTRICAL WIRING OF MOTOR TO BATTERY PACK

1



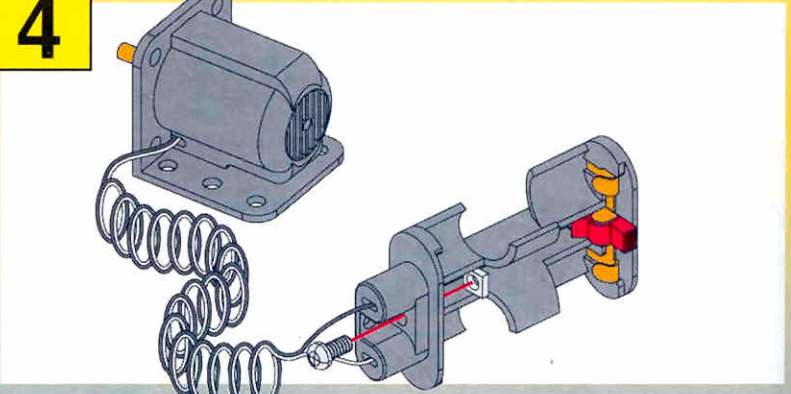
3



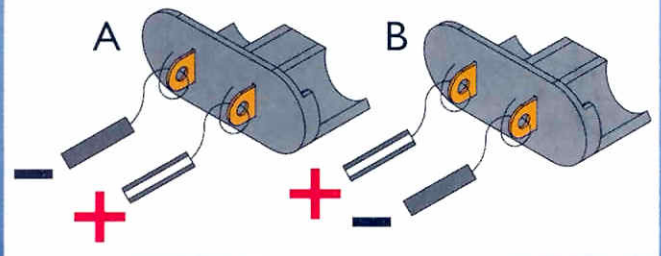
2



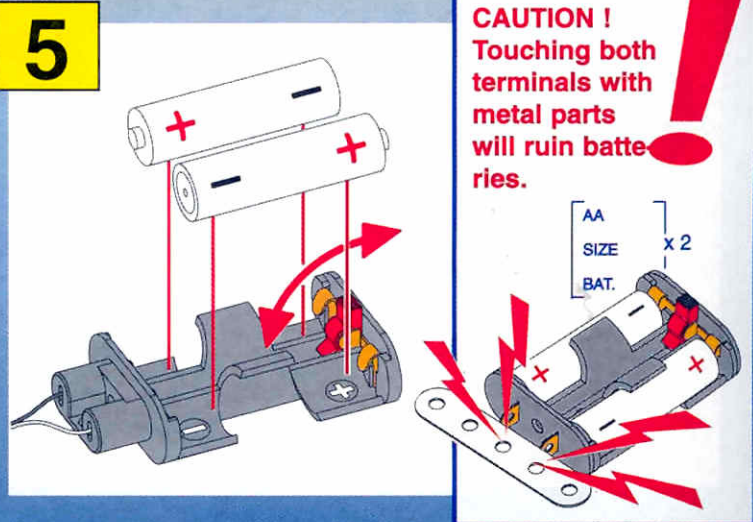
4



A : FORWARD ROTATION
B : BACKWARD ROTATION



5

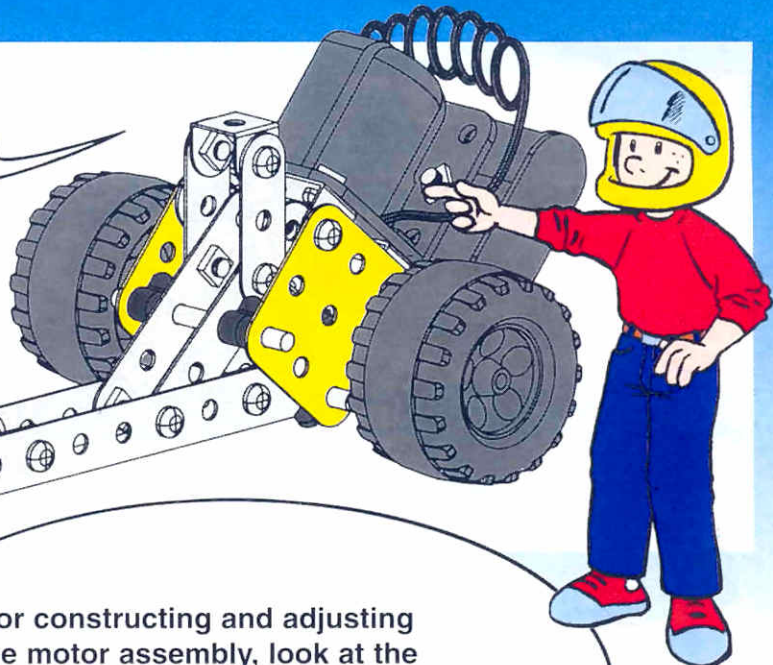


CAUTION !
Touching both terminals with metal parts will ruin batteries.

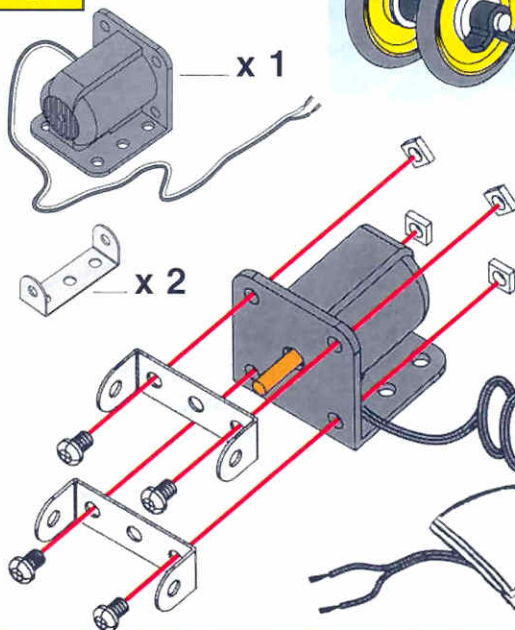
AA SIZE BAT. x 2

Construct this model with basic ERECTOR set 2. You will discover the advantage of the electric motor, which lets this model run by itself.

Your first motorised model : a dragster.

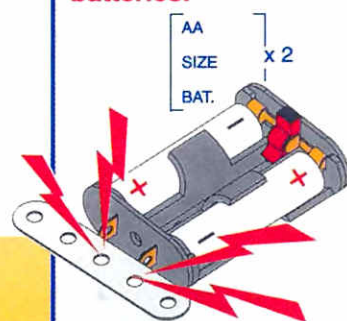


1



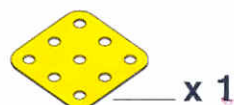
For constructing and adjusting the motor assembly, look at the instruction manual number 2, page 3 !
...It will give you the setting-up instruction step by step.

CAUTION !
Touching both terminals with metal parts will ruin batteries.



2

1 +



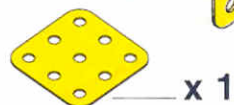
4

3 +



3

2 +



5

4 +

Align the axles so that the gears rotate freely.

x 1

x 1

6

x 1

x 1

7

5 + **6** +

x 1

①

②

③

④ x 1

Speed reduction by gears. Reducing speed increases power : some examples which you will use in other constructions.

8

7 +

x 1

Speed reduction by drive belts : another driving system for different uses. More flexible and quieter than gears.

1 Revolution

2 Revolutions

4

2

3 Revolutions

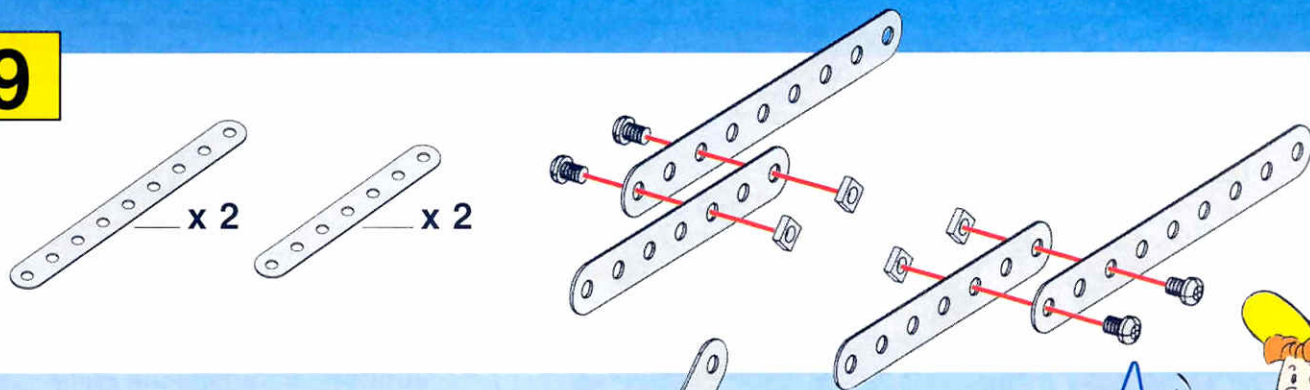
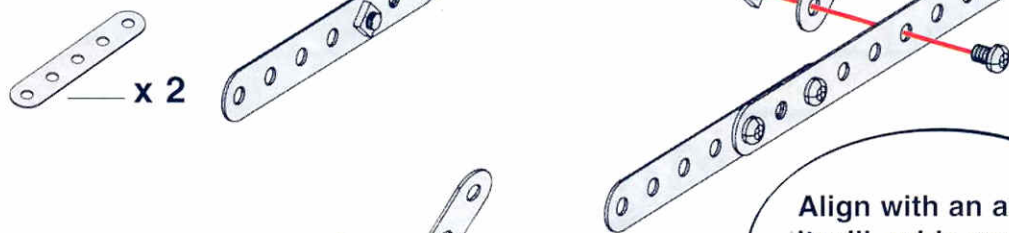
1 Revolution

1

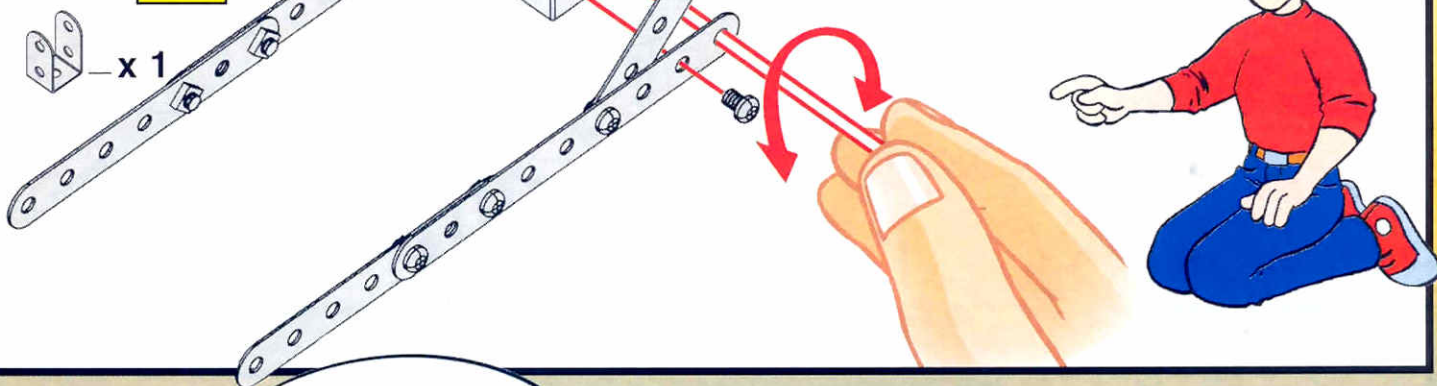
2,6

19

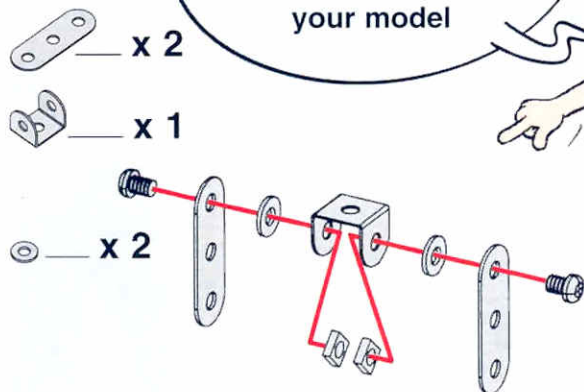
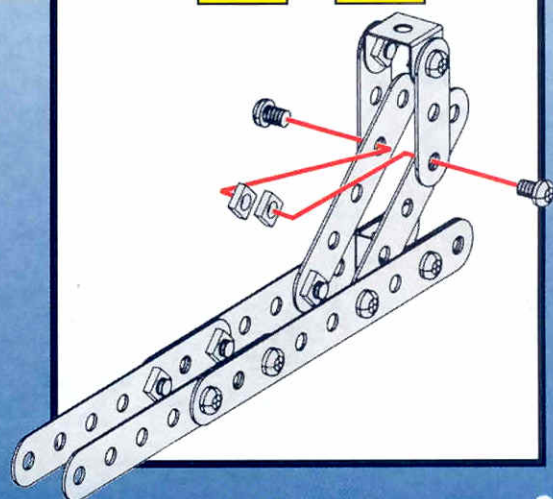
57

9**10****9** +

Align with an axle :
it will guide you for
easy adjustment of
the parts.

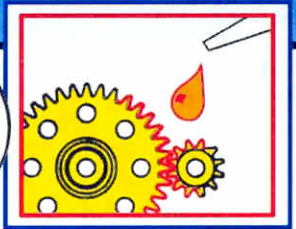
11**10** +**12**

Don't forget the
washers : they are
important for the
correct running of
your model

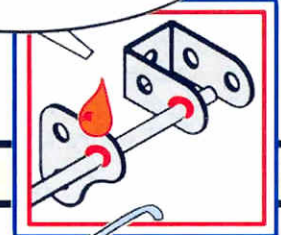
**13****11** + **12**

14 **8** + **13** +

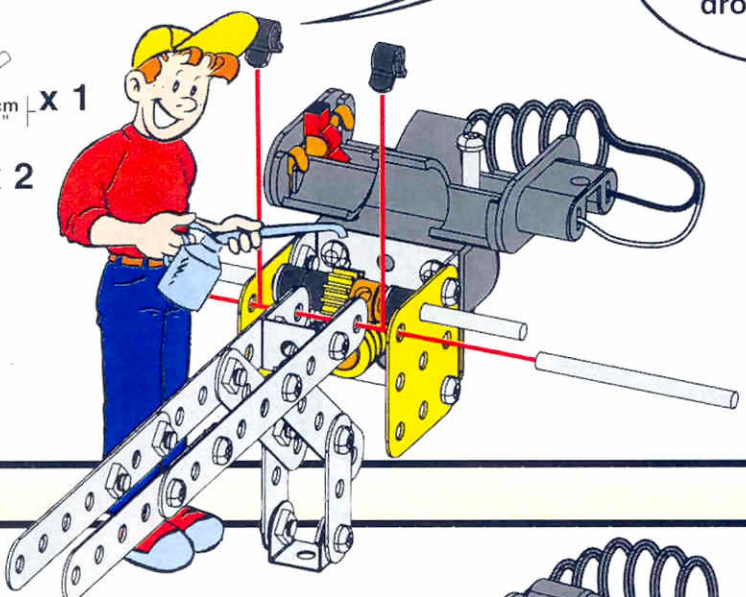
Oil the gears. They will run better and not wear out. One drop is enough.



Oil the axles or bearing supports. Your model will run faster and stay in good mechanical condition.



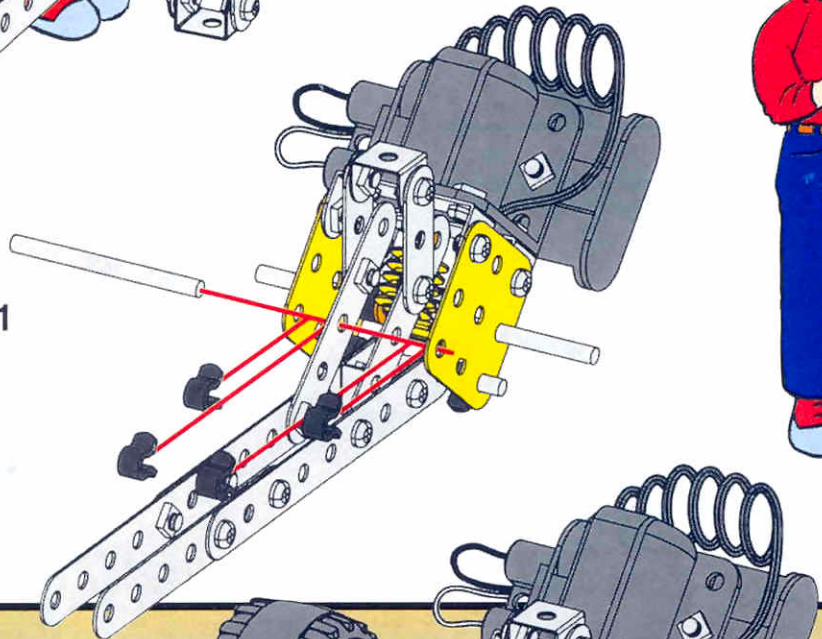
- 5 cm X 1
- X 2



15

14 +

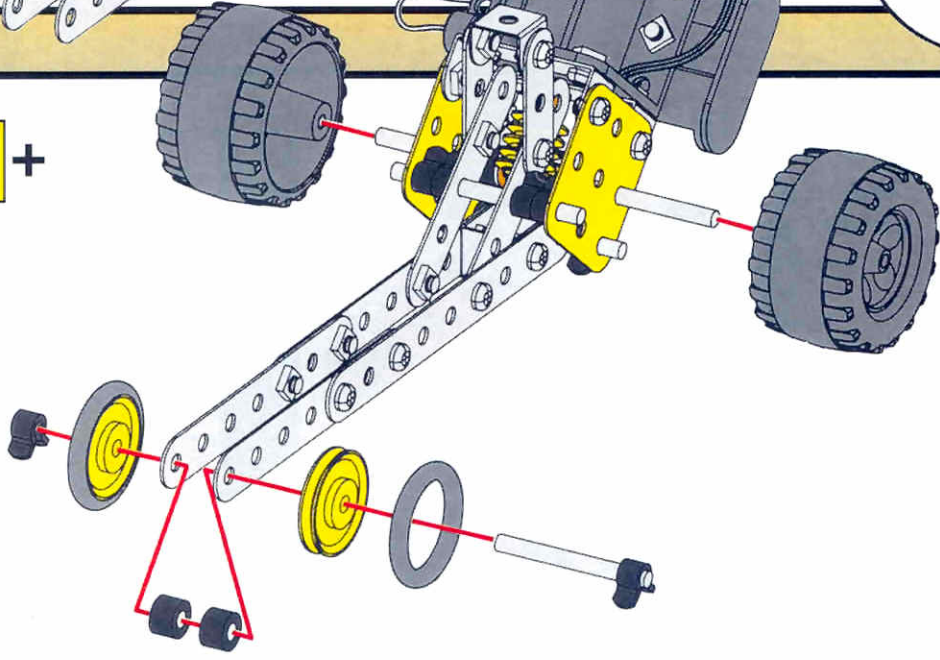
- 5 cm X 1
- X 4

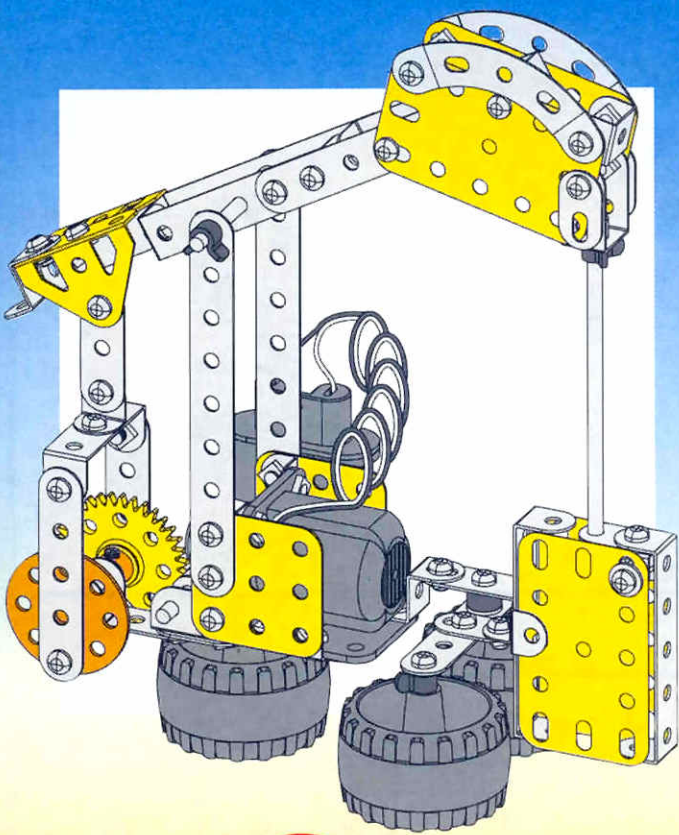


You have succeeded in making a super dragster ! Have fun !

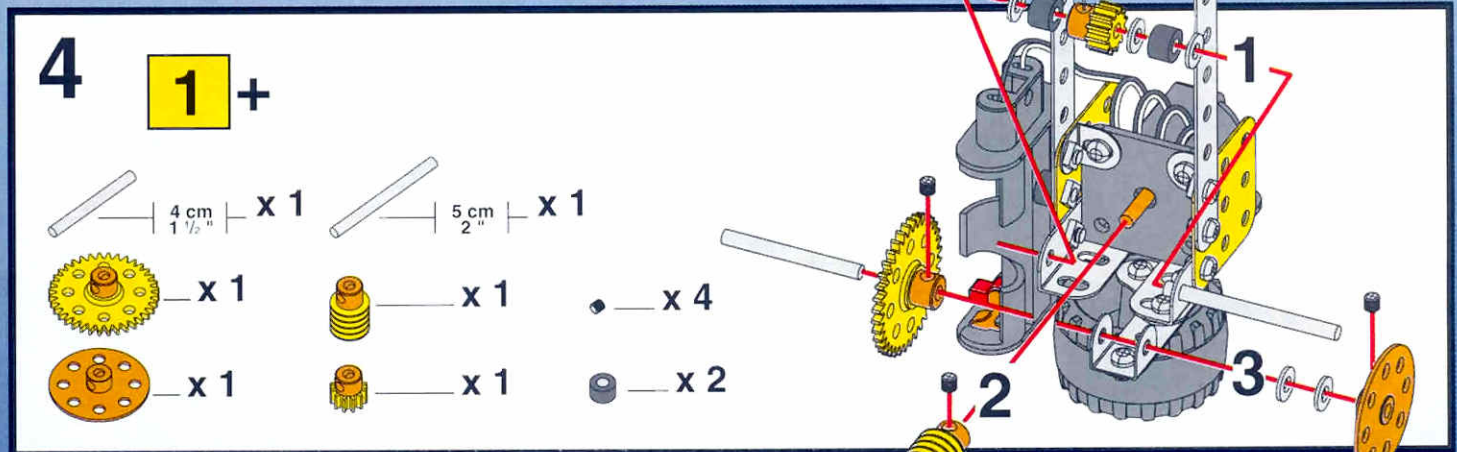
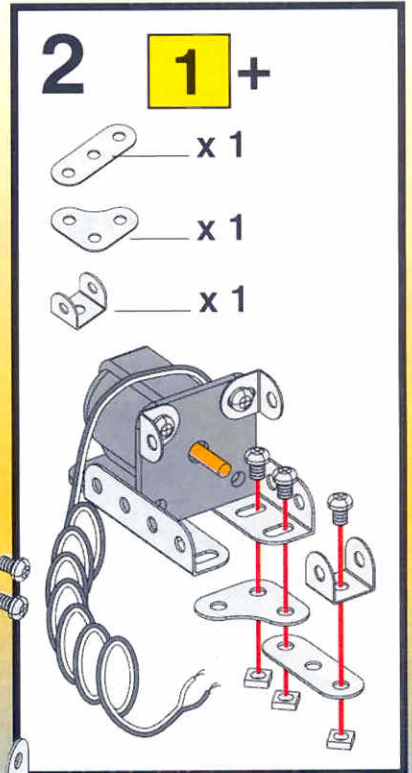
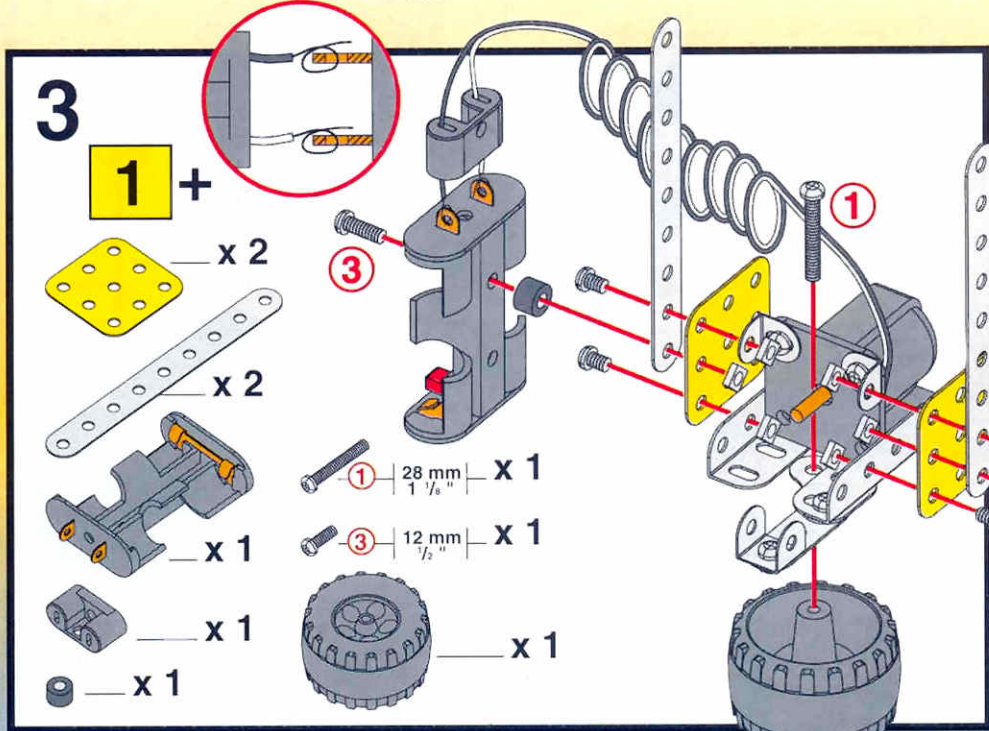
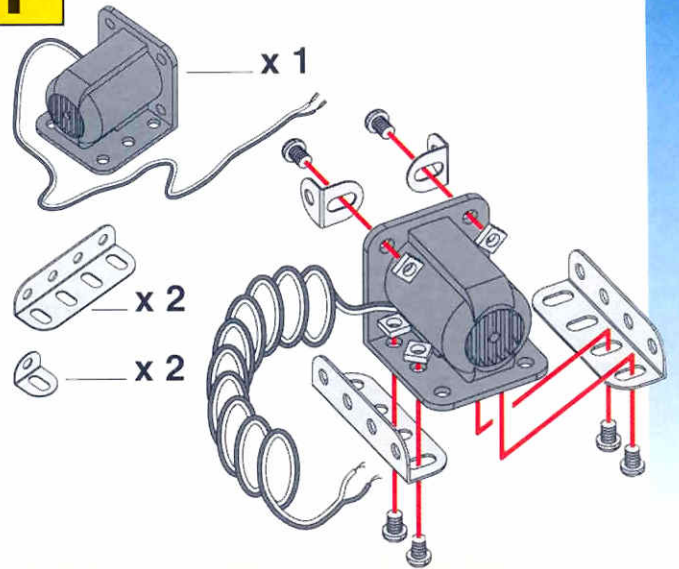
16 **15** +

- X 2
- X 2
- X 2
- 4 cm X 1
- X 2
- X 2





1



5

- x 2
- x 1
- x 1
- ③ | 12 mm | $\frac{1}{2}$ " | x 1

6

5 +

- x 1
- x 2
- x 1

7

- x 2
- x 1
- x 3
- x 1

8

6 + 7 +

- x 2
- x 2
- ⑤ | 23 mm | $\frac{29}{32}$ " | x 2

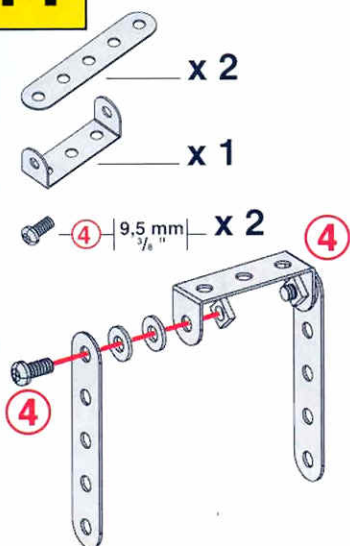
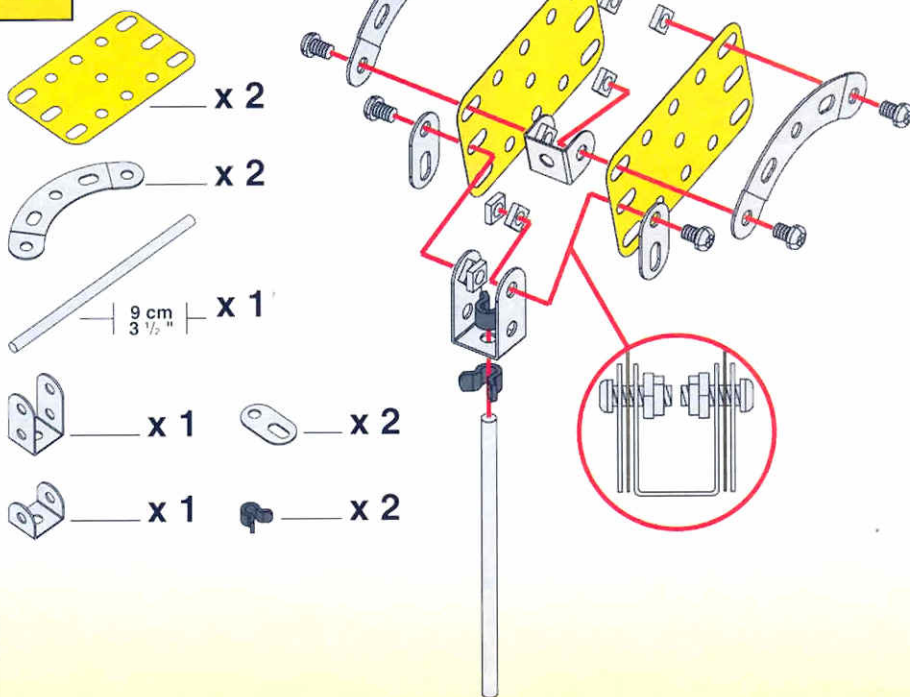
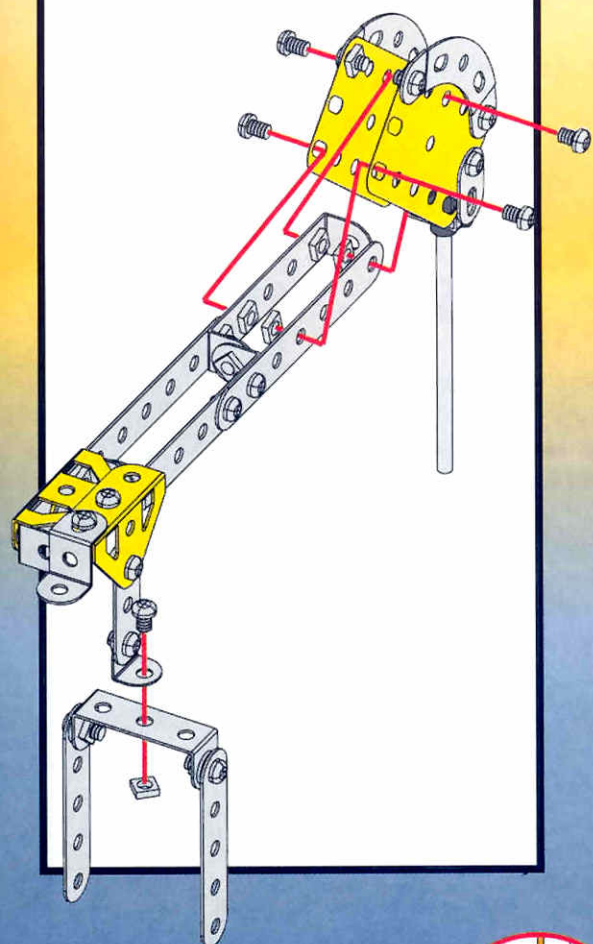
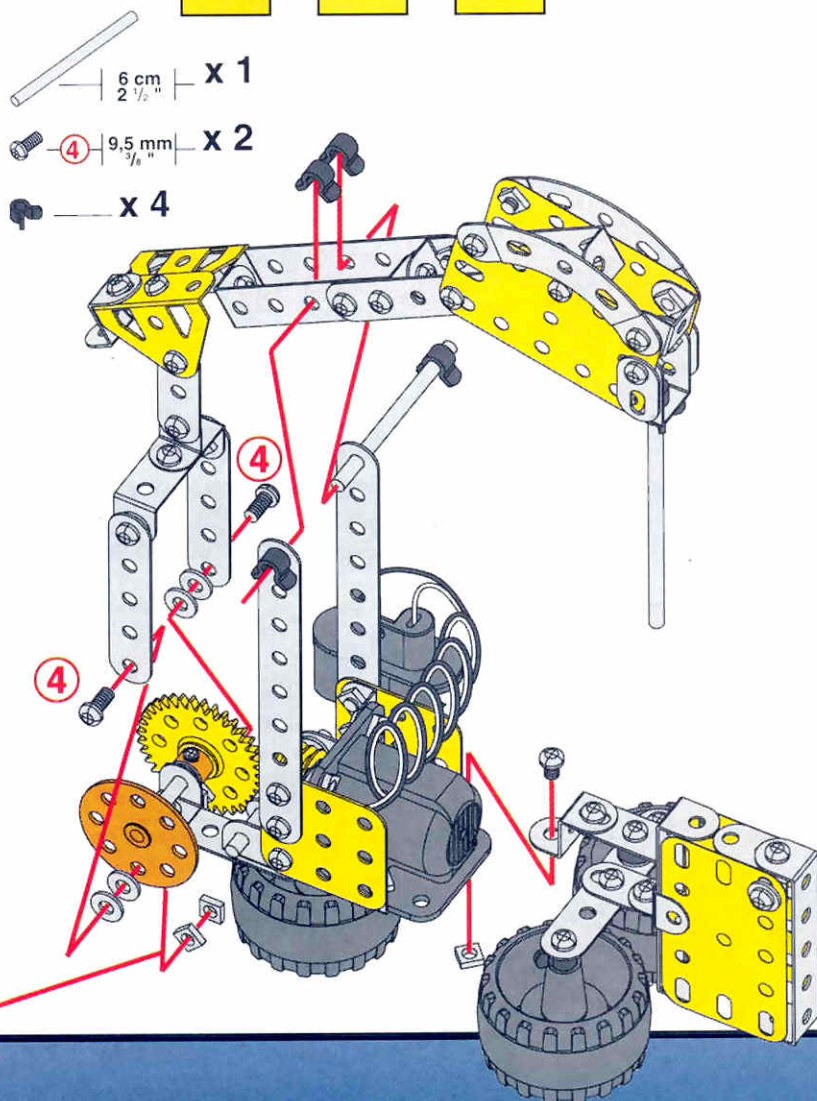
9

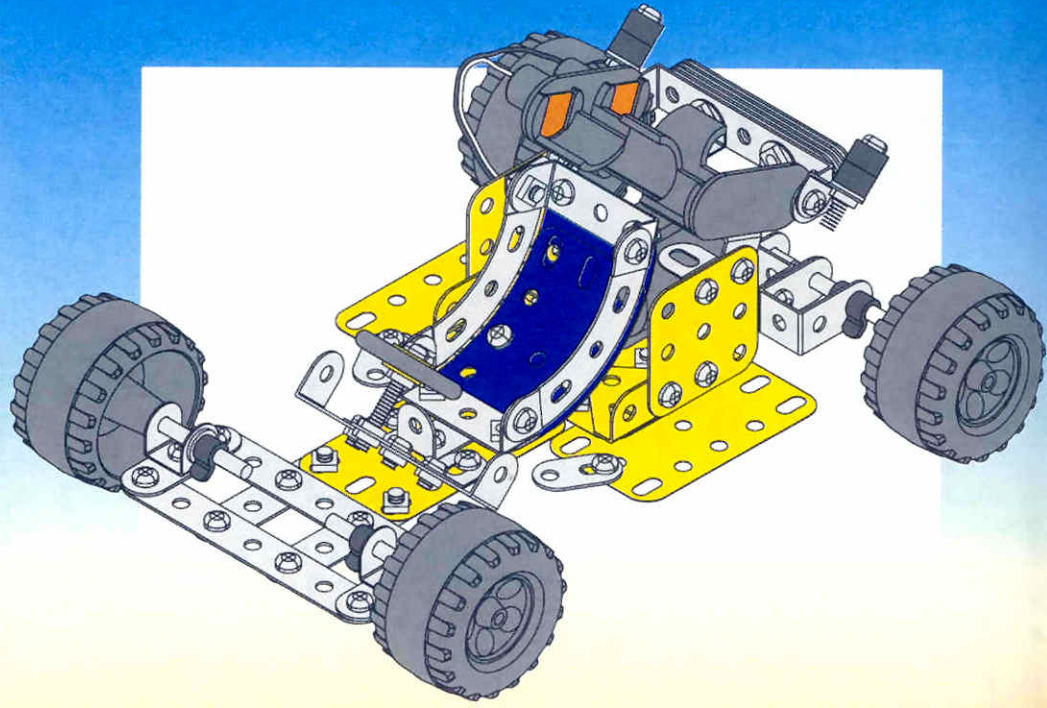
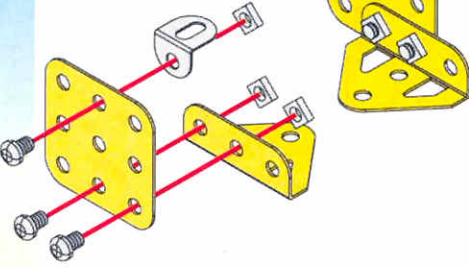
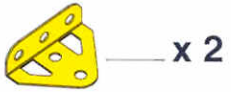
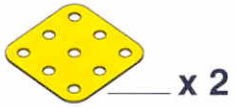
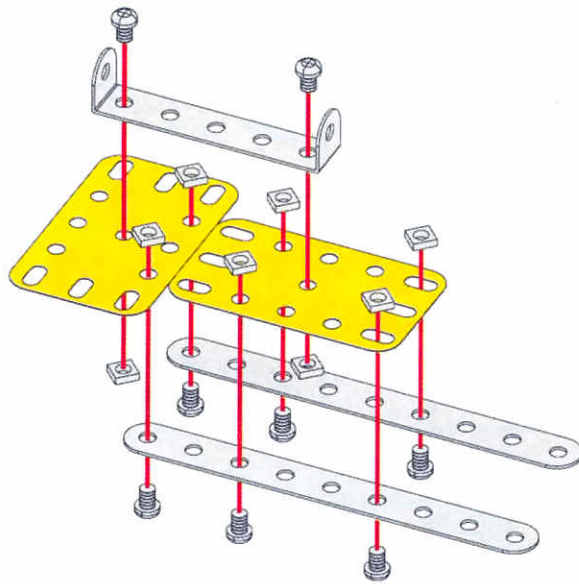
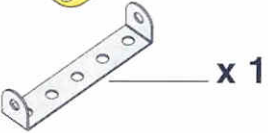
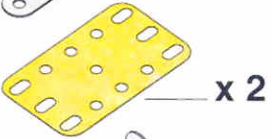
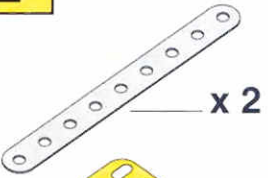
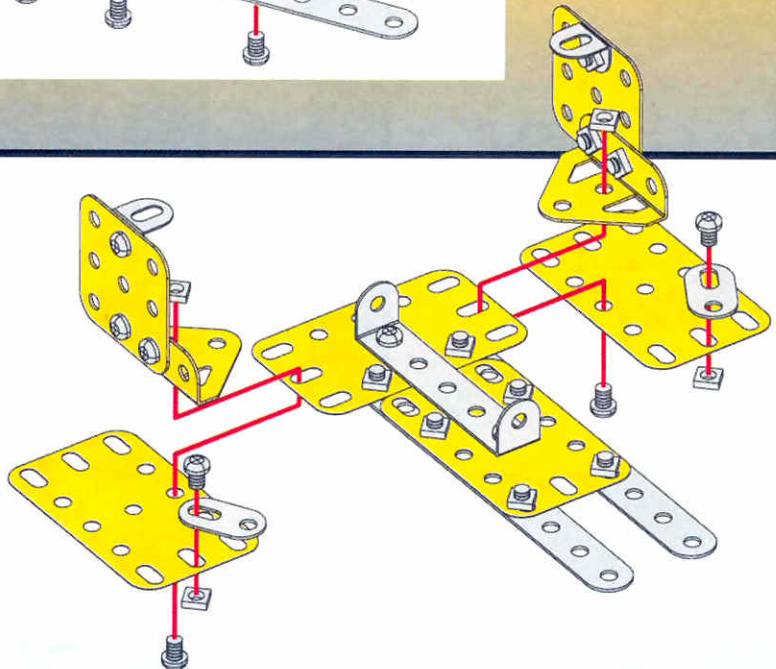
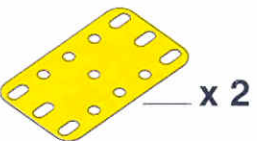
- x 2
- x 2
- x 1
- x 1

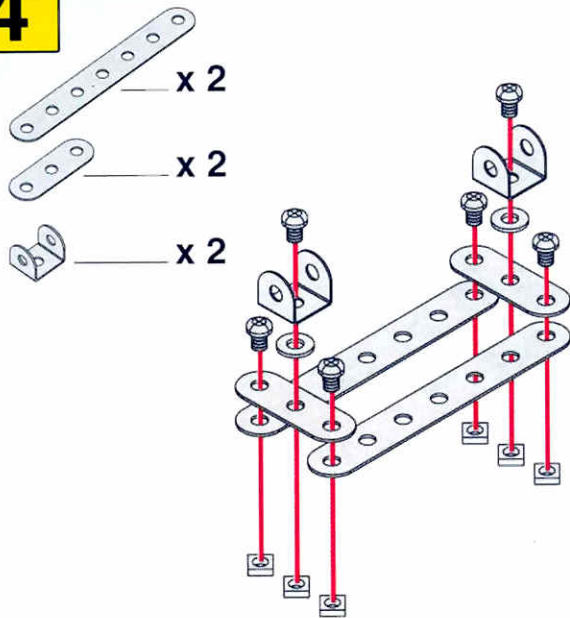
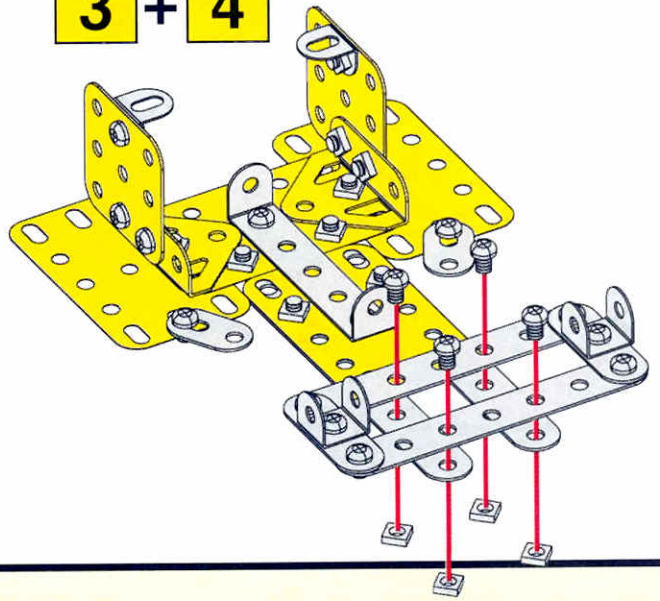
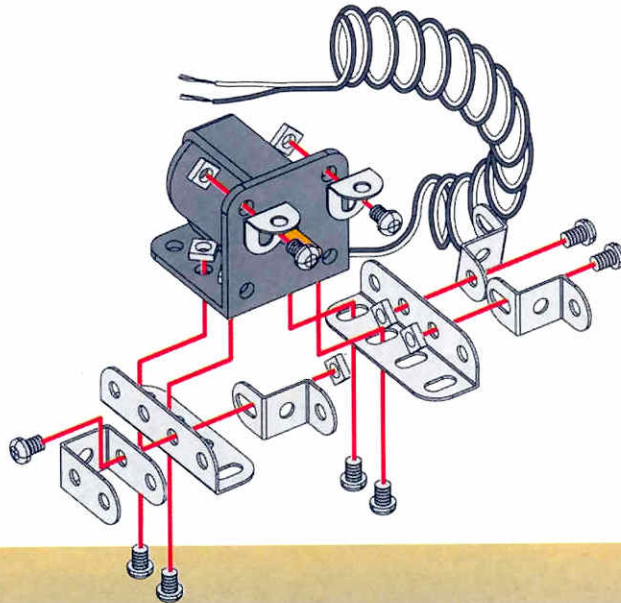
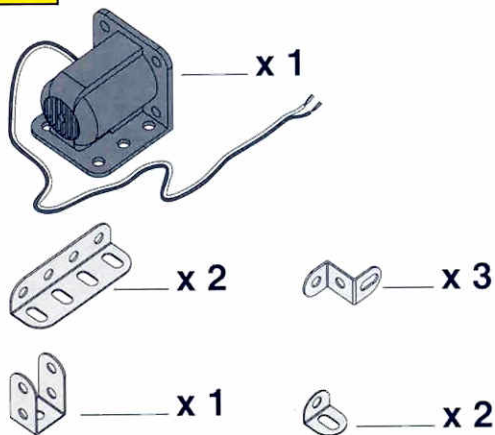
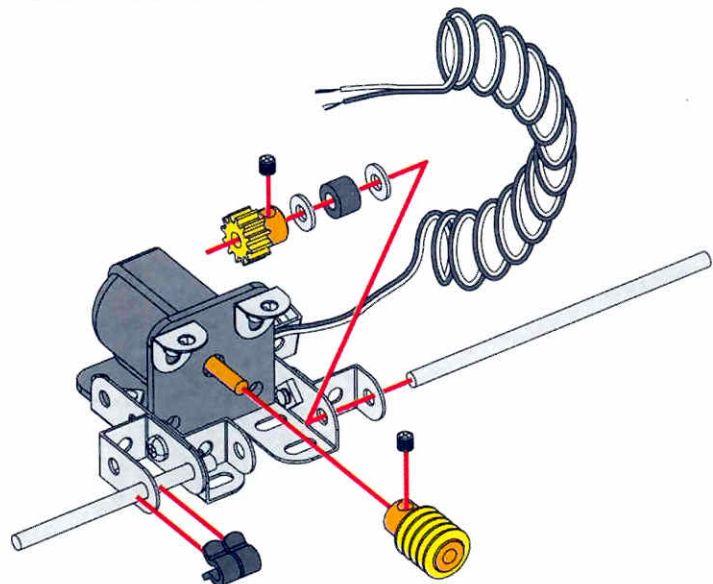
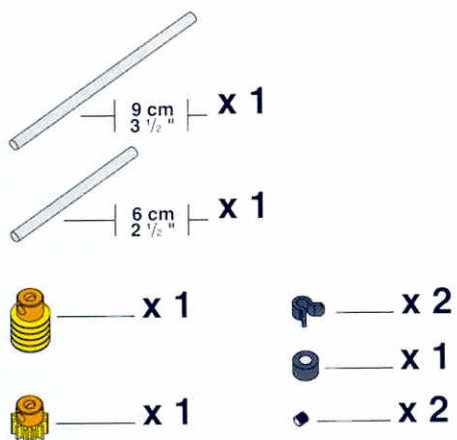
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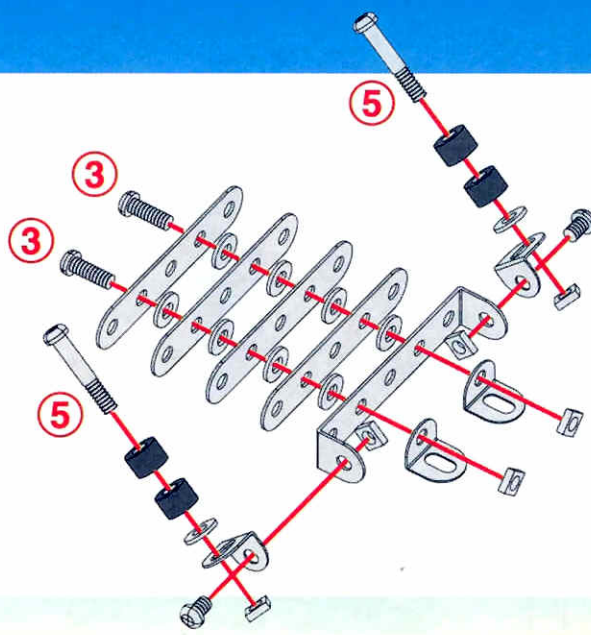
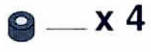
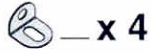
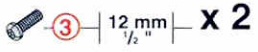
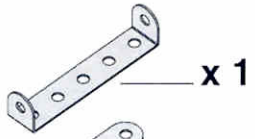
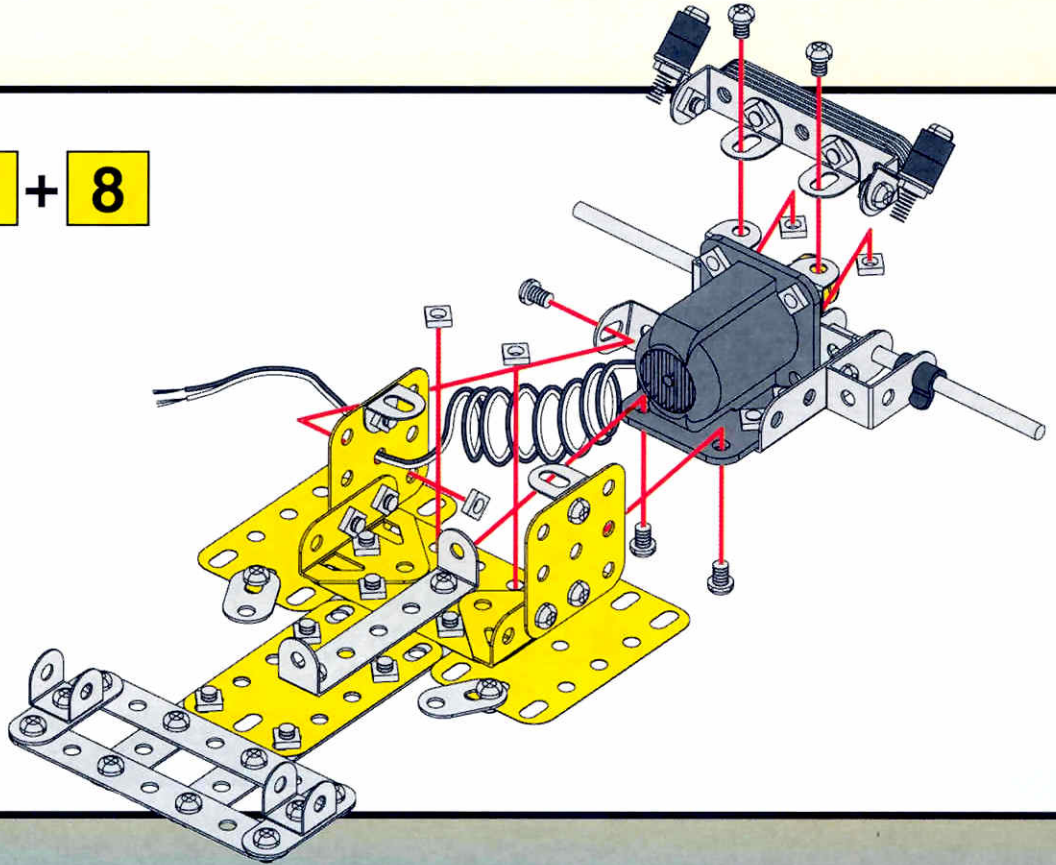
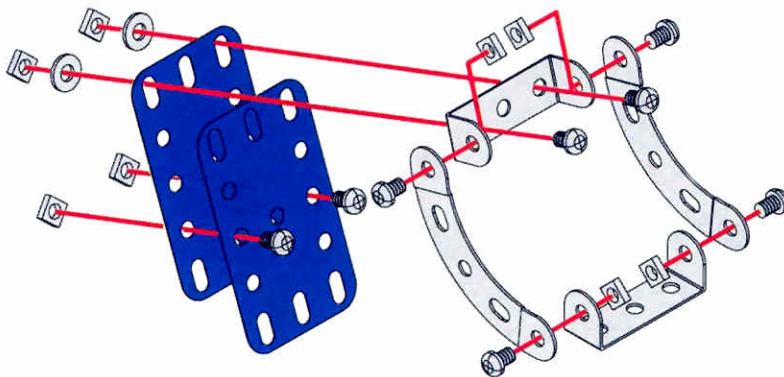
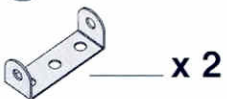
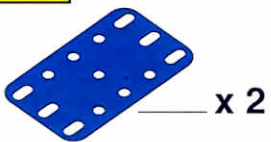
9 +

- x 1
- x 1
- x 1
- x 1

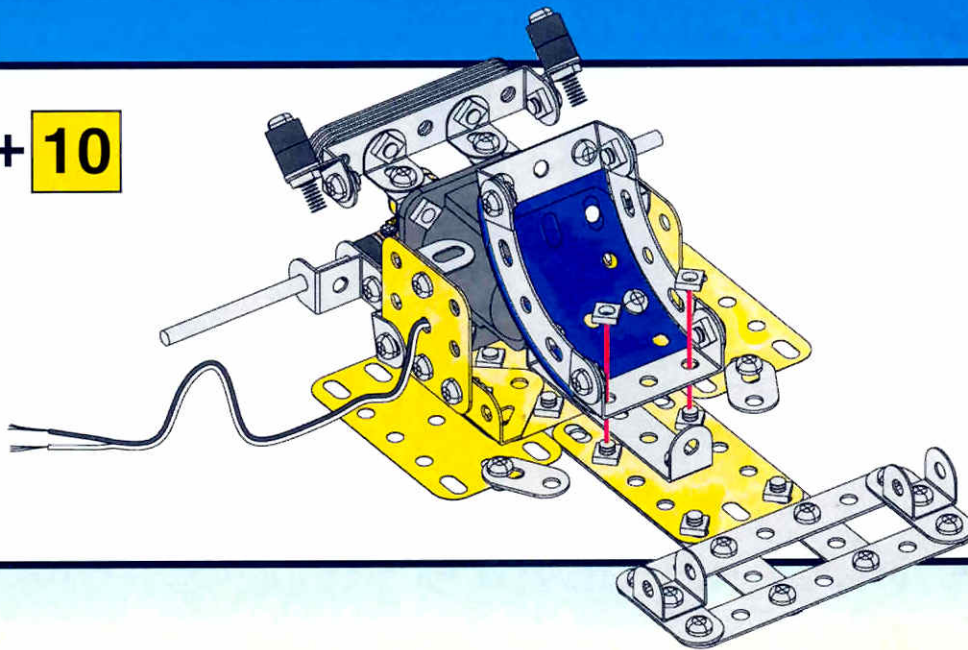
11**12****13****10 + 11 + 12****14****4 + 8 + 13 +**

1**2****3****1 + 2 +**

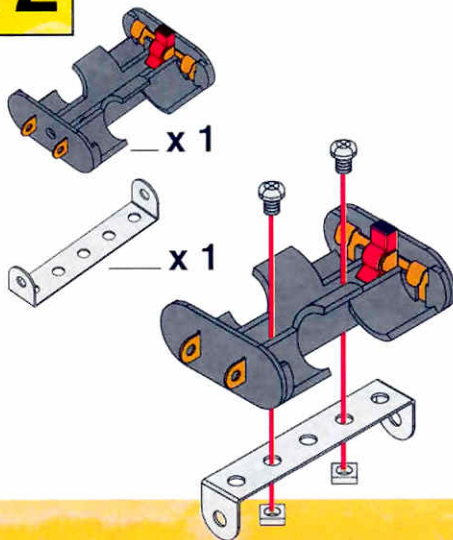
4**5****3 + 4****6****7****6 +**

8**9****5 + 7 + 8****10**

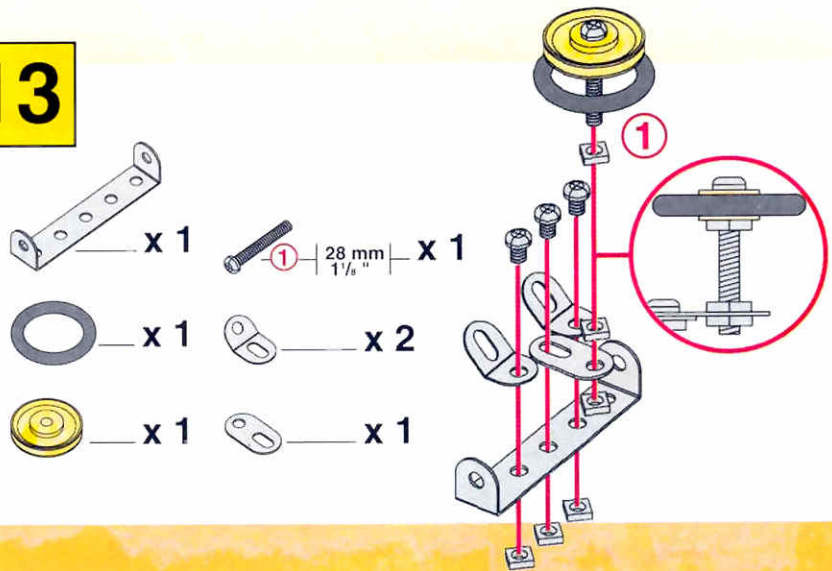
11 9 + 10



12

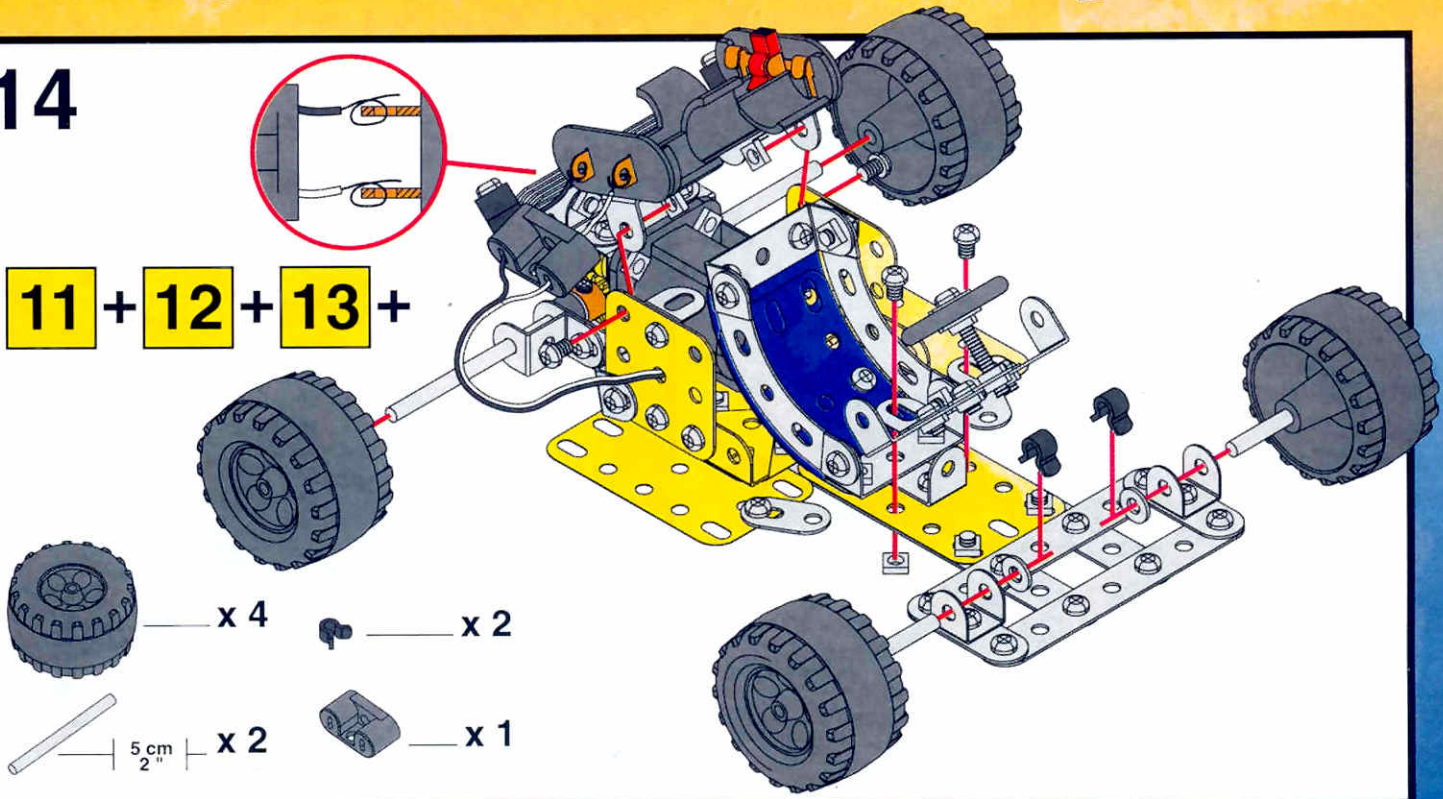






13

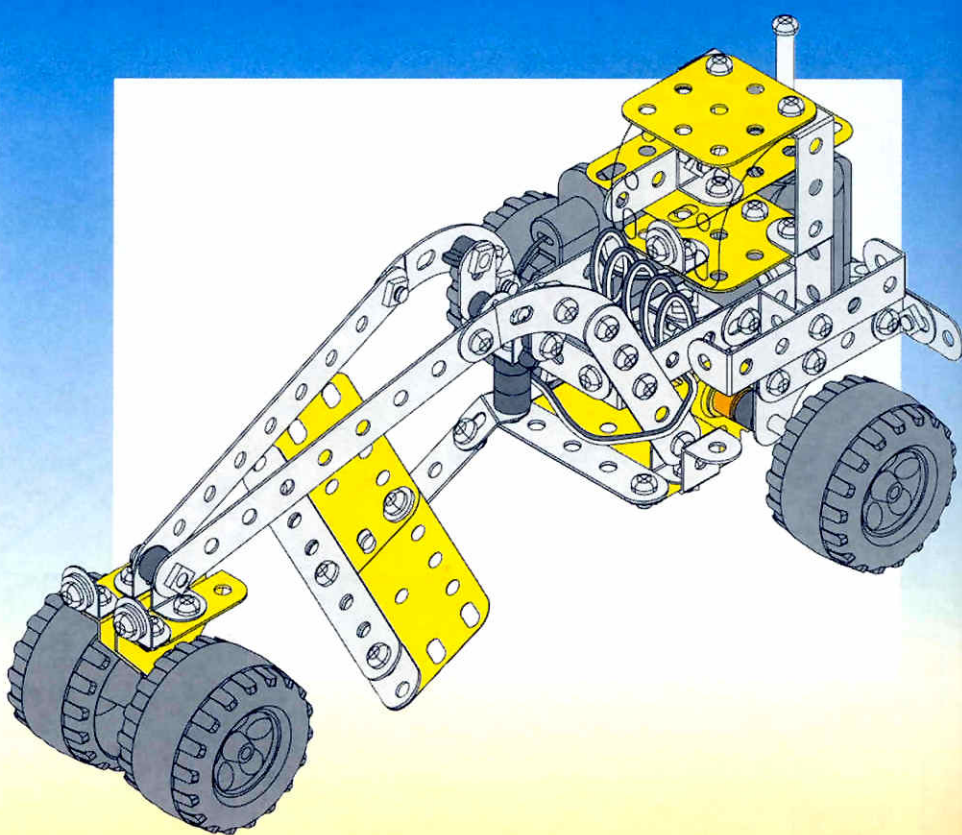
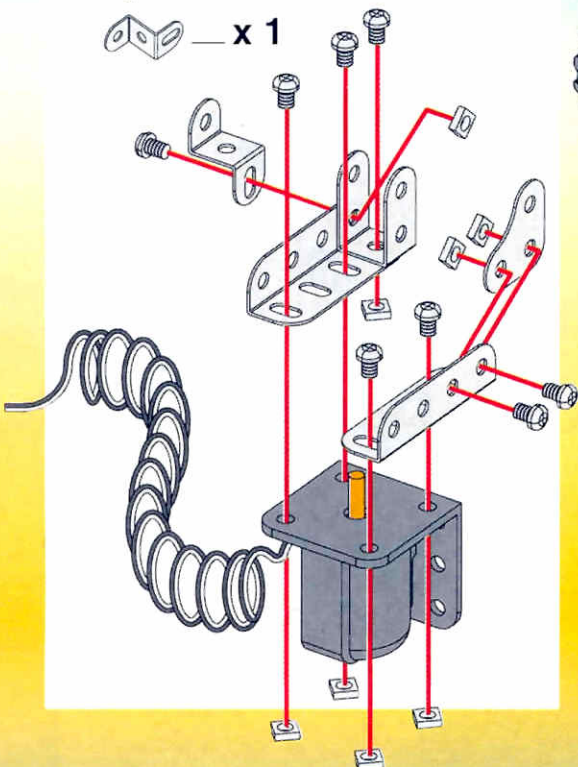
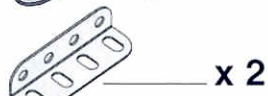
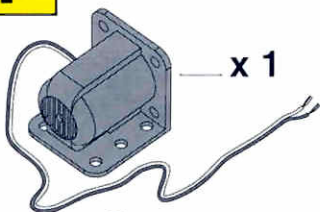
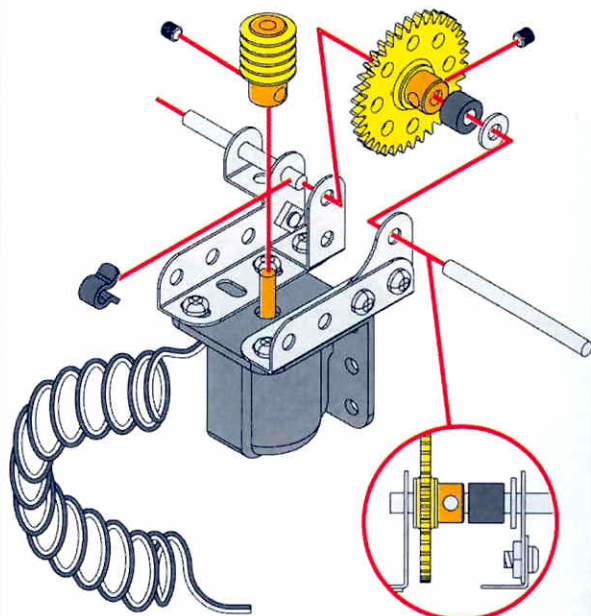
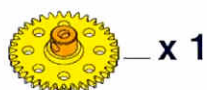
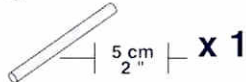
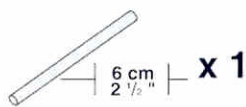
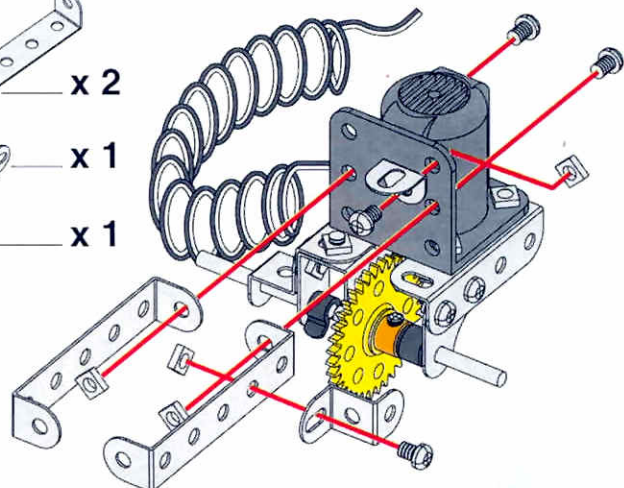
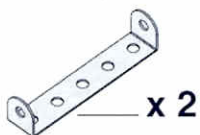


14

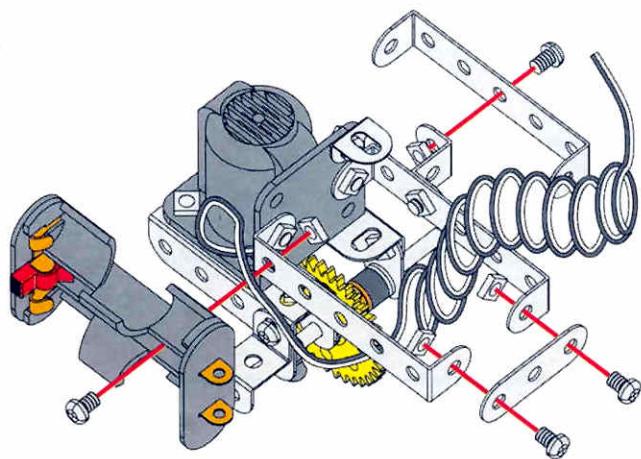
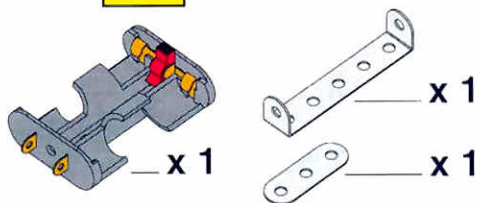
11 + 12 + 13 +



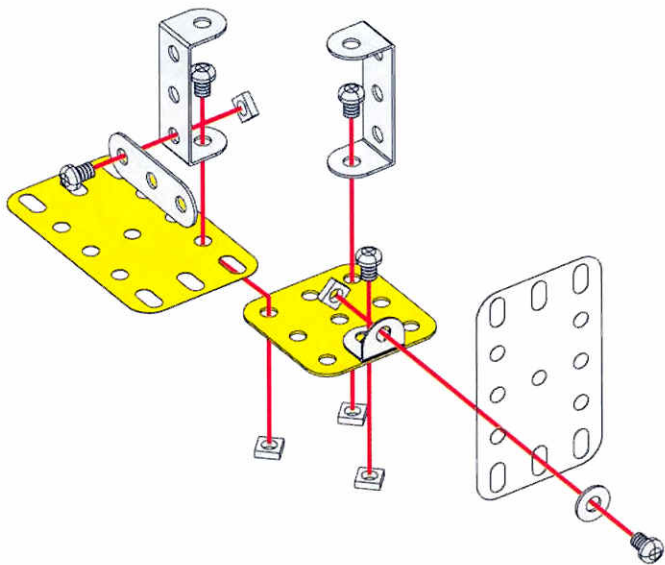
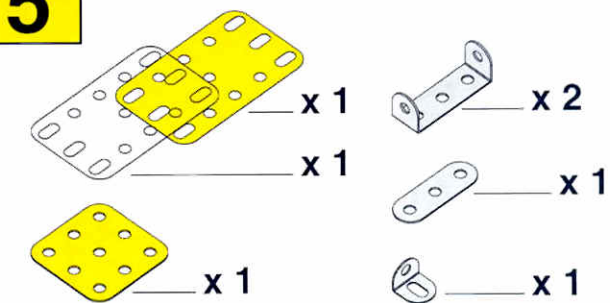
-  x 4
-  x 2
-  5 cm / 2" x 2
-  x 1

1**2****1** +**3****2** +

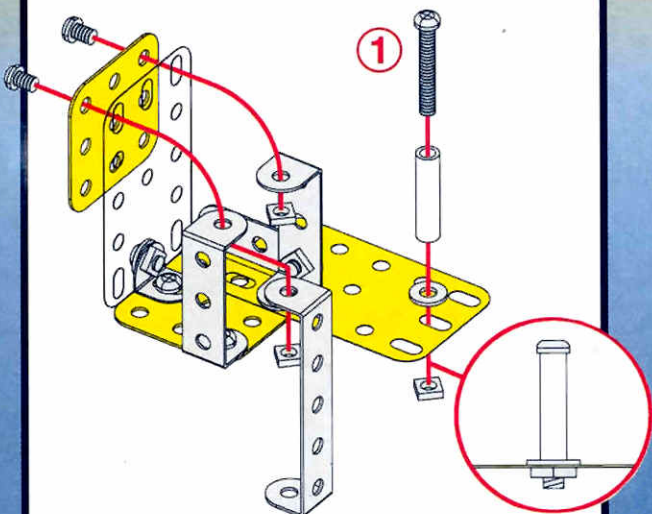
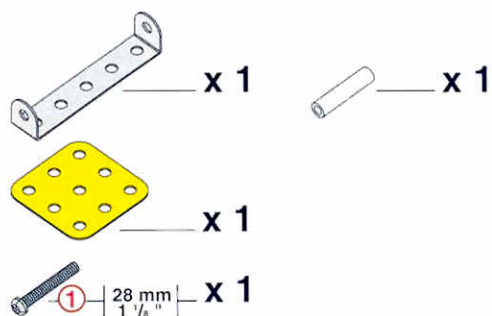
4 **3** +



5

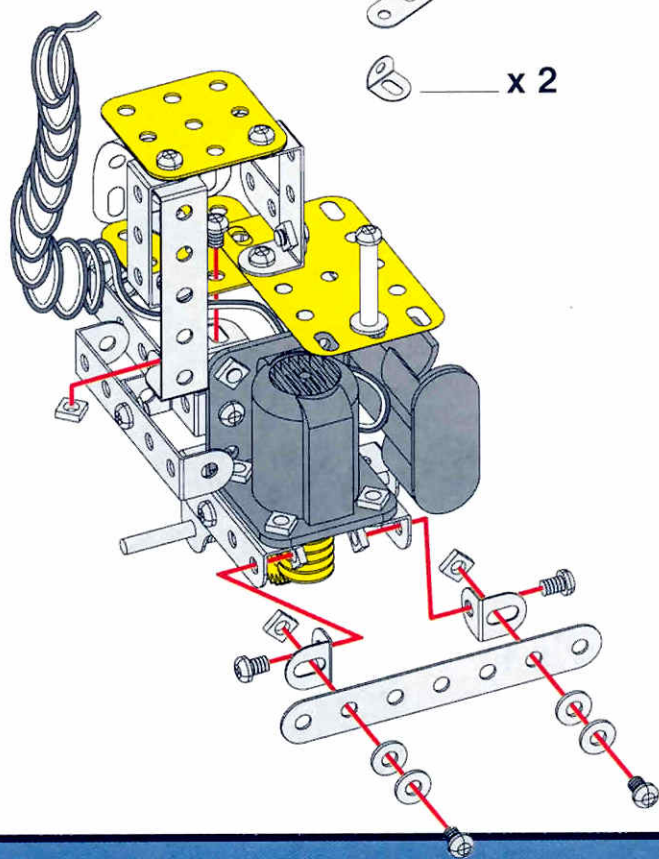
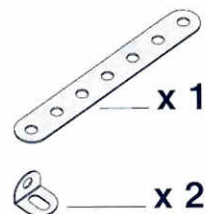


6 **5** +

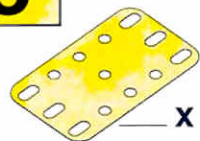
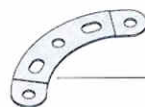





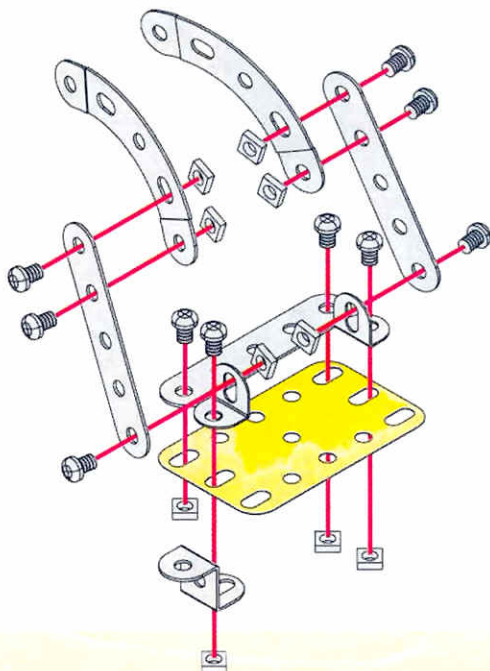
7

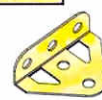


4 + **6** +

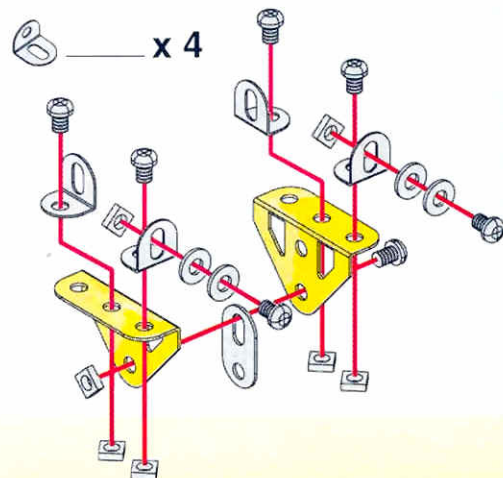


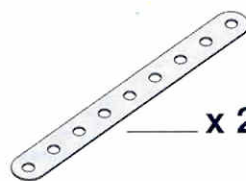


8

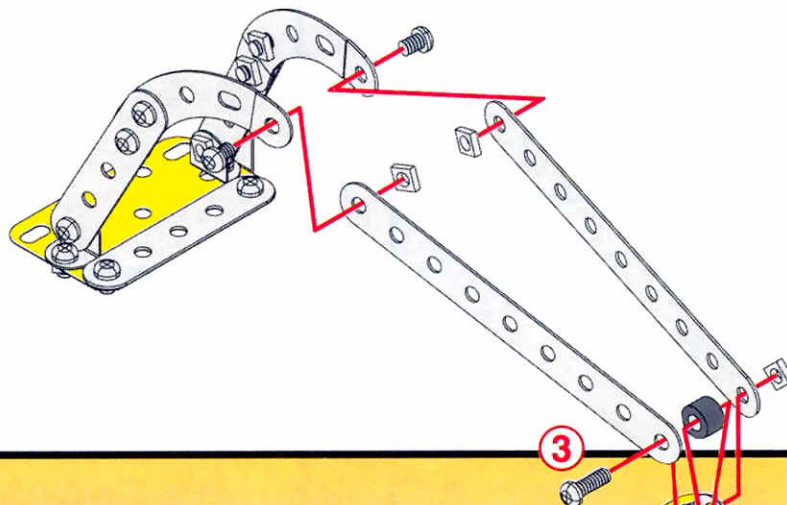
-  x 1
-  x 2
-  x 3
-  x 1
-  x 2









**9**



-  x 2
-  x 1
-  x 4

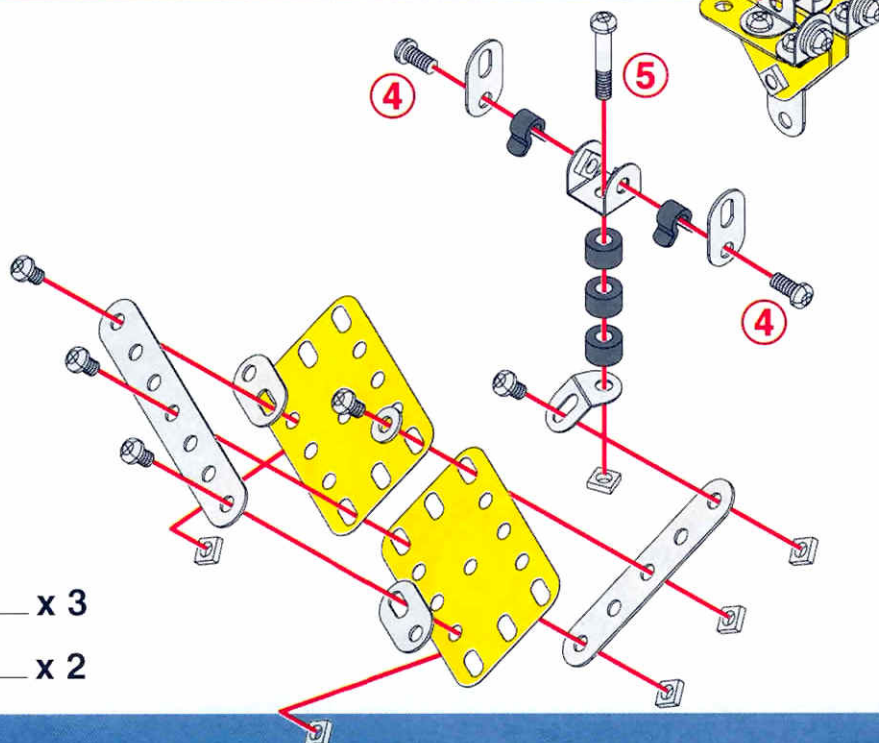
**10****8 + 9 +**

-  x 2
-  12 mm $\frac{1}{2}$ " x 1
-  x 1

**11**

-  x 1
-  x 1
-  x 2
-  23 mm $\frac{29}{32}$ " x 1
-  9.5 mm $\frac{3}{8}$ " x 2
-  x 1
-  x 1
-  x 4

-  x 3
-  x 2

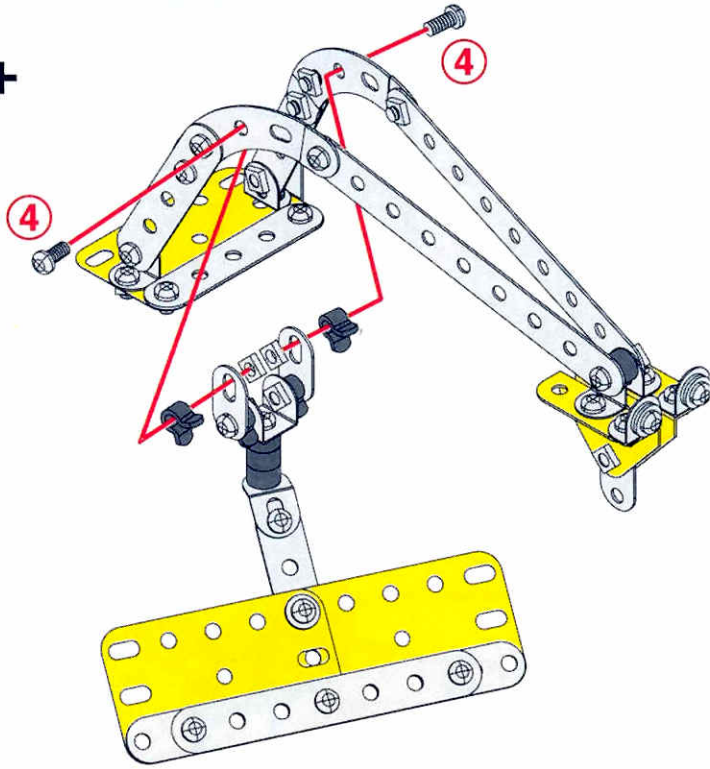


12

10 + 11 +

④ 9,5 mm x 2

— x 2



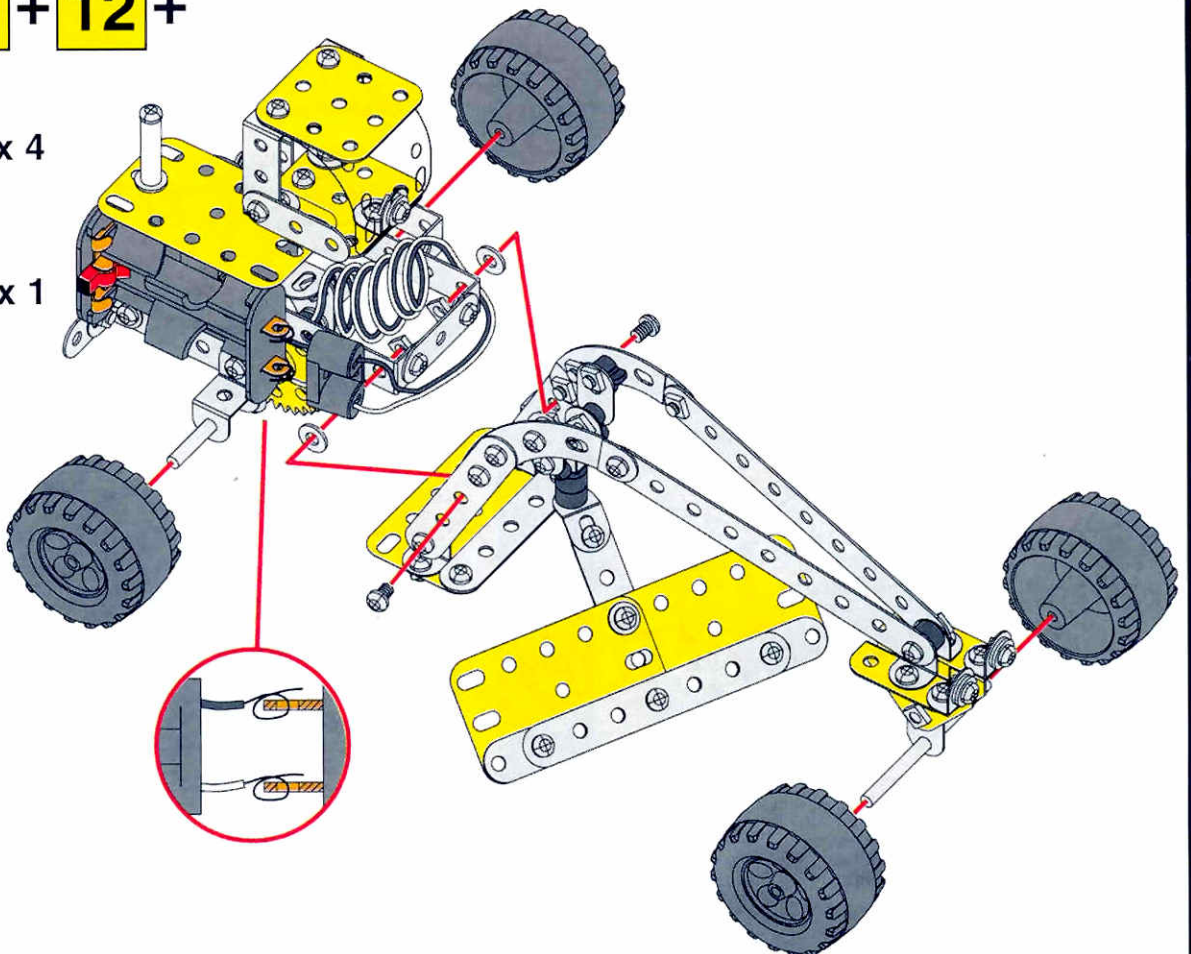
13

7 + 12 +

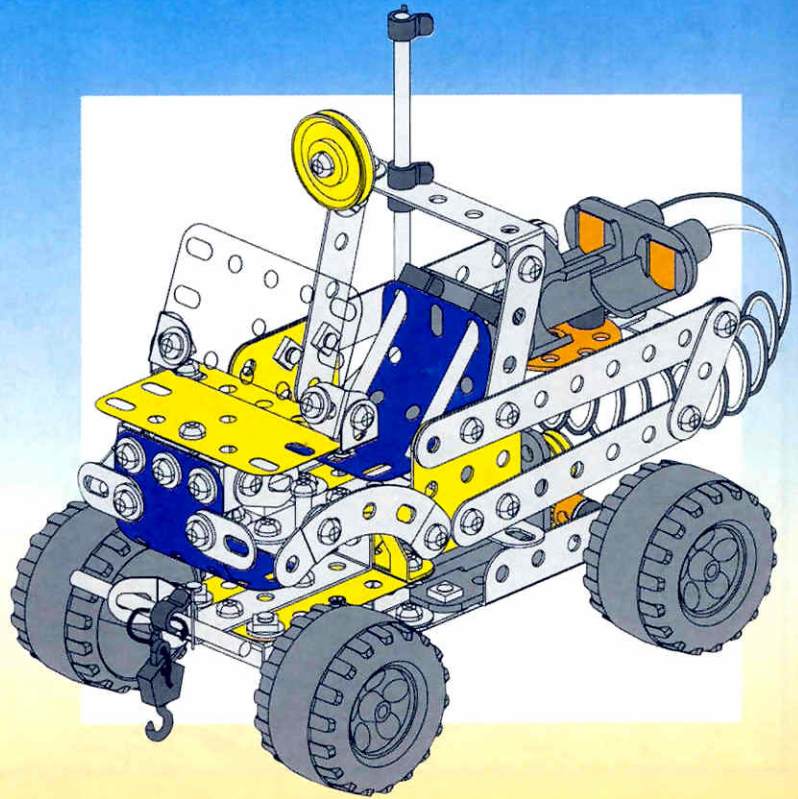
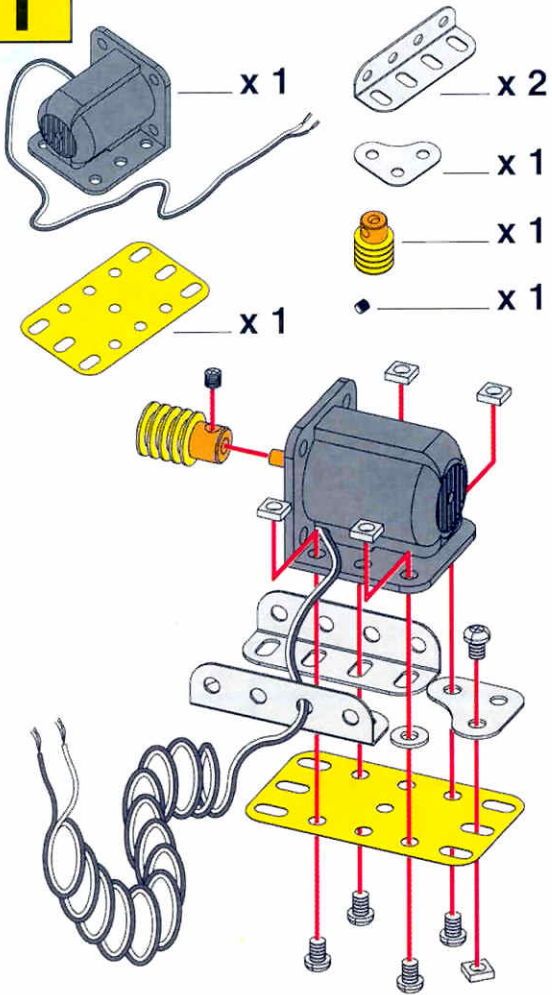
x 4

5 cm
2" x 1

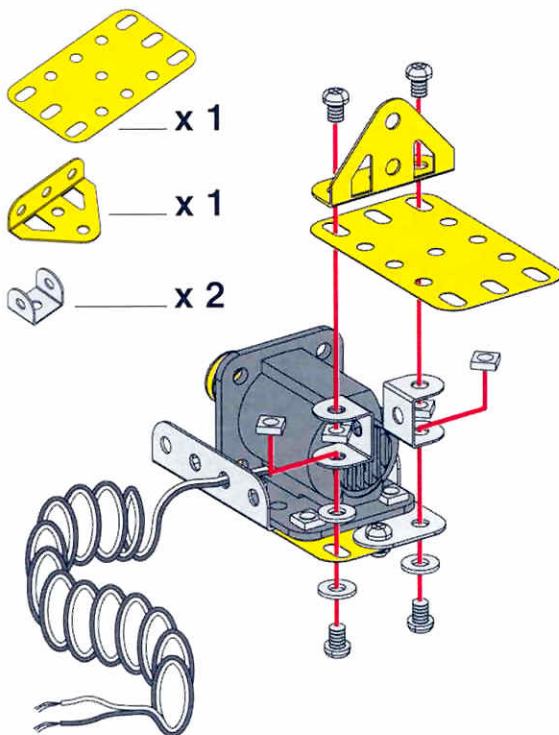
x 1



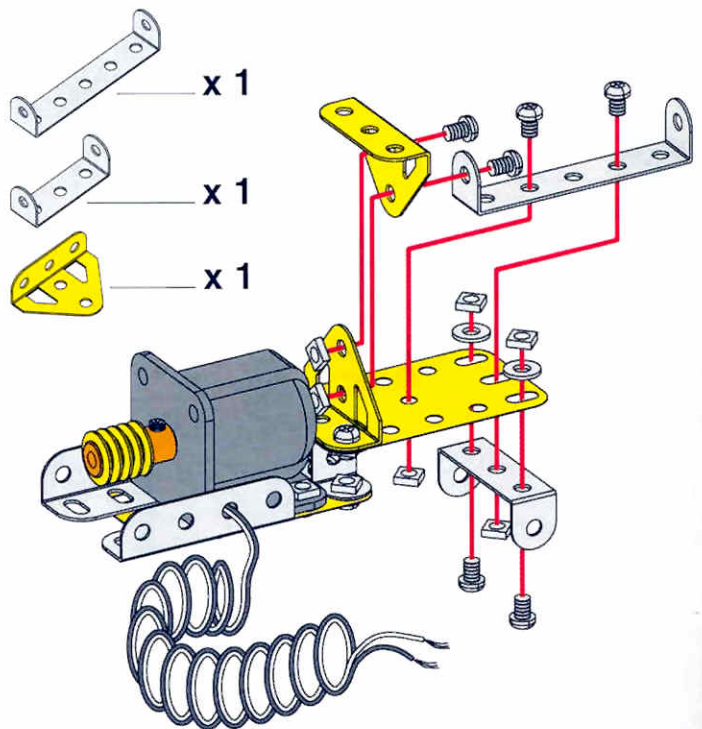
1



2 **1** +



3 **2** +



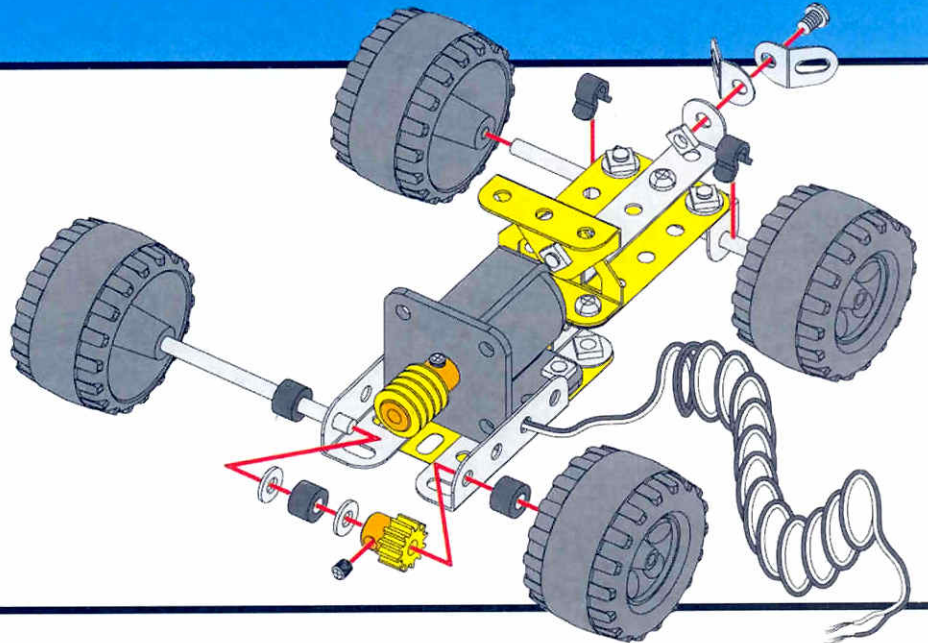
4

3+

9 cm
3 1/2" x 2

x 4

x 2
x 1
x 1
x 3
x 2



5

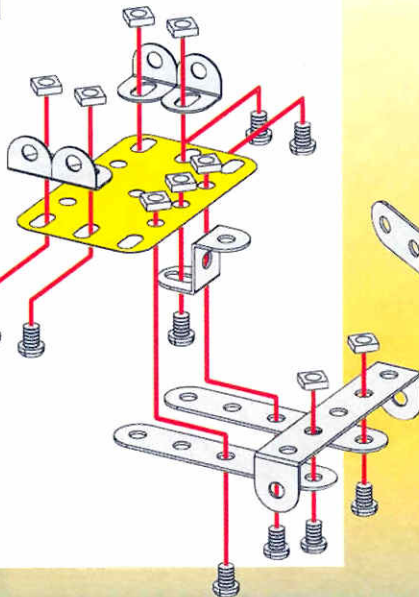
x 1

x 2

x 1

x 1

x 4



6

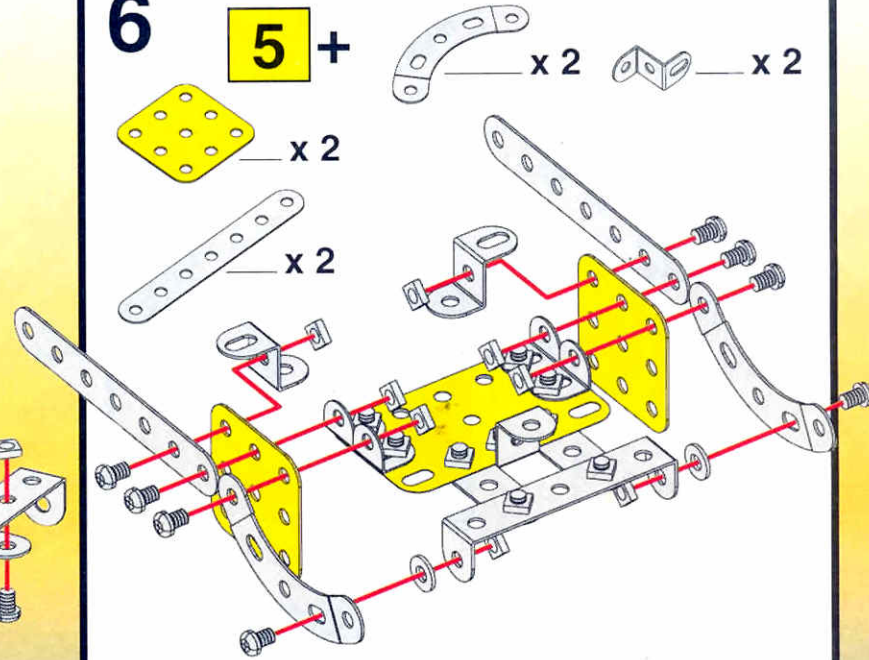
5+

x 2

x 2

x 2

x 2



7

6+

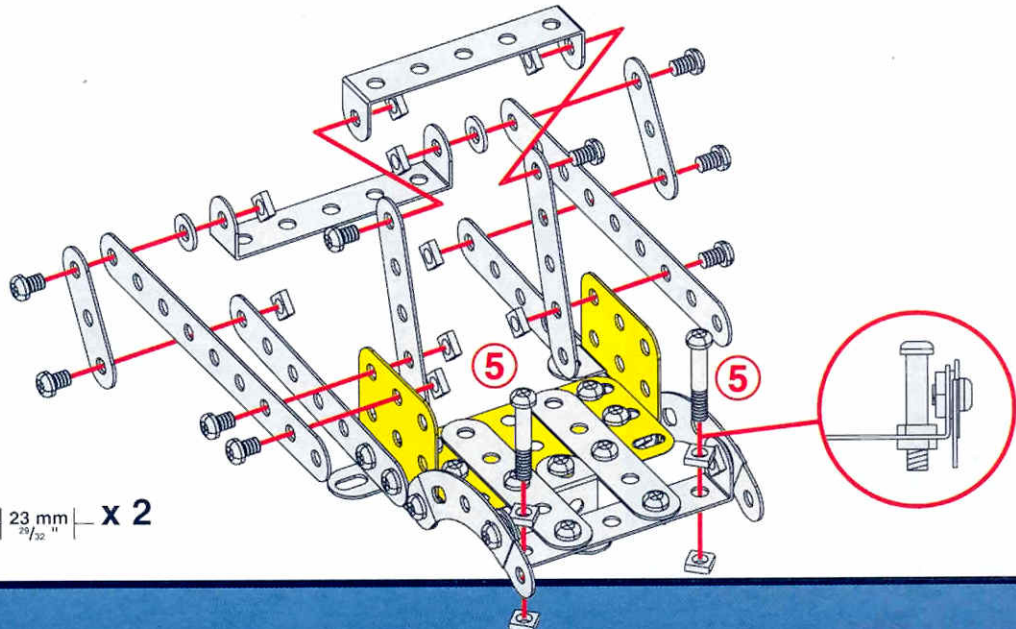
x 2

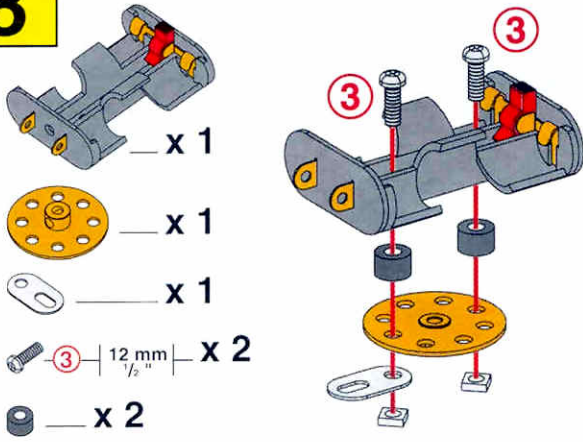
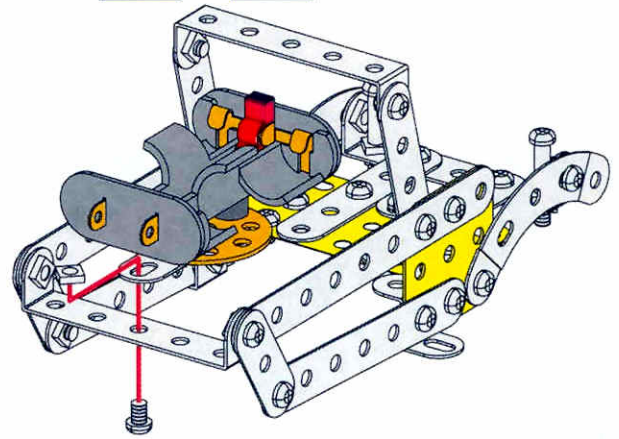
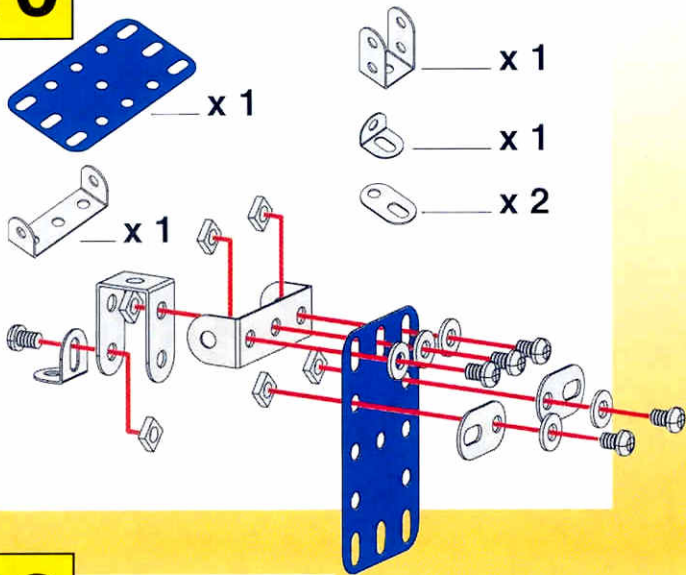
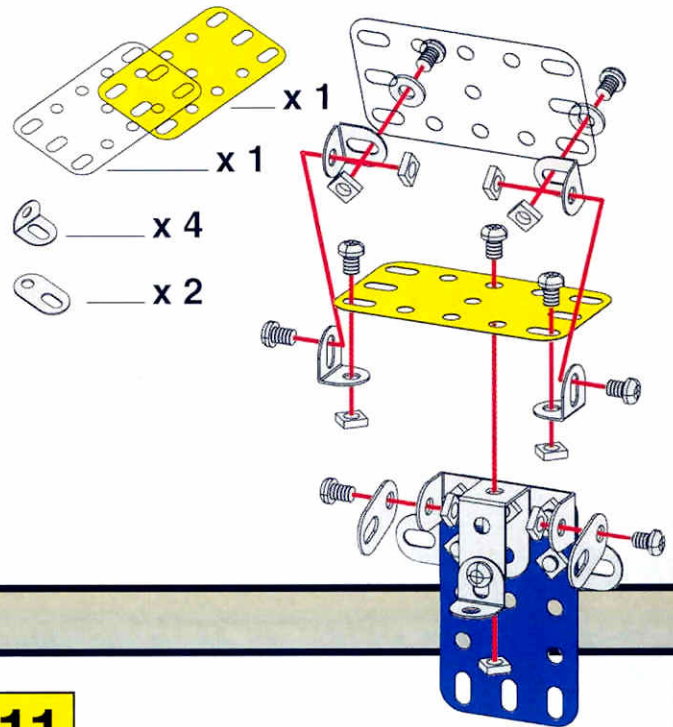
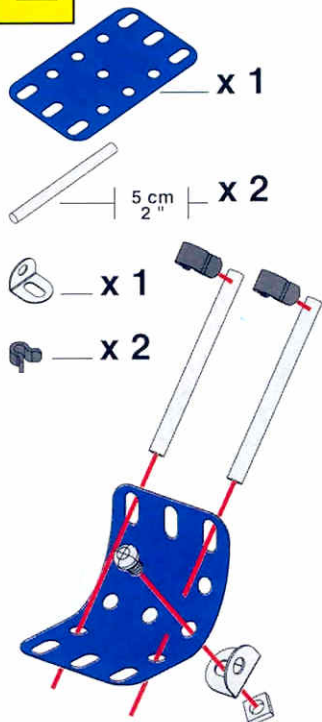
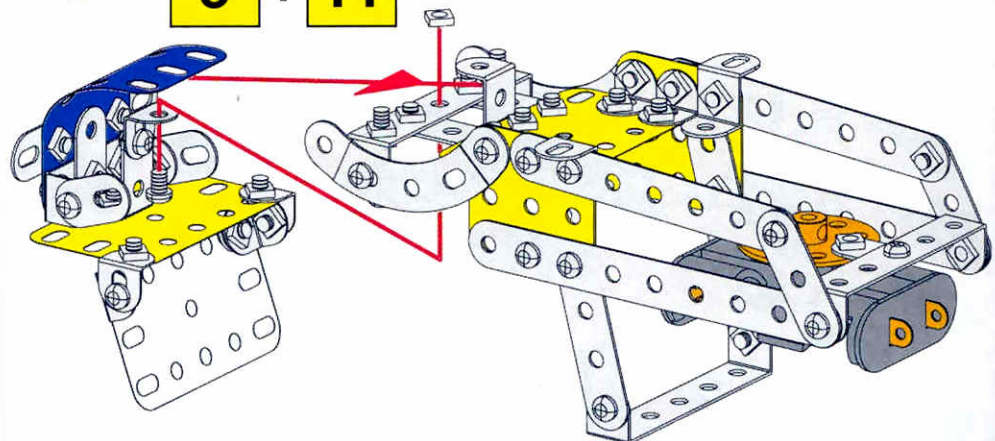
x 2

x 2

x 2


5 23 mm
29/32" x 2

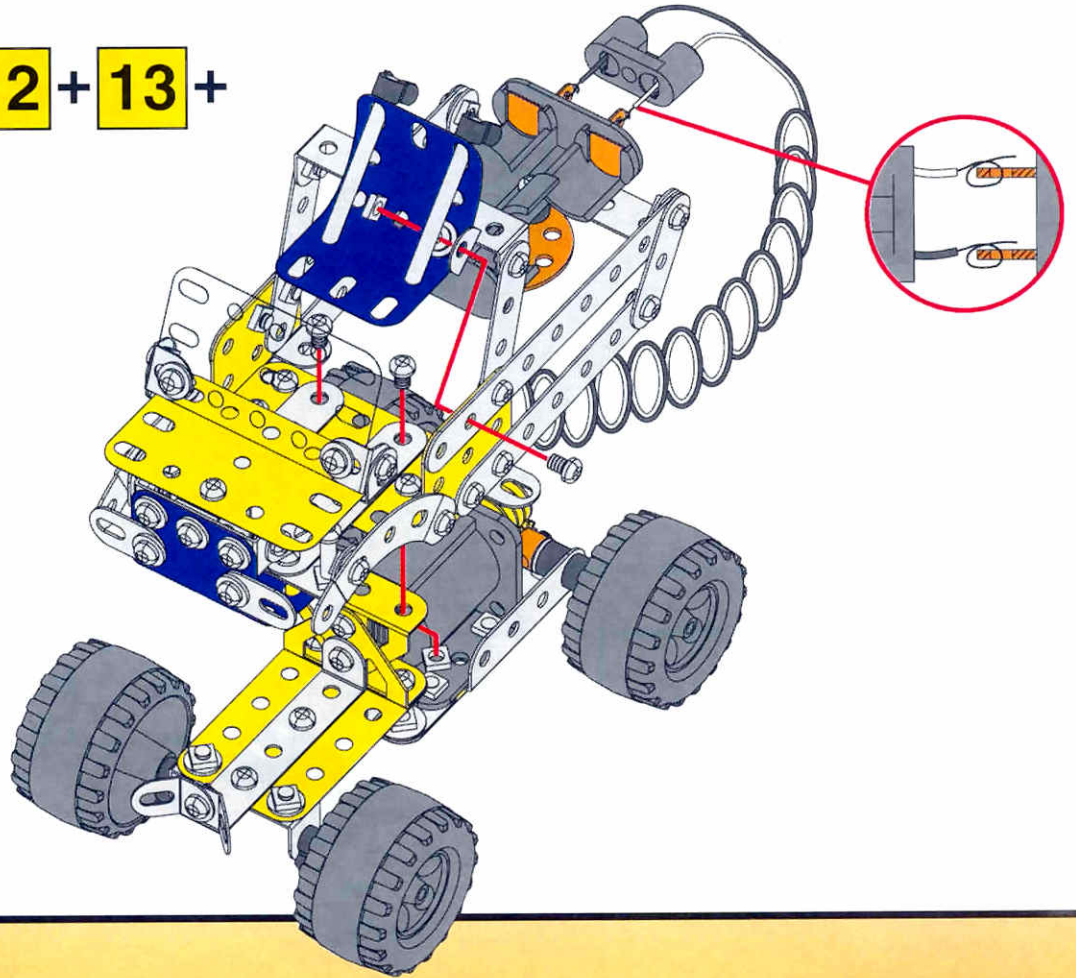


8**9****7 + 8****10****11****10 +****12****13****9 + 11**

14

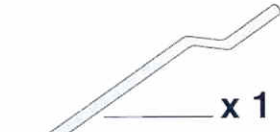
4 + **12** + **13** +

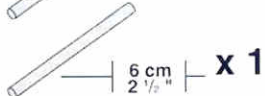
 x 1



15

14 +

 x 1

 $\frac{6 \text{ cm}}{2 \frac{1}{2} \text{ ''}}$ x 1

 x 1

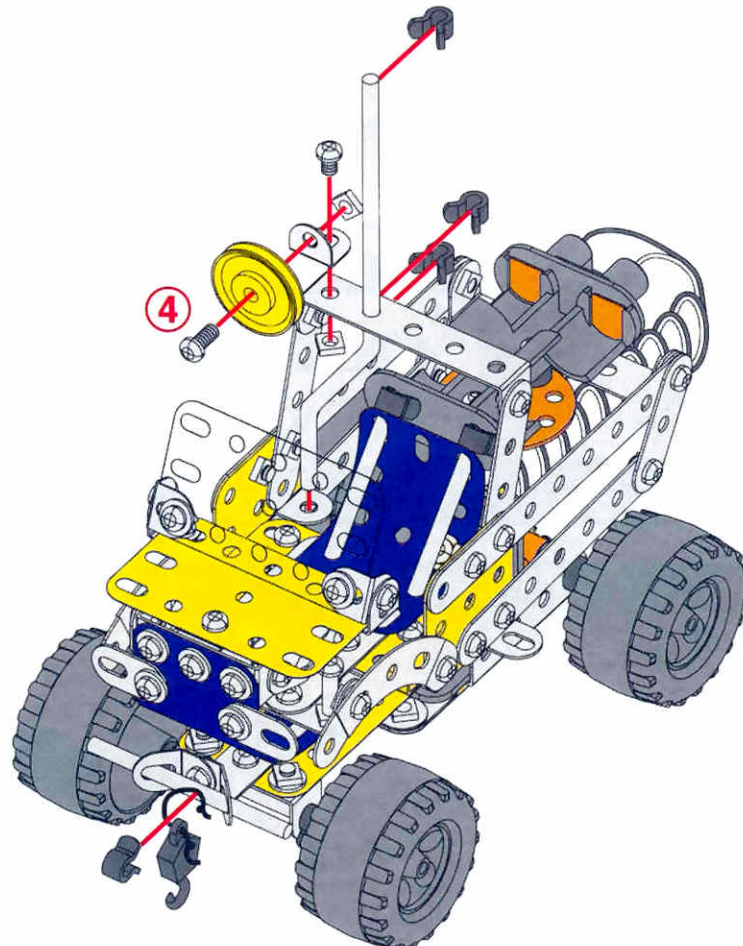
 x 1

 x 1

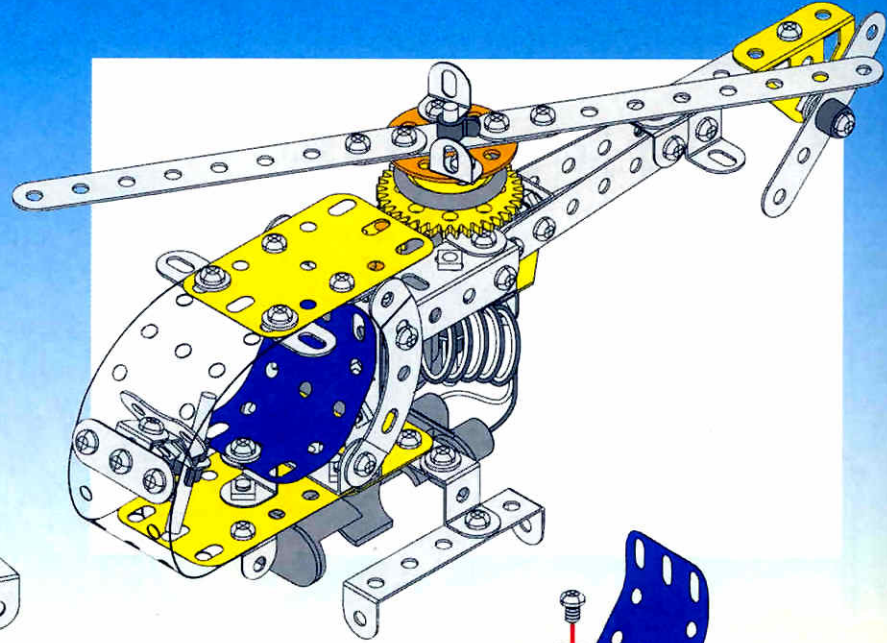
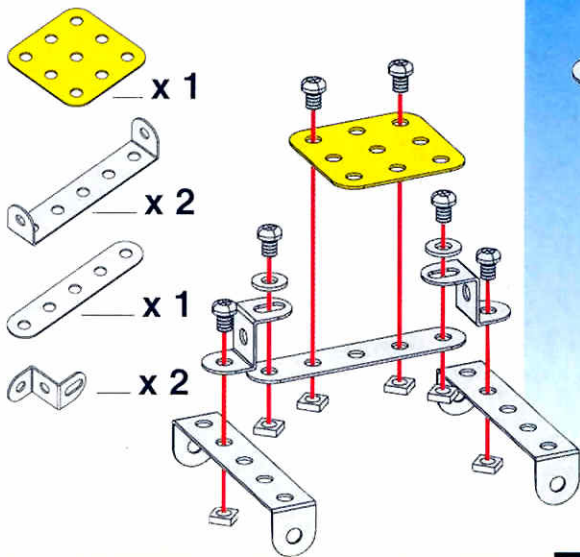
 x 1

 $\frac{9,5 \text{ mm}}{\frac{3}{8} \text{ ''}}$ x 1

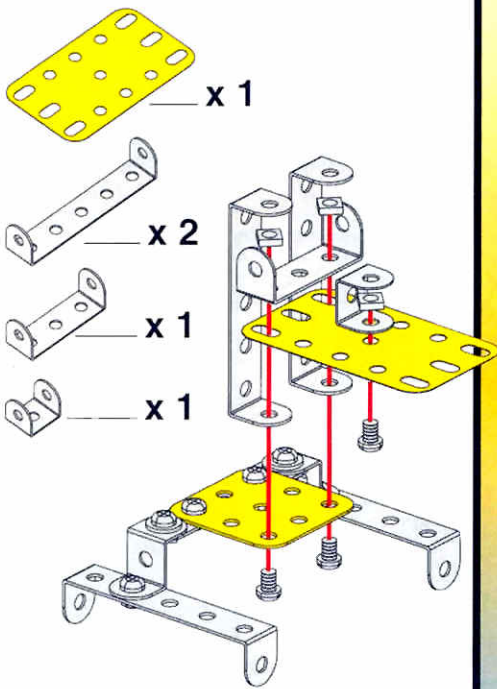
 x 4



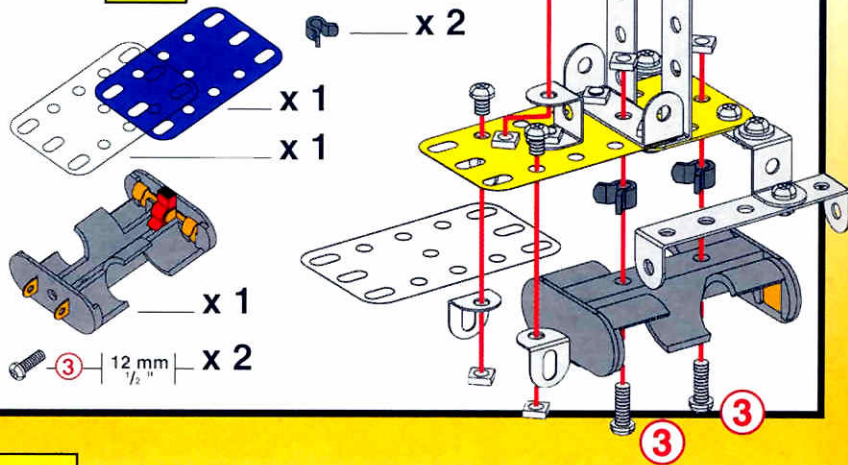
1



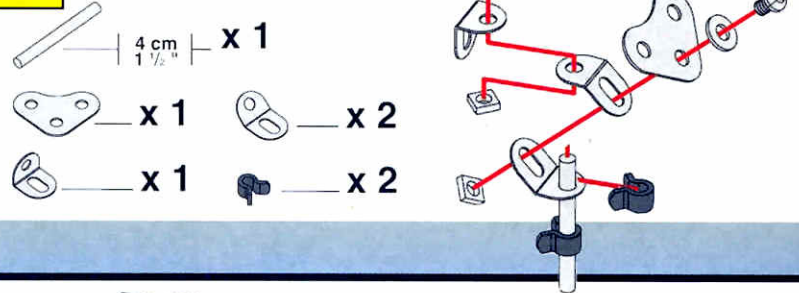
2 1 +



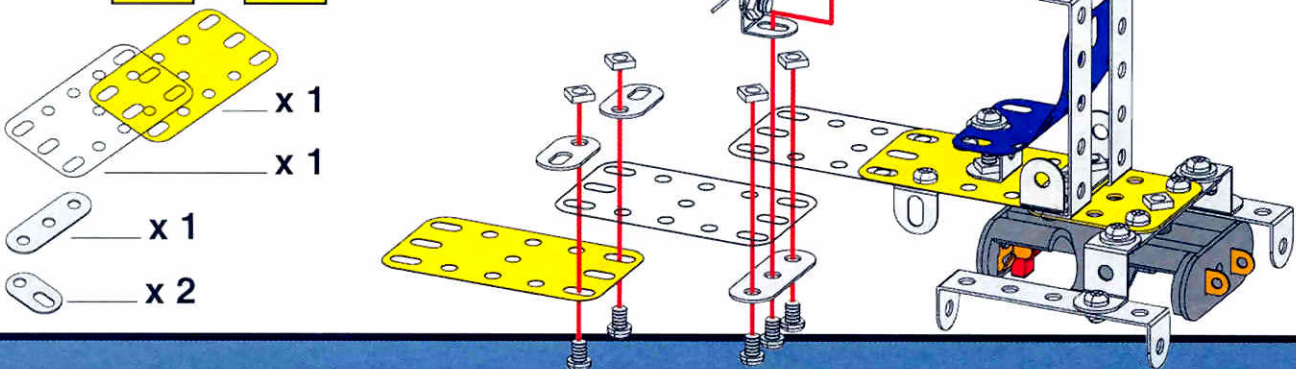
3 2 +

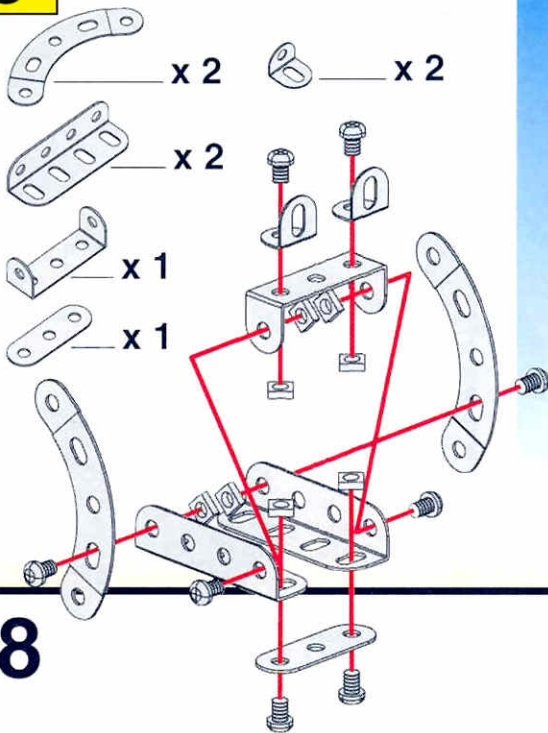
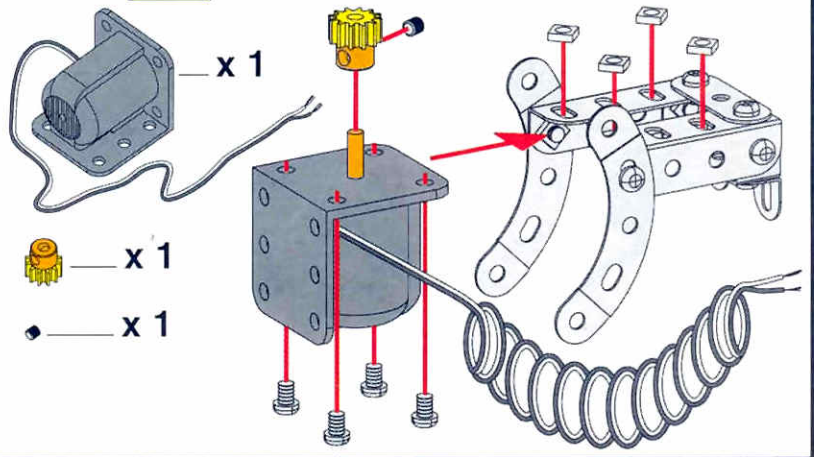
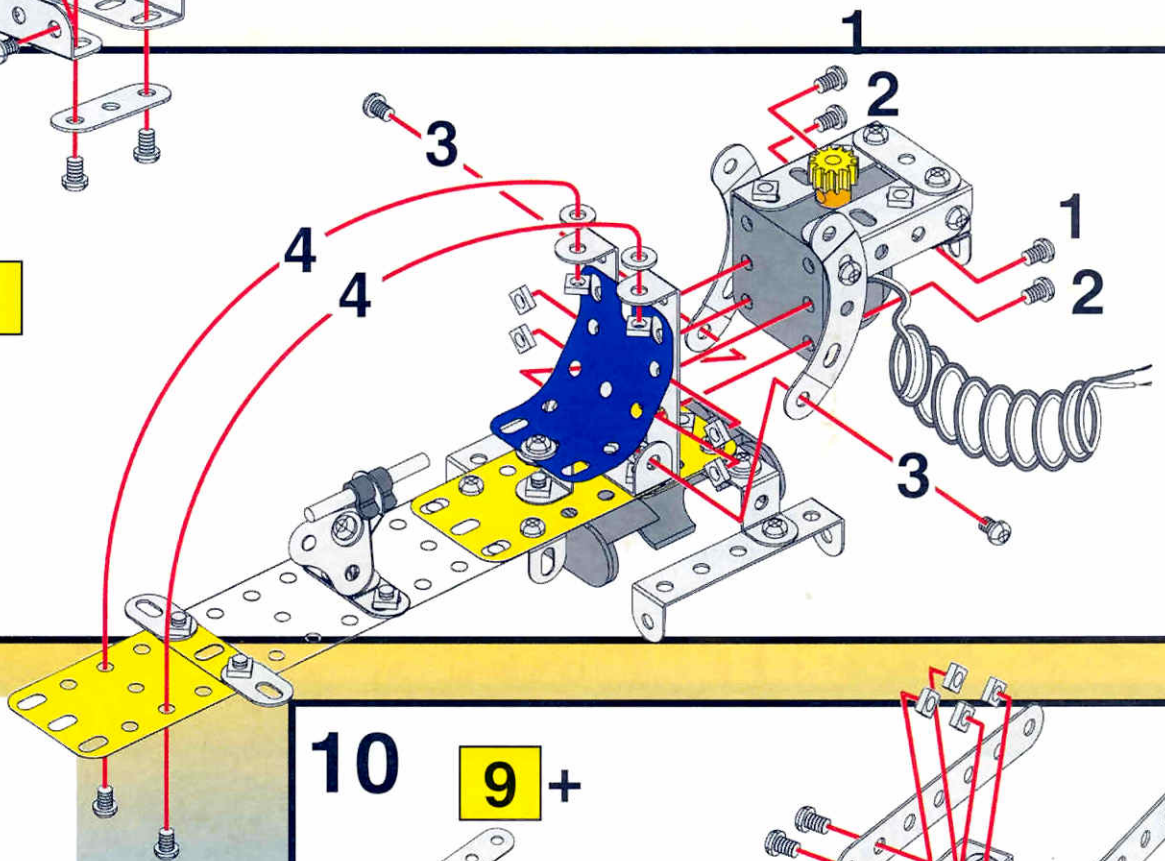
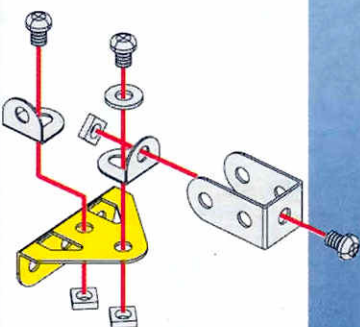
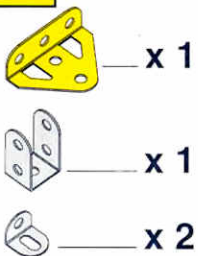
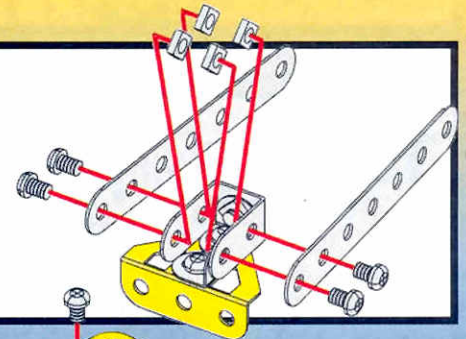
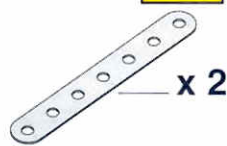
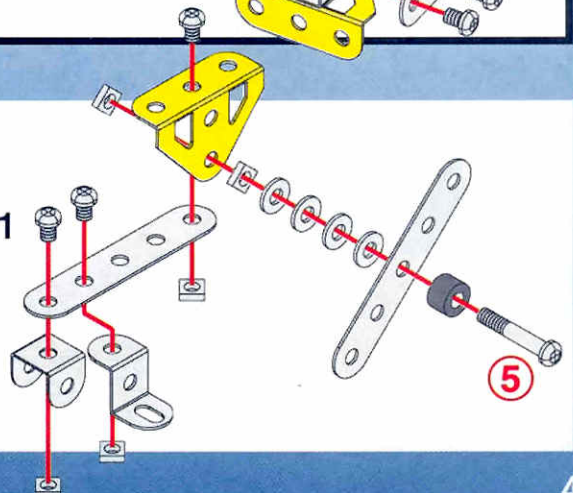
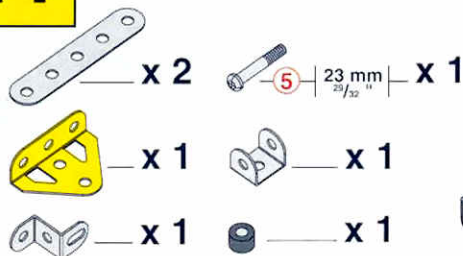


4



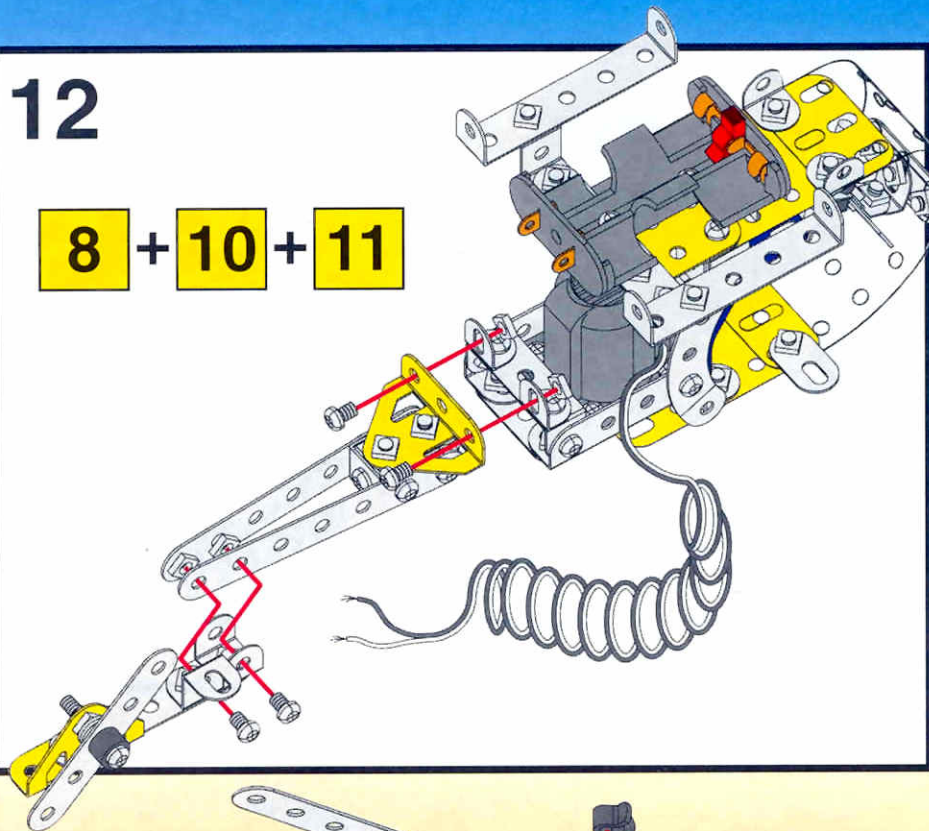
5 3 + 4 +



6**7****6+****8****5+7****9****10****9+****11**

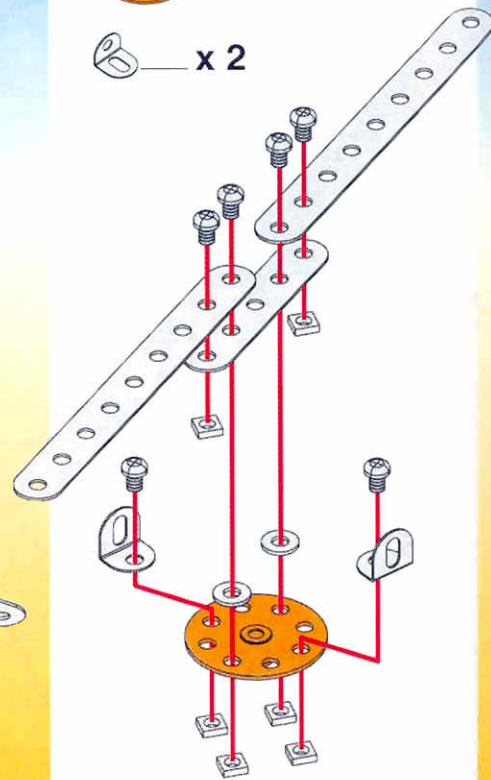
12

8 + 10 + 11



13

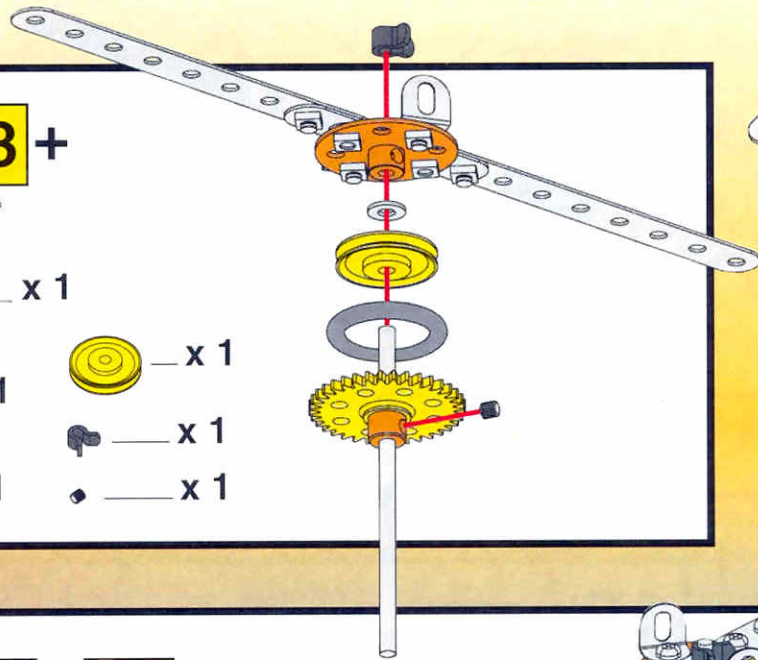
- x 2
- x 1
- x 1
- x 2



14

13 +

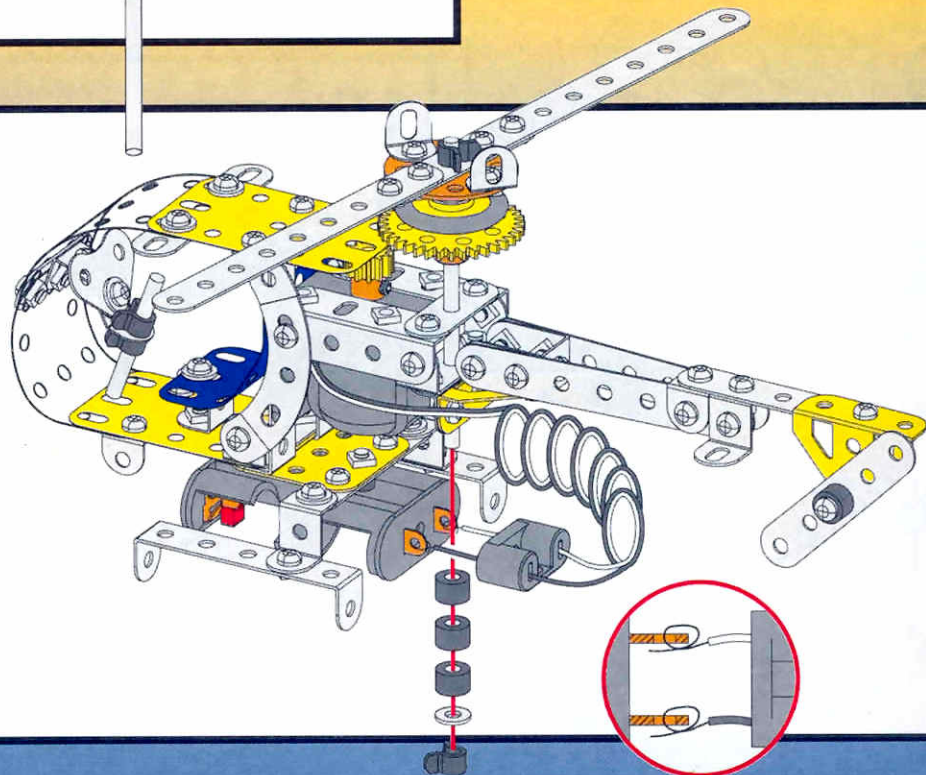
- 9 cm / 3 1/2" x 1
- x 1
- x 1
- x 1
- x 1
- x 1



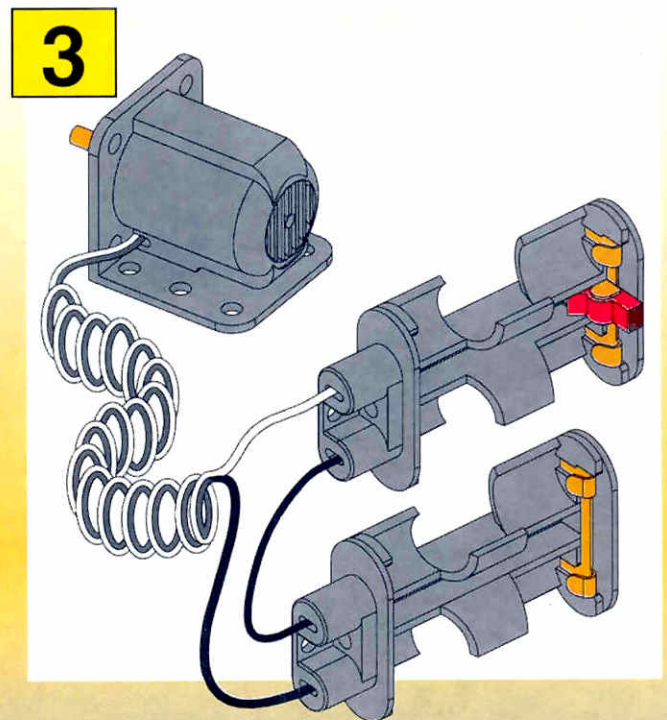
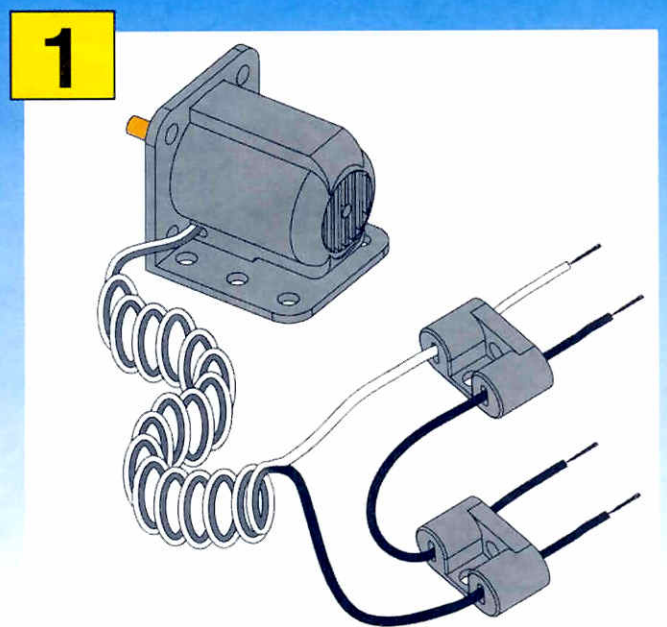
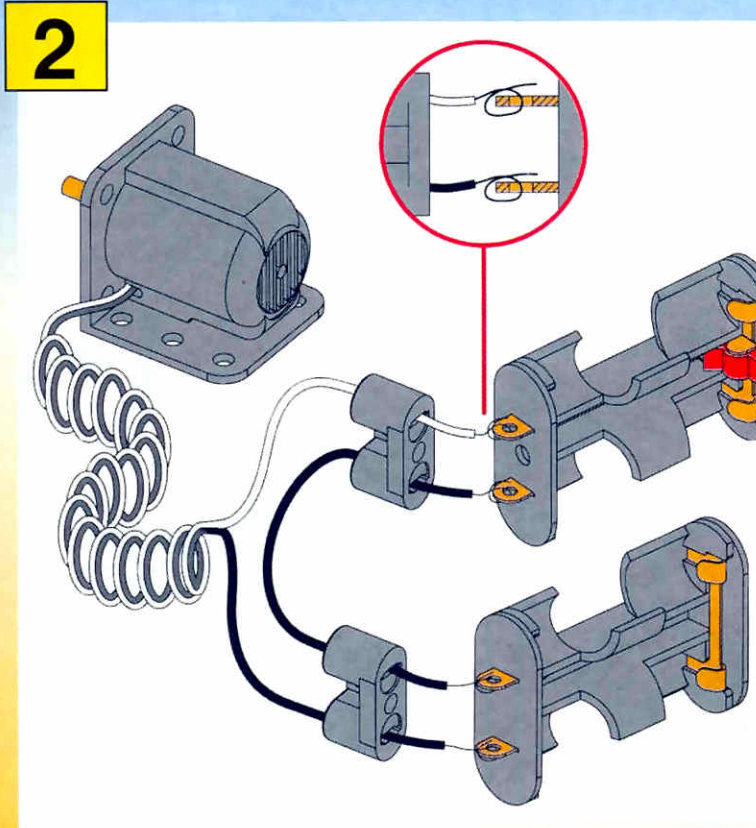
15

12 + 14 +

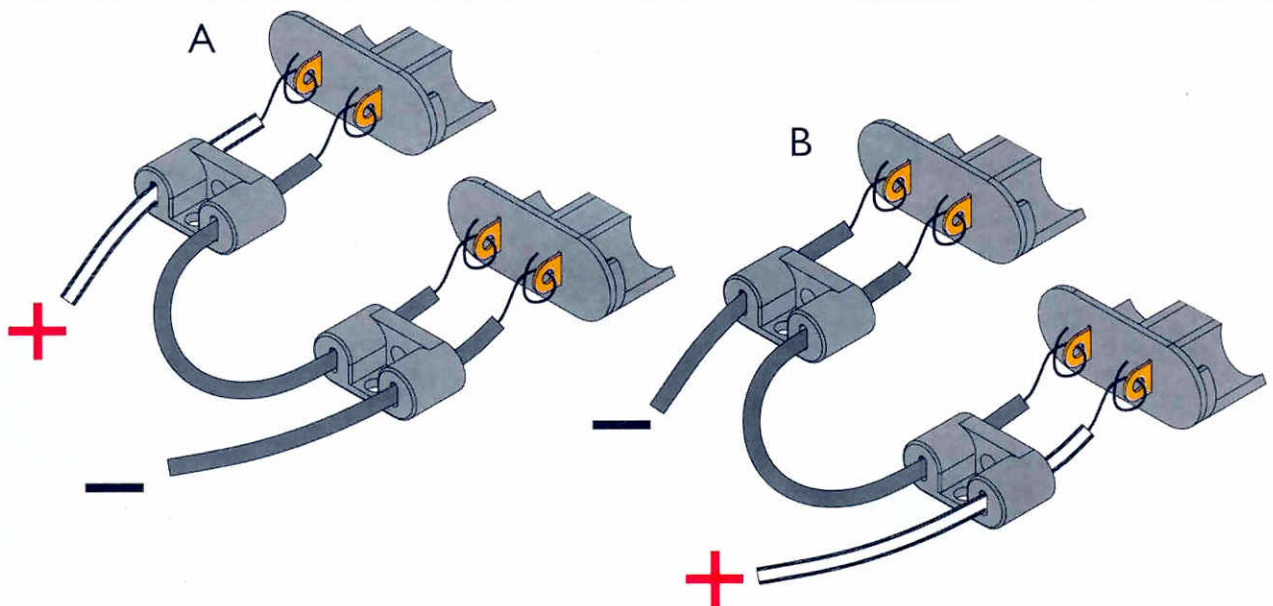
- x 3
- x 1
- x 1

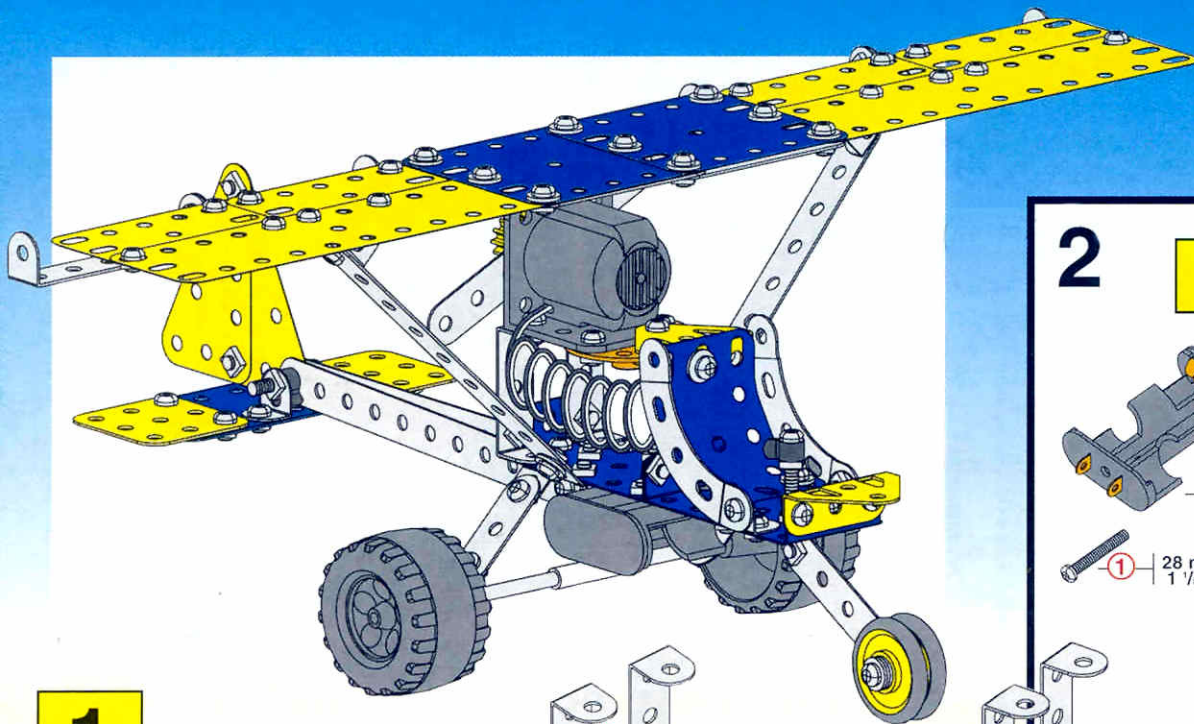


ELECTRICAL WIRING OF MOTOR TO BATTERY PACK

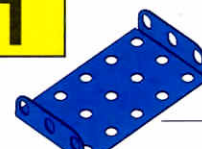

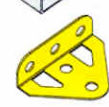




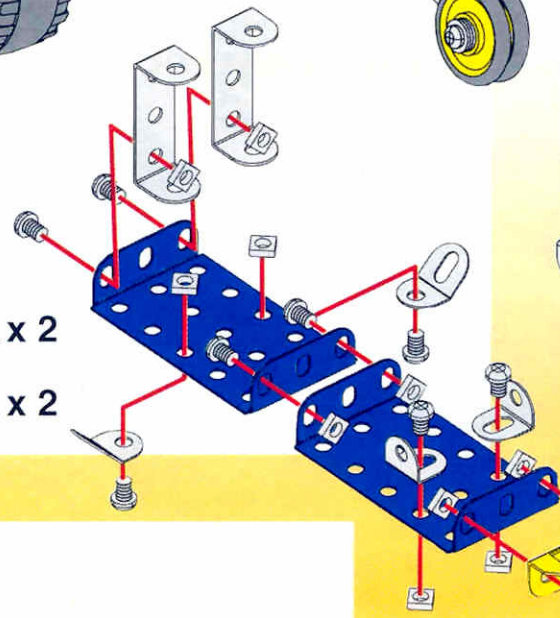
A : FORWARD ROTATION
B : BACKWARD ROTATION





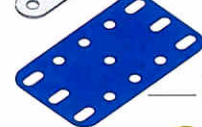
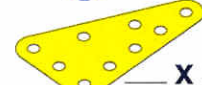
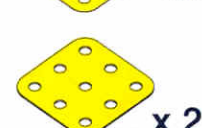
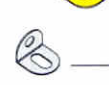




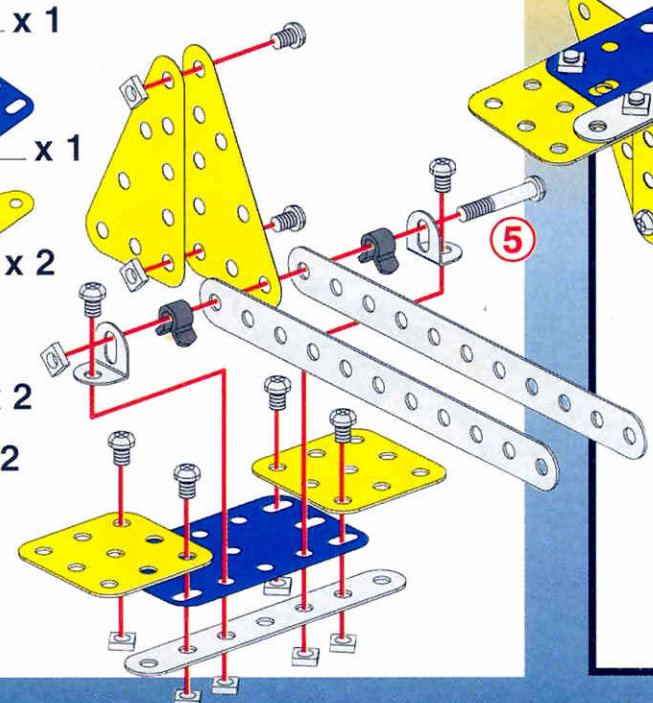
1

-  x 2
-  x 2
-  x 1
-  x 2
-  x 2



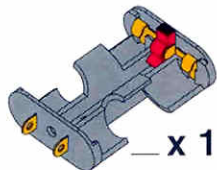




3

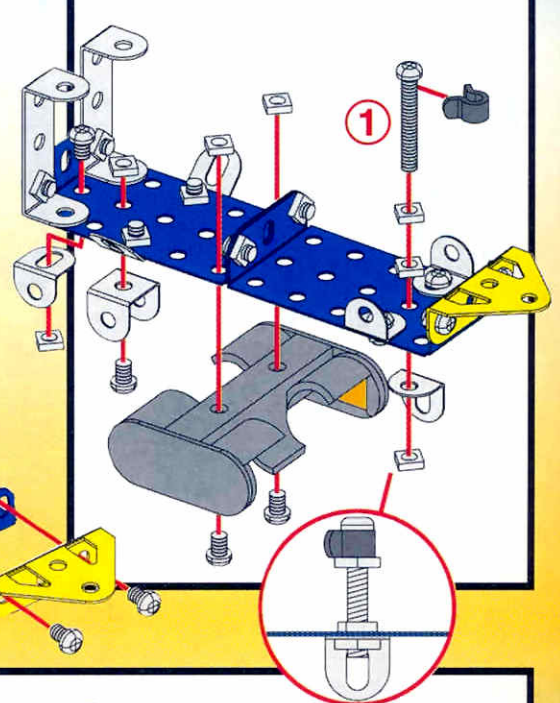
-  x 2
-  x 1
-  x 1
-  x 2
-  x 2
-  x 2
-  x 1
-  x 2



2

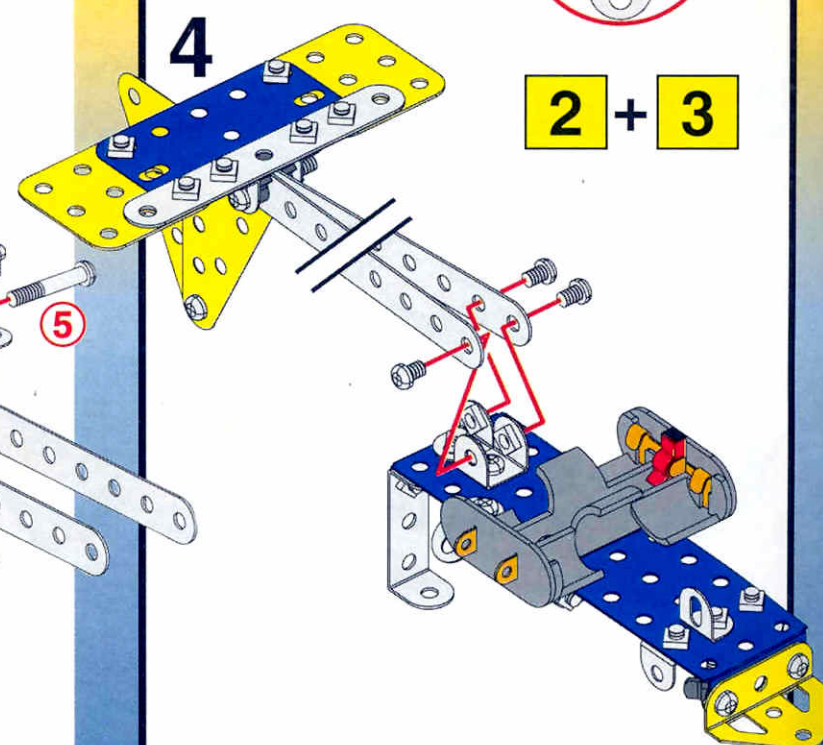
1 +

-  x 1
-  x 1
-  x 2
-  x 1
-  x 1

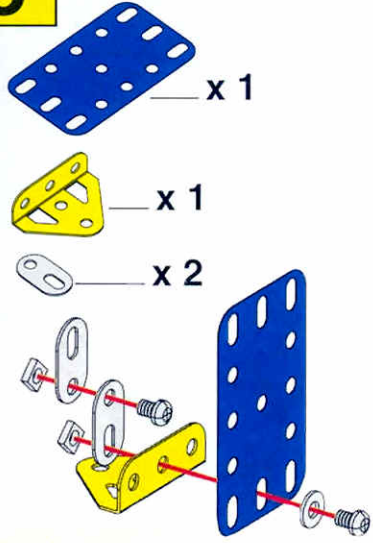


4

2 + **3**



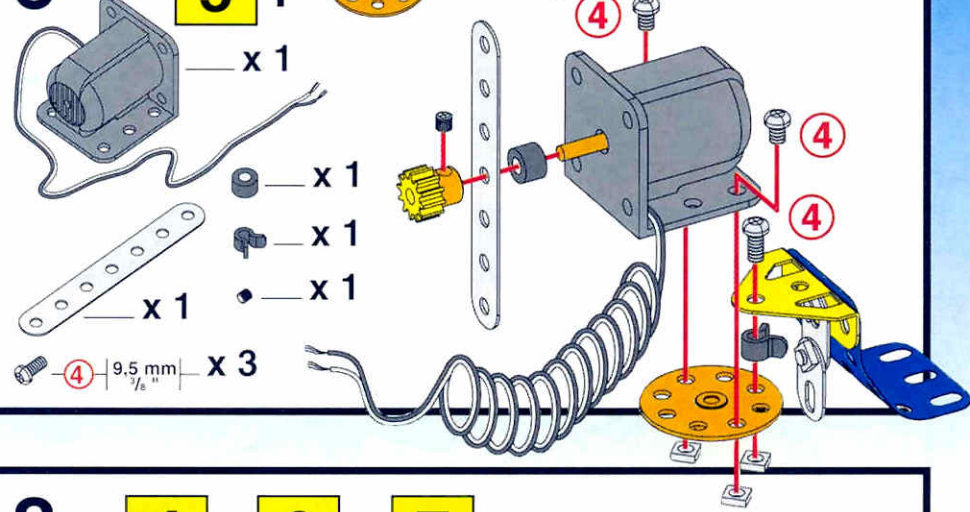
5



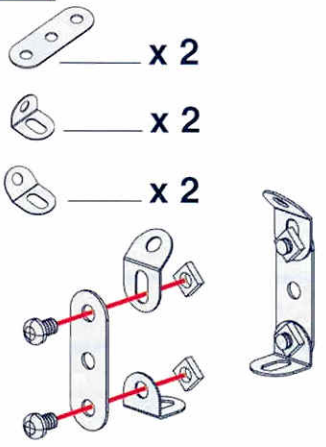
6

5 +

x1 x1

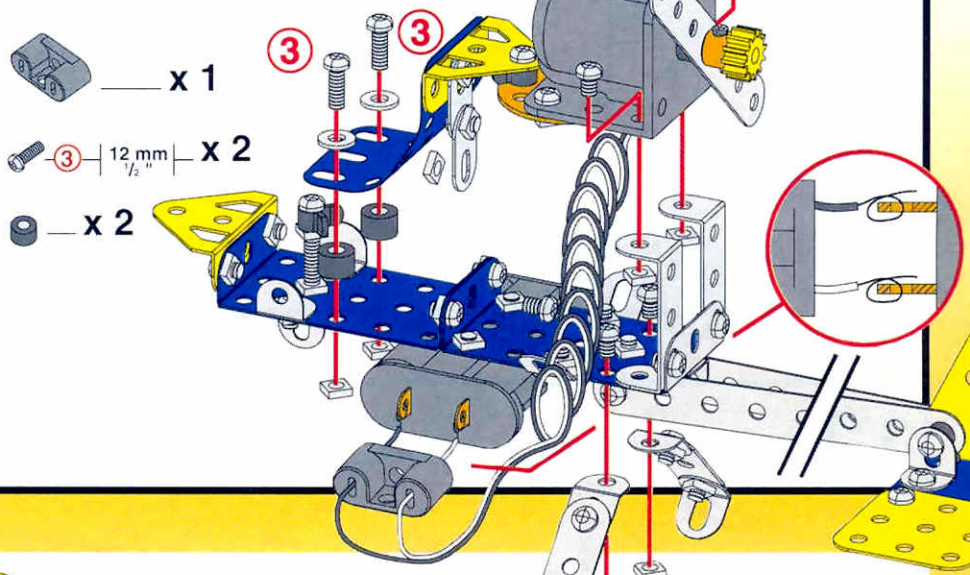


7

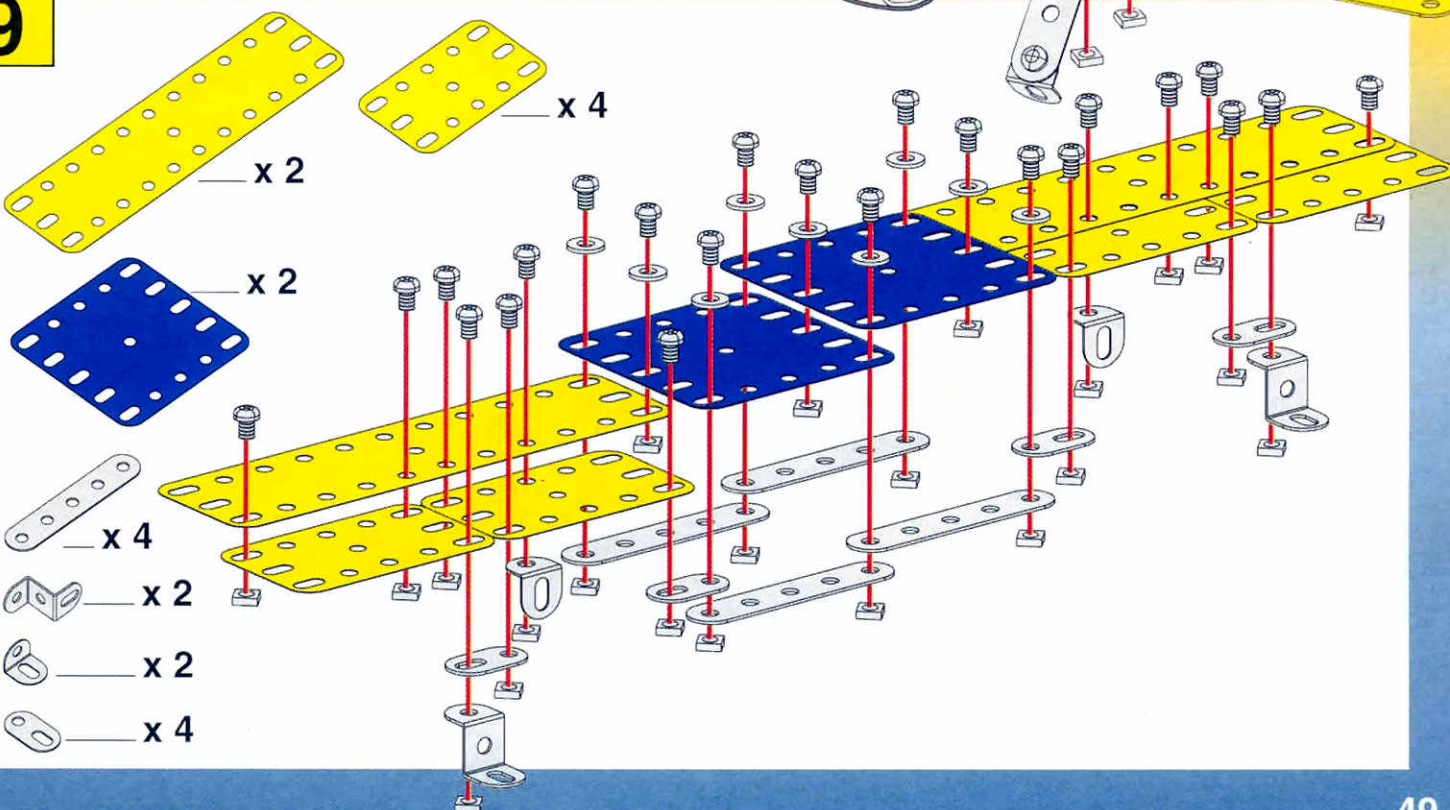


8

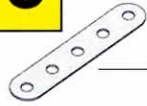
4 + 6 + 7 +



9



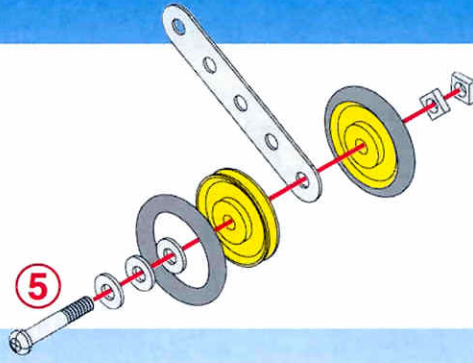
10

 x 1

 x 2

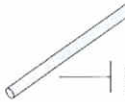
 x 1

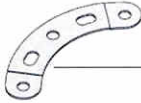
 x 2

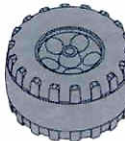


11

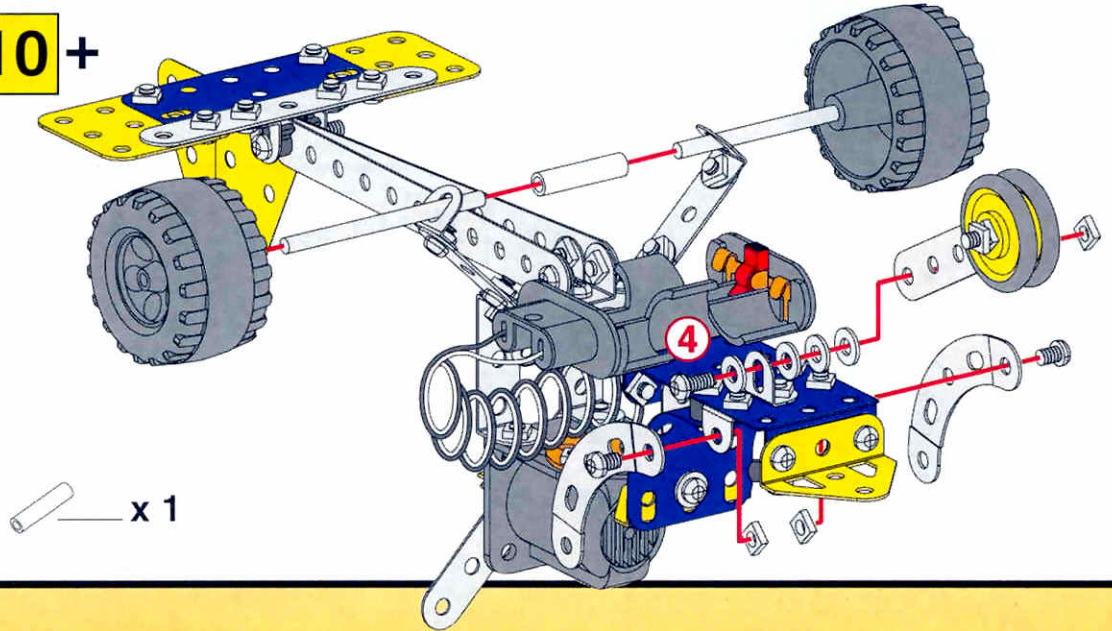
8 + **10** +

 x 2

 x 2

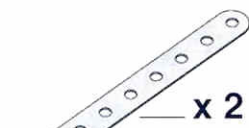
 x 2

 x 1



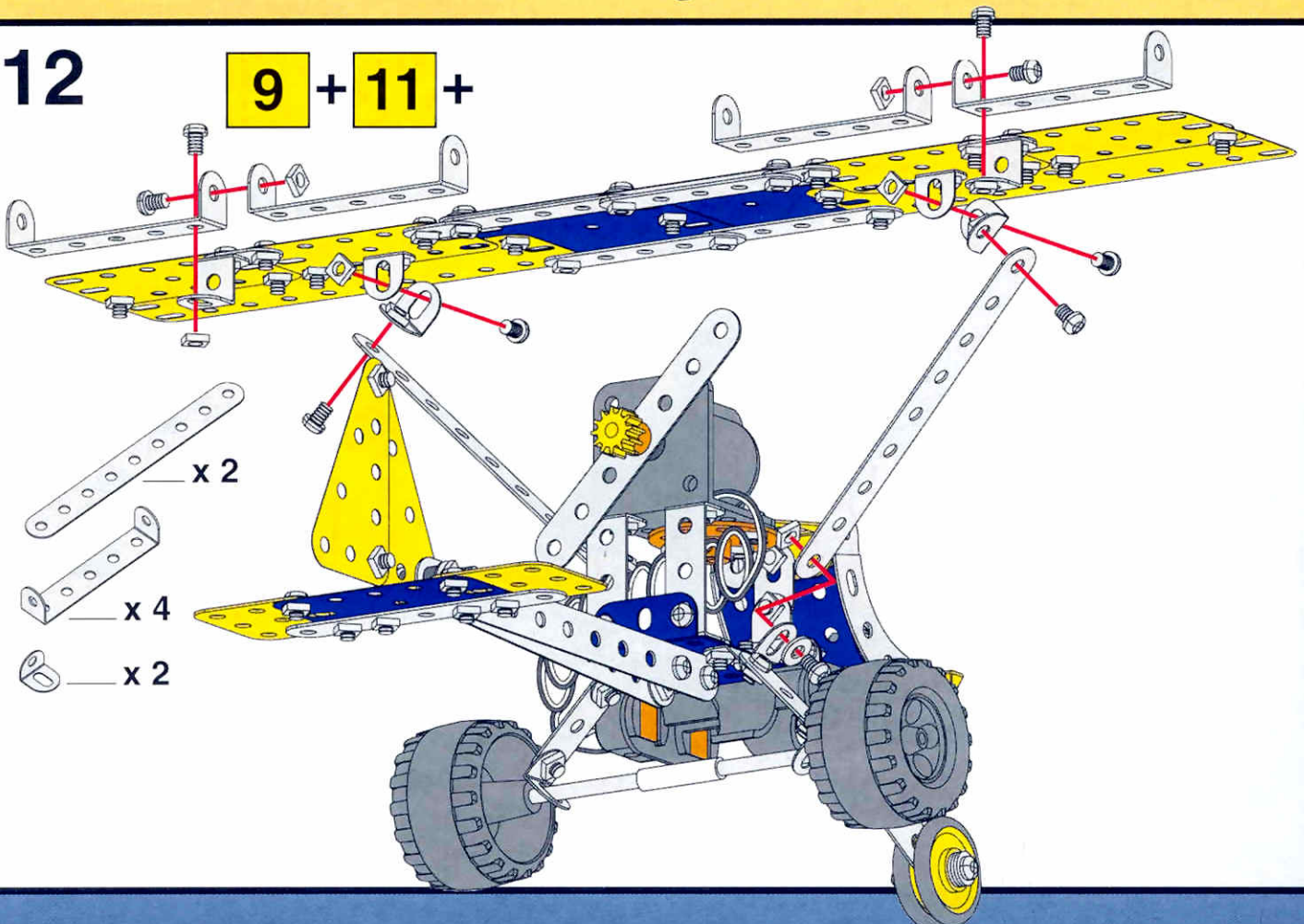
12

9 + **11** +

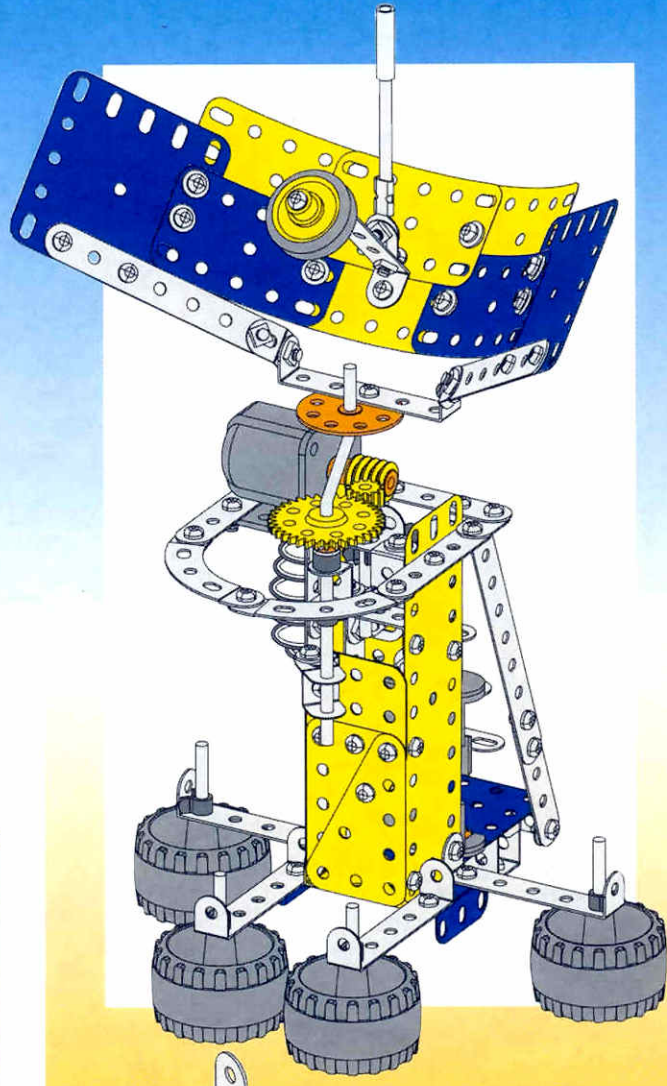
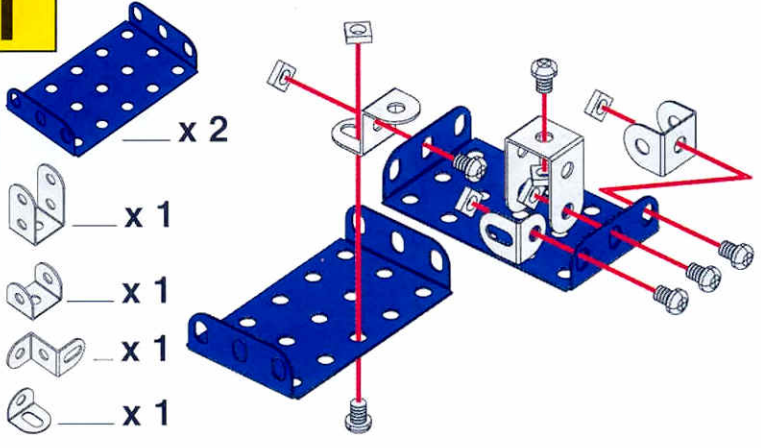
 x 2

 x 4

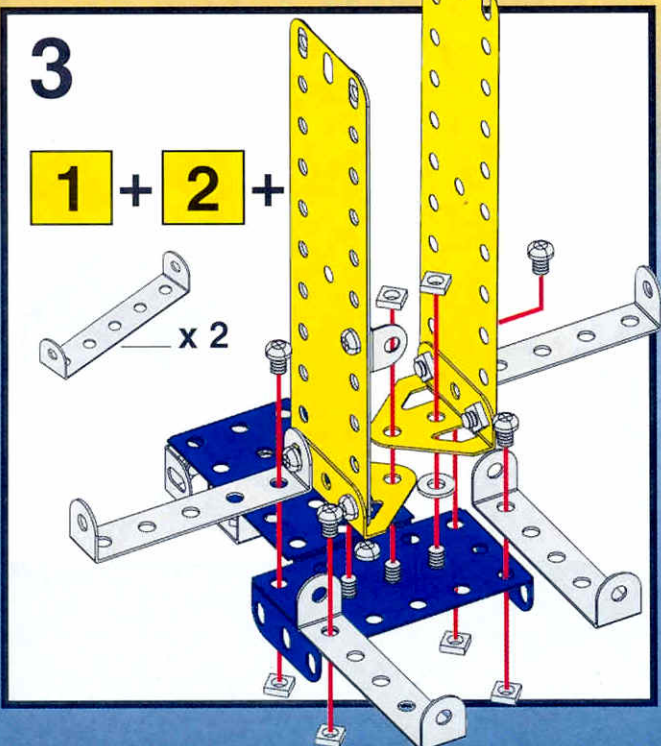
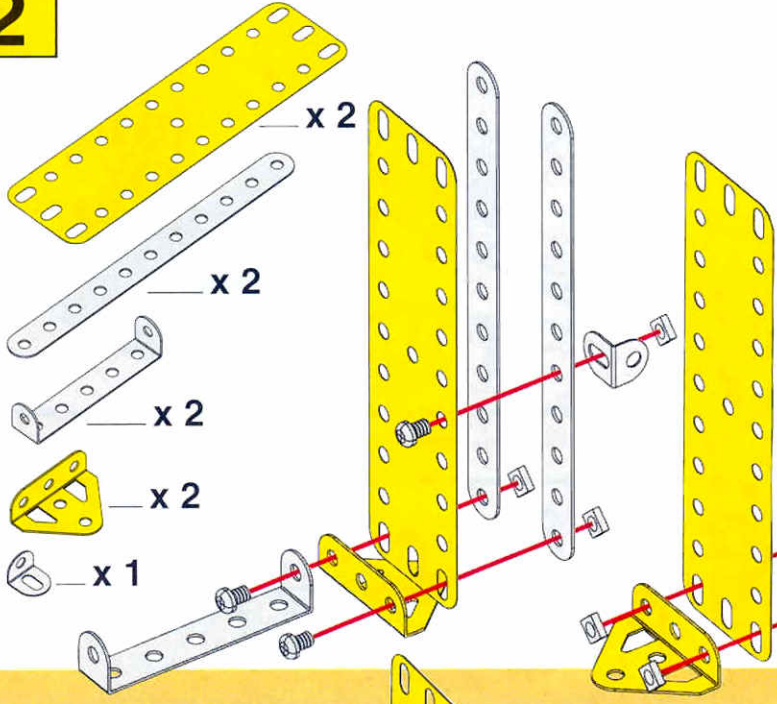
 x 2



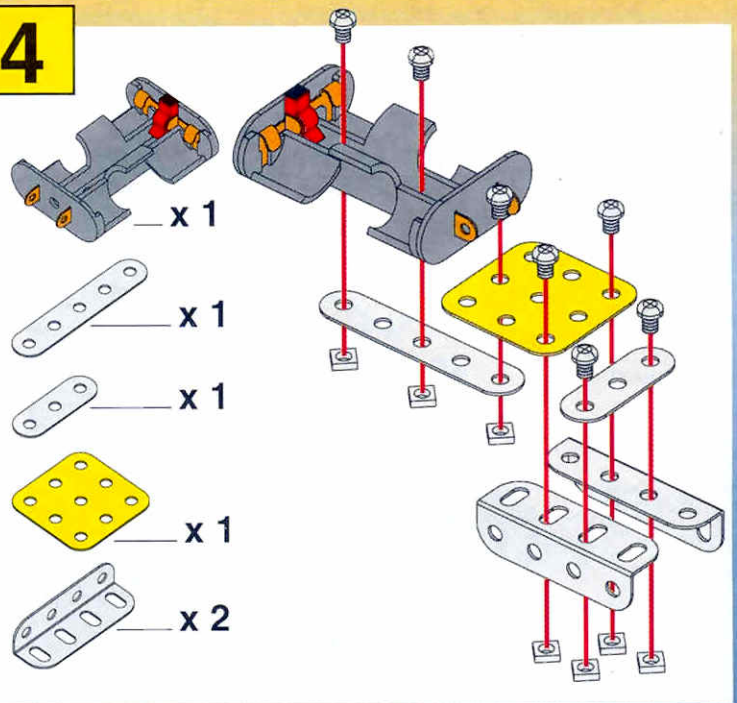
1






2

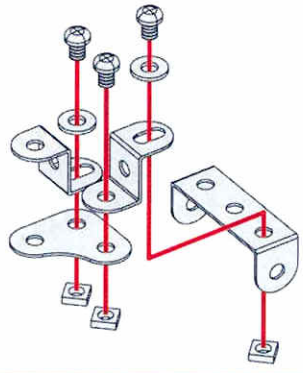


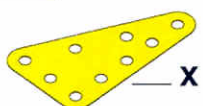
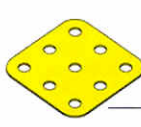


4

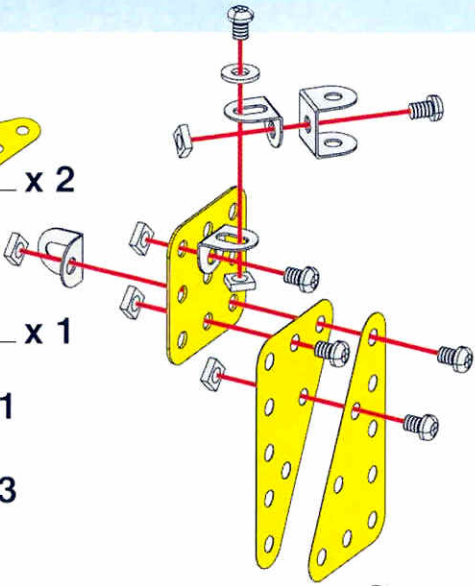


5

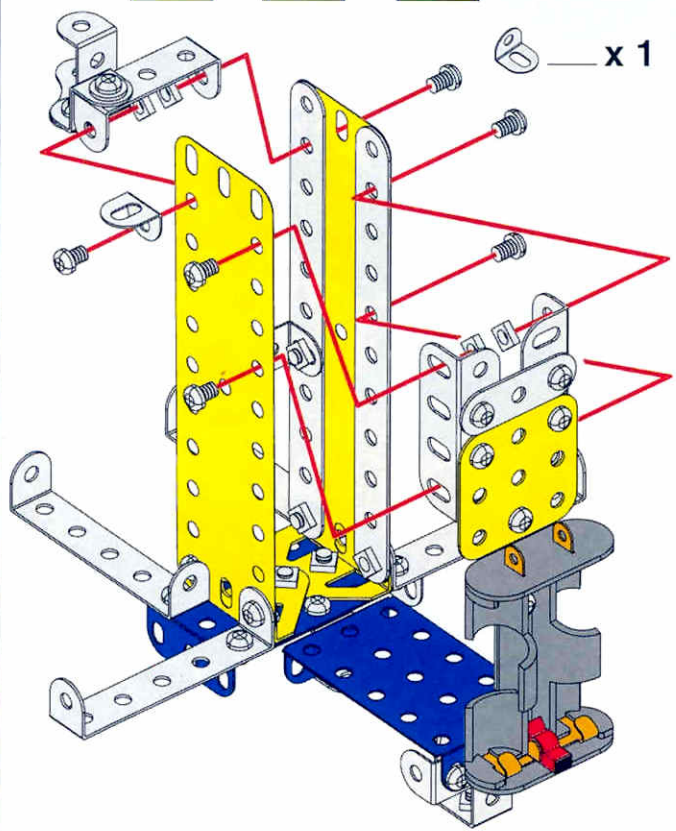
-  x 1
-  x 1
-  x 2

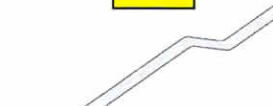
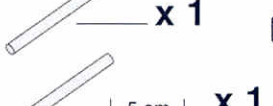






**7**

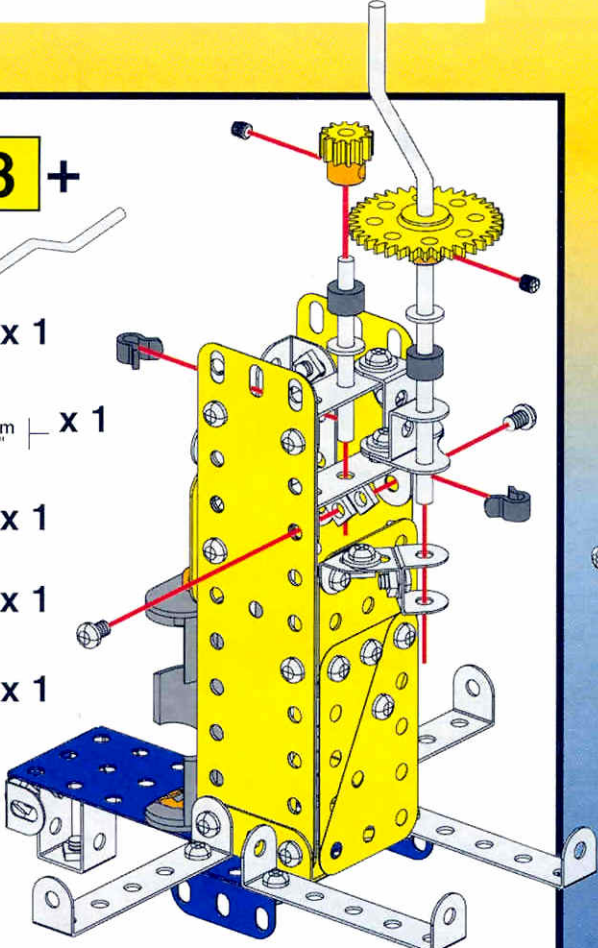
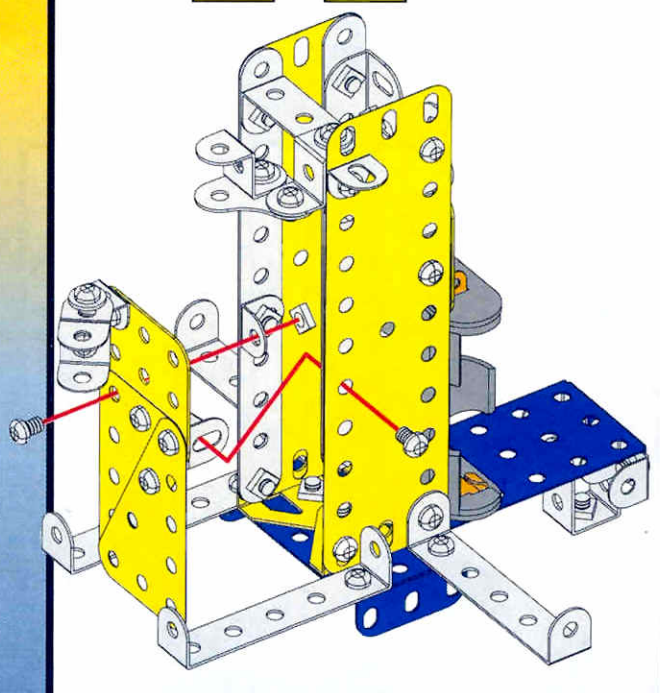
-  x 2
-  x 1
-  x 1
-  x 3

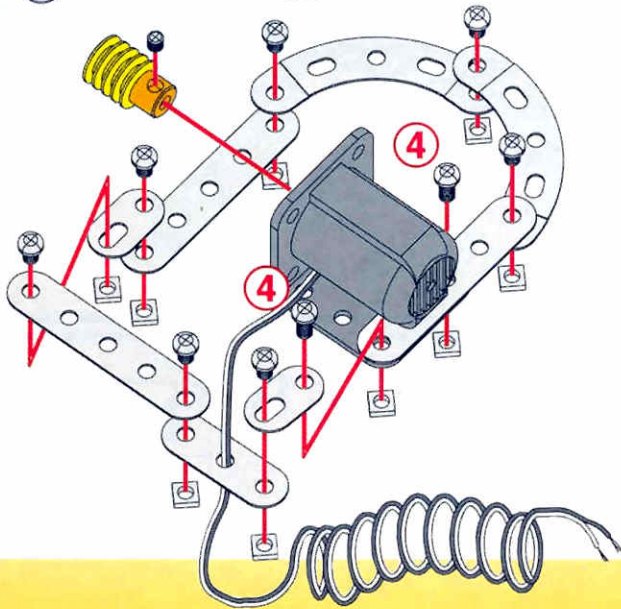
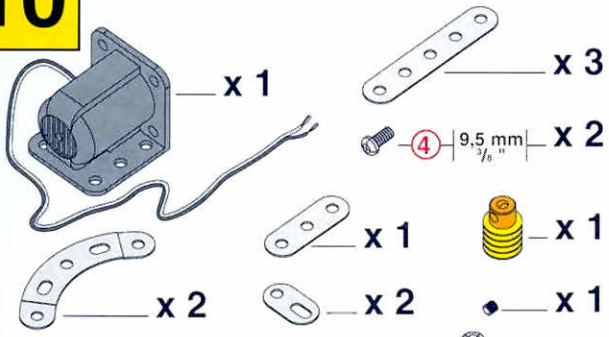
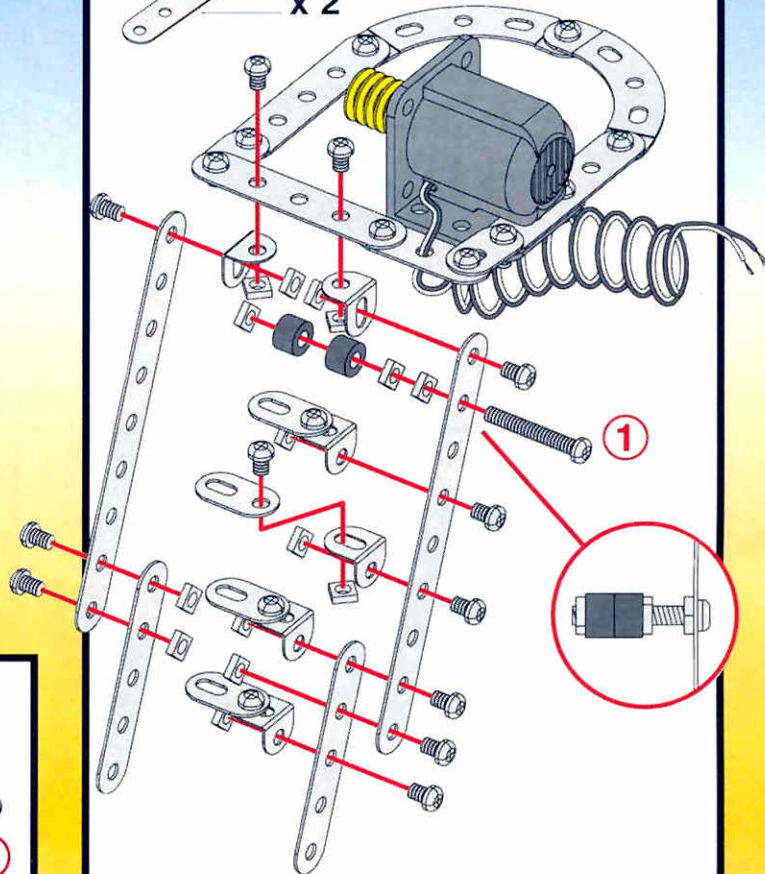
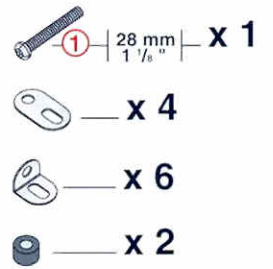
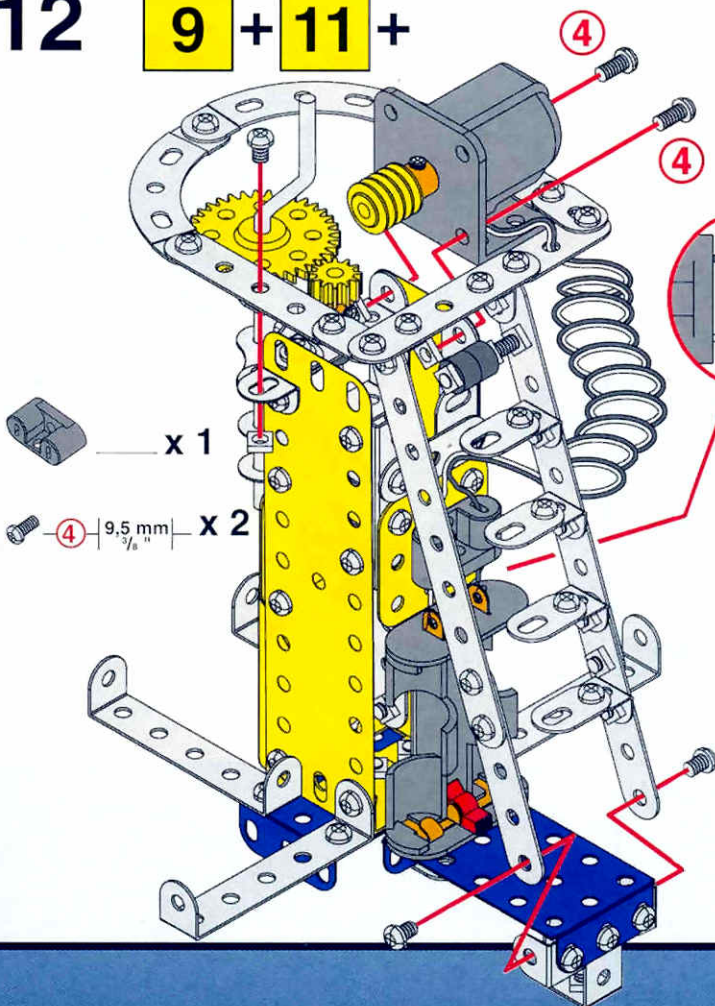
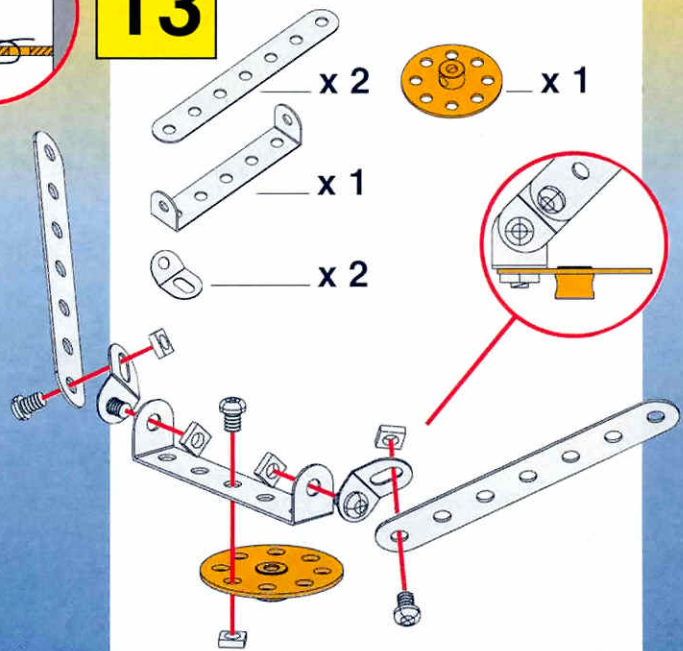
**6****3 + 4 + 5 +**

x 1

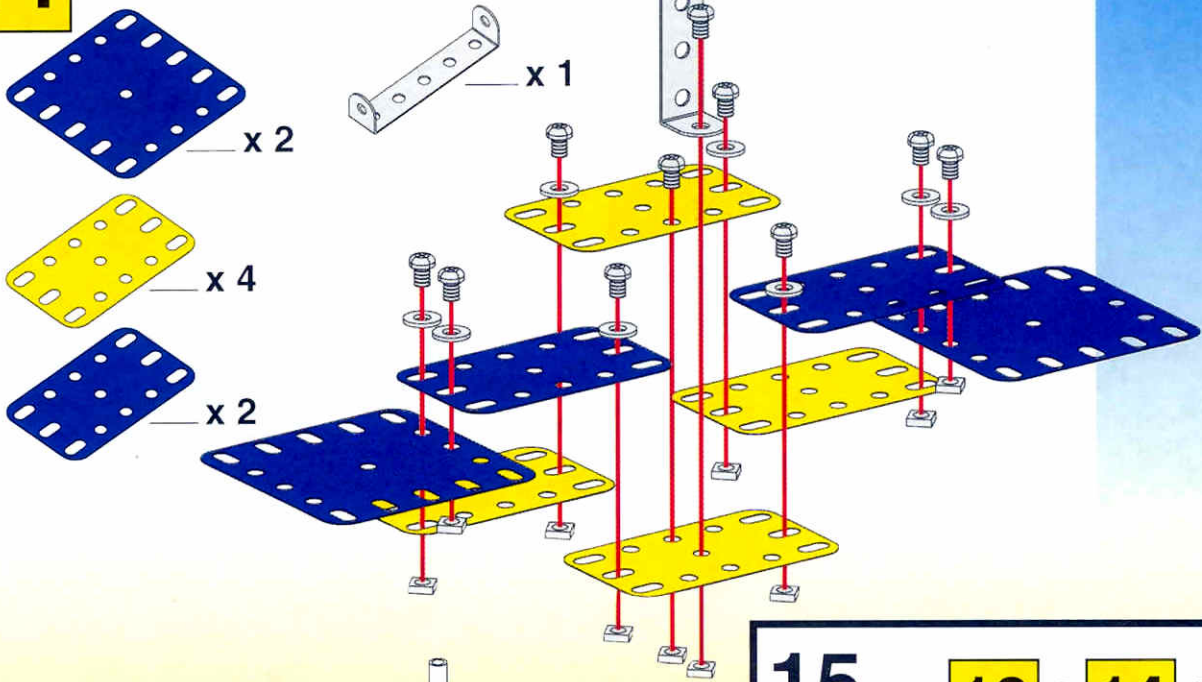
**9****8 +**

-  x 1
-  x 1
-  x 1
-  x 1
-  x 1
-  x 2
-  x 2
-  x 2

**8****6 + 7**

10**11****10+****12****9 + 11 +****13**

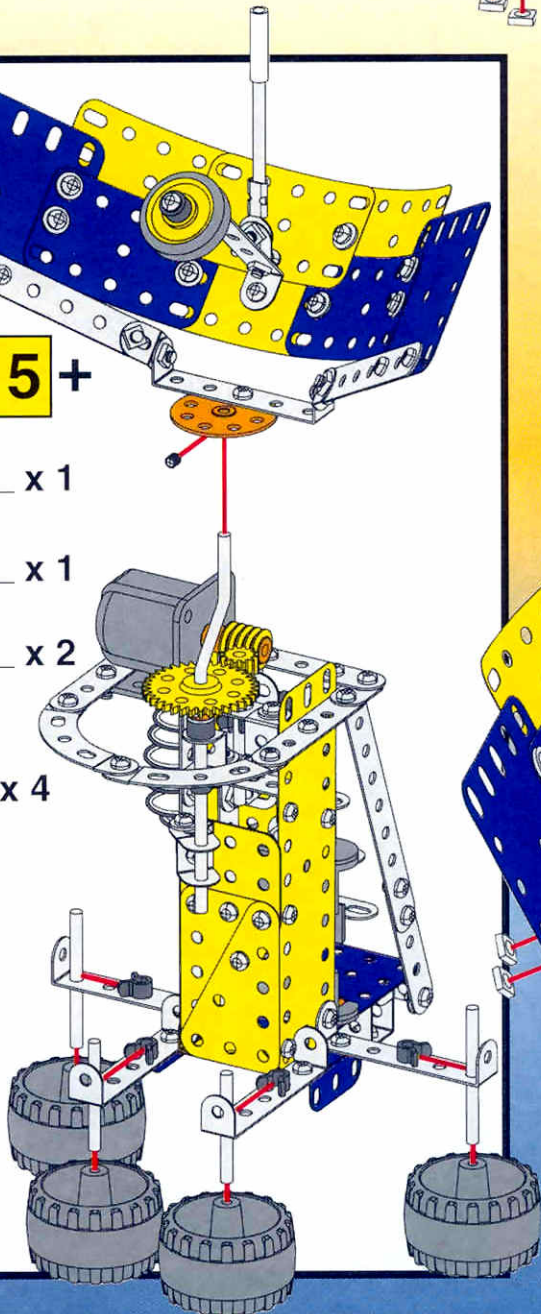
14



16

12 + 15 +

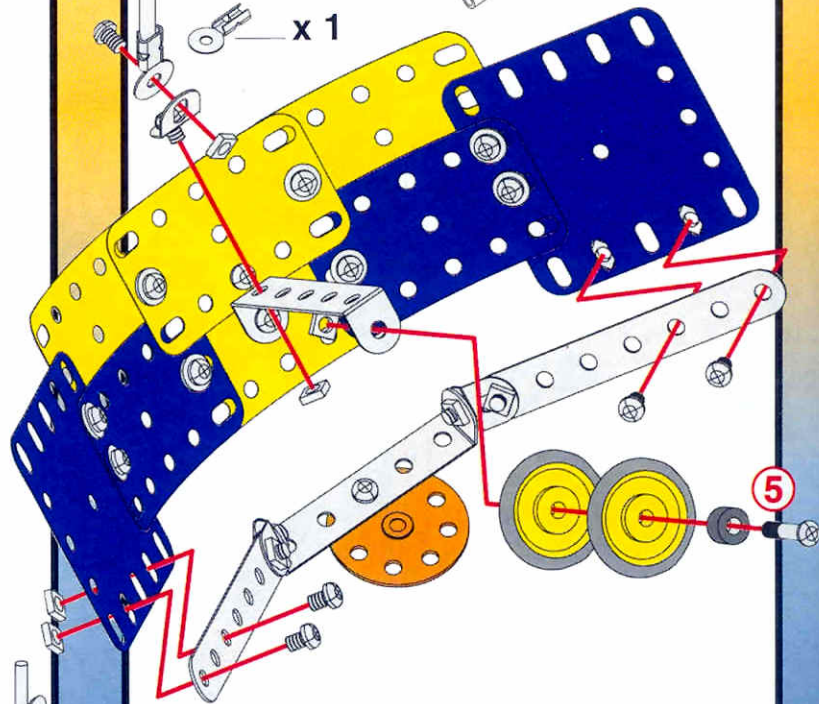
- 6 cm $2\frac{1}{2}$ " x 1
- 5 cm 2 " x 1
- 4 cm $1\frac{1}{2}$ " x 2
- x 4
- x 1
- x 4



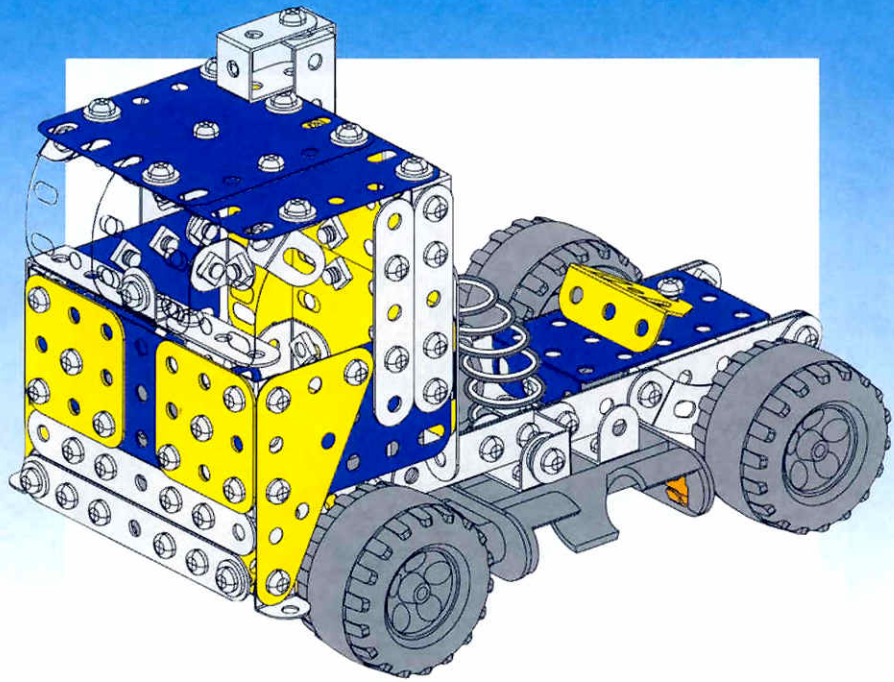
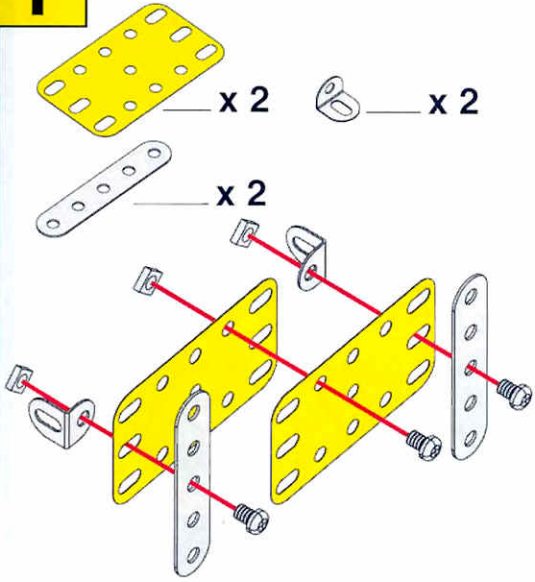
15

13 + 14 +

- 6 cm $2\frac{1}{2}$ " x 1
- x 1
- 23 mm $\frac{29}{32}$ " x 1
- x 1
- x 2
- x 2
- x 1
- x 1

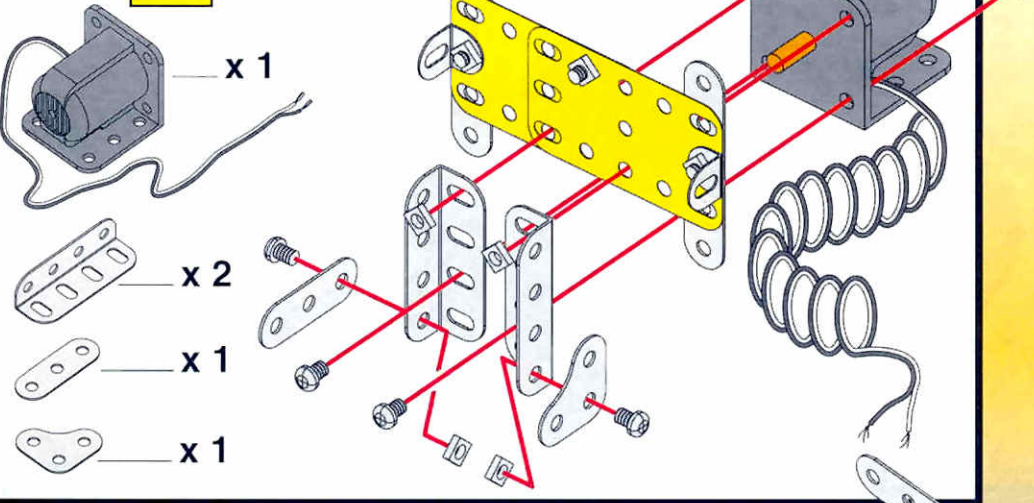


1

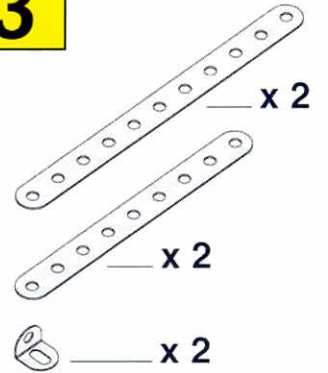


2

1 +

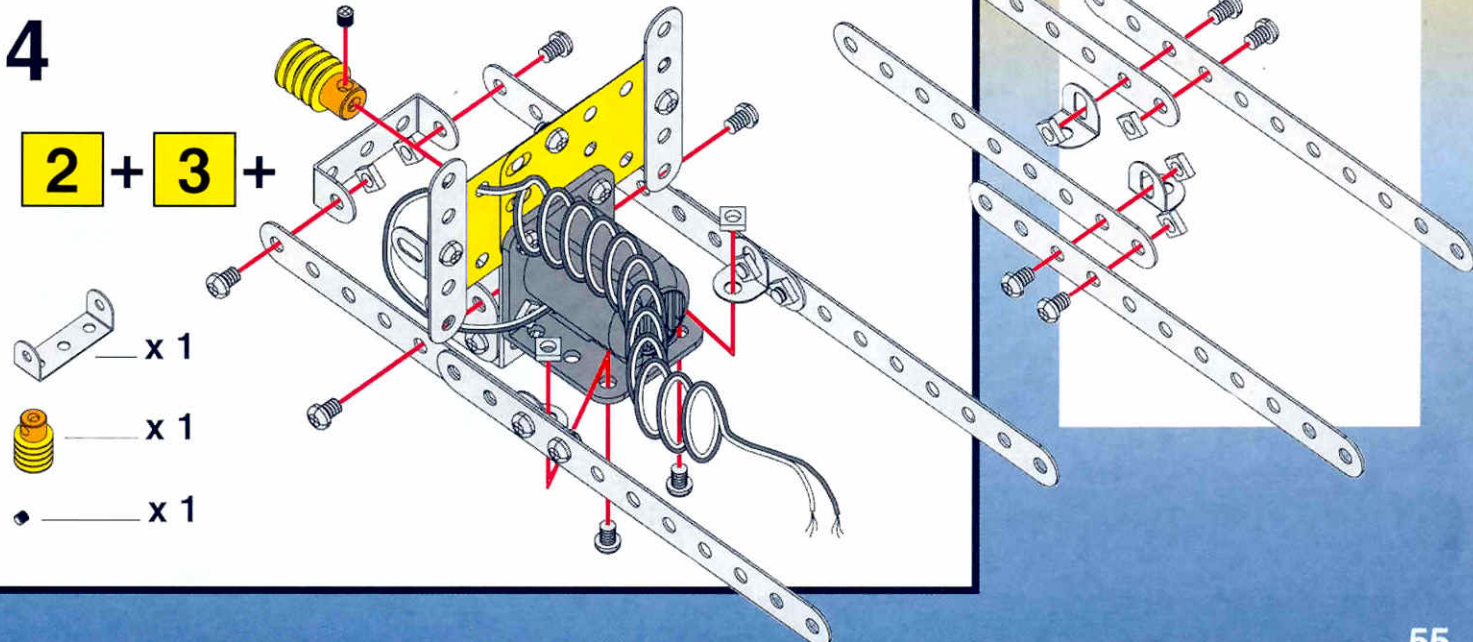


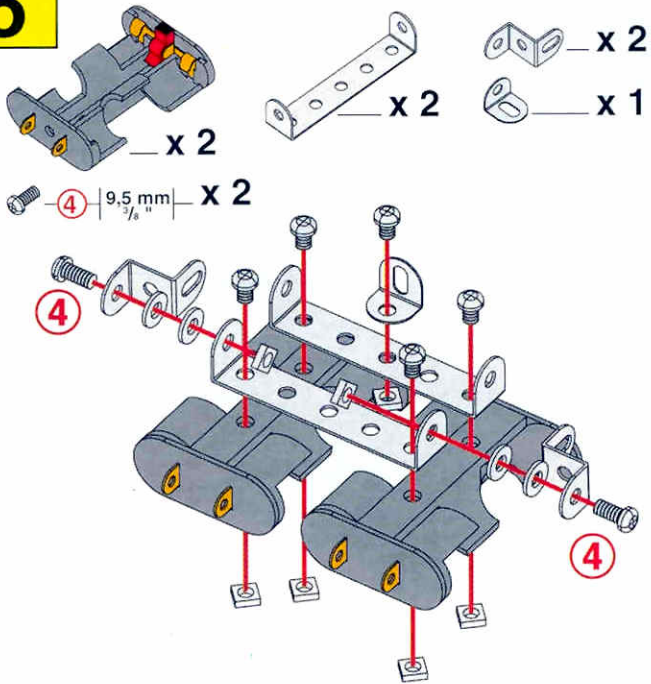
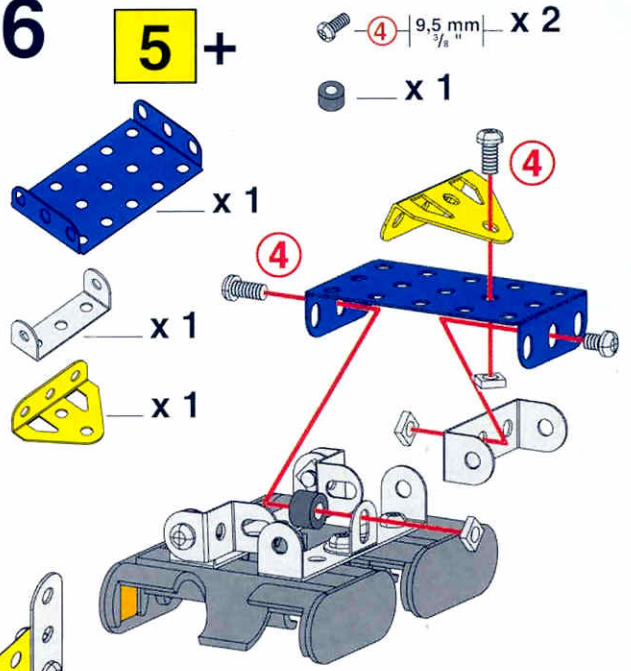
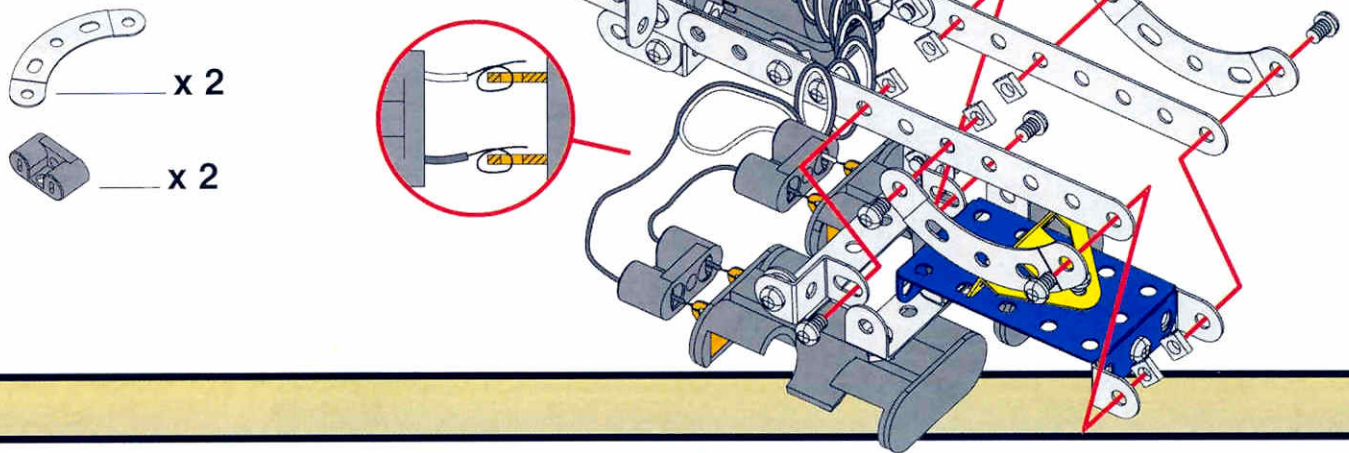
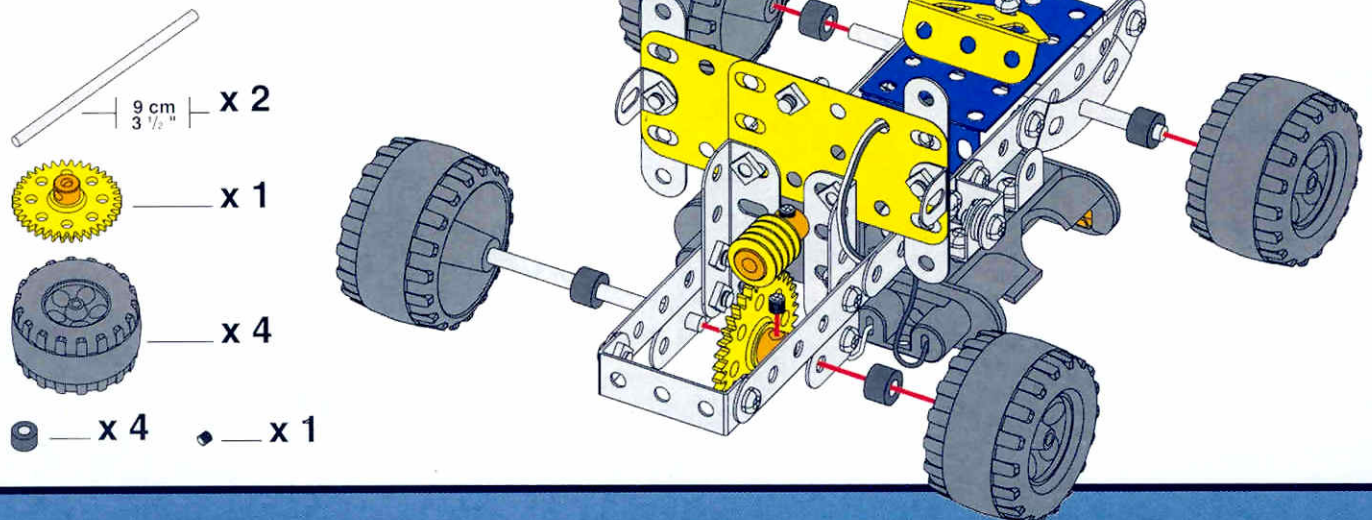
3

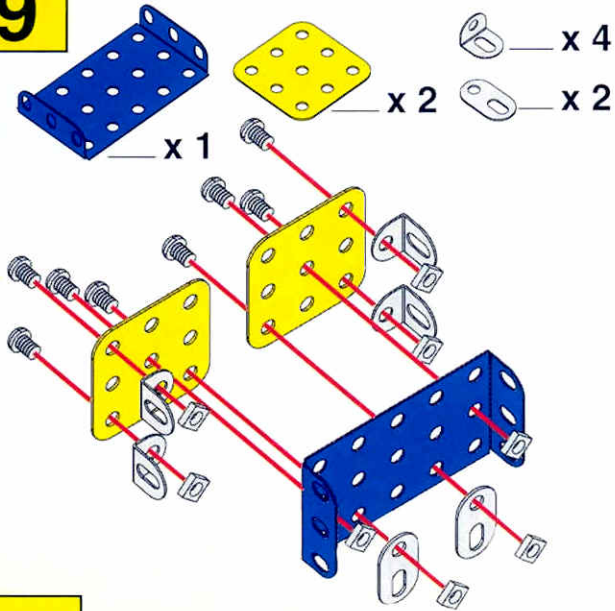
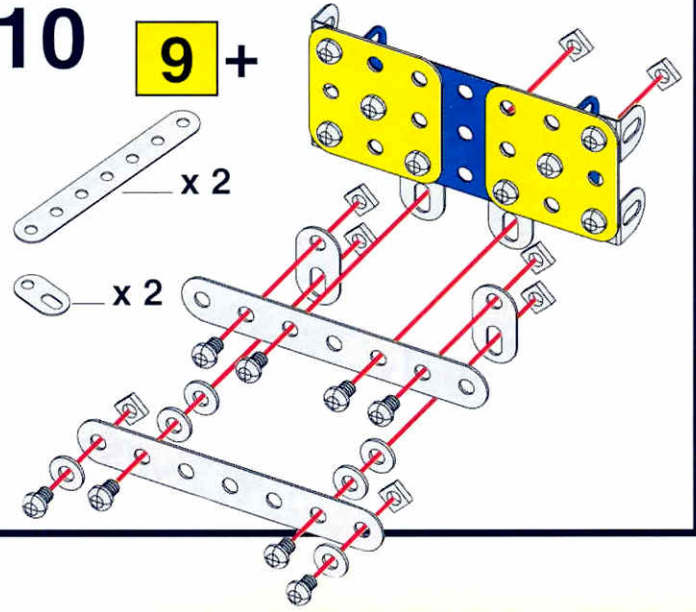
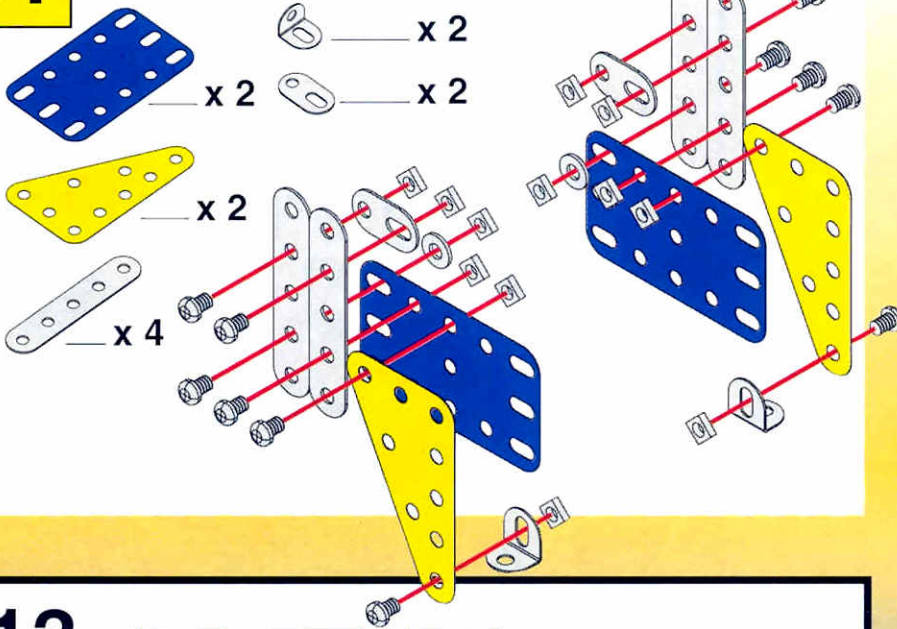
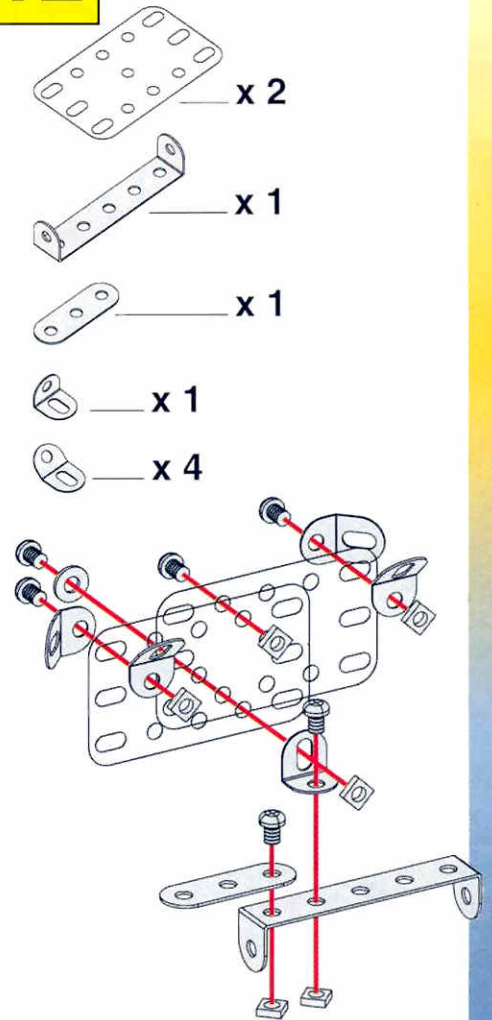
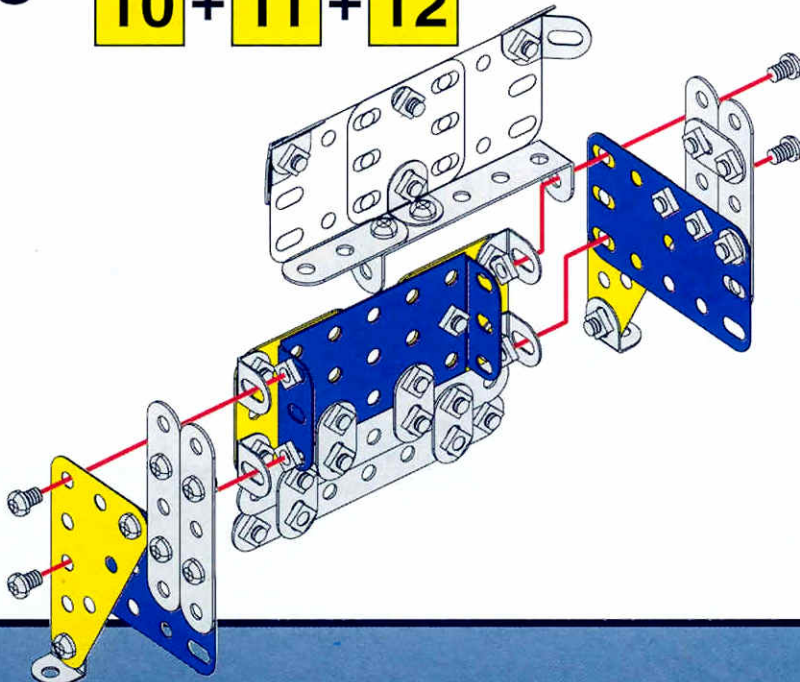


4

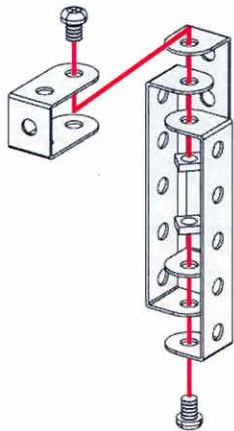
2 + 3 +



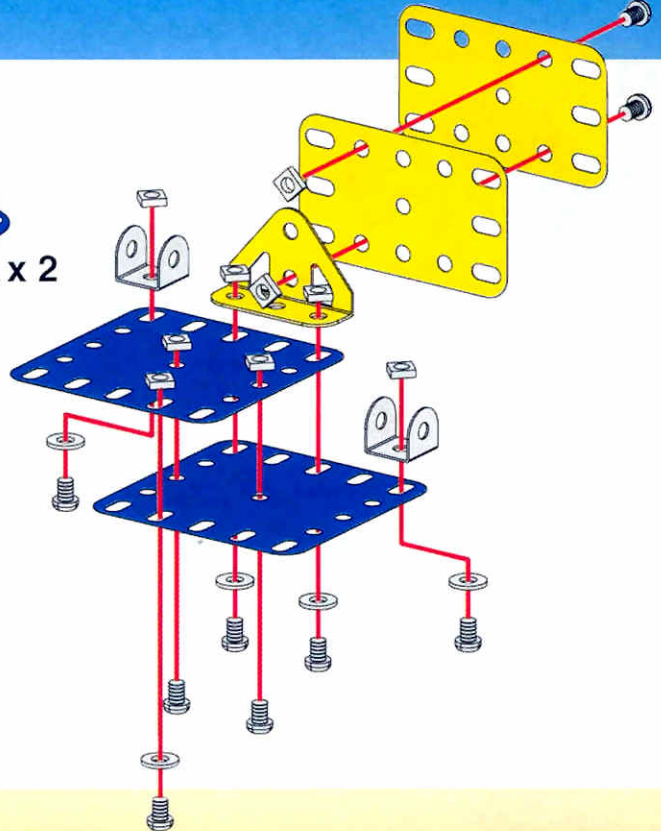
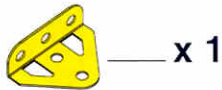
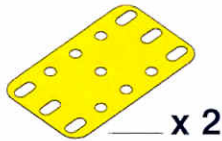
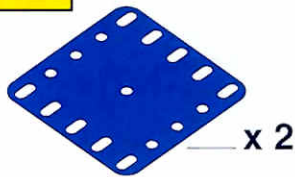
5**6****7****4** + **6** +**8****7** +

9**10****9** +**11****12****13****10** + **11** + **12**

14



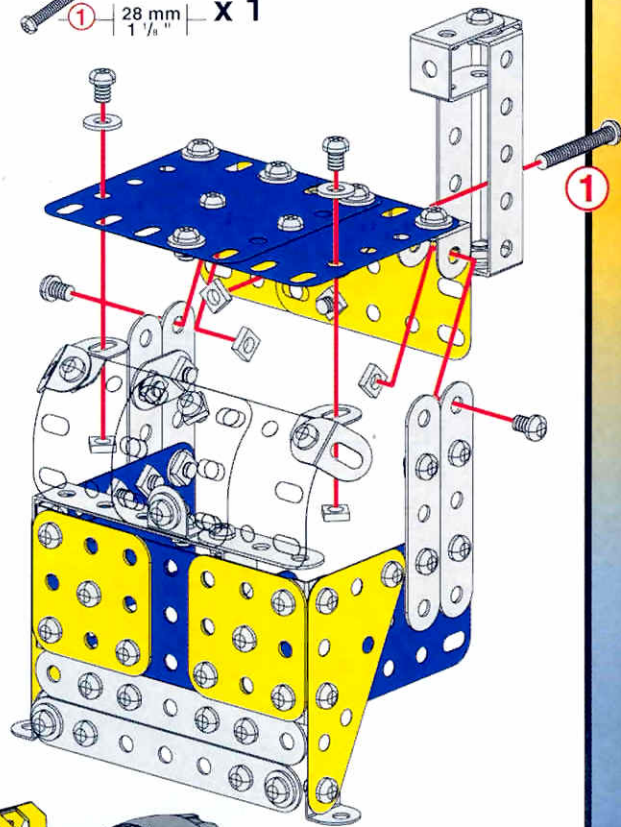
15



16

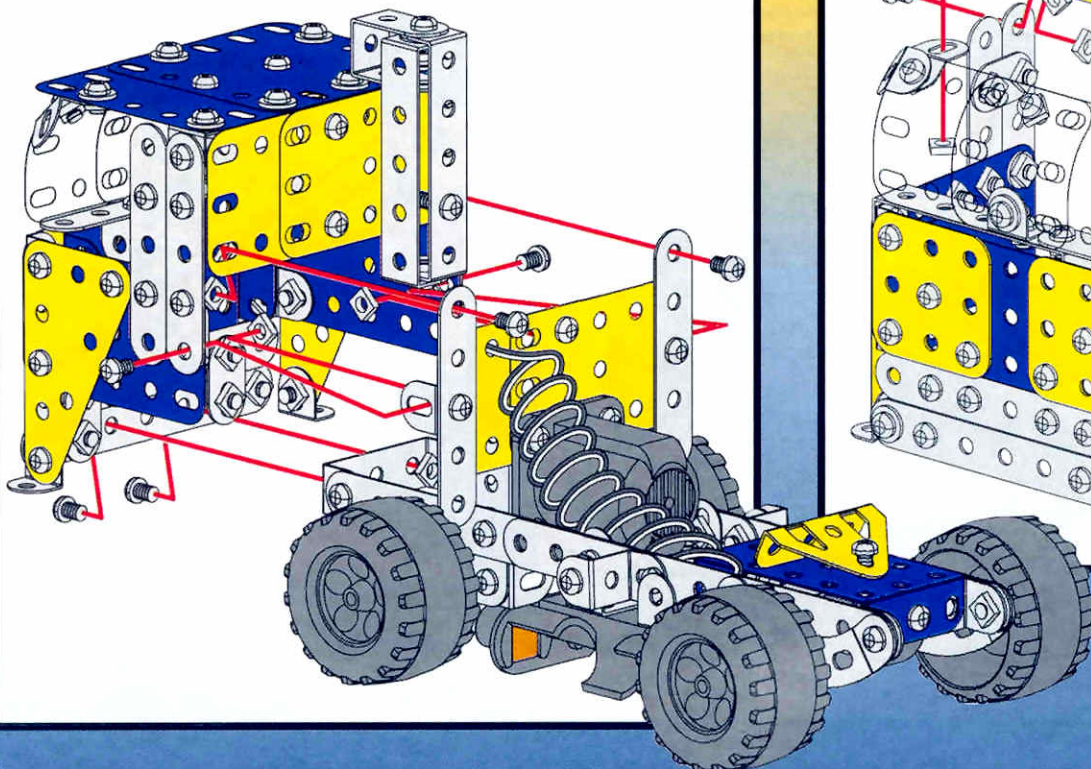
13 + 14 + 15 +

1 28 mm 1/8" X 1

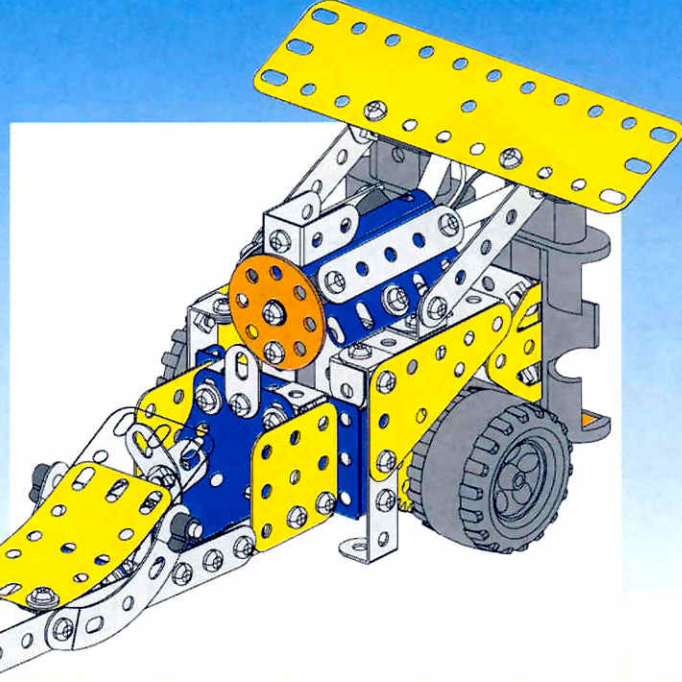
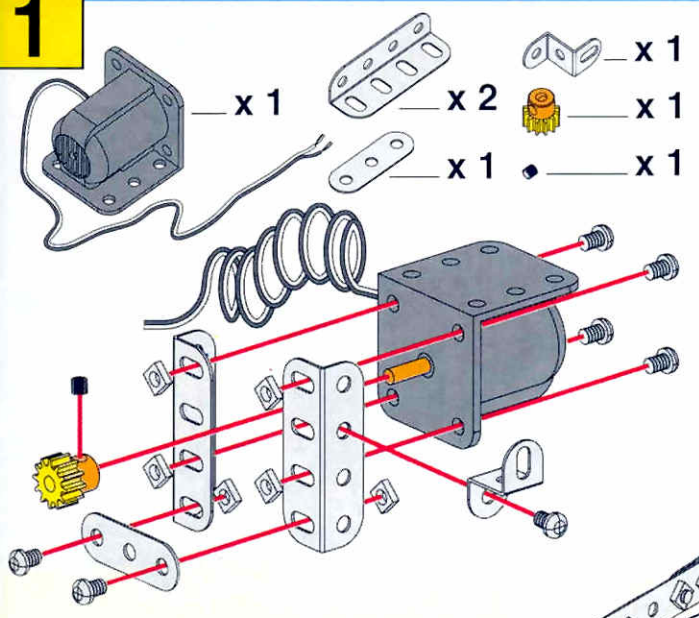


17

8 + 16

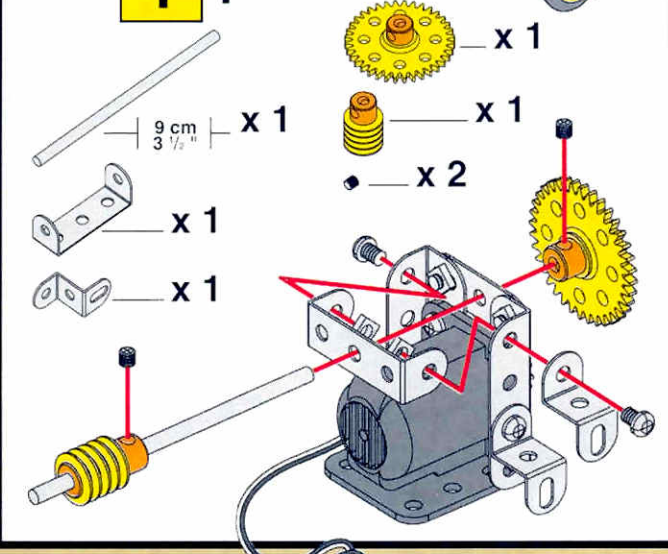


1



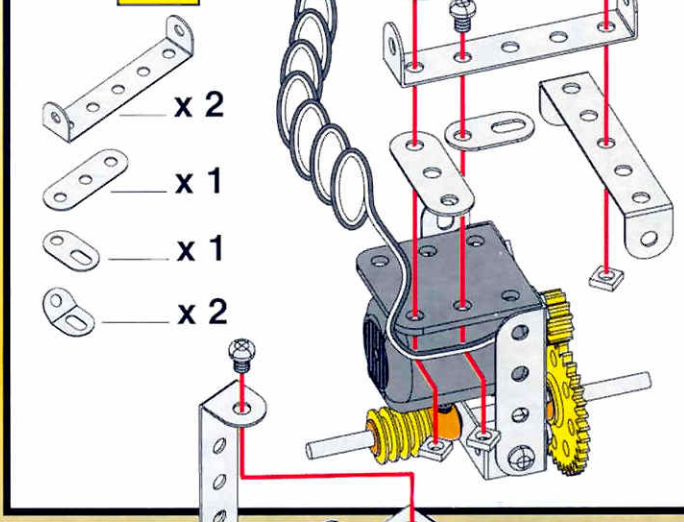
2

1 +



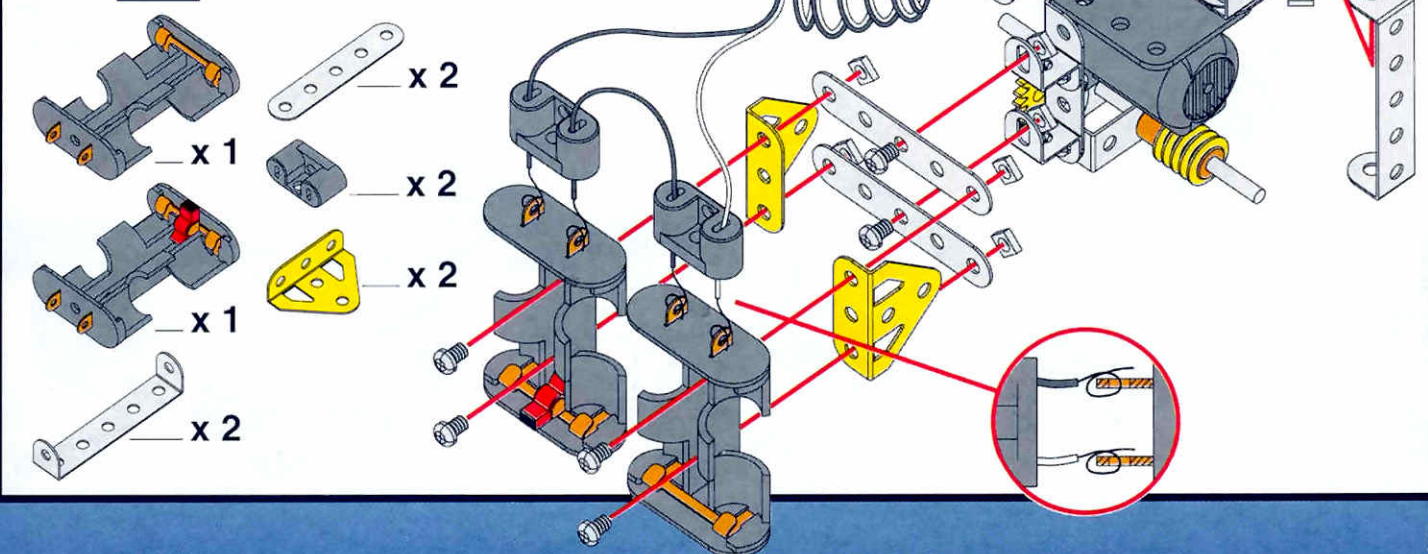
3

2 +



4

3 +



5

Parts list for step 5:

- Blue perforated plate — x 1
- White metal bar (5 cm / 2") — x 2
- White metal bar (3 holes) — x 2
- White metal bracket — x 1
- White metal bracket — x 1
- White metal pin — x 2
- White metal pin (circled 3) — x 4
- White metal pin (circled 3) — x 4
- White metal pin (circled 3) — x 4
- White metal pin (circled 3) — x 2
- White metal pin — x 2
- White metal pin — x 2
- White metal pin — x 2

6

4 + 5 +

Parts list for step 6:

- Yellow perforated plate — x 1
- White metal bar (3 holes) — x 1
- White metal bracket — x 2
- White metal pin — x 1
- White metal pin (circled 3) — x 2

7

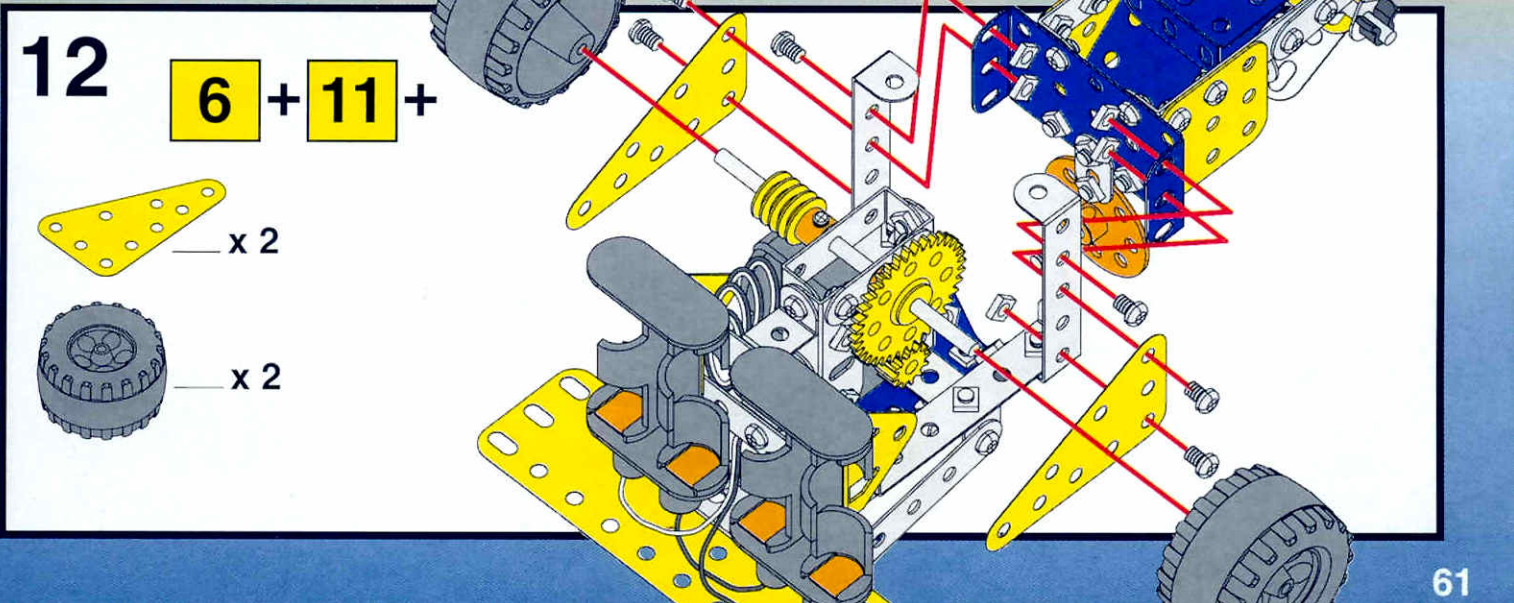
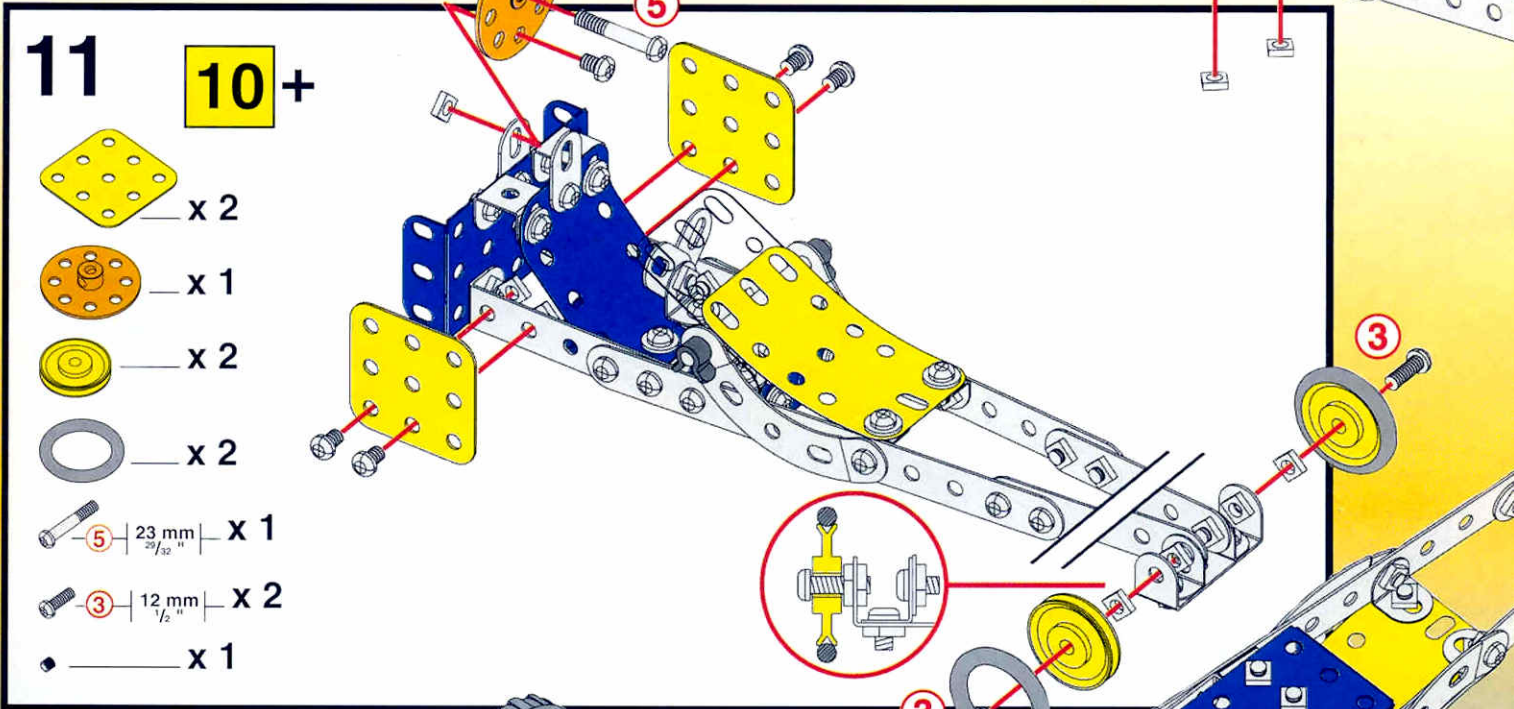
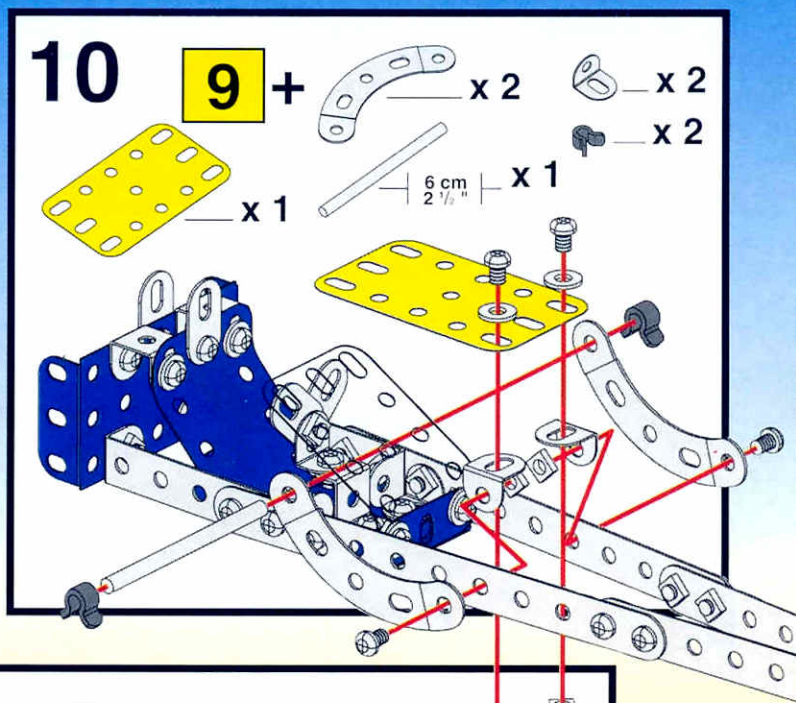
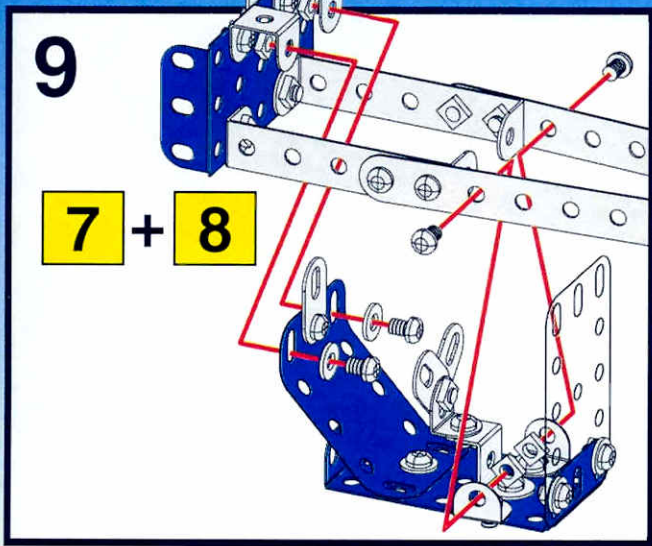
Parts list for step 7:

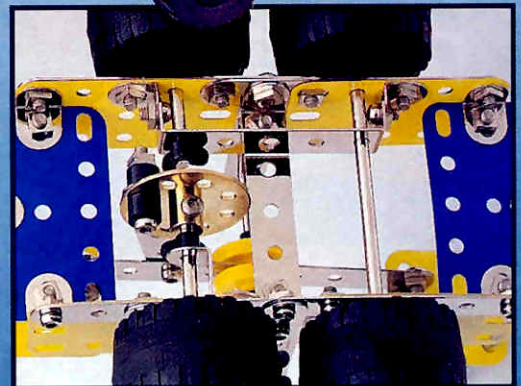
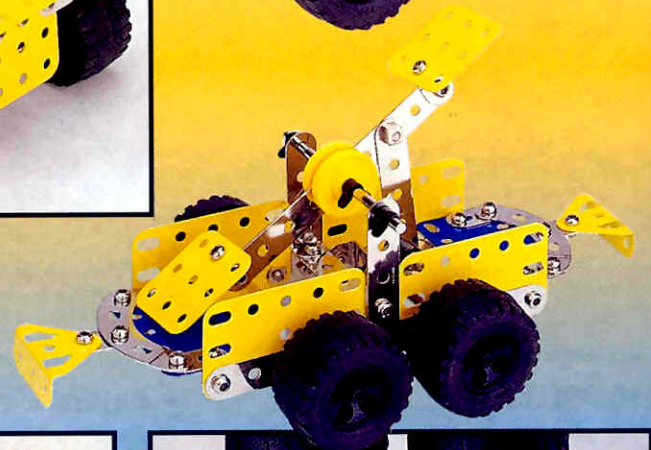
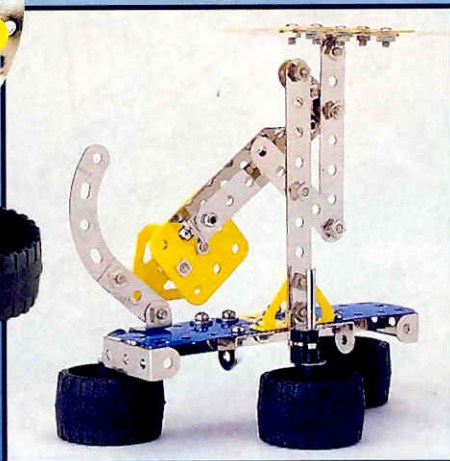
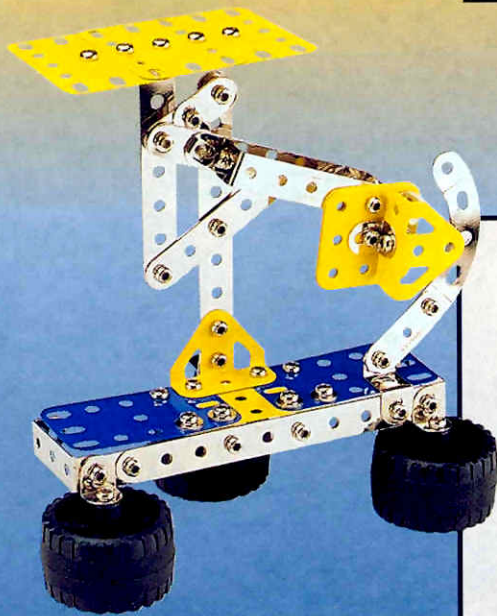
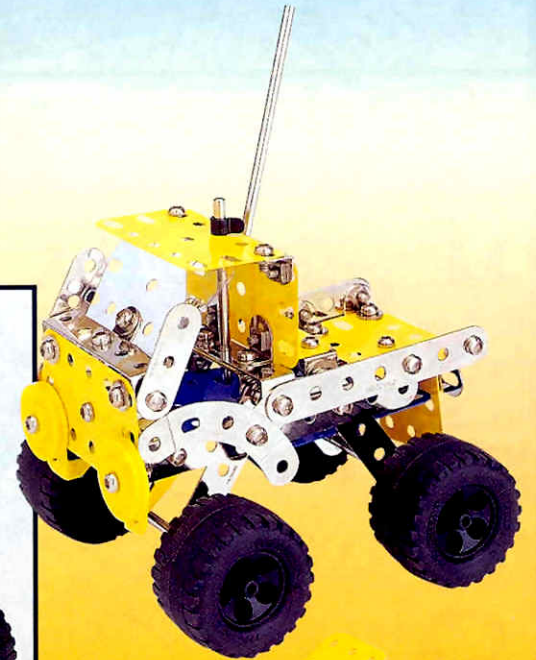
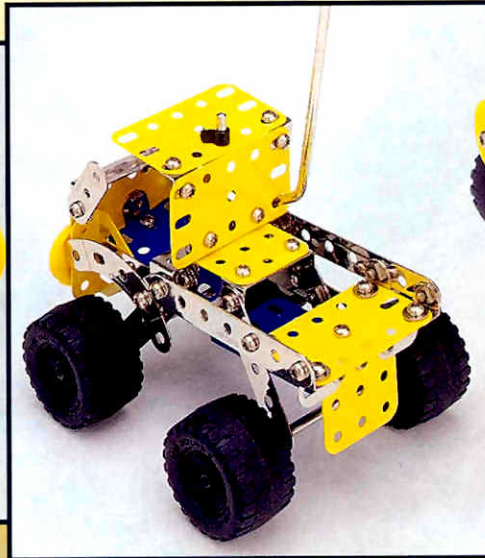
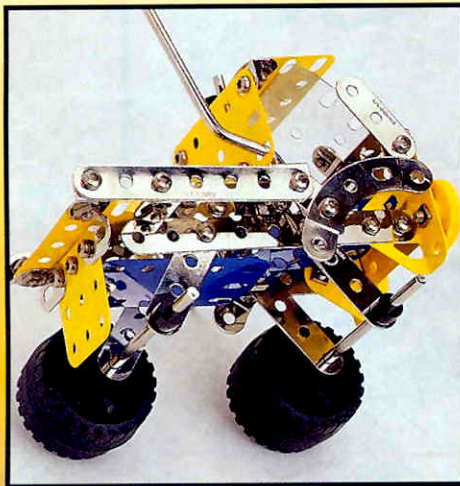
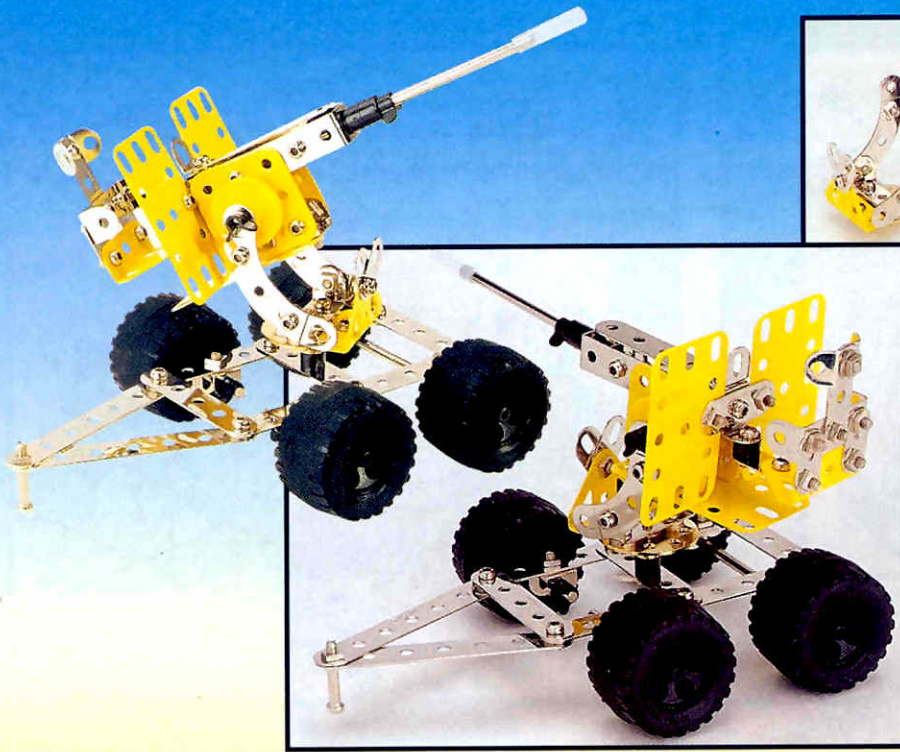
- White metal bar (7 holes) — x 2
- White metal bar (3 holes) — x 2
- White metal bar (3 holes) — x 1
- White metal bar (3 holes) — x 2
- Blue perforated plate — x 1
- White metal pin — x 2
- White metal pin — x 1
- White metal pin — x 2

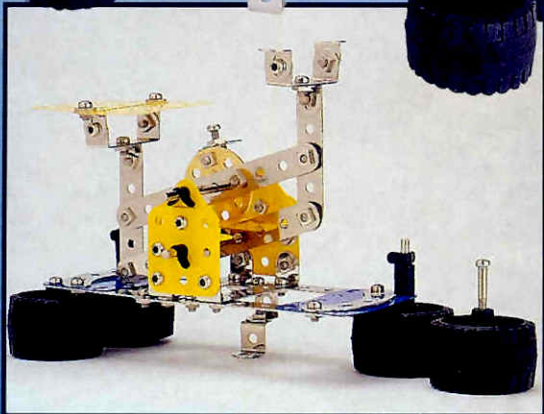
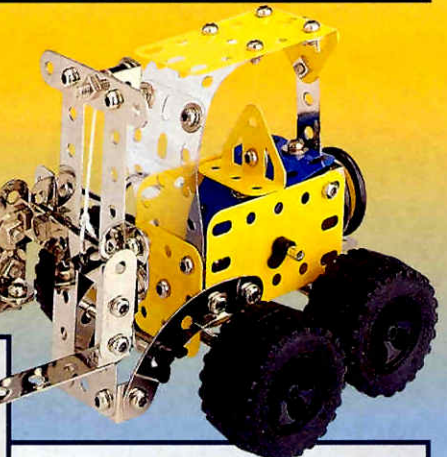
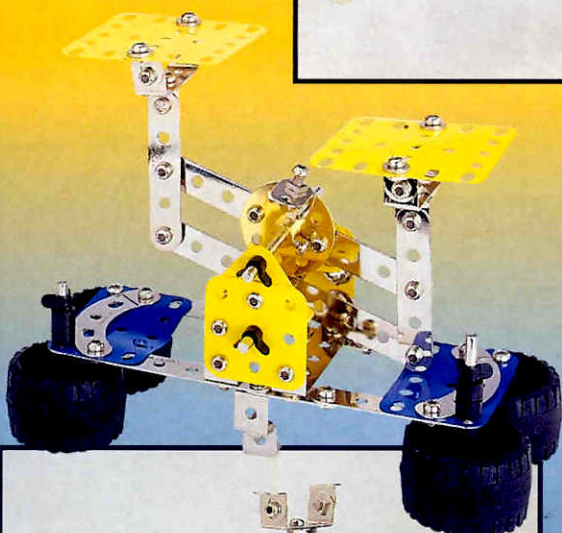
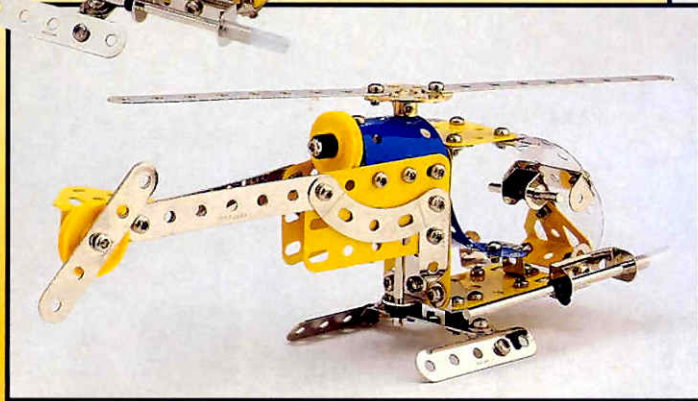
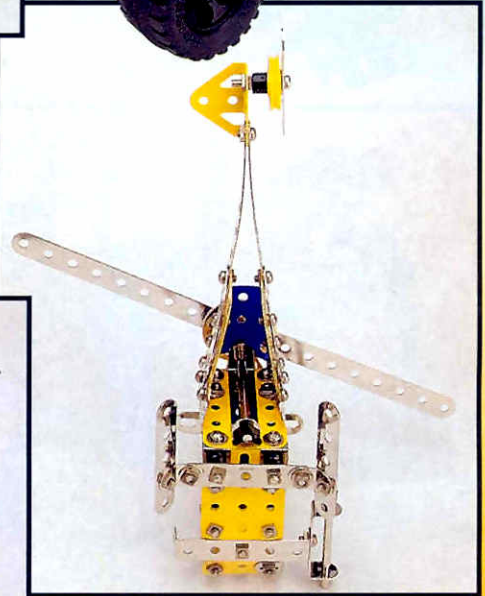
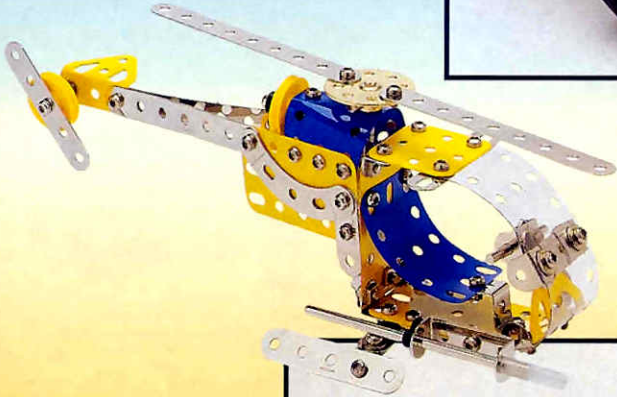
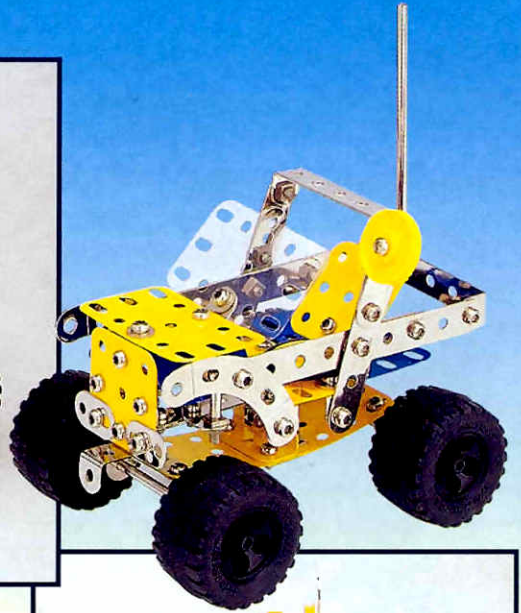
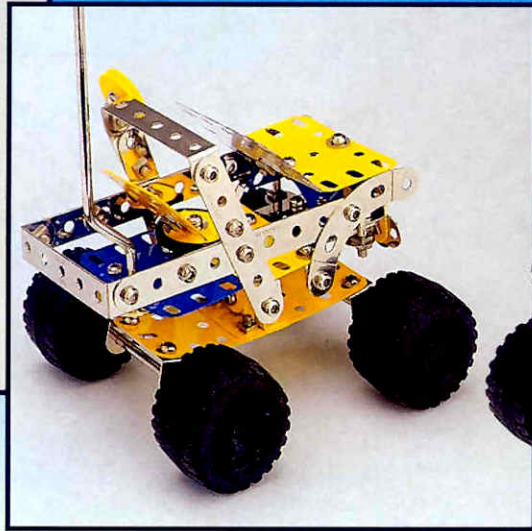
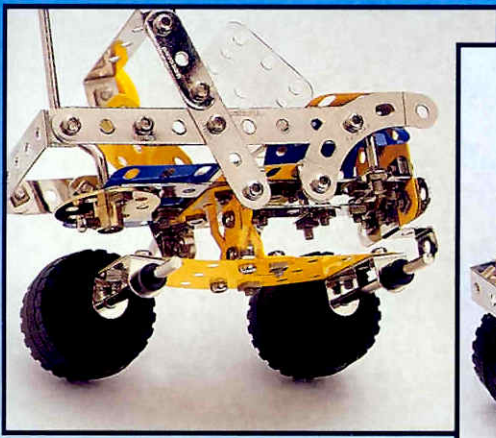
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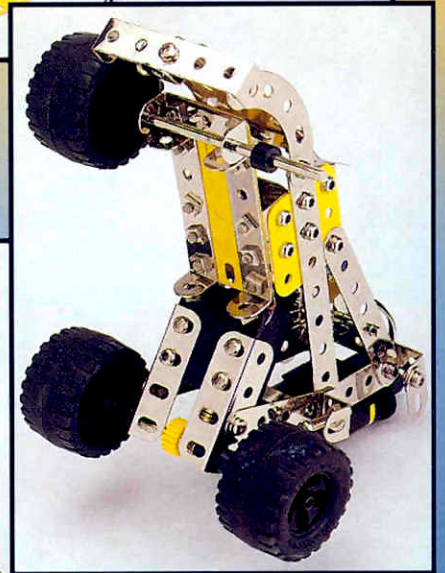
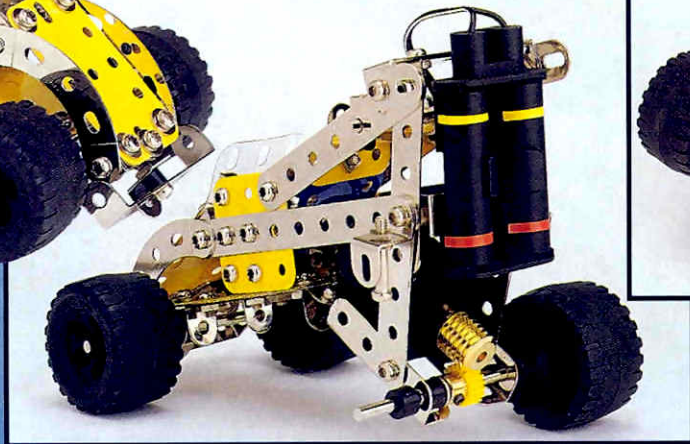
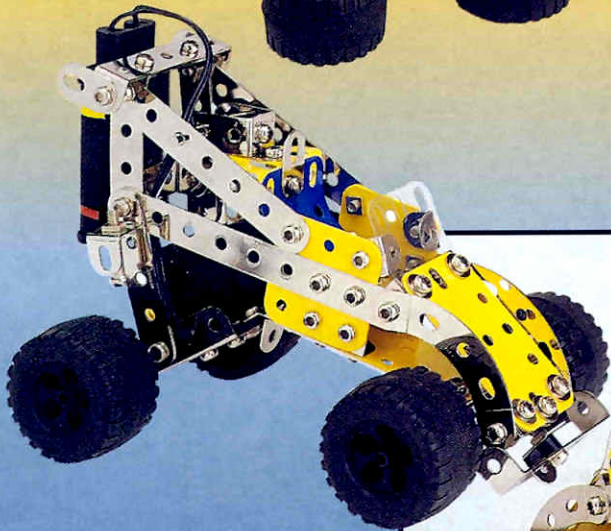
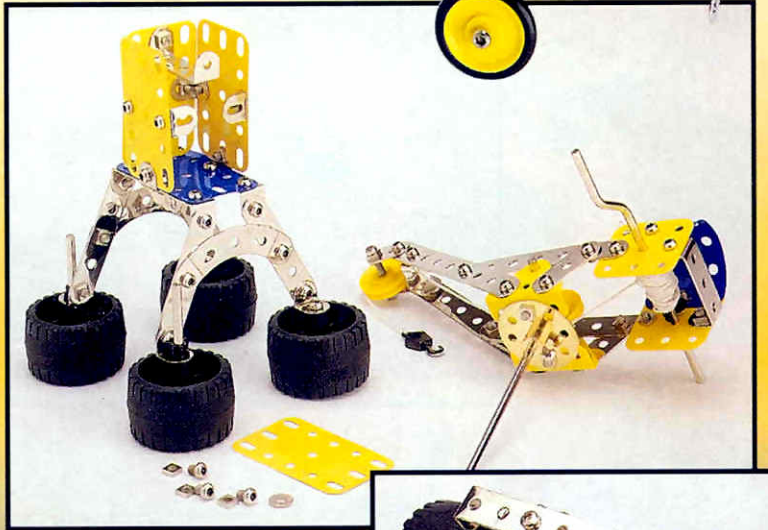
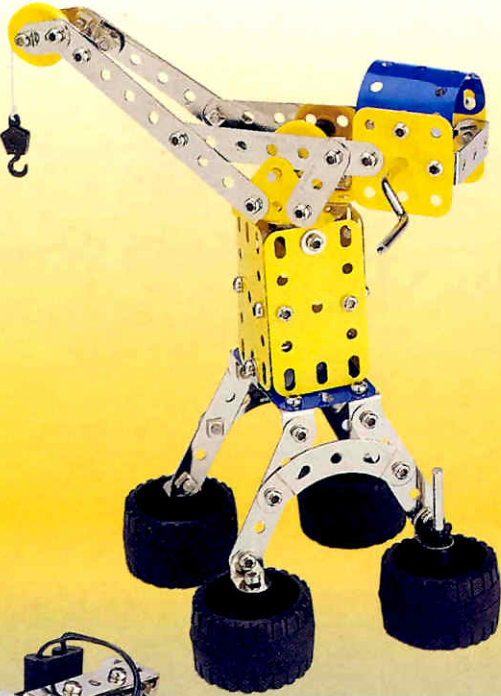
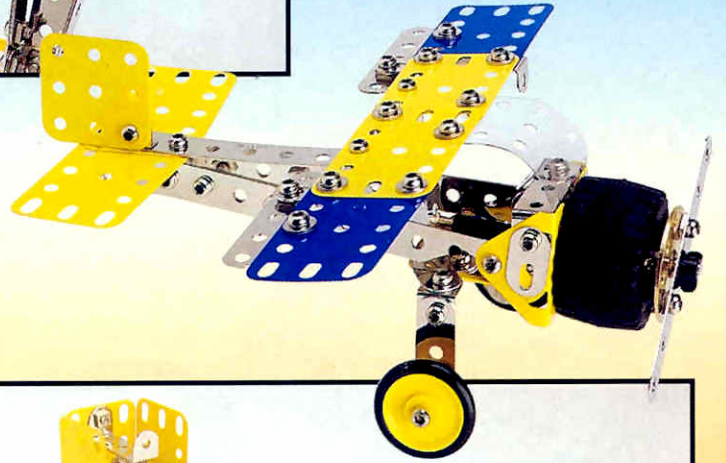
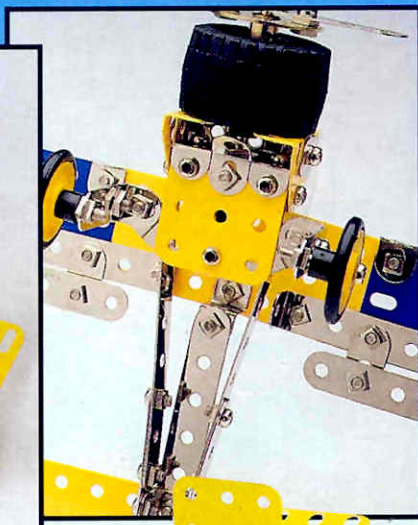
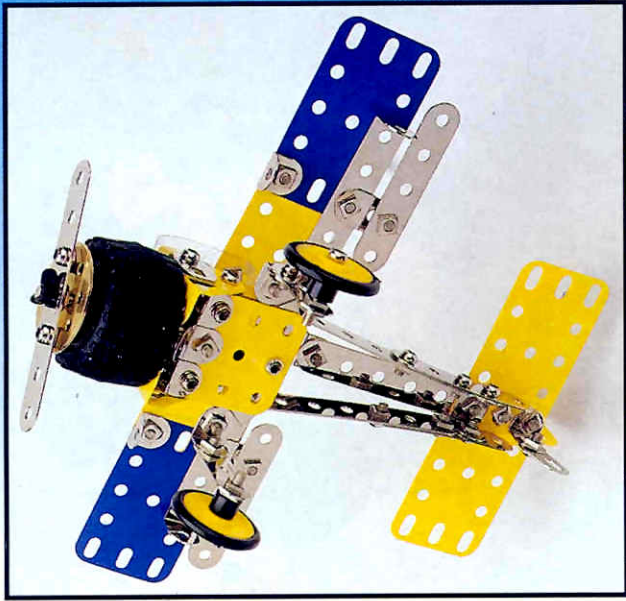
Parts list for step 8:

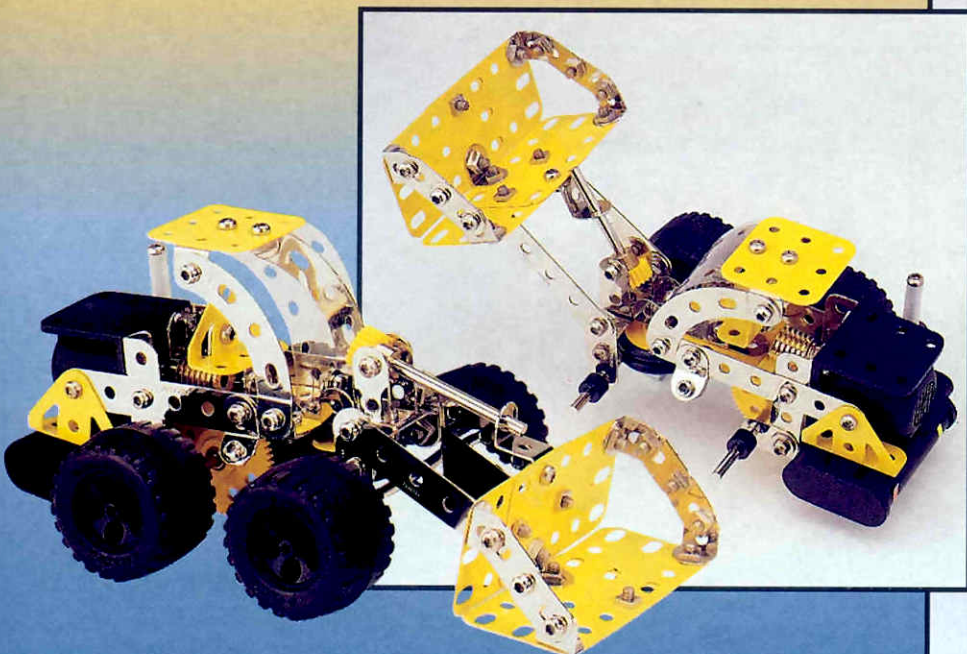
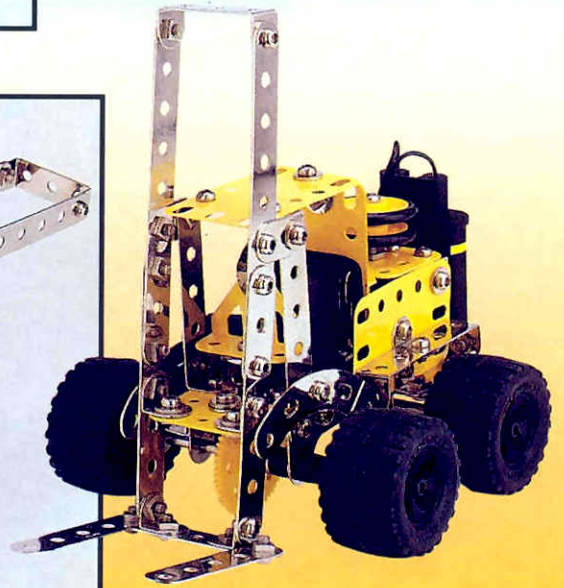
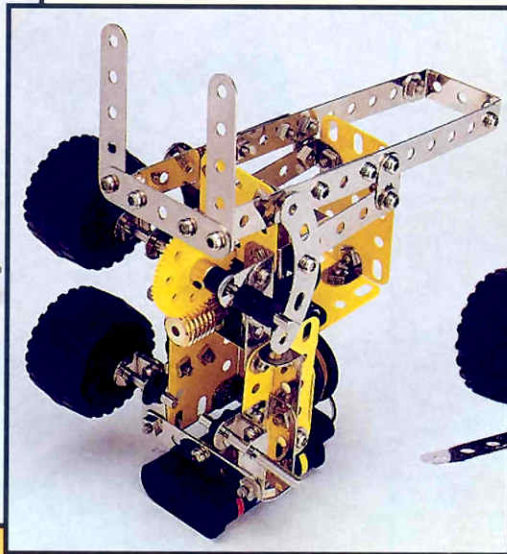
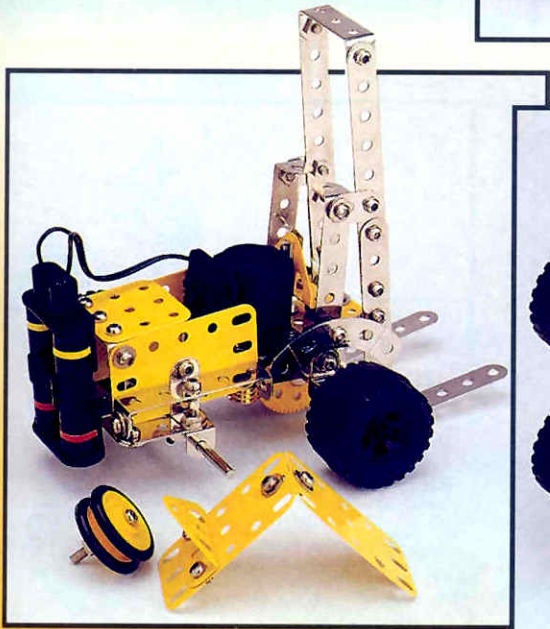
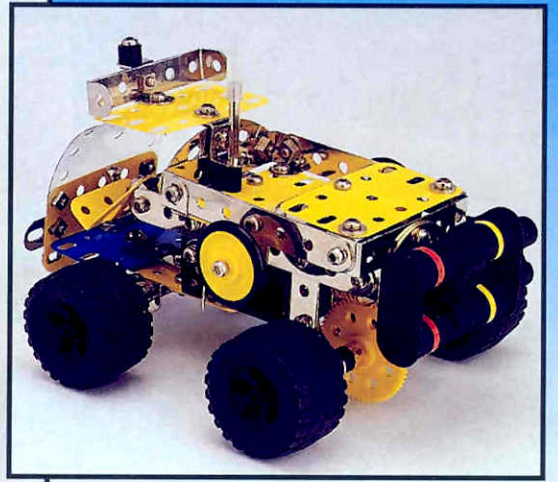
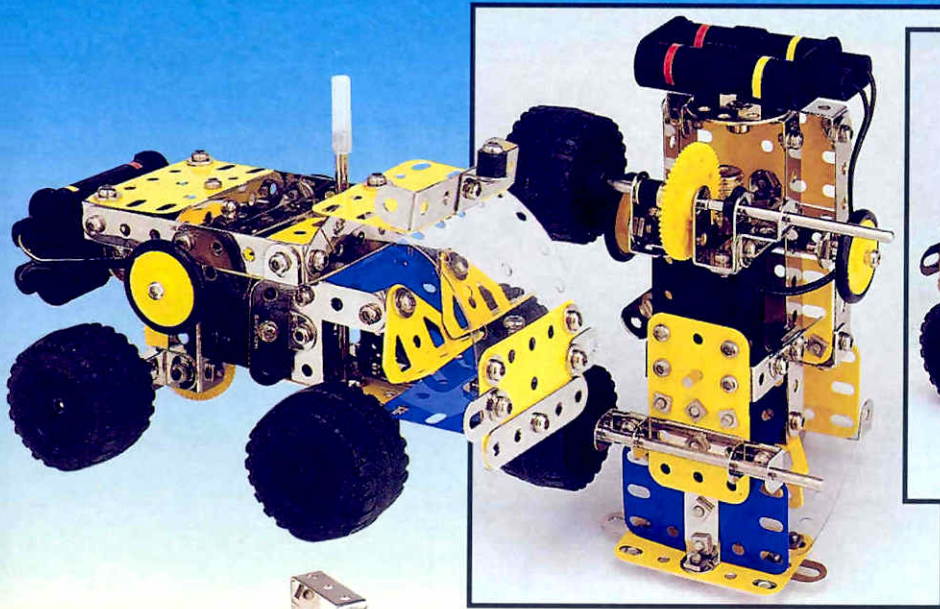
- Blue perforated plate — x 1
- Blue perforated plate — x 1
- White metal bar (3 holes) — x 1
- White metal pin — x 3
- White metal pin — x 3

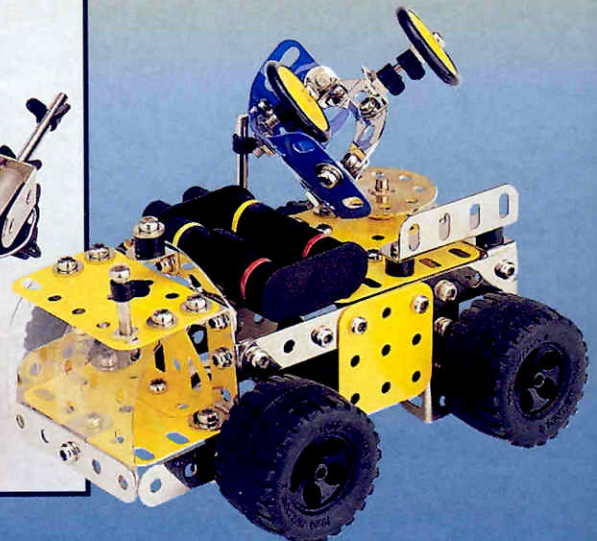
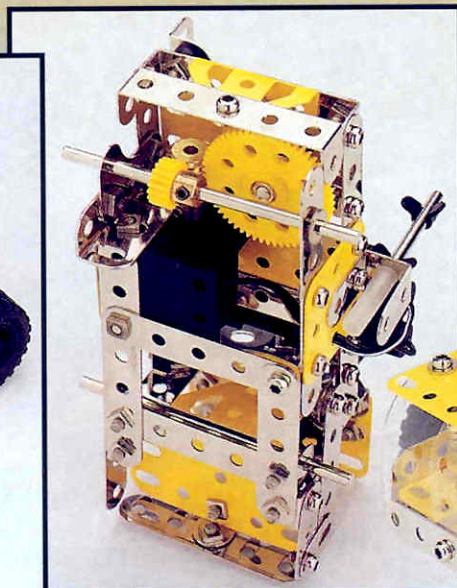
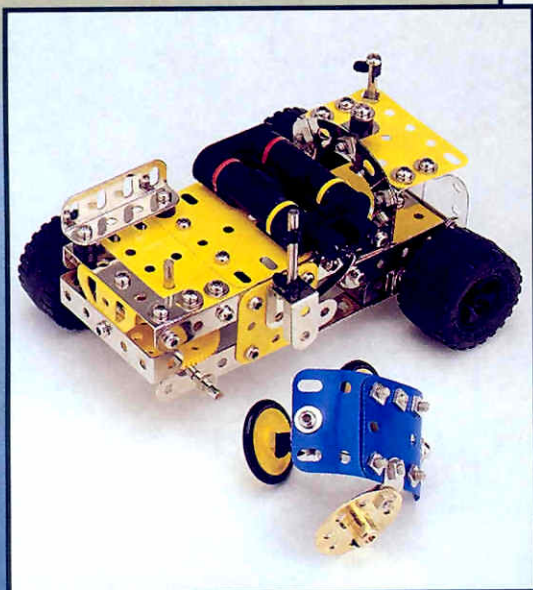
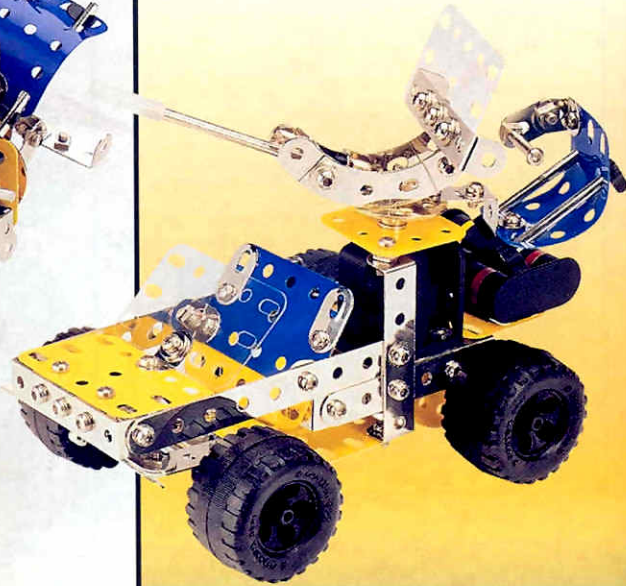
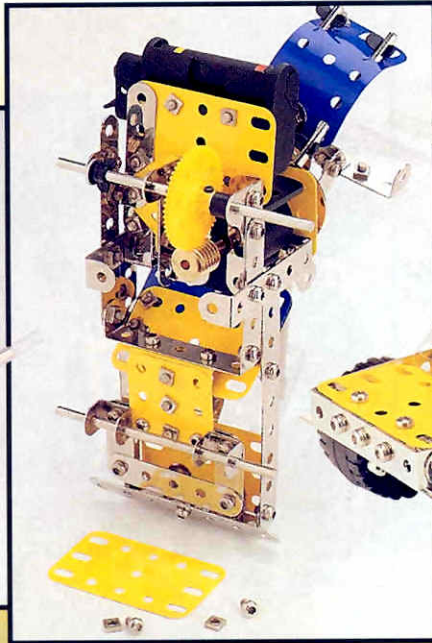
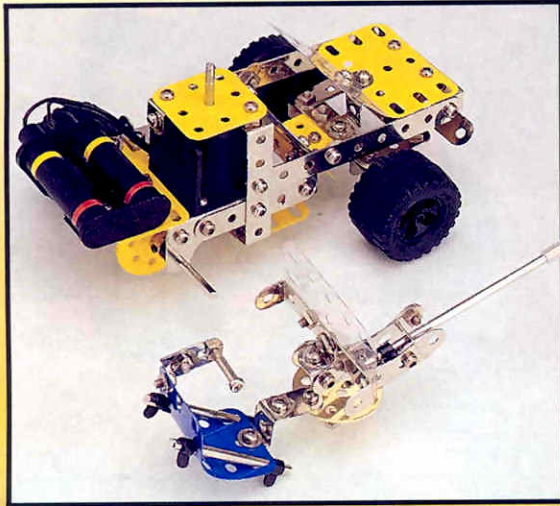
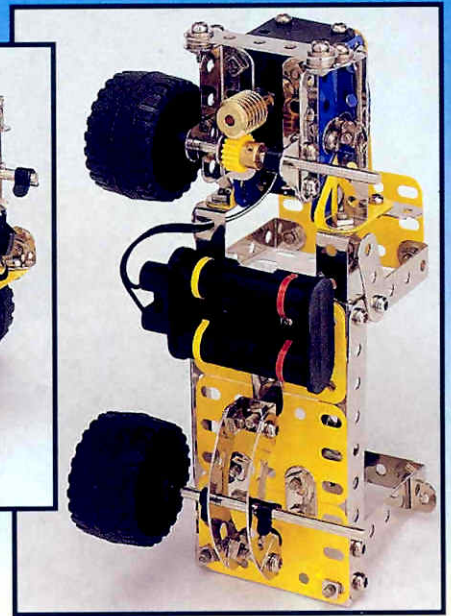
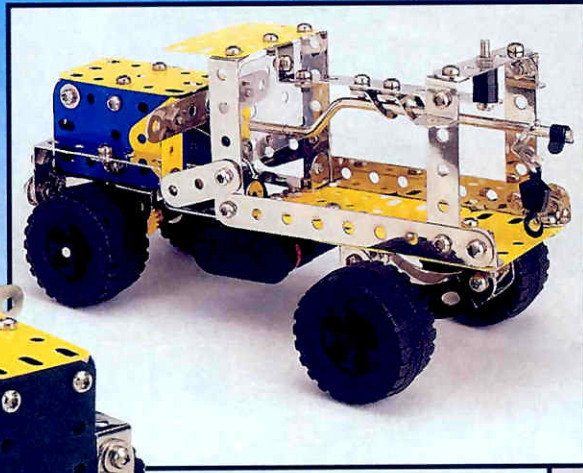
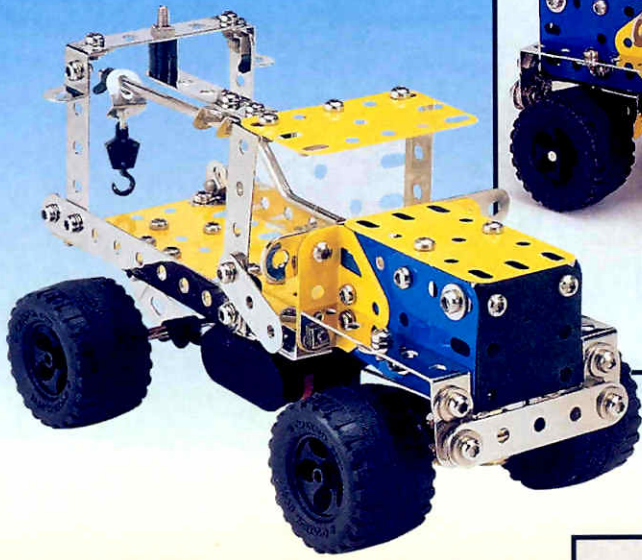


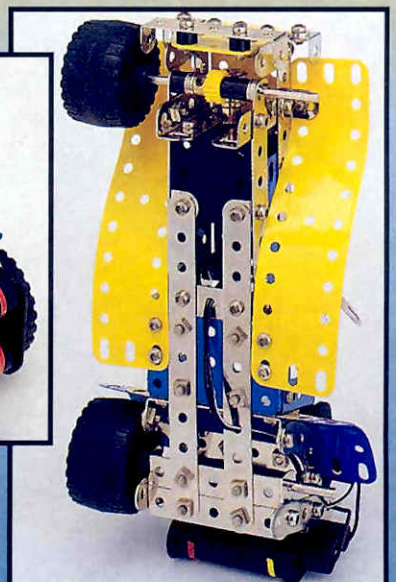
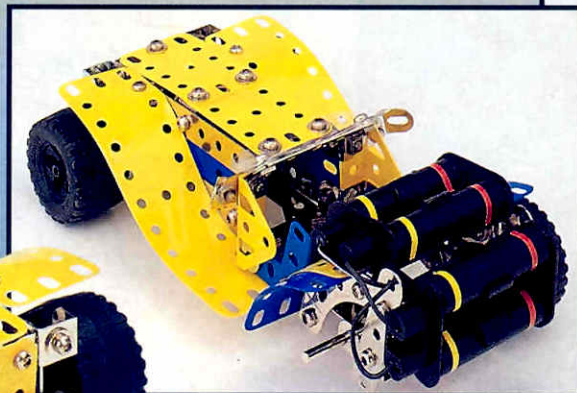
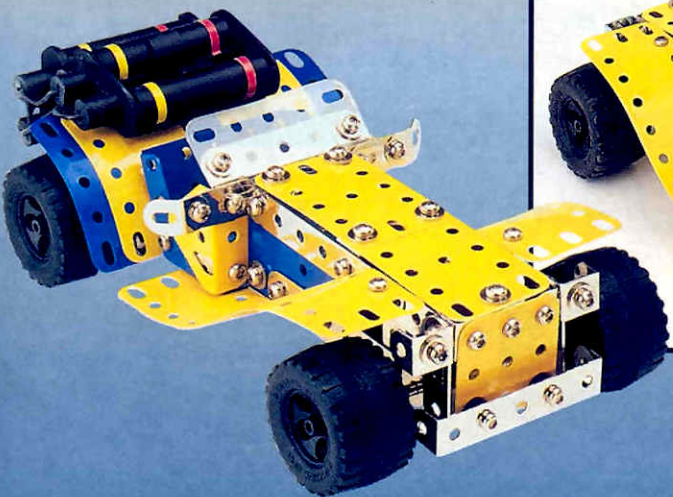
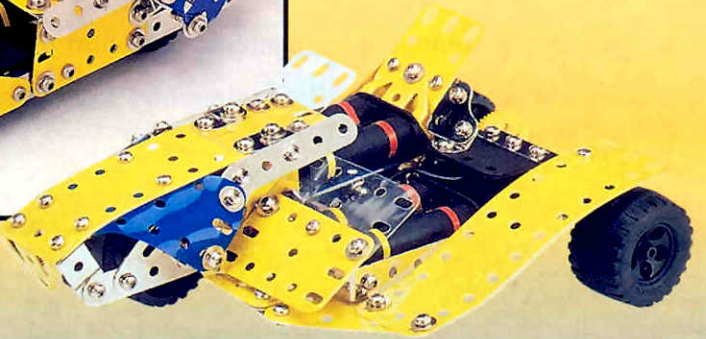
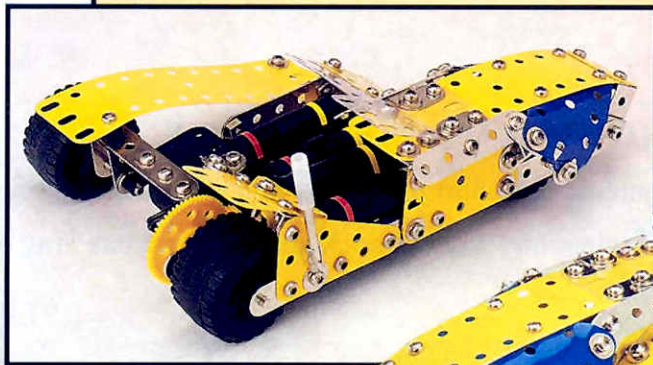
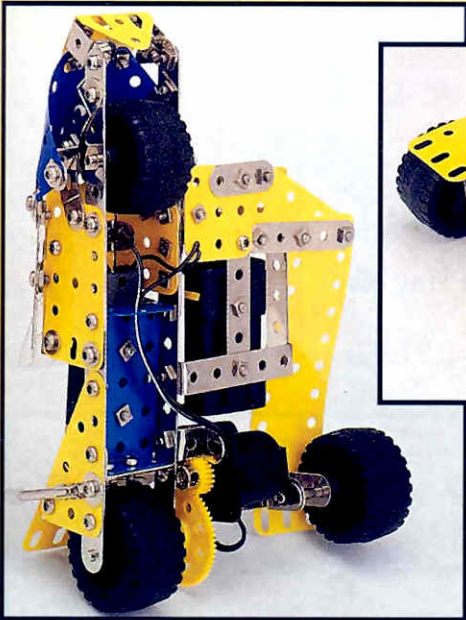
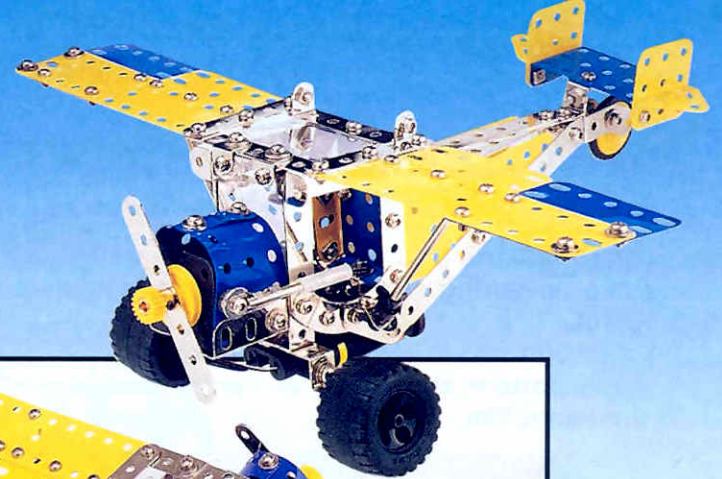
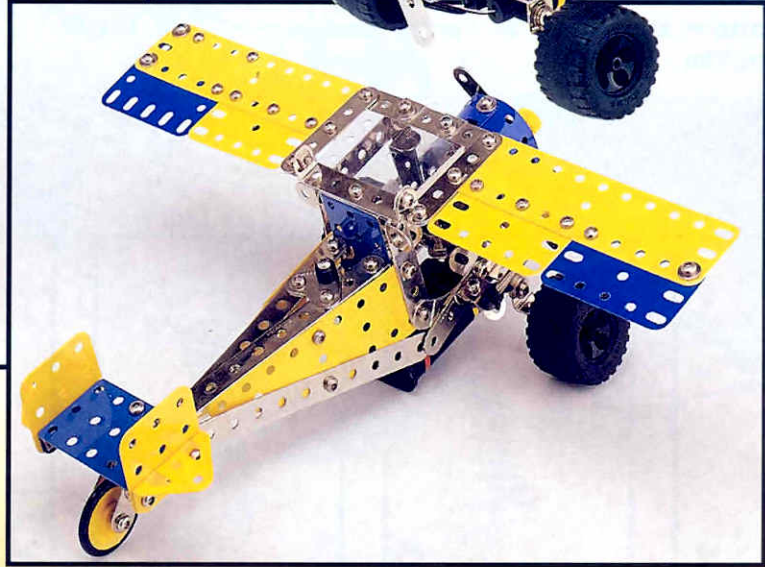
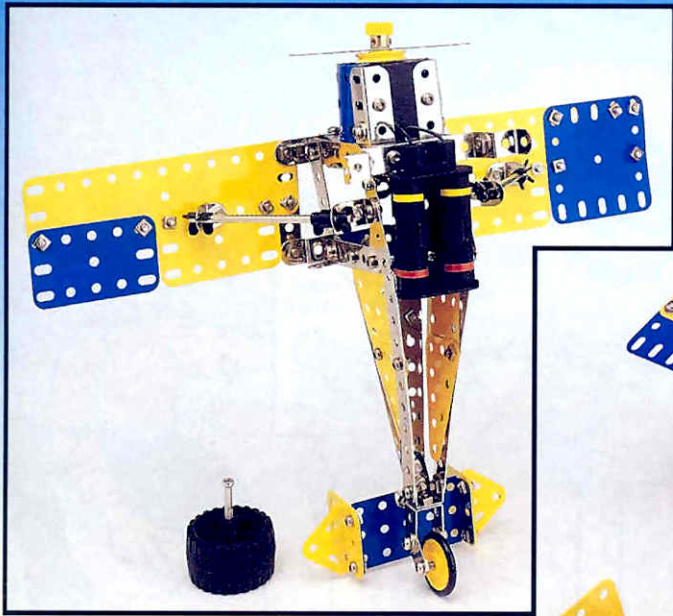






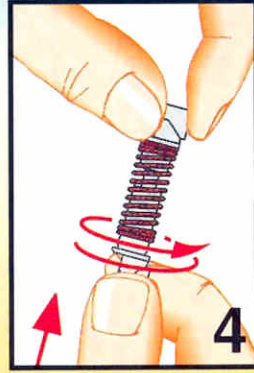
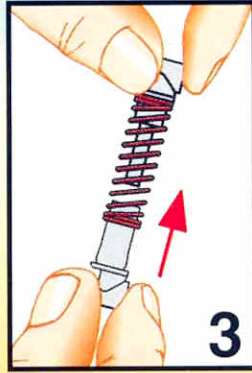
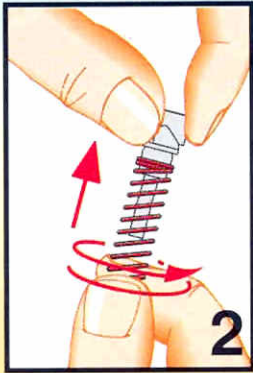
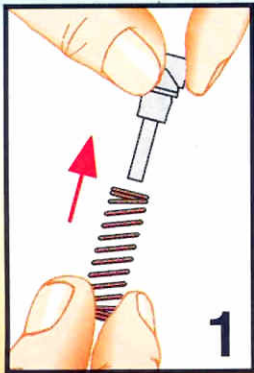
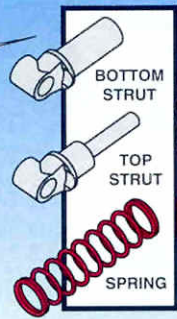






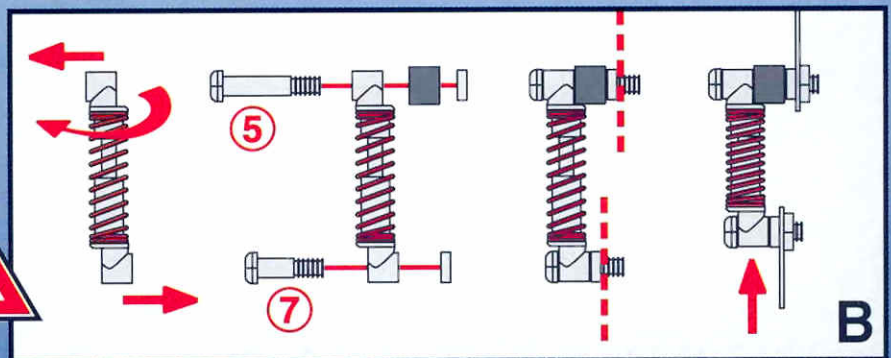
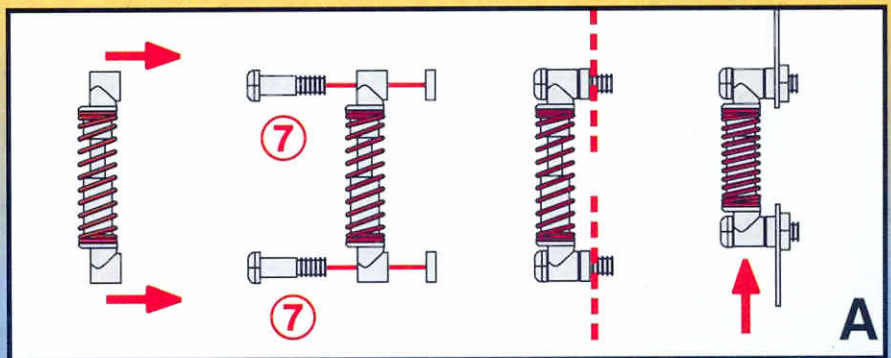
SHOCK ABSORBERS

1. Insert top strut into spring.
2. Push up spring and turn until it stops against shoulder of top strut.
3. Insert bottom strut into spring as shown.
4. Push bottom strut against spring and turn until it stops against shoulder.



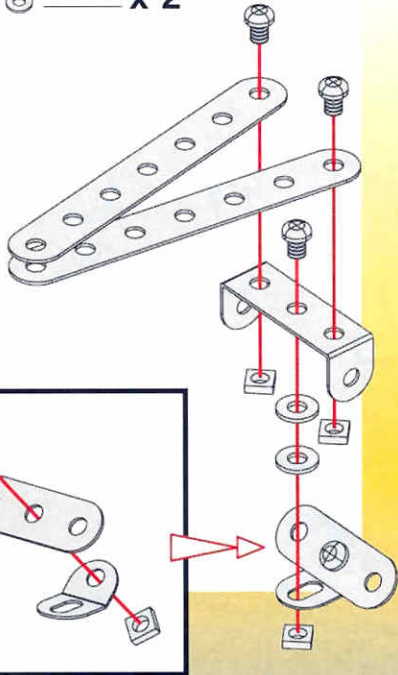
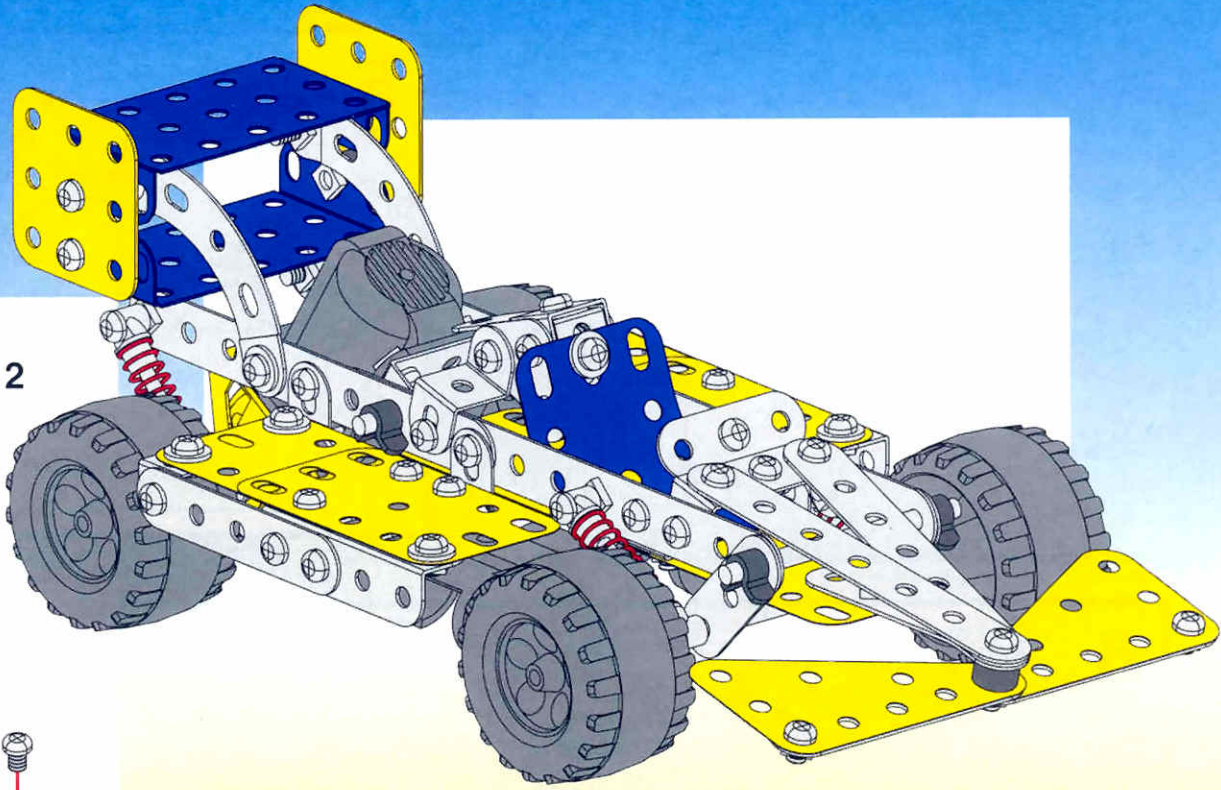
INSTALLATION OF SHOCK ABSORBERS ON MODELS

- A. If mounting points are in alignment use short pivot bolts and lock nuts as shown.
- B. If mounting points are offset rotate one end of shock absorber and use long pivot bolts and spacers to line up parts.

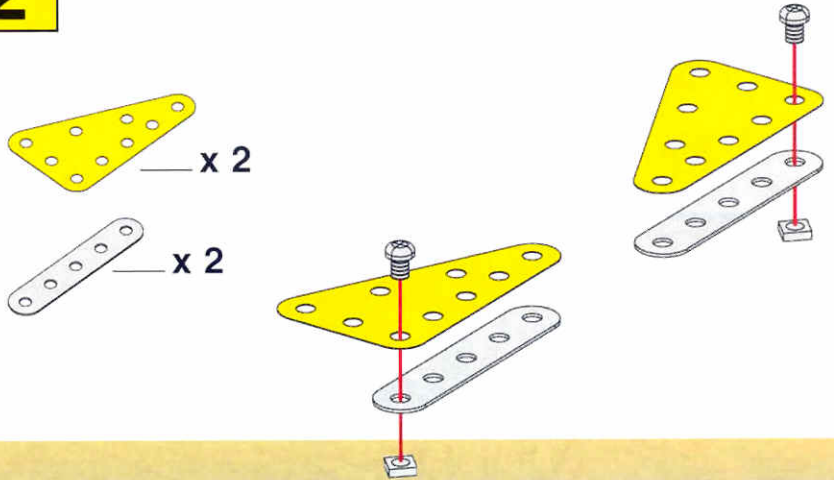


1

- x 2
- x 1
- x 1
- x 1
- x 1
- x 2



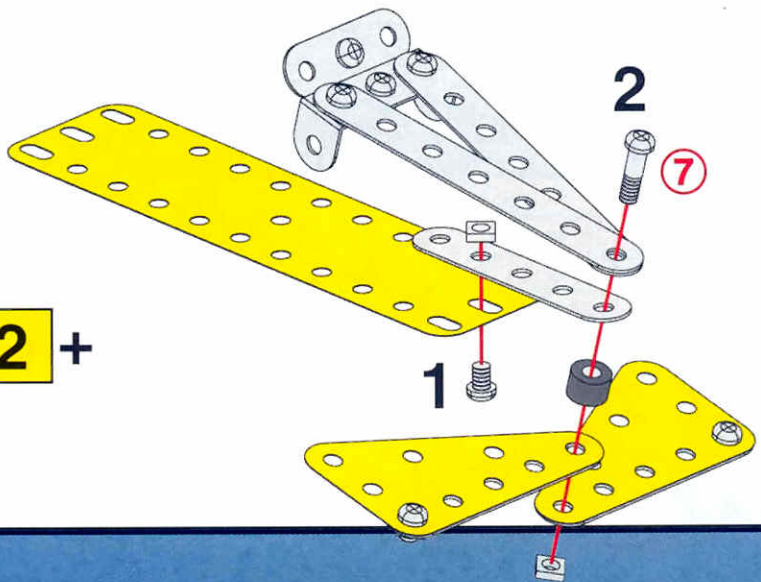
2



3

- x 1
- x 1
- x 1
- x 1

1 + **2** +



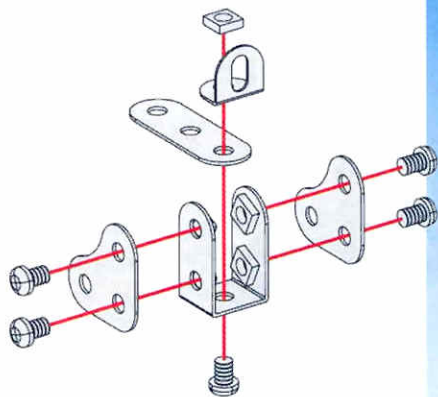
4

— x 1

— x 2

— x 1

— x 1



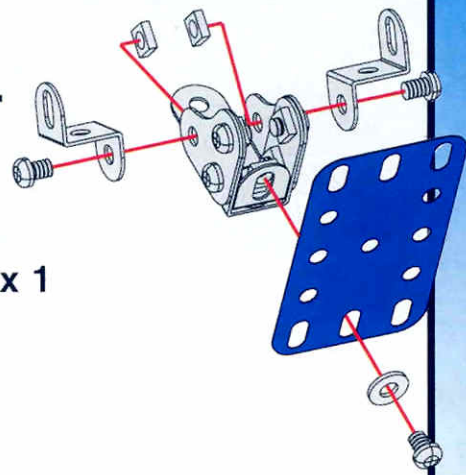
5

4 +

— x 1

— x 2

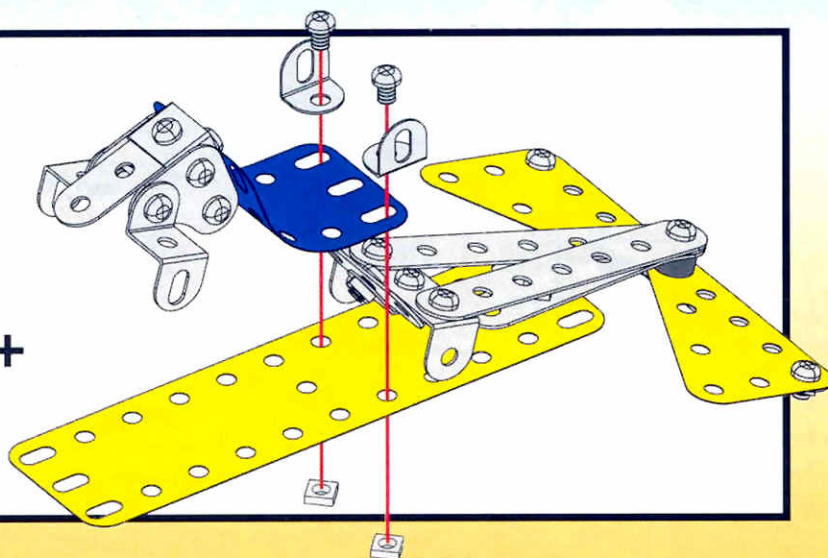
— x 1



6

— x 2

3 + 5 +

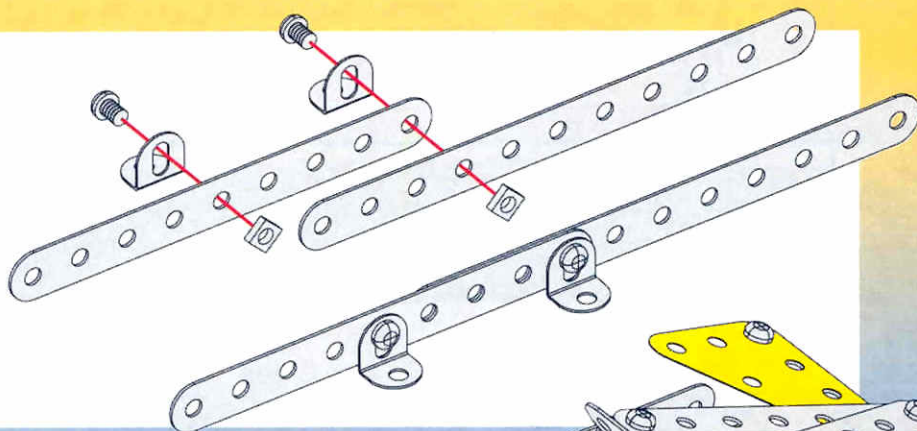


7

— x 2

— x 2

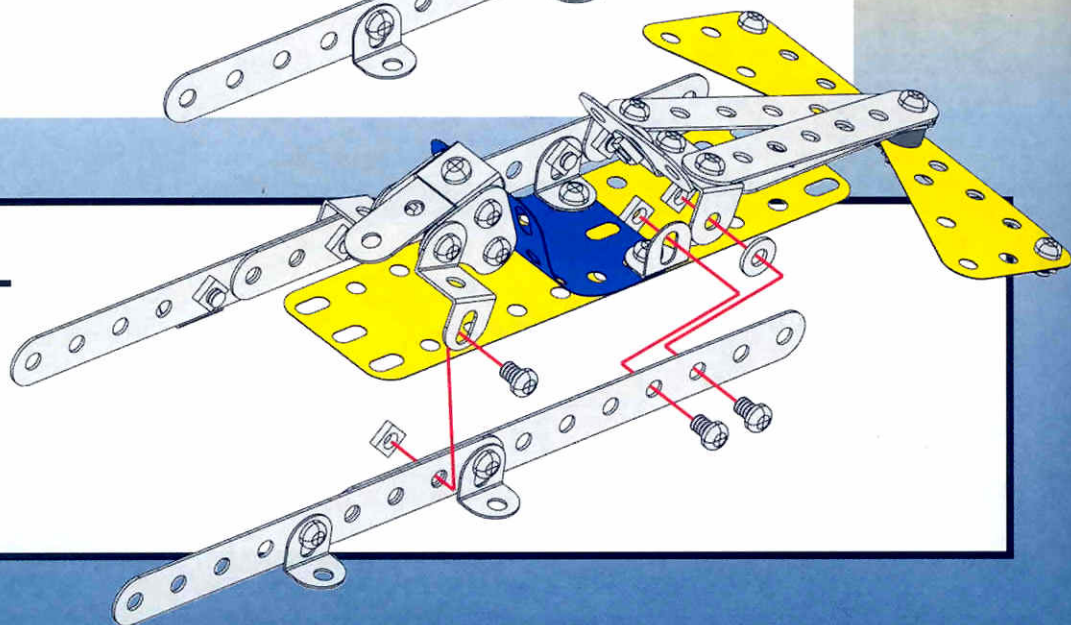
— x 4

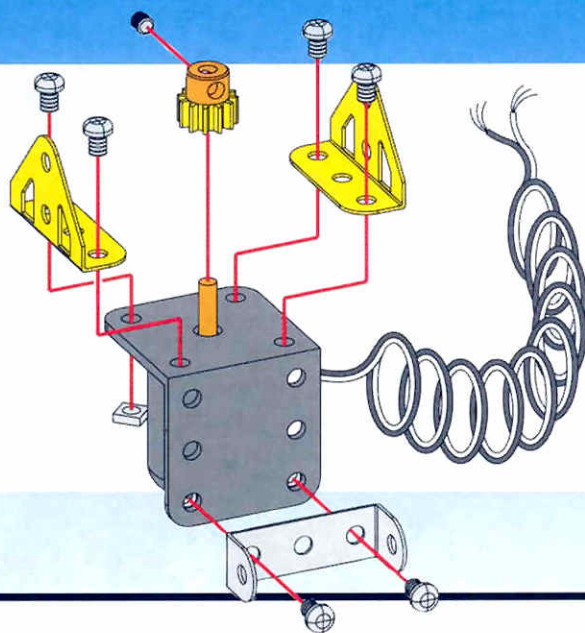
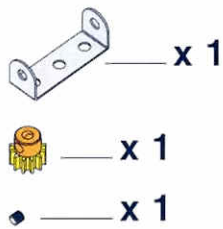
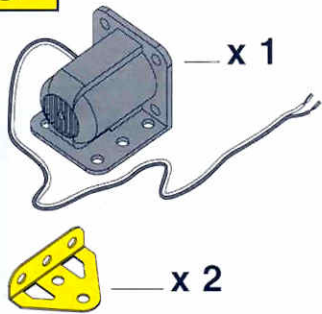
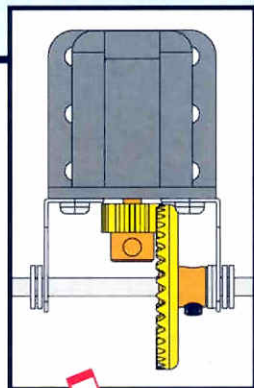
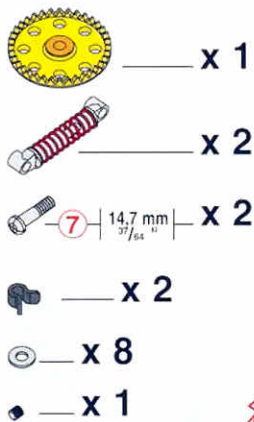
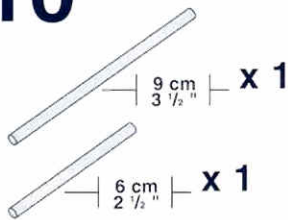
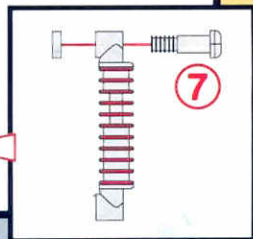
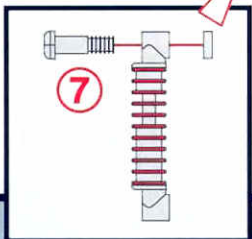
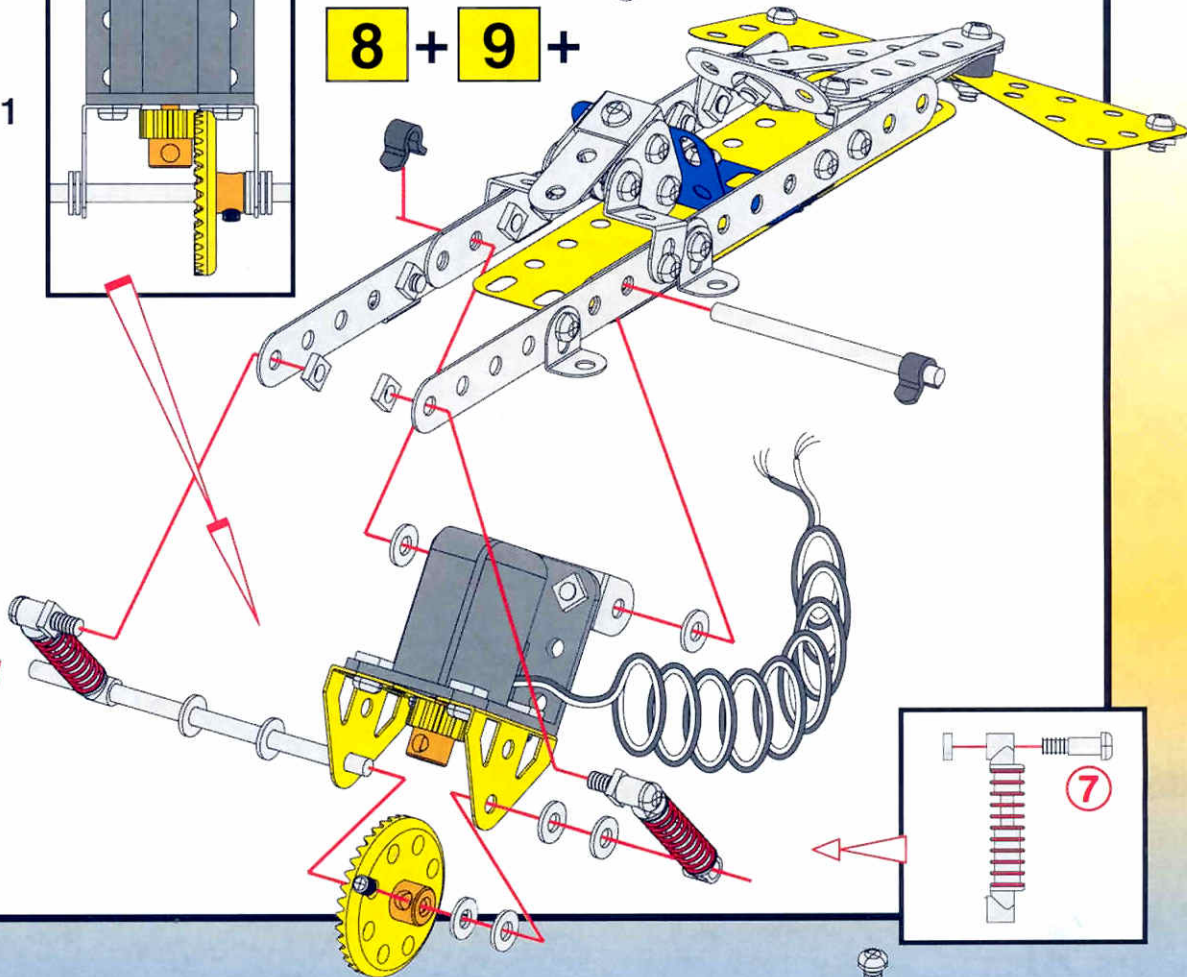
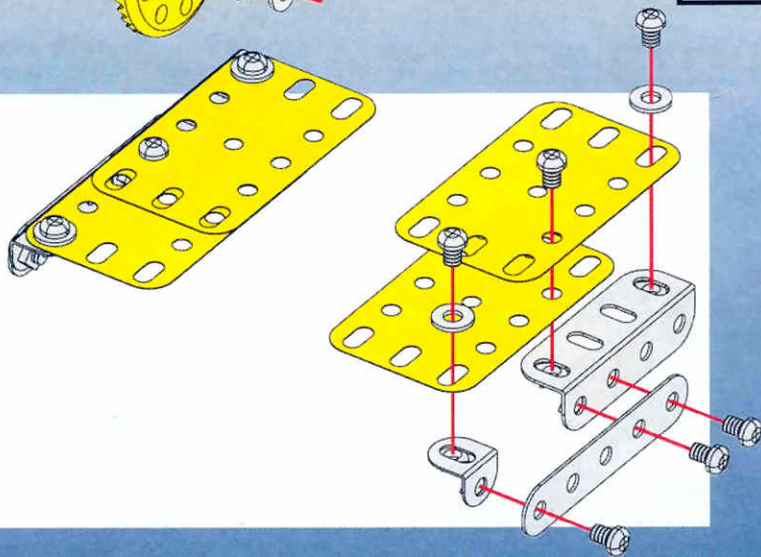
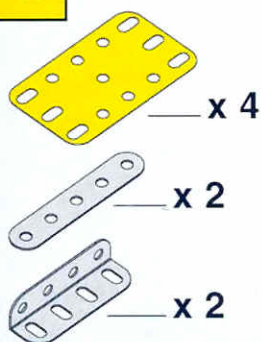


8

6 + 7 +

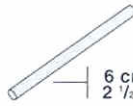





— x 2

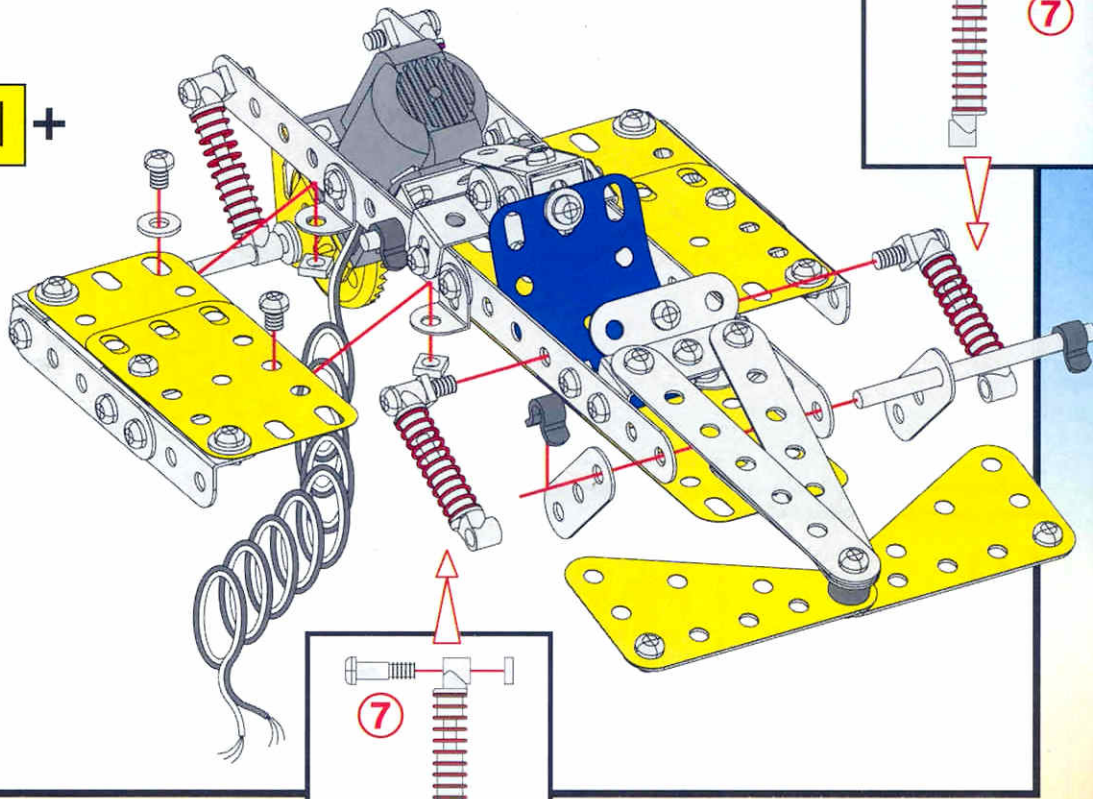


9**10****8 + 9 +****11**

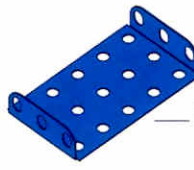
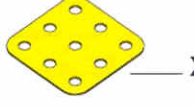



12

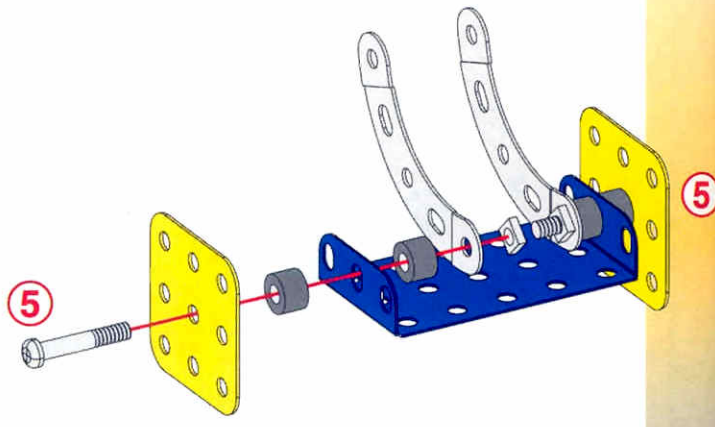
10 + 11 +

-  6 cm $2\frac{1}{2}$ " x 1
-  x 2
-  x 2
-  x 2
-  x 2
-  14,7 mm $\frac{27}{64}$ " x 2



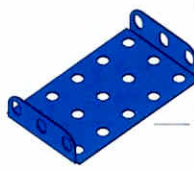
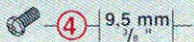

11

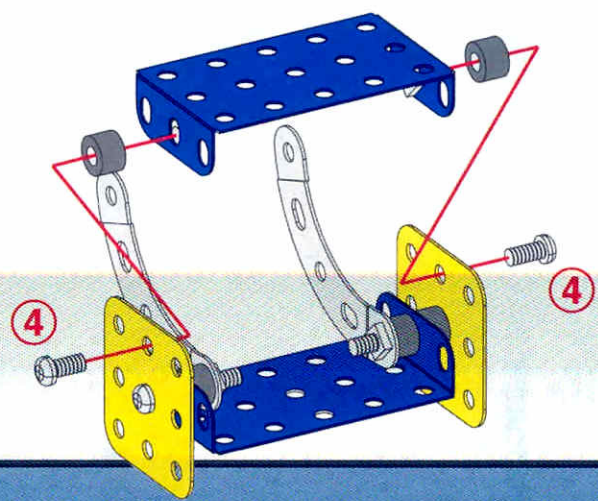
-  x 1
-  x 2
-  x 2
-  23 mm $\frac{29}{32}$ " x 2
-  x 4



14

13 +

-  x 1
-  9,5 mm $\frac{3}{8}$ " x 2
-  x 2



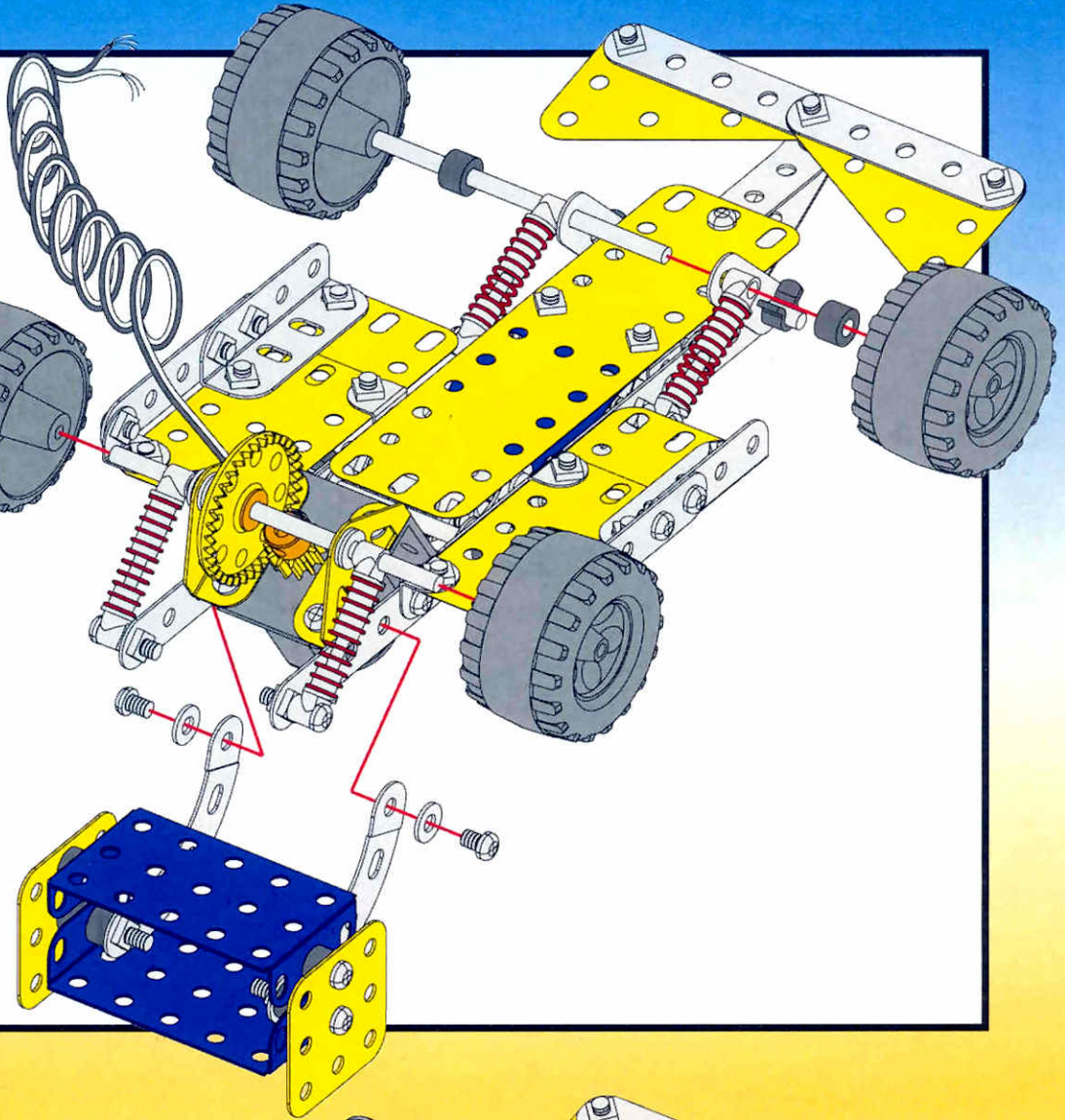
15

12 + 14 +

9 cm $\frac{3}{8}$ " x 1

x 4

x 2
x 2



16

2

x 1
x 1

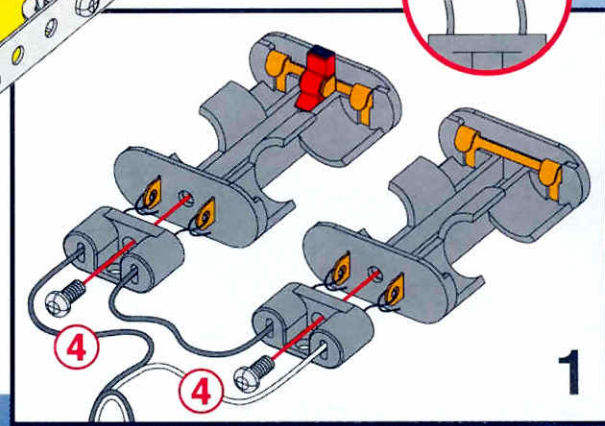
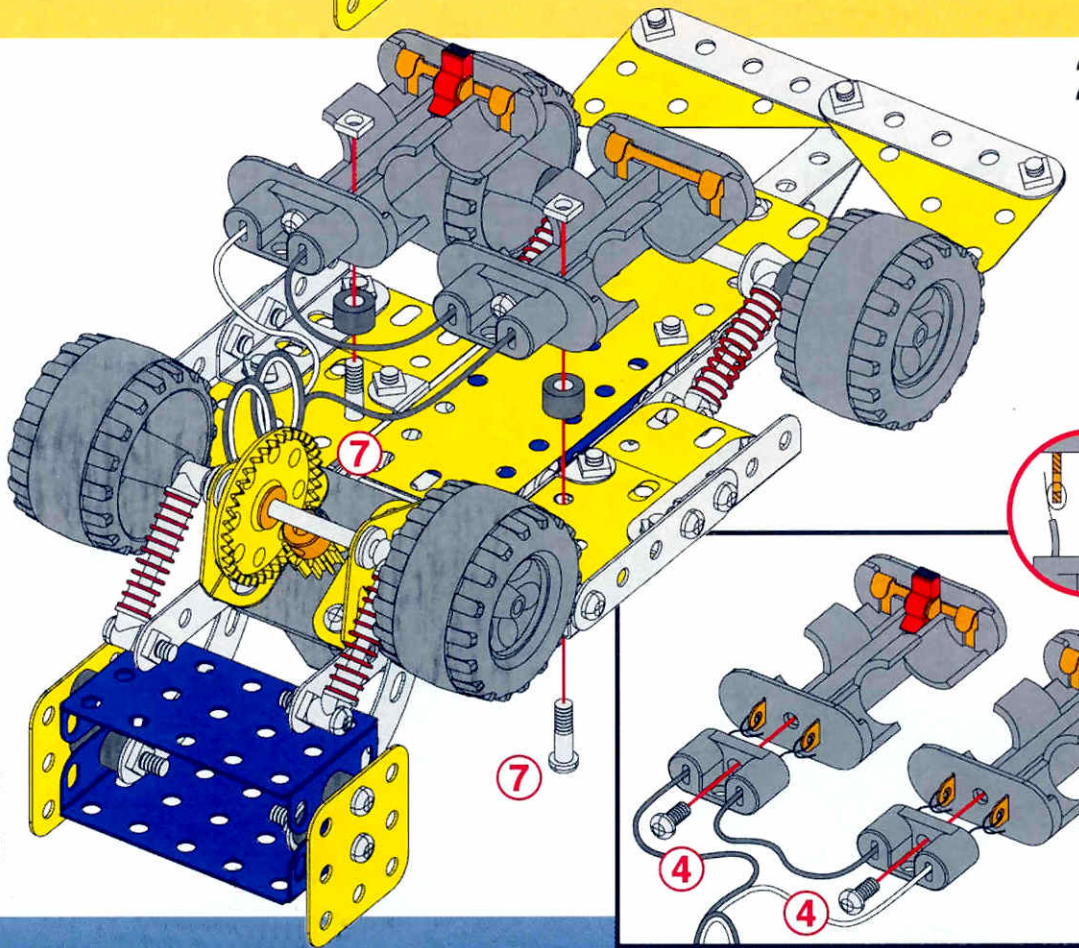
x 1

x 2

x 2

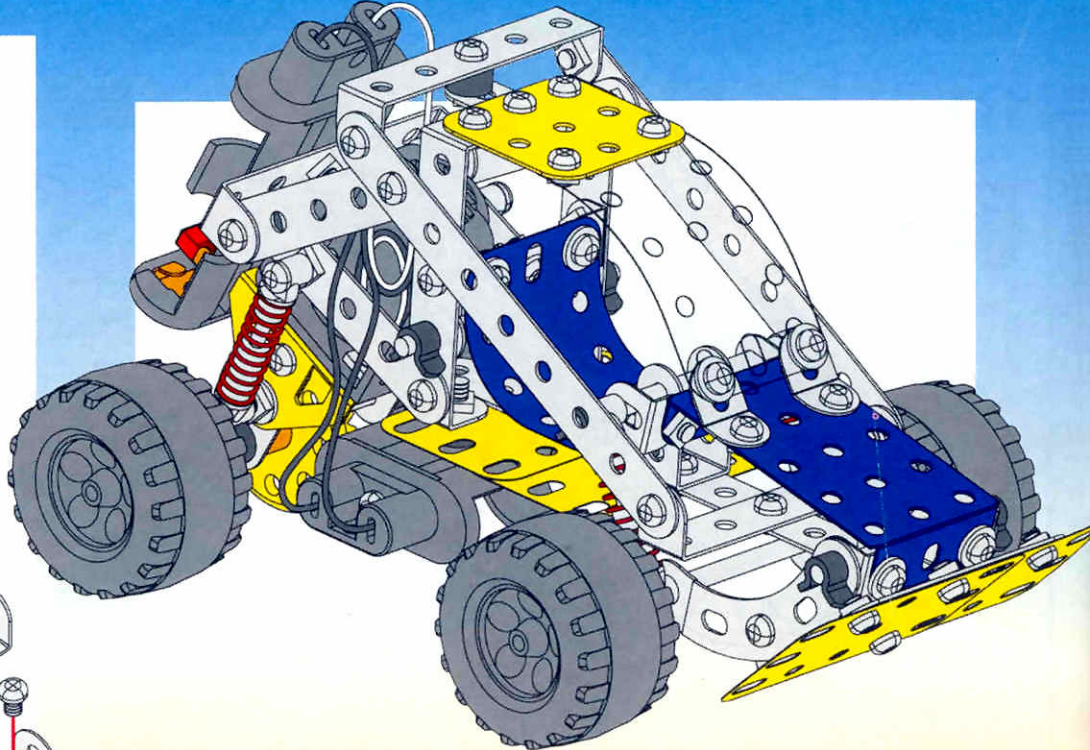
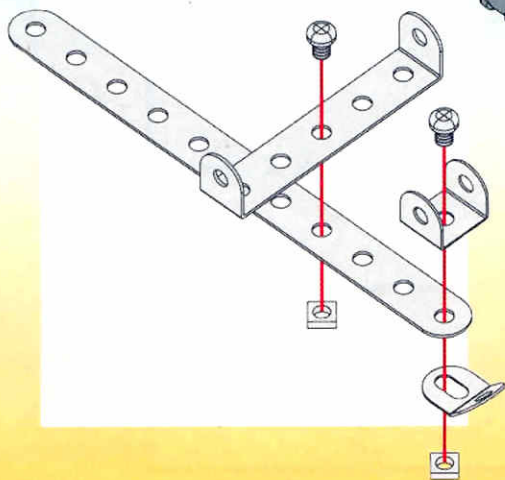
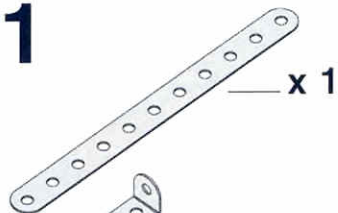
7 | 14,7 mm $\frac{37}{64}$ " x 2

4 | 9,5 mm $\frac{3}{8}$ " x 2

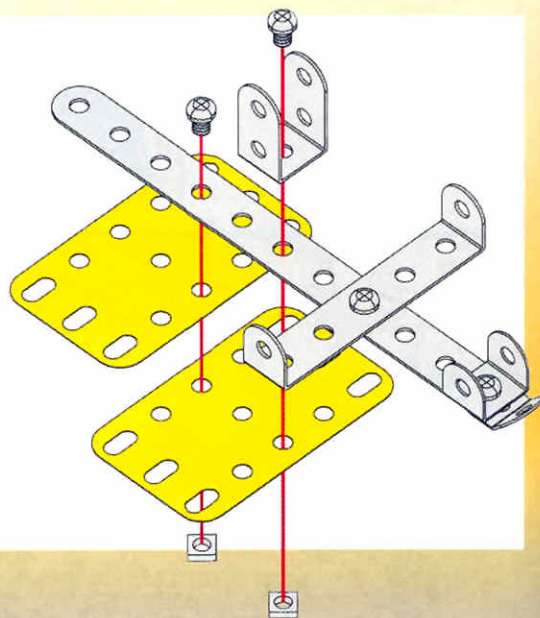
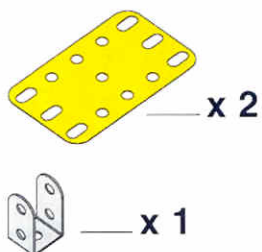


1

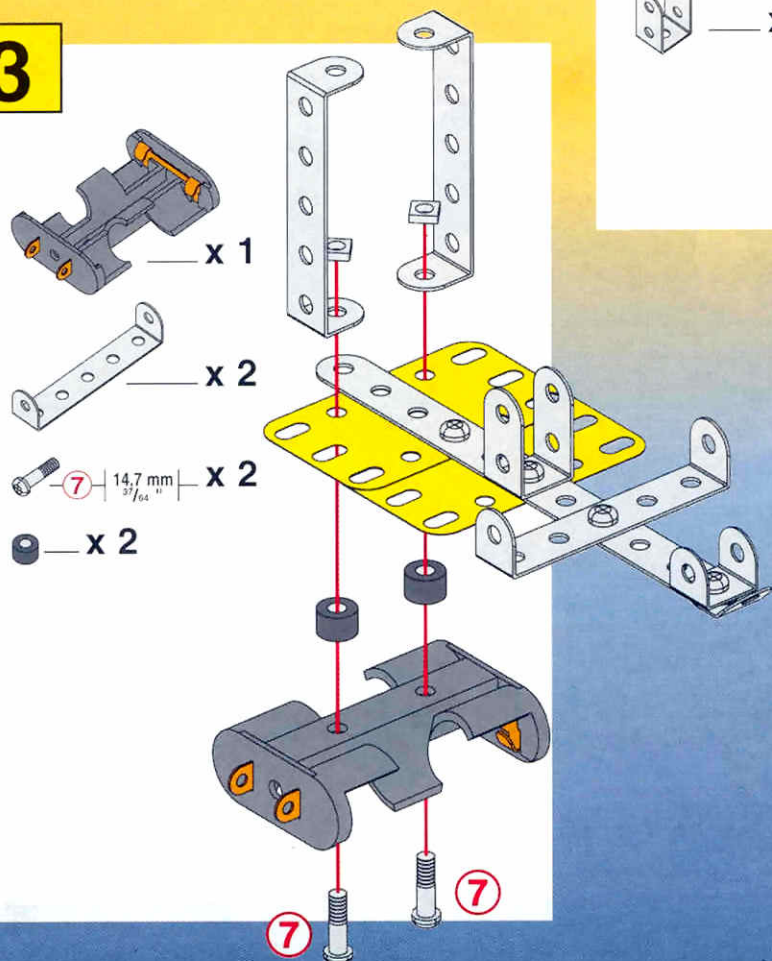
1



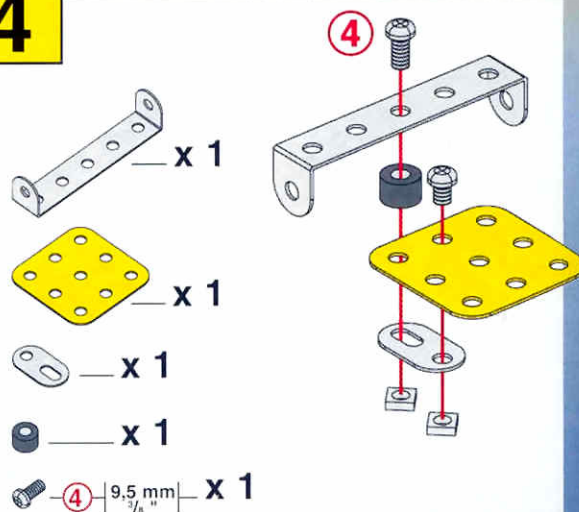
2

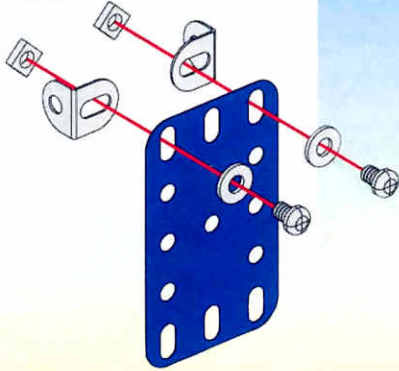
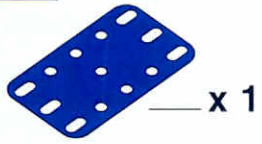
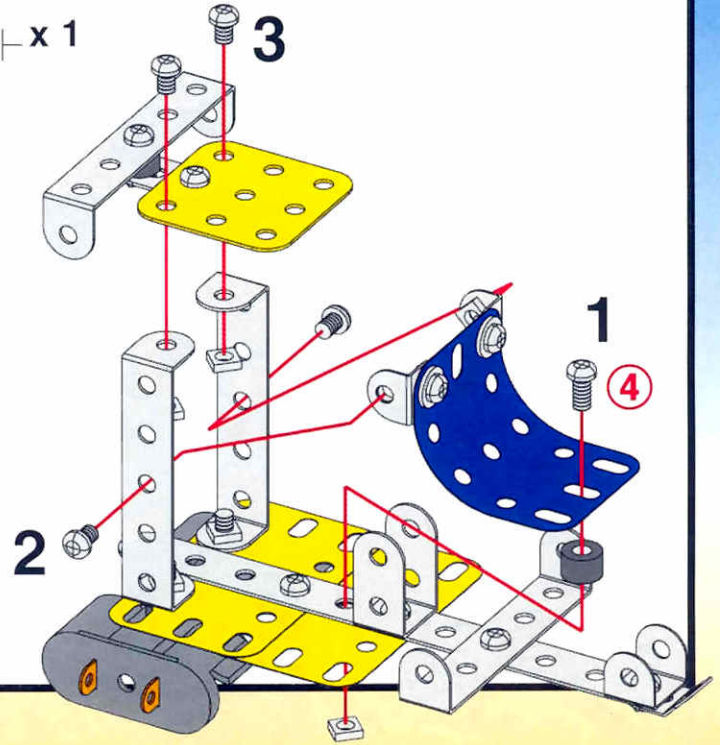
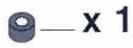
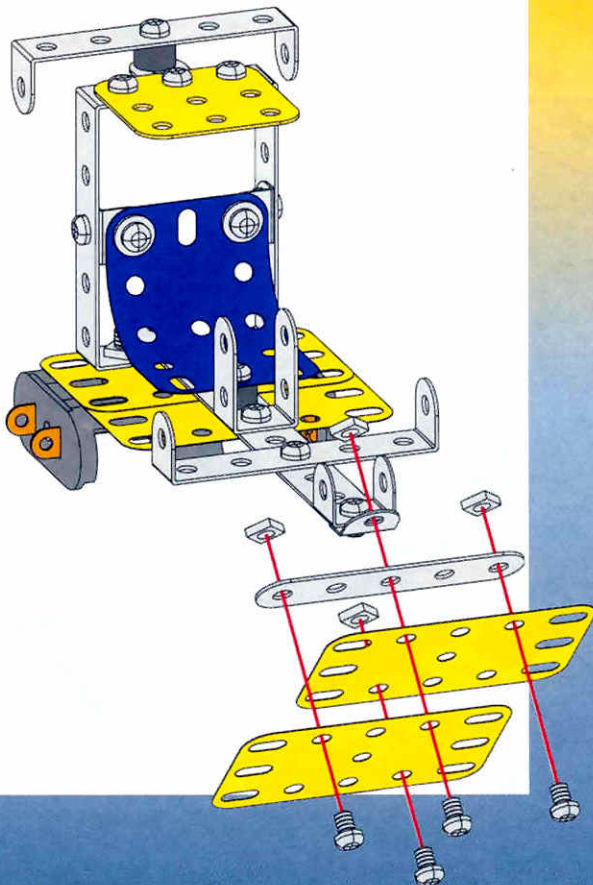
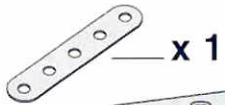
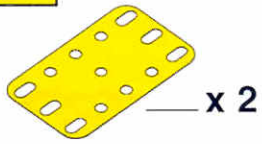
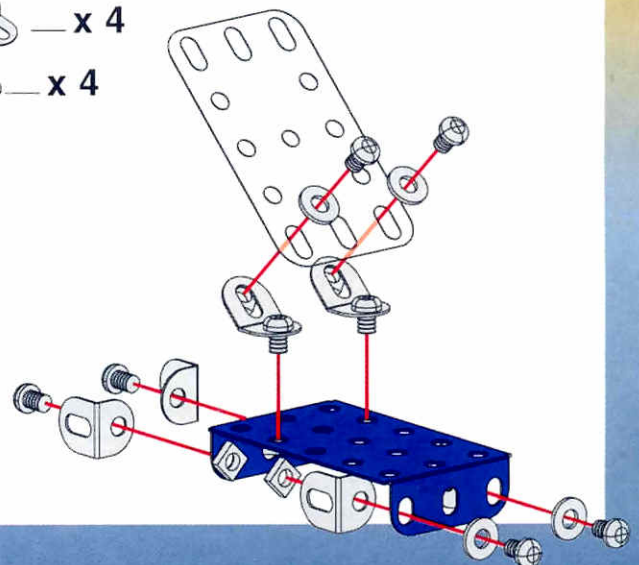
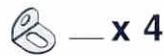


3



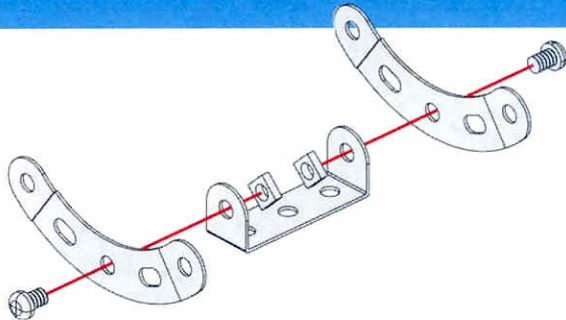
4



5**6****3 + 4 + 5 +****7****8**

9

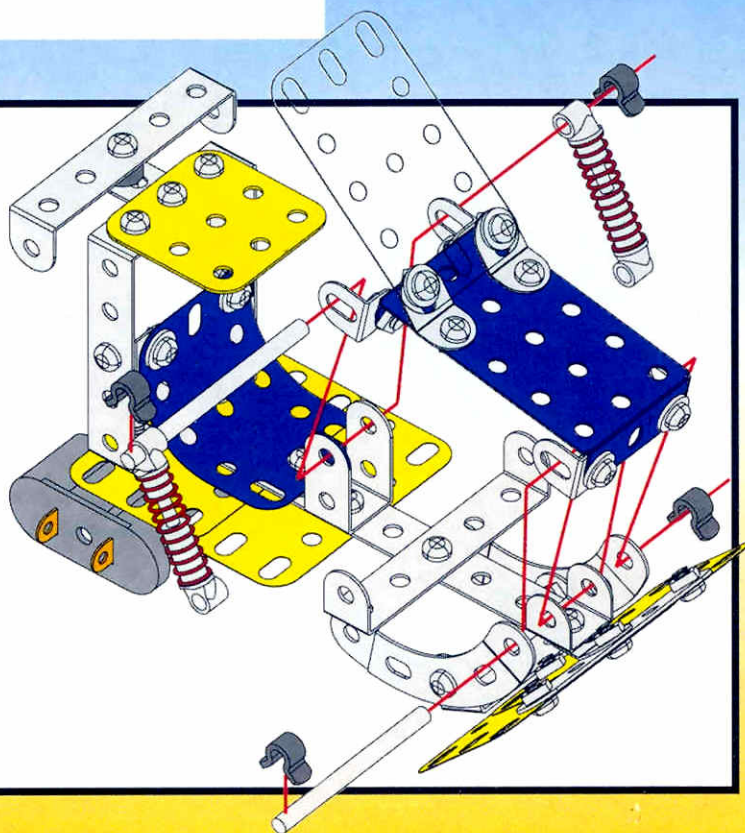
- x 2
- x 1



10

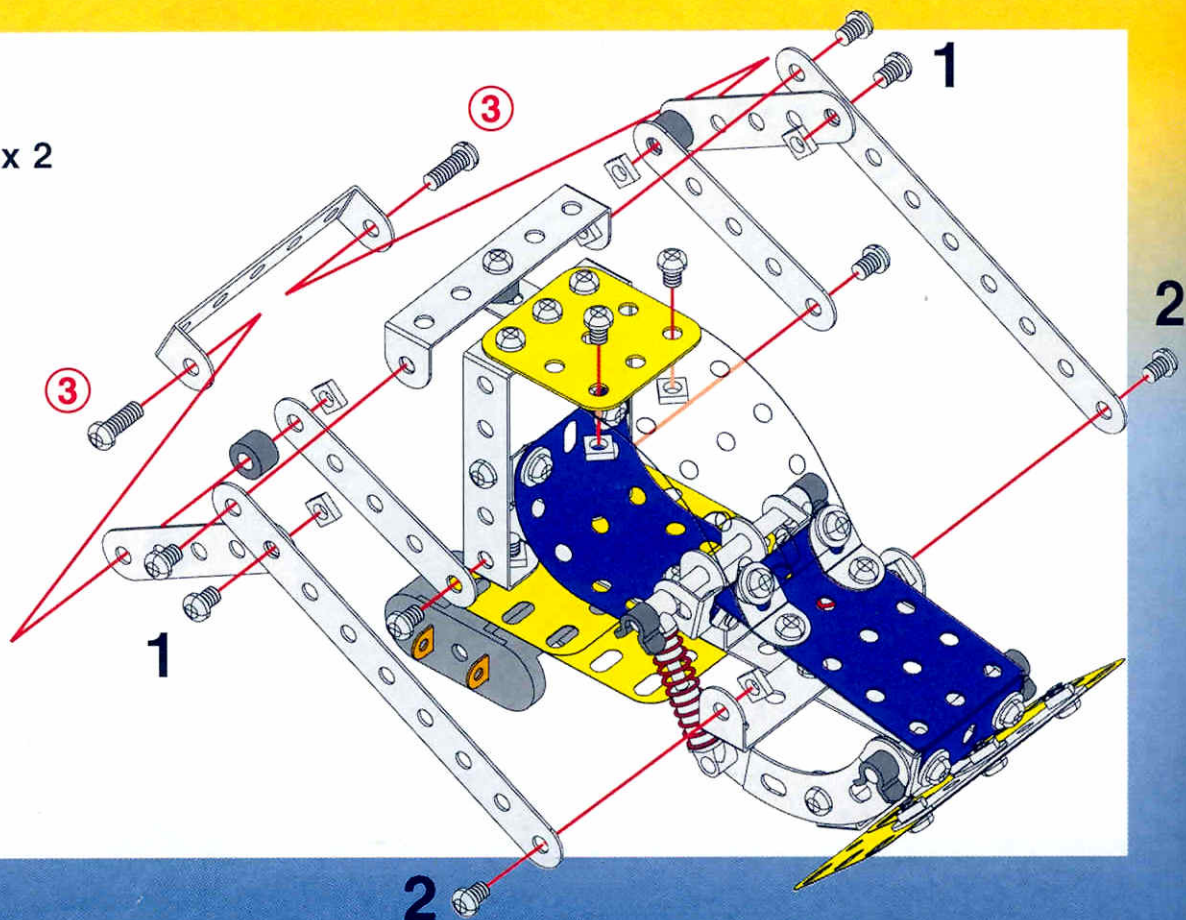
7 + 8 + 9 +

- 6 cm $2\frac{1}{2}$ " x 1
- 5 cm 2 " x 1
- x 2
- x 4








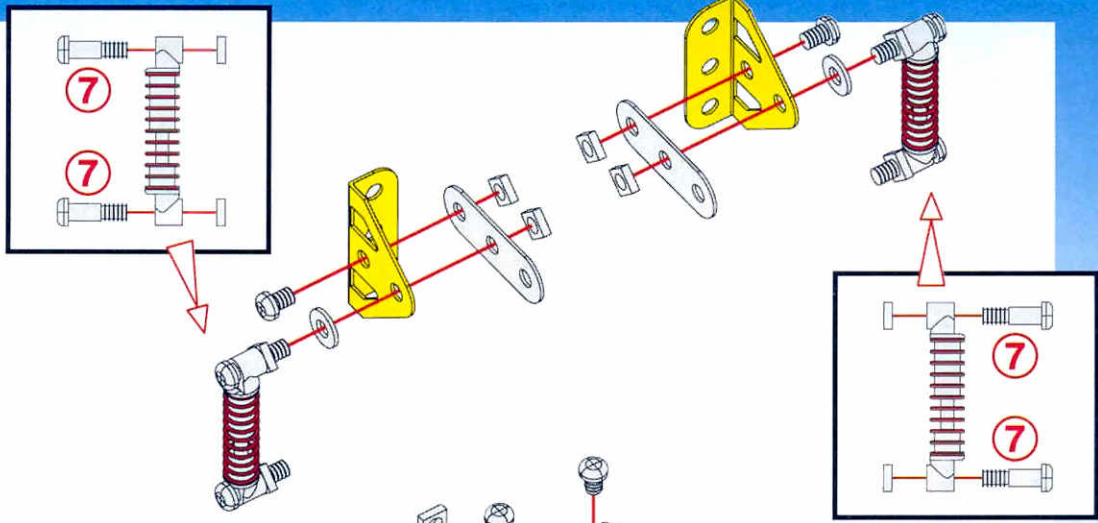
11

- x 2
- x 4
- x 1
- x 2
- 12 mm $\frac{1}{2}$ " x 2

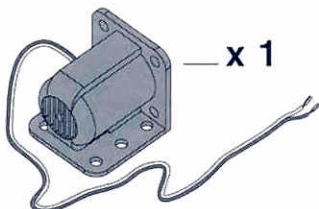





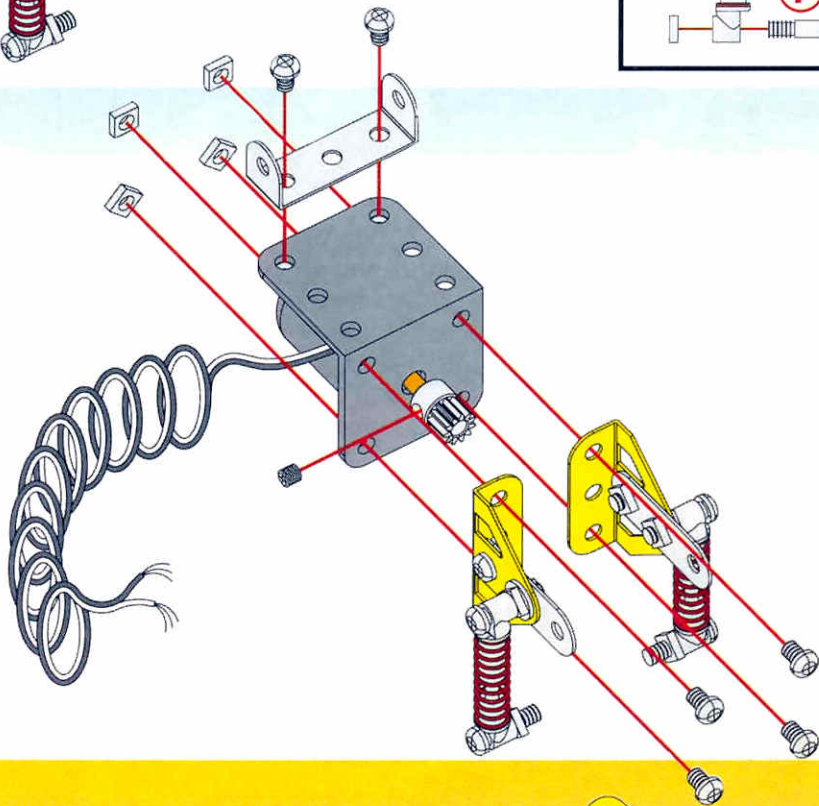
12

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



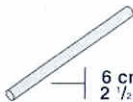

13

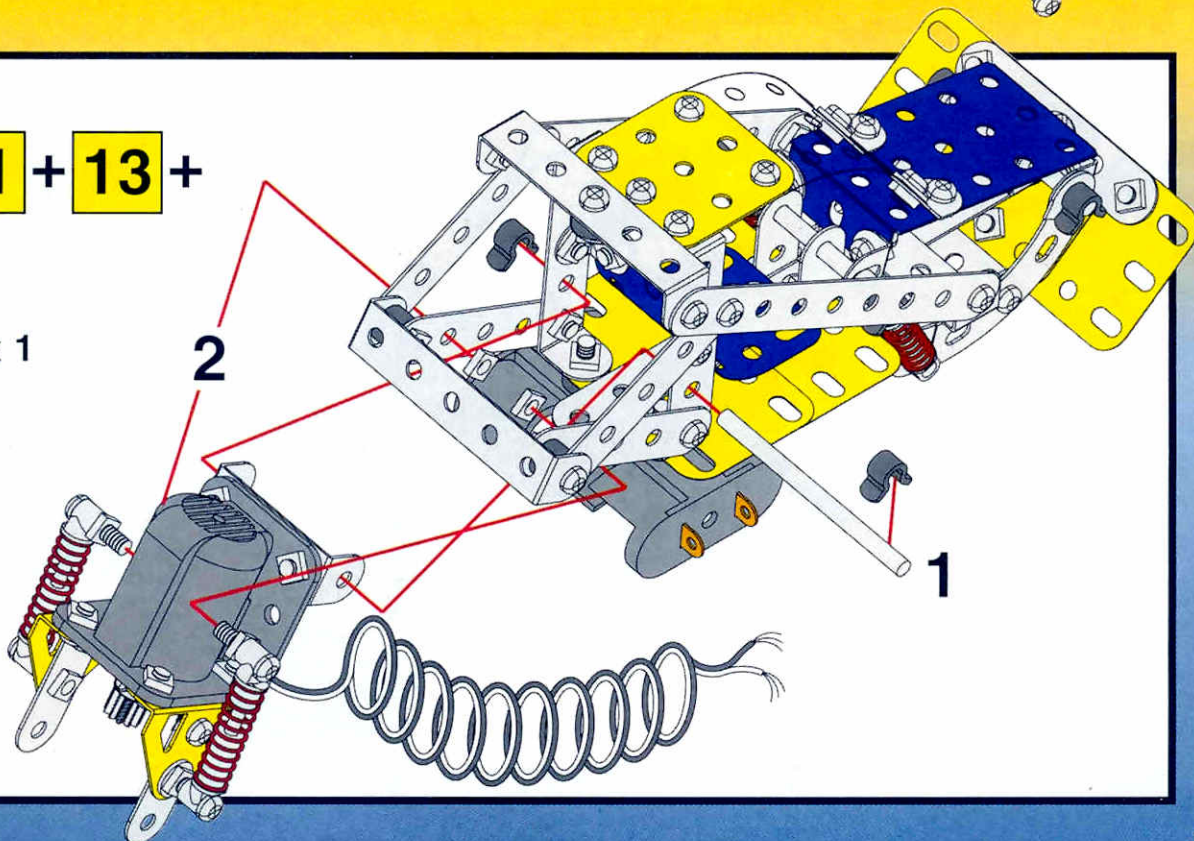
-  x 1
-  x 1
-  x 1
-  x 1



14

11 + **13** +

-  x 1
-  x 2



15

9 cm
3 1/2" x 2

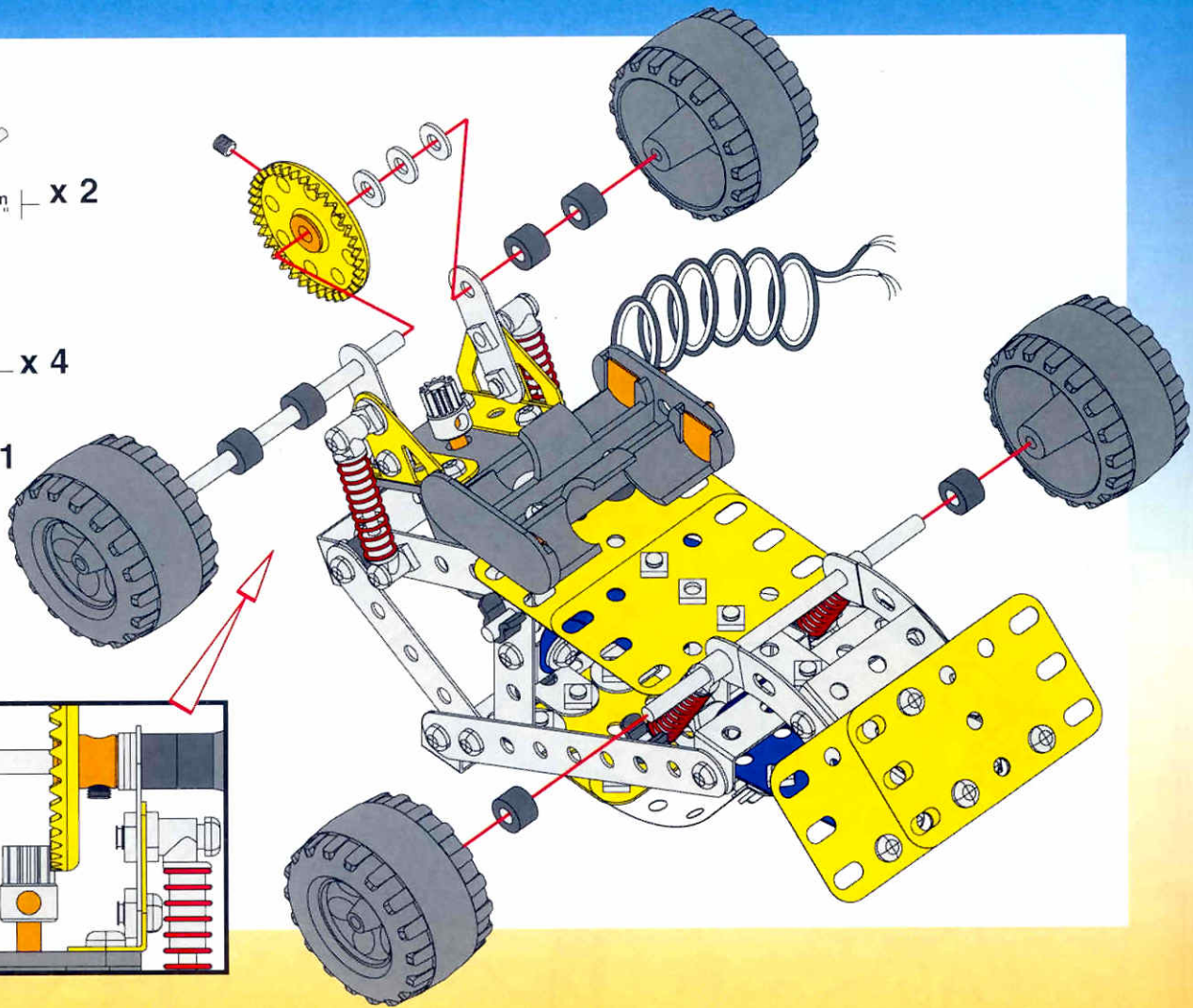
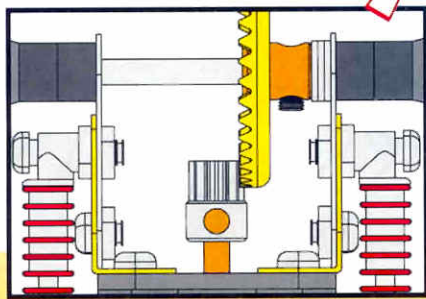
x 4

x 1

x 3

x 6

x 1



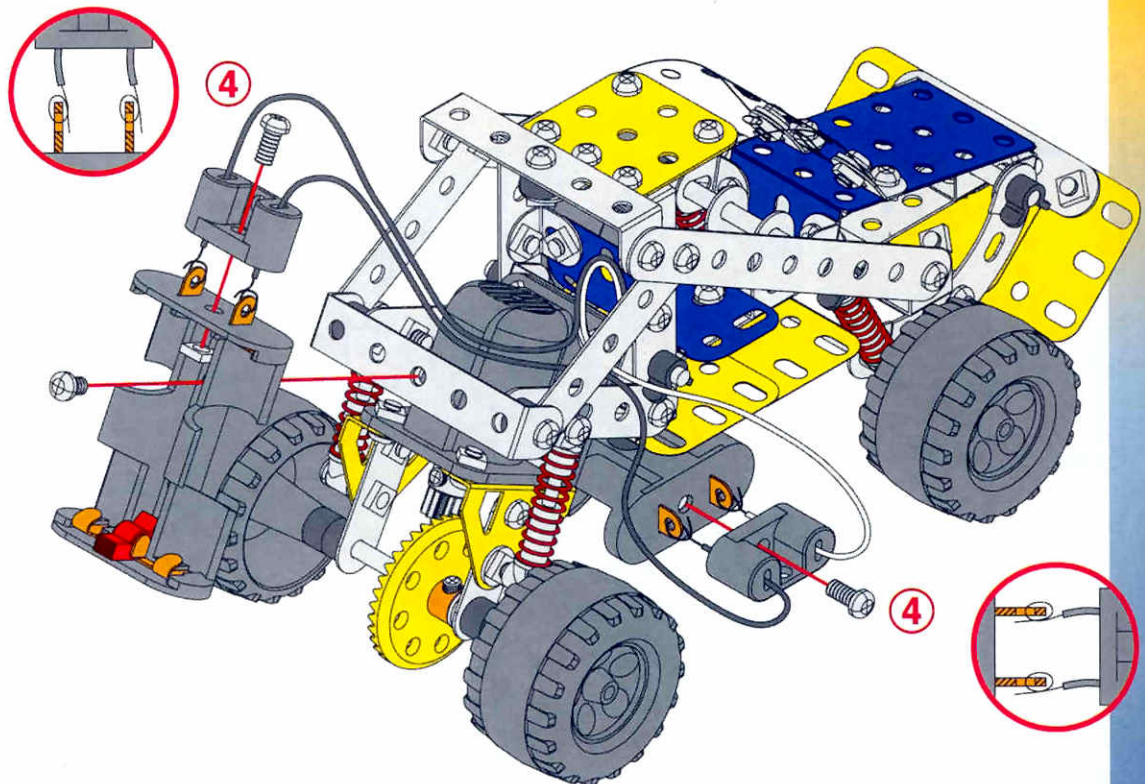
16

x 1

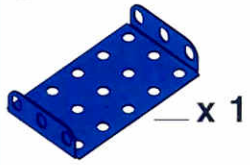
x 1

x 2

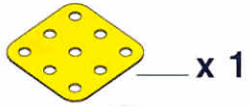
④ 9,5 mm
3/8" x 2



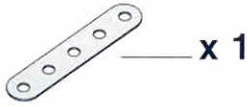
1



x 1



x 1



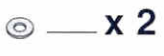
x 1



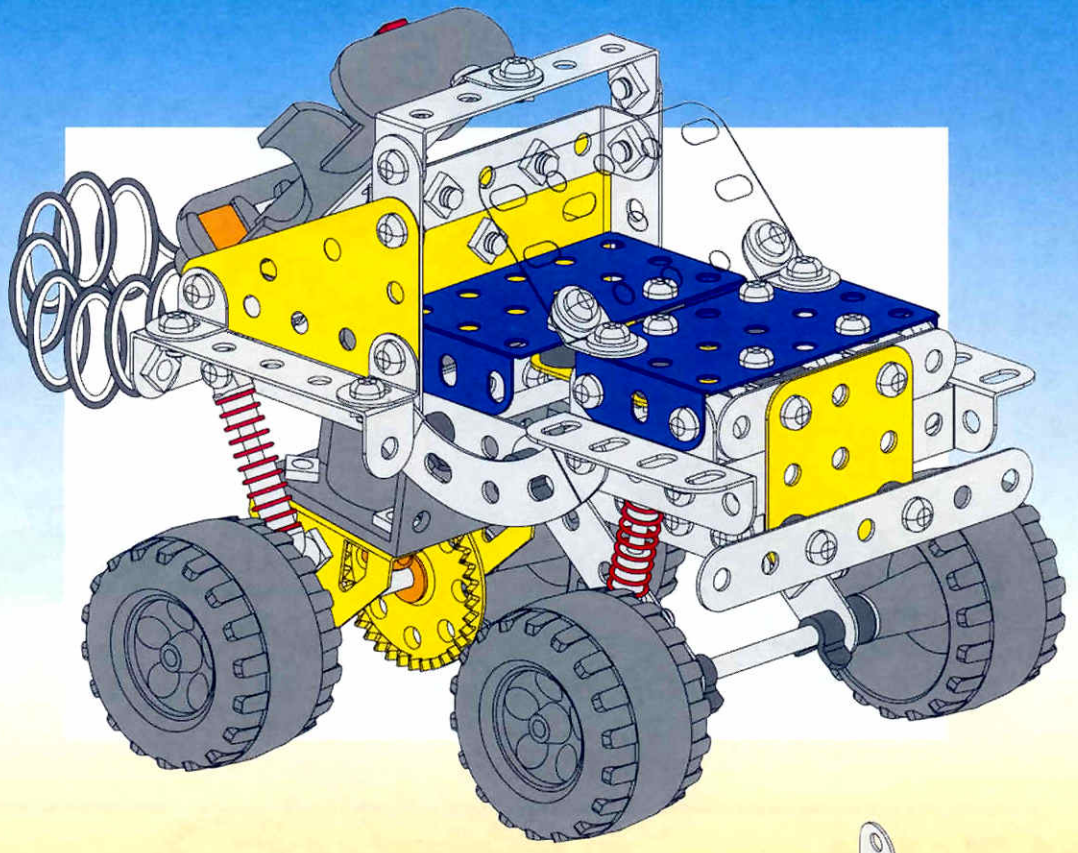
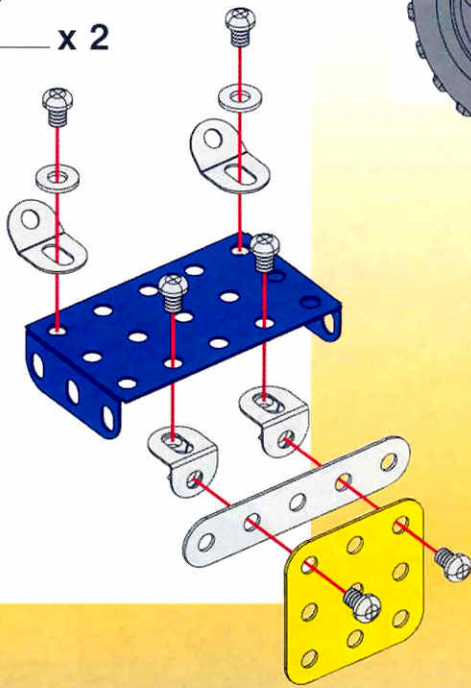
x 2



x 2

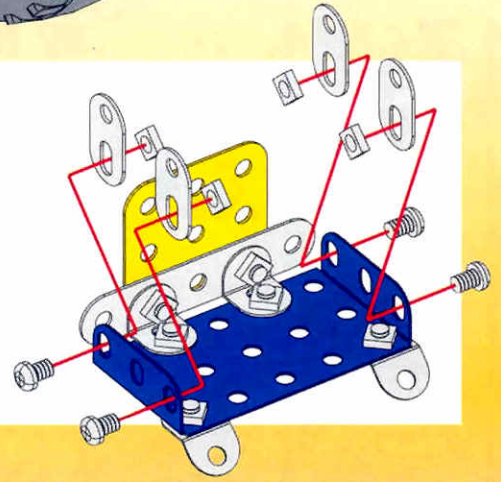


x 2

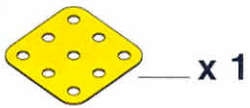


2

x 4



3



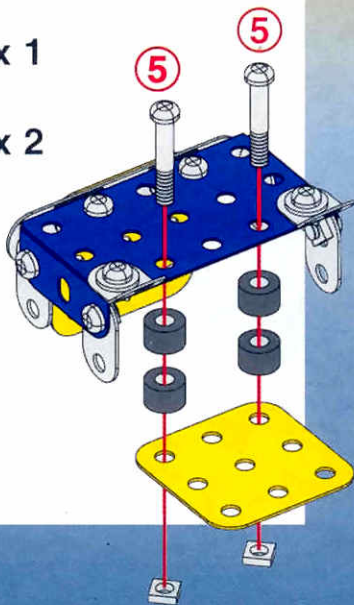
x 1



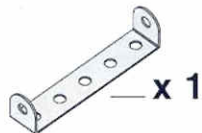
x 2



x 4



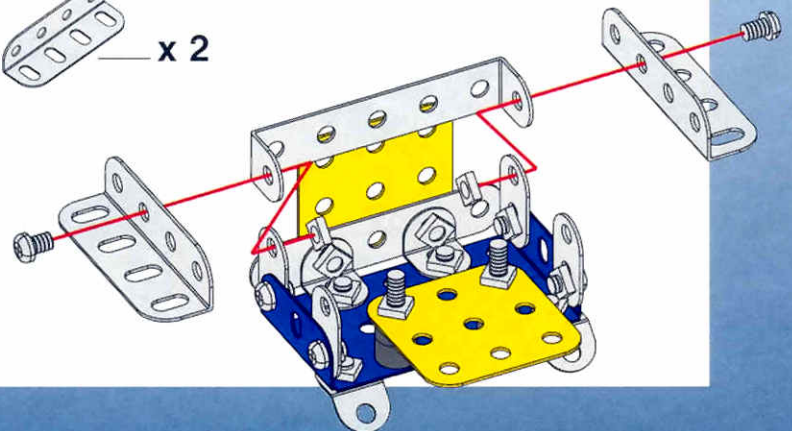
4

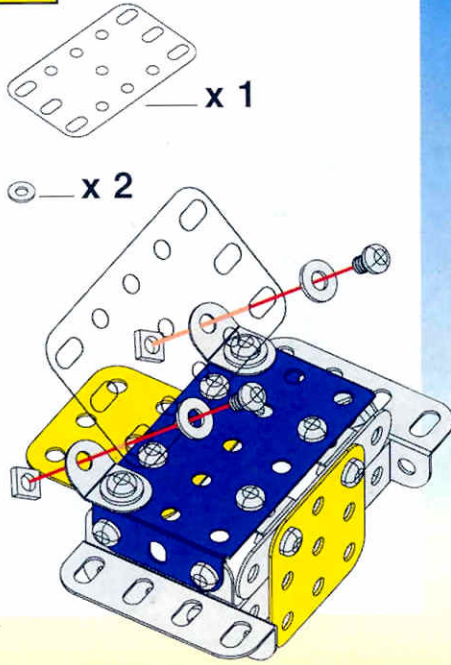
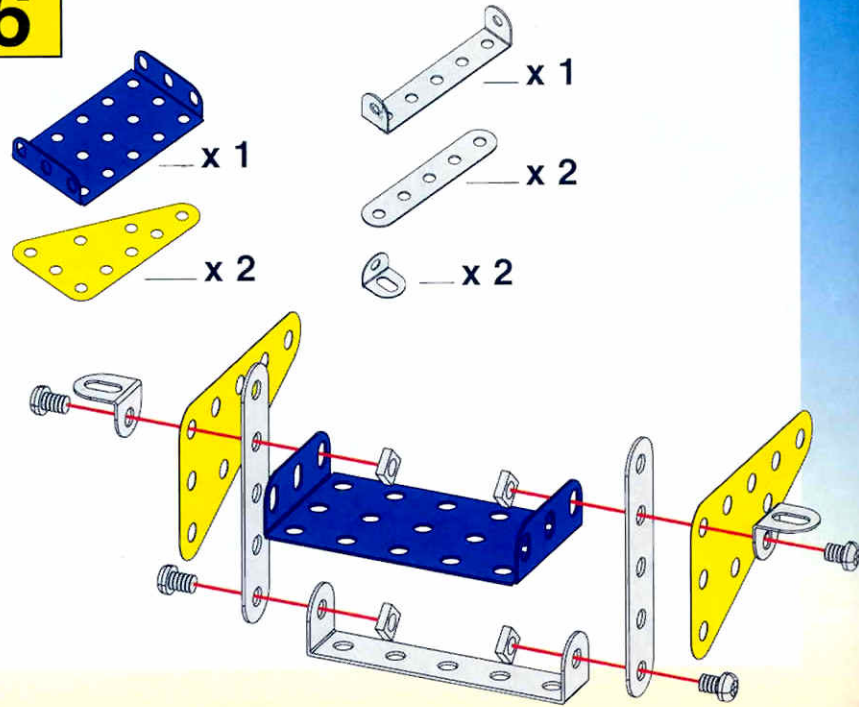


x 1



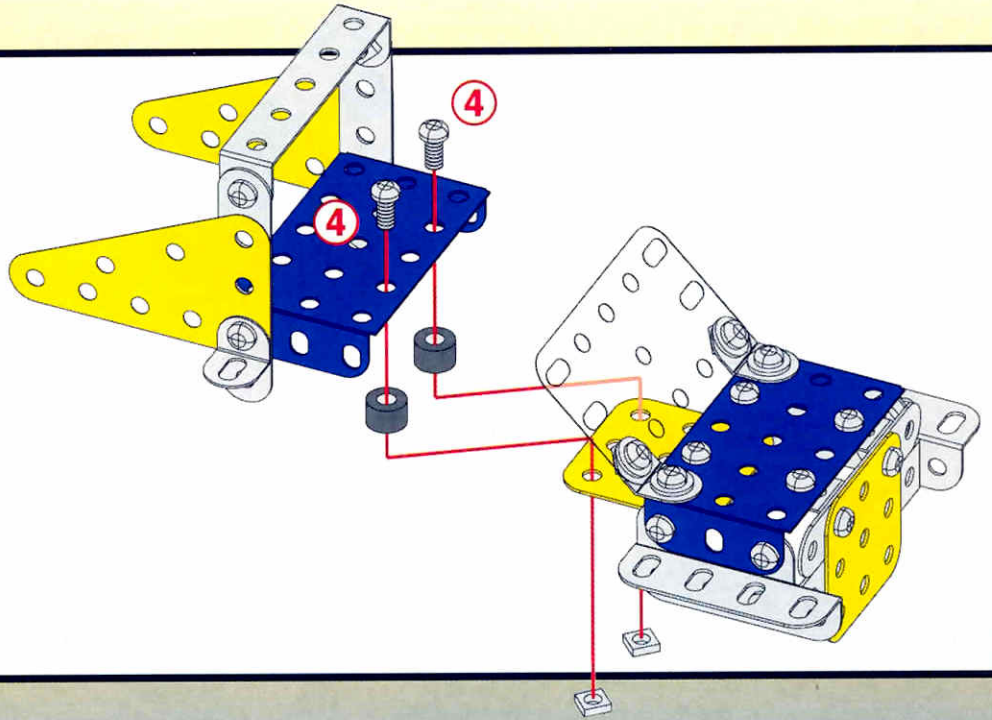
x 2



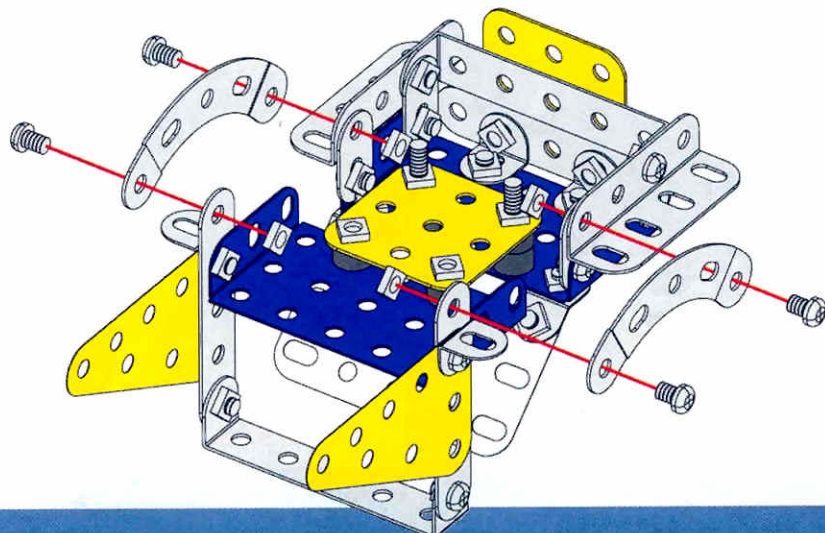
5**6****7****5 + 6 +**

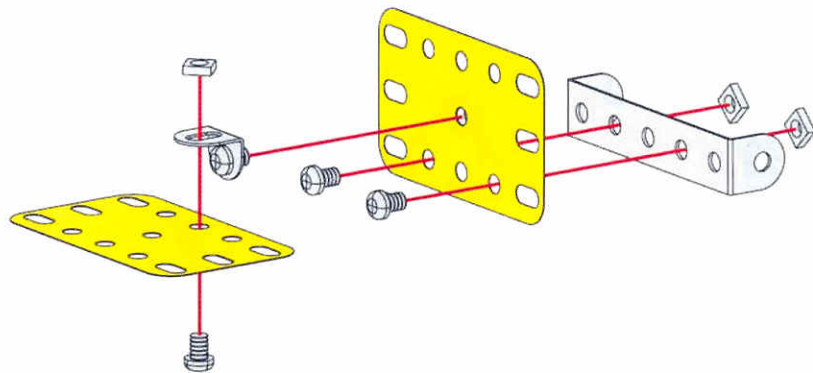
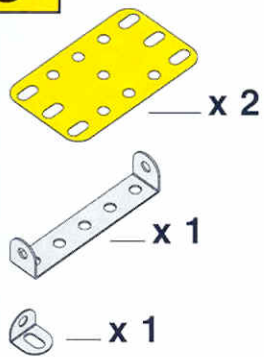
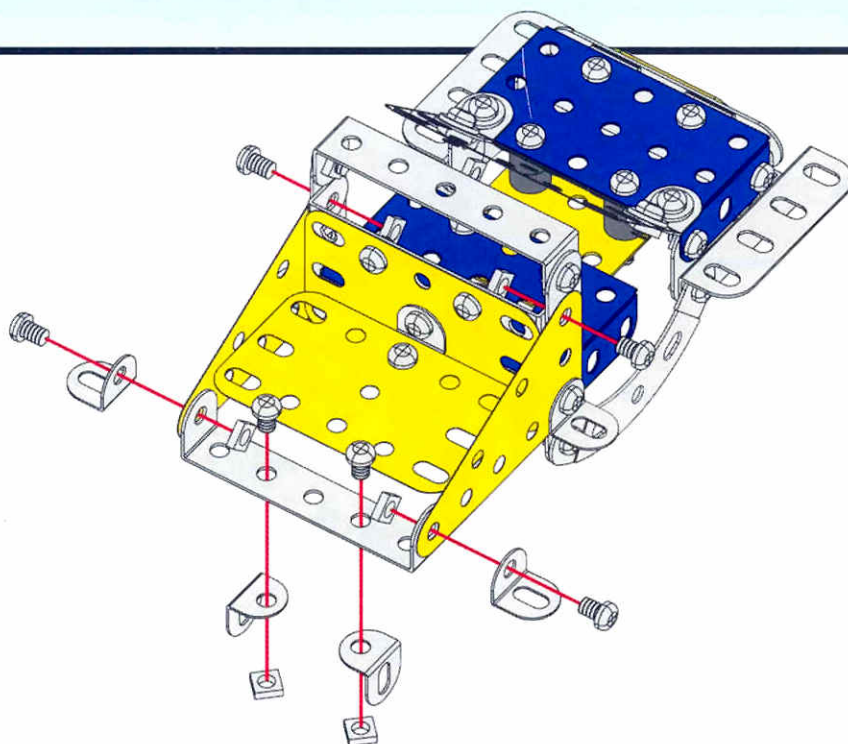
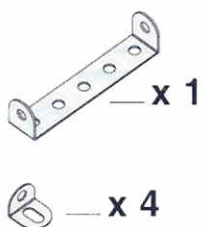
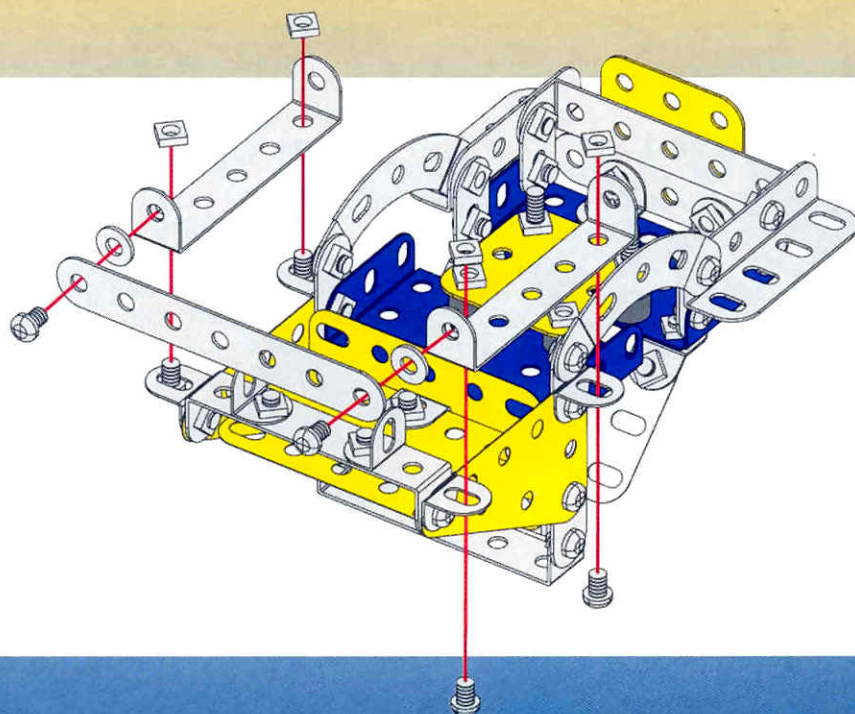
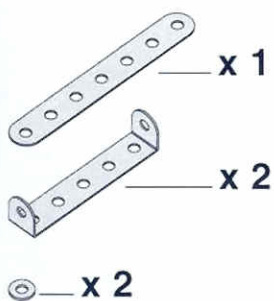
(4) | 9,5 mm | x 2
 x 2

x 2

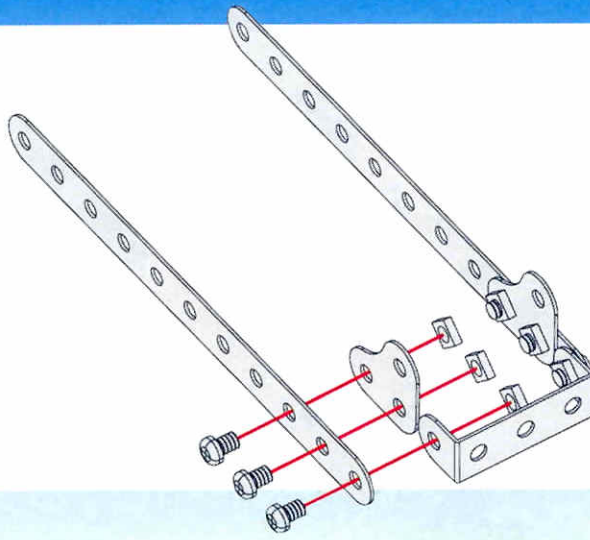
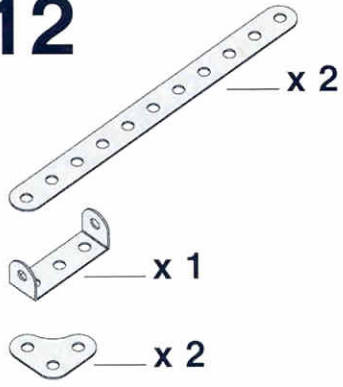
**8**

x 2

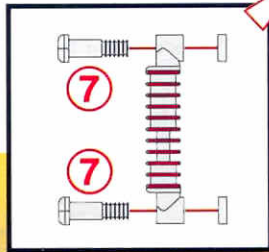
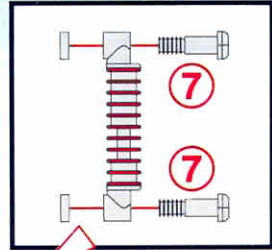
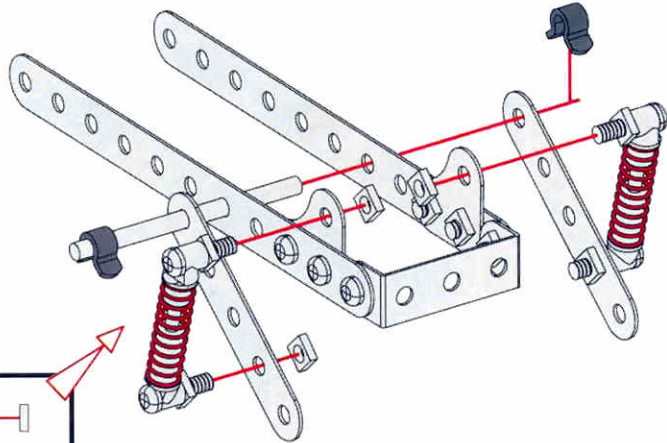
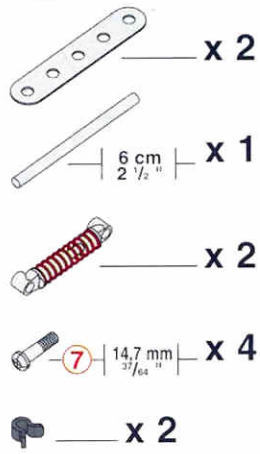


9**10****11**

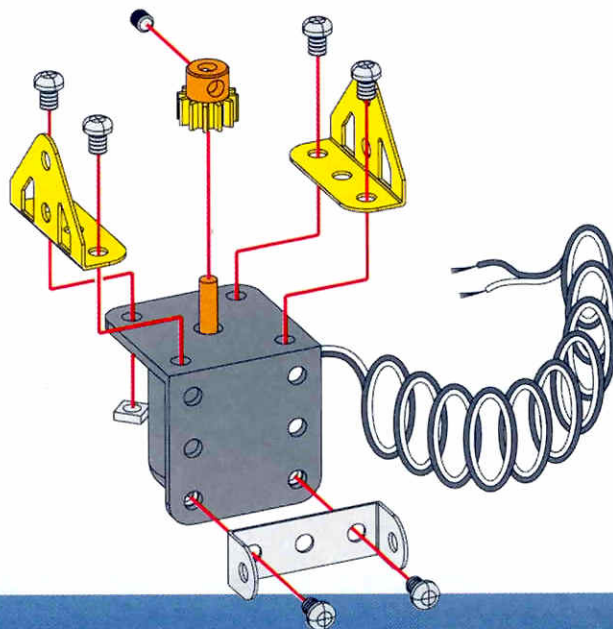
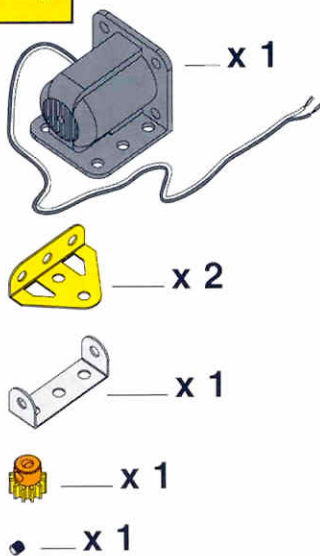
12



13



14

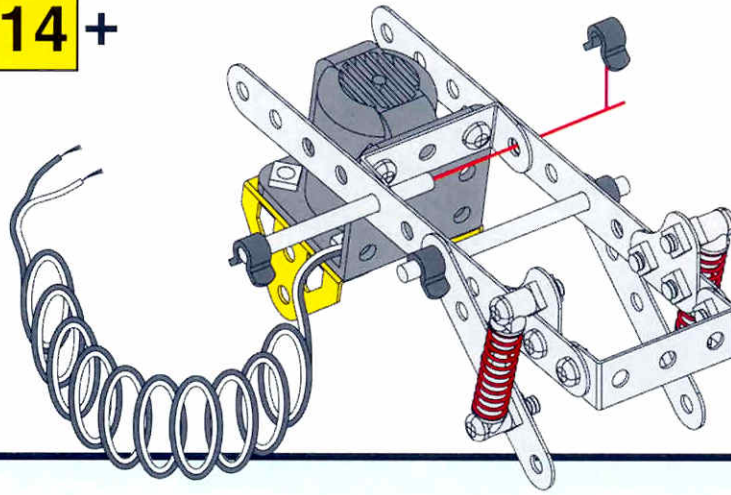


15

13 + **14** +

5 cm
2" x 1

x 2



16

11 + **15** +

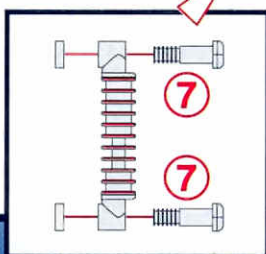
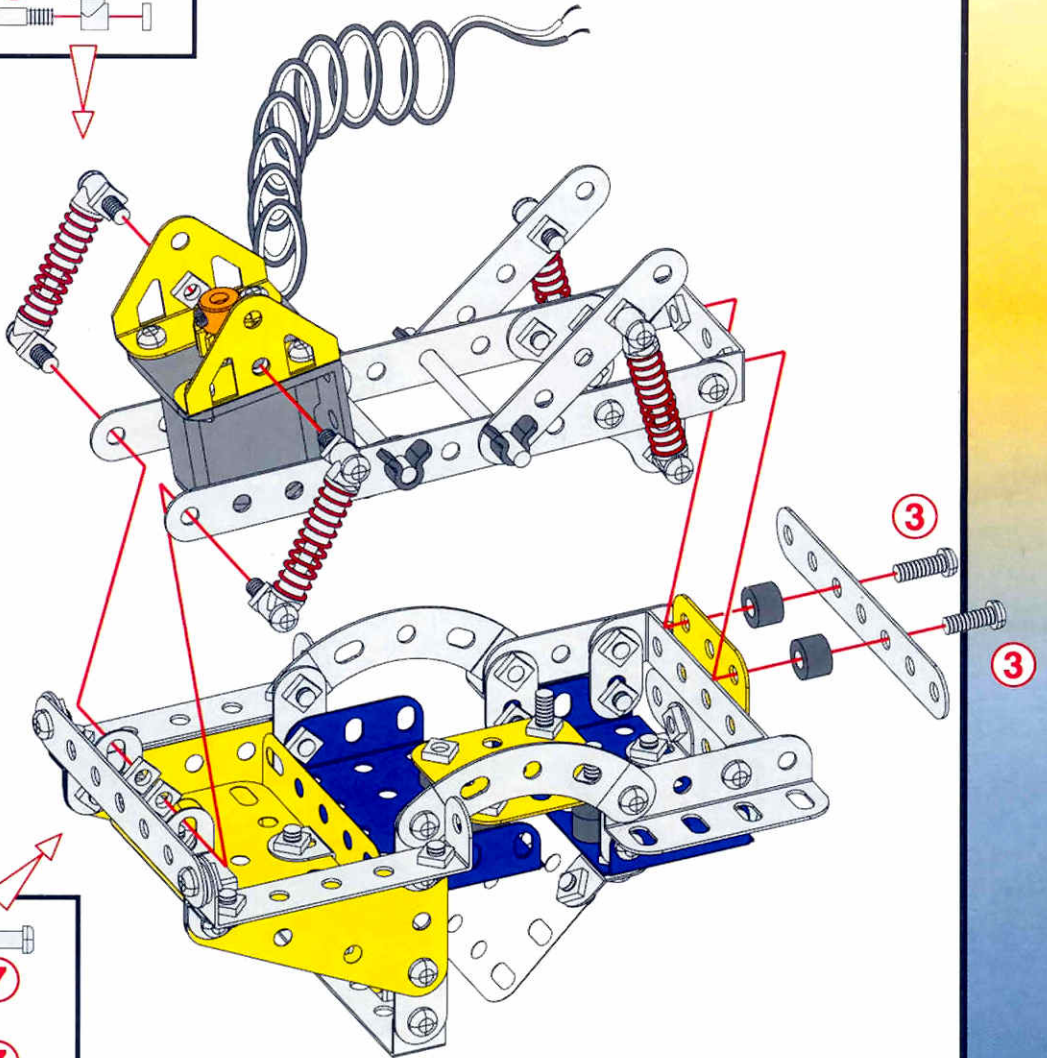
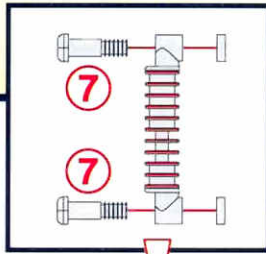
x 1

x 2

7 | 14.7 mm | x 4
37/64"

3 | 12 mm | x 2
1/2"

x 2



17

9 cm
3 1/2" x 2

x 4

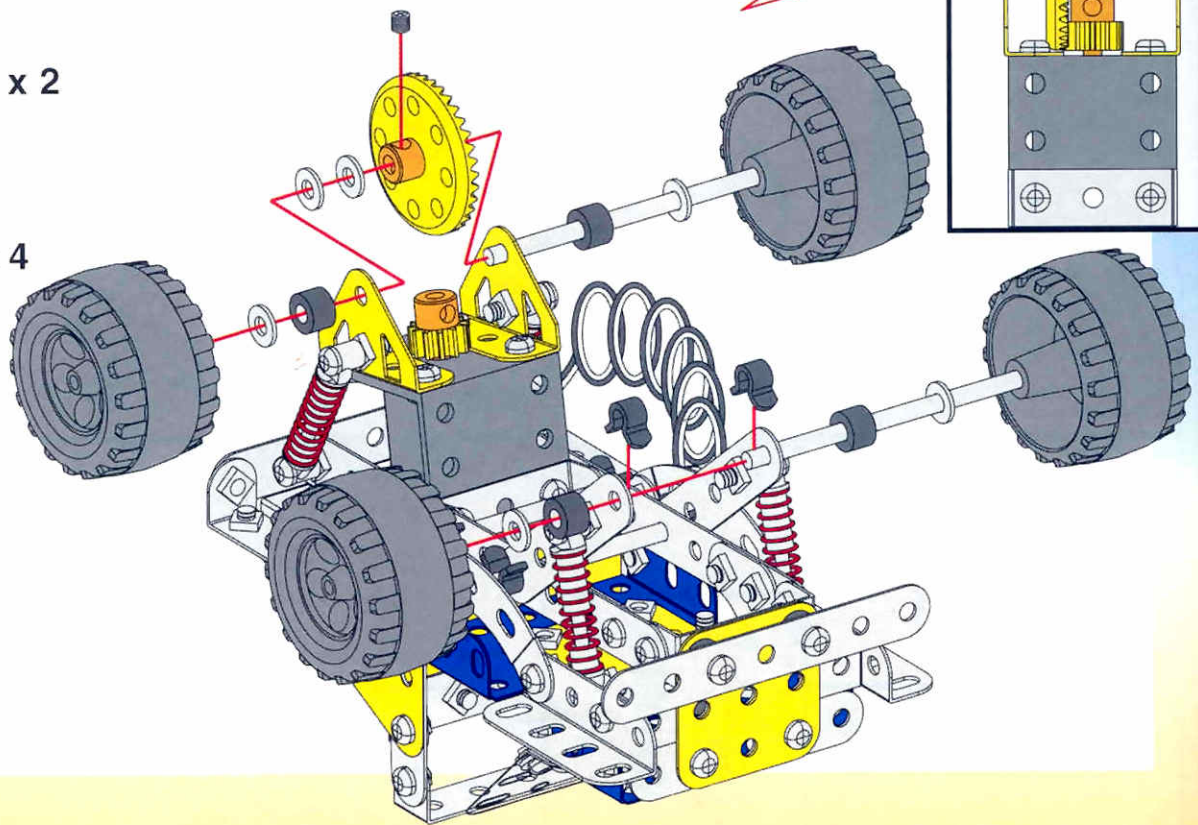
x 1

x 2

x 6

x 4

x 1

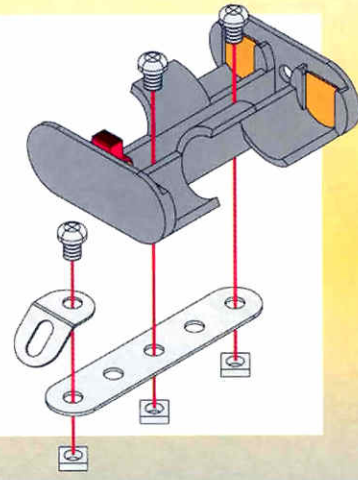


18

x 1

x 1

x 1



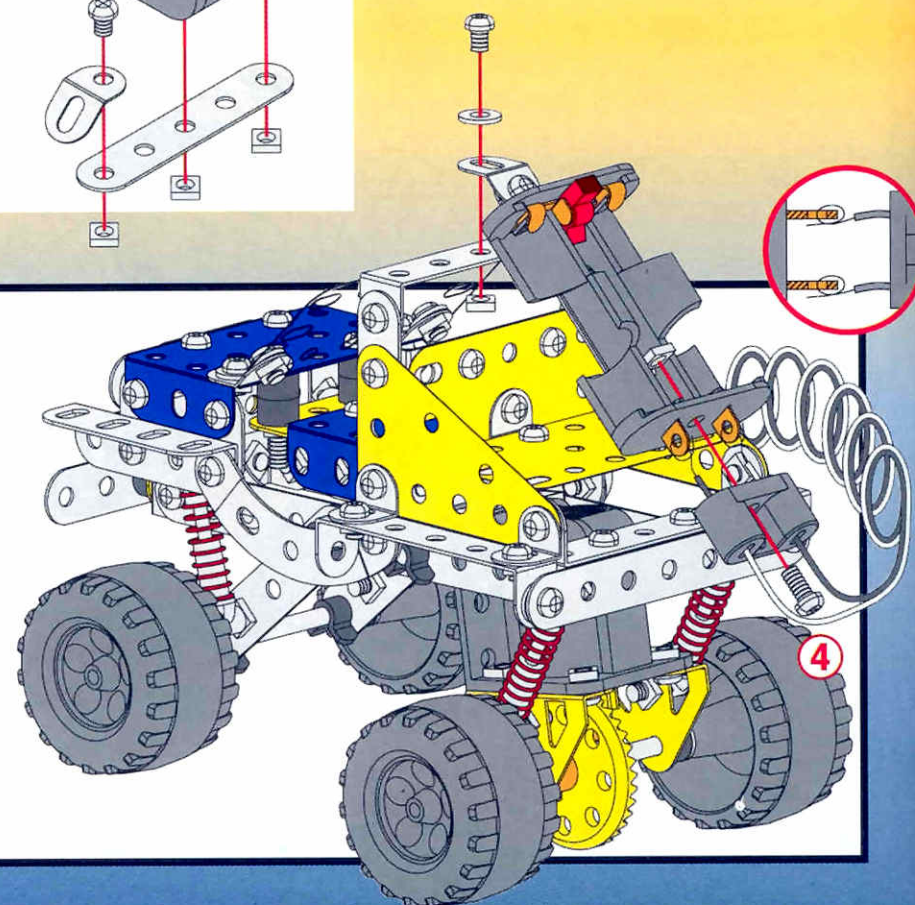
19

17 + 18 +

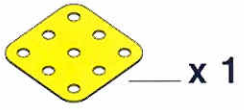
x 1

④ 9,5 mm
3/8" x 1

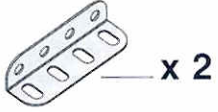
x 1



1



x 1



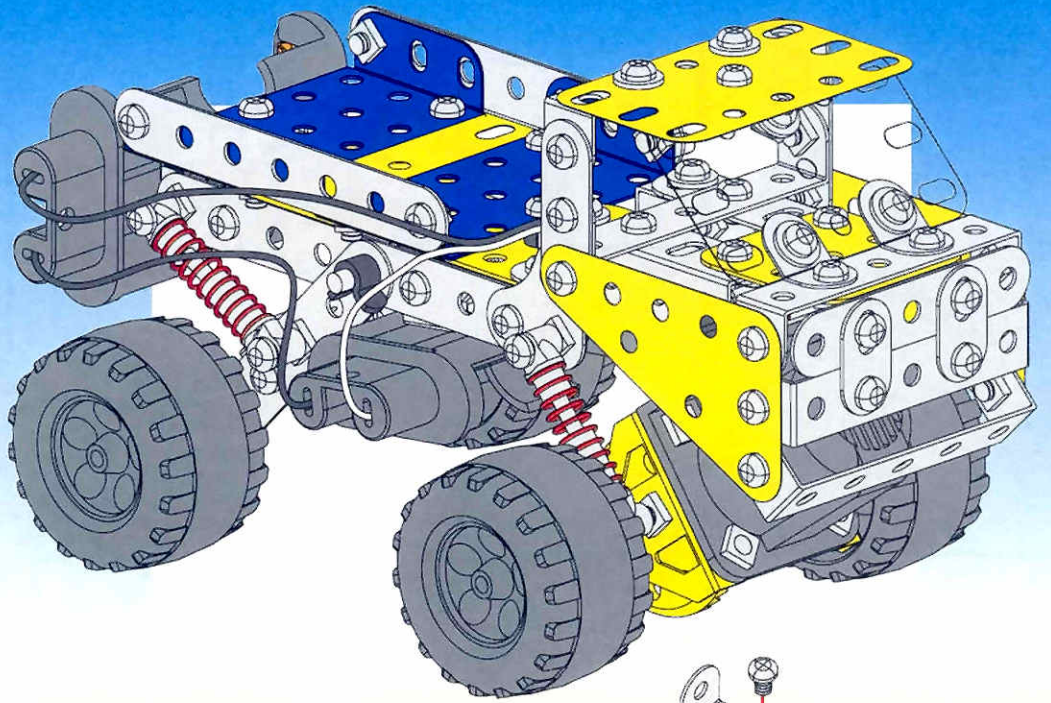
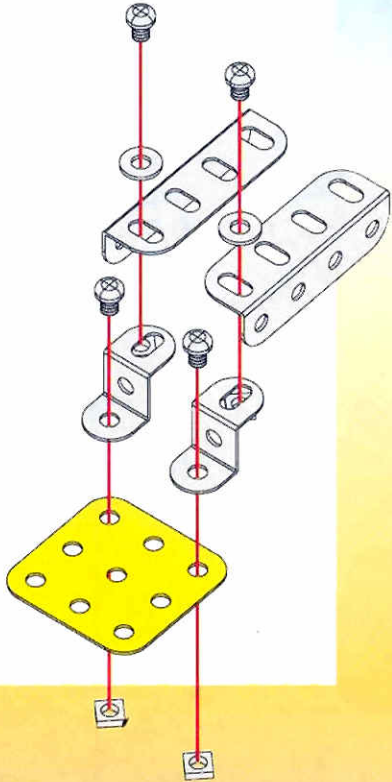
x 2



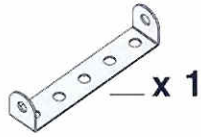
x 2



x 2



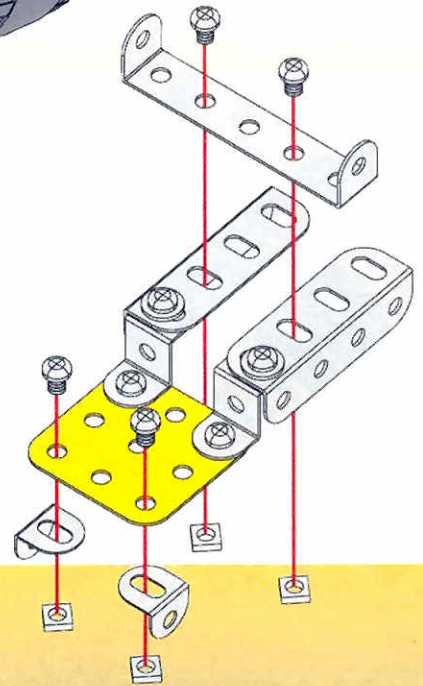
2



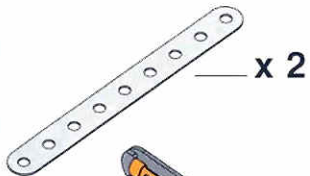
x 1



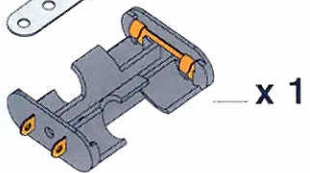
x 2



3



x 2



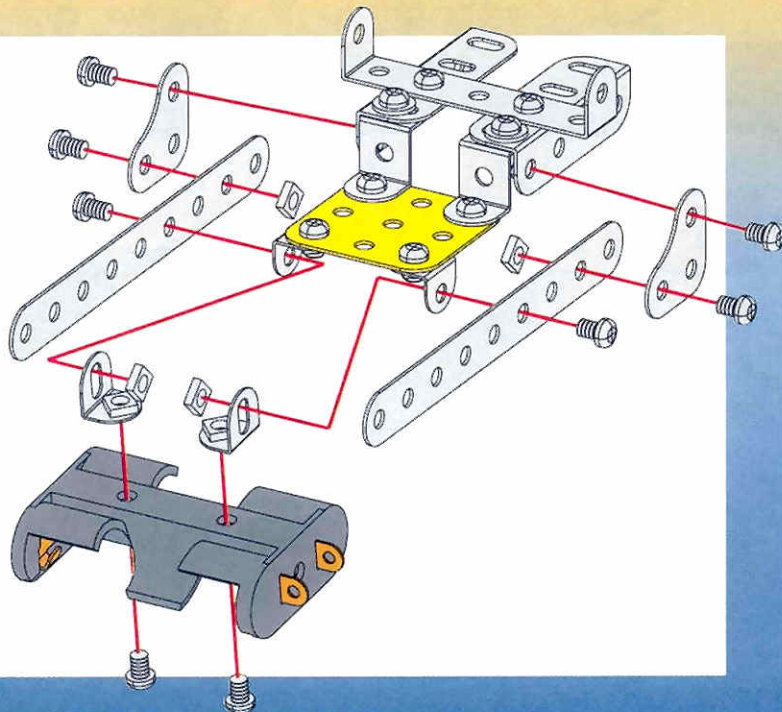
x 1

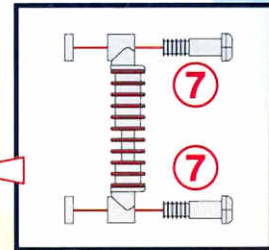
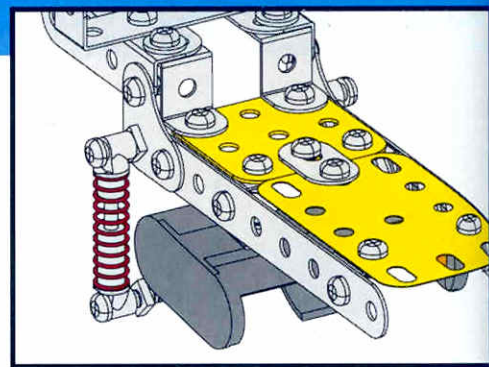
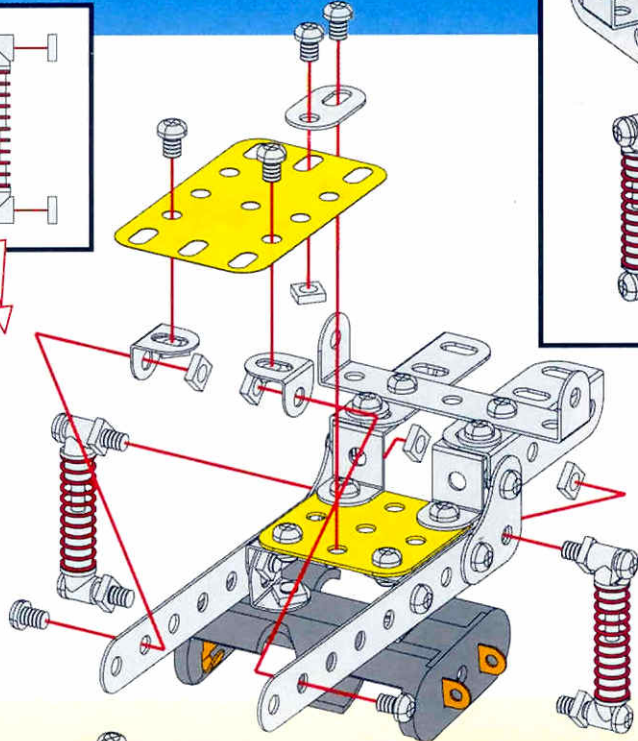
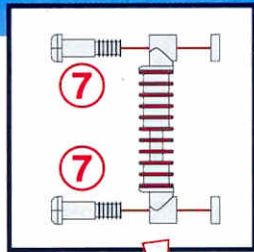
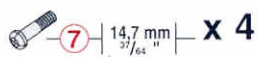
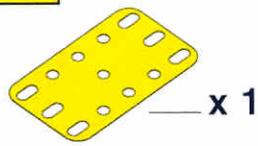
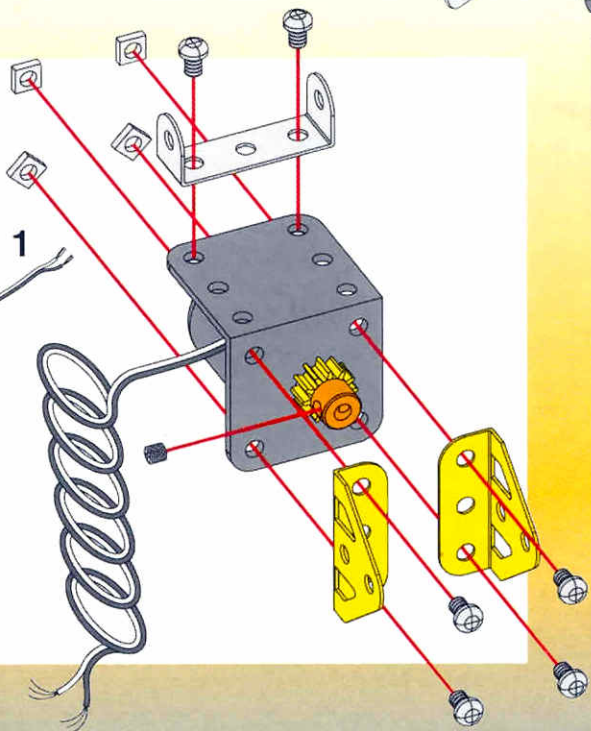
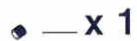
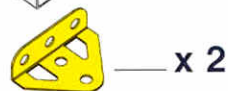
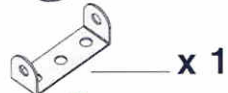
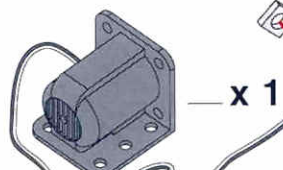
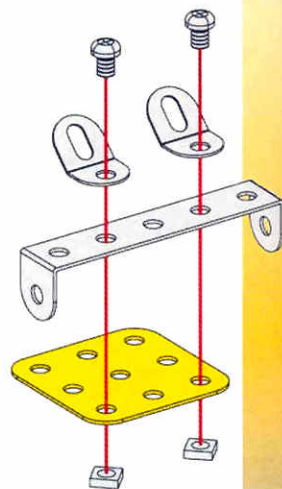
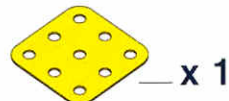
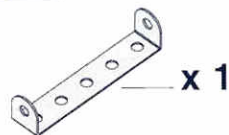


x 2

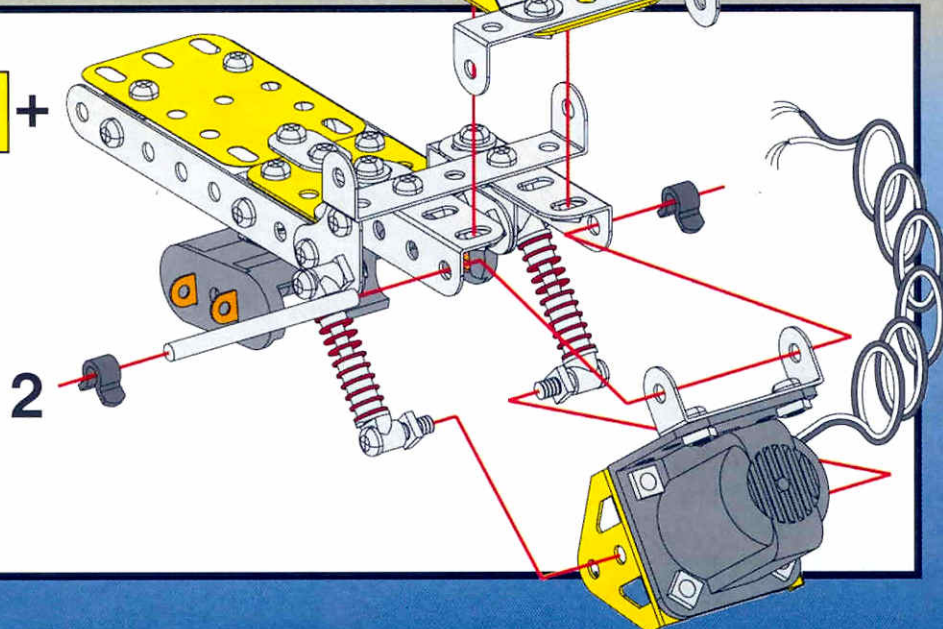
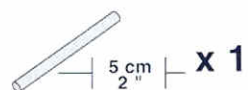


x 2

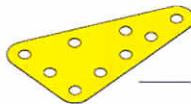
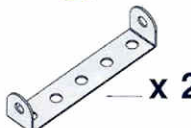



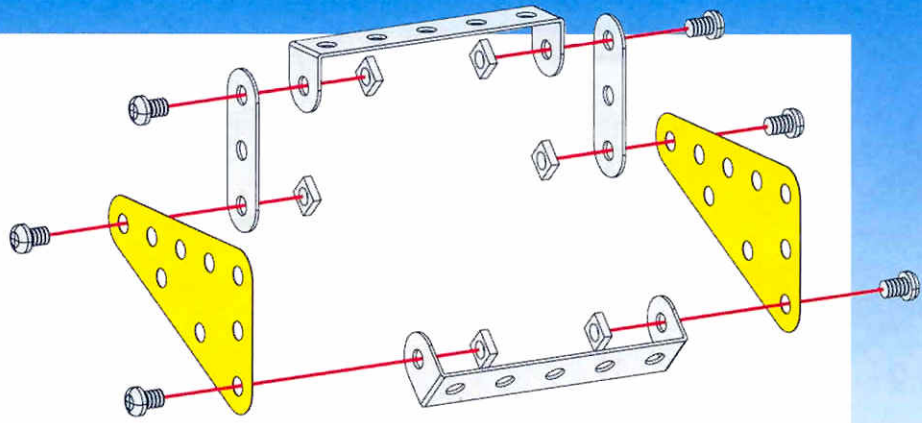
4**5****6****7**

4 + 5 + 6 +

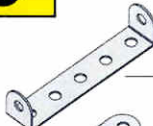




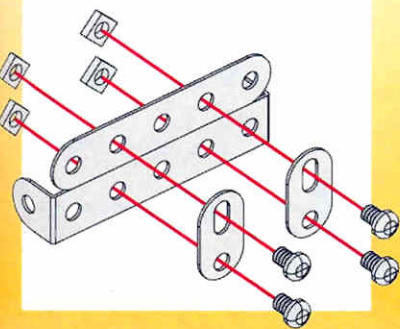
8

-  — x 2
-  — x 2
-  — x 2



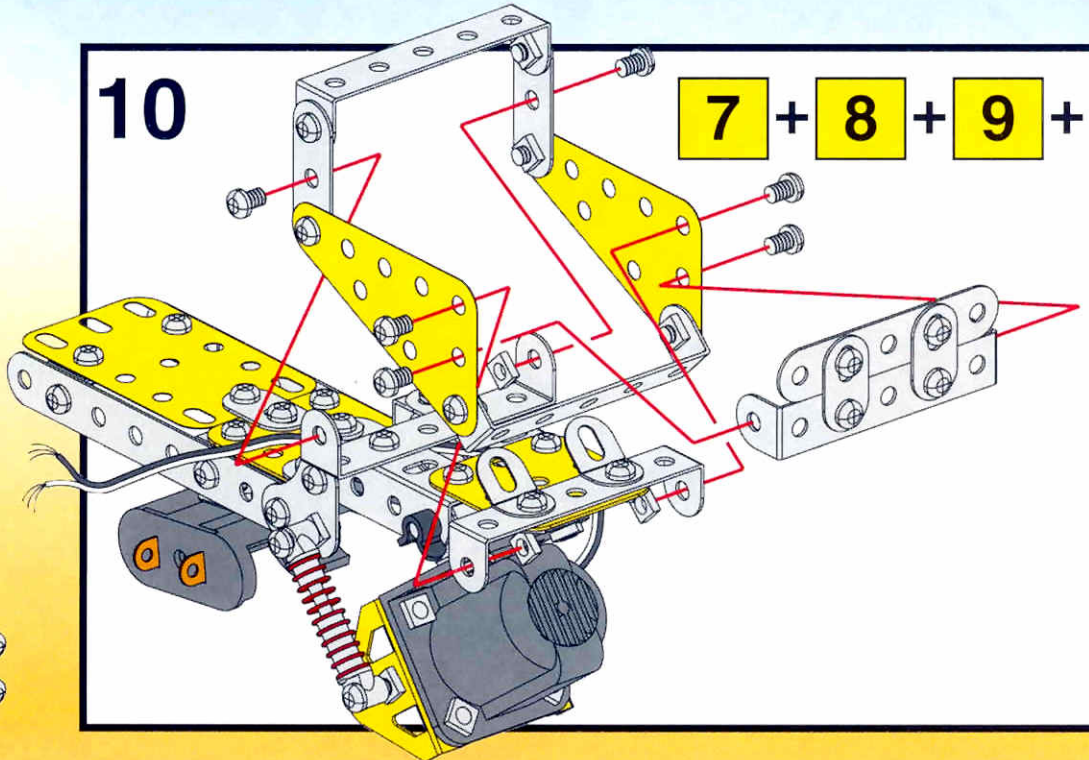
9

-  — x 1
-  — x 1
-  — x 2

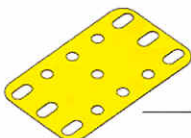
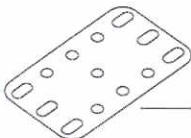




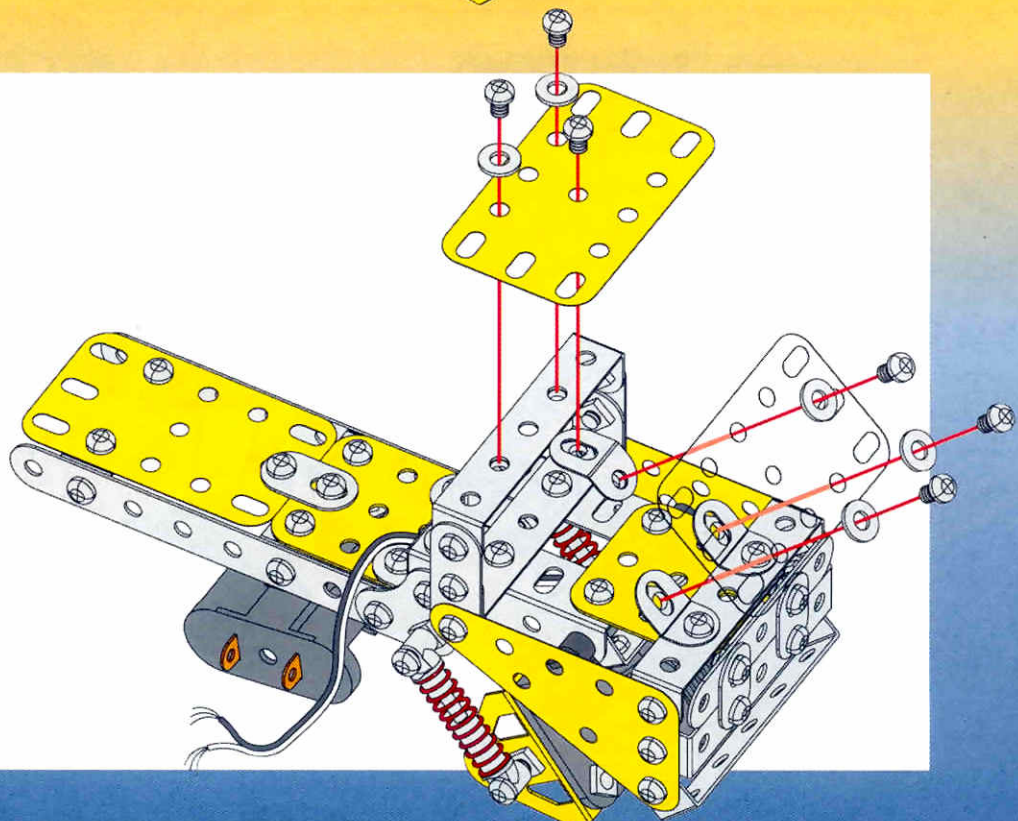
10

7 + 8 + 9 +

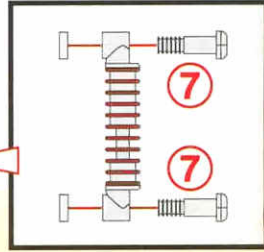
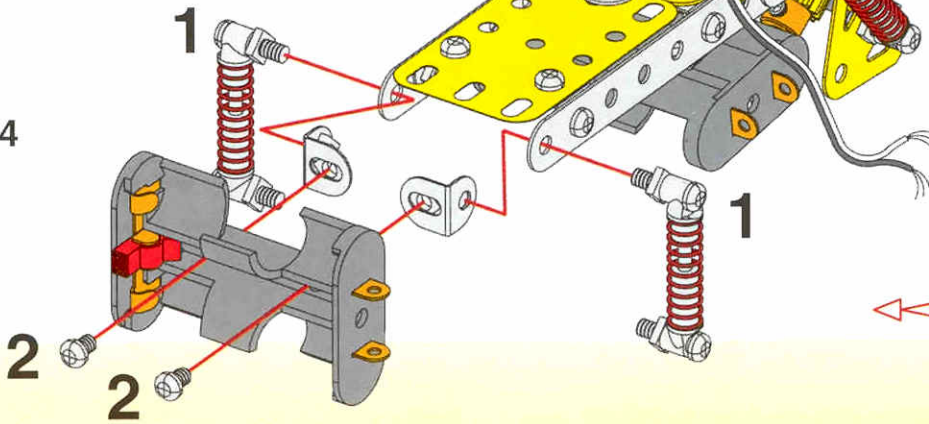
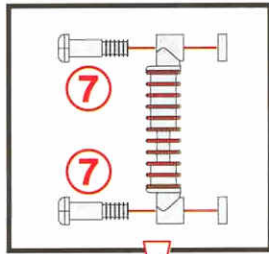
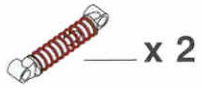
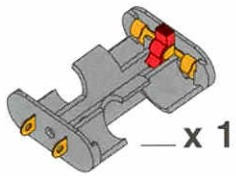


11

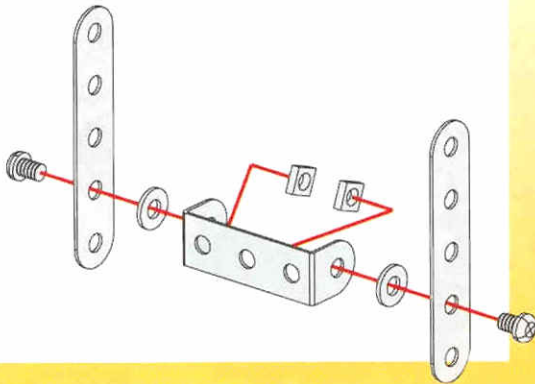
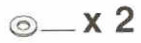
-  — x 1
-  — x 1
-  — x 1
-  — x 5



12

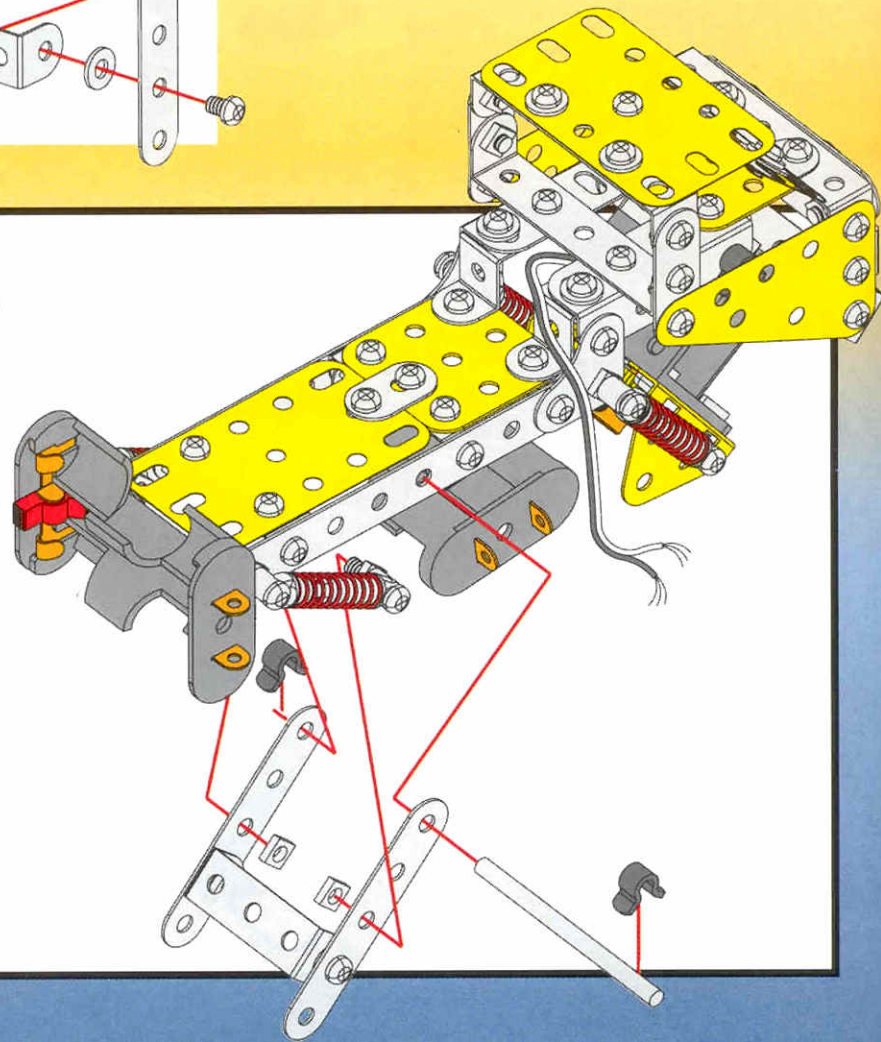
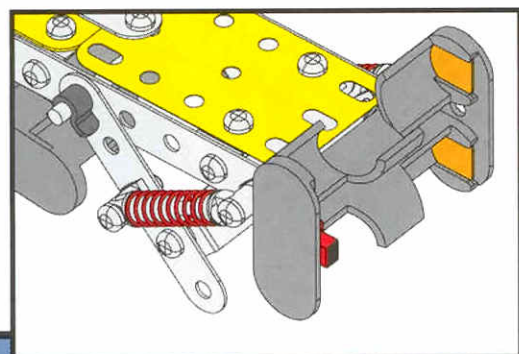
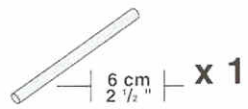


13

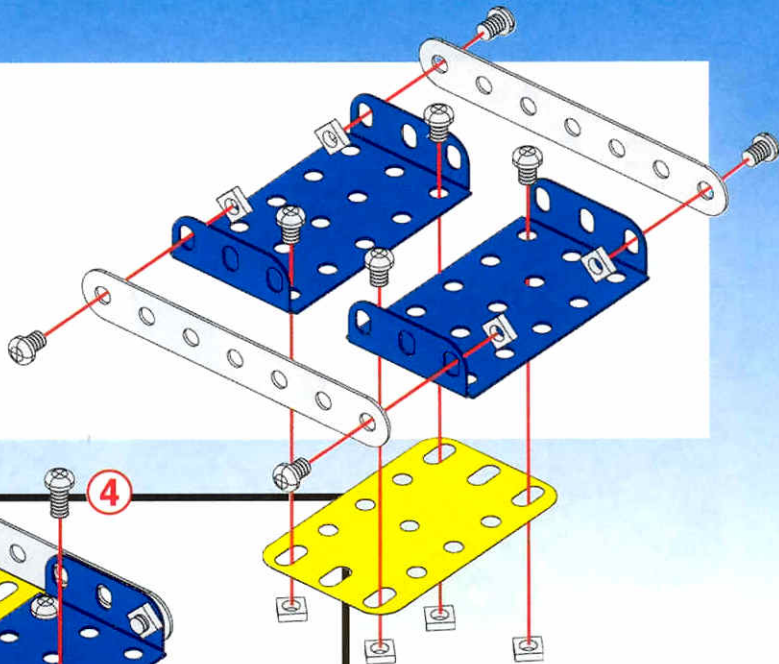
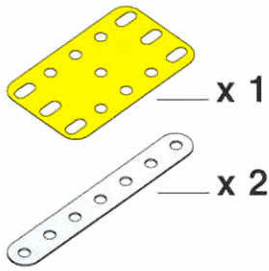
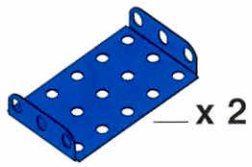


14

12 + 13 +

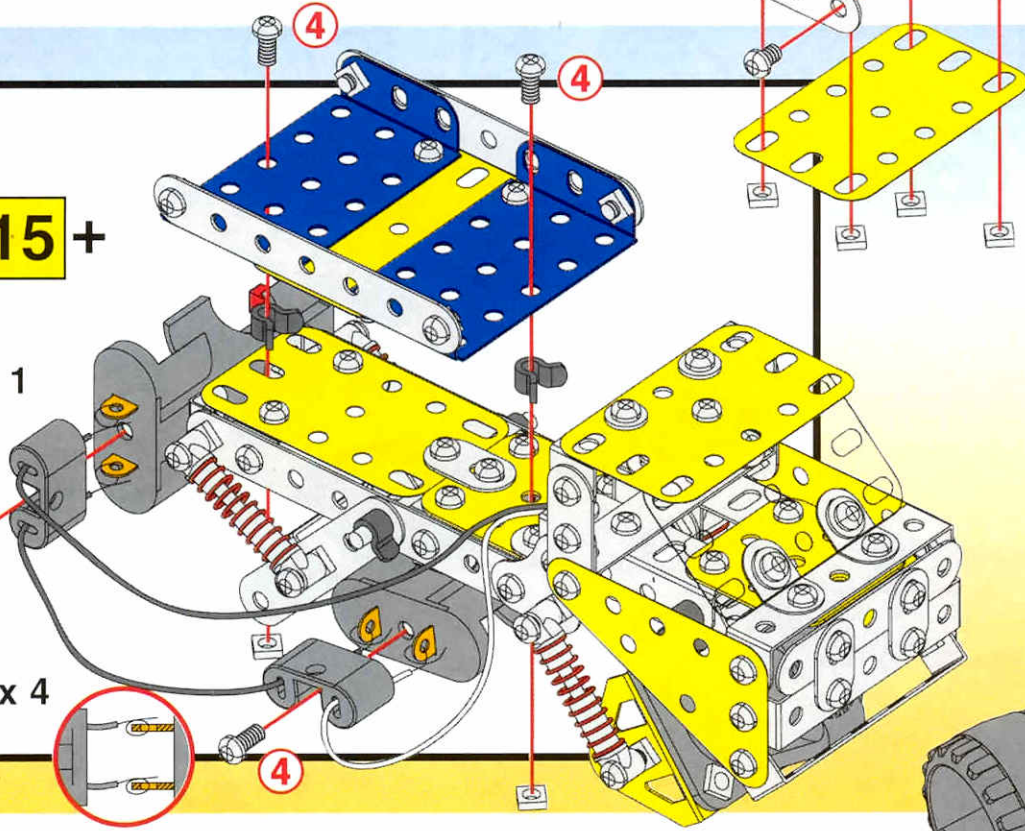
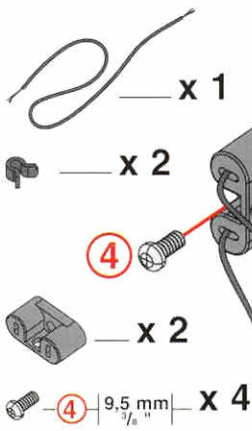


15

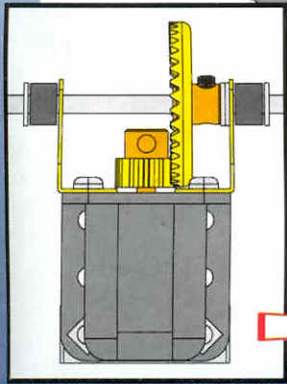
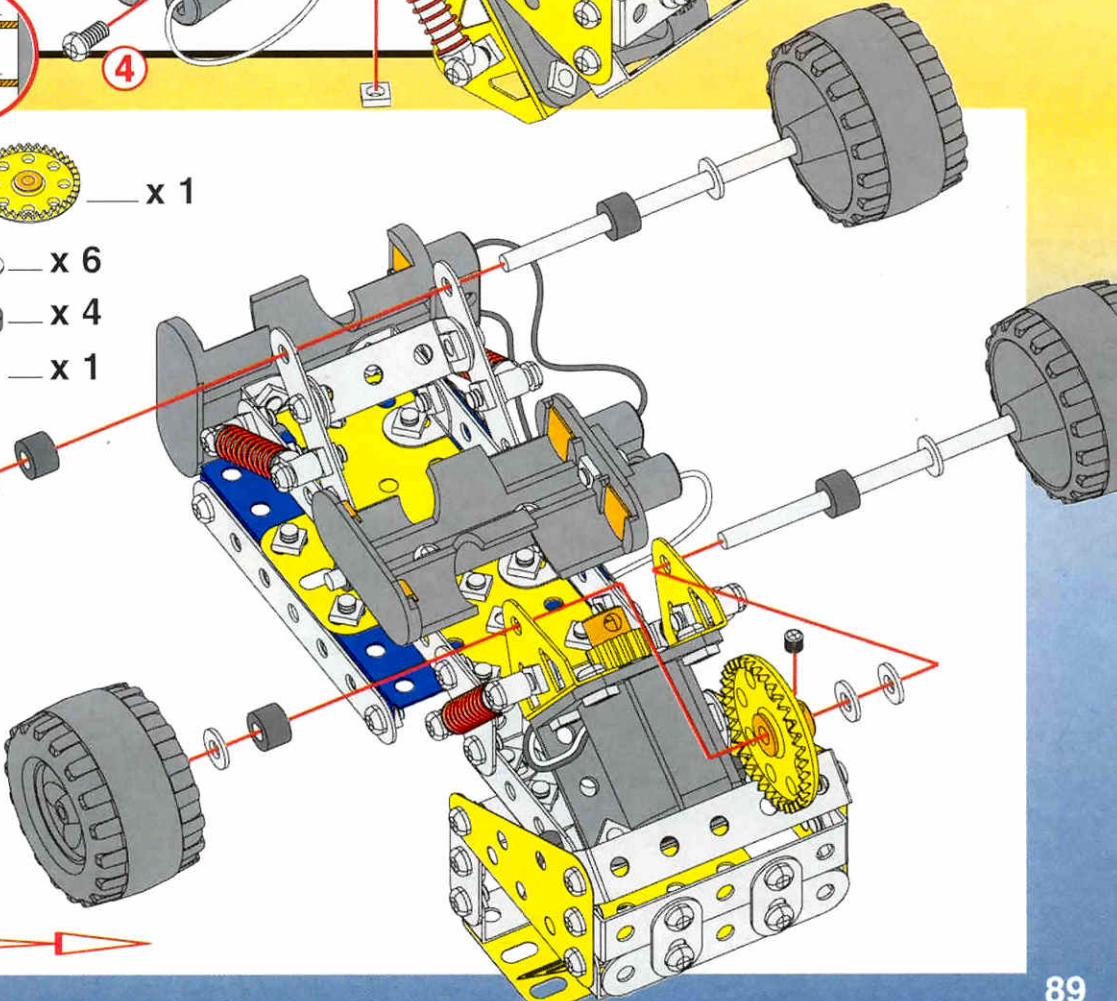
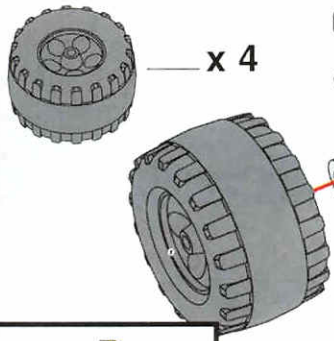
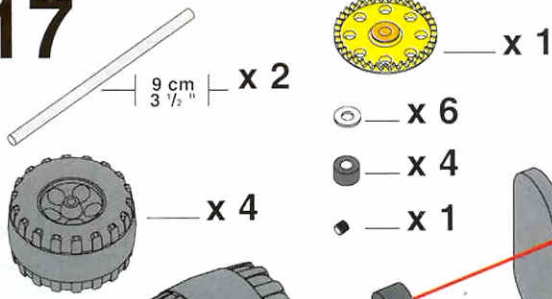


16

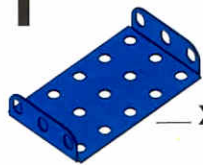
14 + 15 +



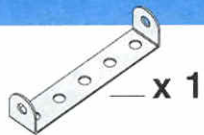
17



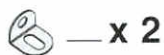
1



x 1



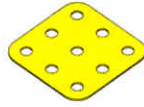
x 1



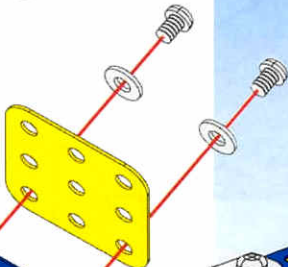
x 2



x 2



x 1



2



x 1



x 1



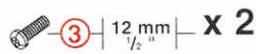
x 2



x 2

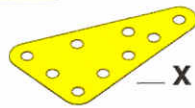


x 2



x 2

3



x 2



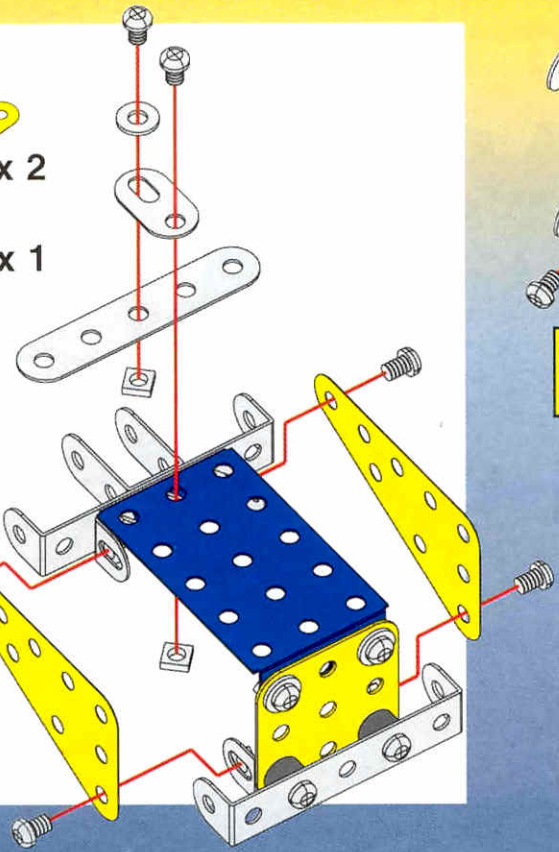
x 1



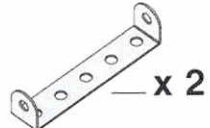
x 1



x 1



4



x 2



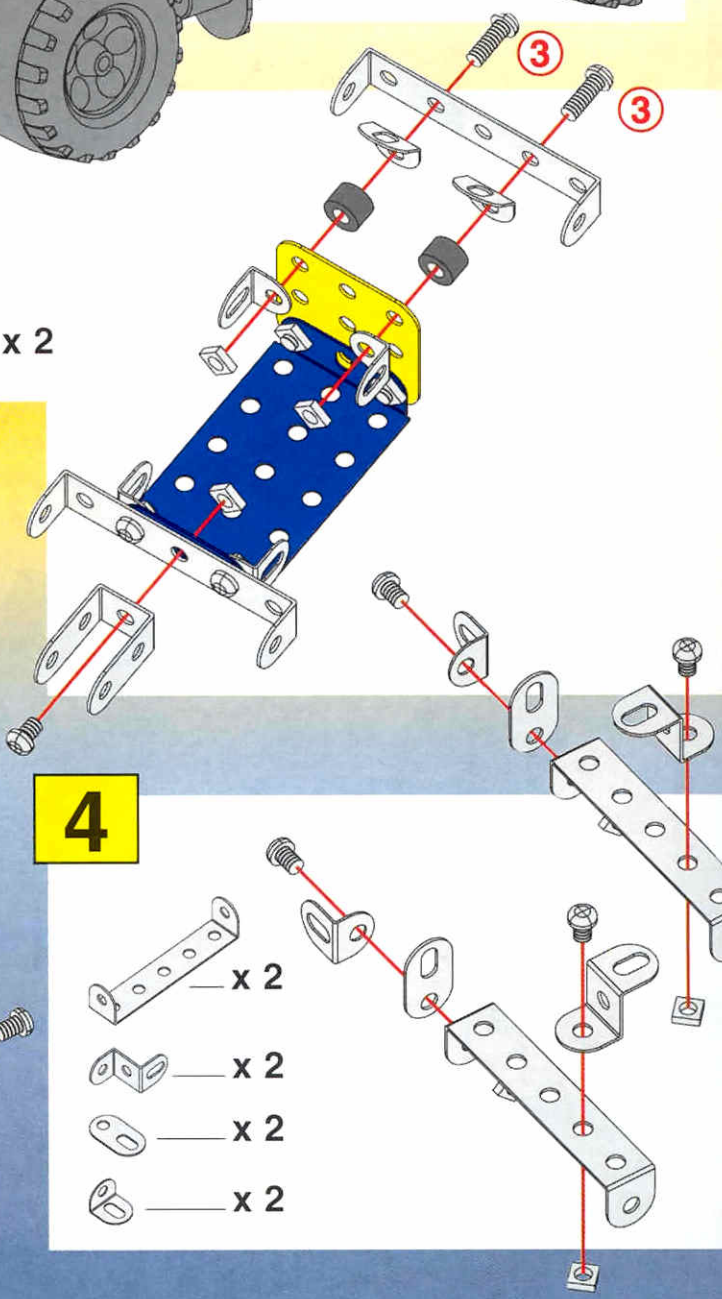
x 2



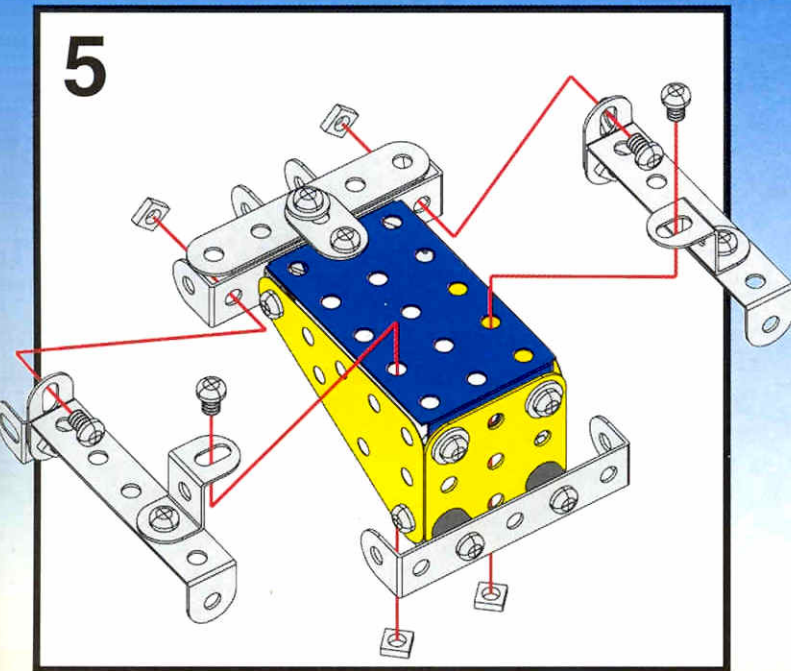
x 2





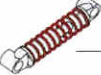

x 2

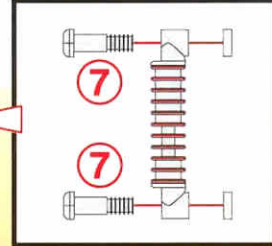
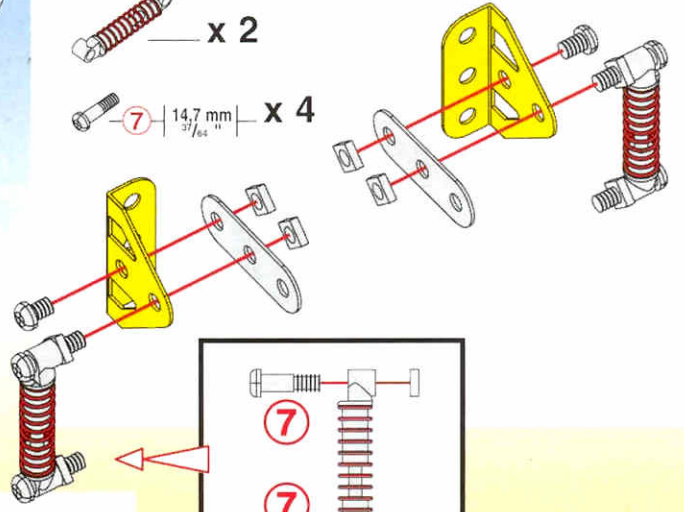
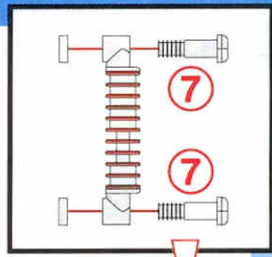


5

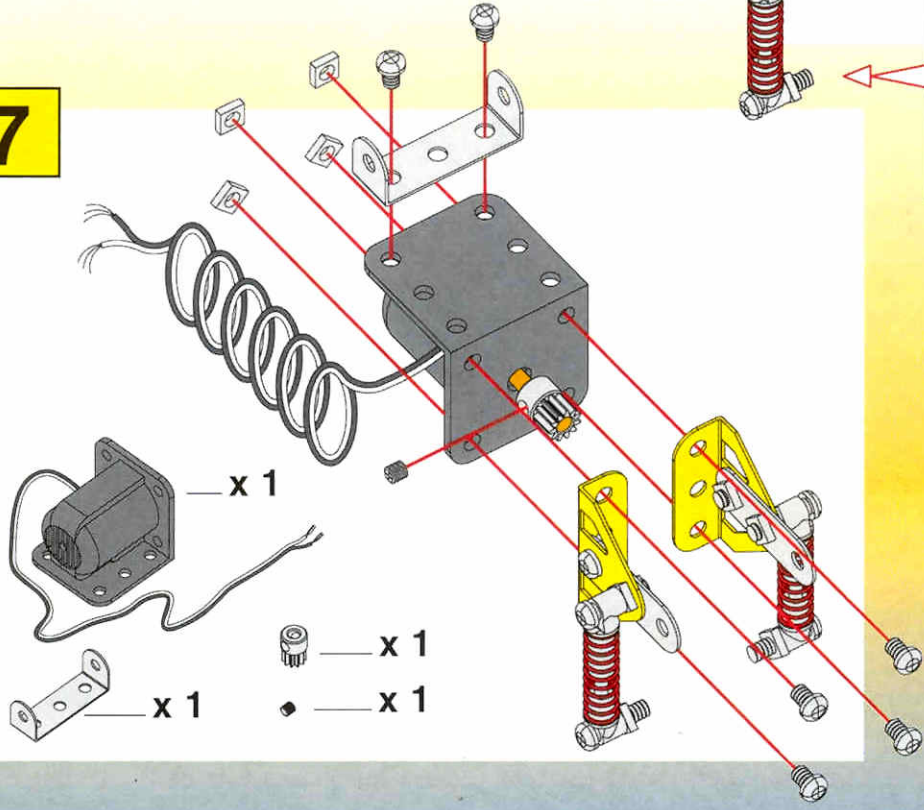


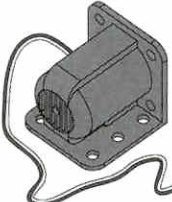
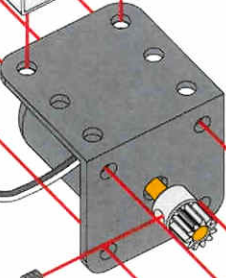
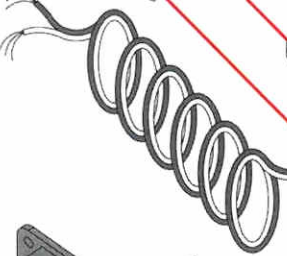

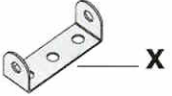


6

-  — x 2
-  — x 2
-  — x 2
-  ⑦ 14,7 mm $\frac{37}{64}$ — x 4



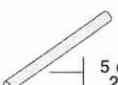

7

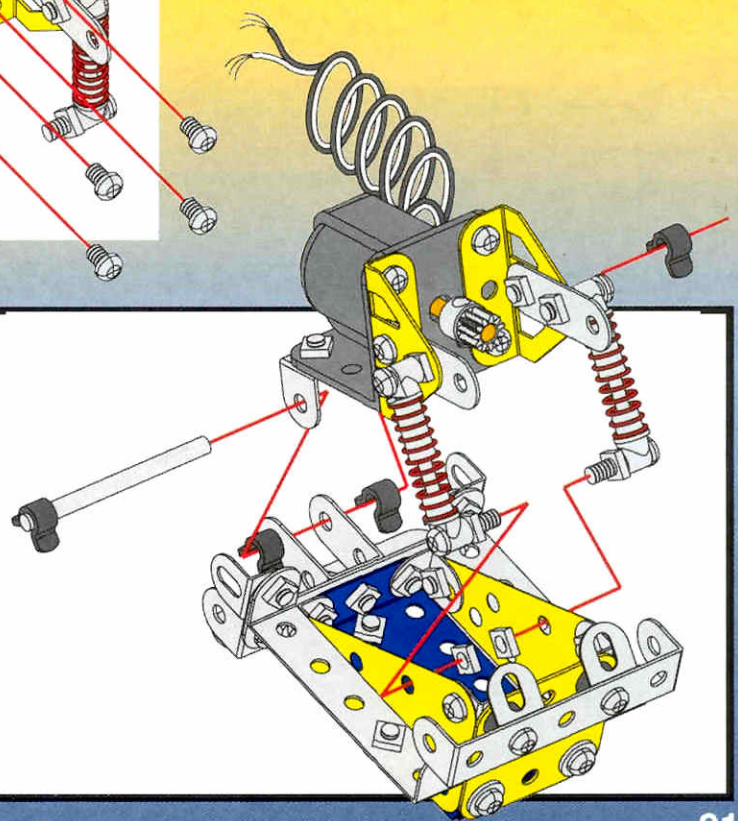


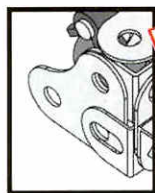
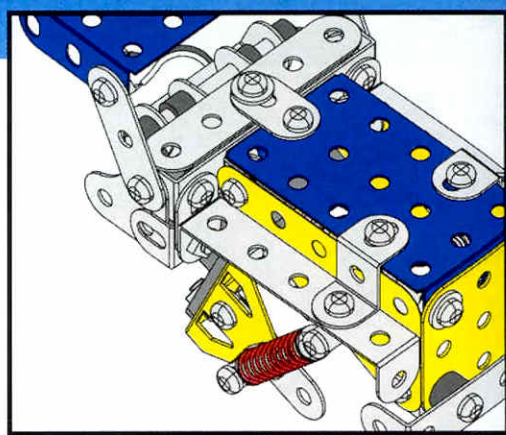
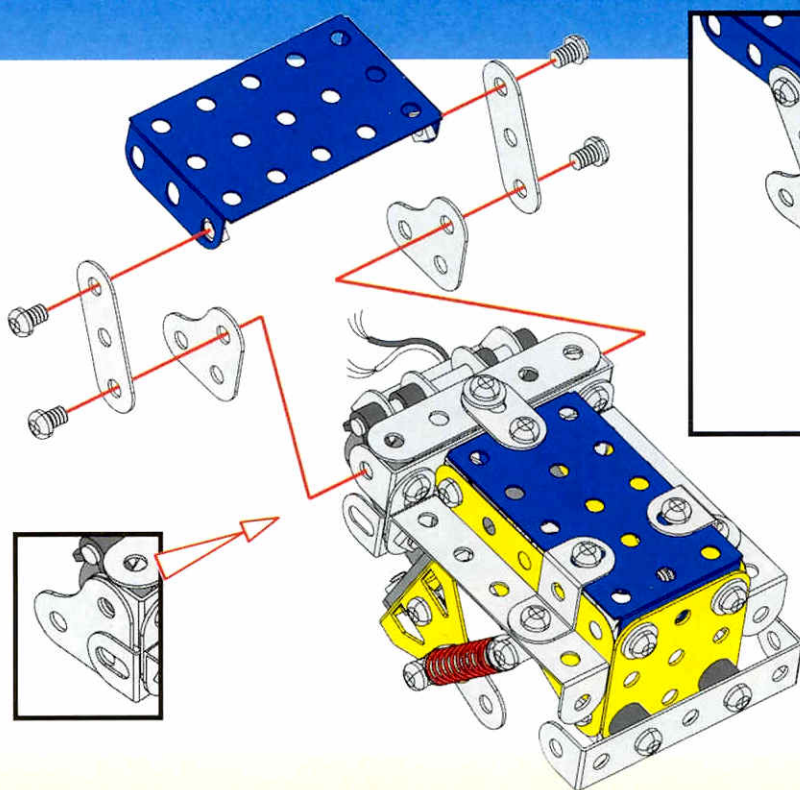
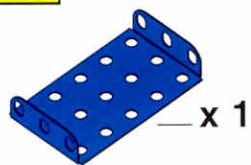
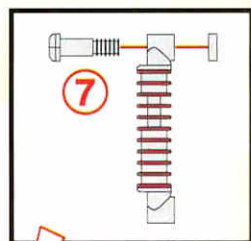
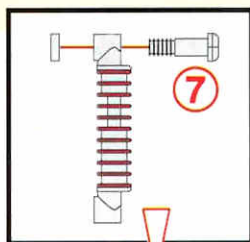
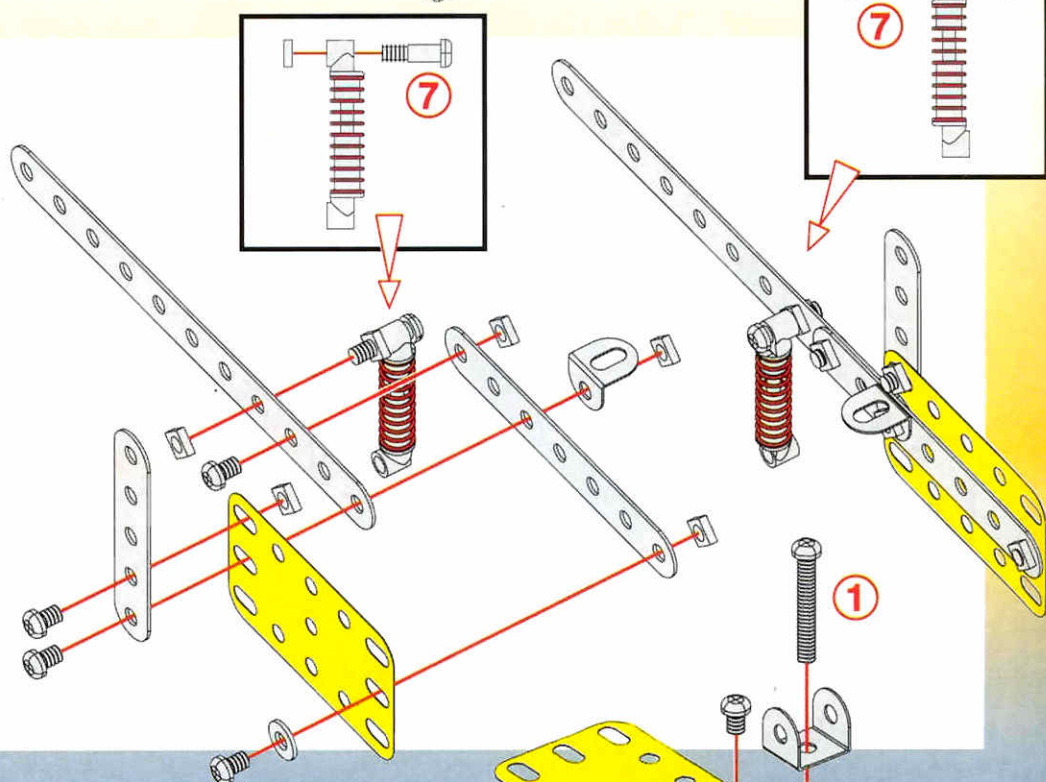
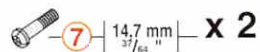
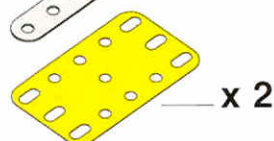
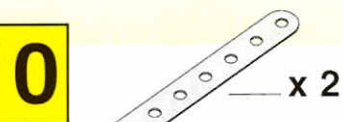
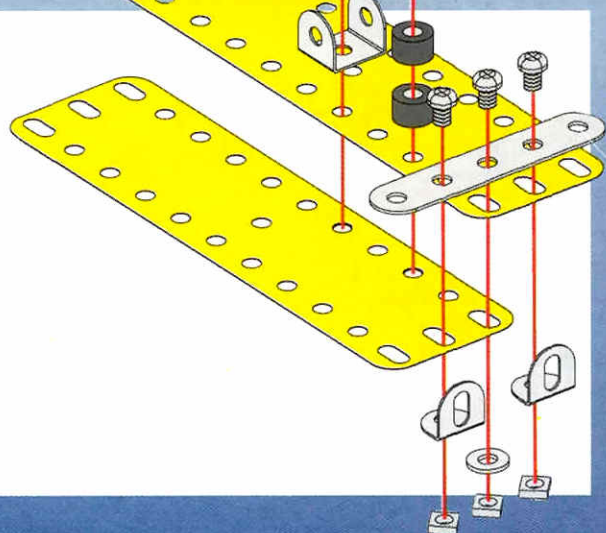
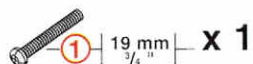
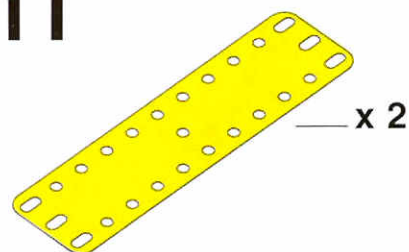
-  — x 1
-  — x 1
-  — x 1
-  — x 1
-  — x 1
-  — x 1
-  — x 1

8



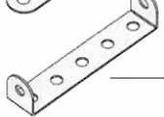





5 + 7 +

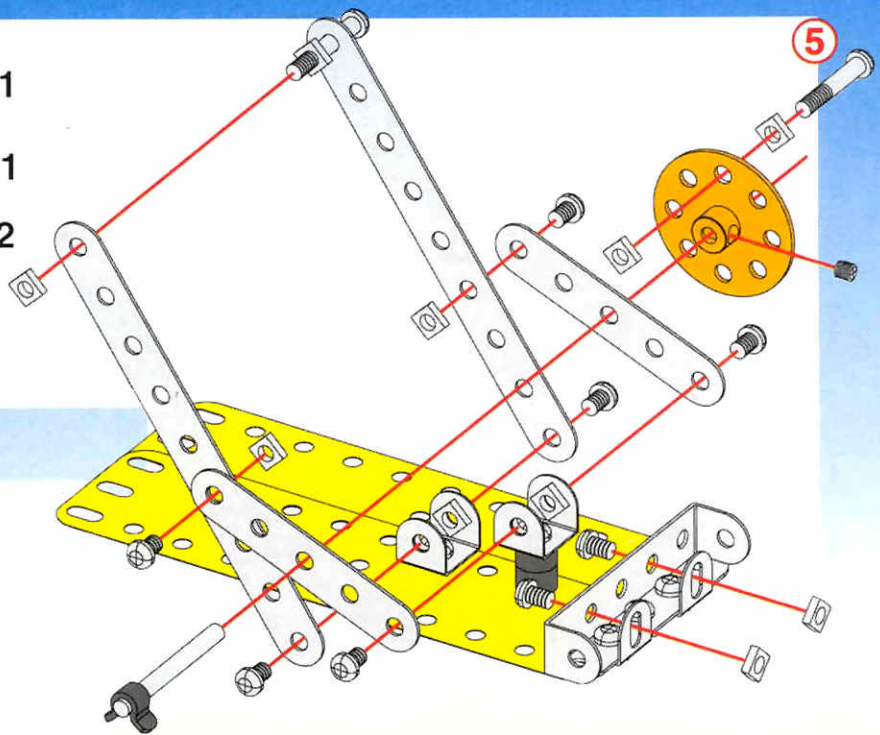
-  5 cm $\frac{1}{2}$ — x 1
-  — x 4



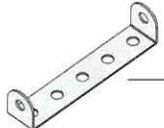
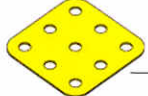




9**10****11****1**

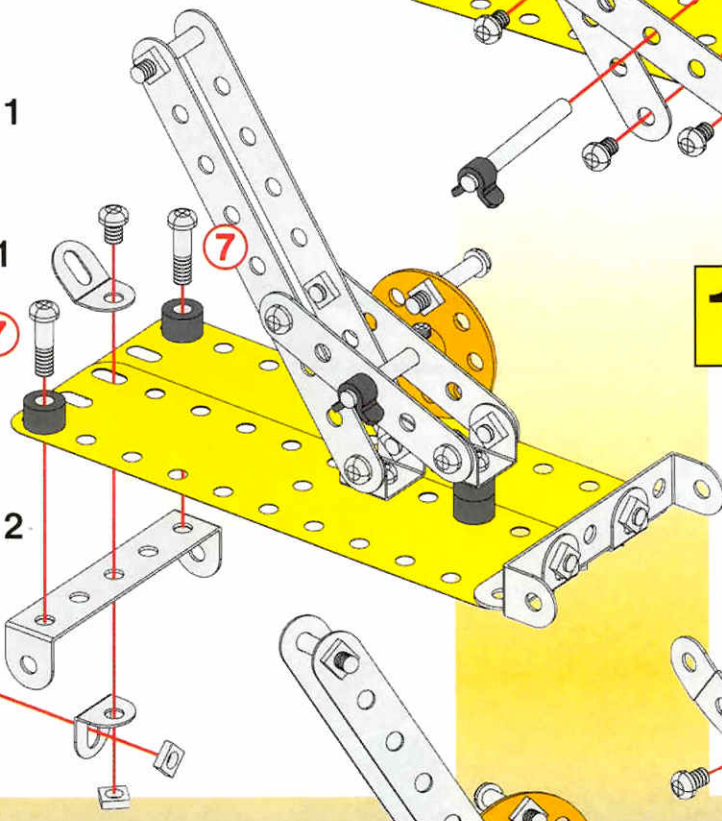
12

-  x 2
-  x 2
-  x 1
-  x 1
-  4 cm / 1 1/2" x 1
-  23 mm / 29/32" x 2
-  x 1
-  x 1

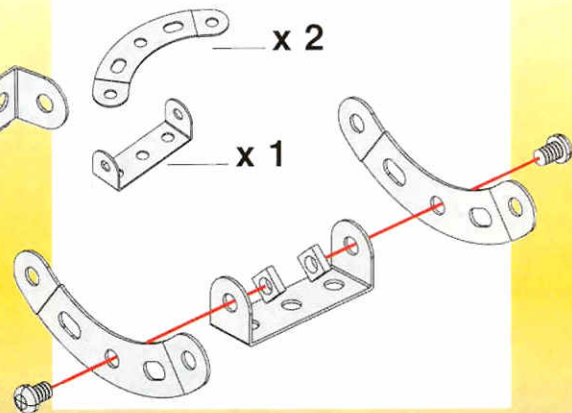


13


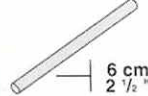


-  x 1
-  x 1
-  x 1
-  x 1
-  x 2
-  14.7 mm / 37/64" x 2

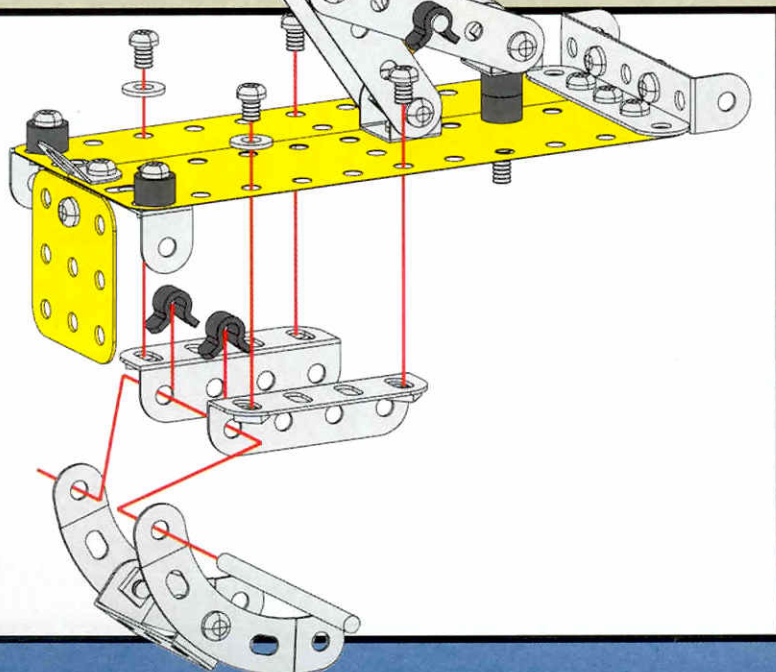


14



15

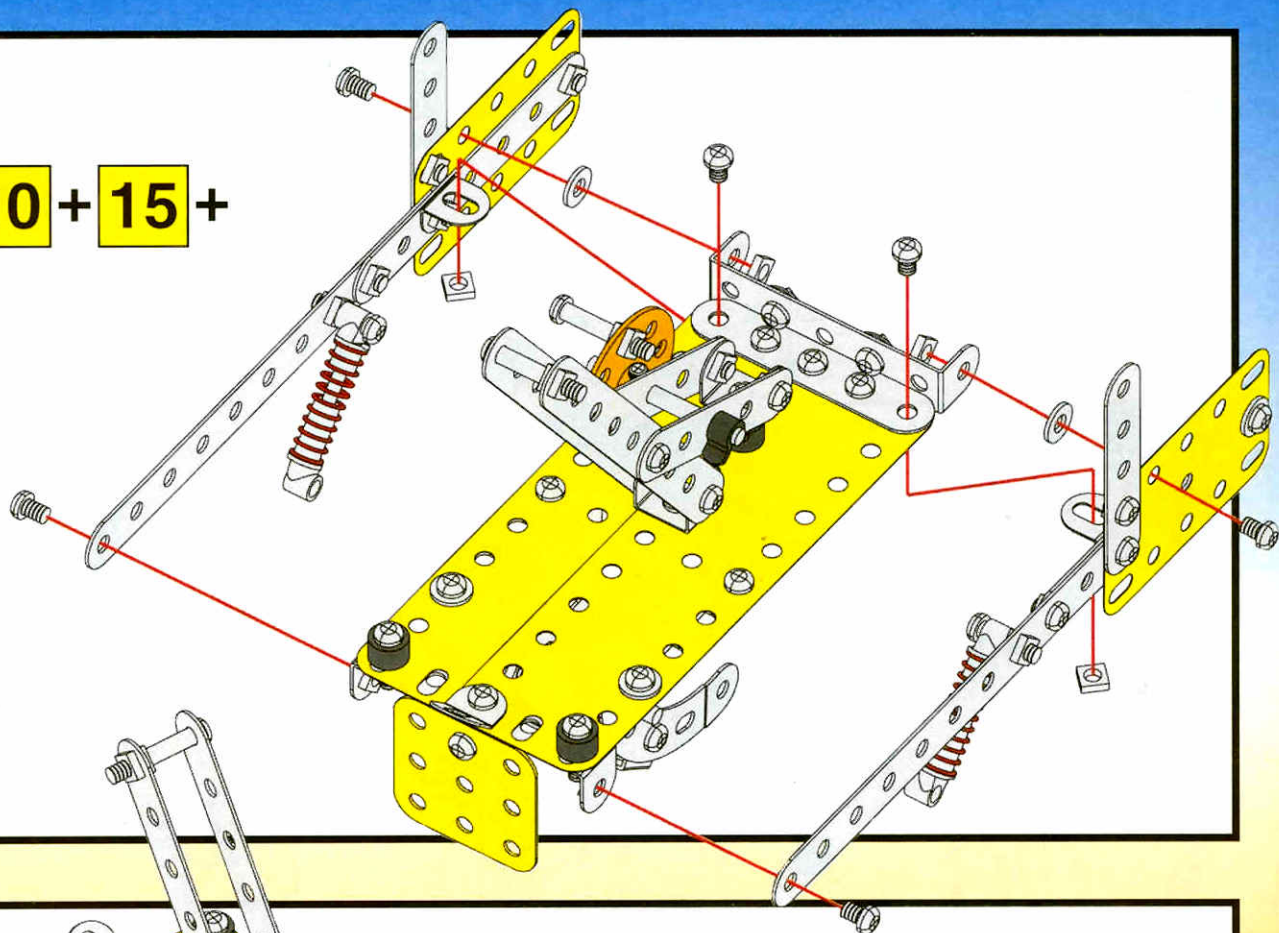
-  x 2
-  6 cm / 2 1/2" x 1
-  x 2
-  x 2



16

10 + **15** +

○ — x 2

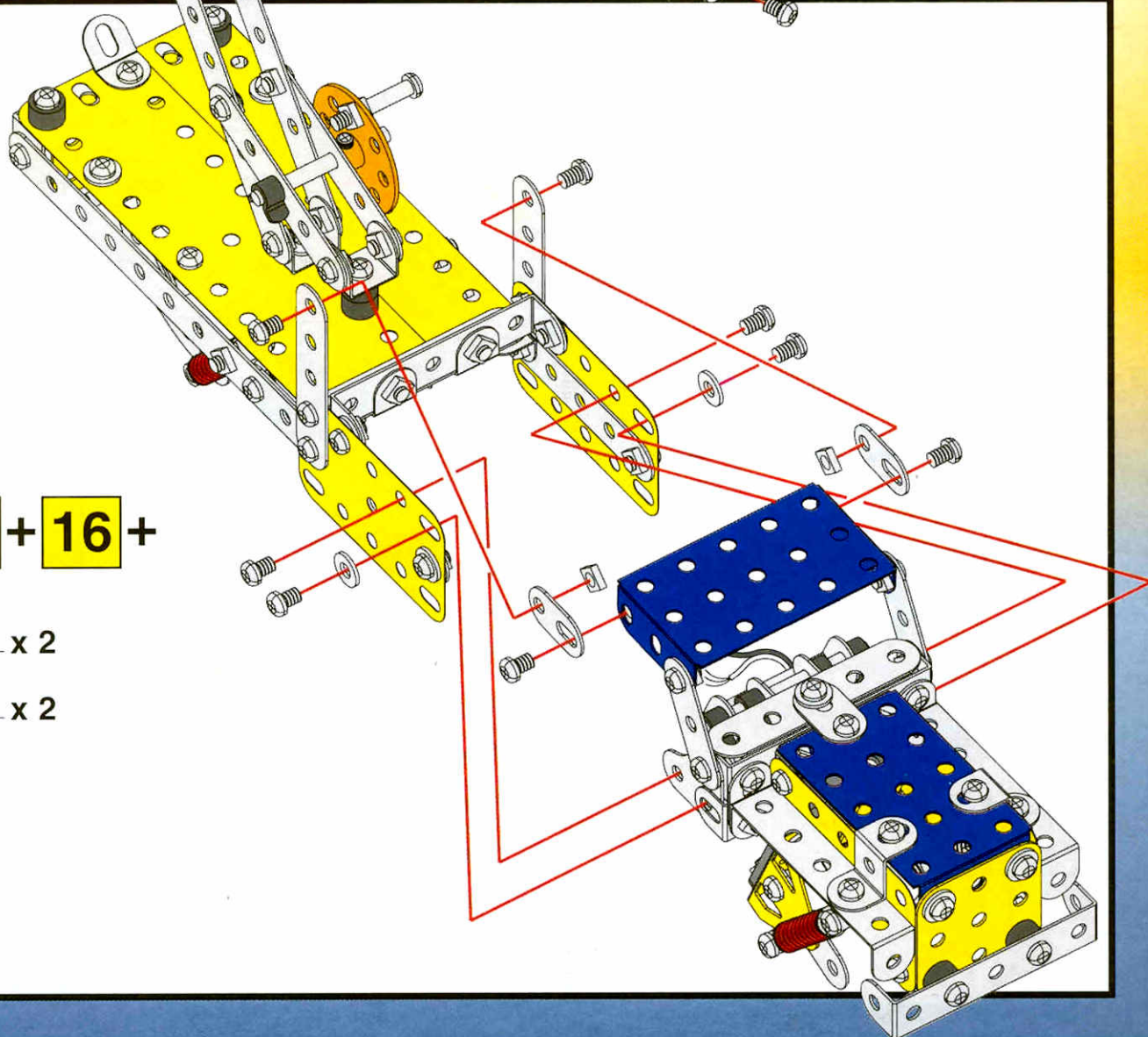


17

9 + **16** +

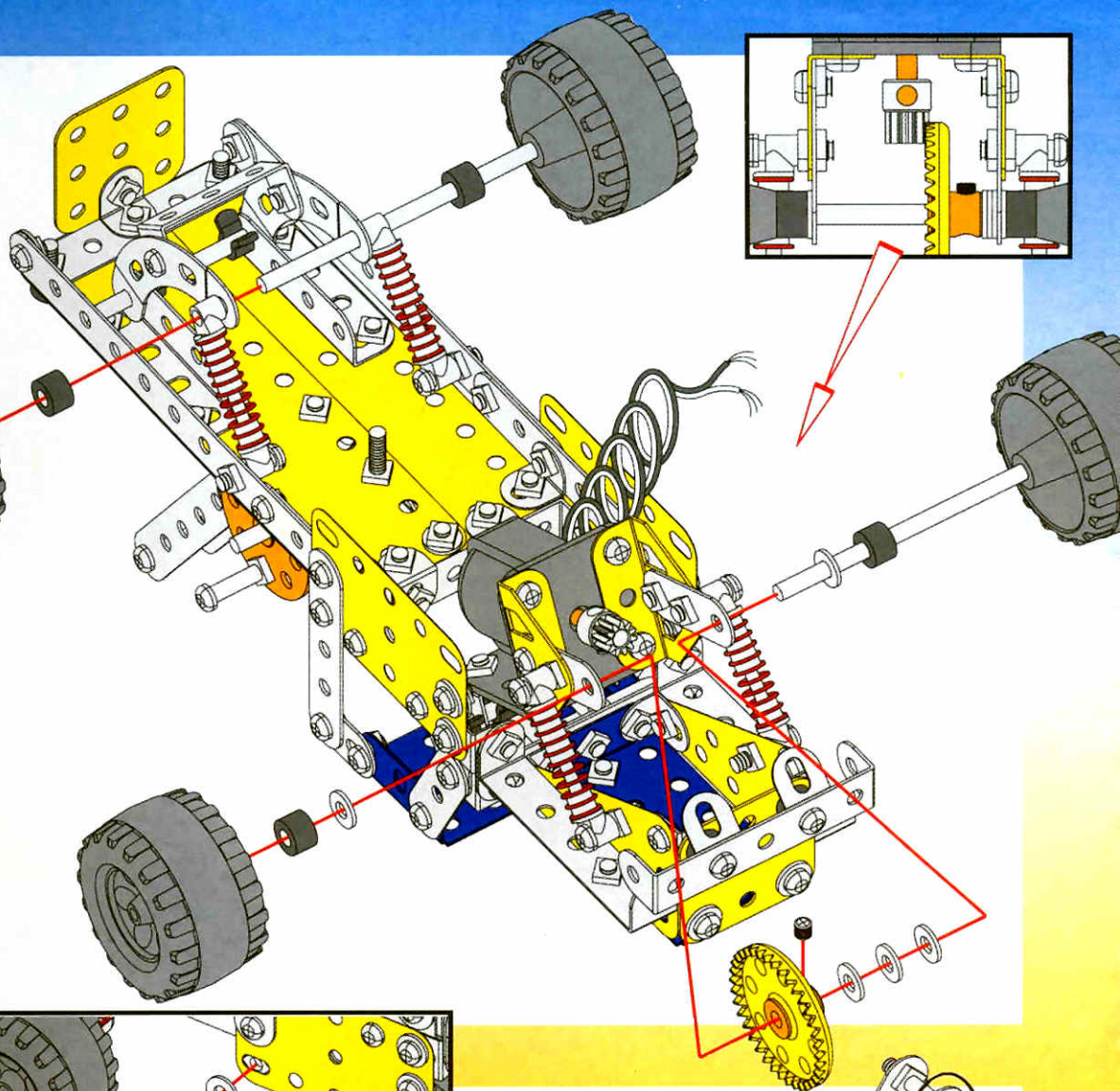
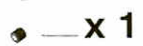
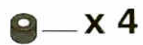
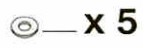
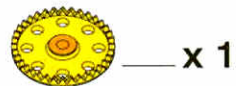
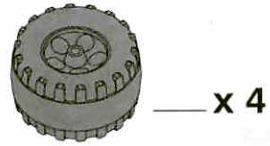
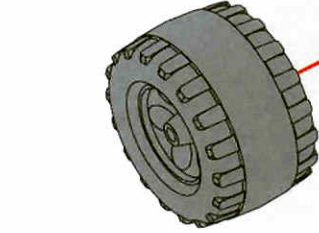
○ — x 2

○ — x 2

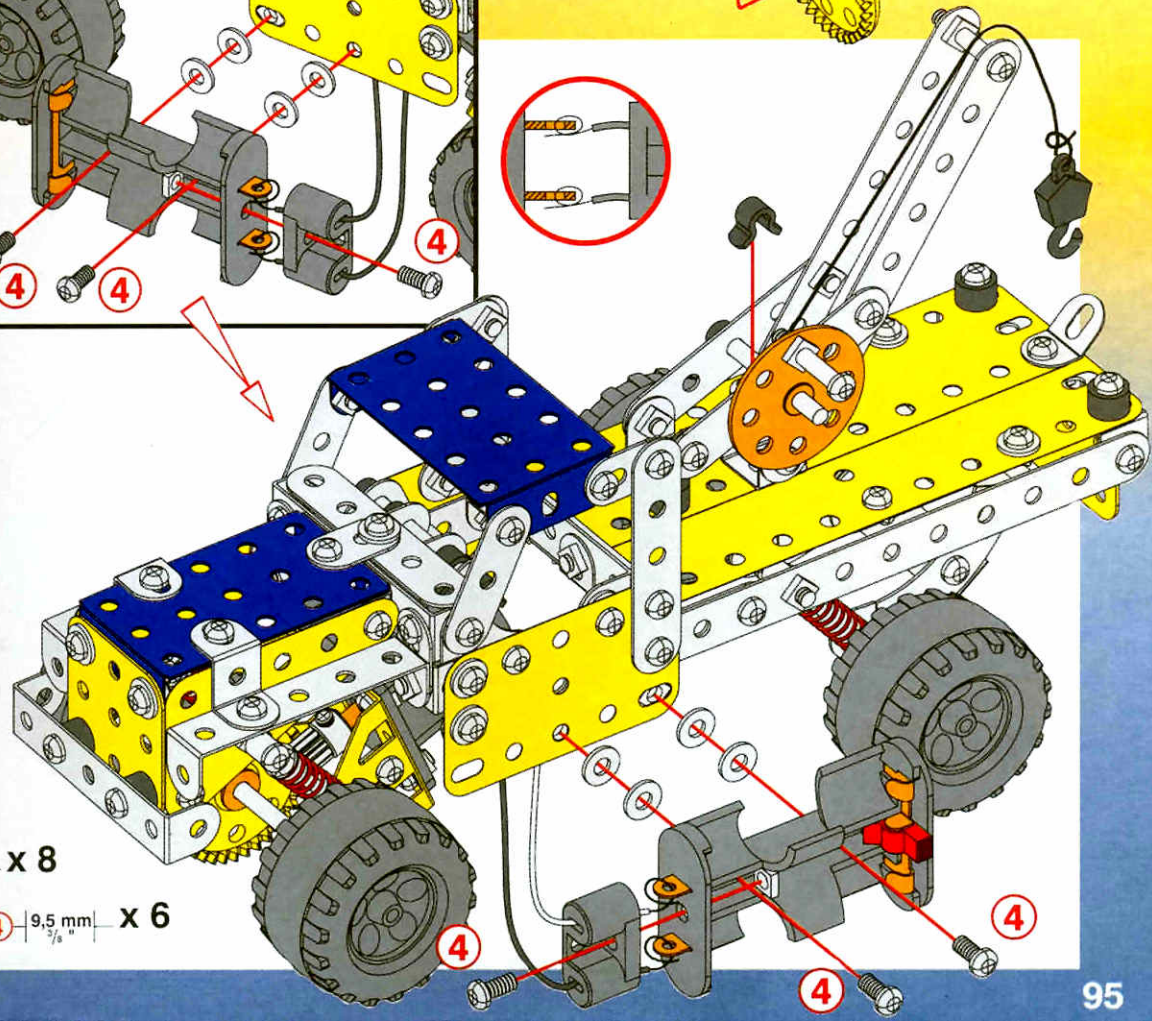
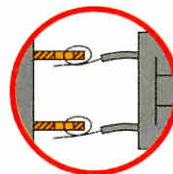
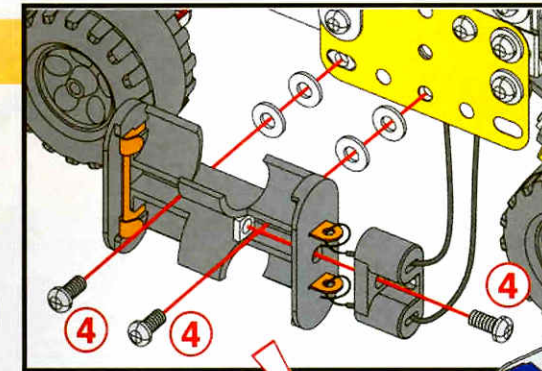
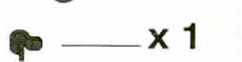
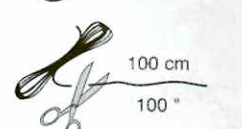
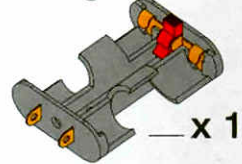
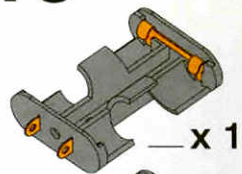


18

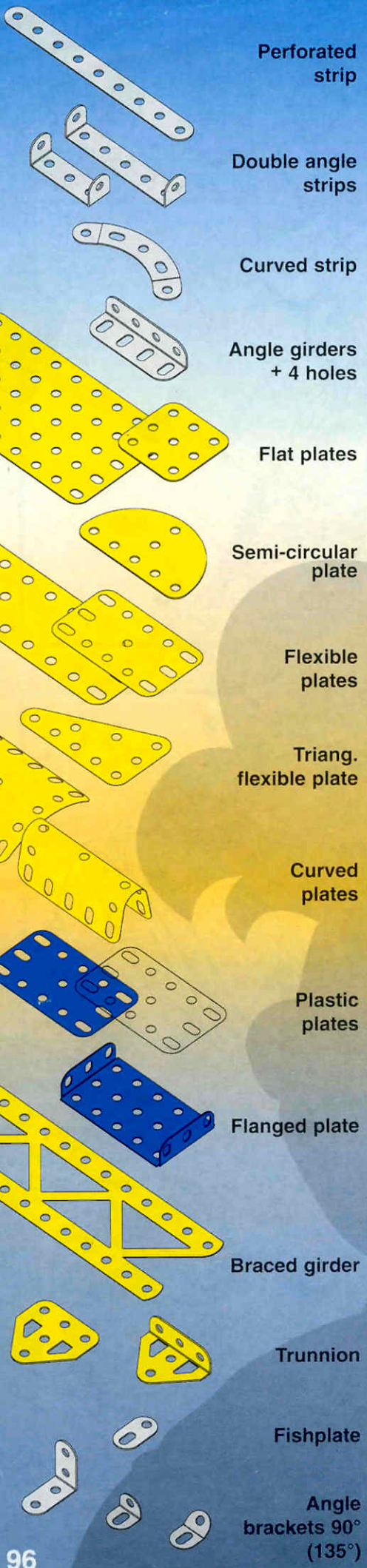
9 cm
3 1/2" x 2



19



GLOSSARY of PARTS



Perforated strip

Double angle strips

Curved strip

Angle girders + 4 holes

Flat plates

Semi-circular plate

Flexible plates

Triang. flexible plate

Curved plates

Plastic plates

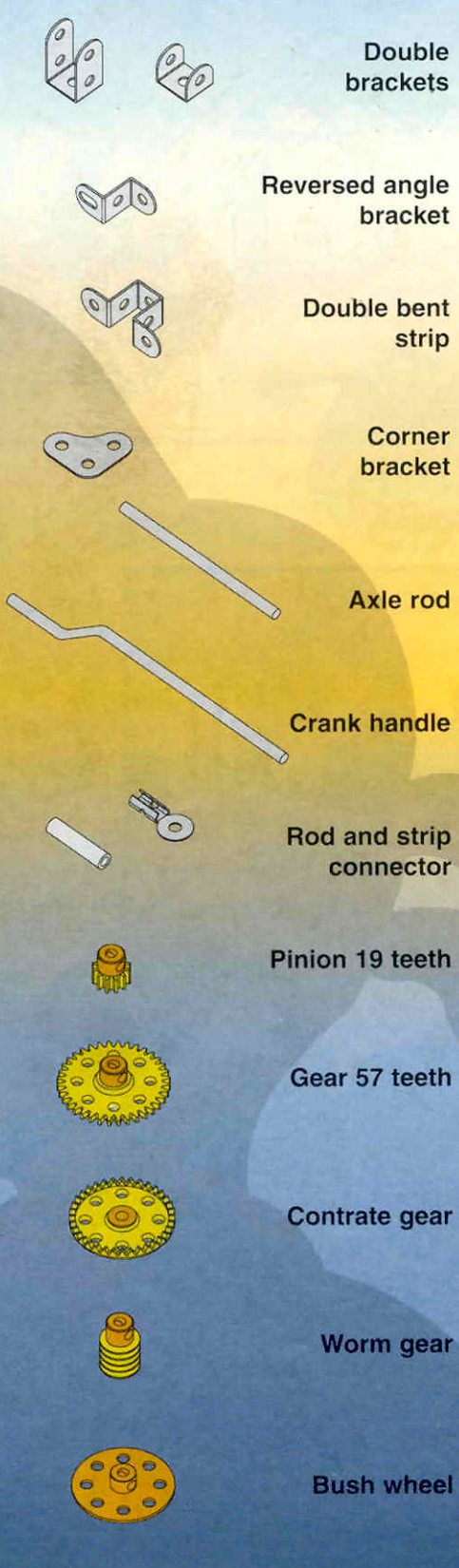
Flanged plate

Braced girder

Trunnion

Fishplate

Angle brackets 90° (135°)



Double brackets

Reversed angle bracket

Double bent strip

Corner bracket

Axle rod

Crank handle

Rod and strip connector

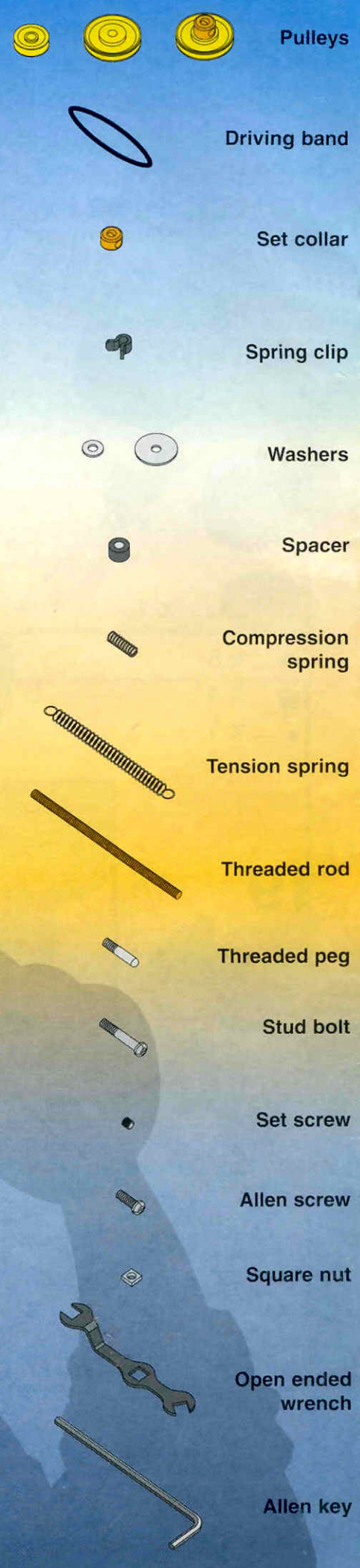
Pinion 19 teeth

Gear 57 teeth

Contrate gear

Worm gear

Bush wheel



Pulleys

Driving band

Set collar

Spring clip

Washers

Spacer

Compression spring

Tension spring

Threaded rod

Threaded peg

Stud bolt

Set screw

Allen screw

Square nut

Open ended wrench

Allen key