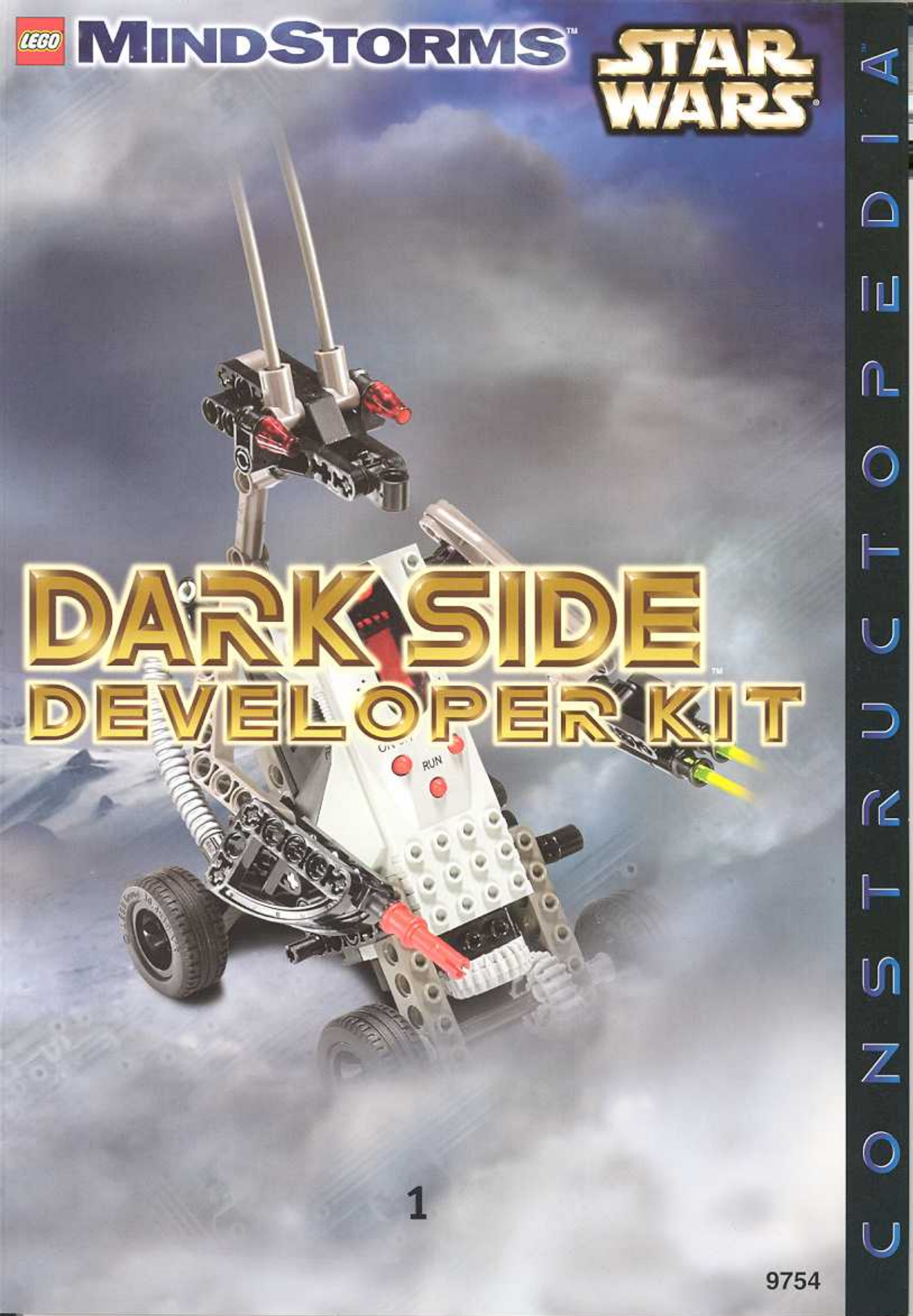
LEGO MINDSTORMS™

STAR WARS®



DARK SIDE™ DEVELOPER KIT

CONSTRUCTOPEDIA®

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THE MICRO SCOUT / THE MICRO SCOUT

The Micro Scout is a LEGO microcomputer that controls your inventions. With it, you can build Robots, Transports, and Creatures that move and react to light.

The Micro Scout has a built-in:

- **Motor that lets your inventions move**
- **Light Sensor that lets your inventions react to light**
- **Display and buttons that let you control your invention**

OFF
SELECT
RUN

GETTING STARTED

INSTALLING BATTERIES

US **The Micro Scout requires two AA/LR6 batteries (not included). Alkaline batteries are recommended.**

1. To install, slide the battery cover off (follow the arrows on back).
2. Put the two batteries in (make sure the "+" signs match).
3. Slide the cover back on.

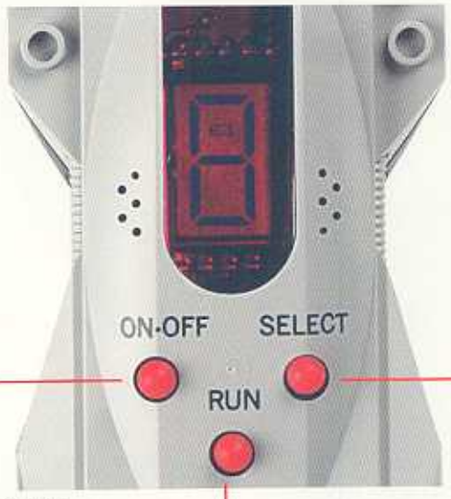
Important: When the Micro Scout's batteries are low, a battery icon appears on the Display.

Instructions for use of battery box: Never mix different types of batteries or old and new batteries in one battery box. Always remove the batteries from the battery box for long-term storage, or if they have reached the end of their life. Liquid leaking from dead batteries will damage the battery box.

Warning: Changes or modifications to the Micro Scout not expressly approved by the party responsible for the compliance could void the users right to operate the equipment.

FCC Statement: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesirable interference.

USING THE BUTTONS



ON-OFF
Turns the Micro Scout on and off.

When on, the Micro Scout is ready for your commands.

SELECT
Switches between the 7 built-in programs, as well as the P program.*

** Check out www.legomindstorms.com/darkside for more information on the P program.*

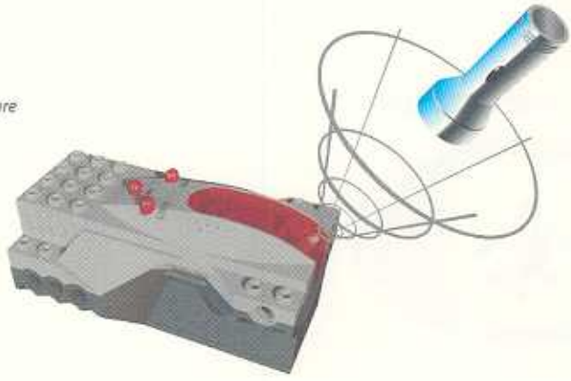
RUN
Starts and stops the Micro Scout's programs.

When a program is running, its number flashes in the Display.

LIGHT SENSOR

Light Sensor
A Light Sensor is built into the front of the Micro Scout. It lets the Micro Scout see changes in light.

The Light Sensor is placed at a 45 degree angle.



When using a light to control your Robot, be sure to aim your light directly at the Light Sensor.

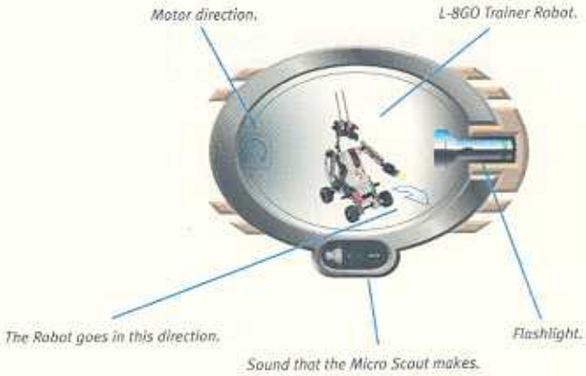
CHECKPOINT: LIGHT SENSOR

1. Make sure the Micro Scout is turned on.
2. Press **Select** until the display shows Program 6.
   This is the Alarm program.
3. Press **Run**.
   The Micro Scout plays a sound while it measures the light level.
4. Cover the Light Sensor with your hand or flash a light at it to trigger the alarm.
   The alarm should sound and the motor should spin.

PROGRAMS

To run the program

1) Make sure the Micro Scout is up.
2) Press Select until the program you want is in the Display.
3) Press Run to start the program.



1 ONE DIRECTION

L-8GO drives forwards.

2 TWO DIRECTIONS

L-8GO first drives forwards.

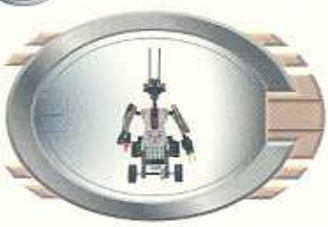
L-8GO then turns backwards.

3 AVOID LIGHT

L-8GO drives forwards.

When L-8GO sees a light, turns backwards.

4 LIGHT CONTROL



L-BGO stands still.

When L-BGO sees a light, it turns backwards.

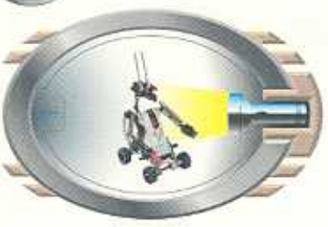
When L-BGO detects two flashes from a light source, the Robot changes direction.

6 KEEP ALIVE

L-BGO stands still.

When a light is flashed L-BGO turns backwards and picks up speed.

8 ALARM



L-BGO waits for a change in light.

When L-BGO sees a light change, an alarm sounds and the Robot drives forwards and turns backwards.

7 CODE

L-BGO plays a sequence of short and long beeps.

Play the same sequence with your flashlight.

If the code is correct L-BGO drives backwards for a split-second.

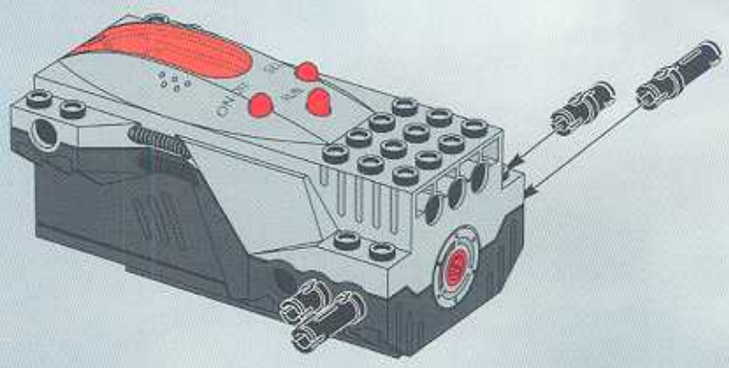
If the code is wrong L-BGO drives forwards for a split-second.

9 POWER MODE

To find more about the P Program, go to www.legomindstorms.com/darkside

Y-Frame

1



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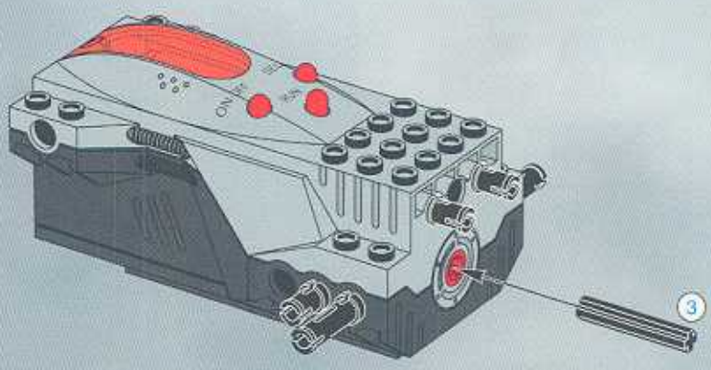

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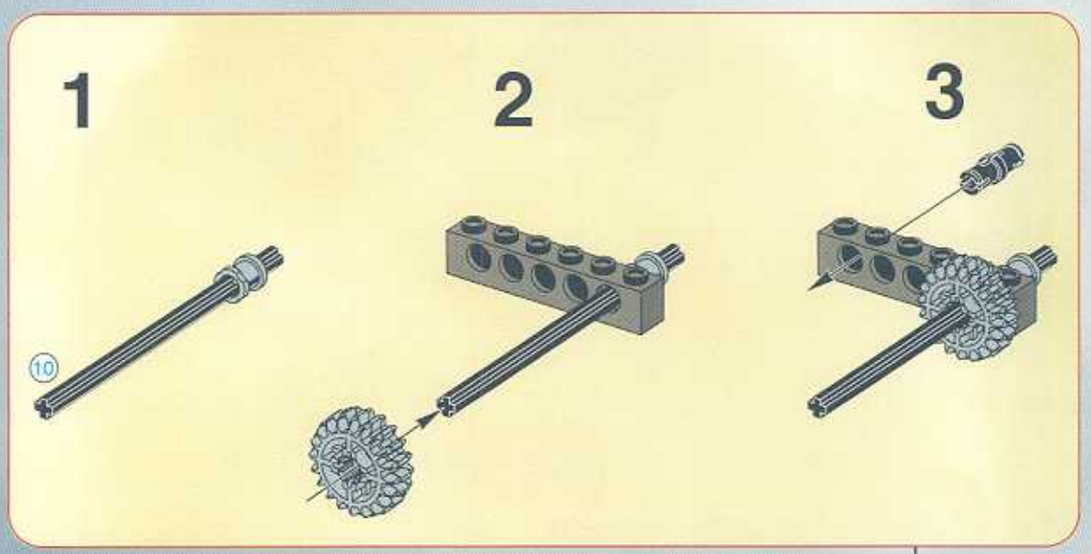

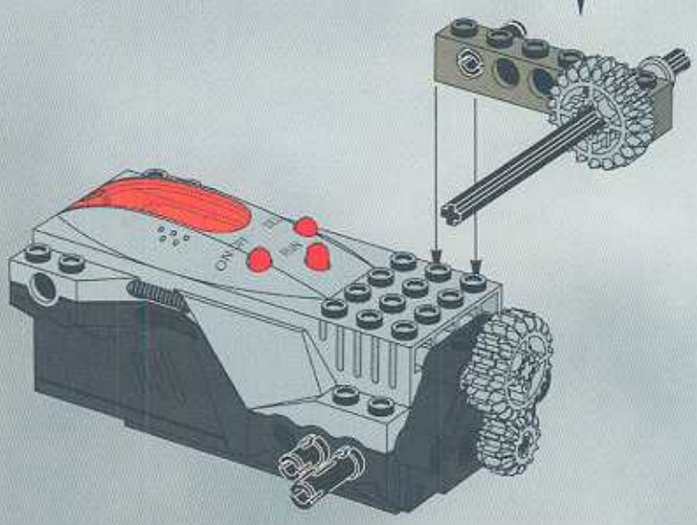

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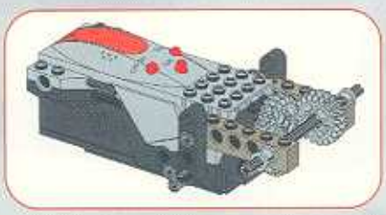
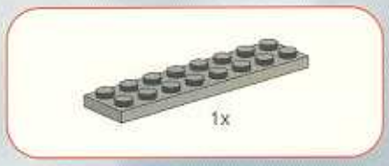
L-8GO Navigator

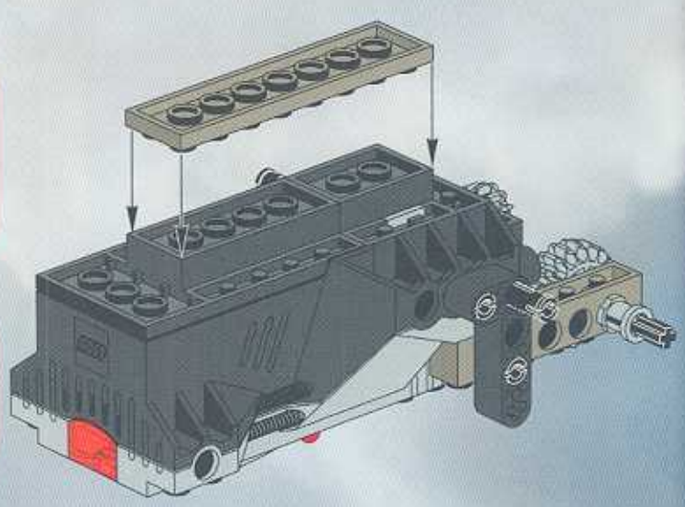
This is L-8GO Navigator. Build this
Robot to see your Micro Scout in action

If you have not yet built the Y-Frame, go to page 10

1







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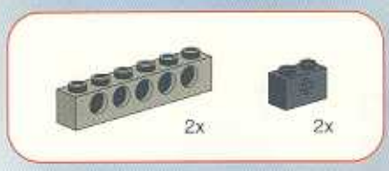

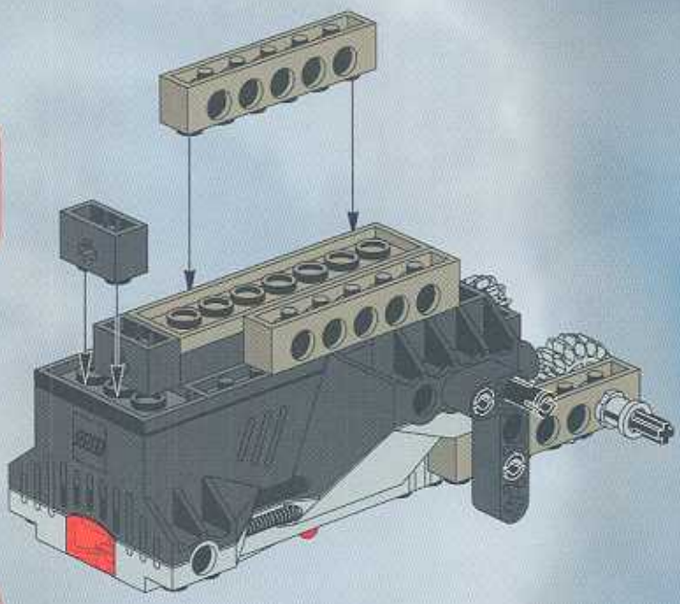

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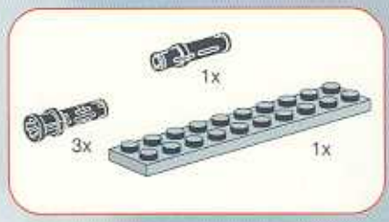

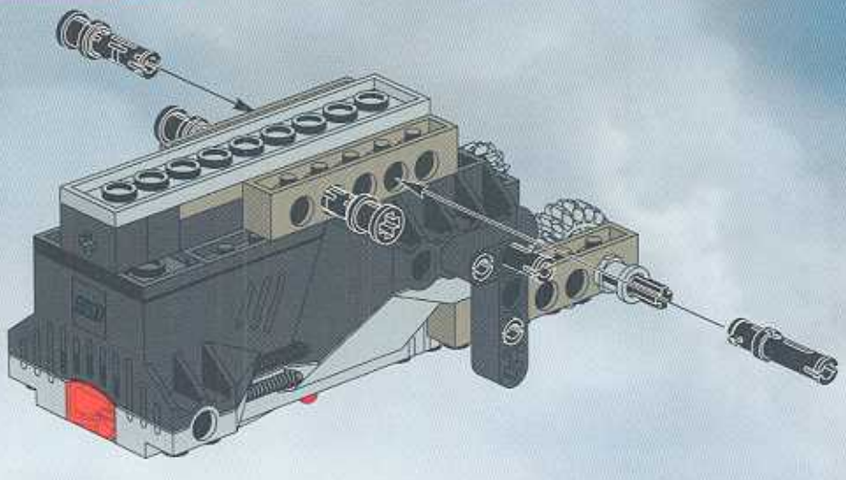

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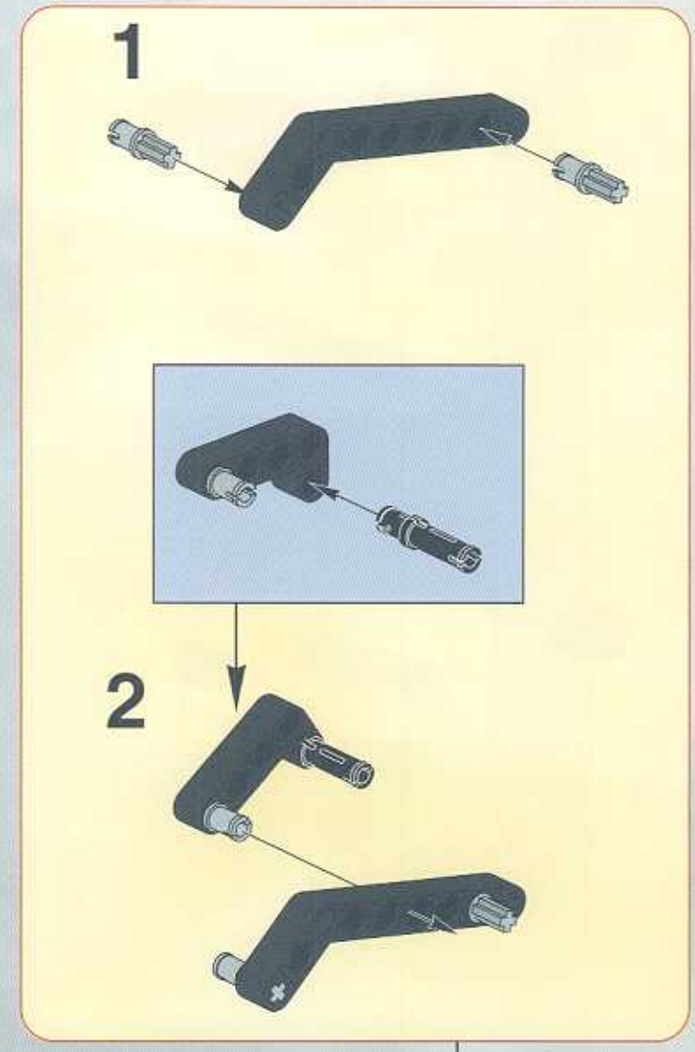

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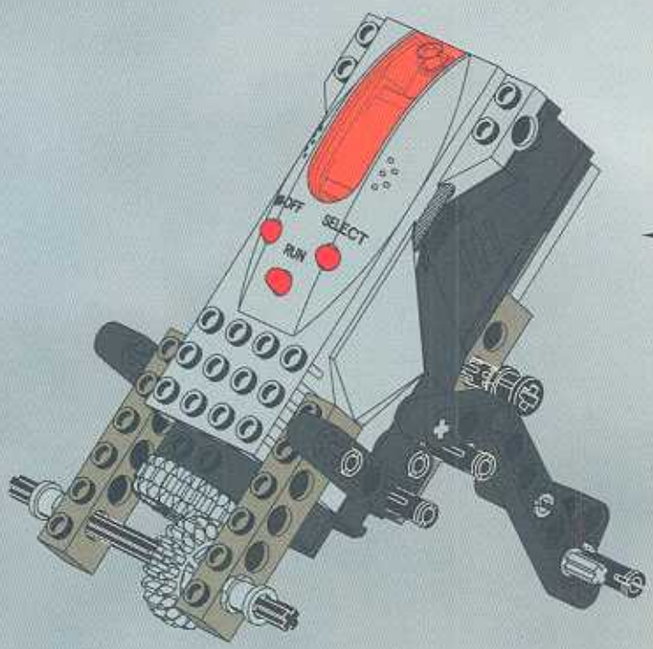

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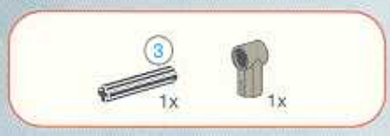

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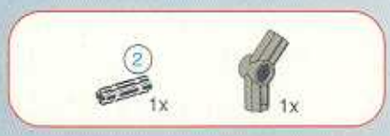

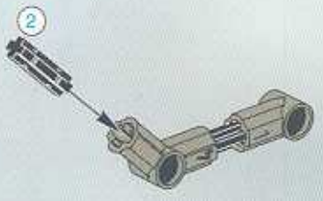

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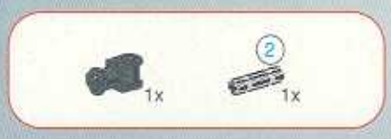

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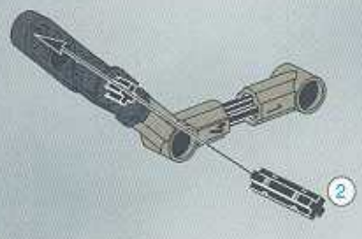

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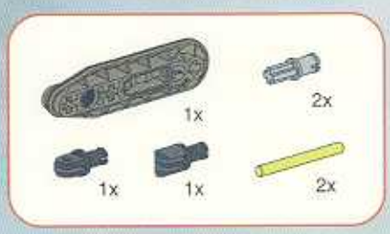

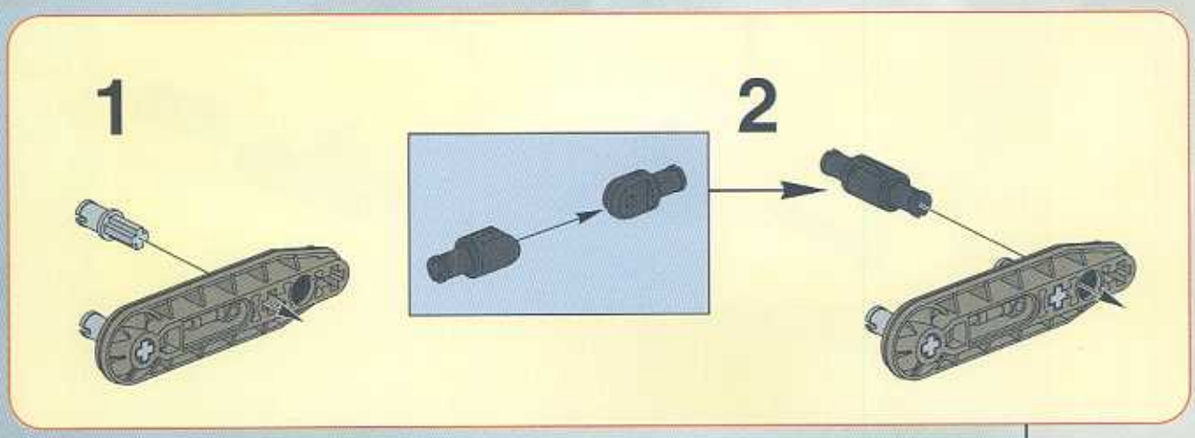

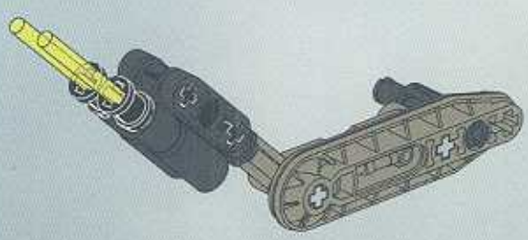

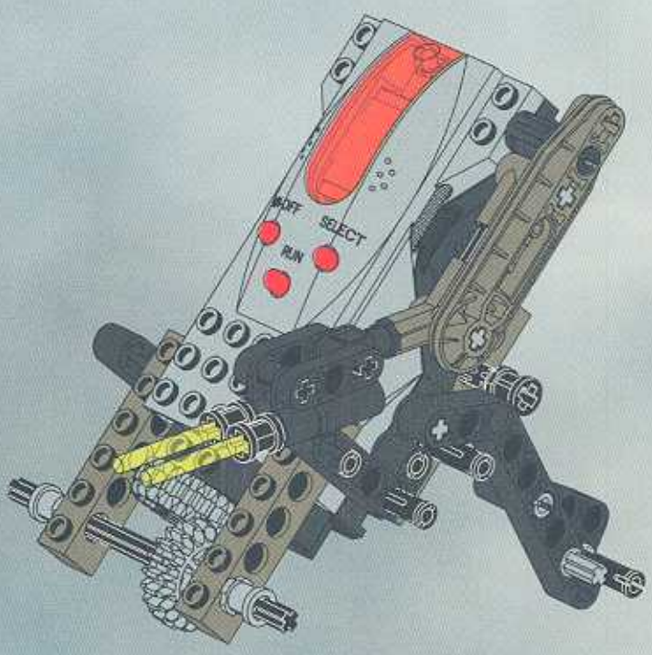

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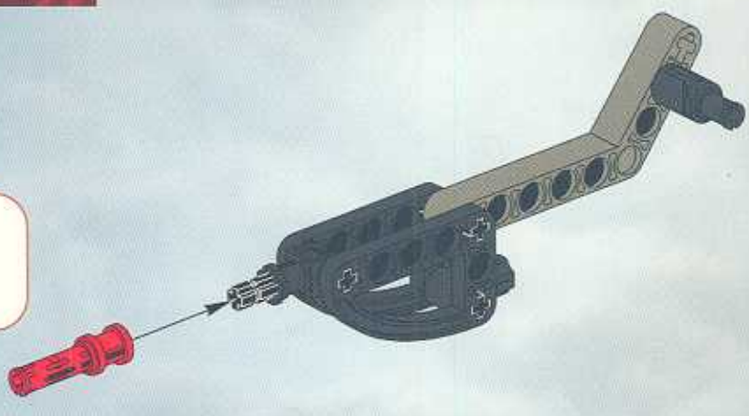

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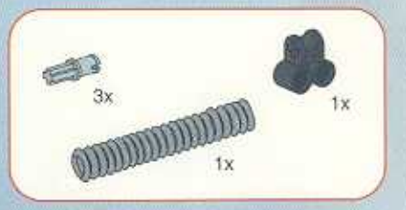

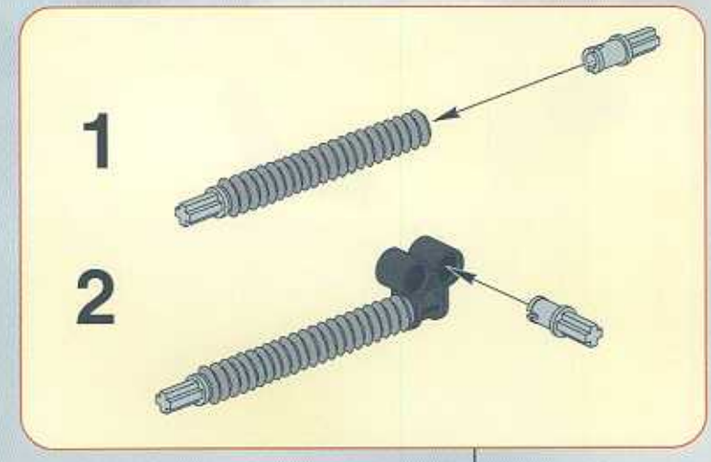

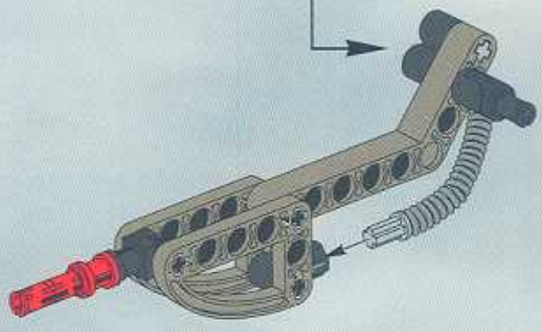

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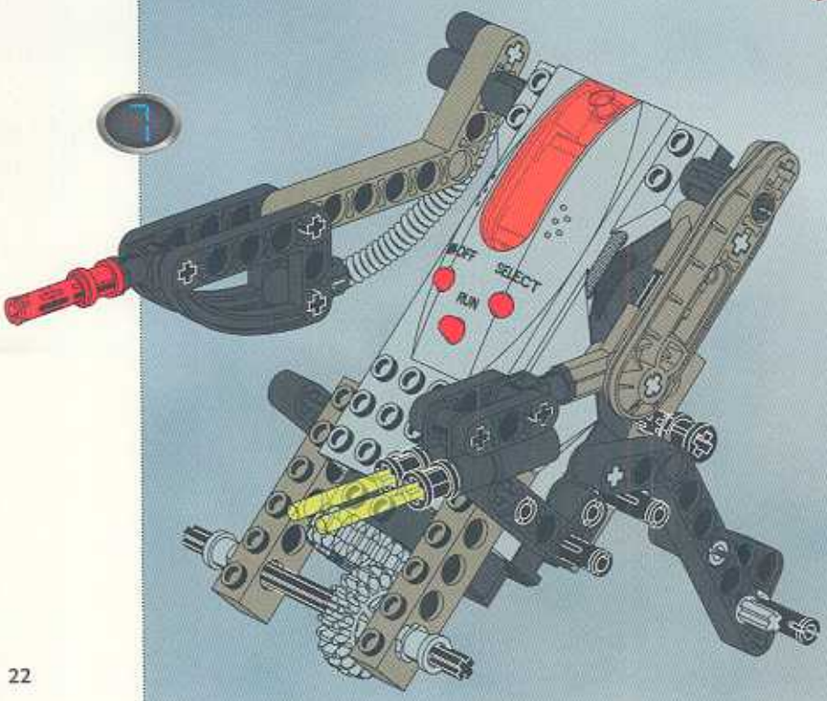

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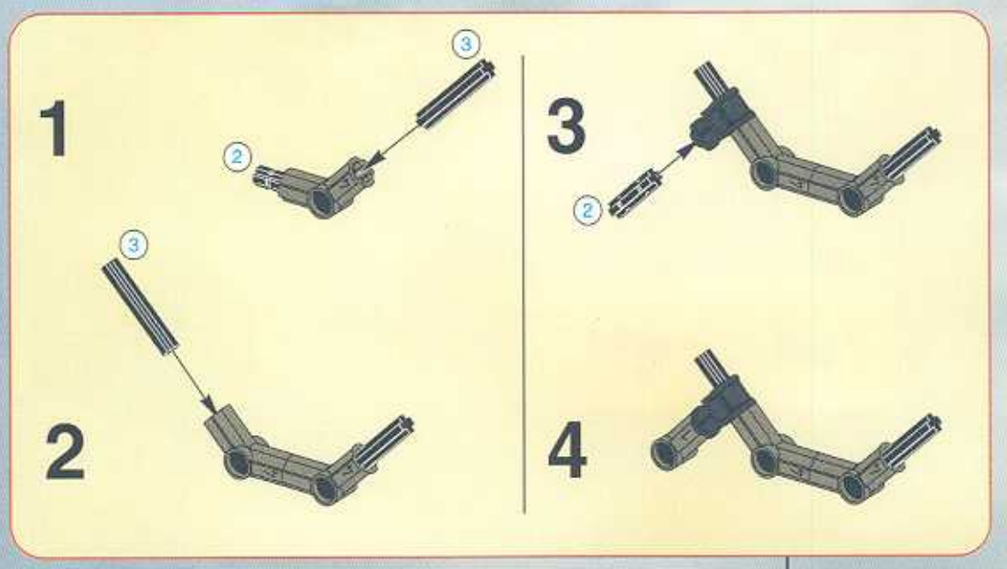

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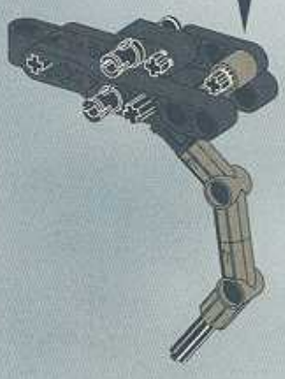

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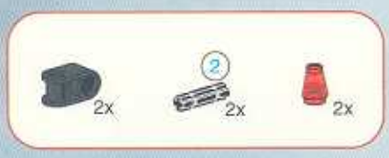
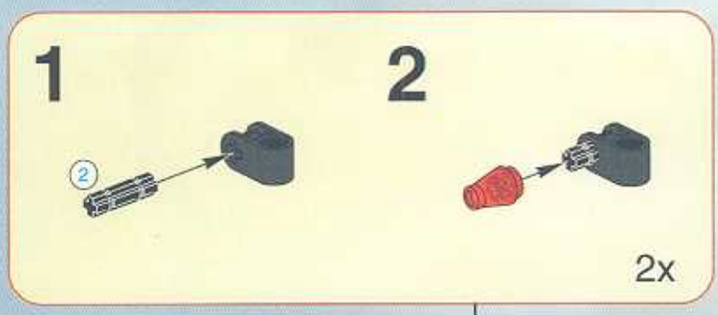
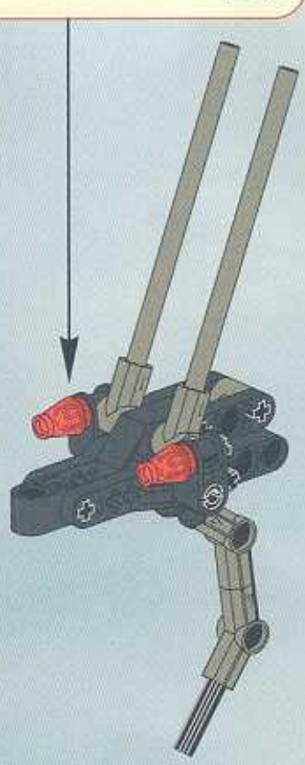
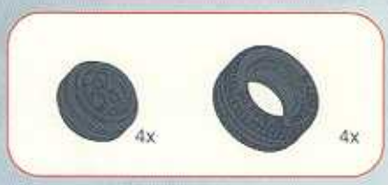






SELECT
RUN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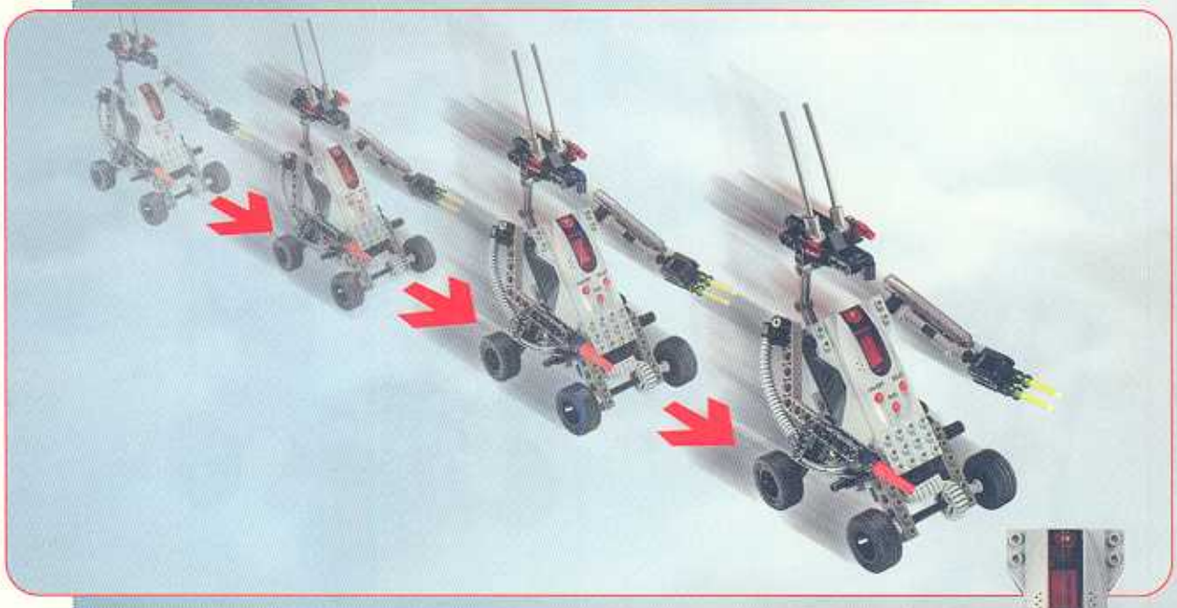
OFF
SELECT
RUN

Check out special Features ideas to customize you Robots

ONE DIRECTION



Press the On button on your Micro Scout. Use the Select button to choose Program 1 (One Direction). Press Run. L-8GO goes forwards and stops three times.

TWO DIRECTIONS

Select and Run Program 2 (Two Directions). L-8GO moves forwards and turns backwards three times.

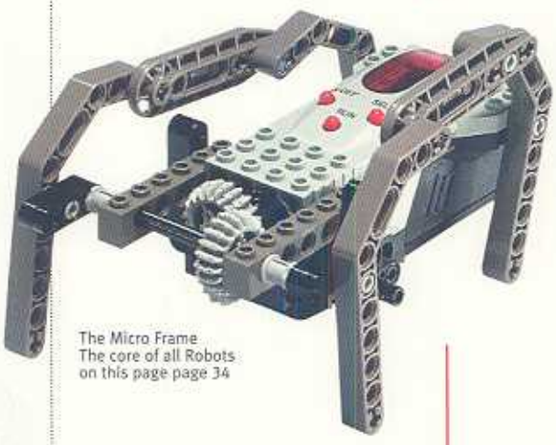
AVOID LIGHT

Select and Run Program 3 (Avoid Light). L-8GO drives forwards. When it sees a bright light, it moves backwards and turns.

OVERVIEW OF SITH APPRENTICE LEVEL

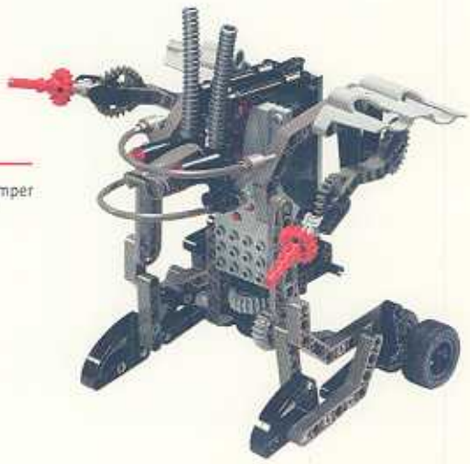
In the Sith Apprentice level, you will create Robots that walk. Start by building the Micro Frame. Then add the attachments to the frame to make the Micro Walker, the Droid Starfighter, or the Stomper.

The Micro Walker
page 34



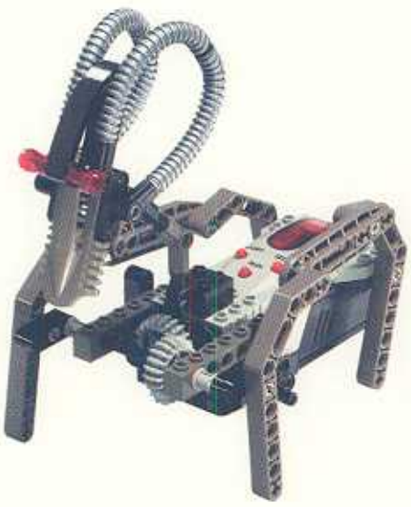
The Micro Frame
The core of all Robots on this page page 34

The Droid Starfighter
page 38



The Stomper
page 52

After you have built the Micro Walker and the Droid Starfighter, test your skills by building the Stomper.

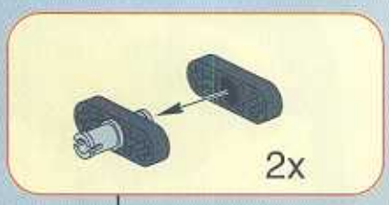


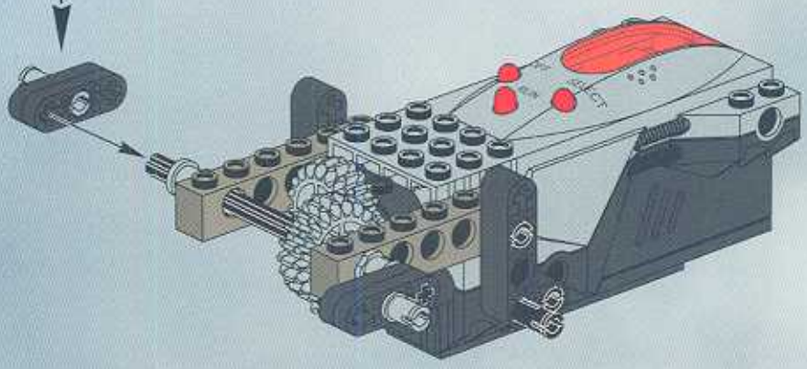
Challenges, page 52

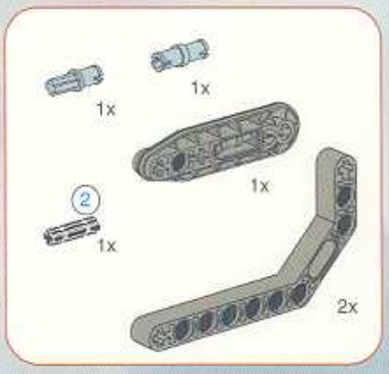
Micro Frame

If you have not yet built the Y-Frame, go to page 10

1



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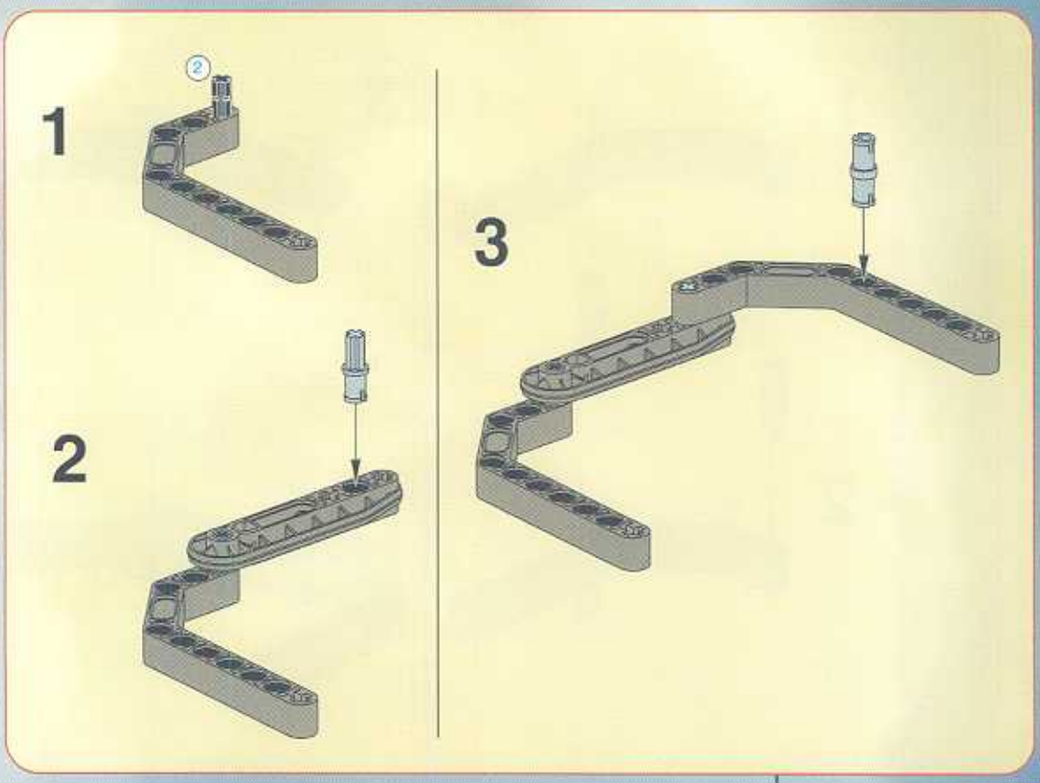
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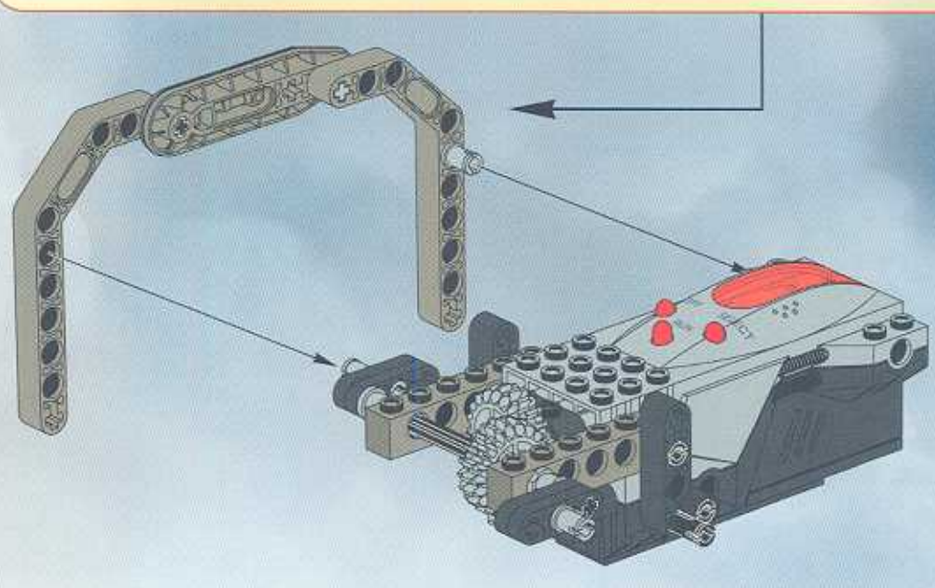
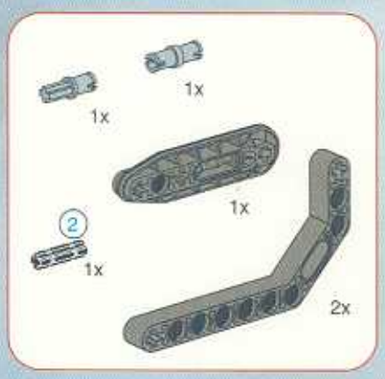
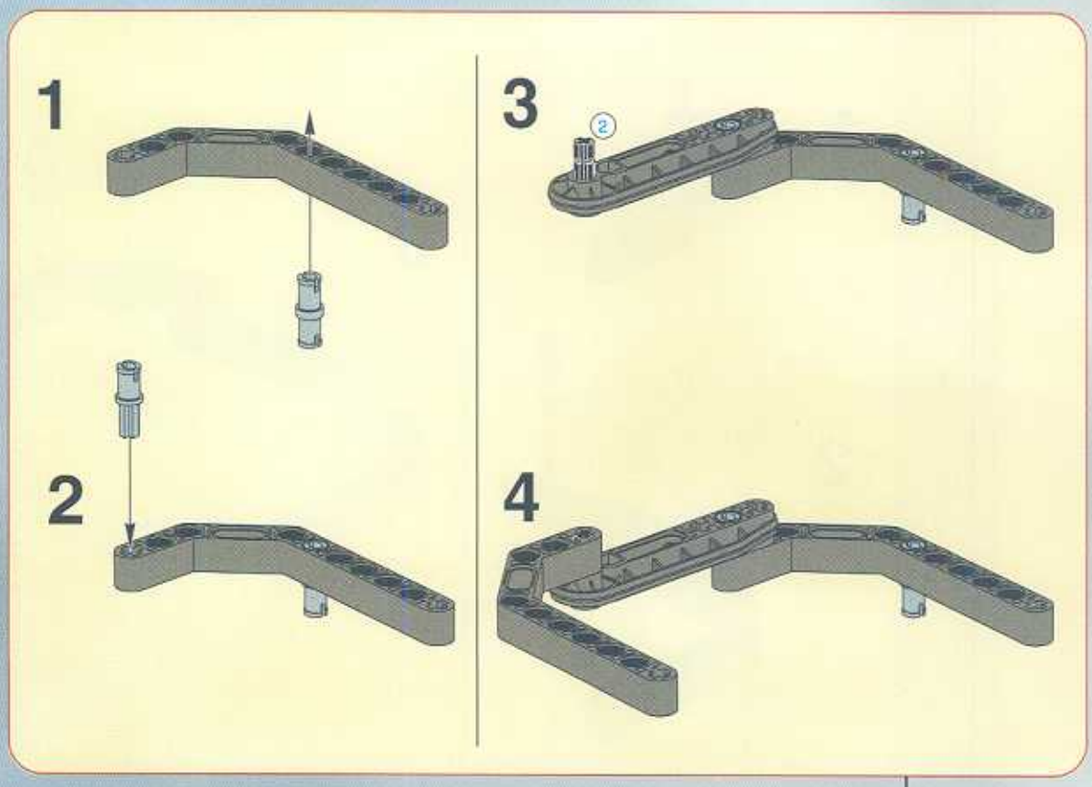
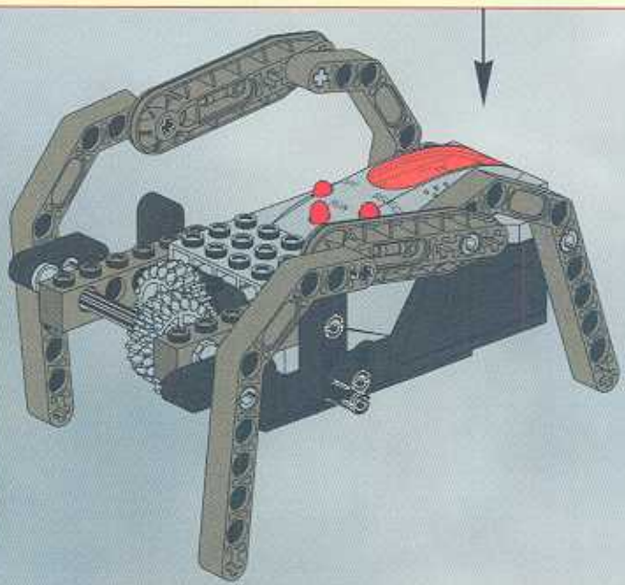


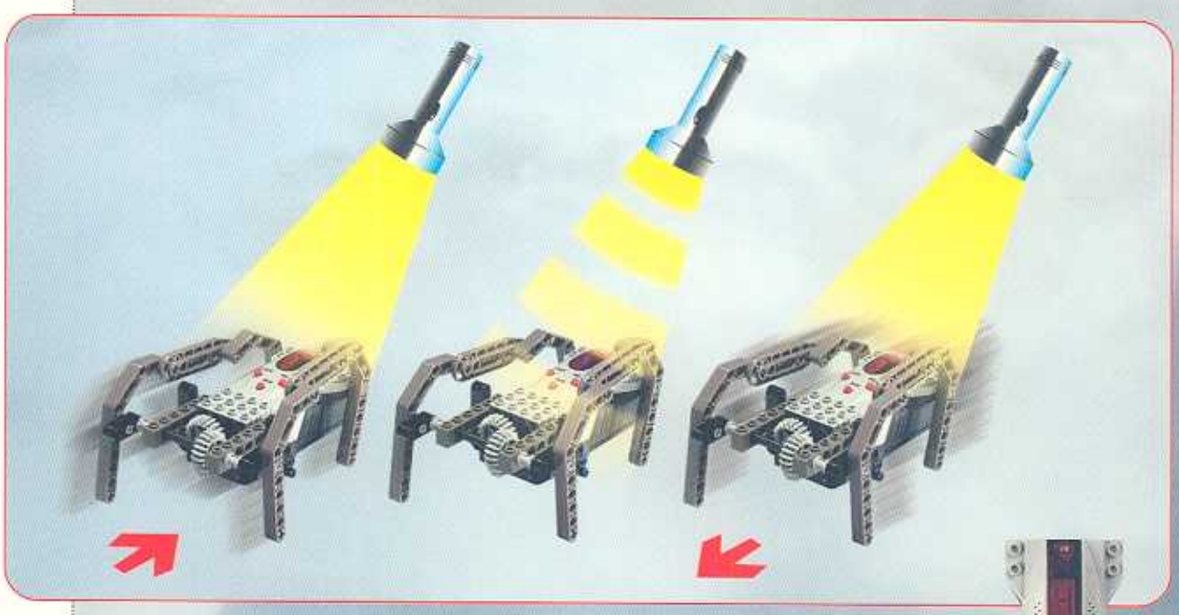




Now that you have built the frame, use it with the Droid Starfighter, (page 38) and the Stomper (page 52).



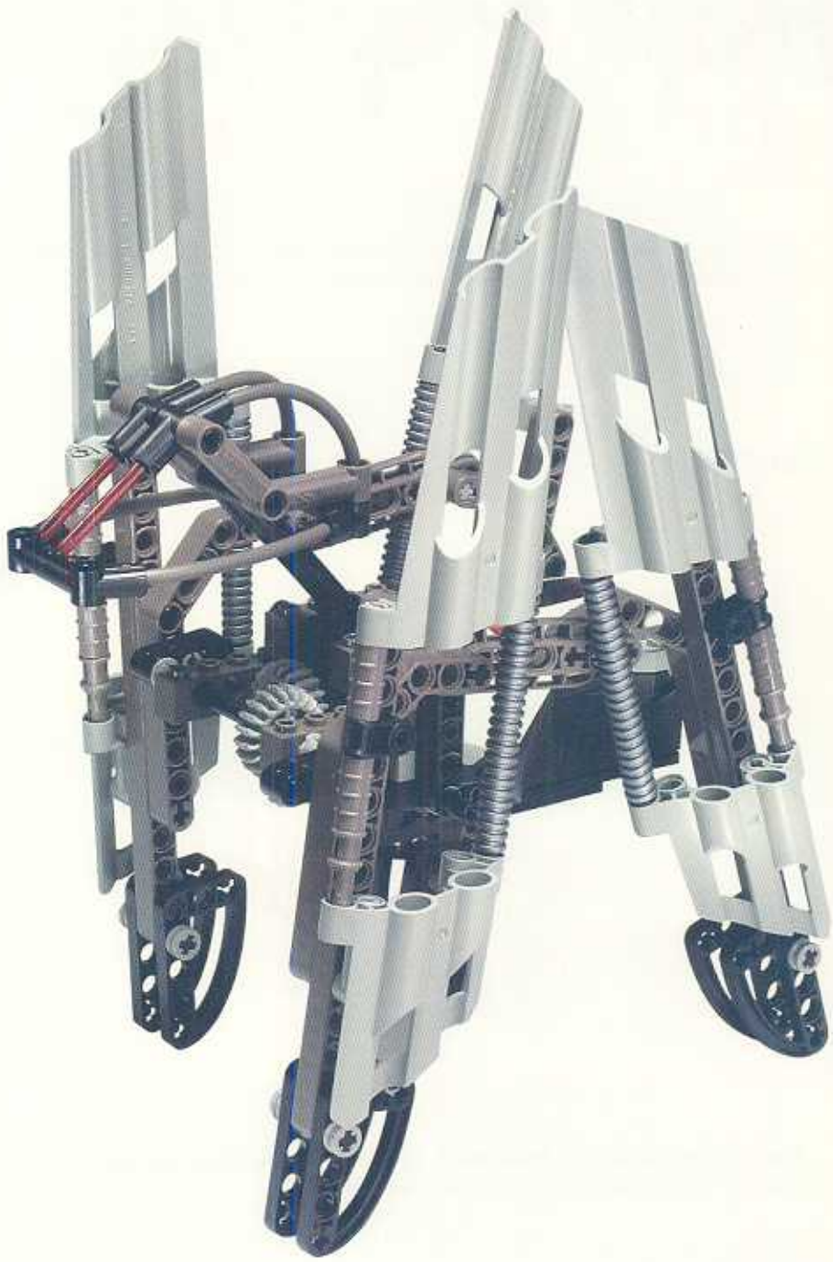
LIGHT CONTROL



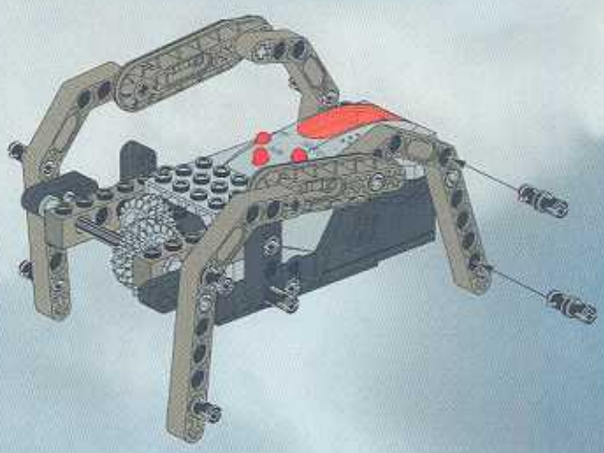
Select and Run Program 4 (Light Control). The Micro Frame moves forwards when you shine a light at the Light Sensor. Two flashes makes it change direction.

KEEP ALIVE

Select and Run Program 5 (Keep Alive). Flash a light at the Micro Frame to make it move. Flash it several times to make it move faster.



If you have not yet built the Micro Frame, go to page 34



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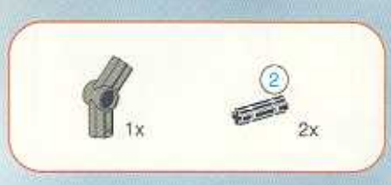

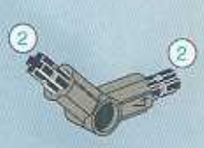

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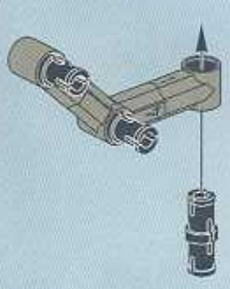

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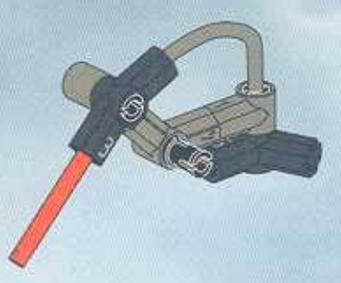

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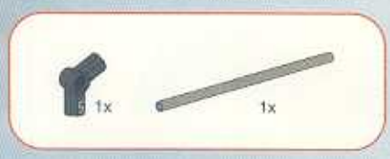

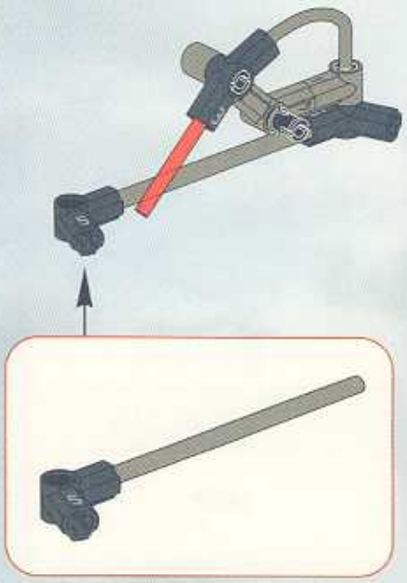

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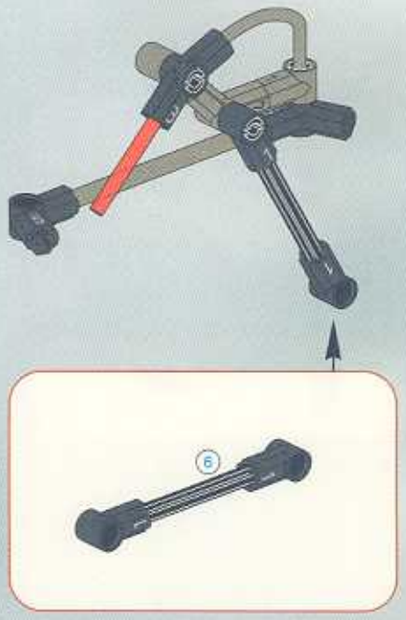

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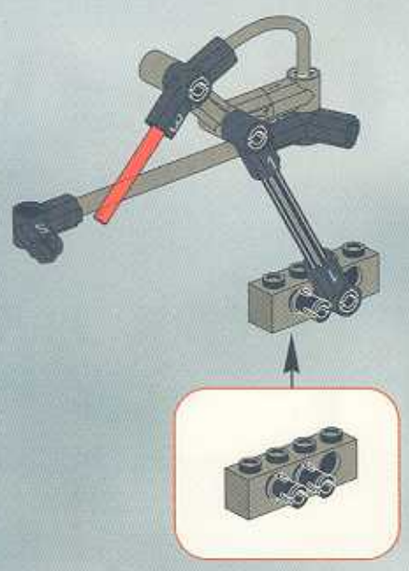

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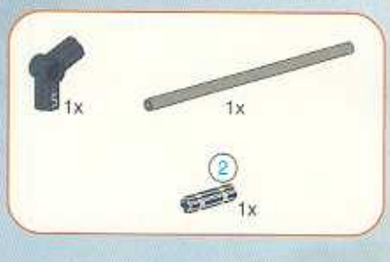

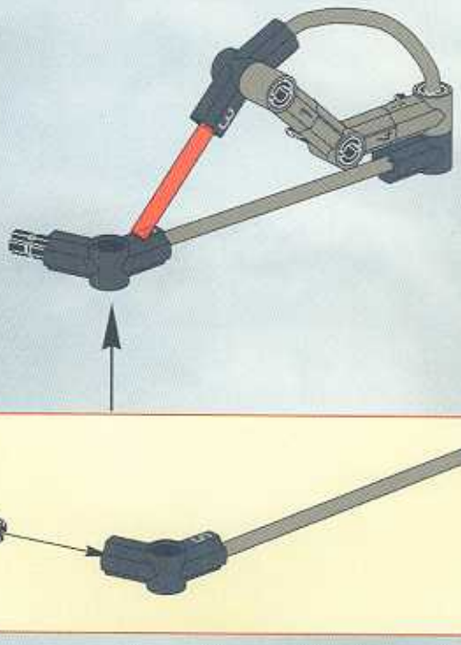

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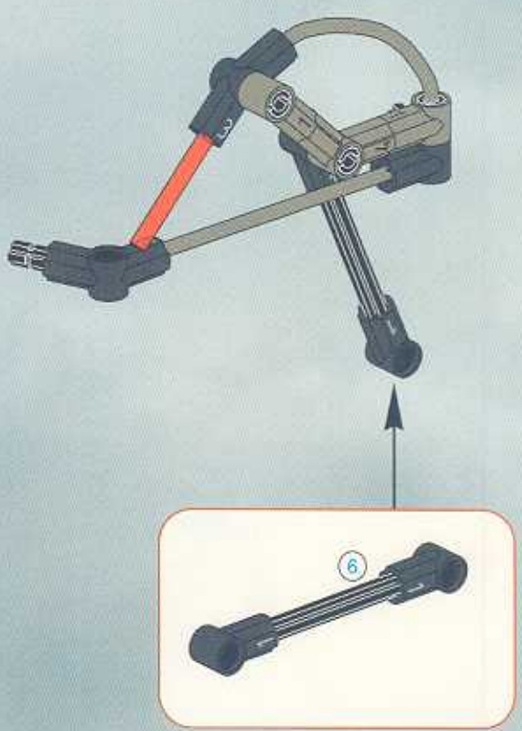

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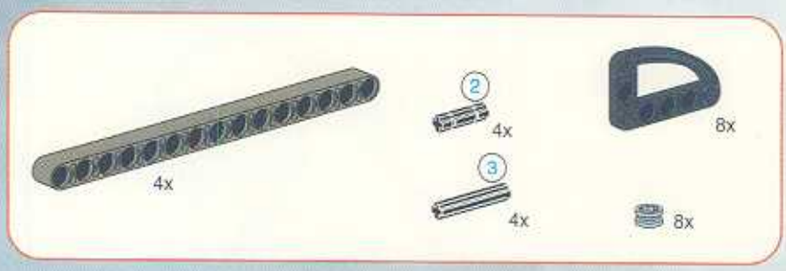
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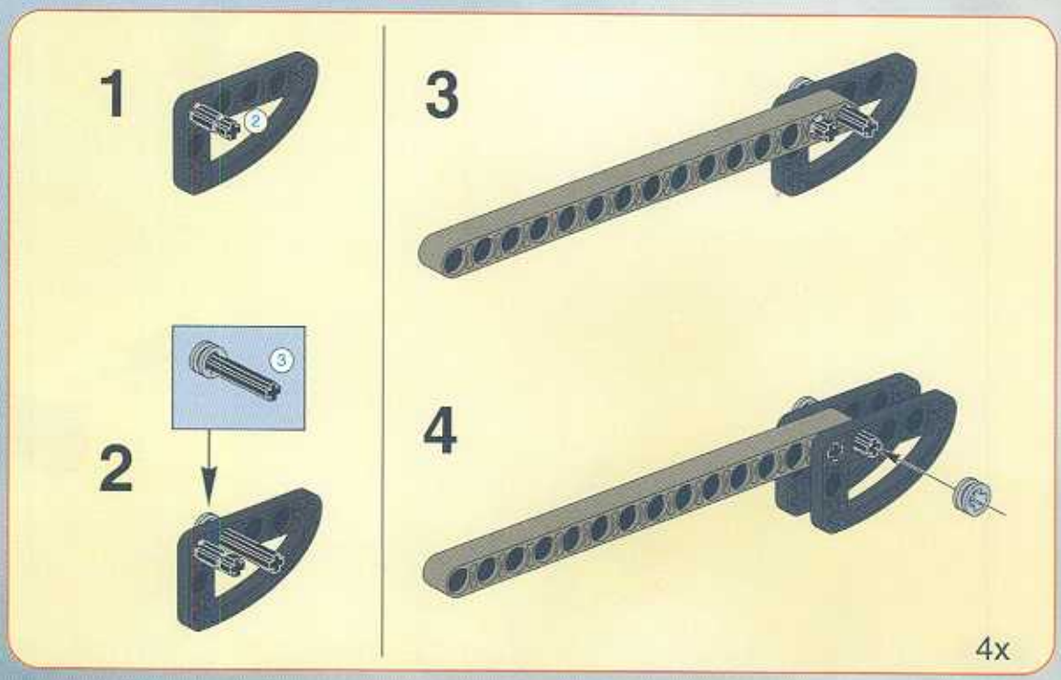
8x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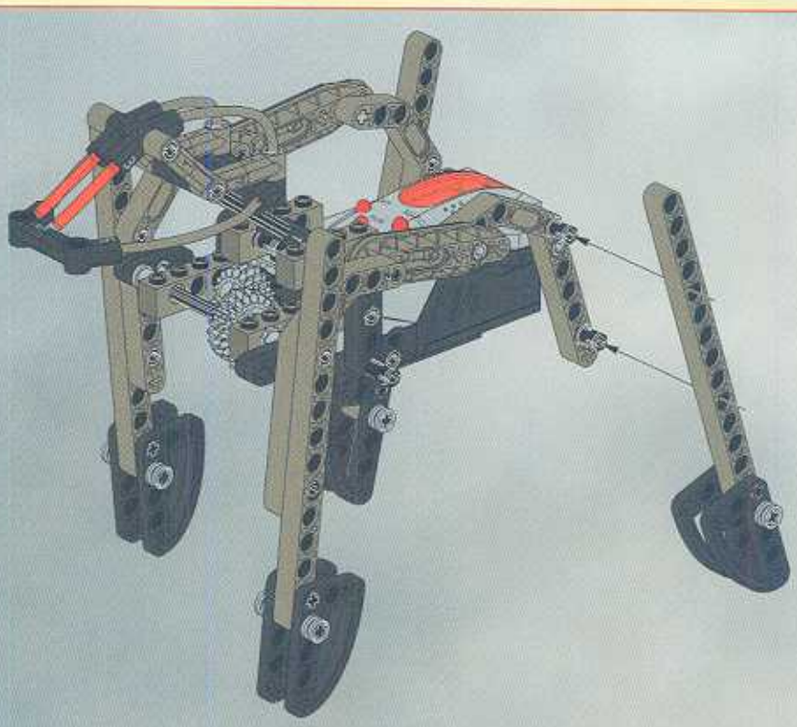

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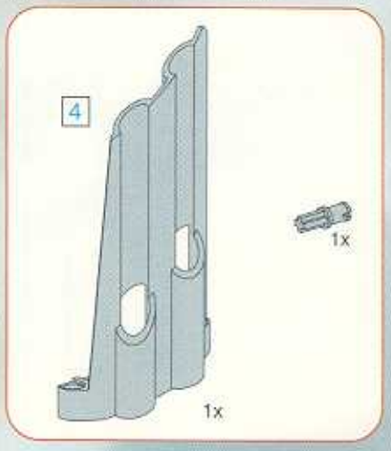

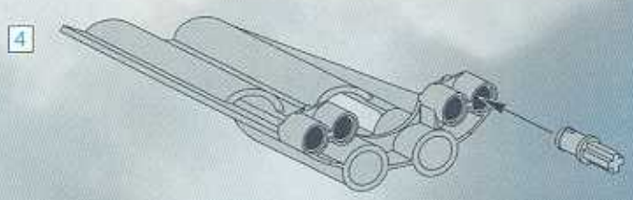

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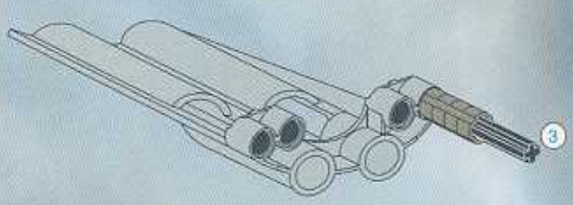

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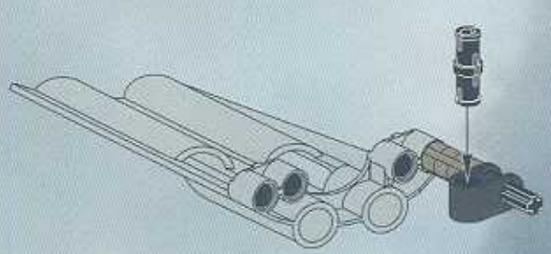

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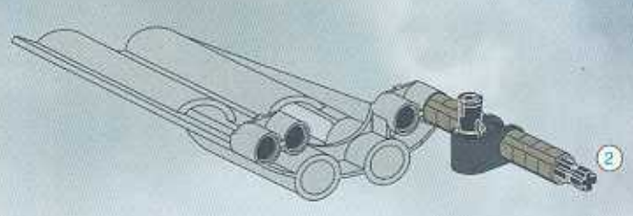

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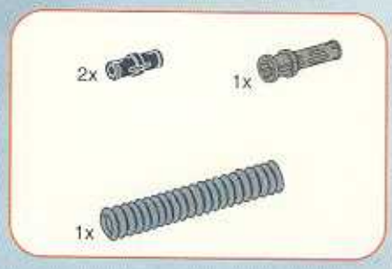

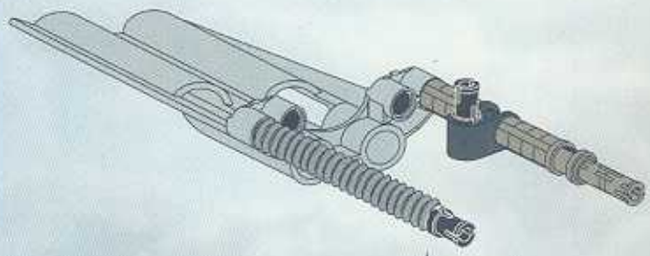

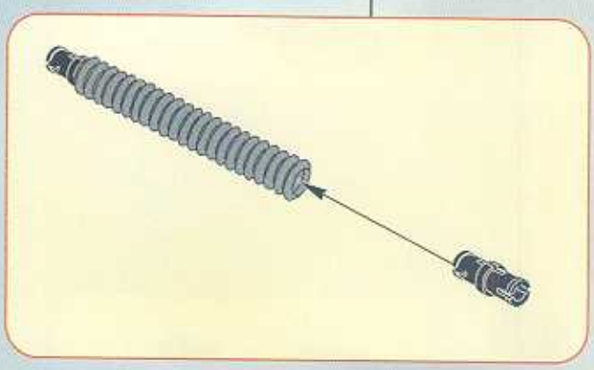

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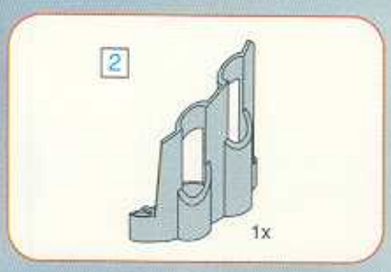

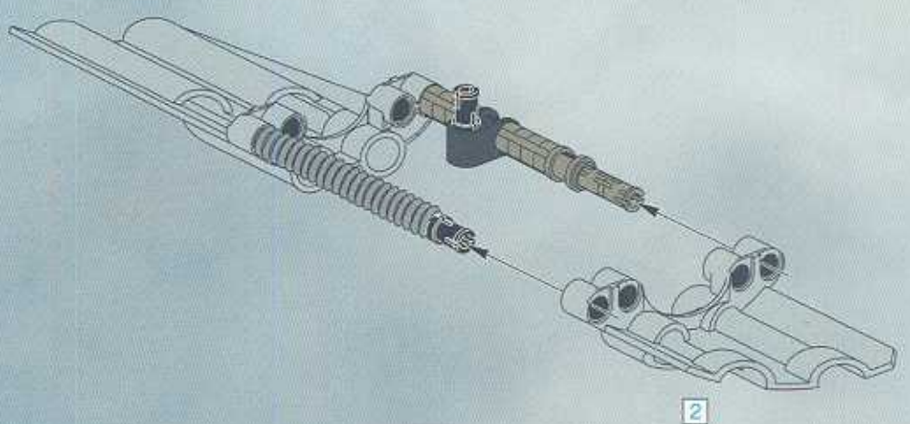

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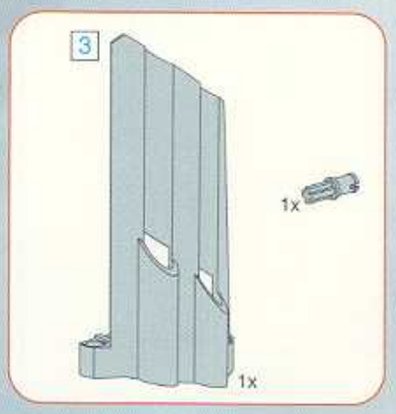

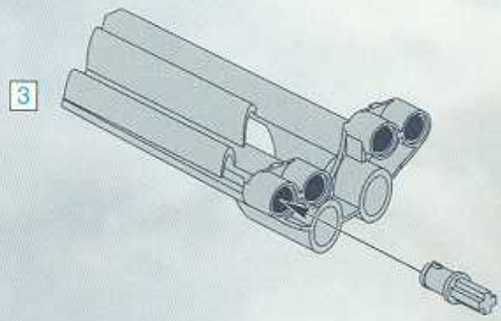

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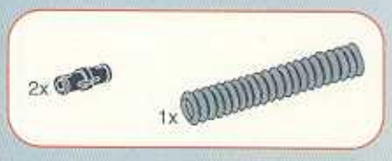

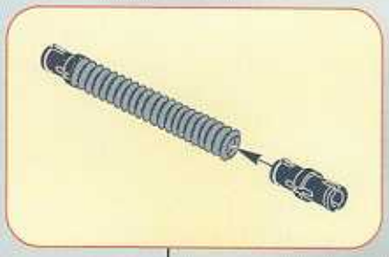

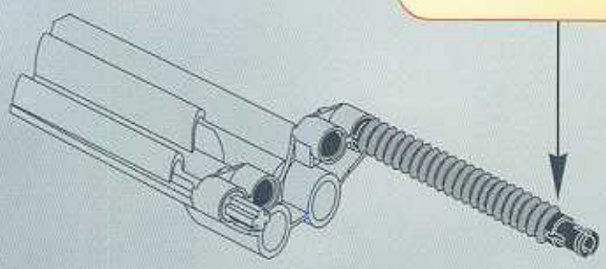

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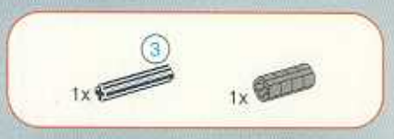

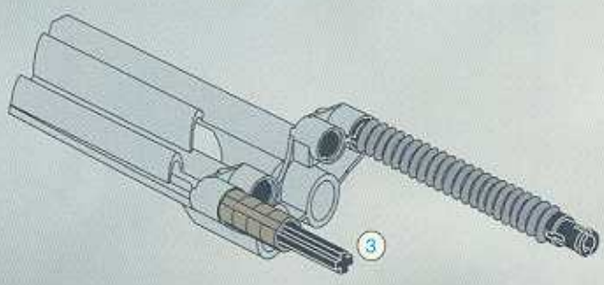

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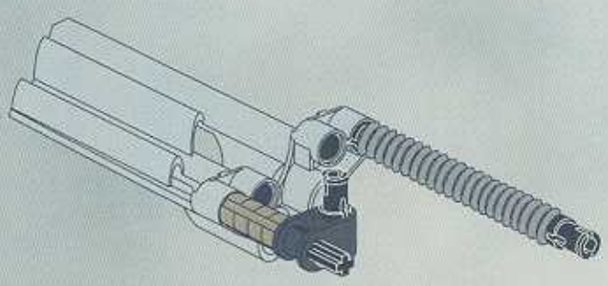

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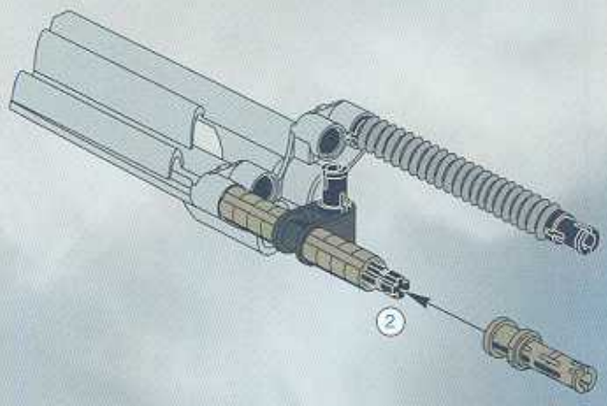

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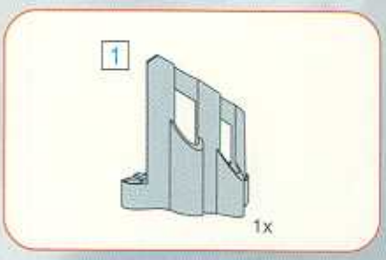

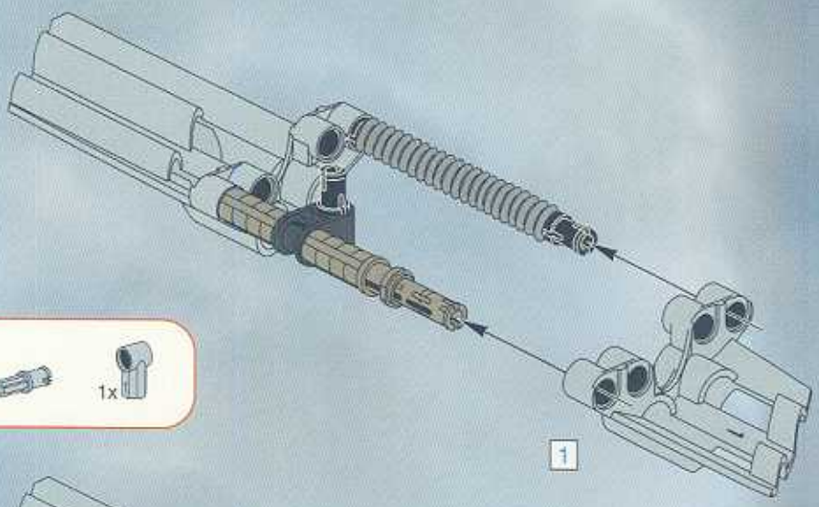

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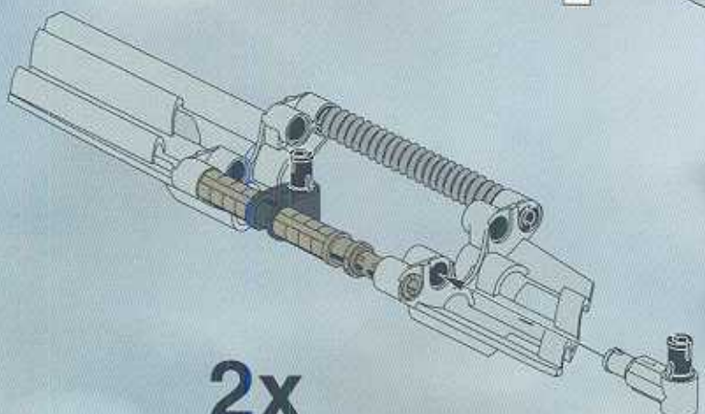

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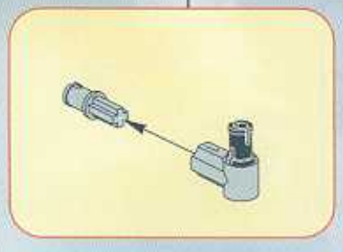
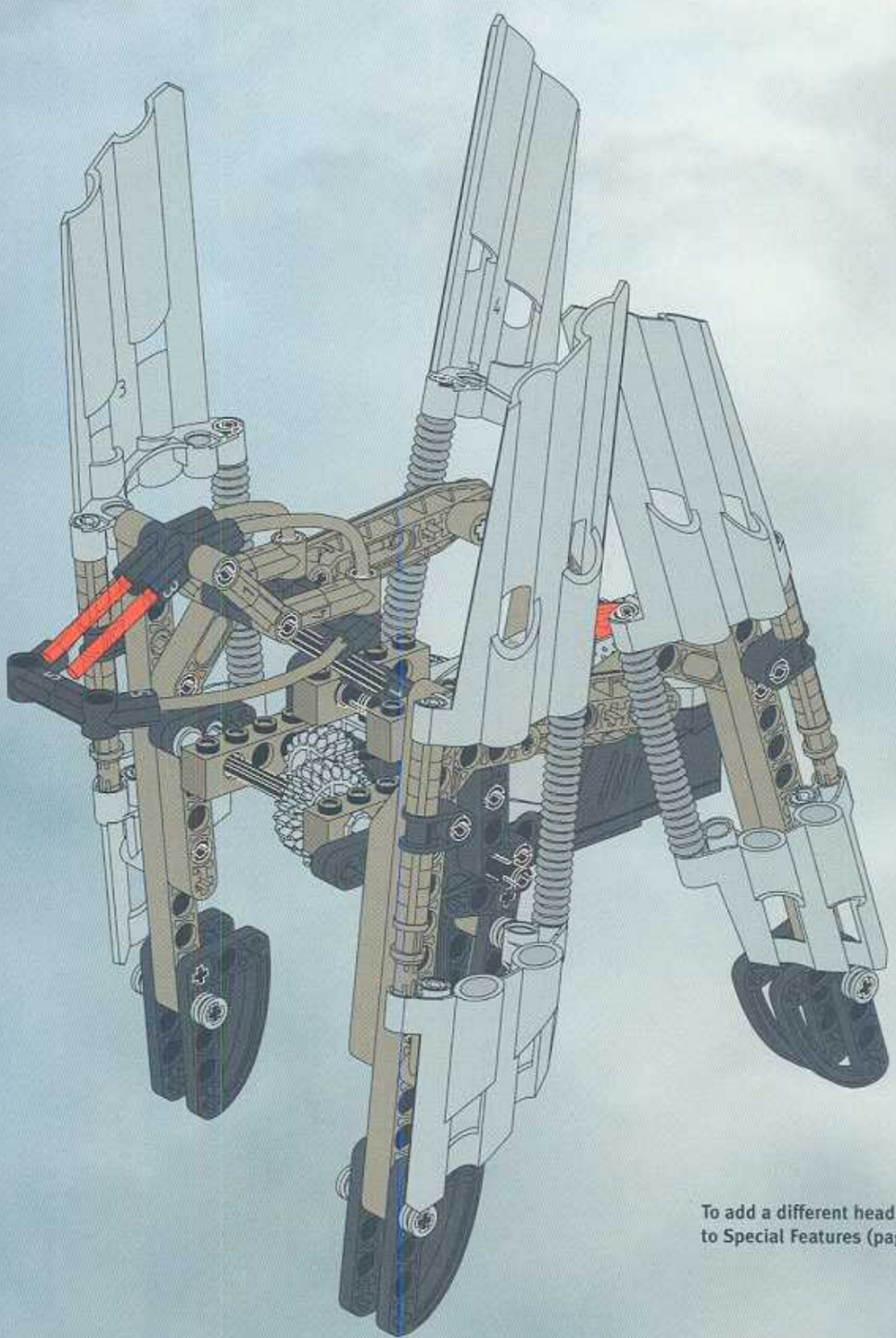


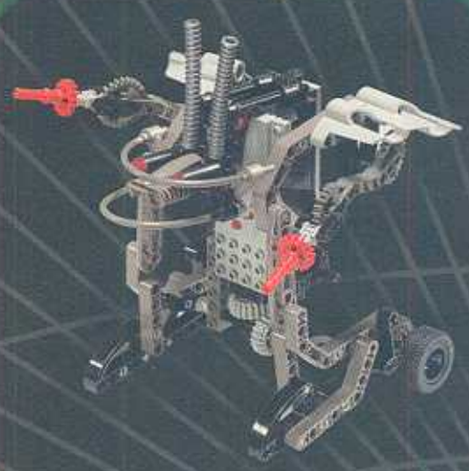


To add a different head, go to Special Features (page 54)

ALARM

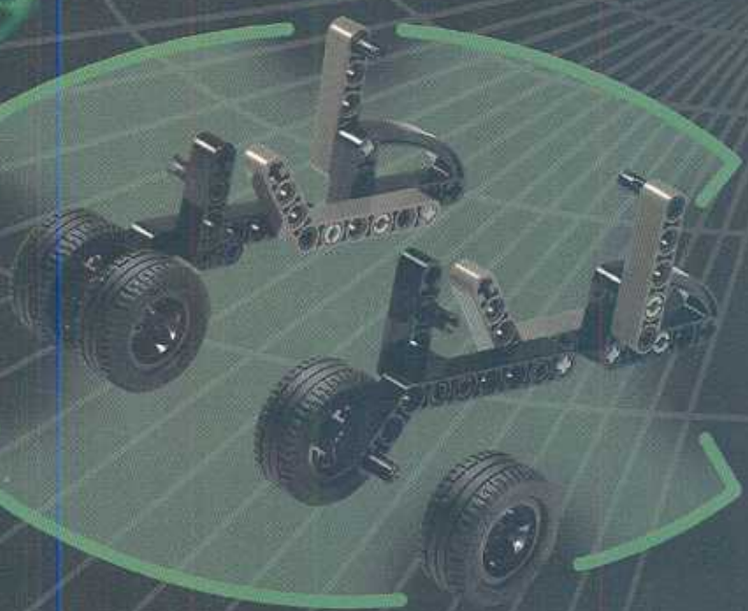
Select and Run Program 6 (Alarm). A change in light makes the Droid Starfighter move and sound an alarm.

STOMPER CHALLENGE



If you have not yet built the Y-Frame go to page 10

Well Sith Apprentice you have trained well. Test your new skills by using these plans to build the Stomper



(1)

Stomper Legs
(Attach these to the rear of the Micro Walker frame to build a Robot that can stand)

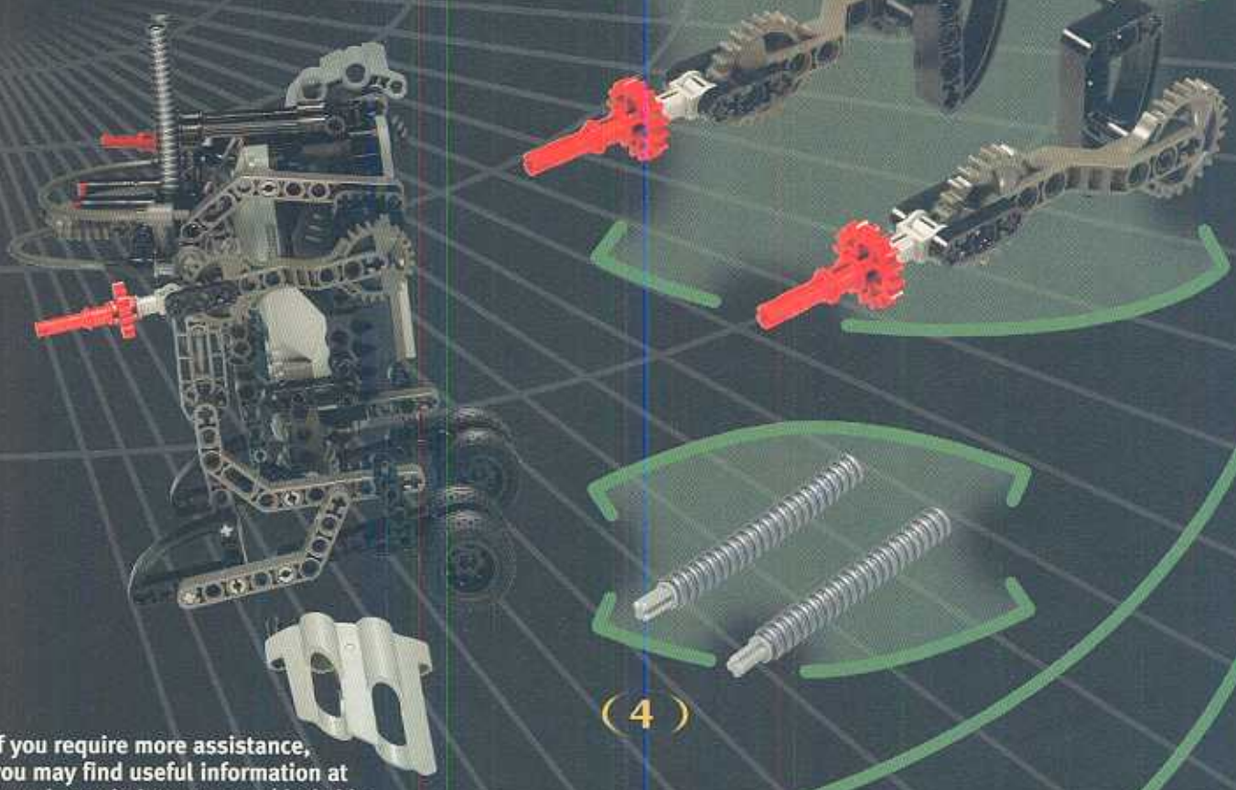
Stomper Head

(2A)

(2B)

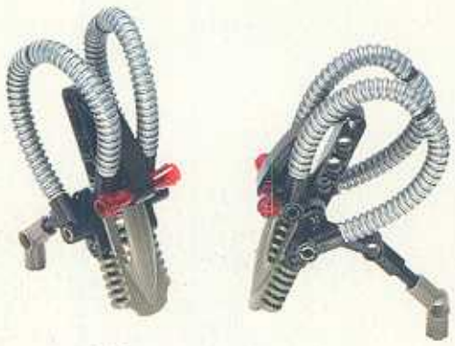
(3)

Stomper Arms



(4)

If you require more assistance, you may find useful information at www.legomindstorms.com/darkside



Go-AT 3

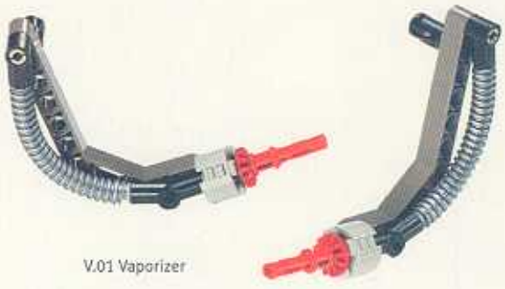
Flop-E7

Mantis

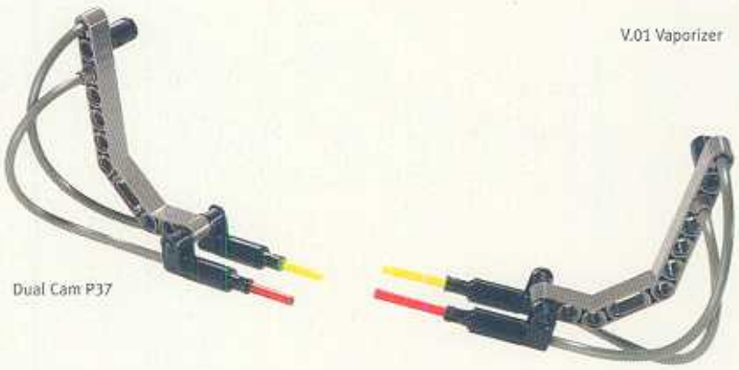
Hammer Head

IL-Blasters

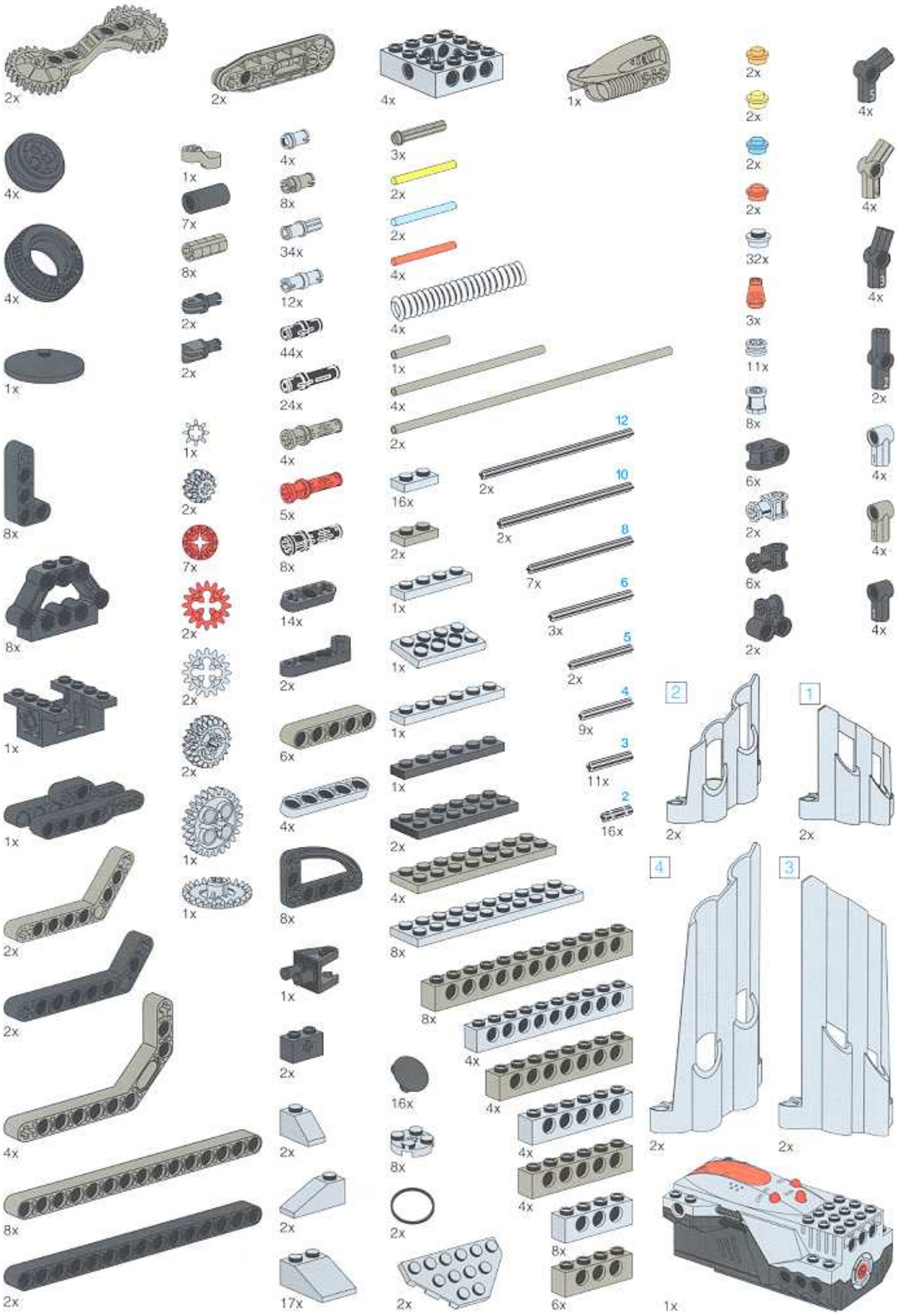
Scorpio Twin Stinger



V.01 Vaporizer



Dual Cam P37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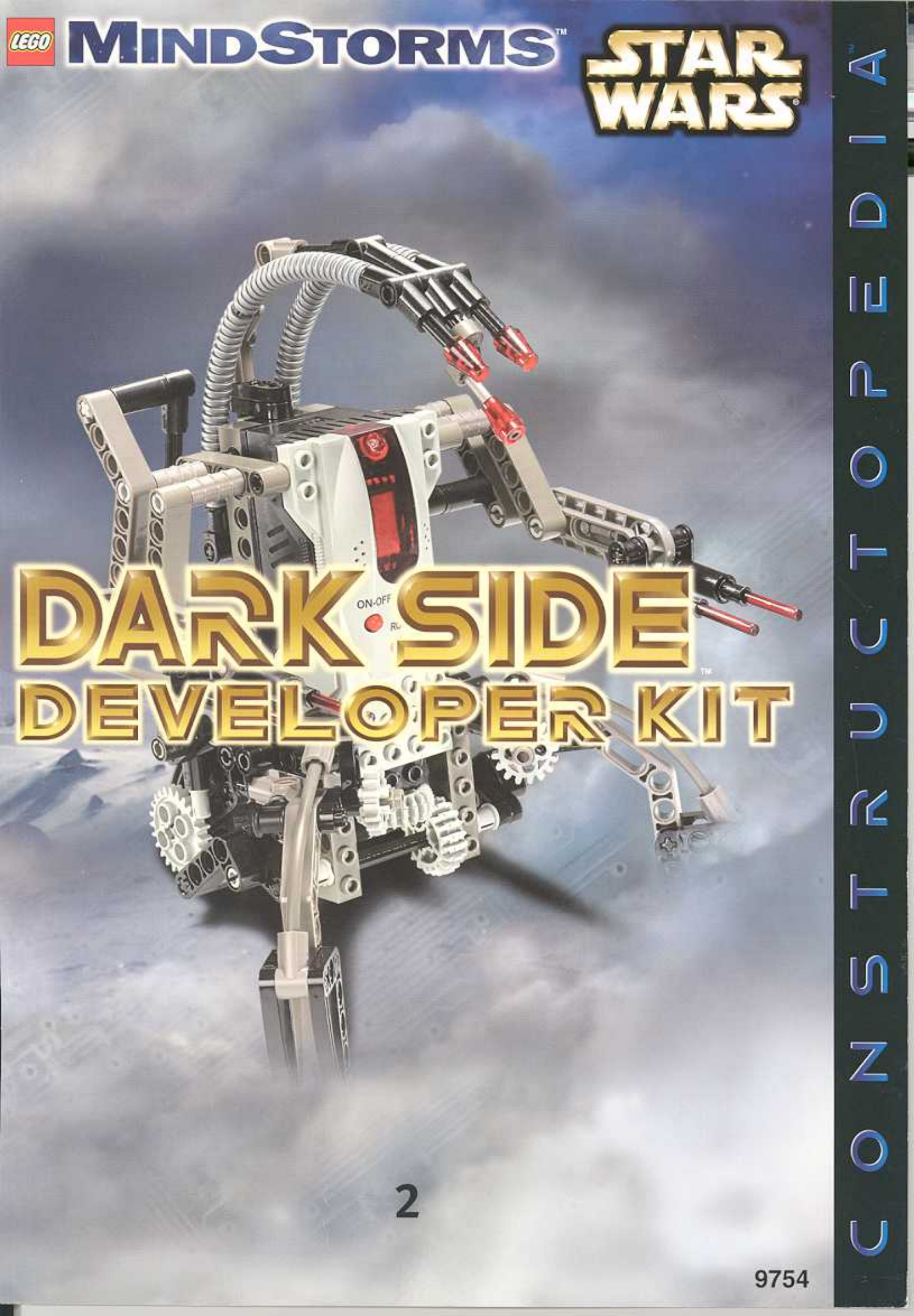
STAR WARS®



DARK SIDE™ DEVELOPER KIT

CONSTRUCTOPEDIA®

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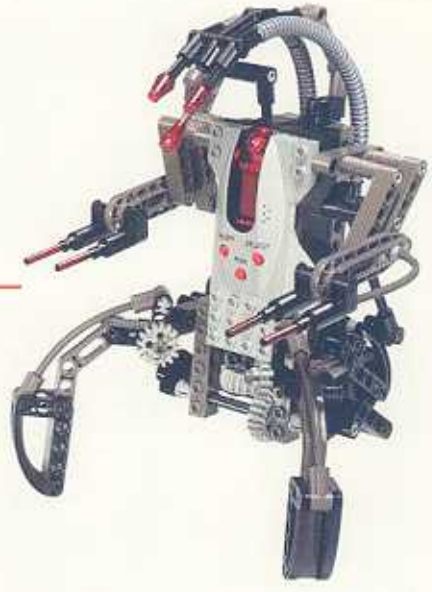
The Destroyer Droid
ON-OFF
SELECT
RUN

The X-Walker
OFF
RUN
The Stepper

OVERVIEW OF SITH™ LORD LEVEL

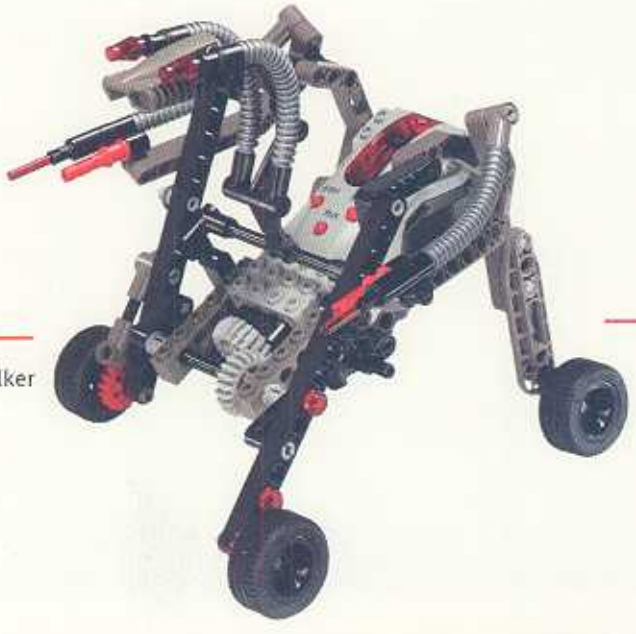
In the Sith Lord level, you will create more advanced Robots. Start by building the Y-Frame. Then add attachments to the frame to build the Destroyer Droid, the Stepper, or the X-Walker.



The Destroyer Droid
page 8

The Y-Frame
The core for all Droids
on this page go to
book 1 page 10

The Stepper
page 42



The X-Walker
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Special Features, page 70

Special Features, page 70

Special Features, page 70

ON-OFF
SELECT
RUN

If you have not yet built the Y-Frame, go to book 1 page 10

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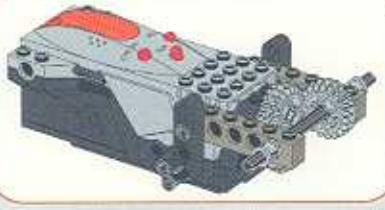

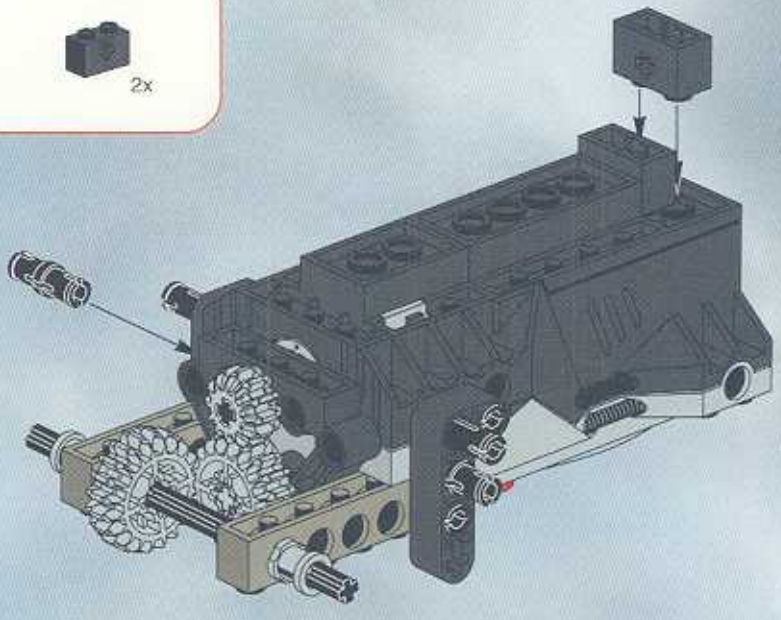

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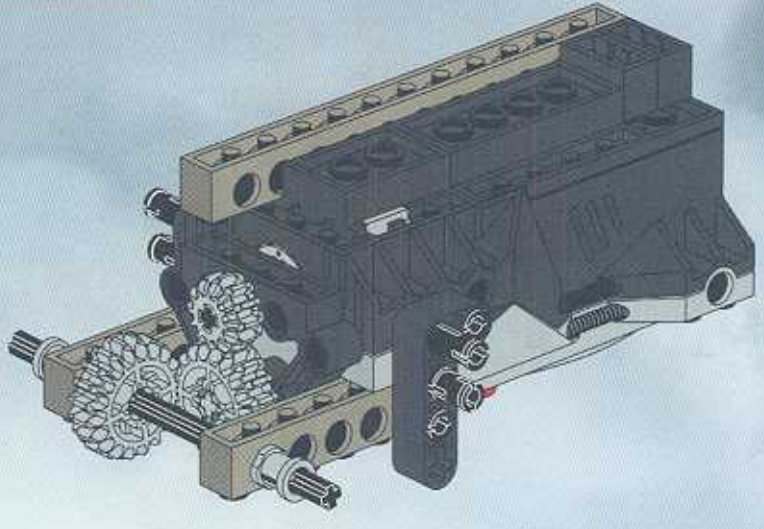

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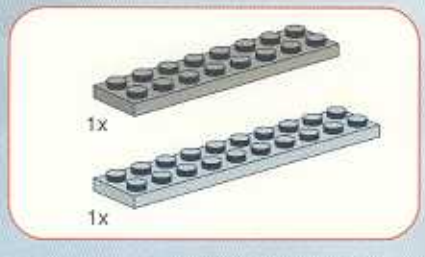

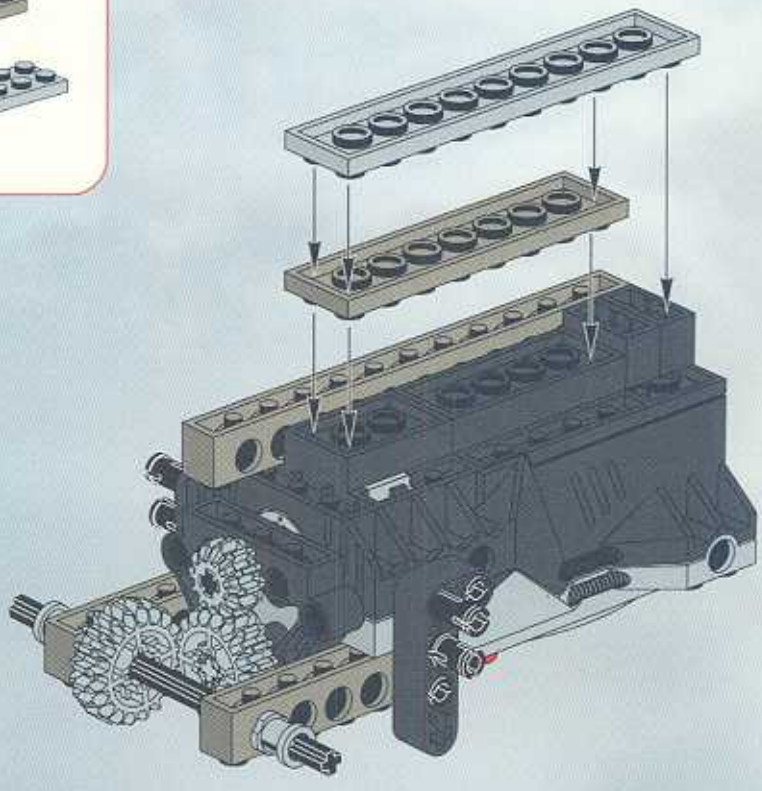

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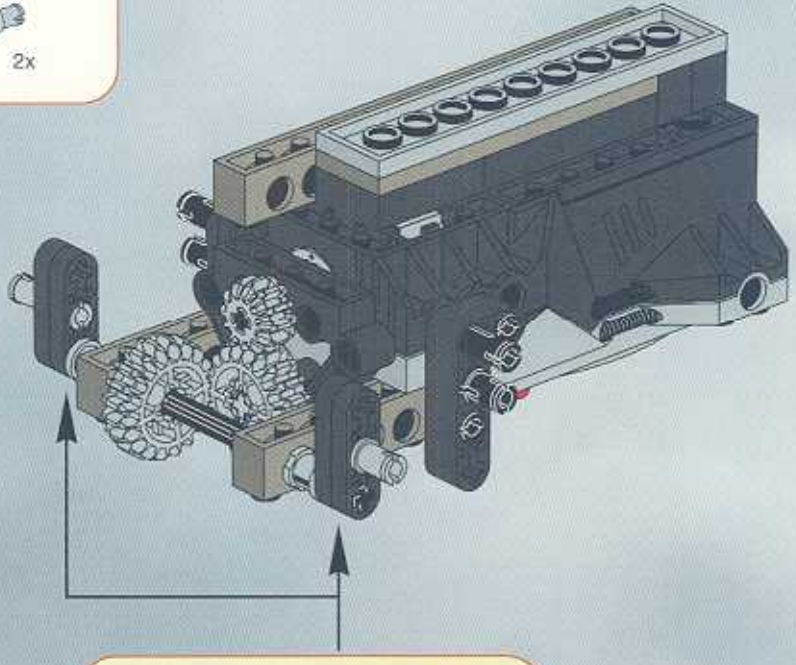

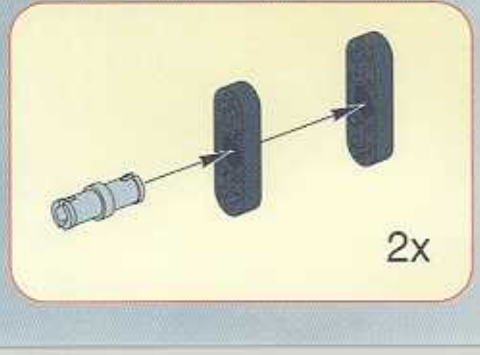

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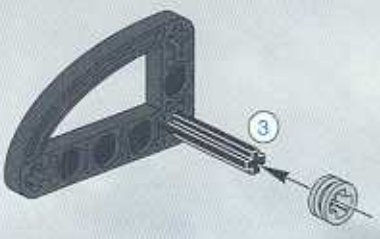

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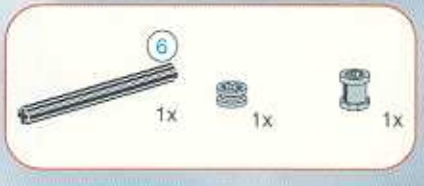

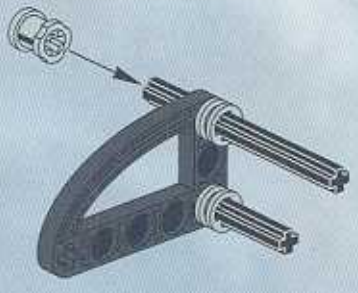

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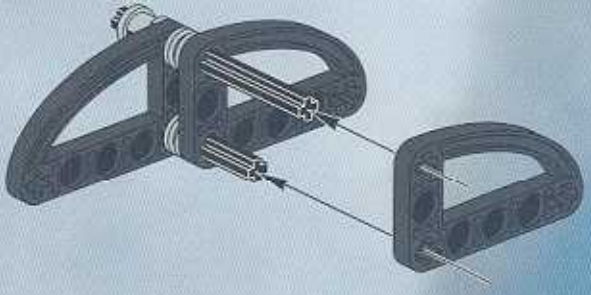

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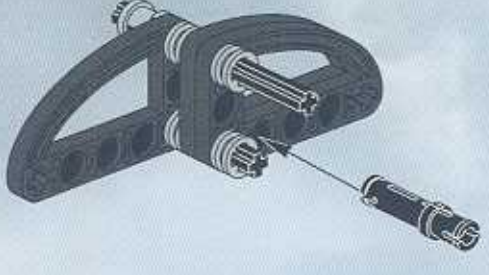

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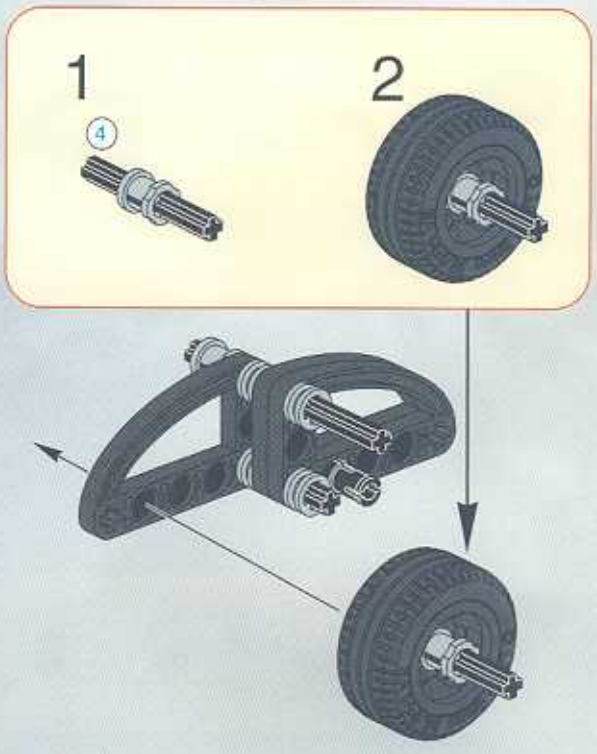

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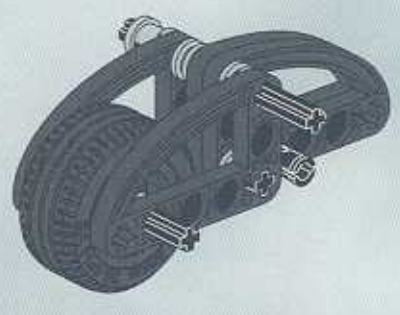

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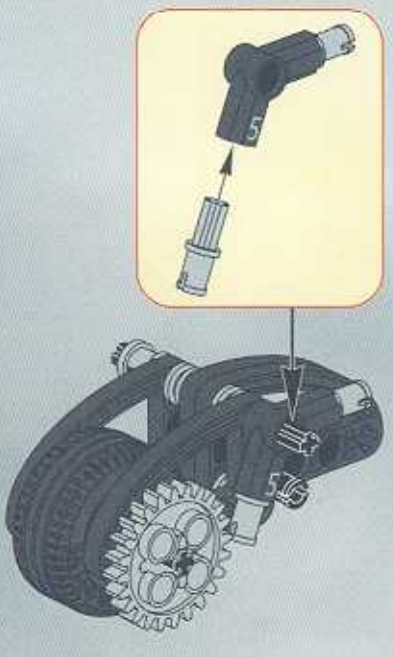

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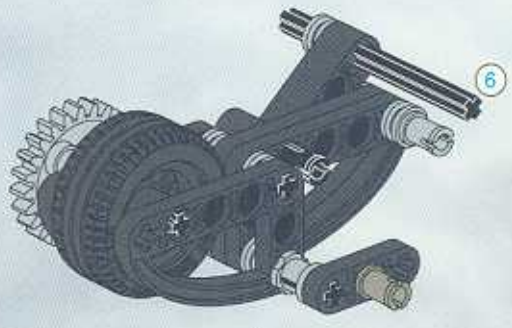

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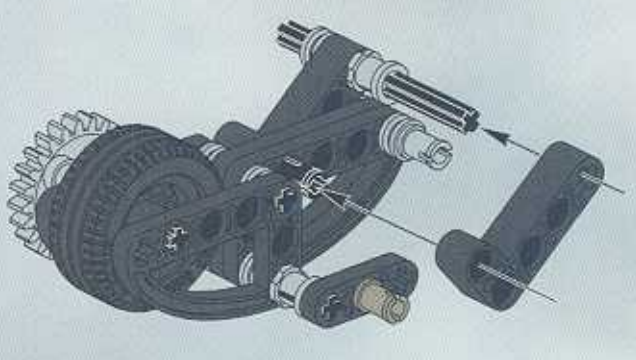

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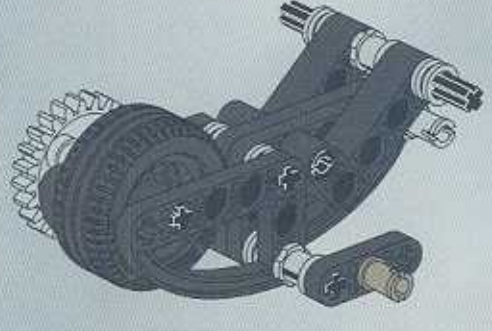

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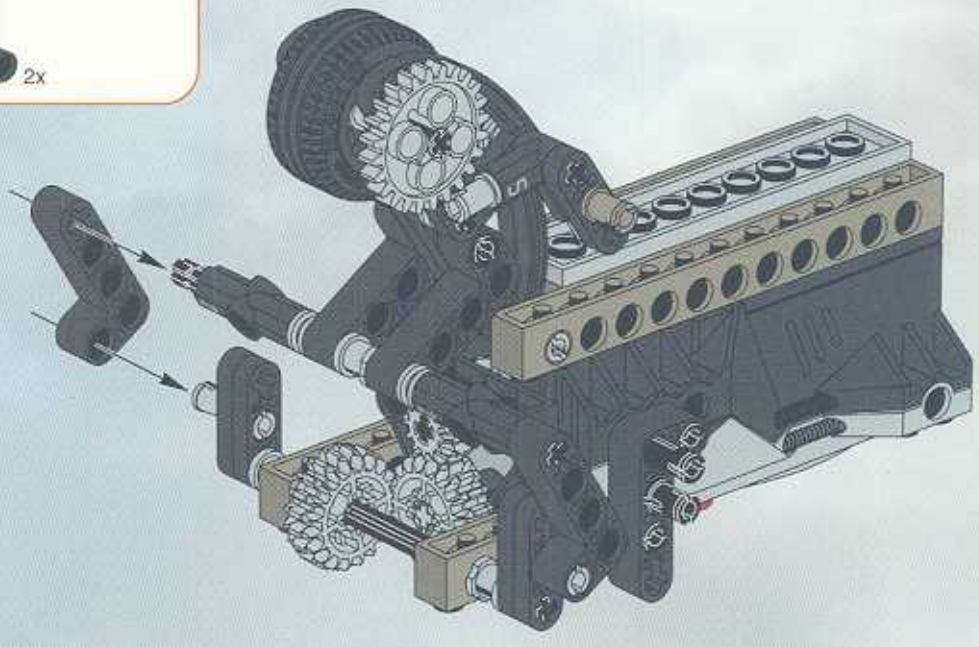

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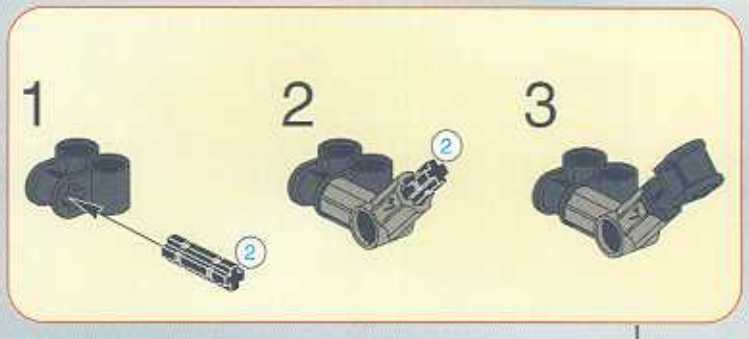

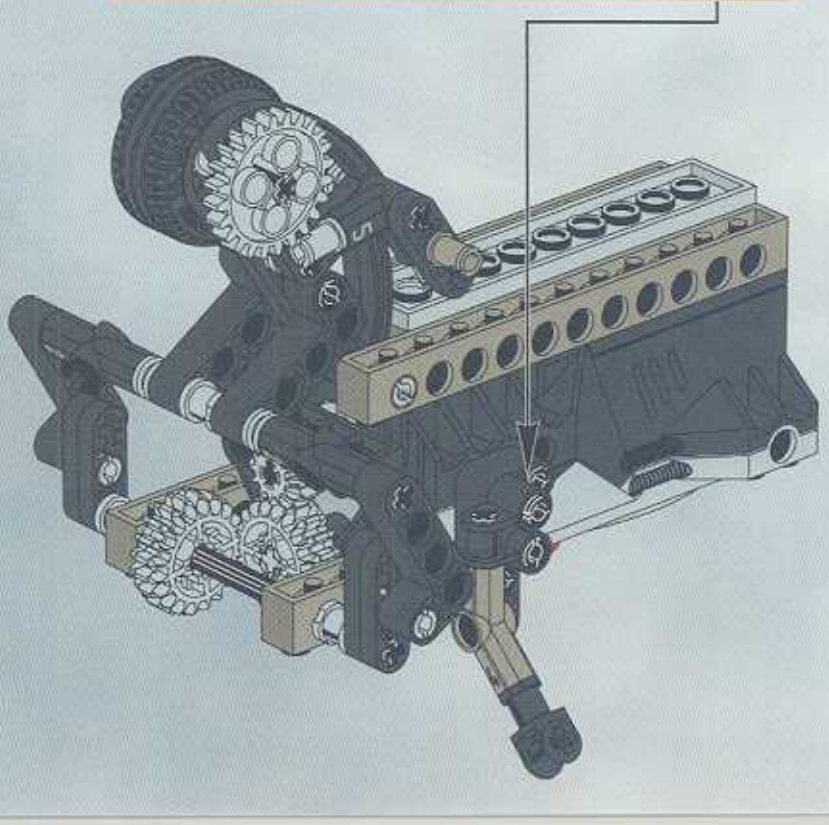

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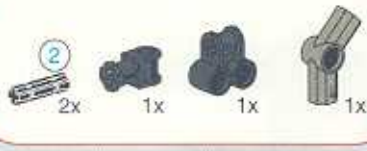

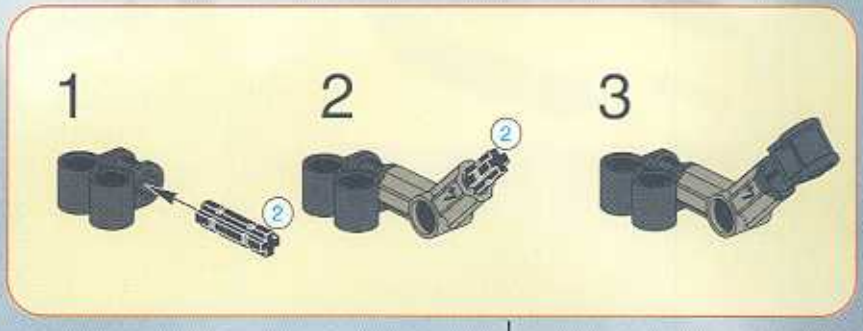

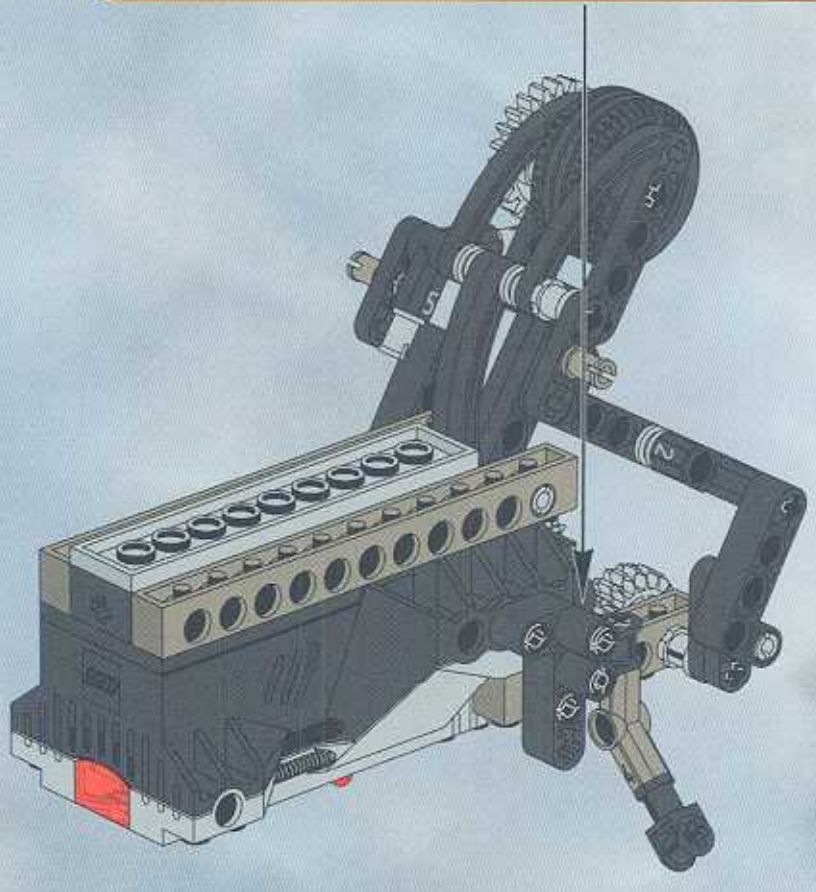

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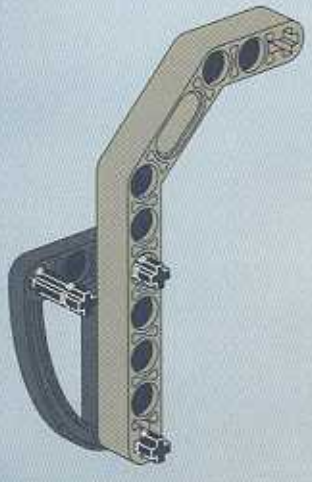

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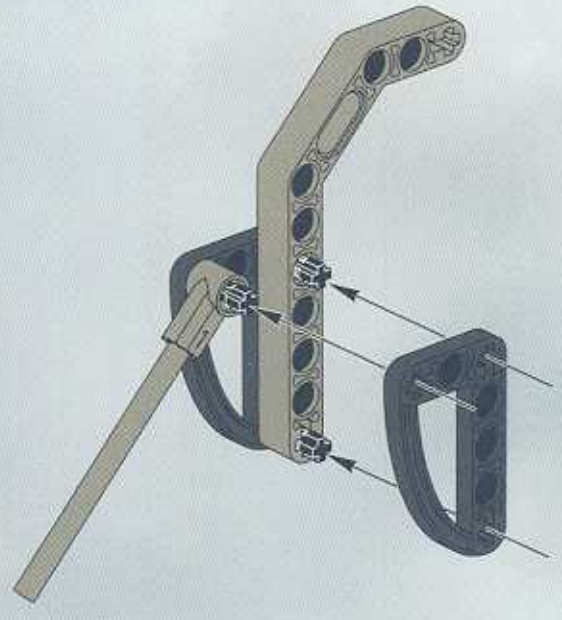

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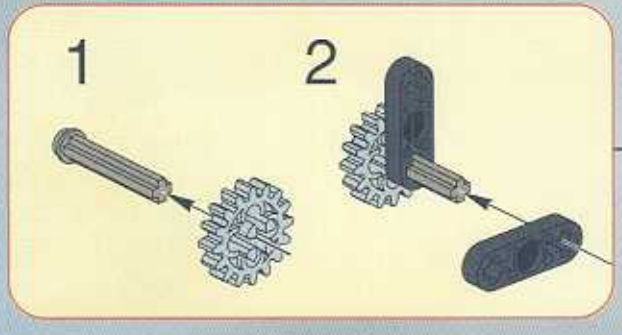

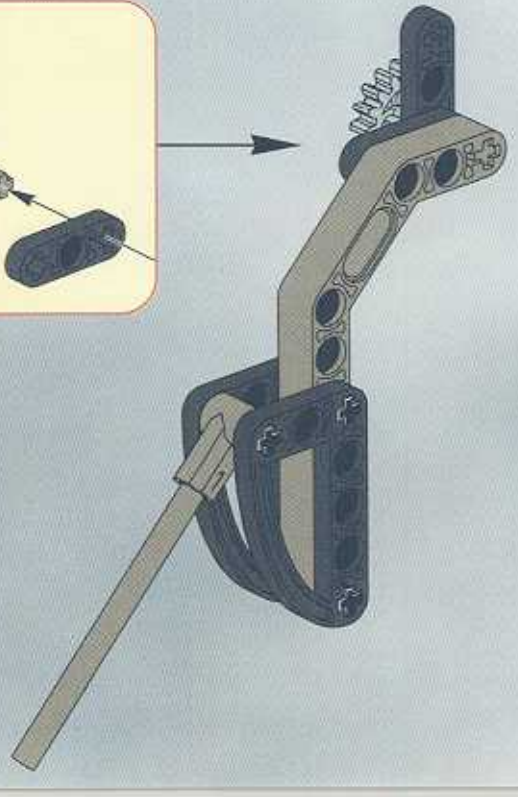

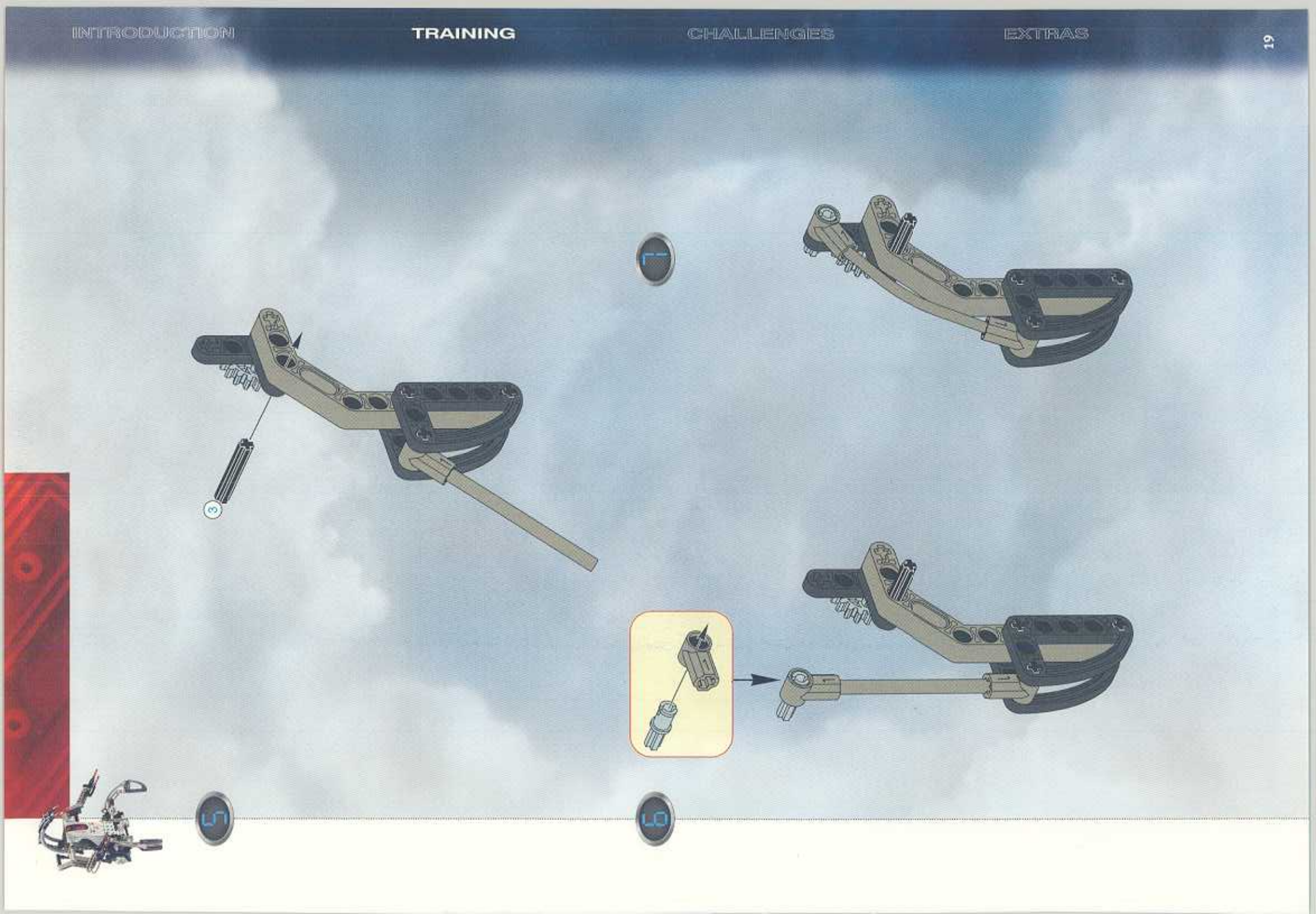
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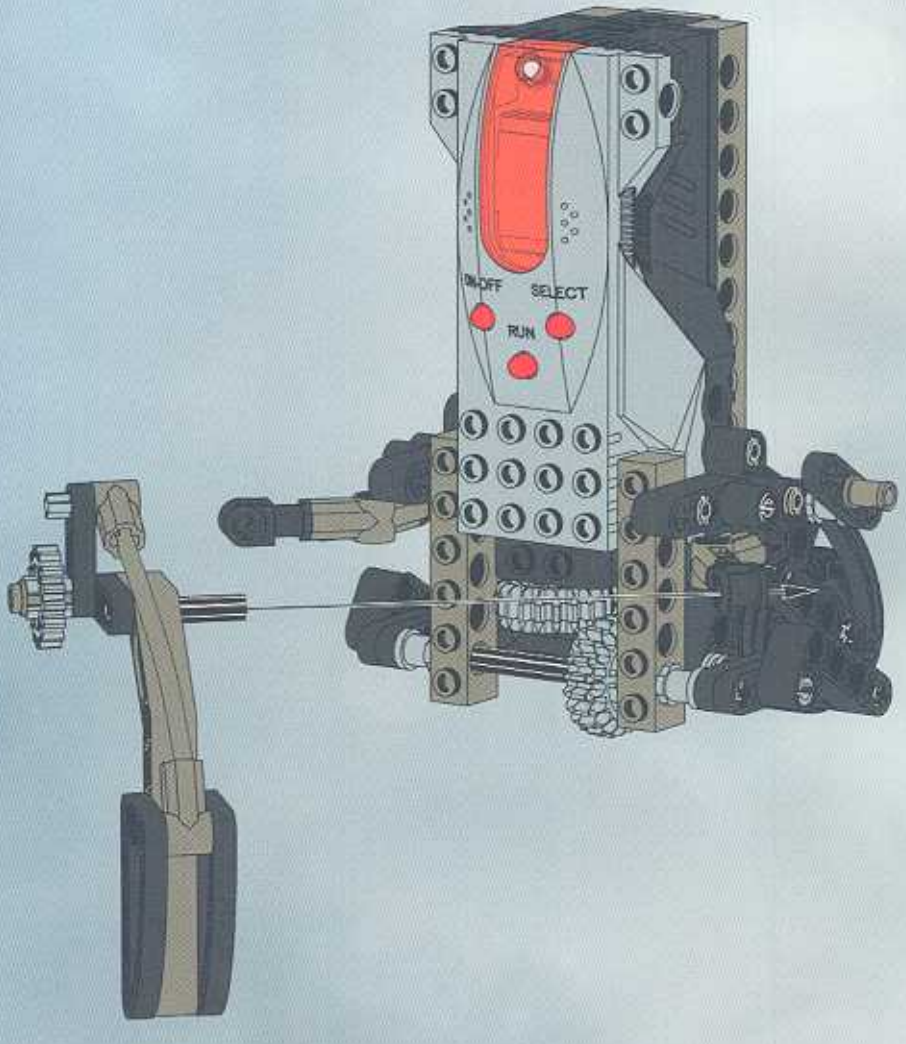
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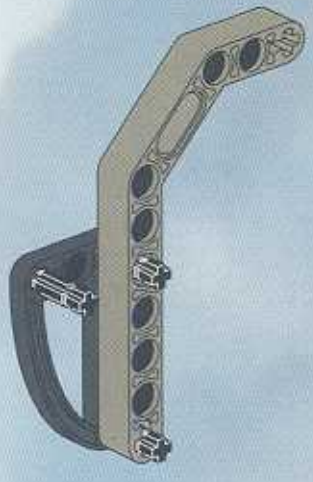

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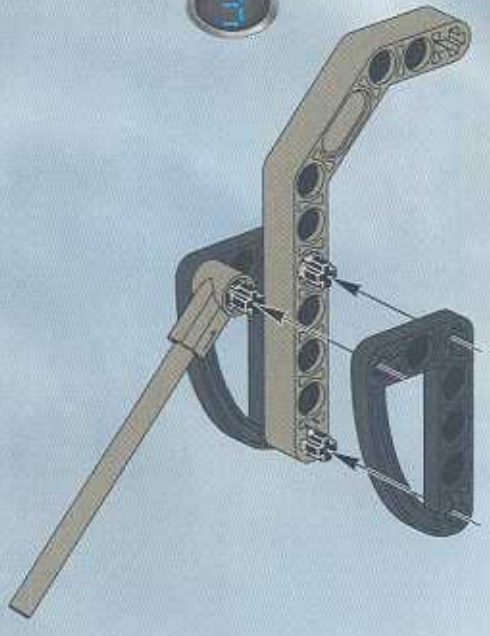

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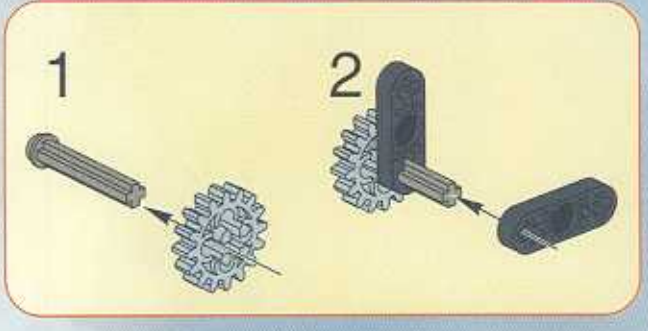

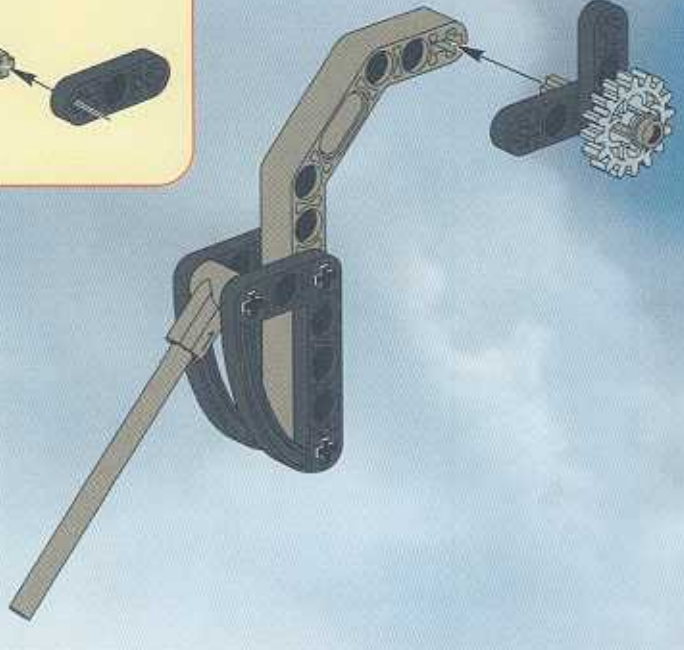

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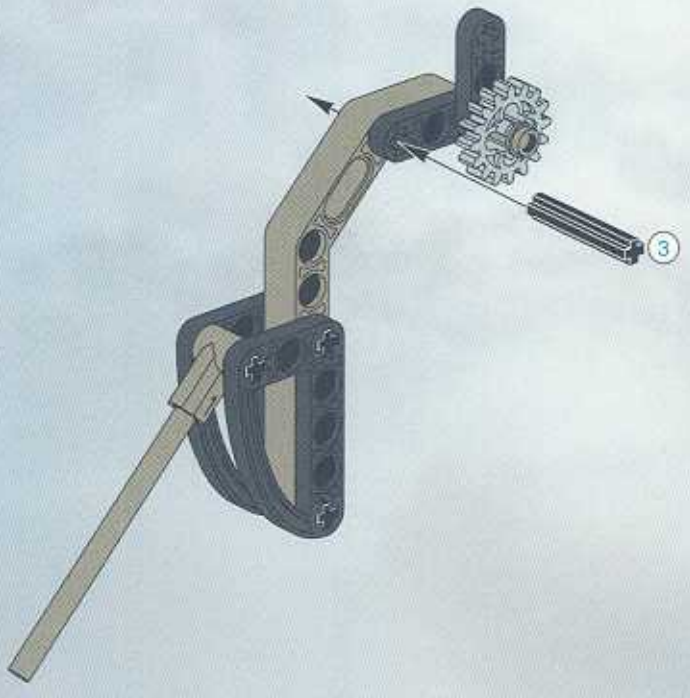

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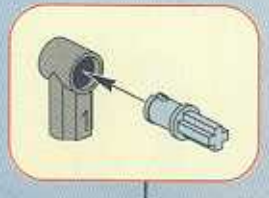

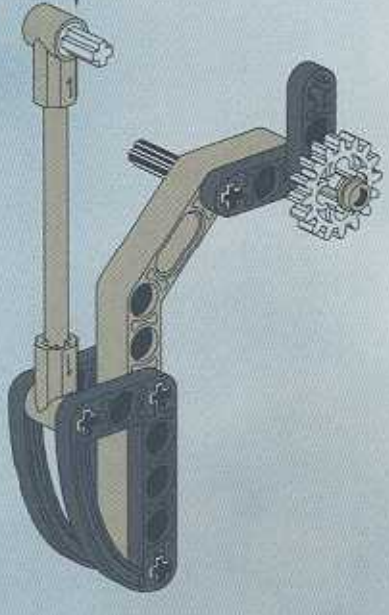

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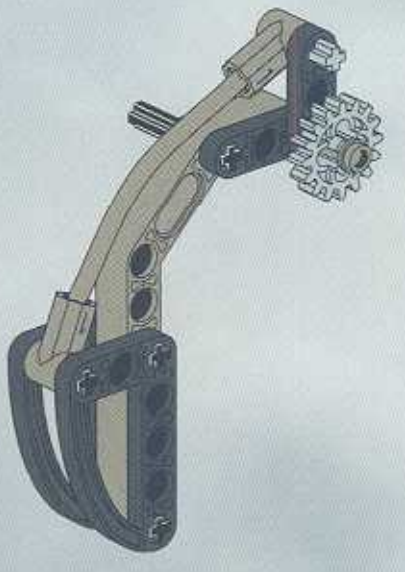

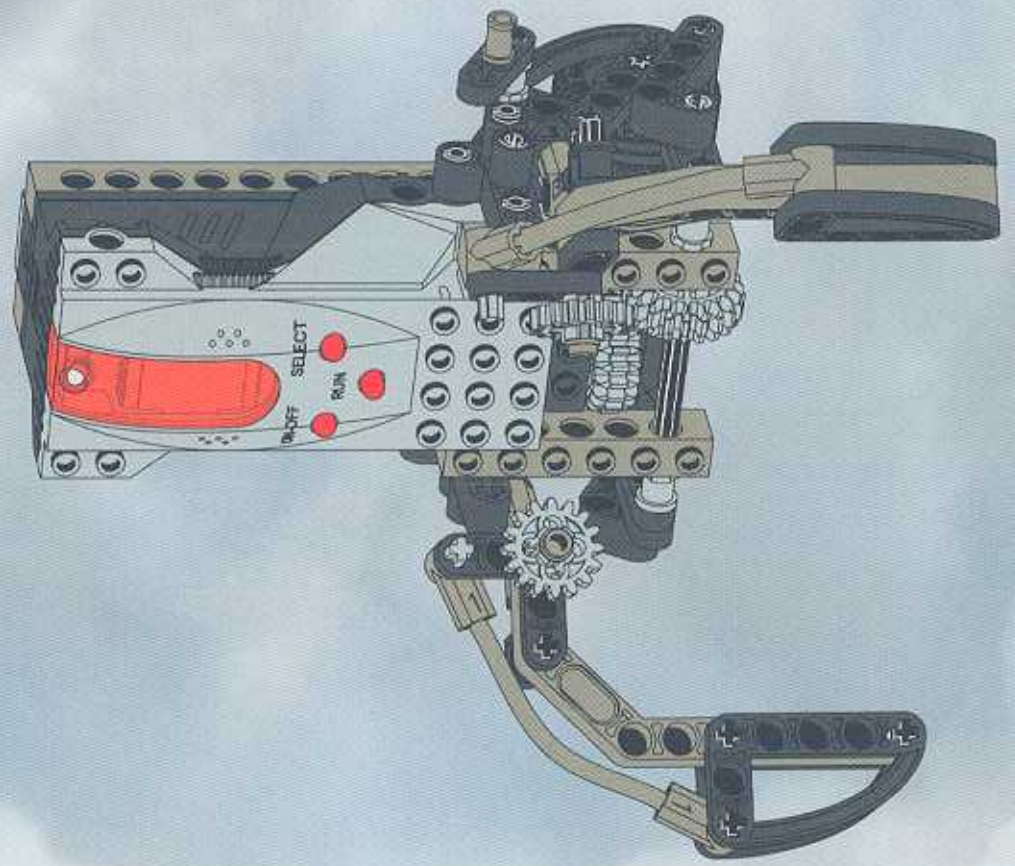
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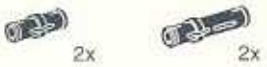

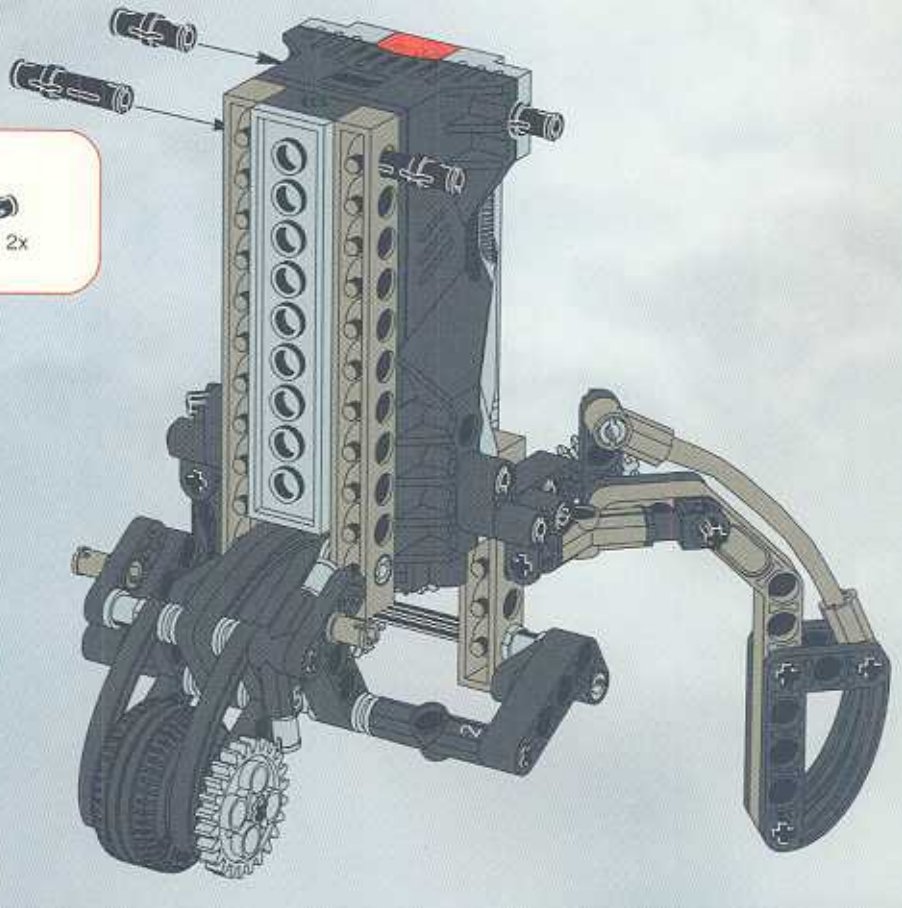

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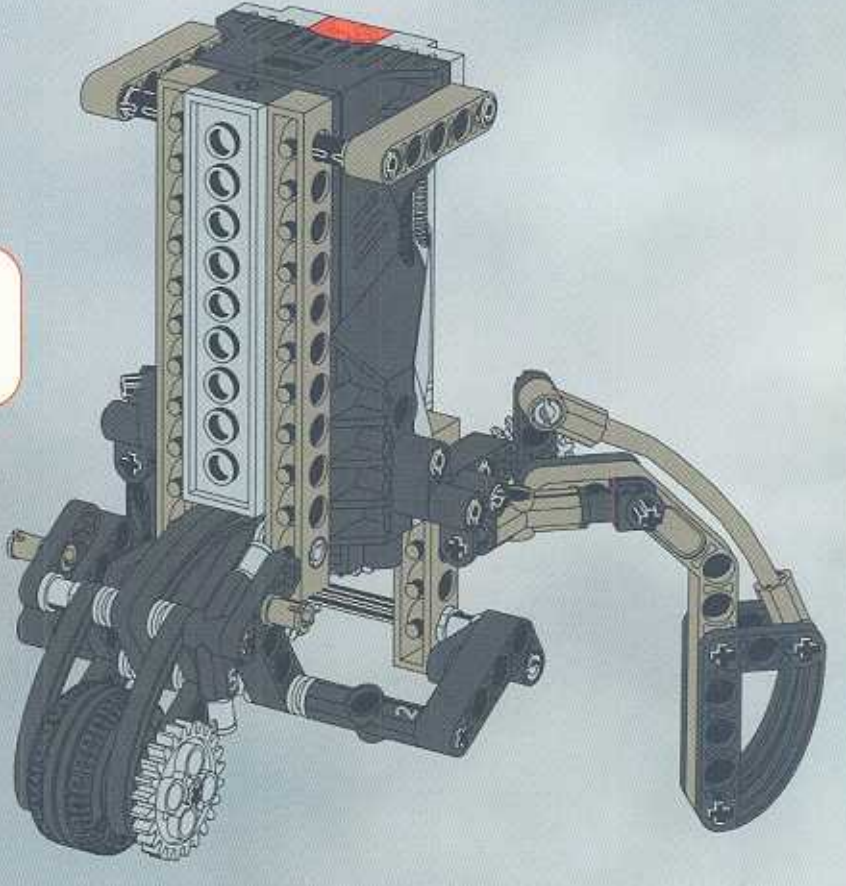

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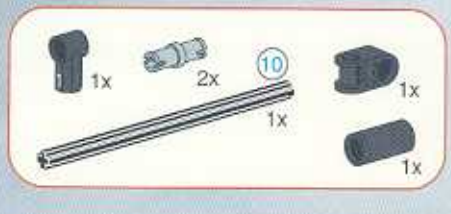

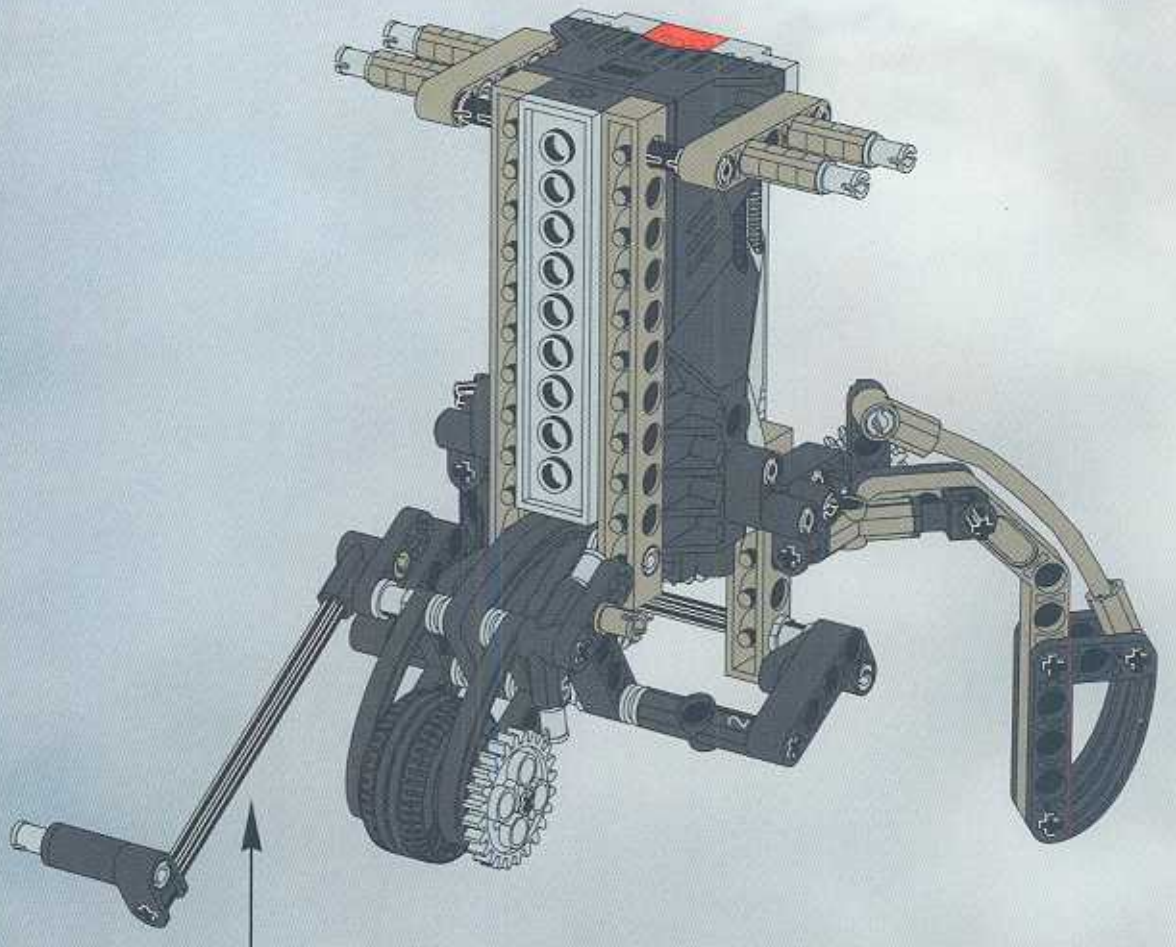

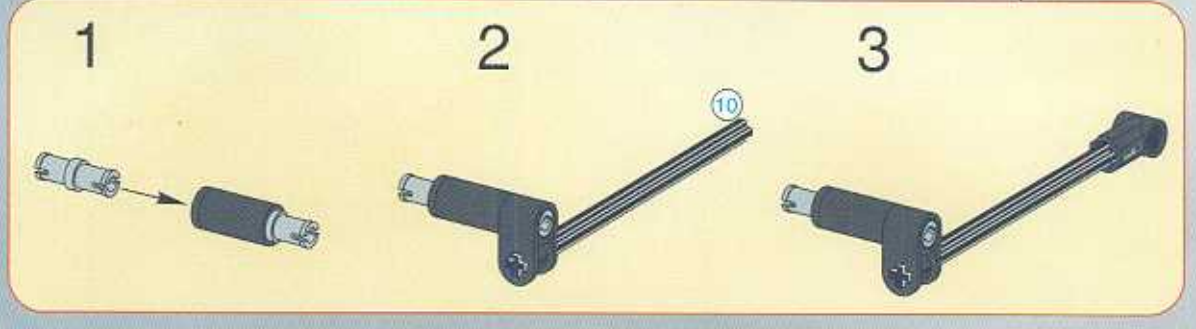

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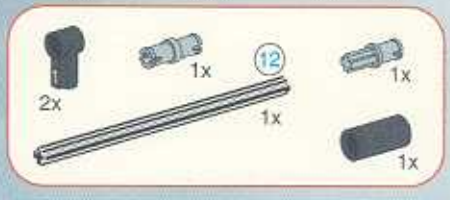

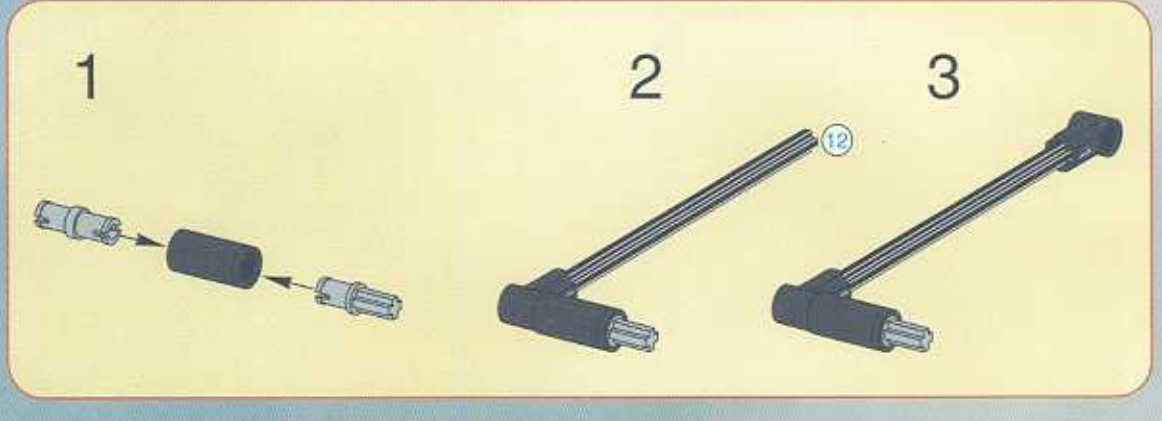

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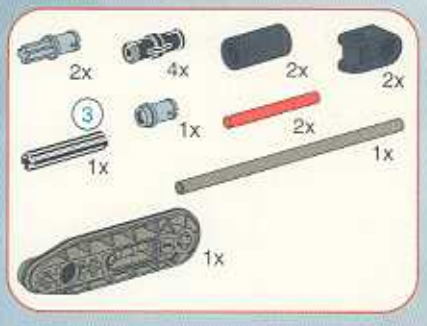

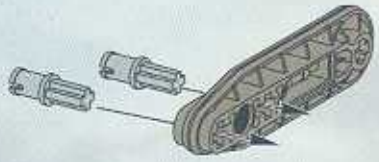

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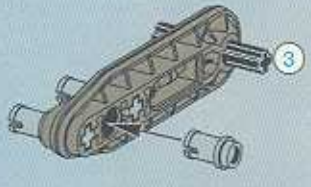

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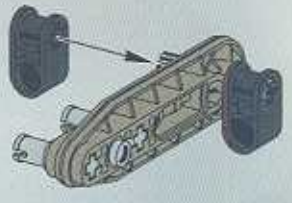

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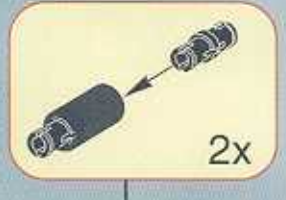

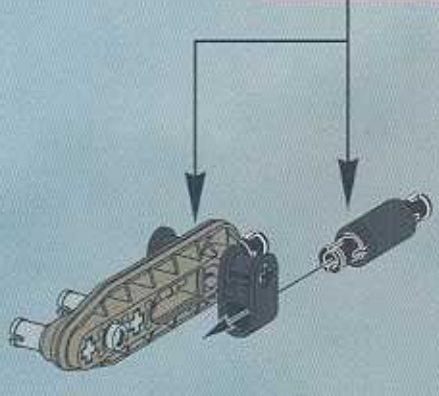

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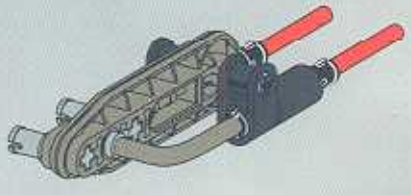

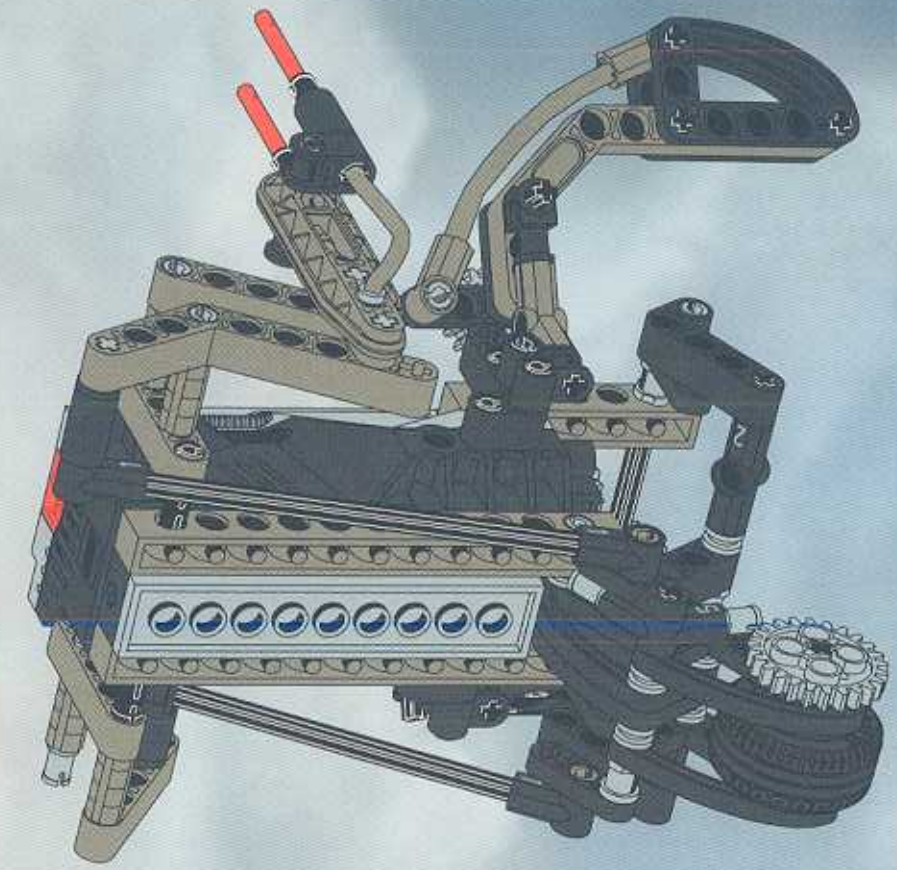

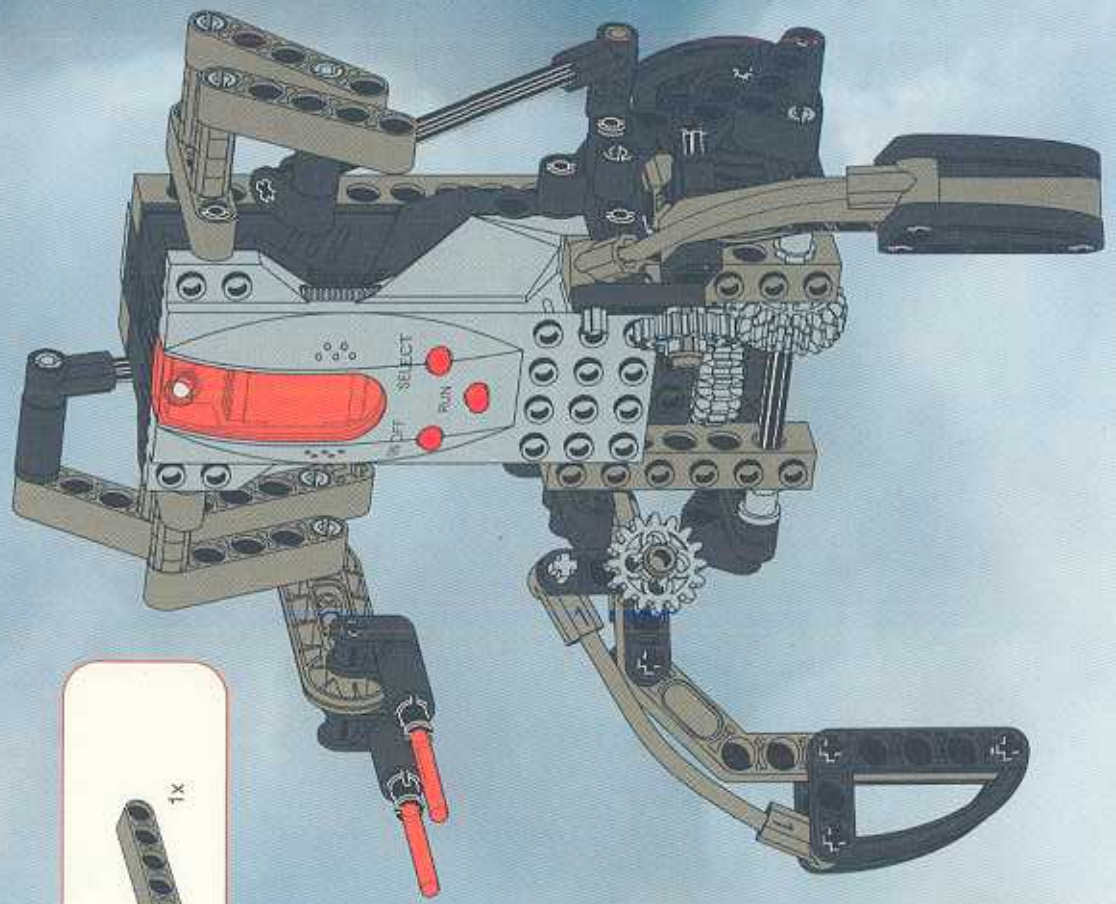
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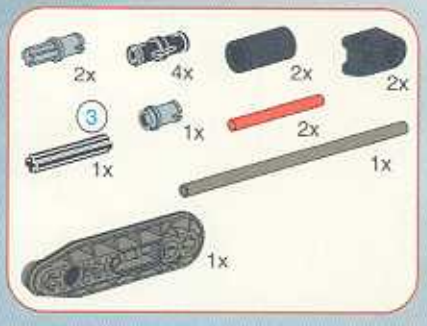
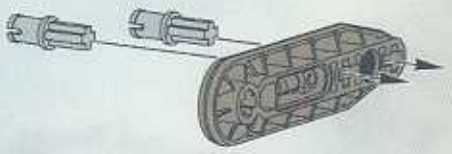
RUN
LEFT

1x

1





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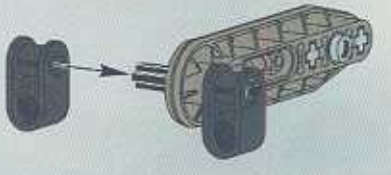

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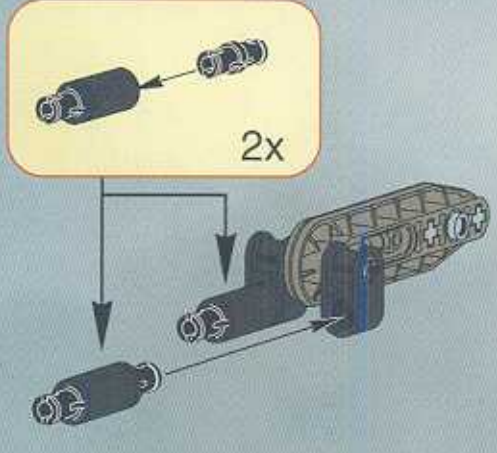

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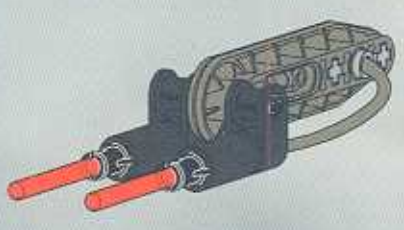
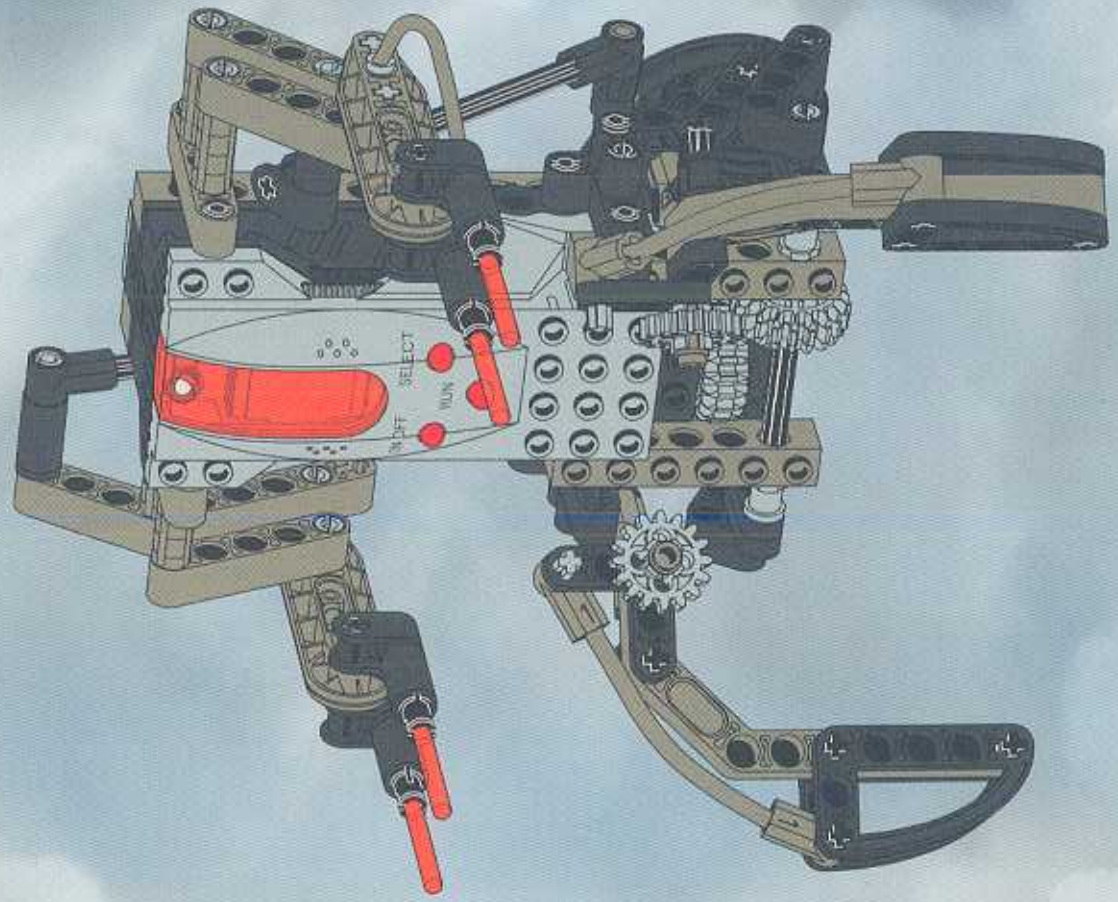
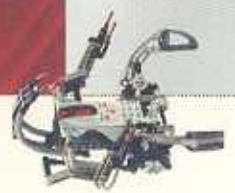



SELECT
RUN
SHIFT



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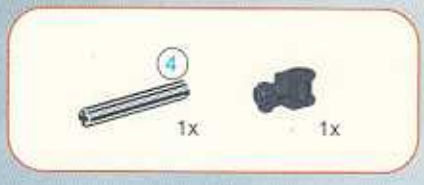

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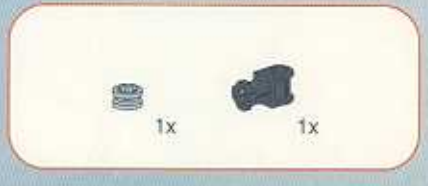

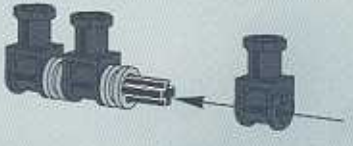

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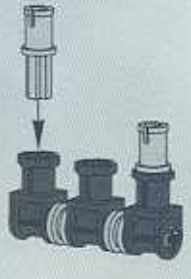

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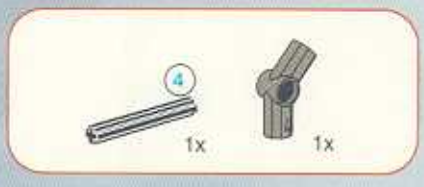
1x
1x

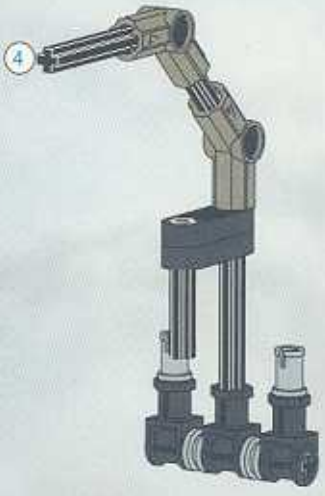
3

3
1x

3

9





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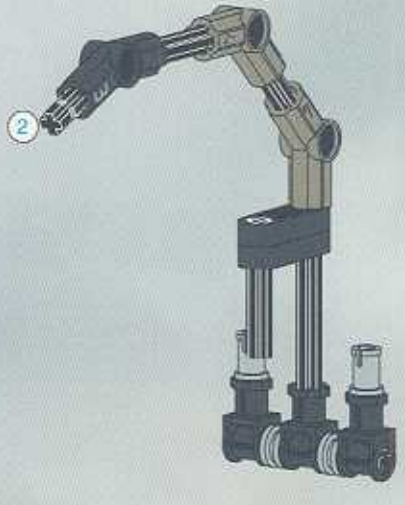

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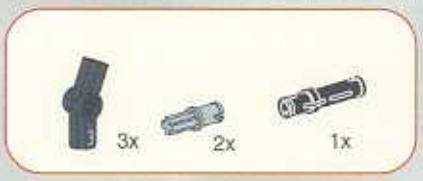

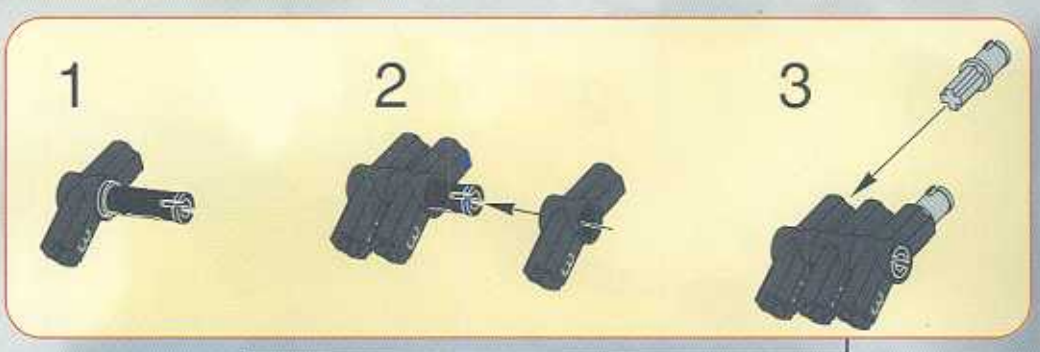

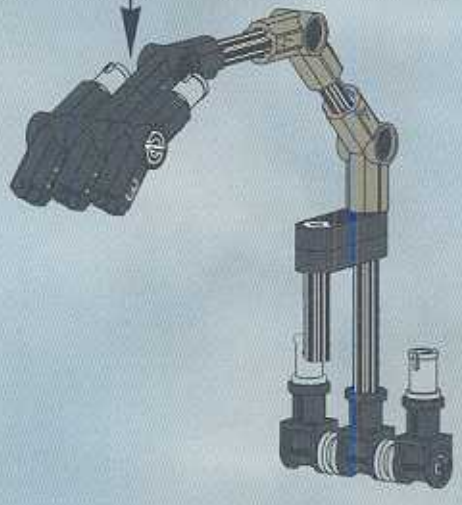

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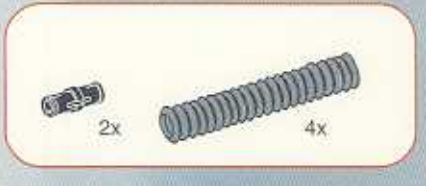

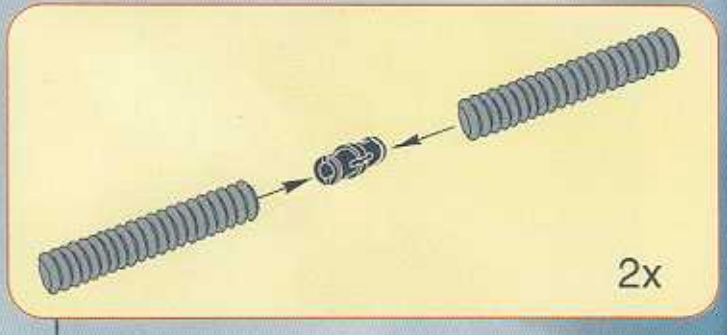

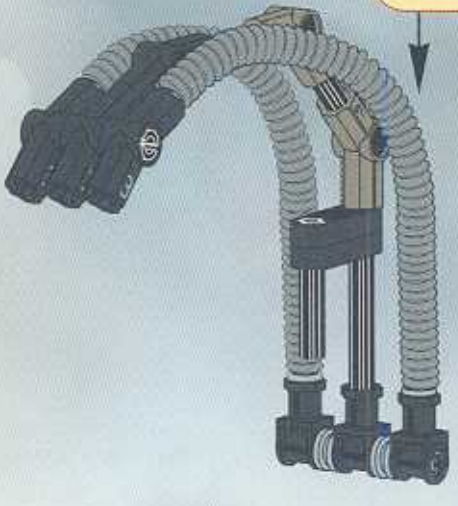

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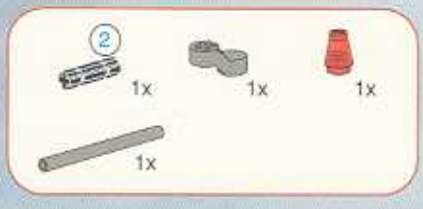

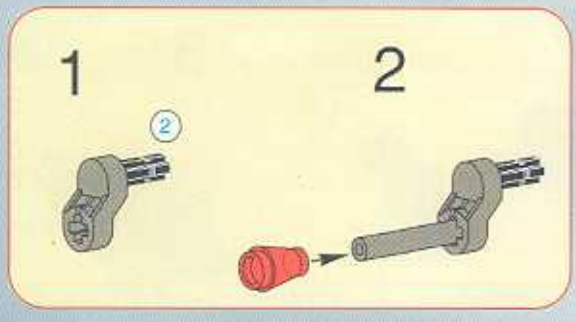

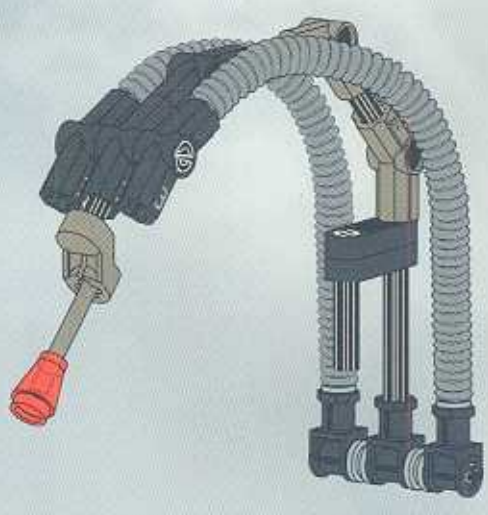

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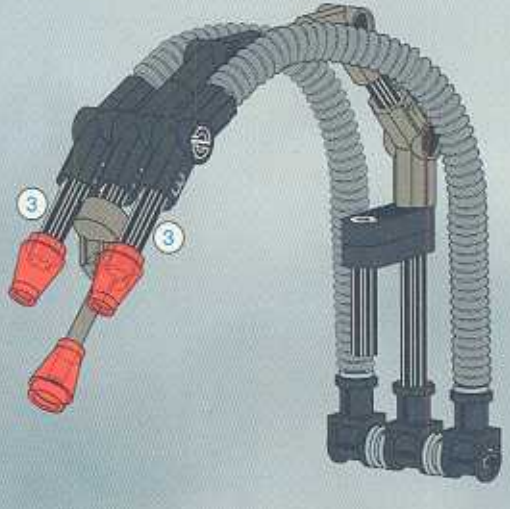
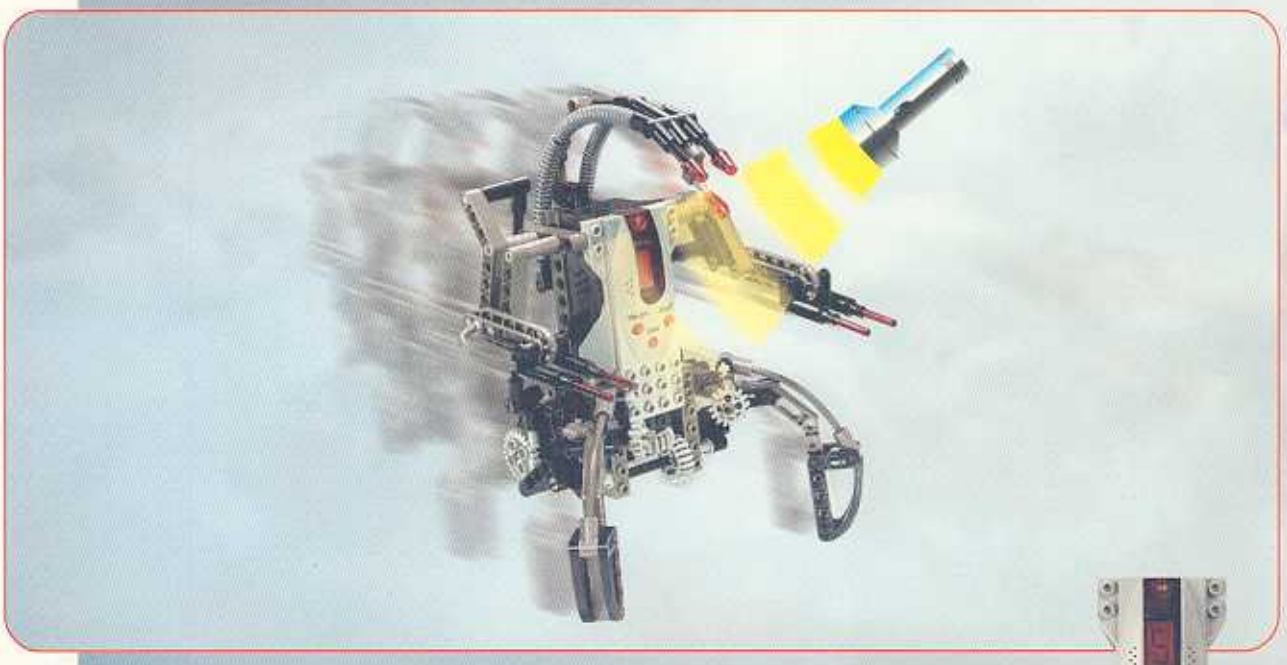


SELECT
RUN

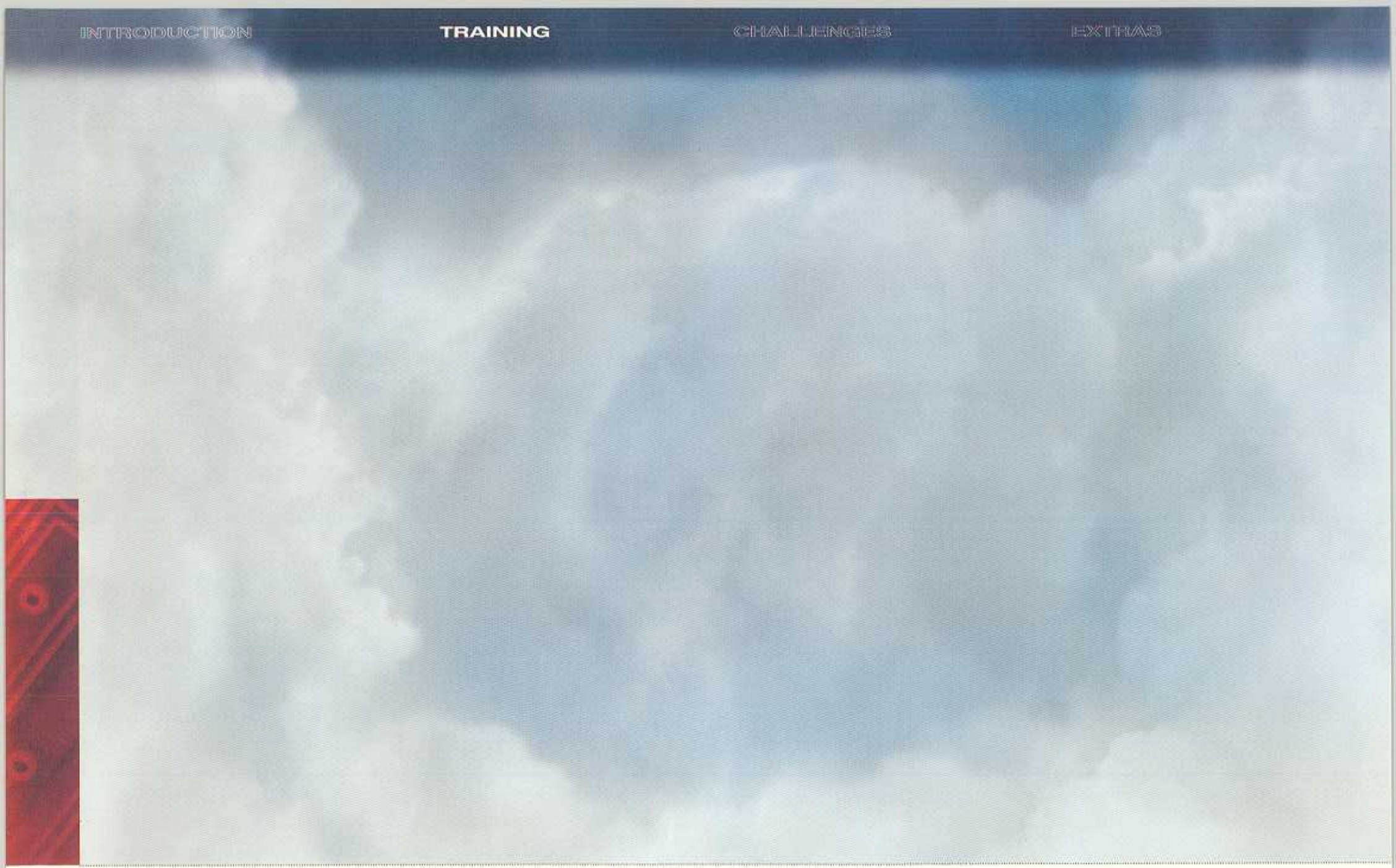
KEEP ALIVE



Select and Run Program 5 (Keep Alive). Flash the Destroyer Droid to make it move. Flash it several times to make it move faster. You can change the Droid's direction by flipping the Direction Switch on the back of the model.

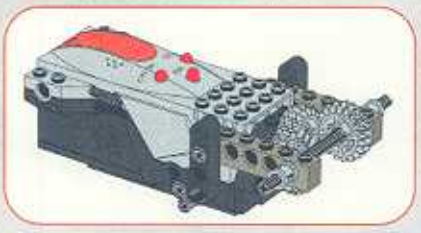
ALARM

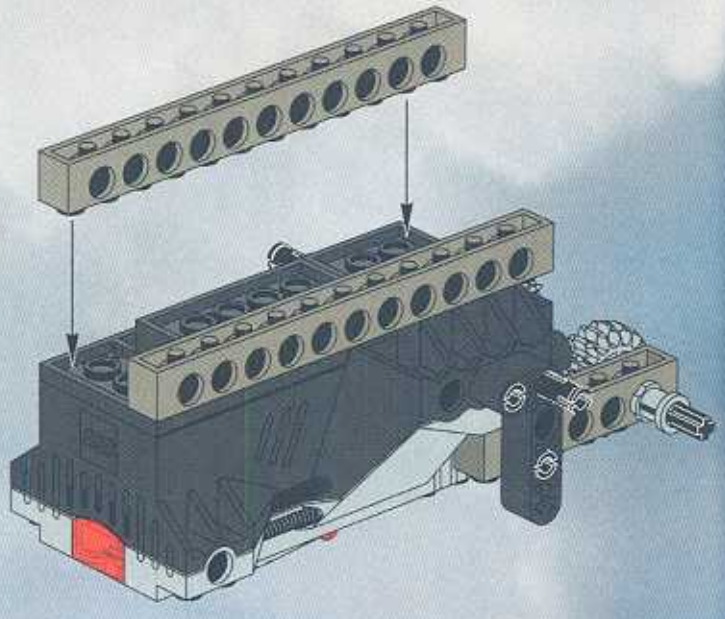
Select and Run Program 6 (Alarm). A change in light causes the Destroyer Droid to move and sound an alarm.



If you have not yet built the Y-Frame, go to book 1 page 10

1





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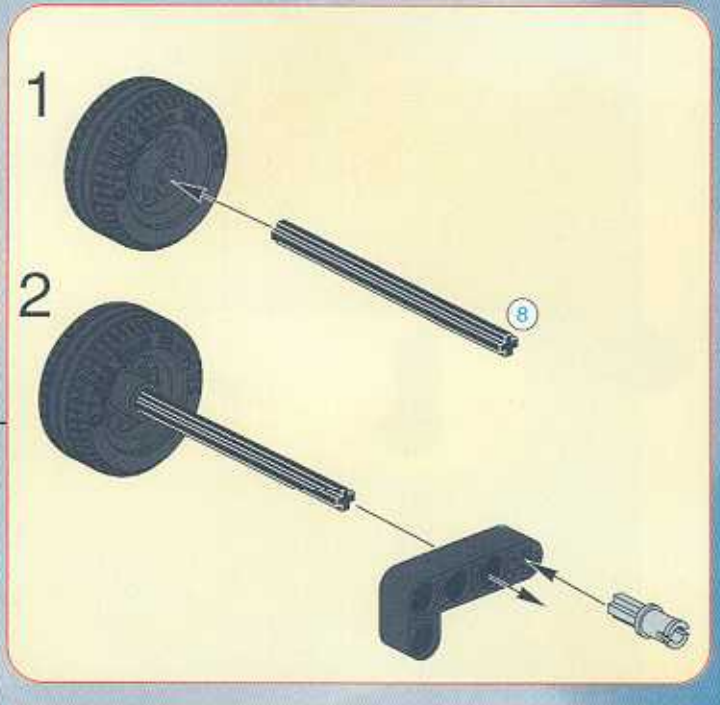

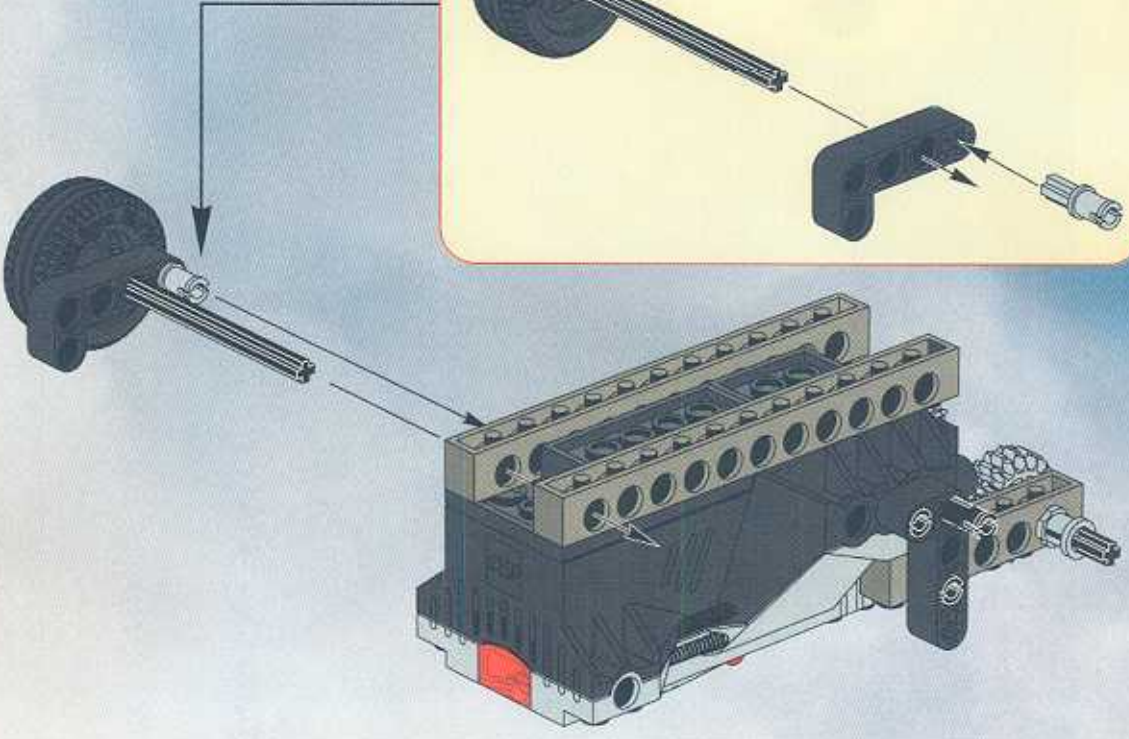

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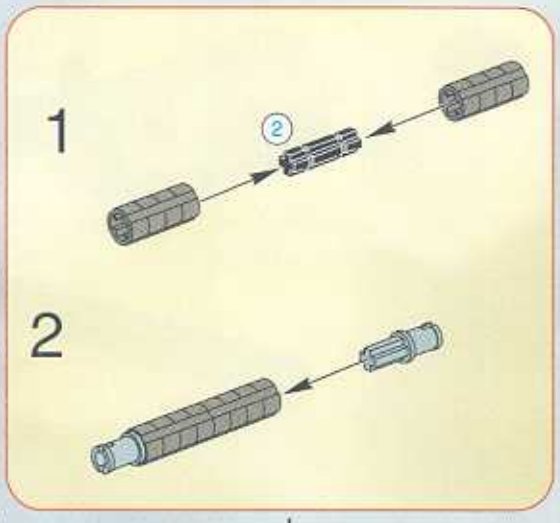

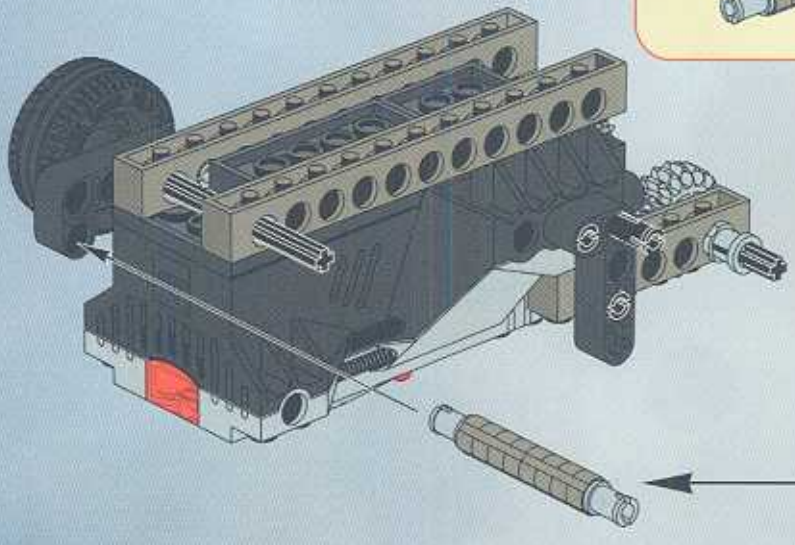

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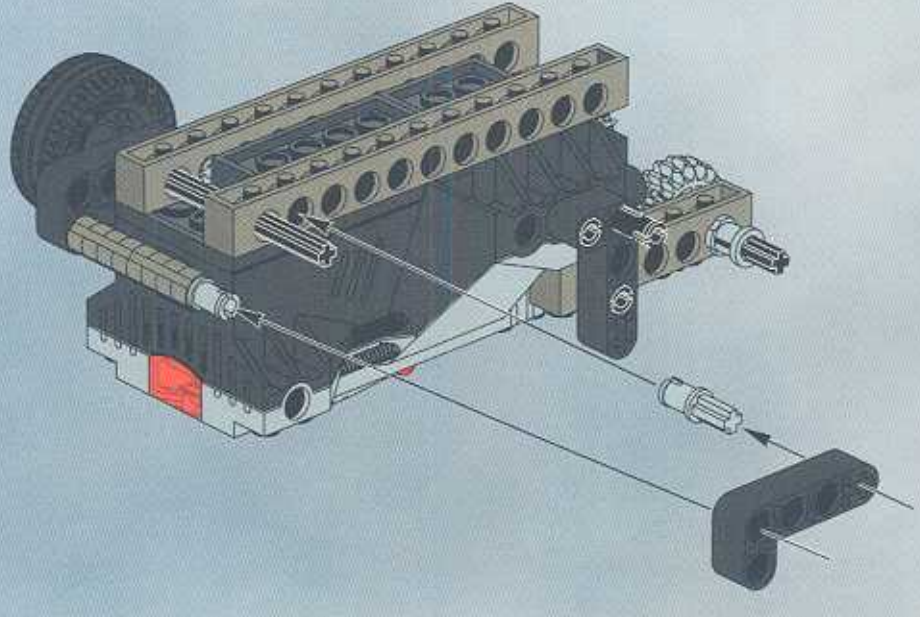

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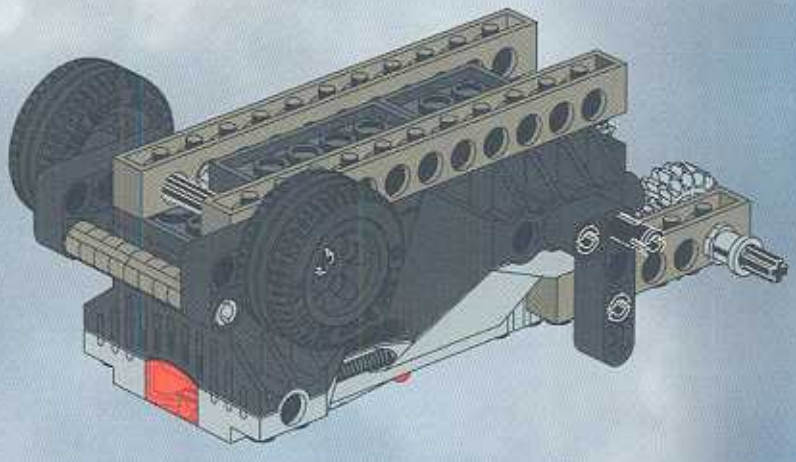

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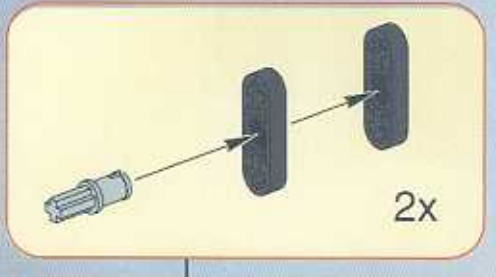

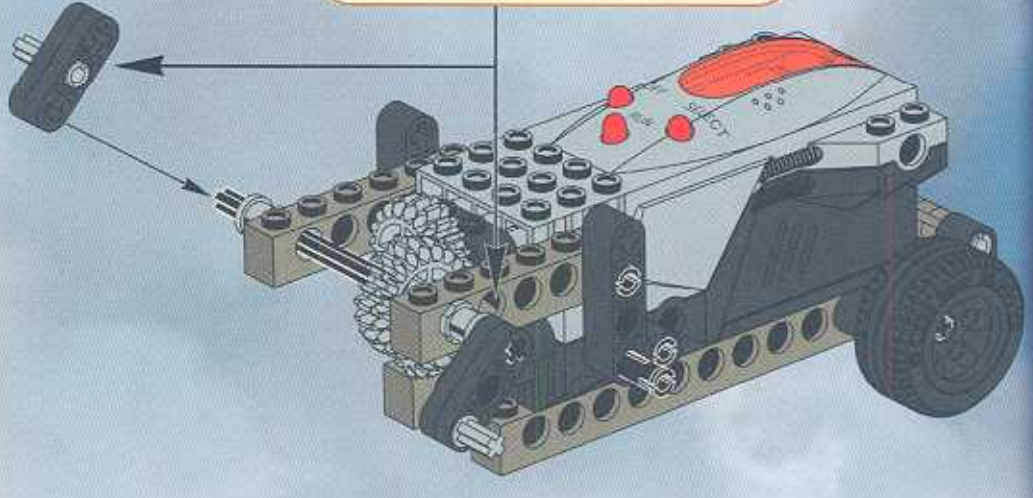

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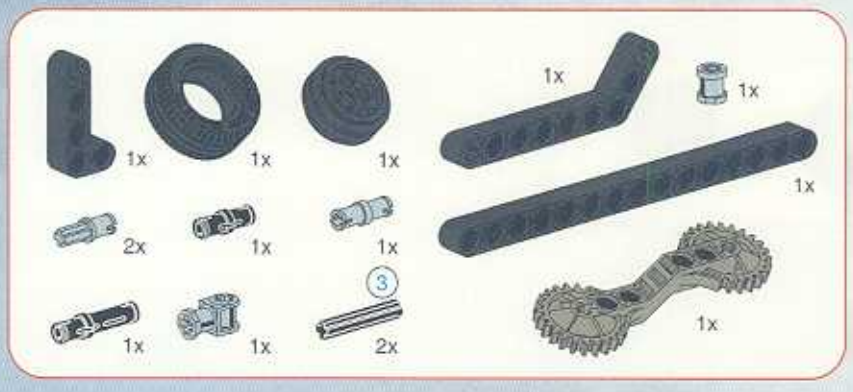

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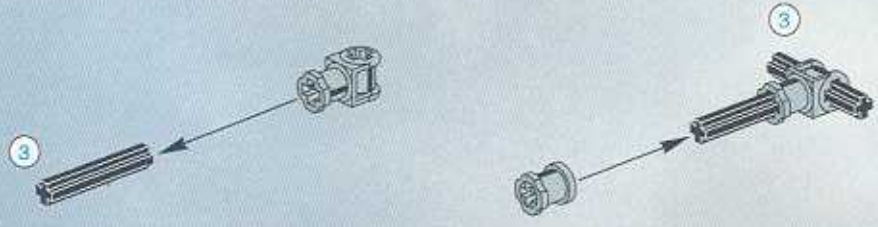

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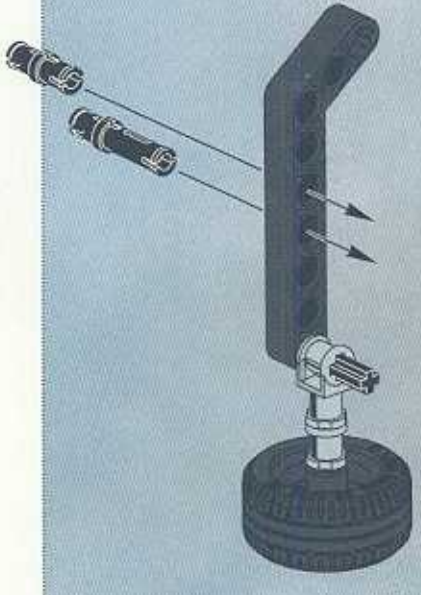

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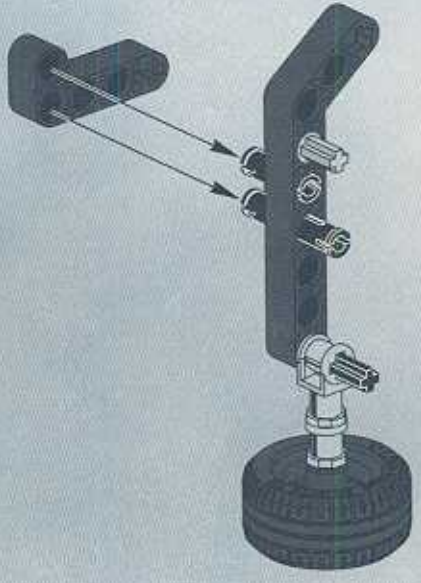

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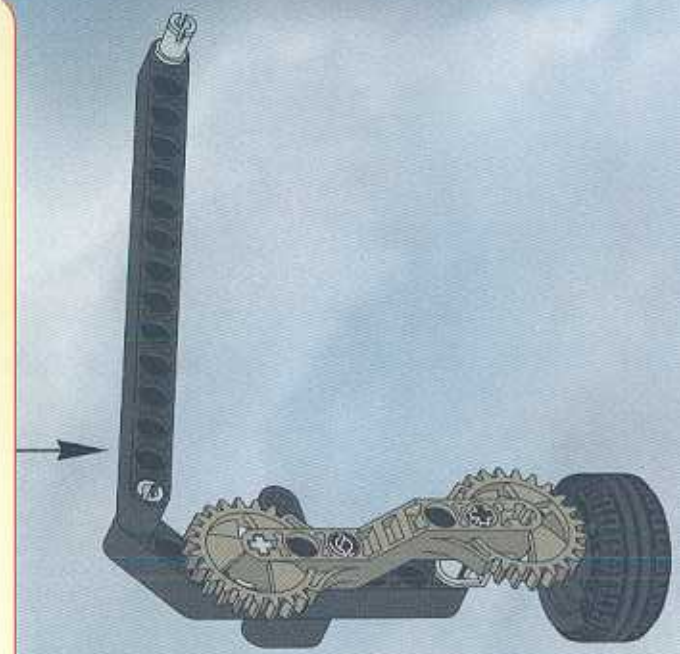

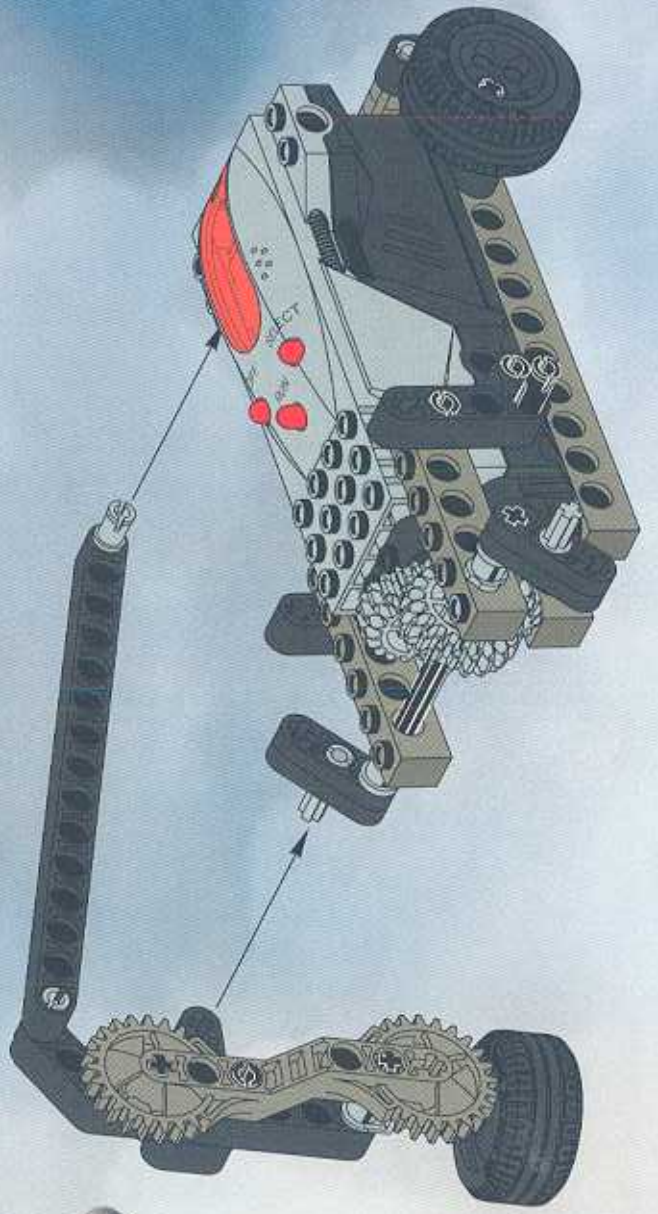

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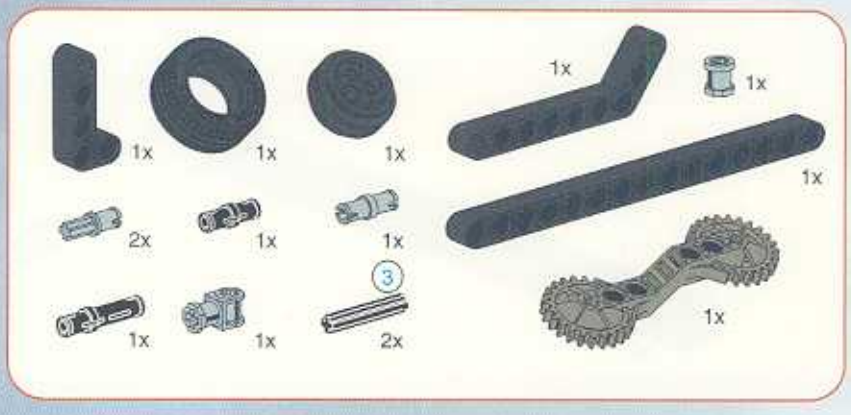

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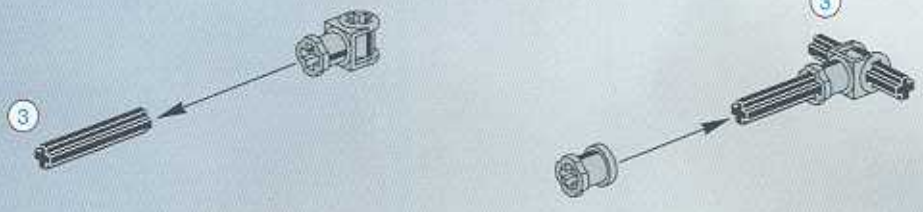

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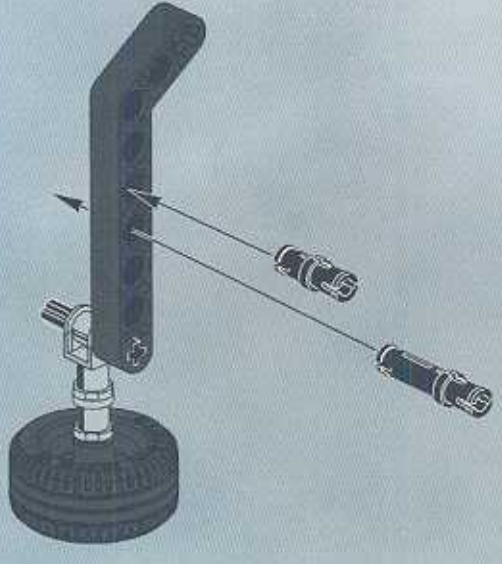

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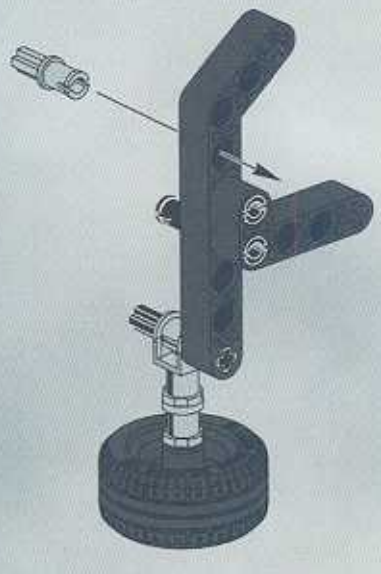

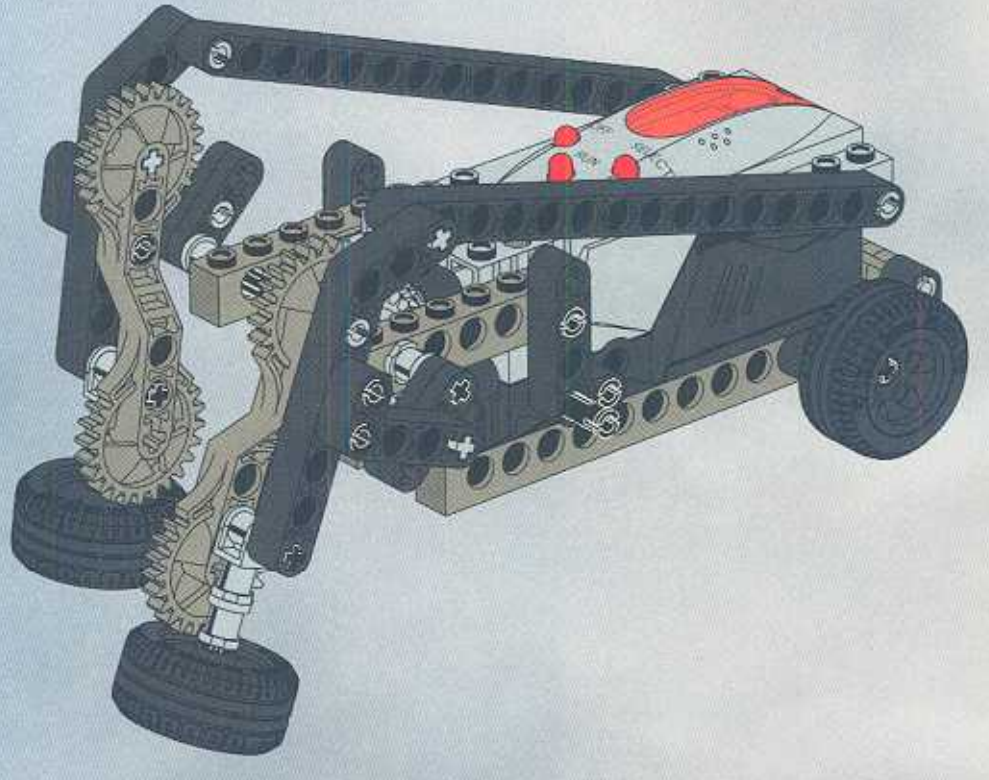

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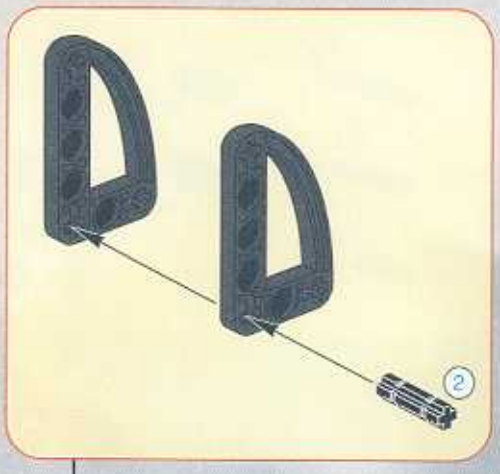

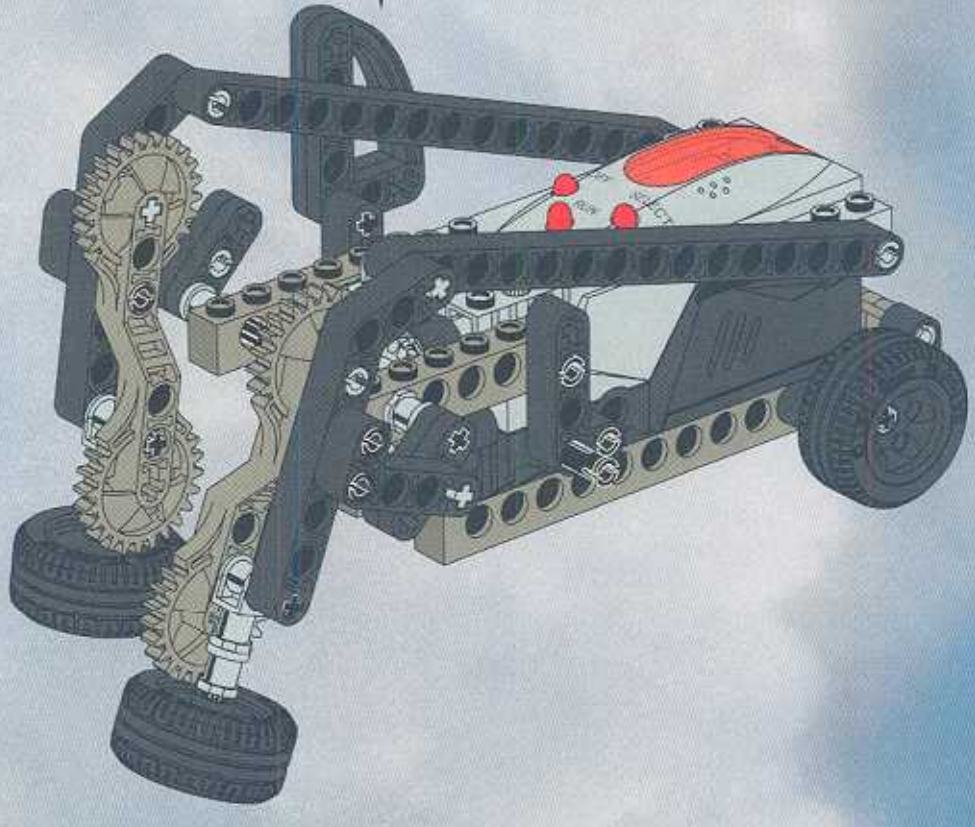

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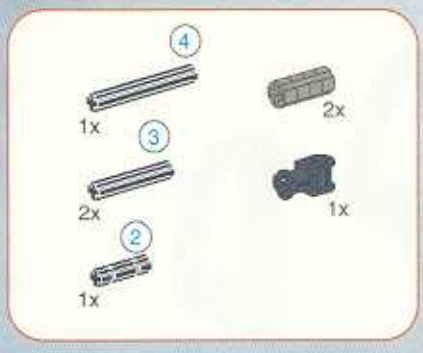
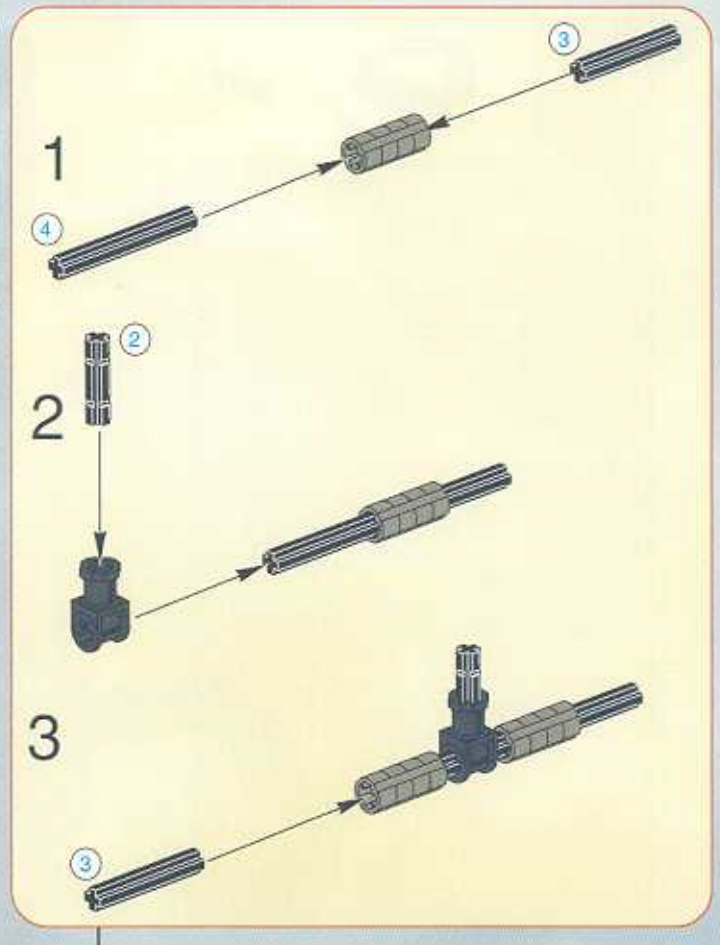
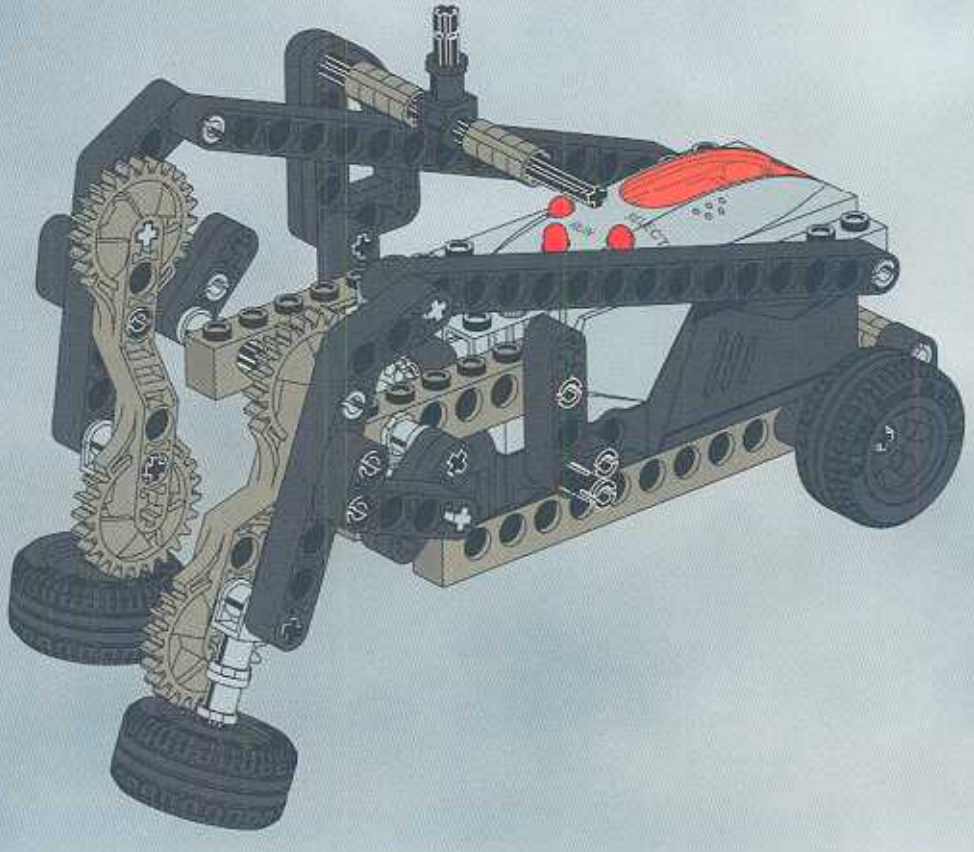
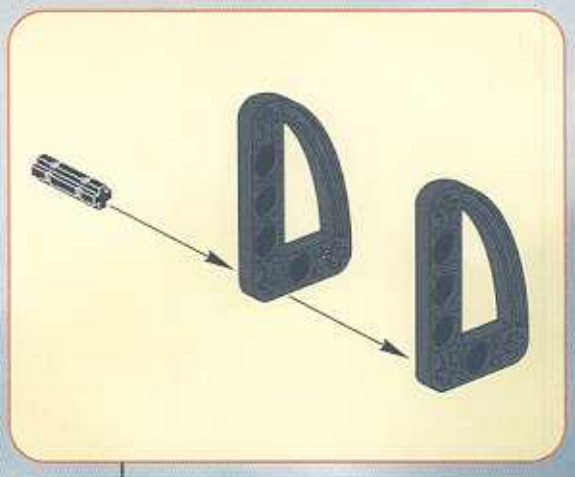
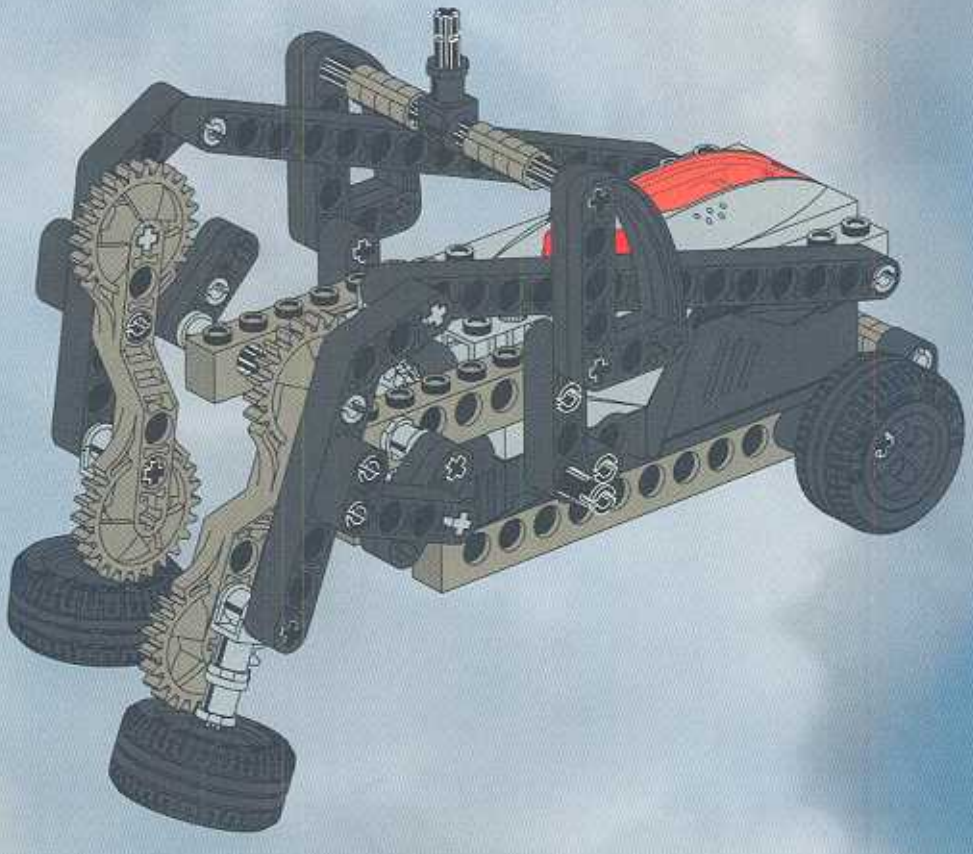


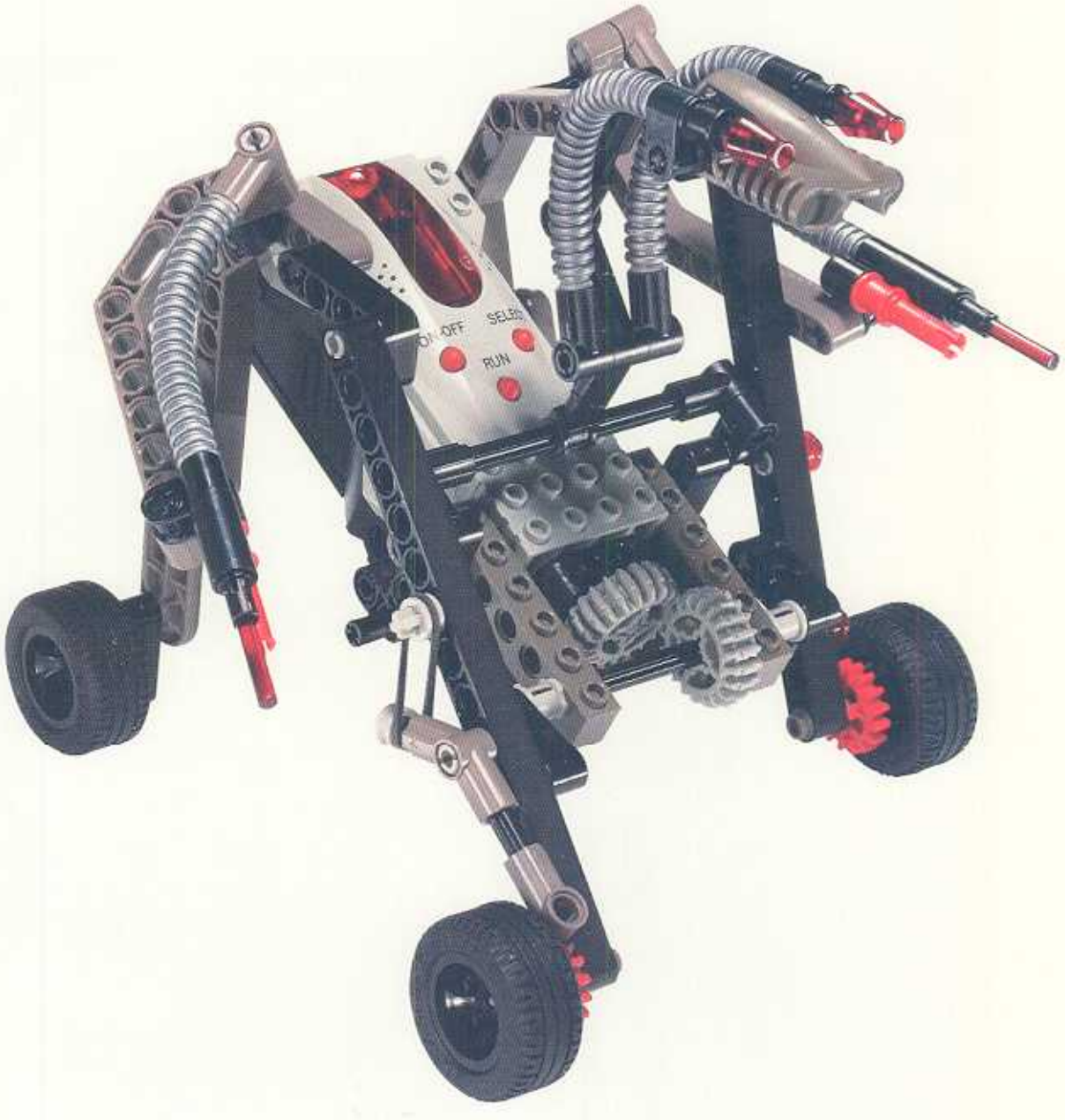








To add different attachments, go to Special Features (page 70) or go to the Stepper Challenge (page 69)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If you have not yet built the Y-Frame, go to book 1 page 10

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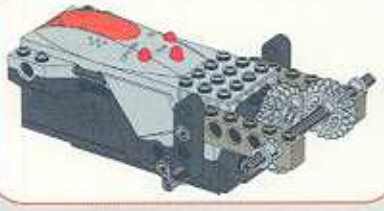

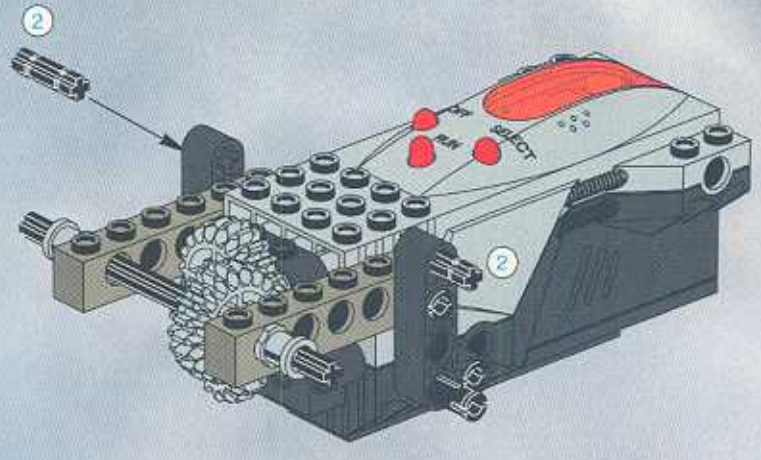

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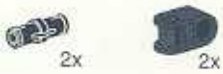

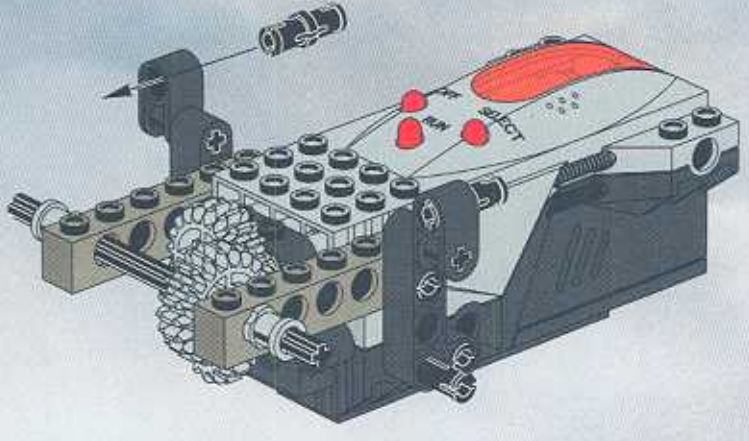

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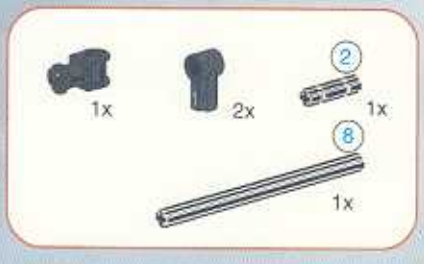

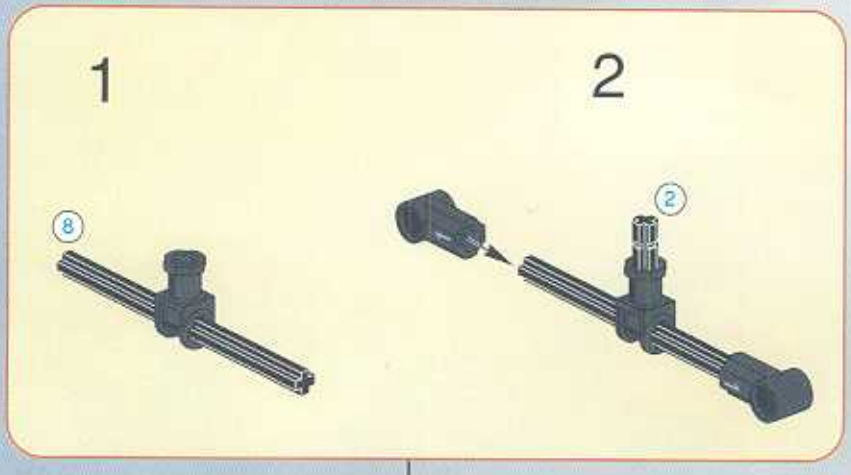

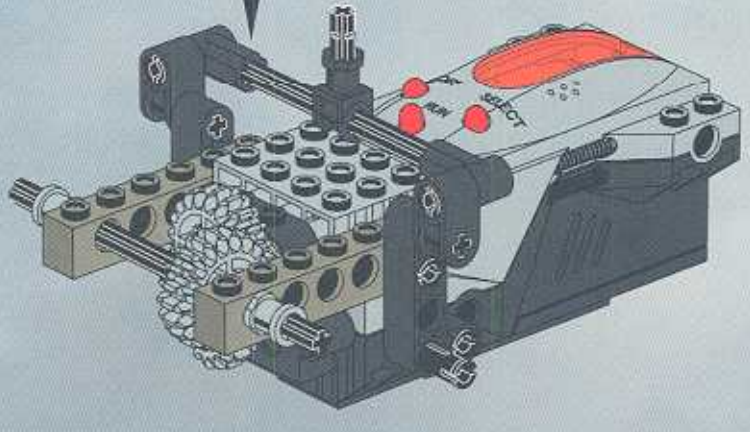

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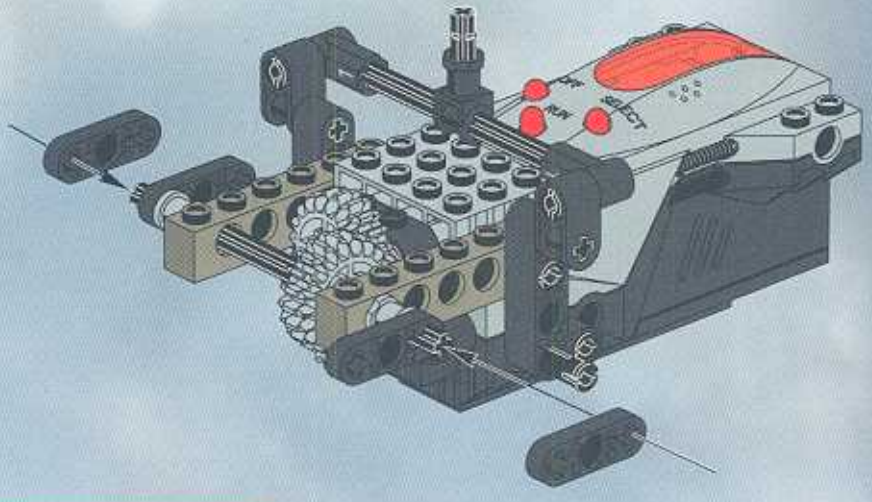

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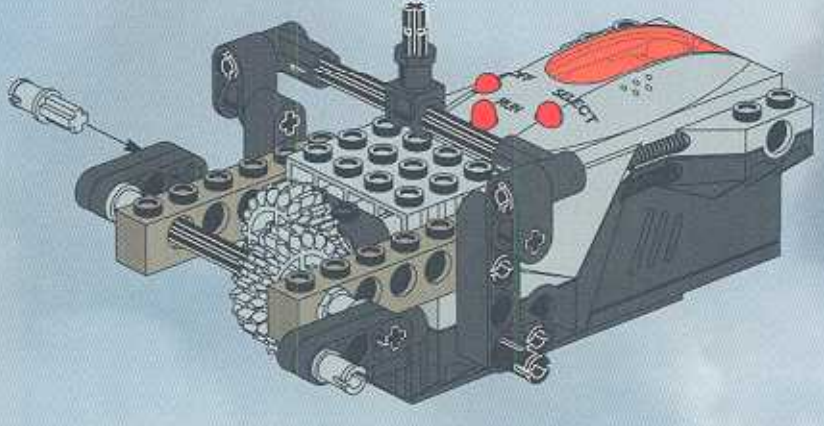

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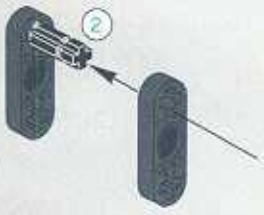

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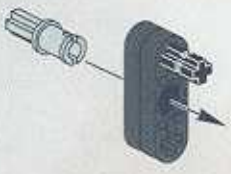

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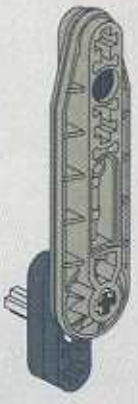

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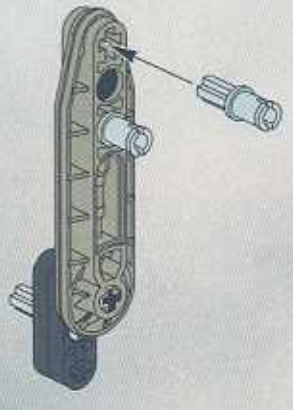

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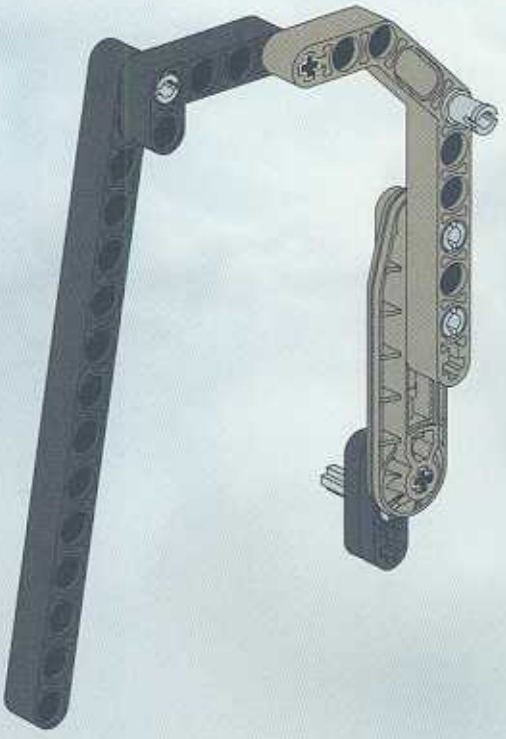

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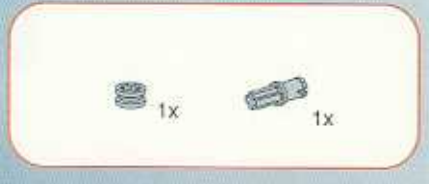

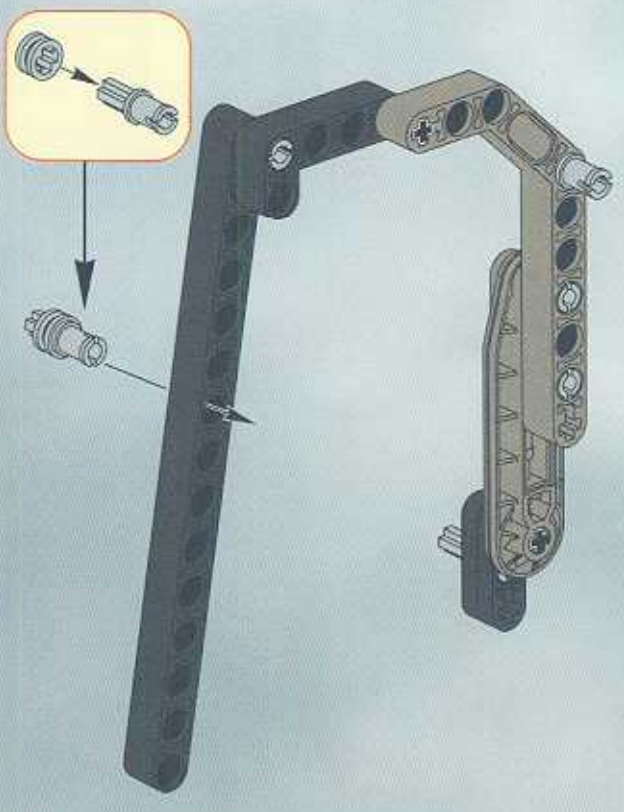

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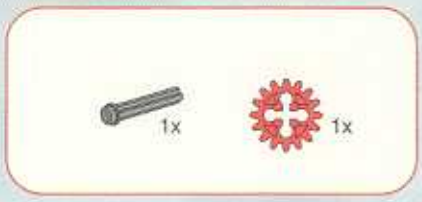

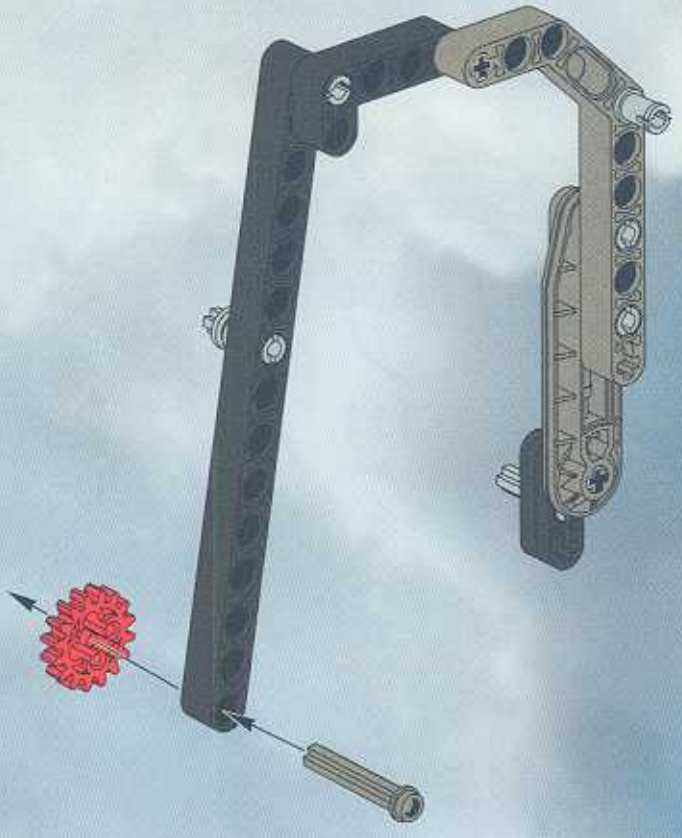

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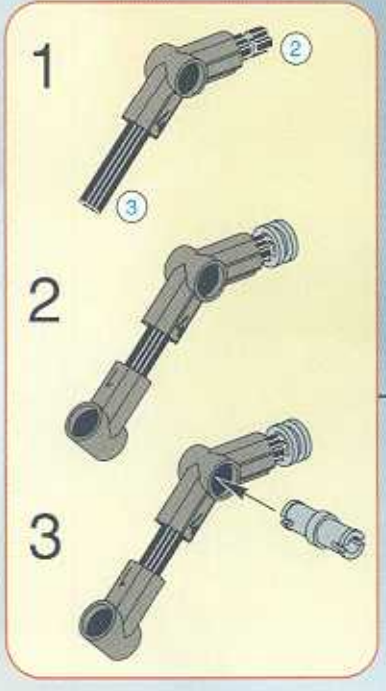

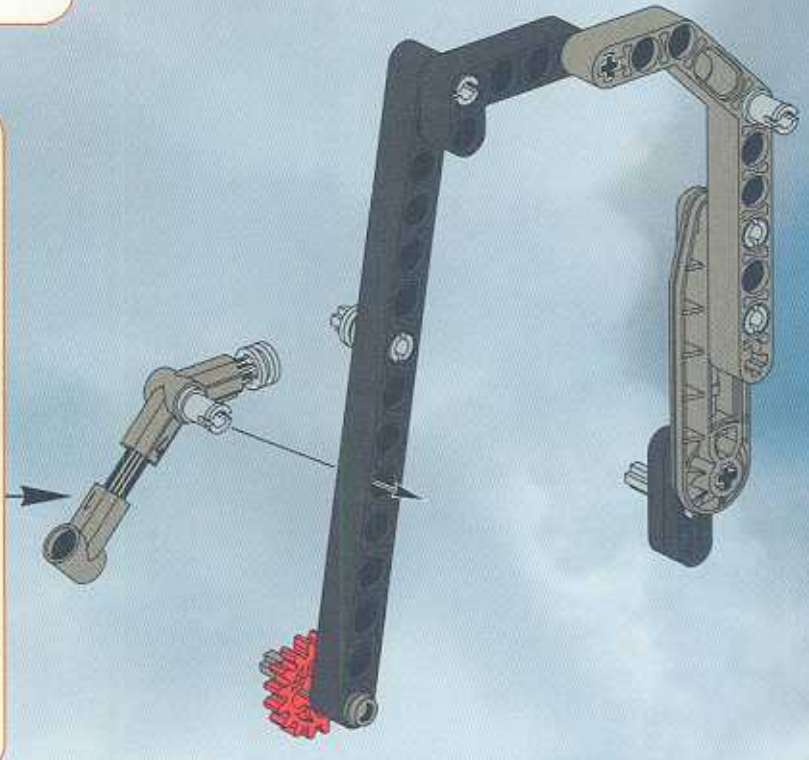

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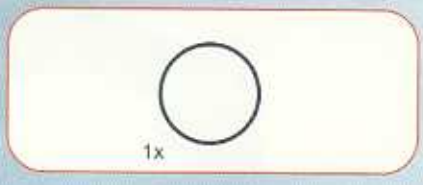

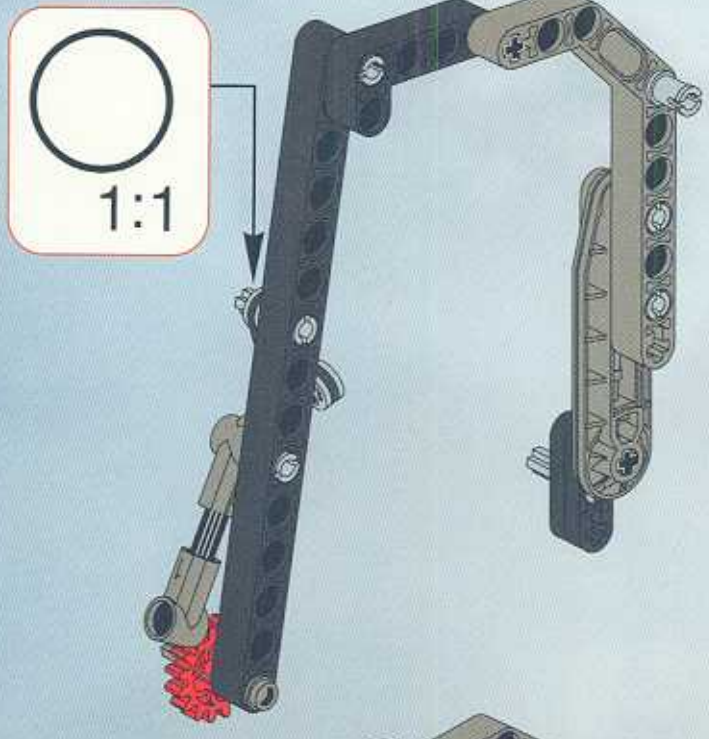

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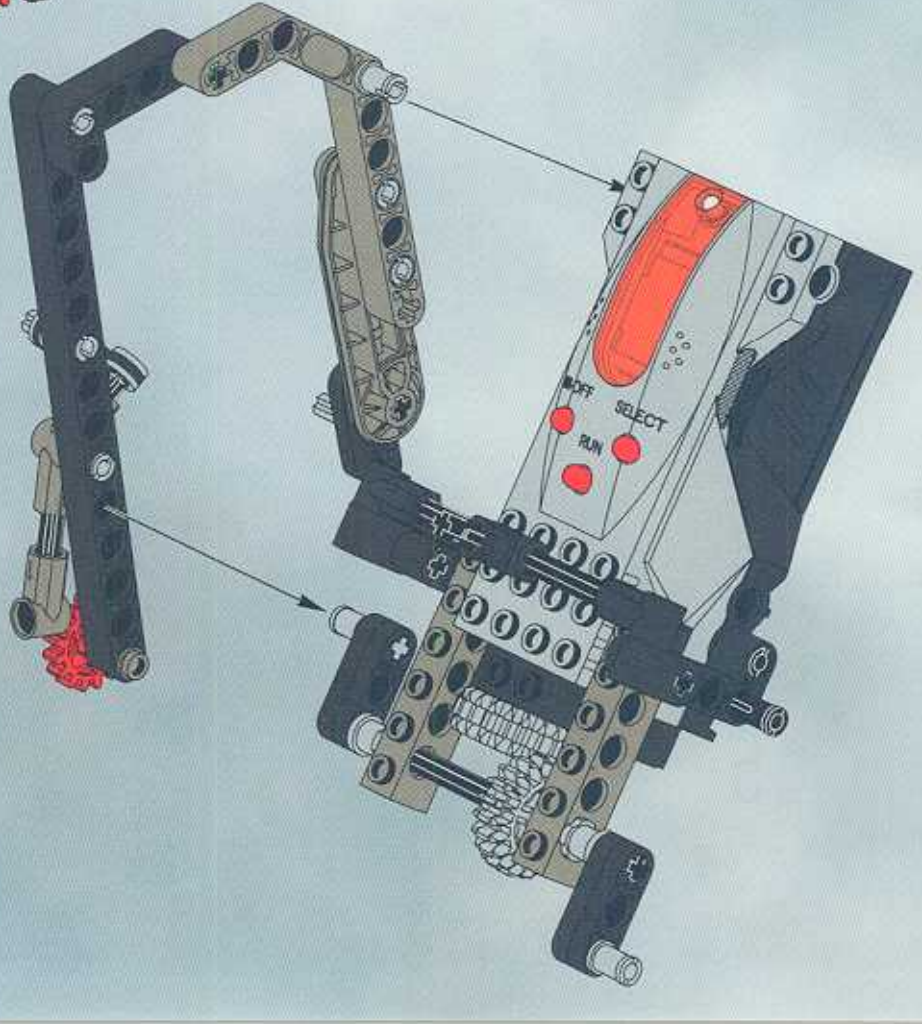

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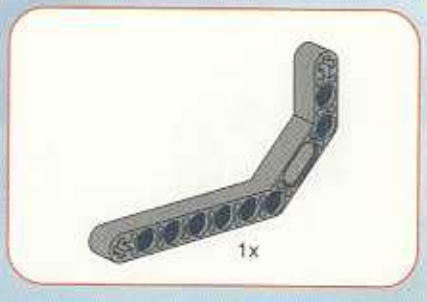

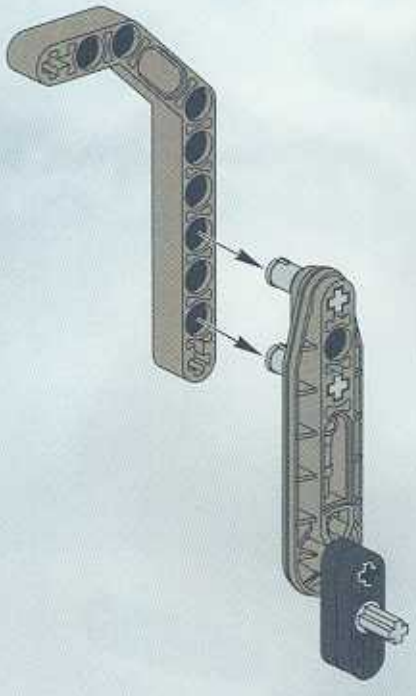

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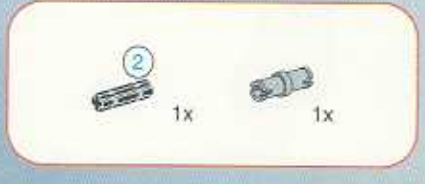

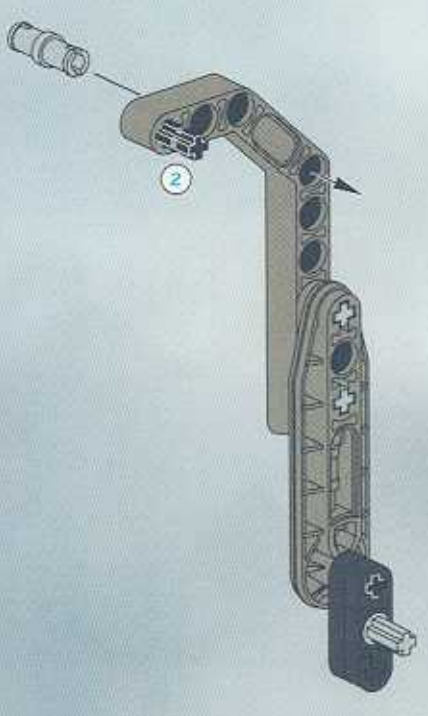

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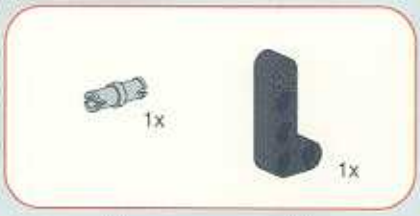

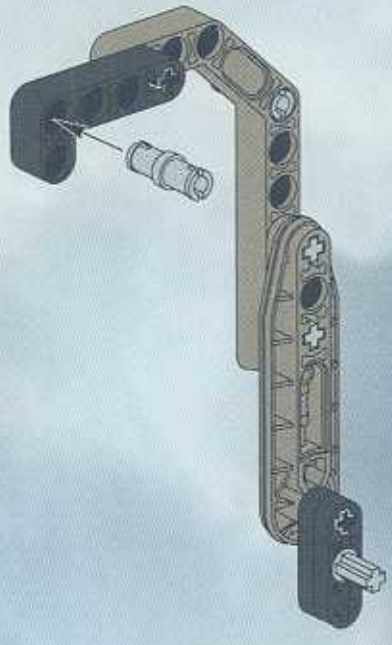

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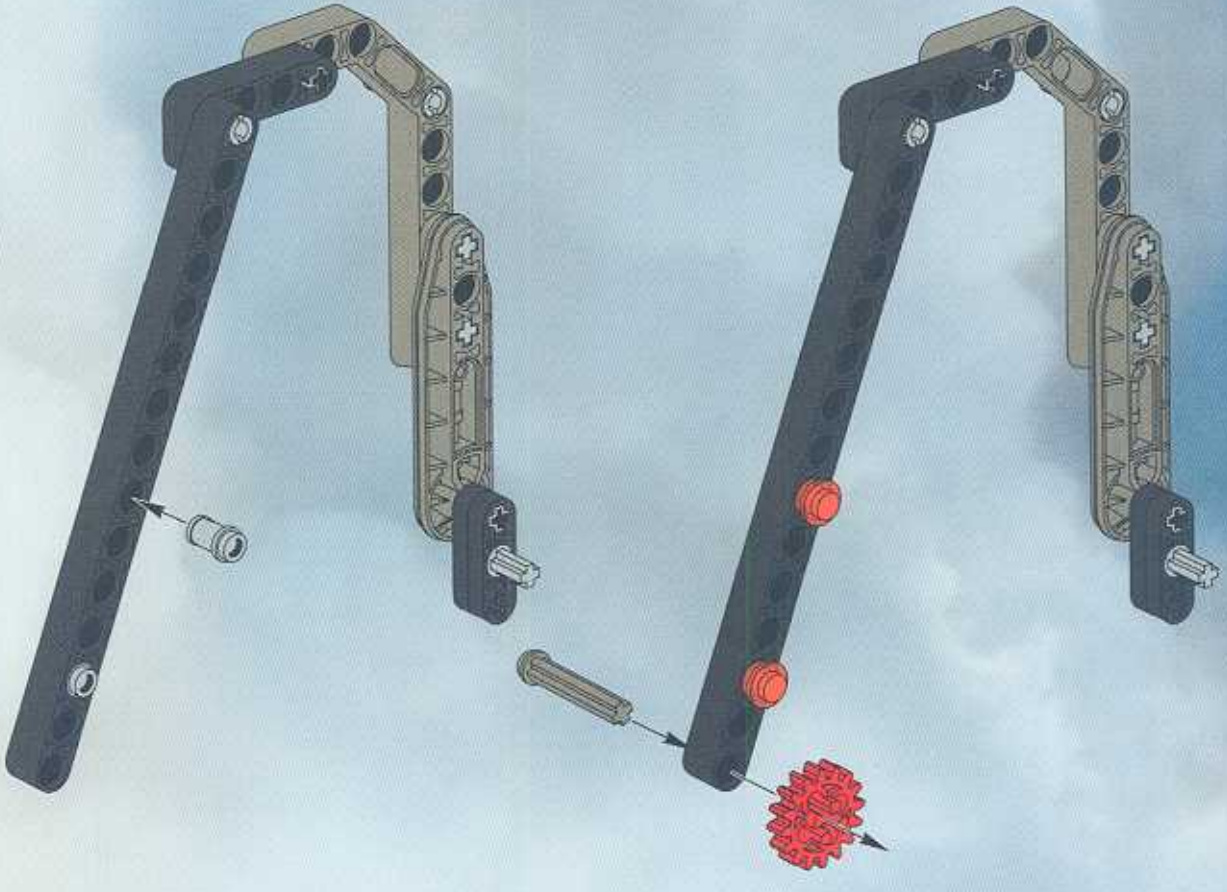

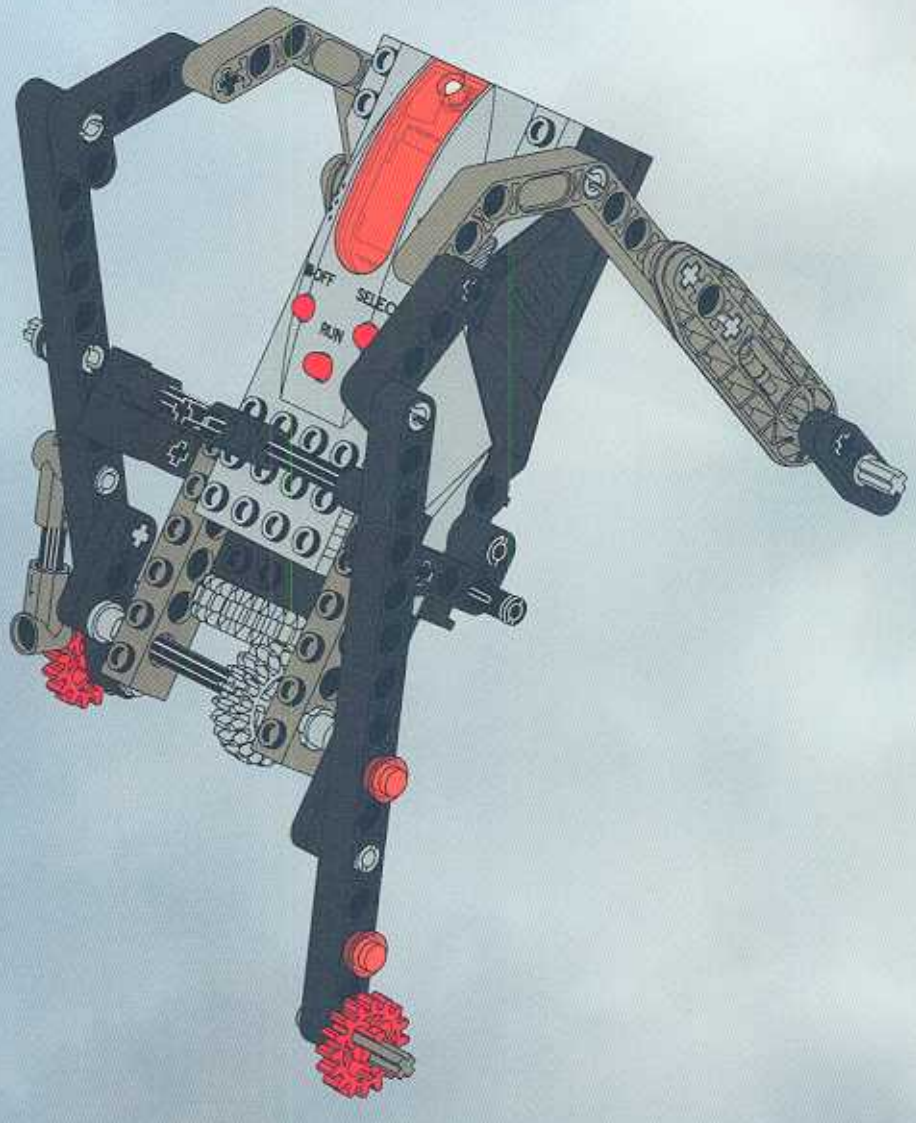
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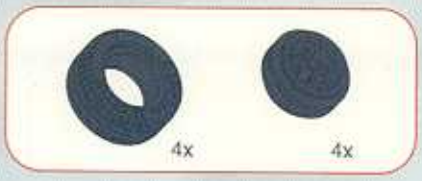


To add different attachments, go to Special Features (page 70) or go to the X-Walker Challenge on the next page

X-Walker Challenge 1 - 2

X-WALKER CHALLENGE 1
Experiment with different programs to find the best one for this Robot.

X-WALKER CHALLENGE 2
Rebuild your X-Walker to change the way it walks. Use the pictures below for help with changing the legs.

Also experiment with the length of the front legs

Change the legs so that they roll sideways as the X-Walker moves

Try changing the legs so that they are locked in place

TRY TO ADJUST THE LENGHT OF THE FRONT LEGS TO CHANGE THE WAY THE X-WALKER MOVES

Front leg in low position

Front leg in high position

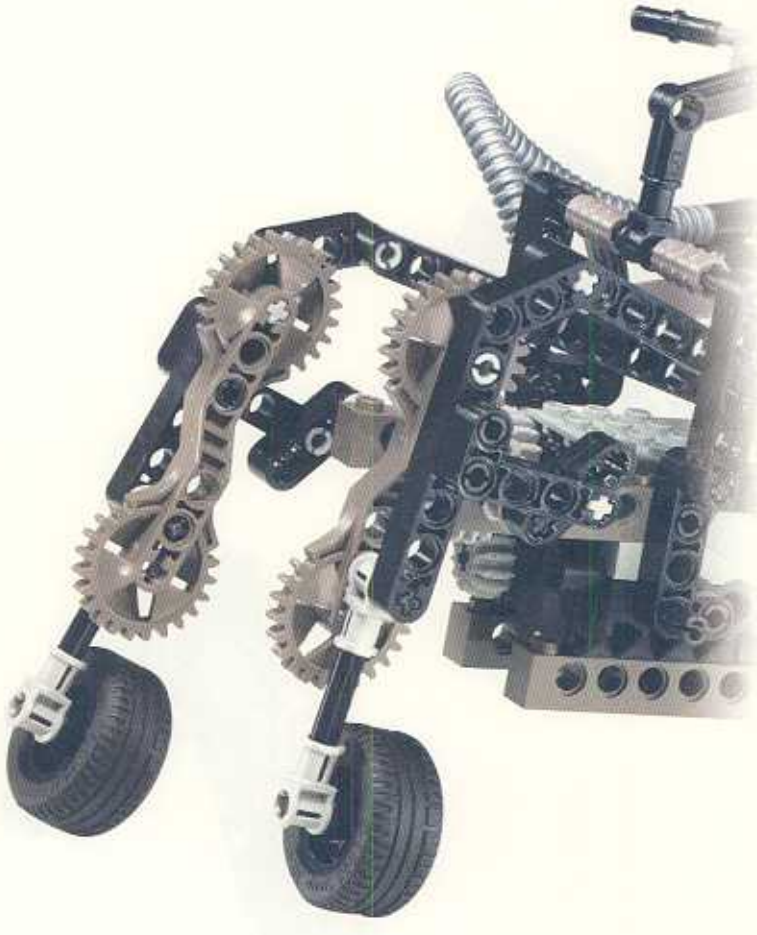
Stepper Challenge 1 - 2

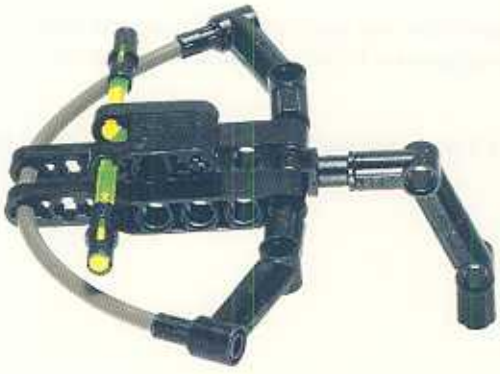
STEPPER CHALLENGE 1

Add a head and arms to your Stepper. Use your own imagination, or go to Special Features (page 70) for ideas. Then program your Robot so it can walk backwards.

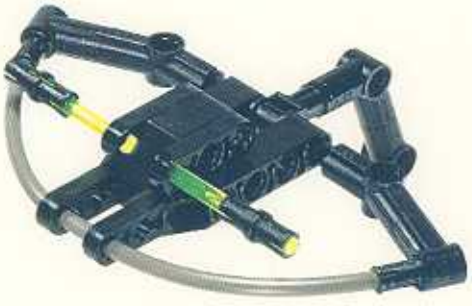
STEPPER CHALLENGE 2

Modify your Stepper so it turns as it walks backwards. Use the picture below for help.





Hammer Head



Flop-E7

Stepper Head

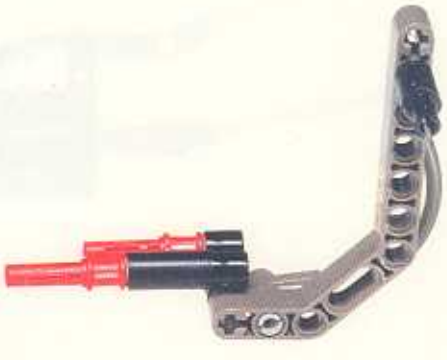
X-Walker Head

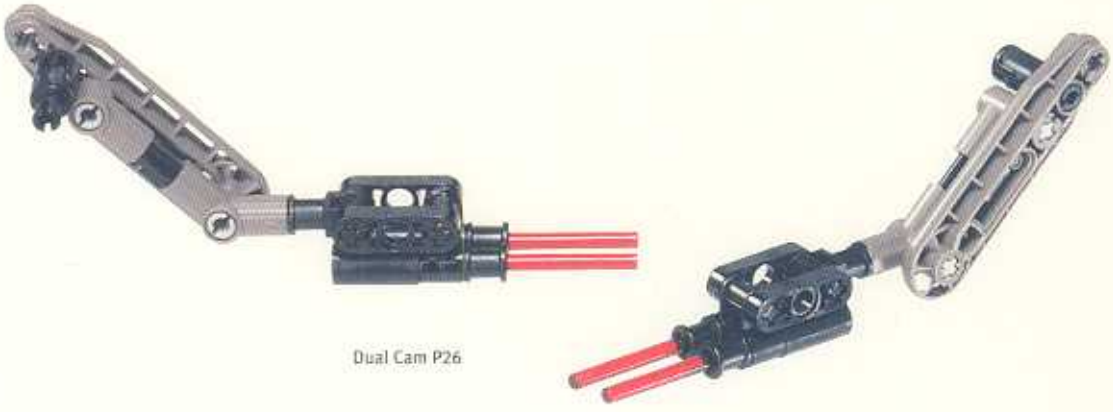
Sentry X-11

Dual Cam P27

Scorpio Twin Stinger

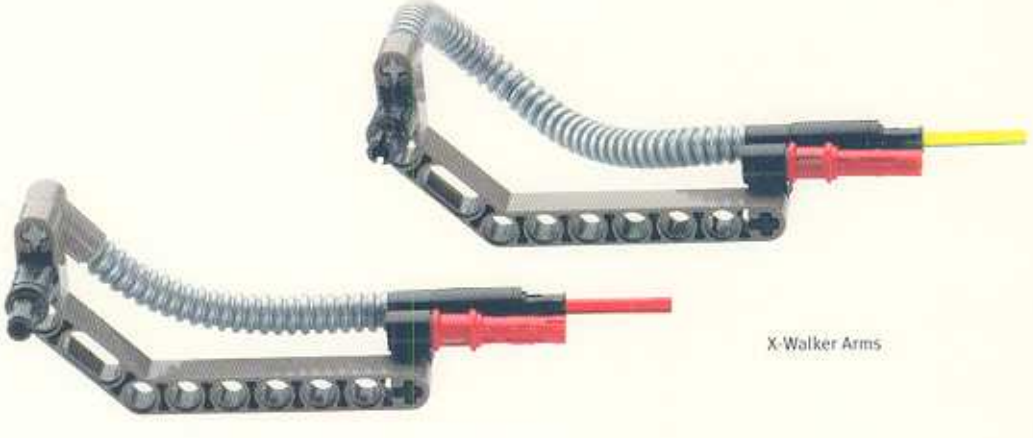
Viol Vaporizer





Dual Cam P26

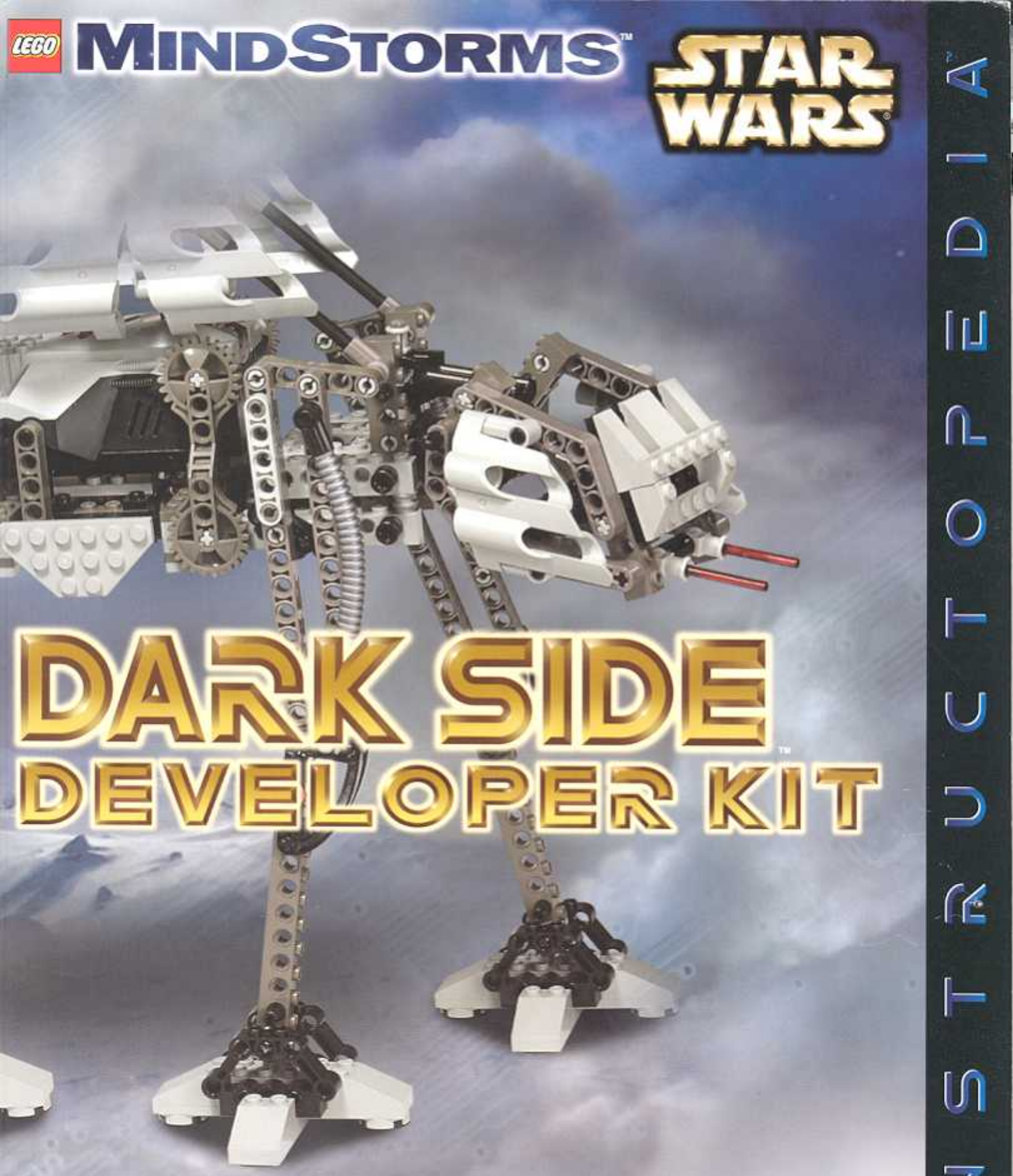
Stepper Arms



X-Walker Arms

LEGO MINDSTORMS™

STAR WARS®



DARK SIDE™ DEVELOPER KIT

CONSTRUCTOPEDIA®

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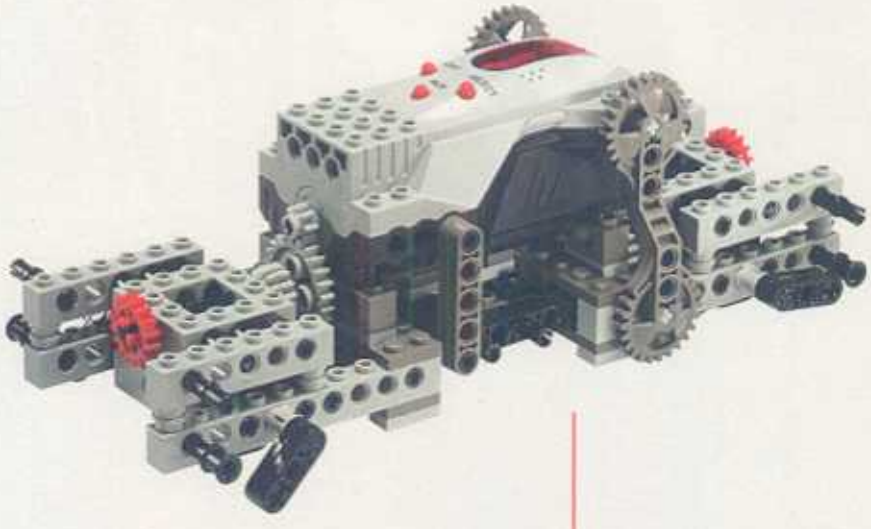
Swamp Creature
Trade Federation AAT

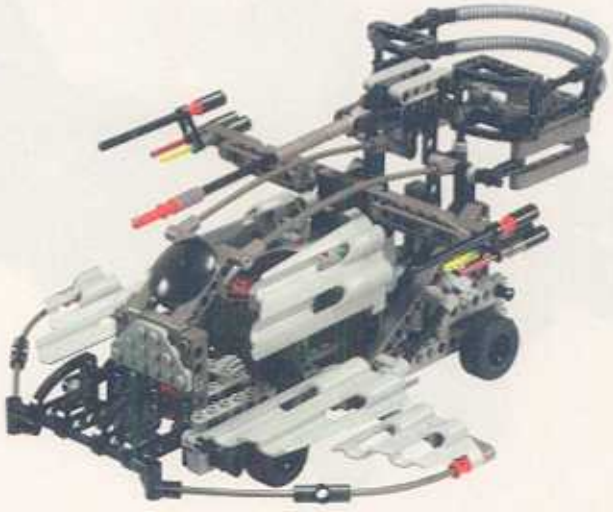
OVERVIEW OF THE SITH™ MASTER LEVEL

US In the Sith Master level, you create Transports and Creatures. Start by building the X-Frame. Then, add attachments to the frame to build the AT-AT, the Trade Federation AAT, or the Swamp Creature.



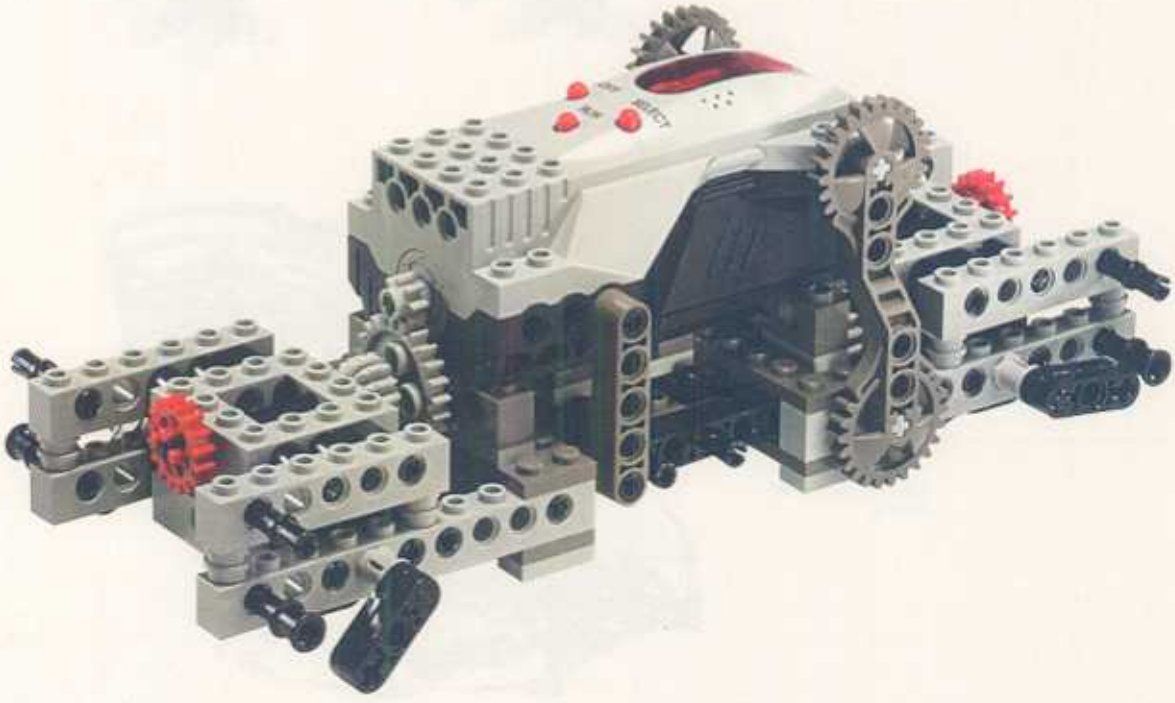
X-Frame
The core for all inventions in this book
page 8

AT-AT
page 24



Trade Federation AAT
page 56

Swamp Creature
page 62



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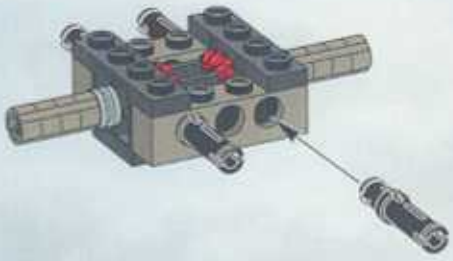

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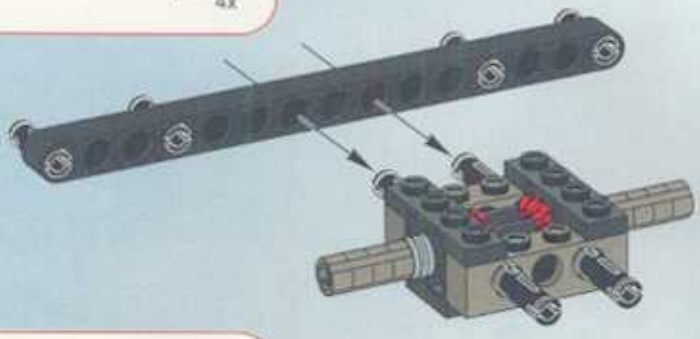

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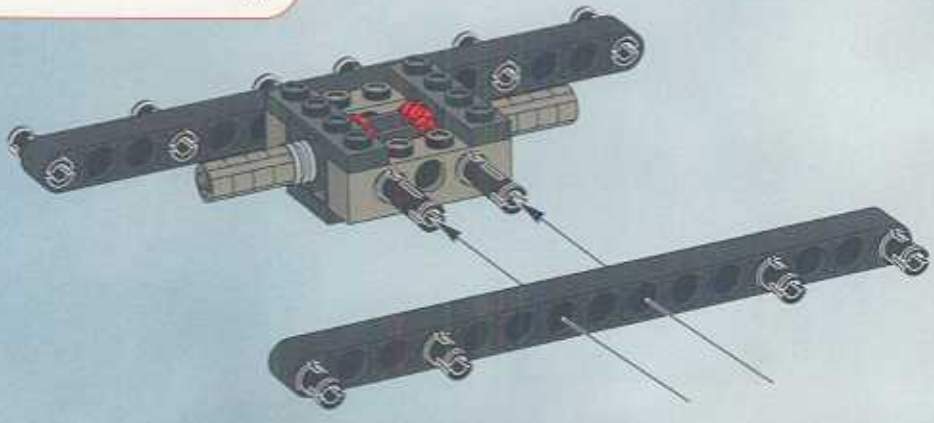

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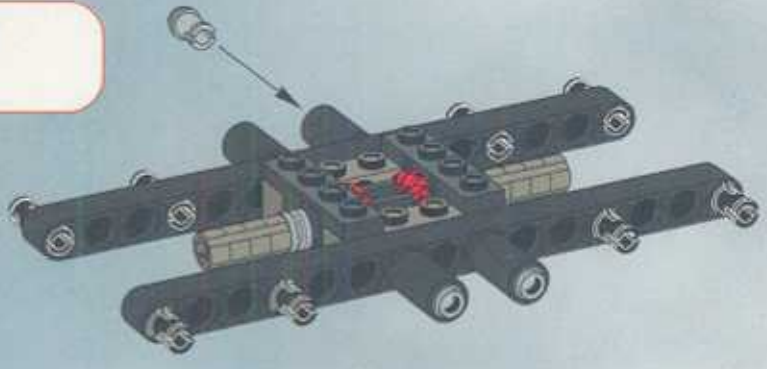

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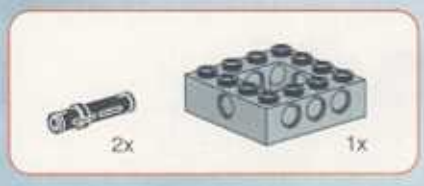

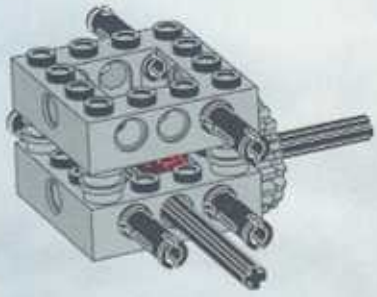

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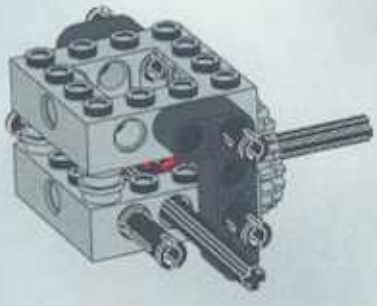

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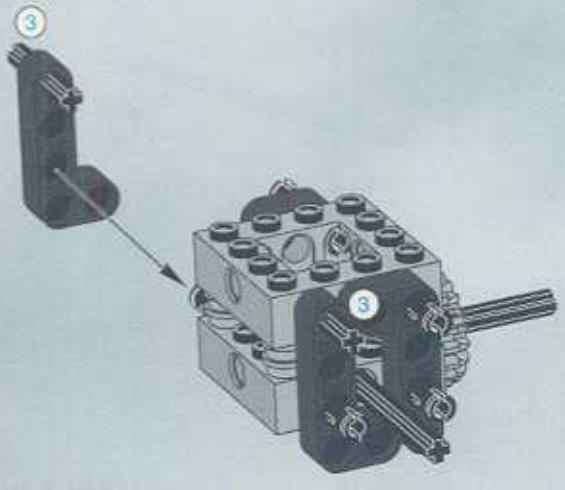

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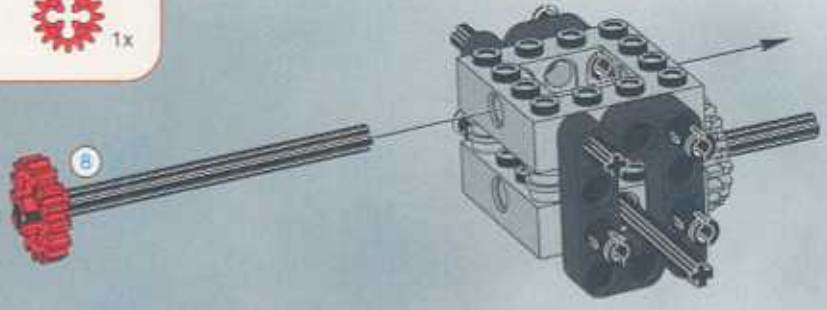

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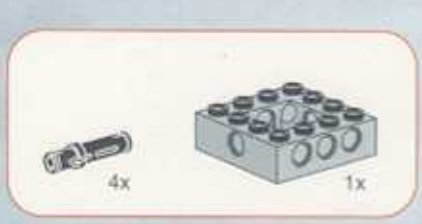

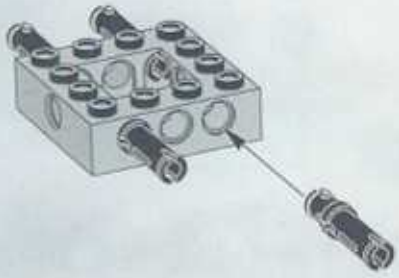

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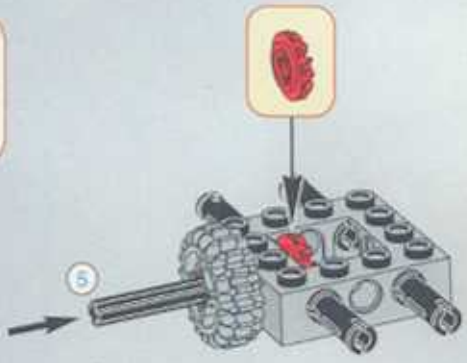

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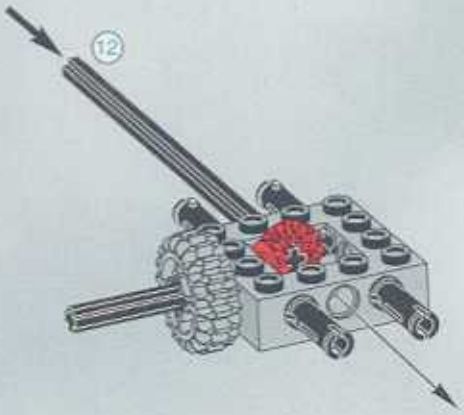

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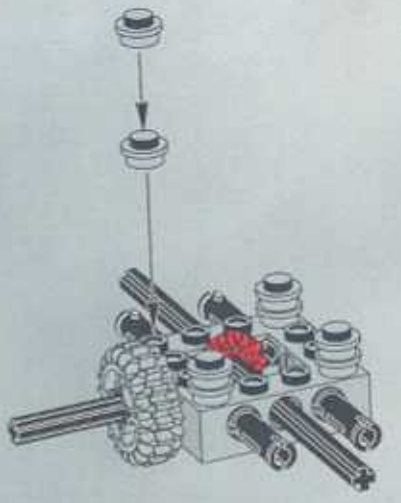

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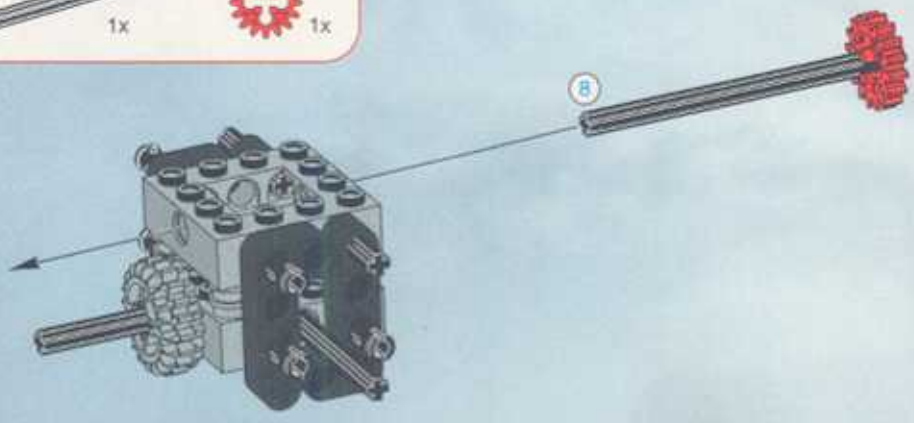

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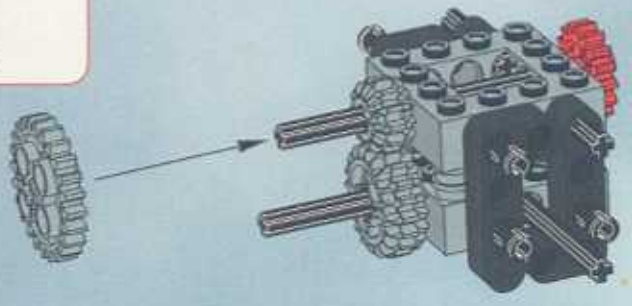

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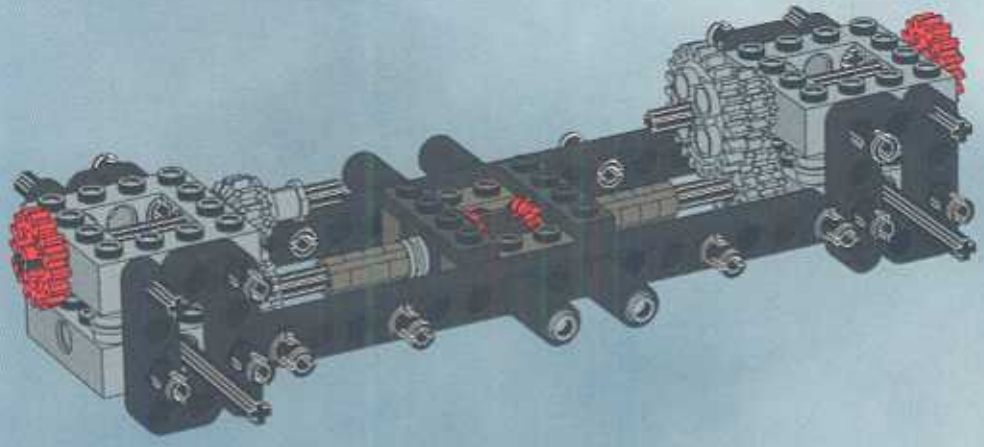

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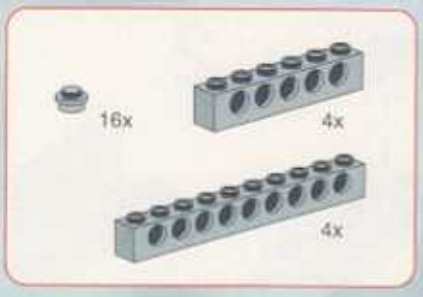

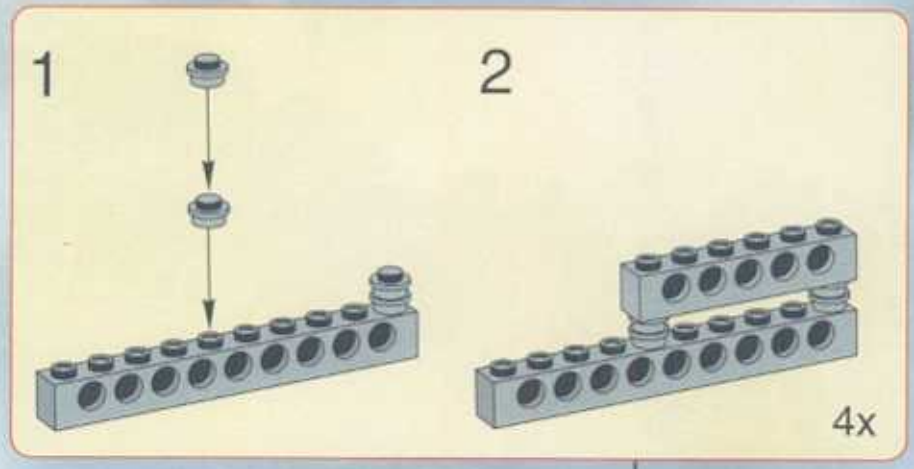

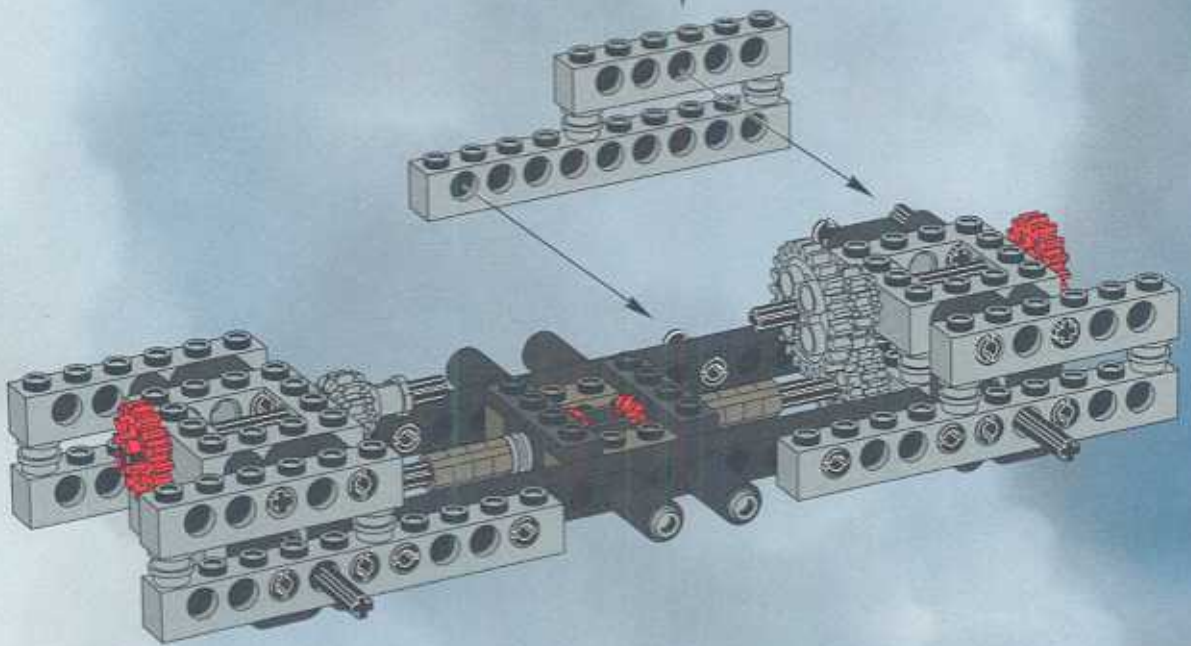

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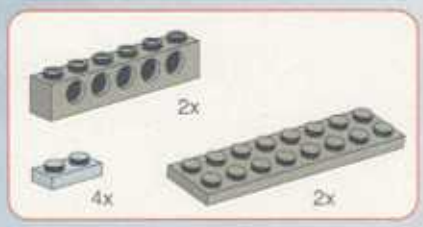

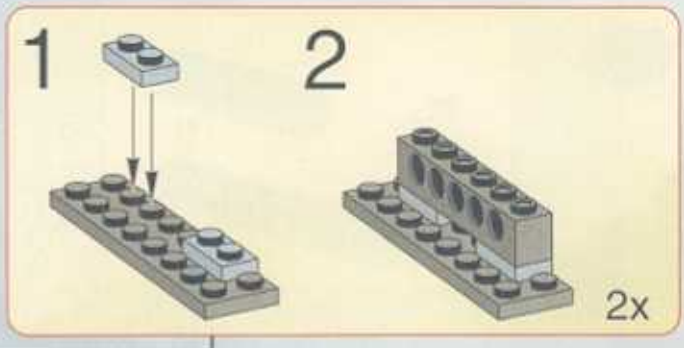

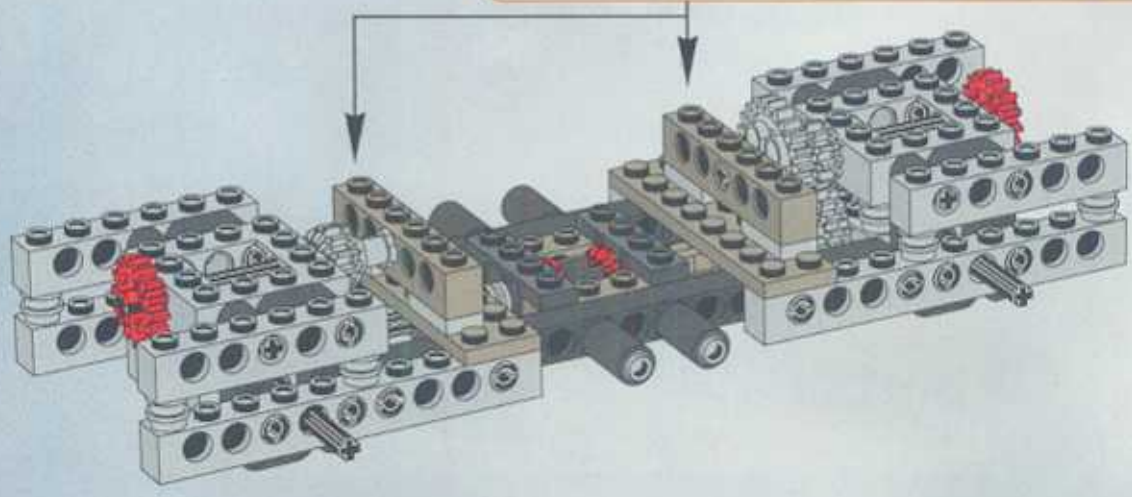

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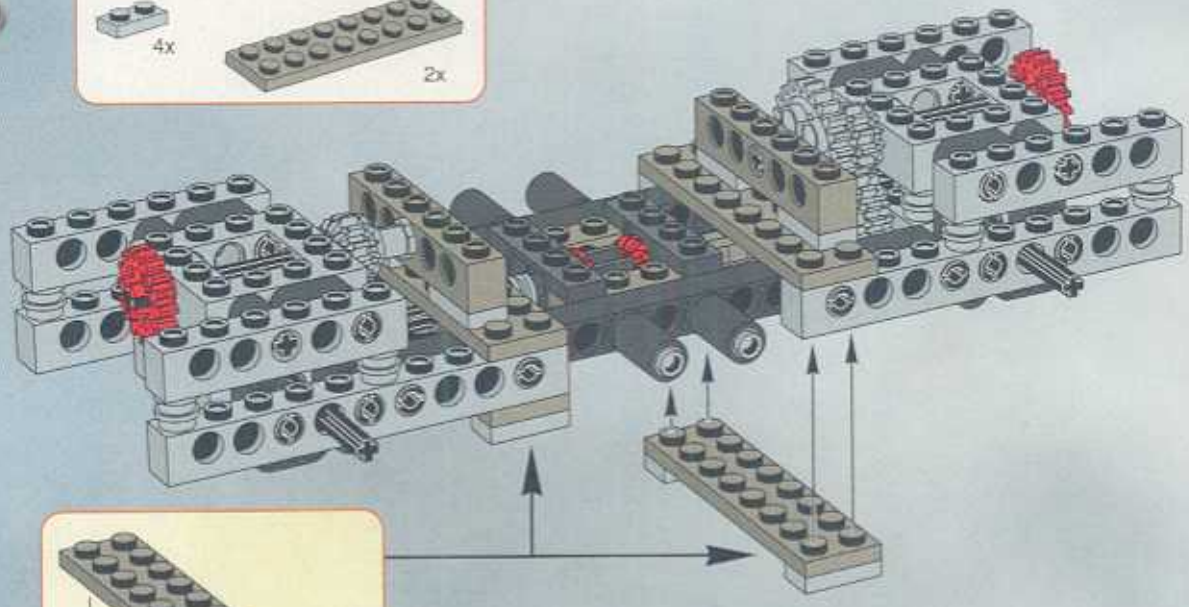

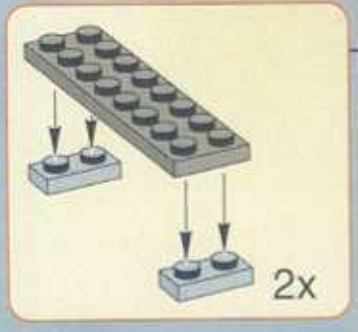

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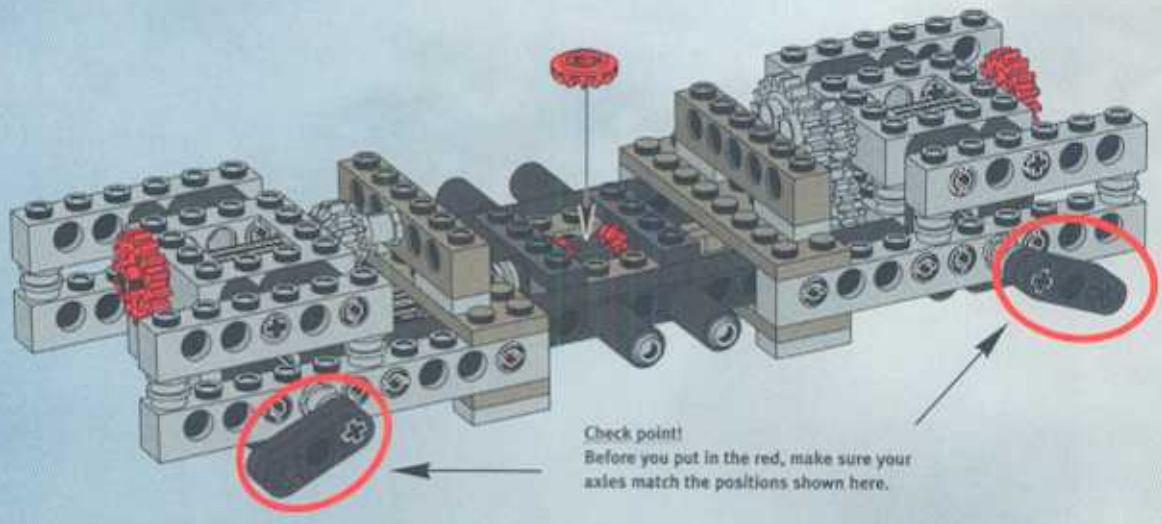
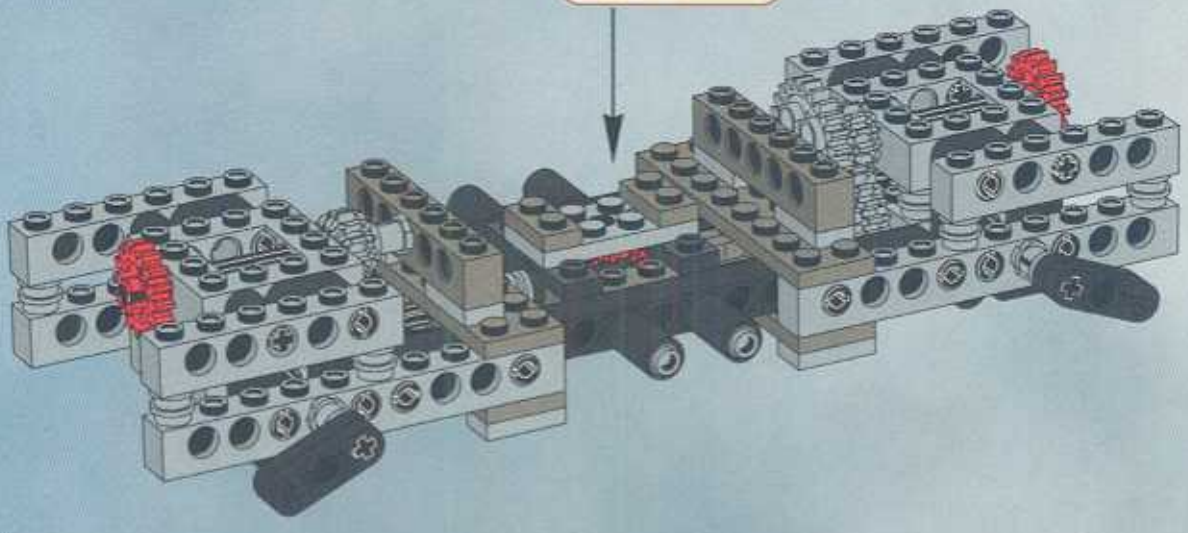
Tip: Place the frame flat on a table to line up the axles.



Check point!
Before you put in the red, make sure your axles match the positions shown here.

17



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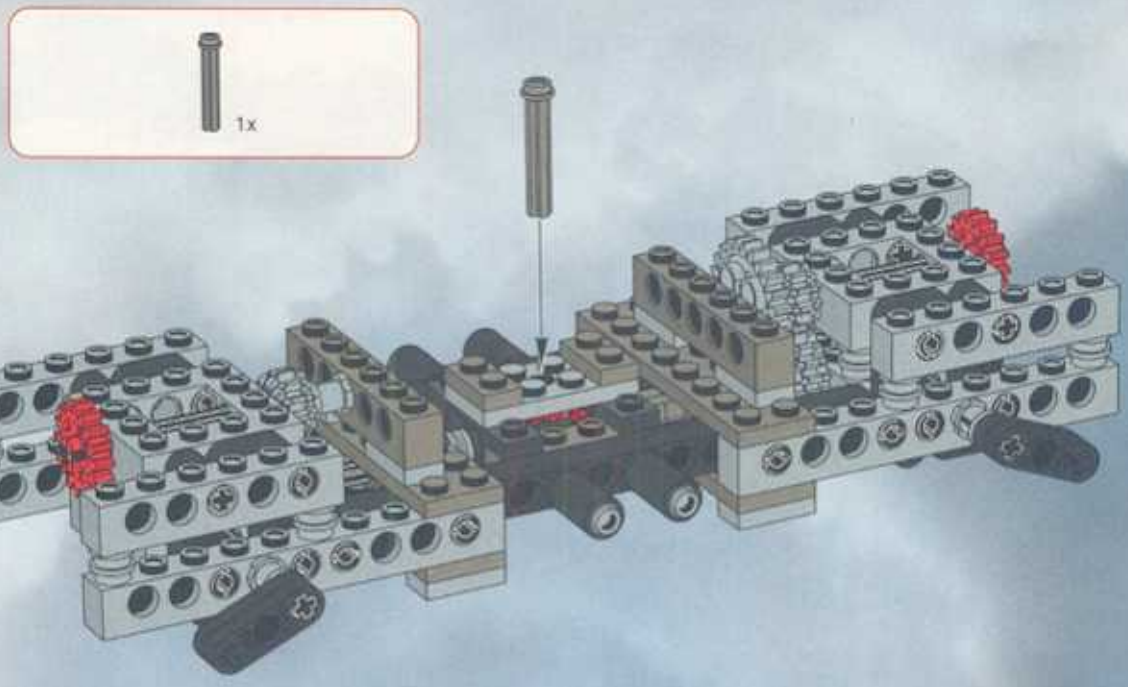

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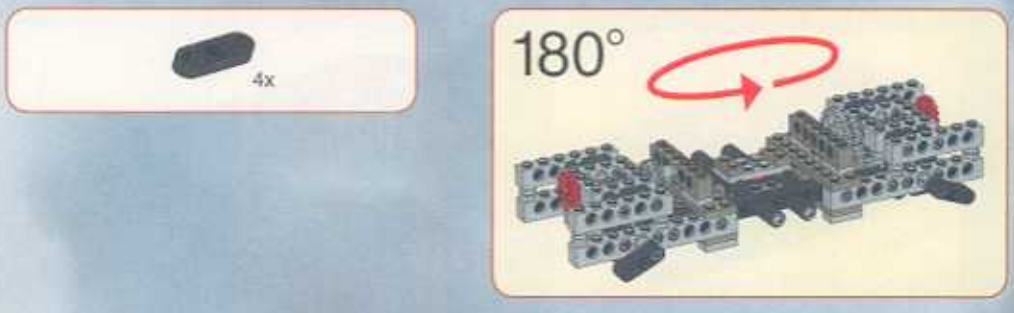
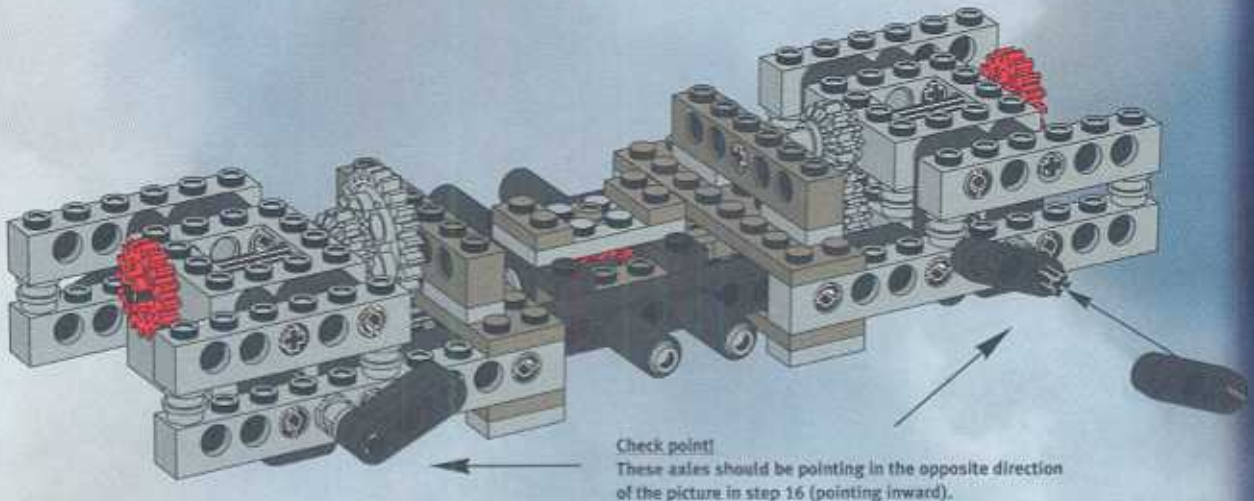
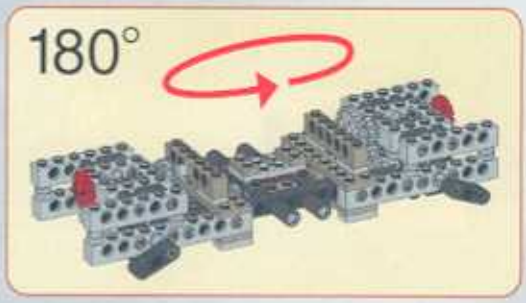
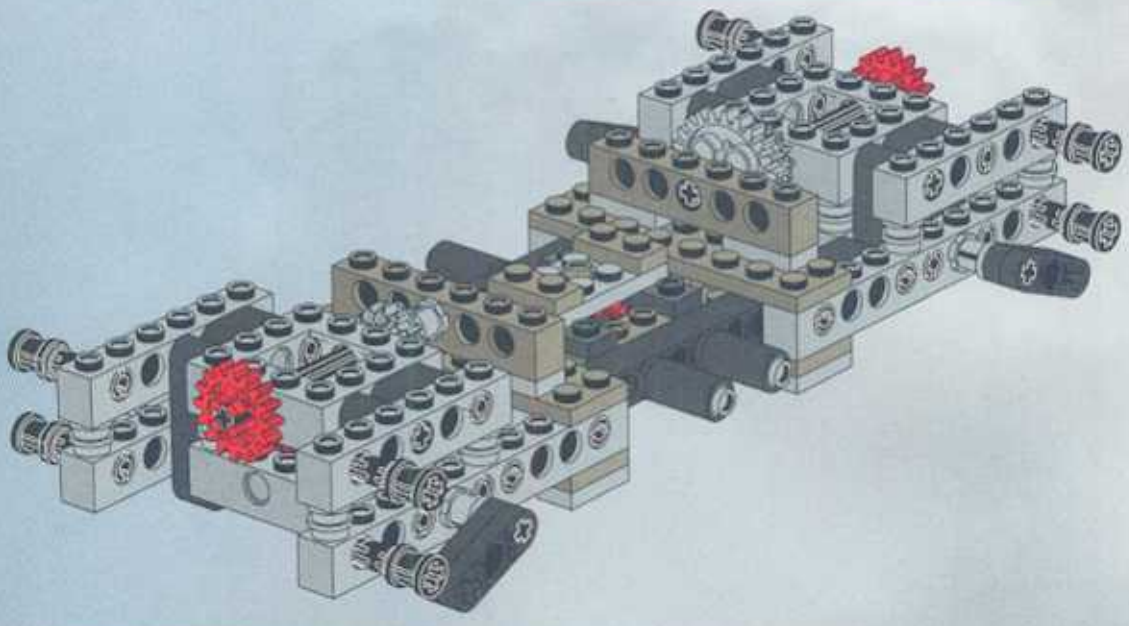




Check point!
These axles should be pointing in the opposite direction of the picture in step 16 (pointing inward).

20





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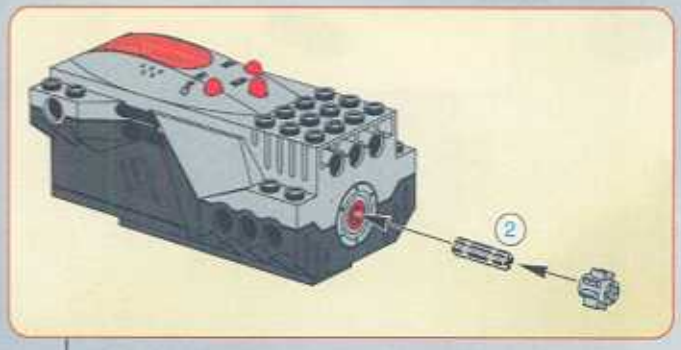
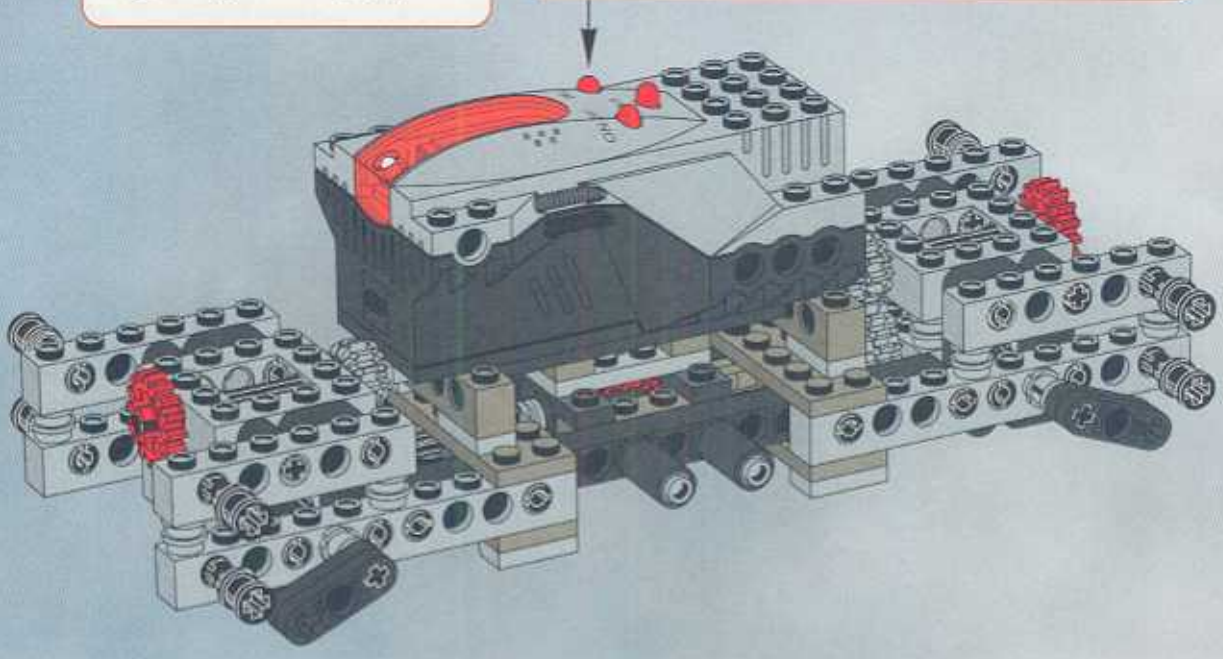
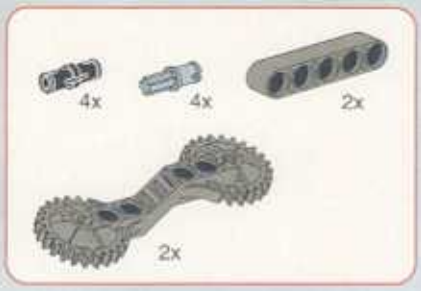
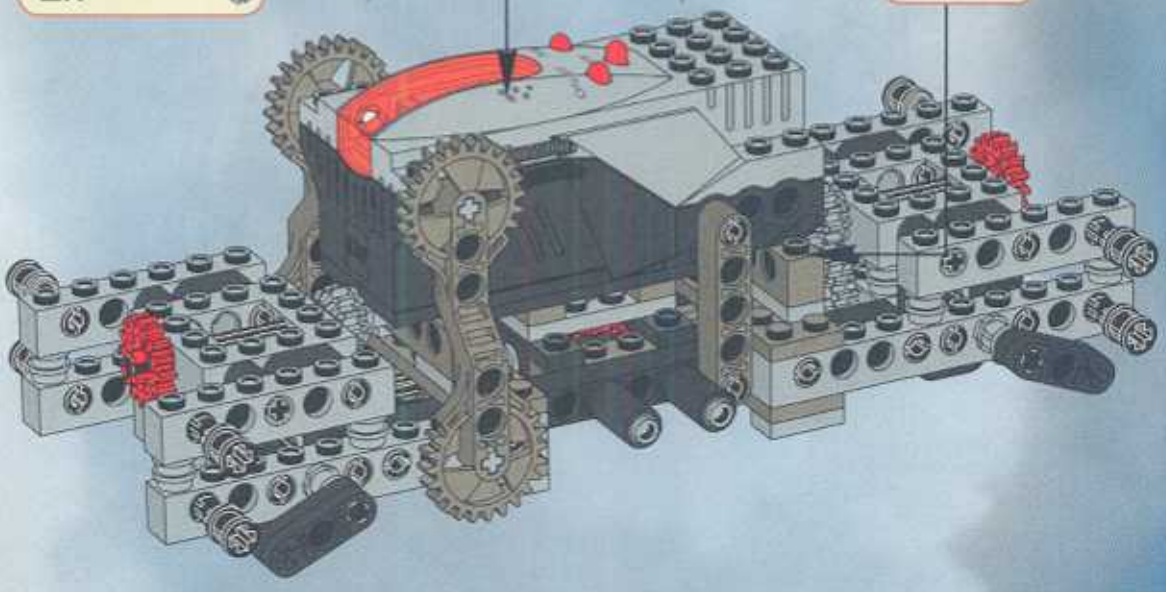
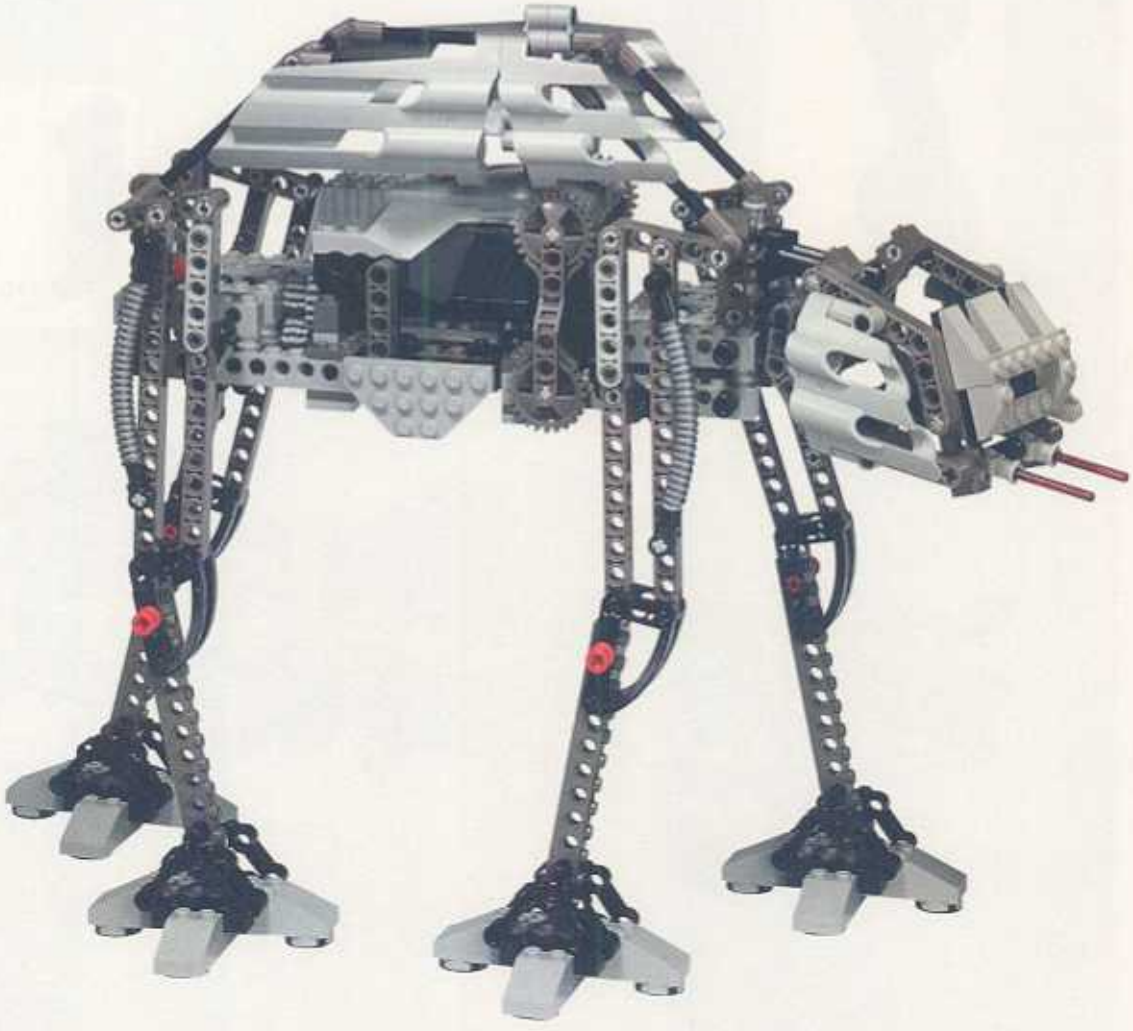




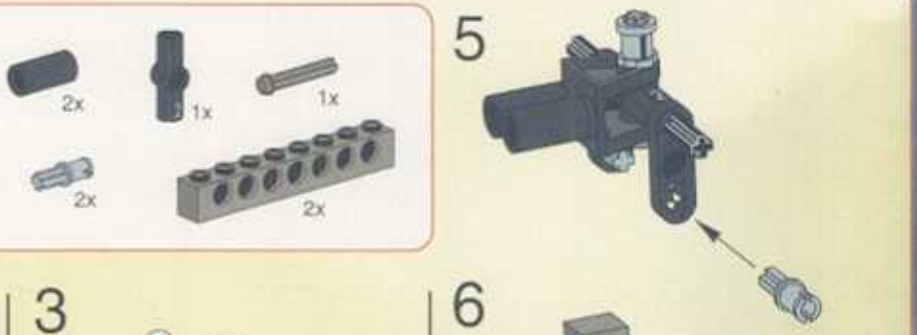


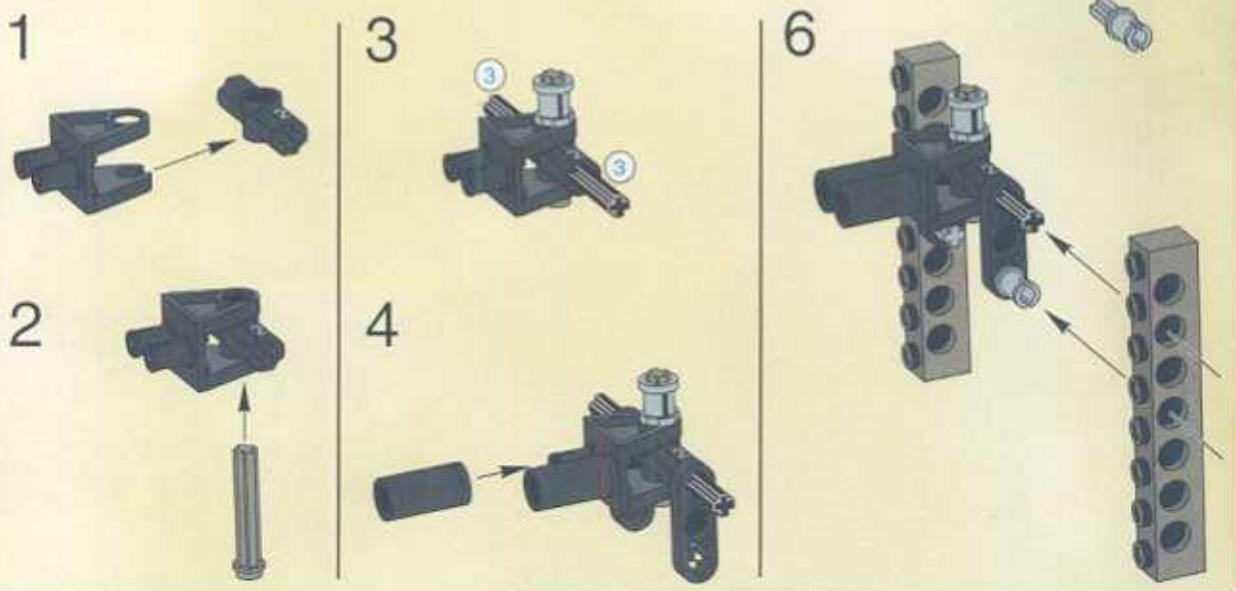


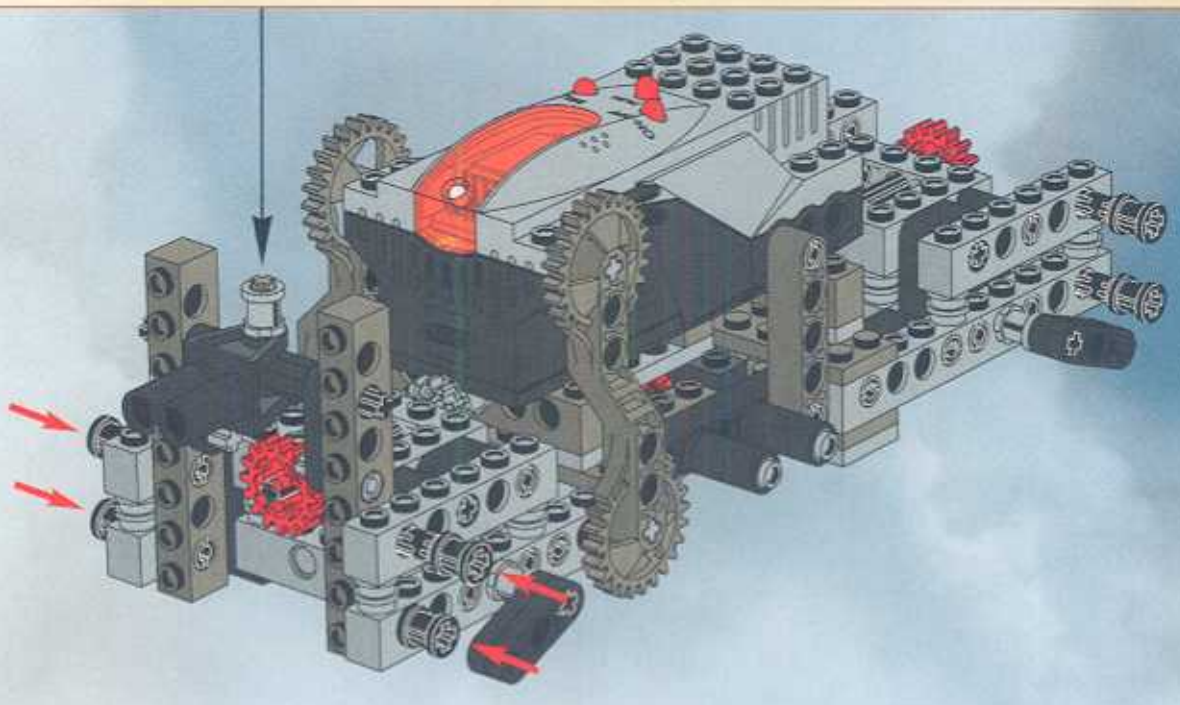
Now that you have built the frame, use it to build the AT-AT (page 24), Trade Federation AAT (page 56), and Swamp Creature (page 62).



If you have not yet built the X-Frame, go to page 8







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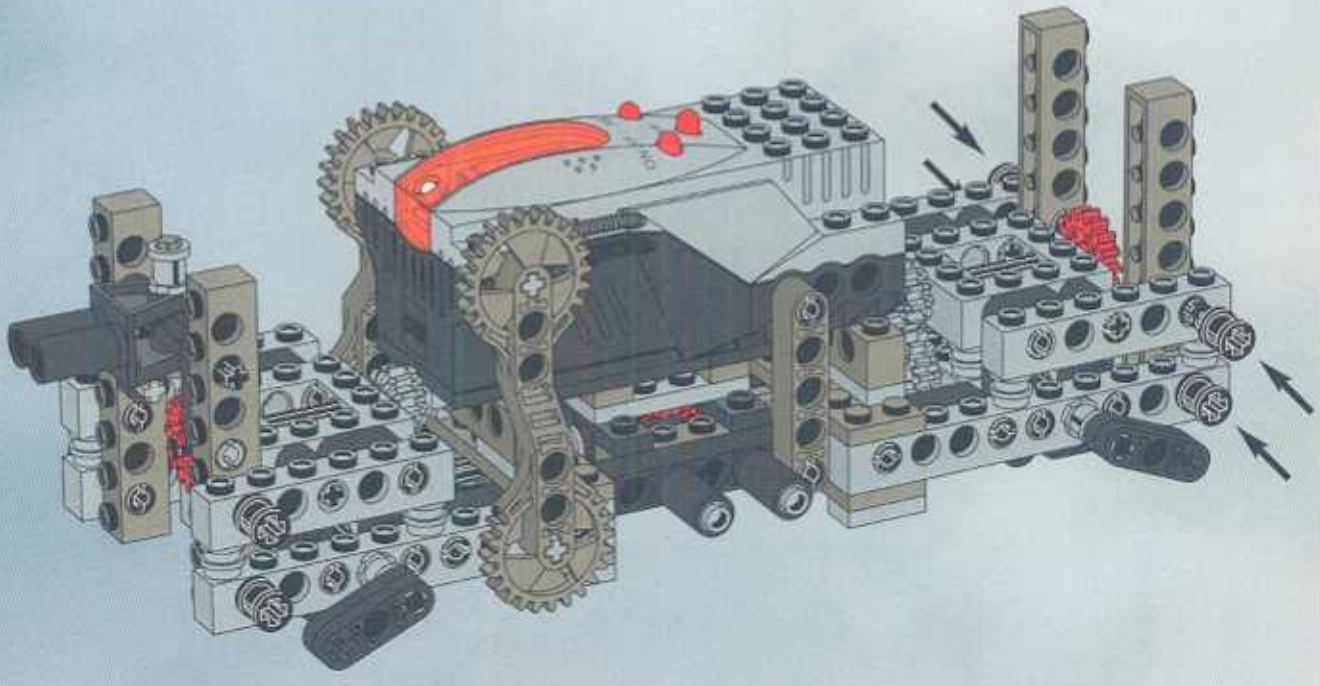

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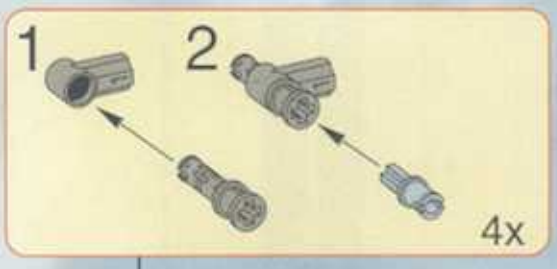

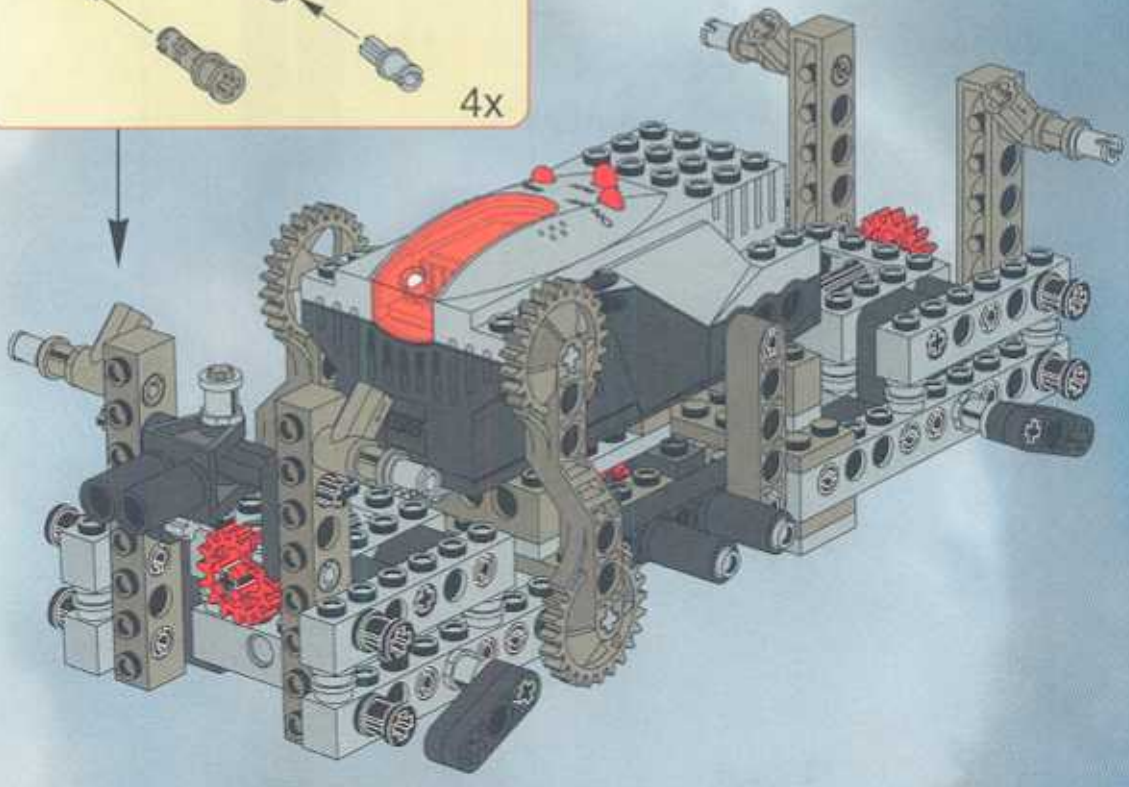

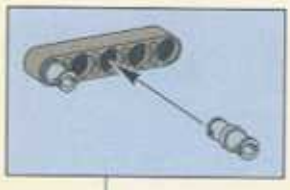

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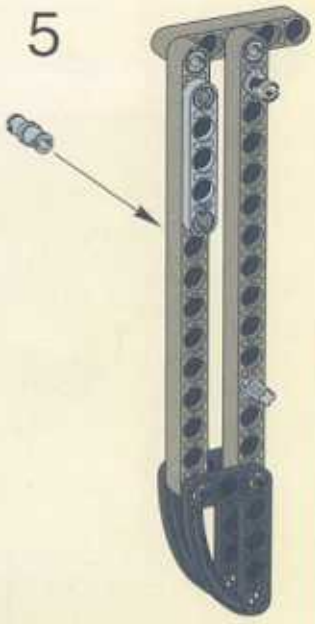

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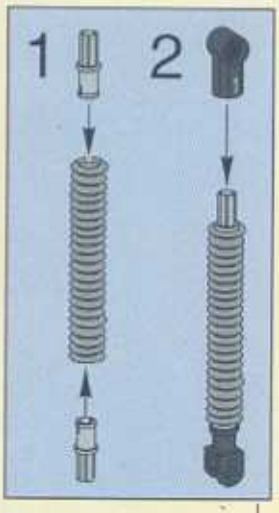

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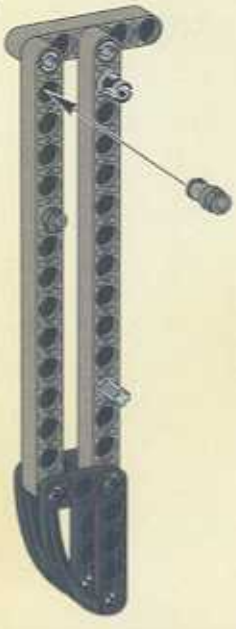

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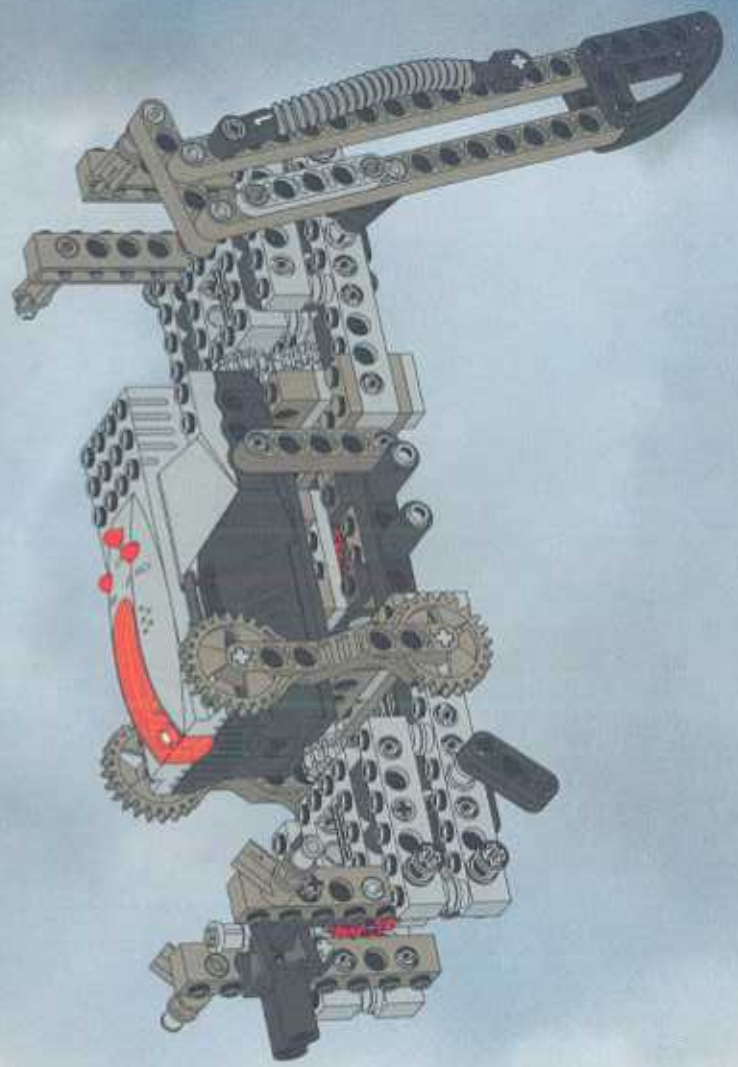

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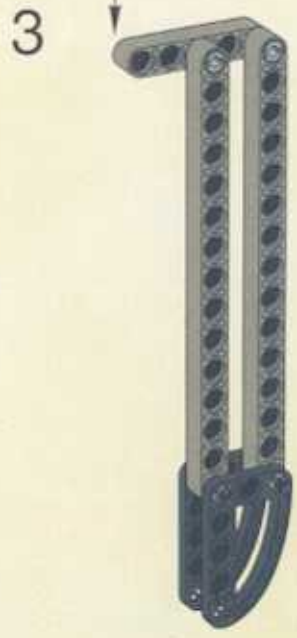
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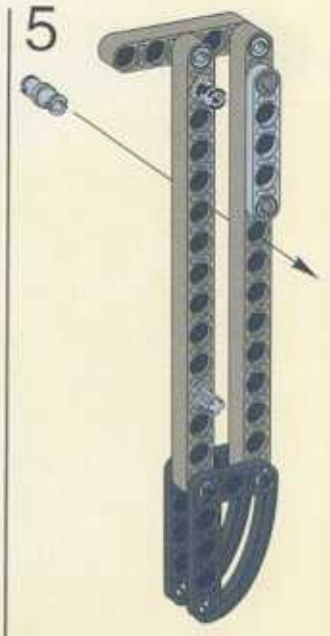
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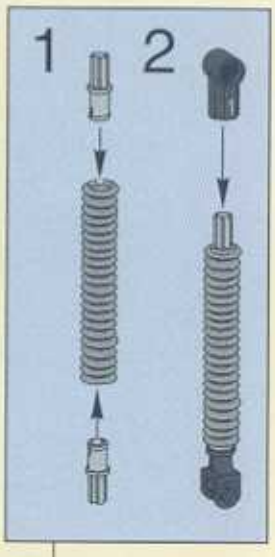
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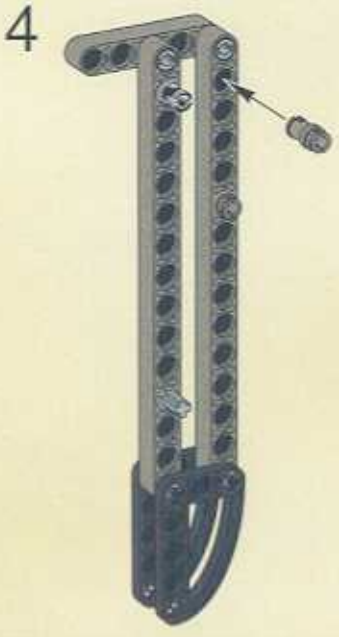
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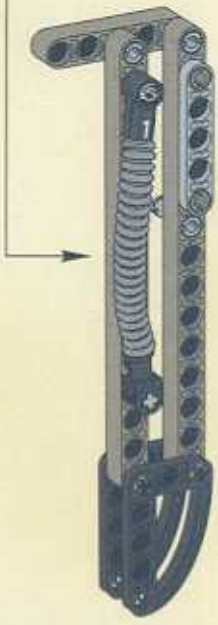
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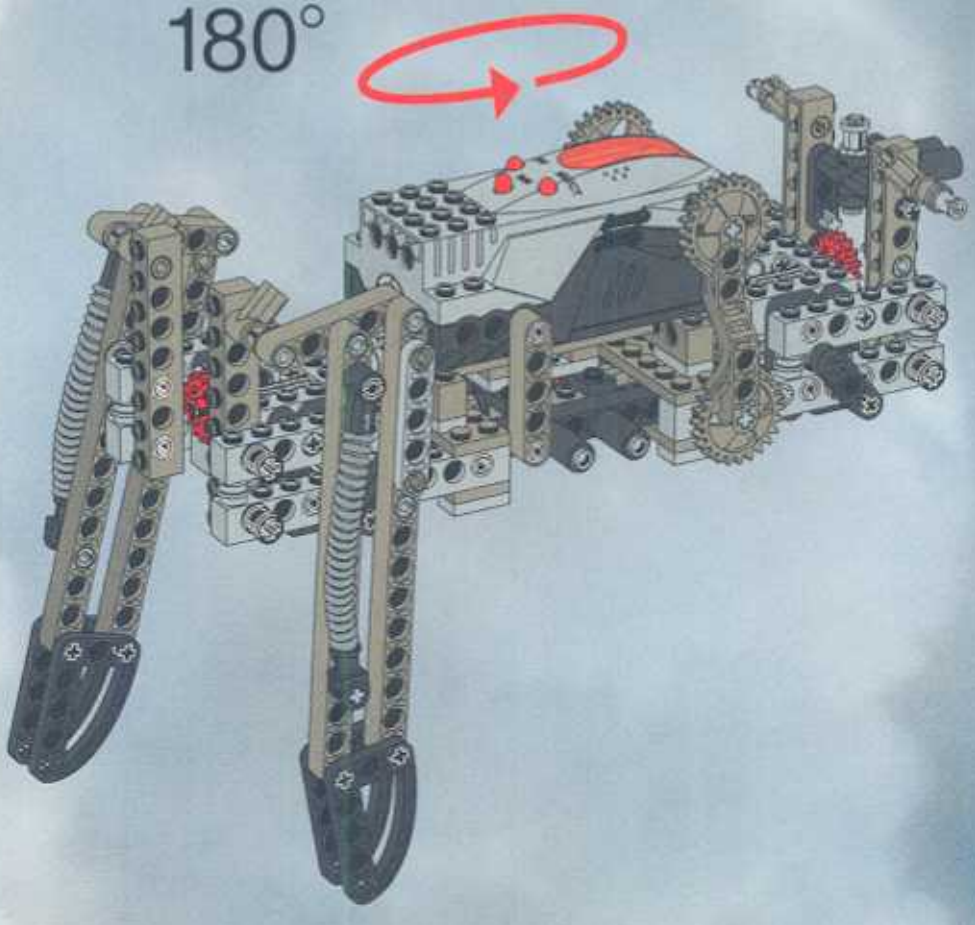

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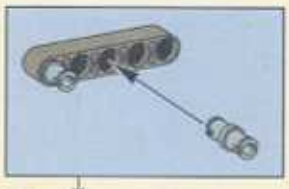

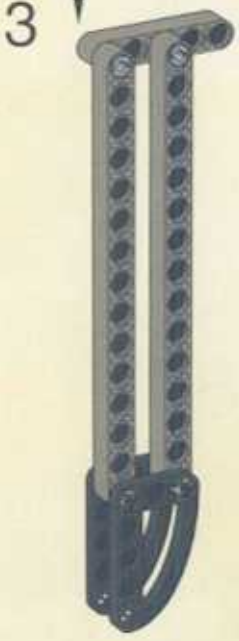
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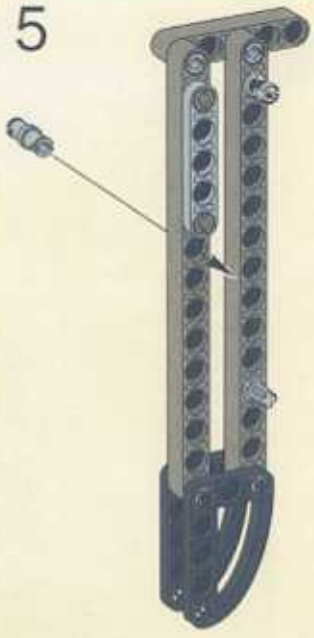
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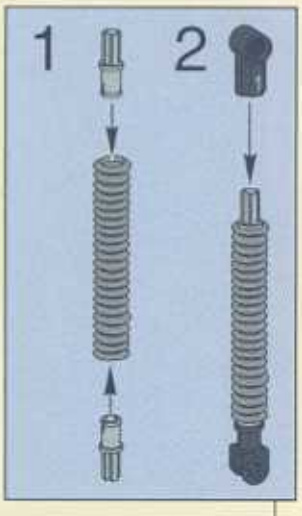
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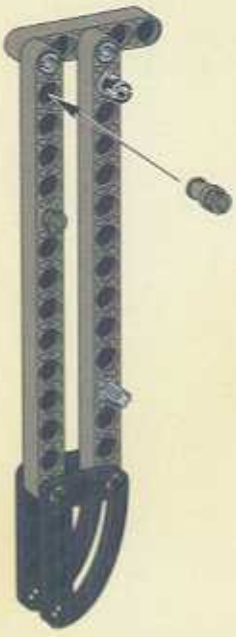
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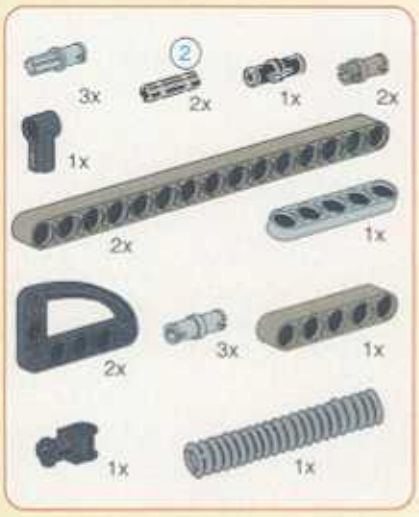
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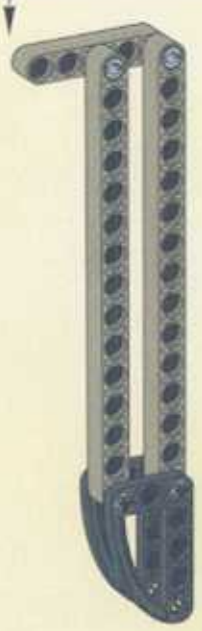
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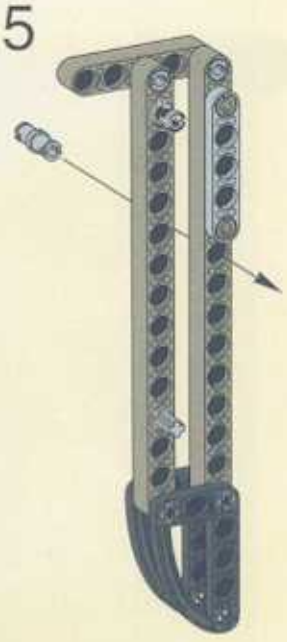
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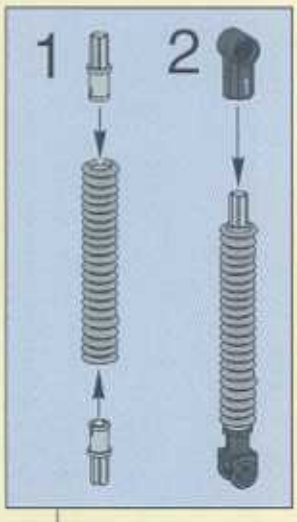
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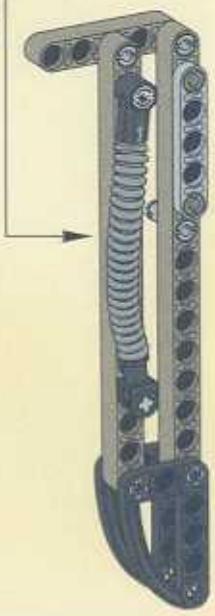
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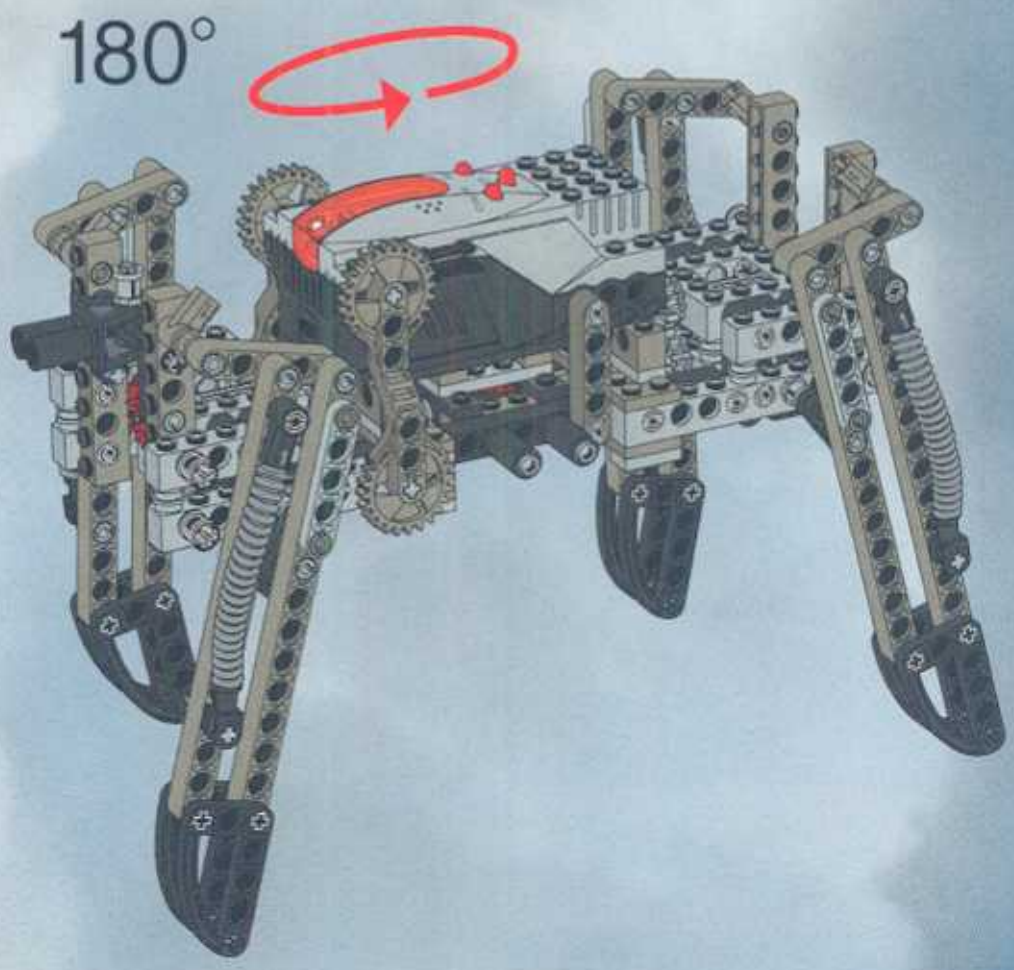

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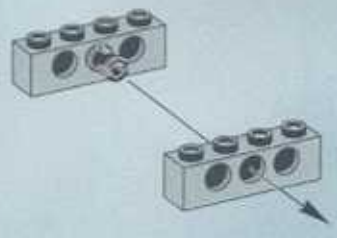

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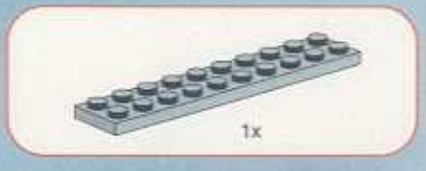

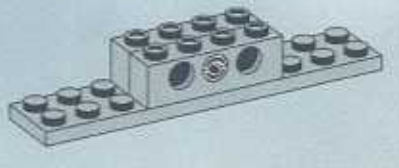

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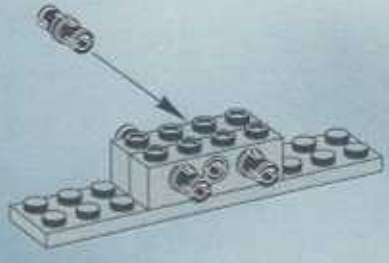

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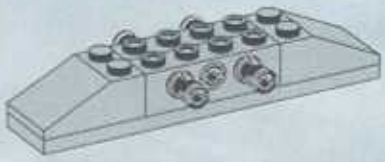

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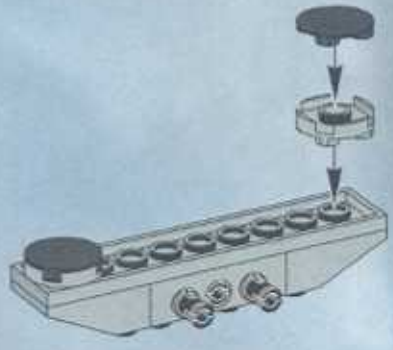

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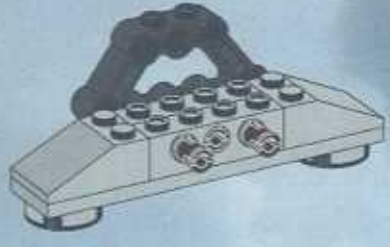

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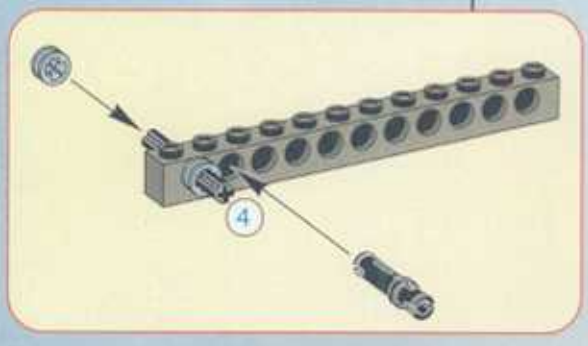

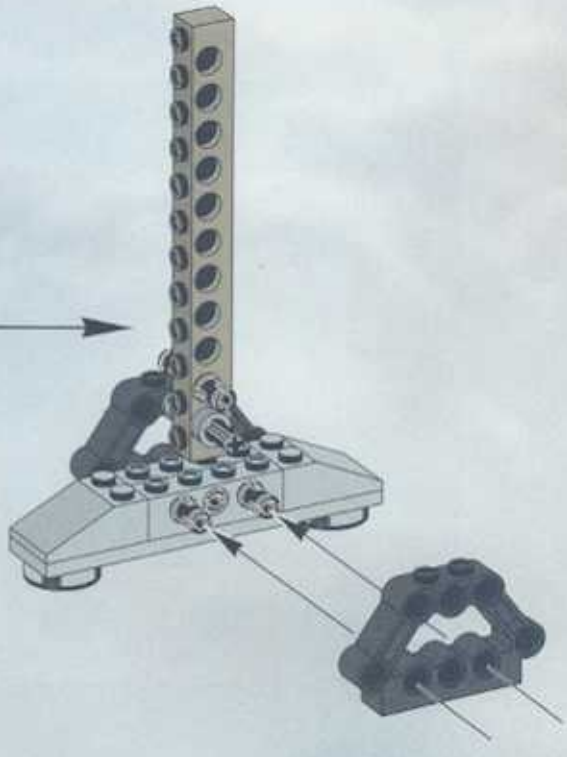

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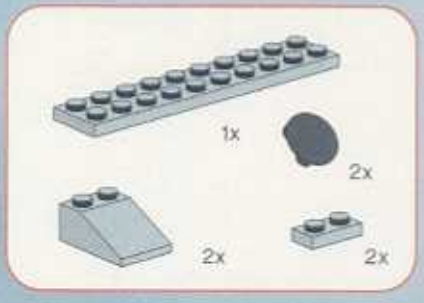

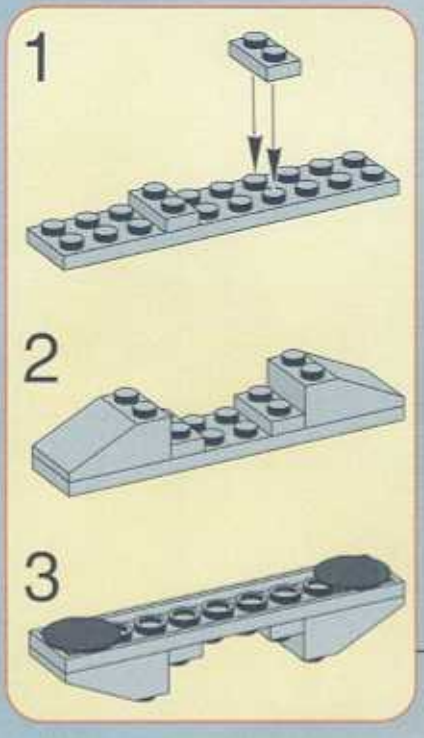

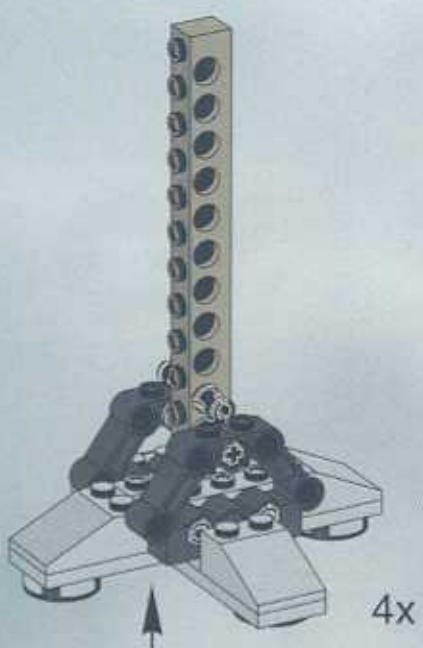

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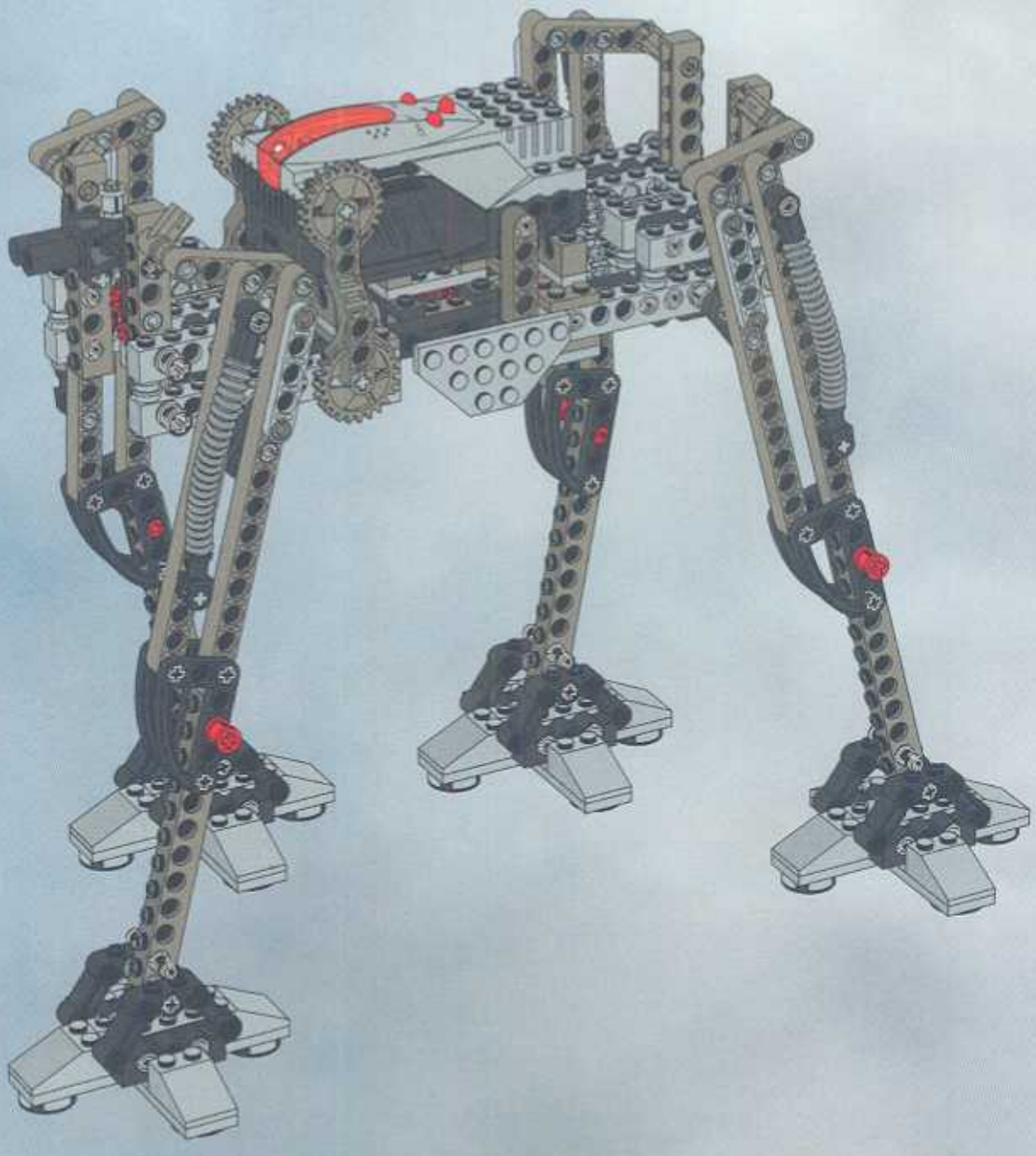

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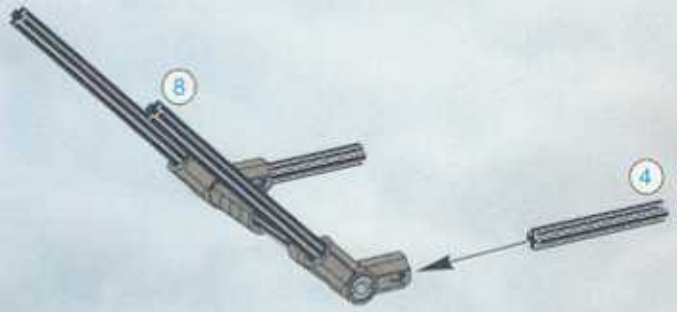

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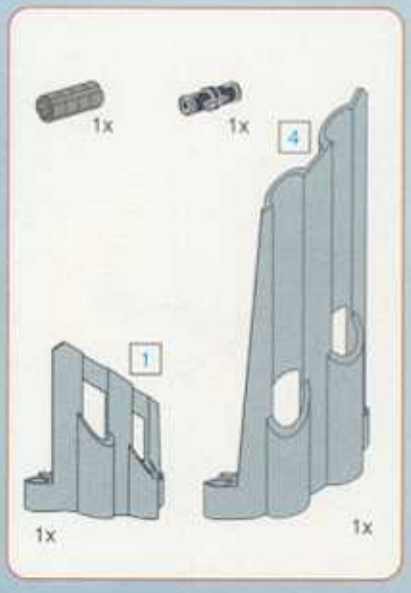

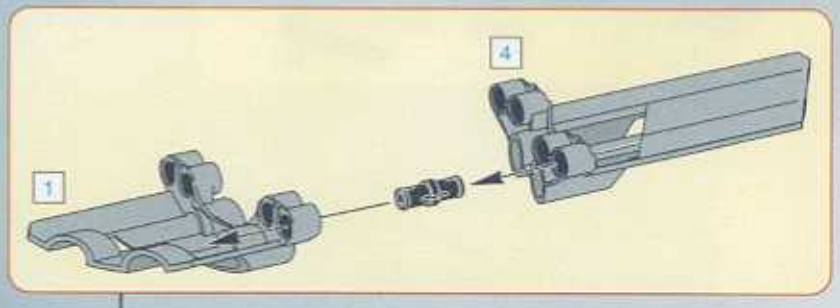

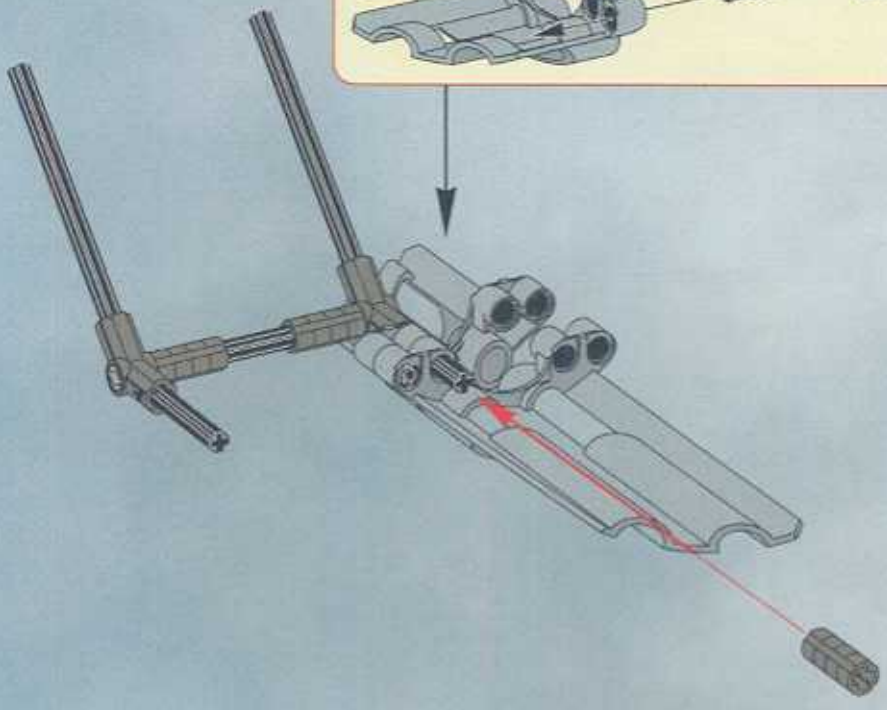

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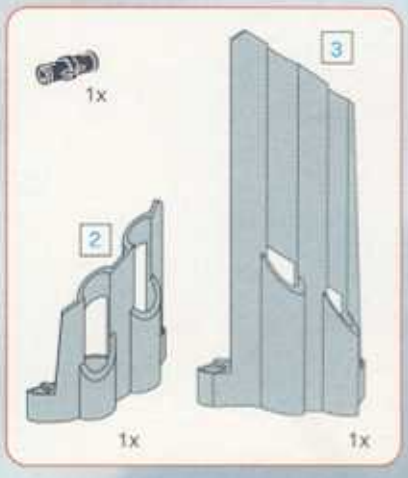

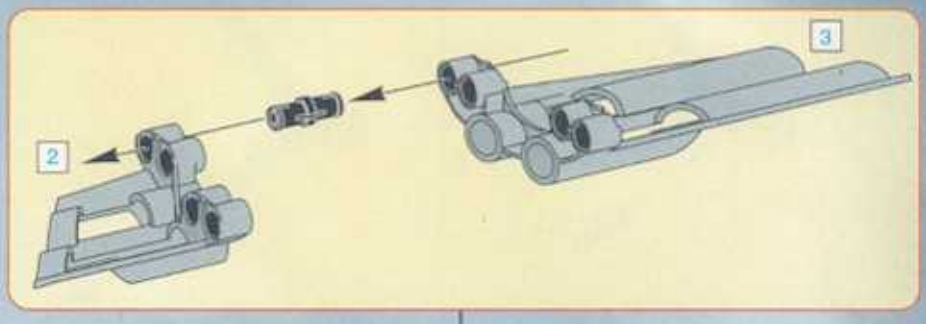

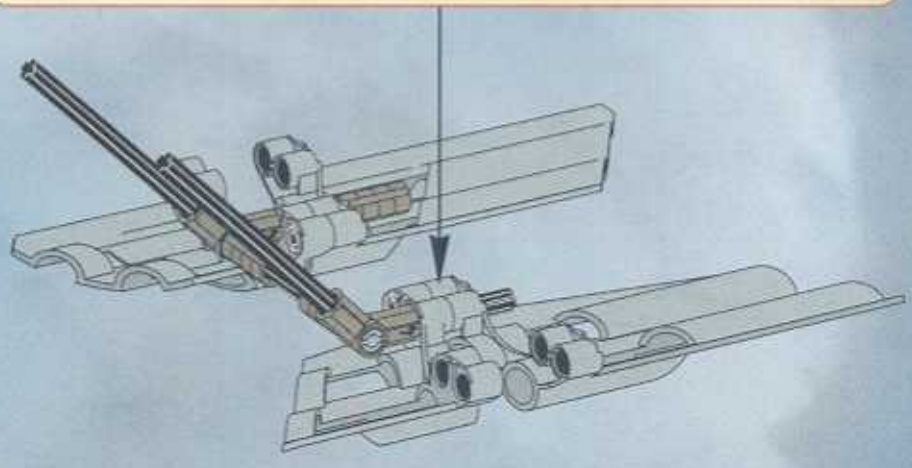

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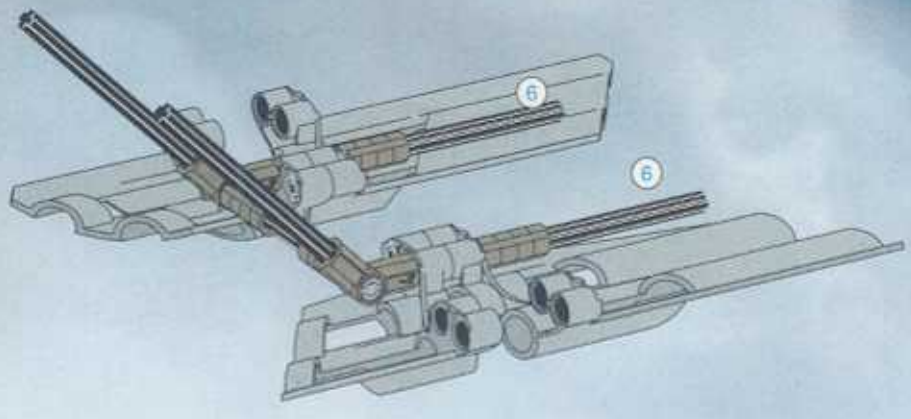

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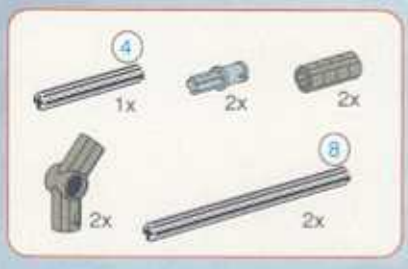

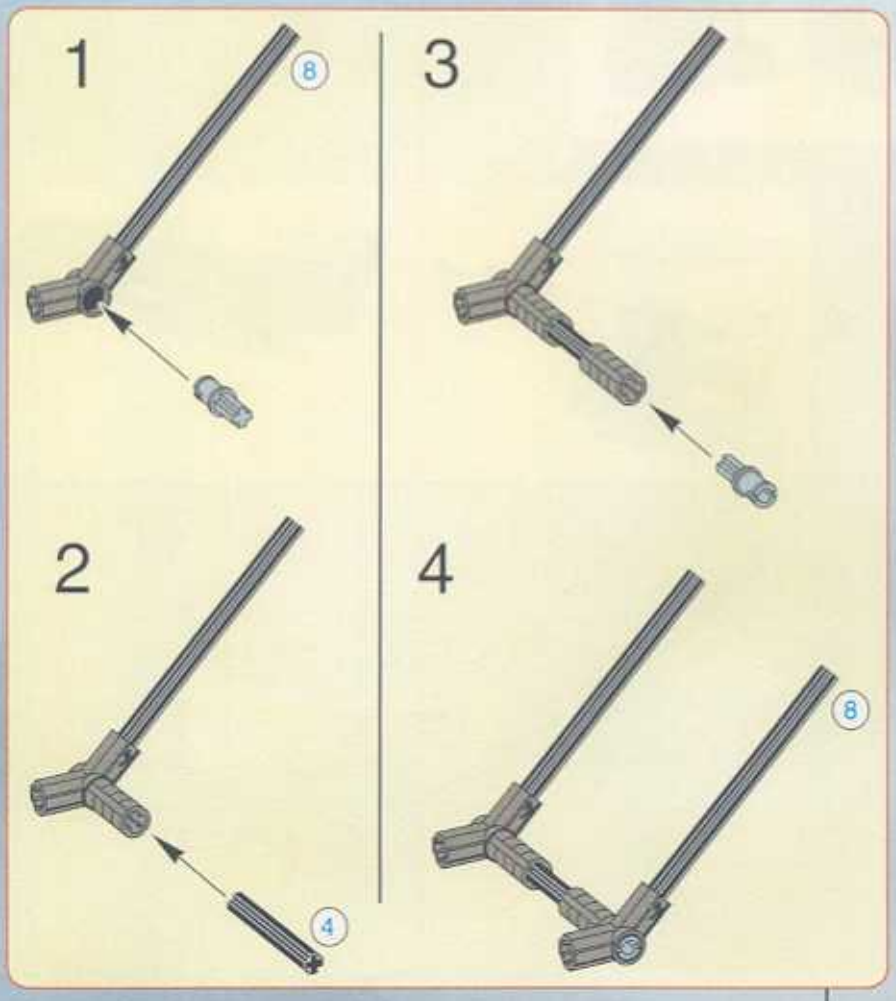

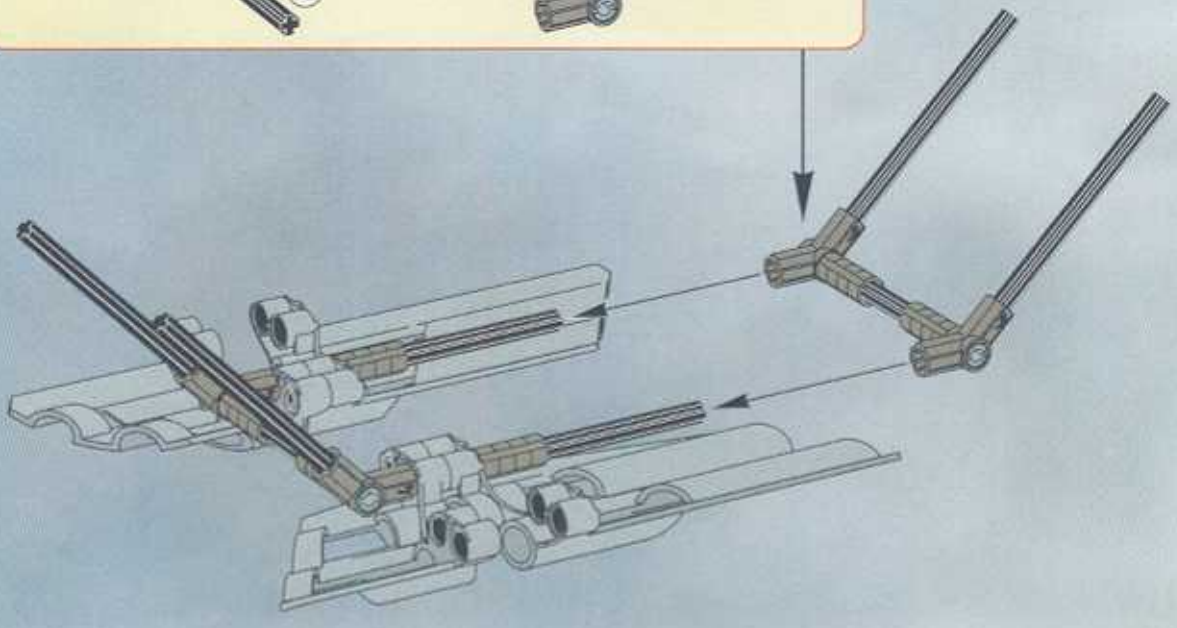

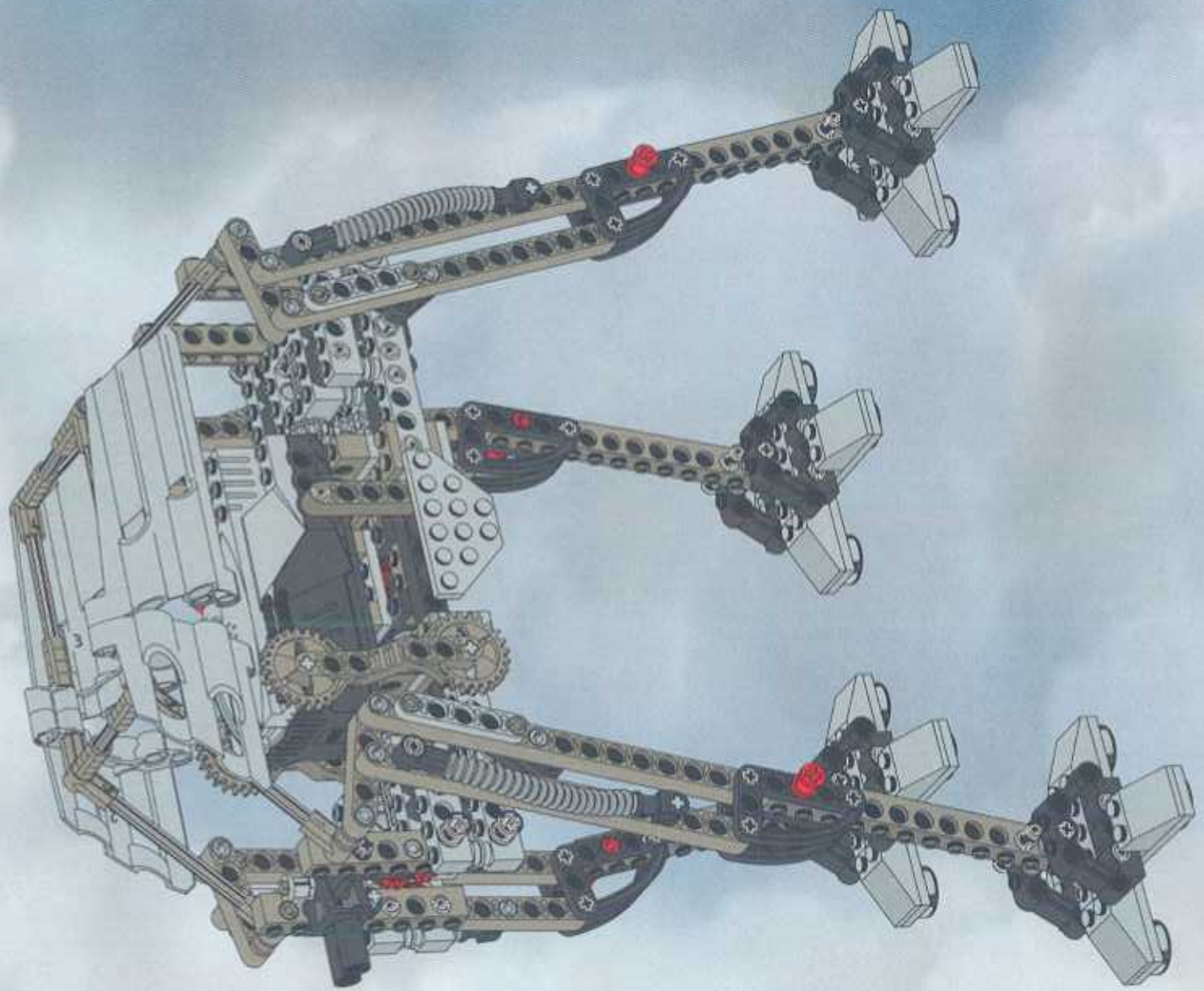

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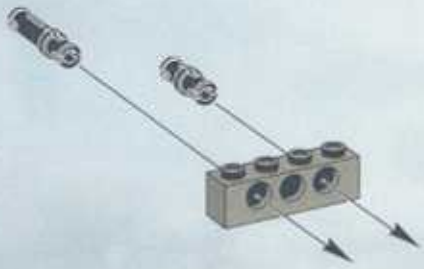

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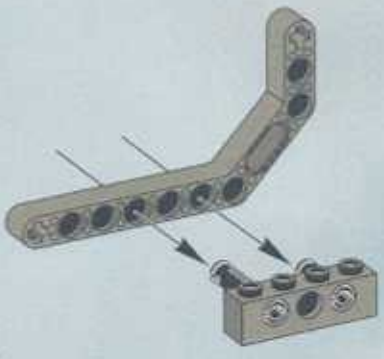

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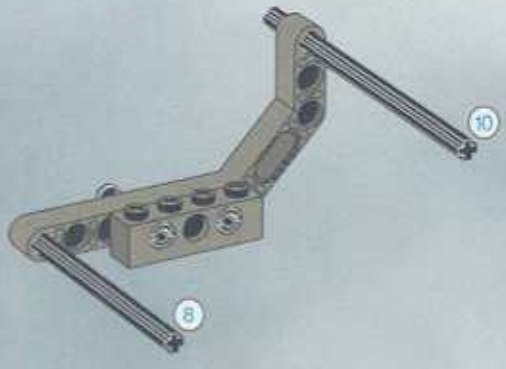

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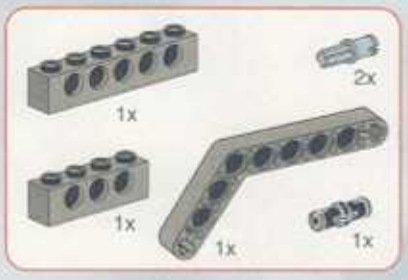

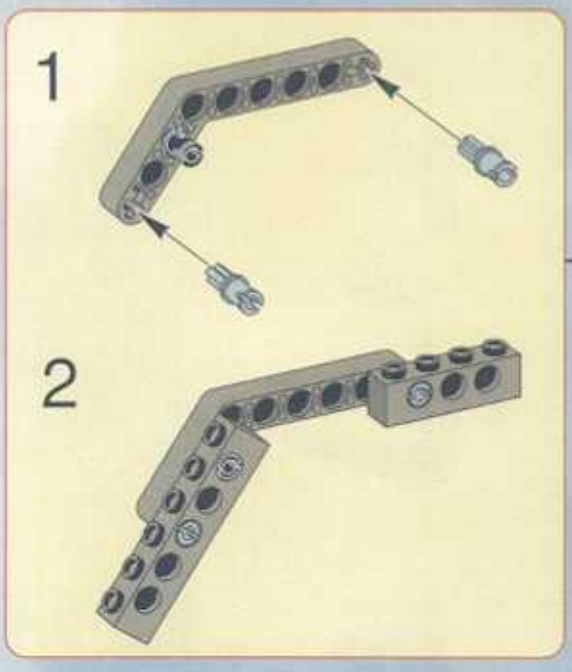

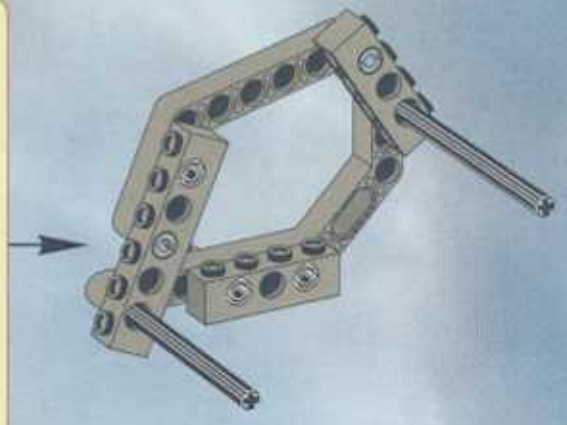

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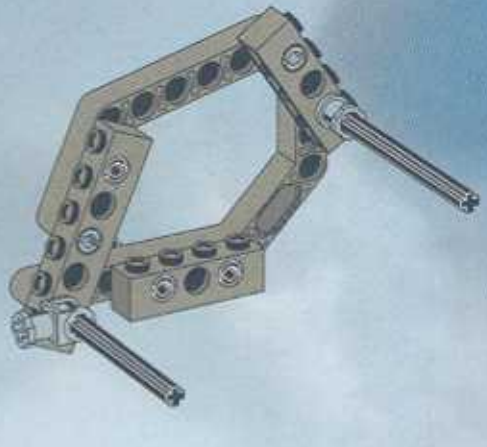

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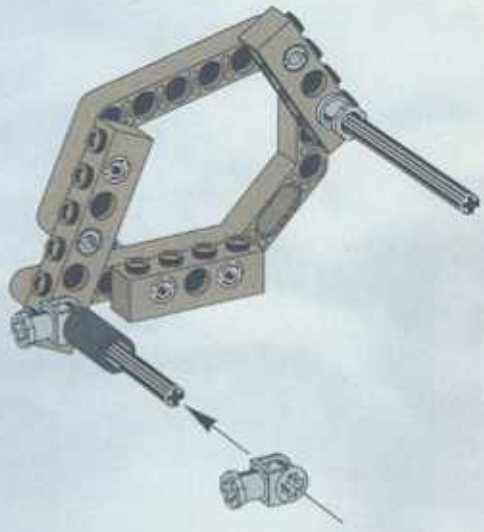

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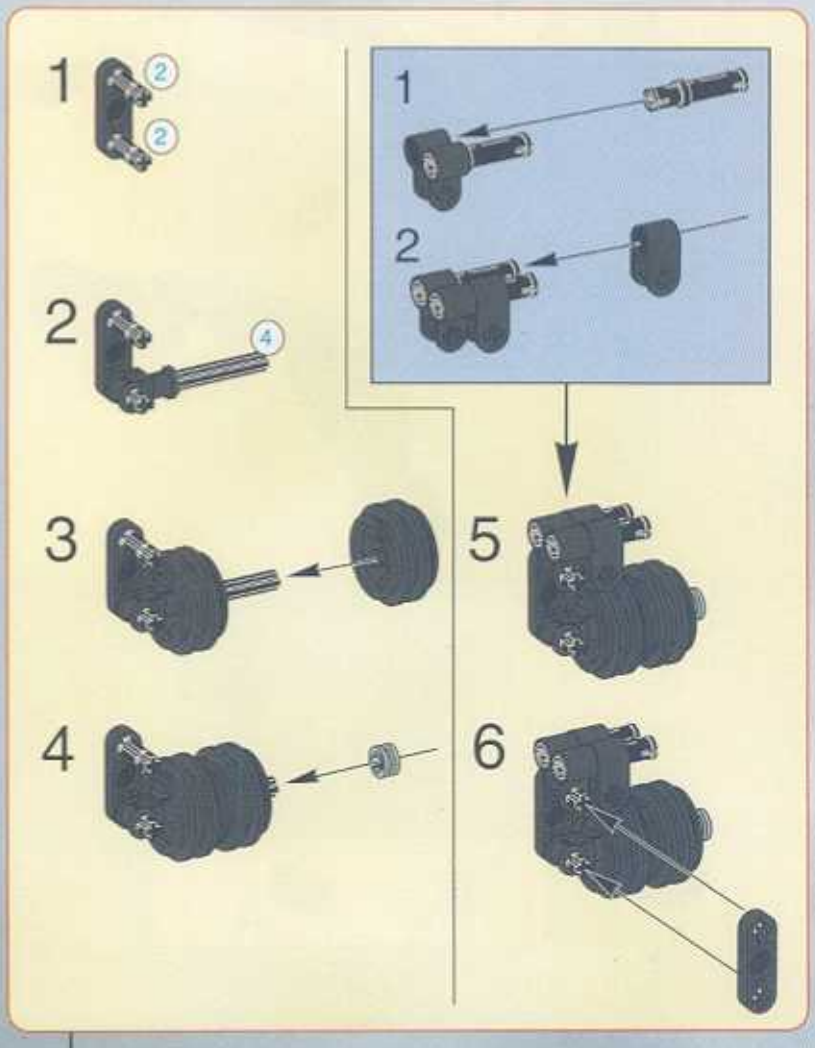

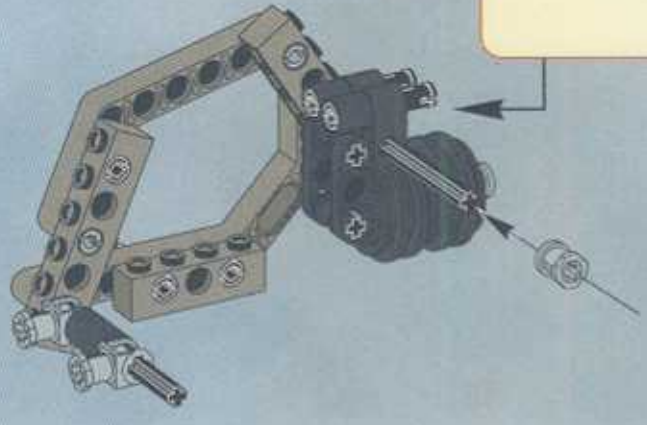

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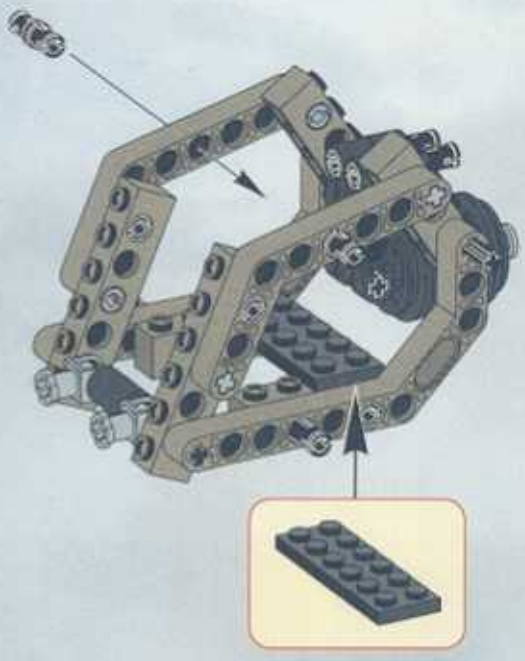

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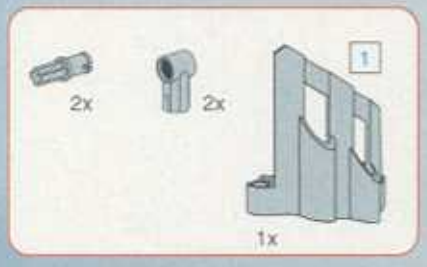

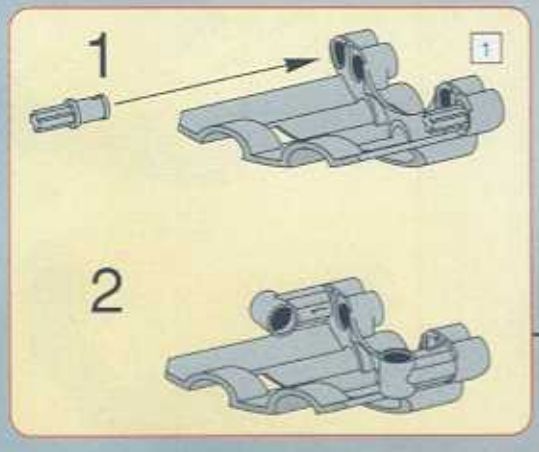

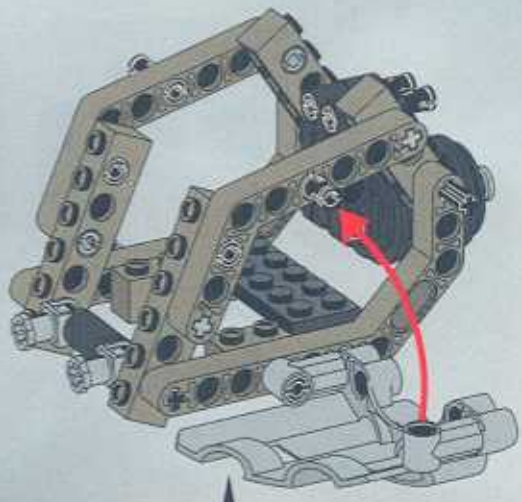

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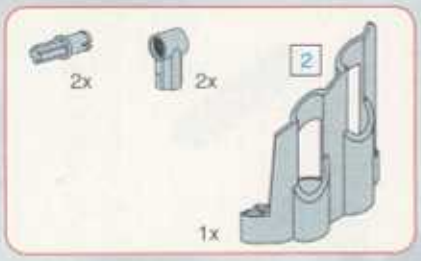

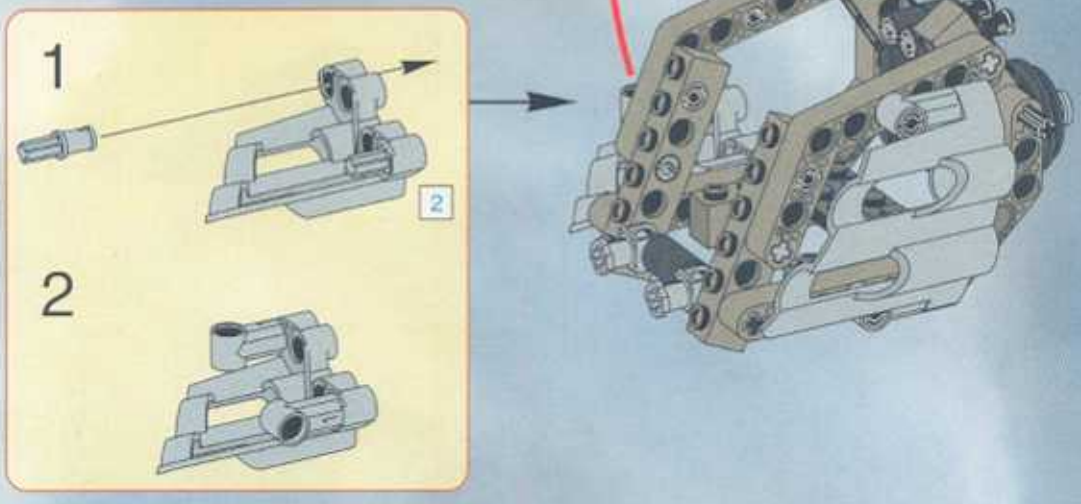

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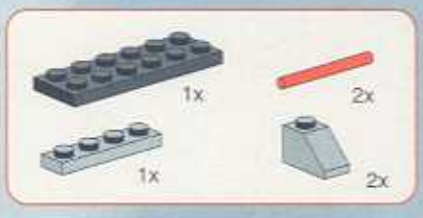

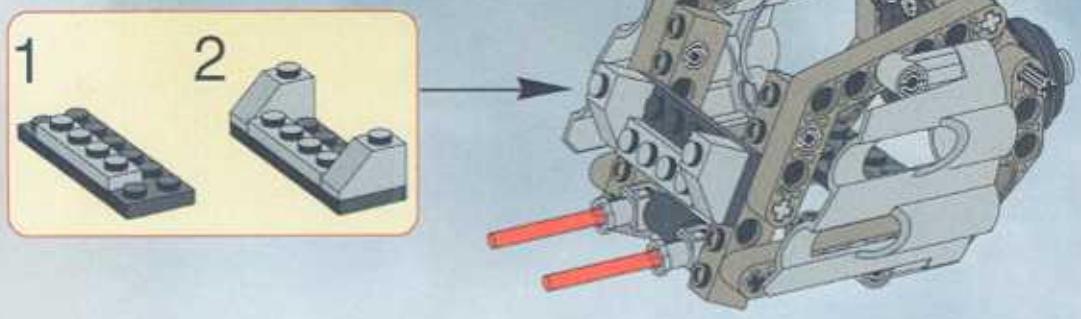

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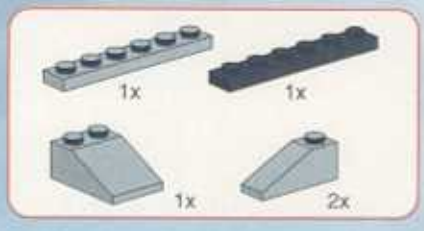

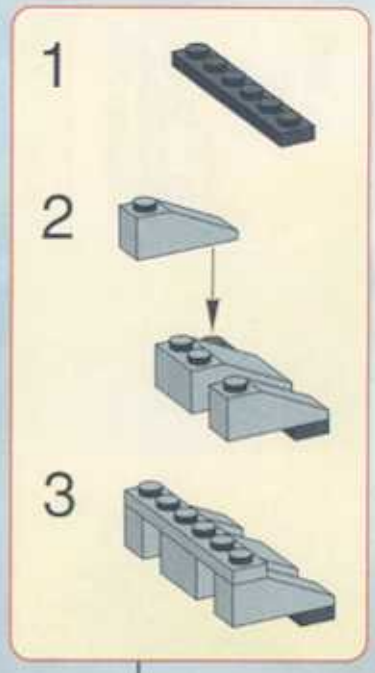

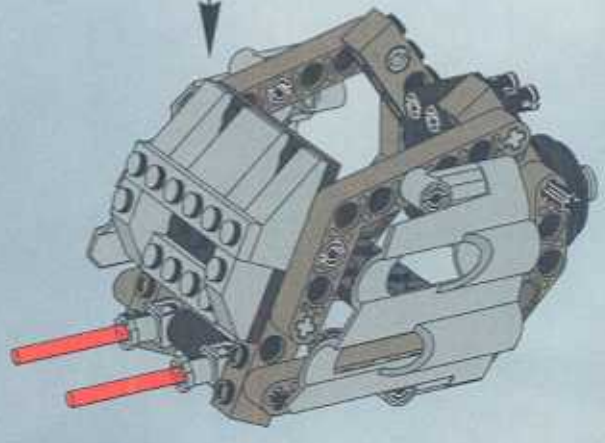

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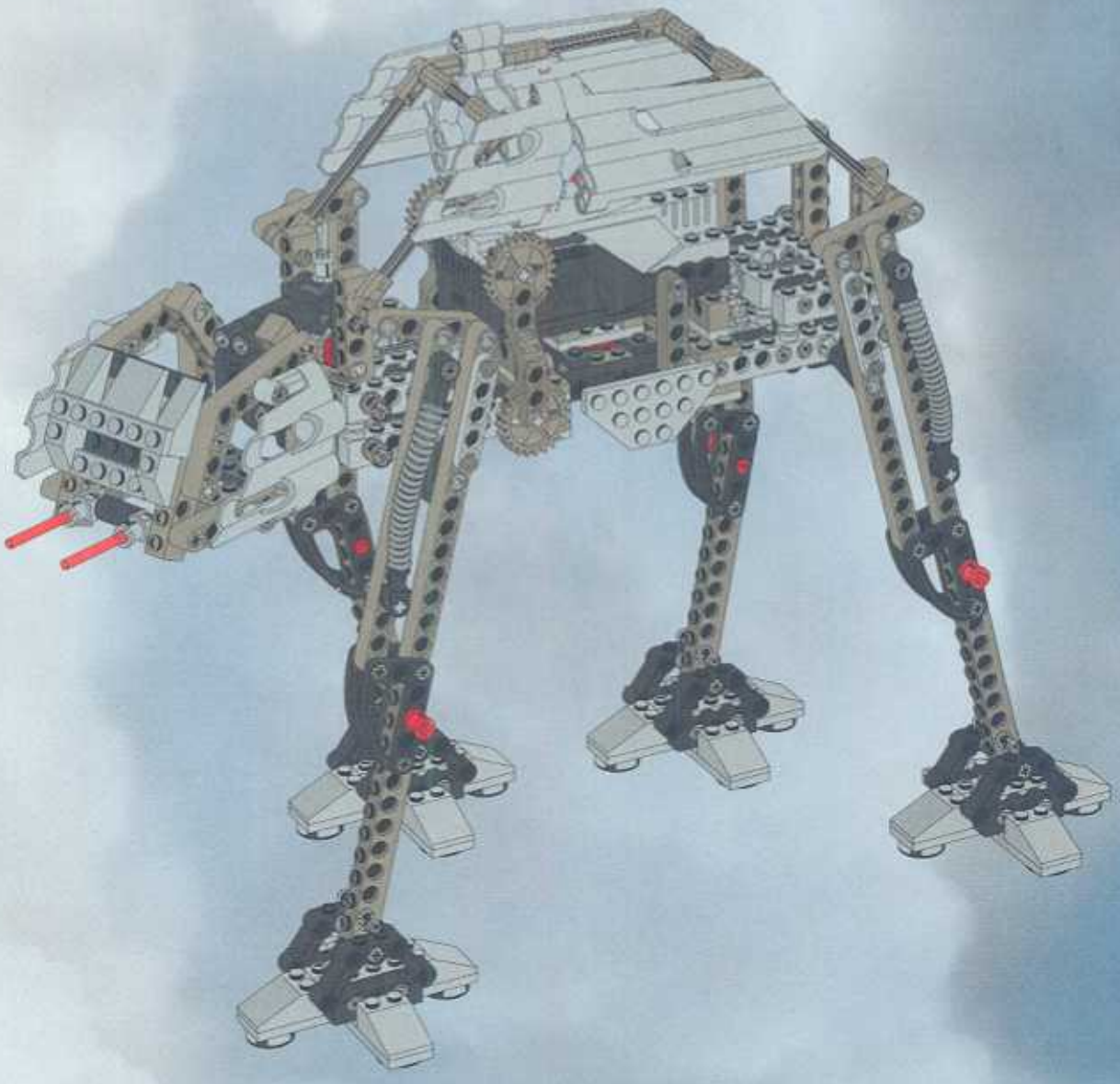
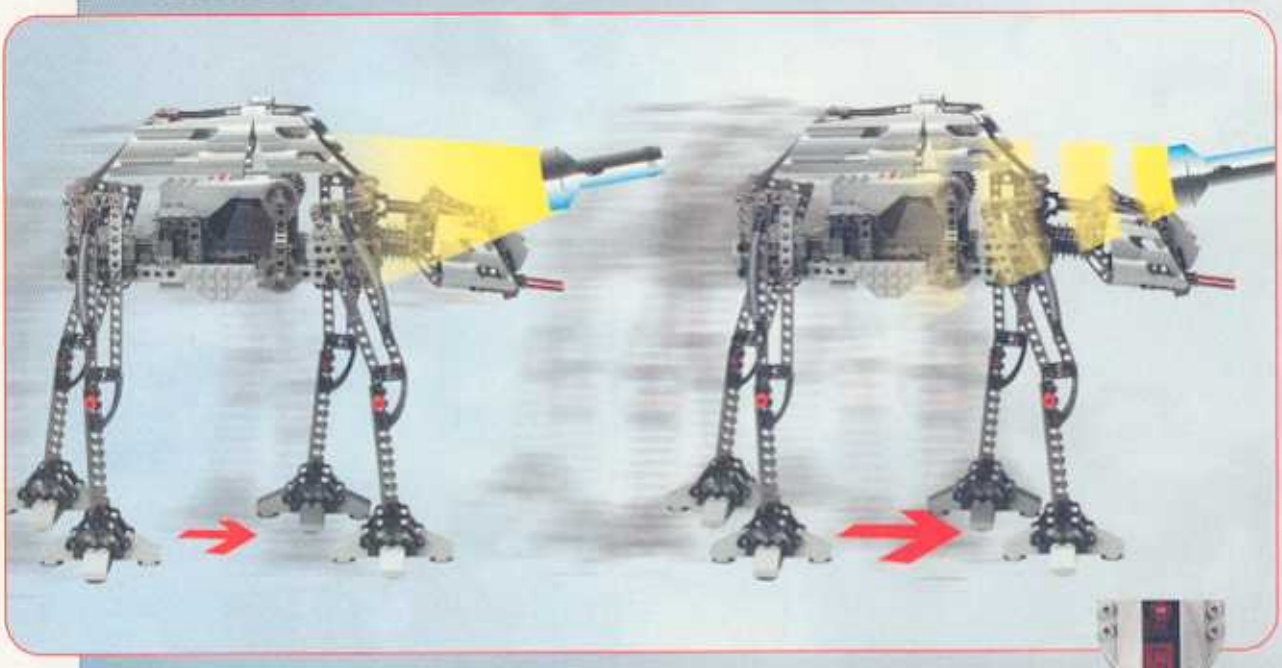


KEEP ALIVE



Select and Run Program 5 (Keep Alive). Flash a light at the AT-AT to make it move. Flash it several times to make it move faster.

LIGHT CONTROL

Cover the Light Sensor with your finger. Select and Run Program 4 (Light Control).

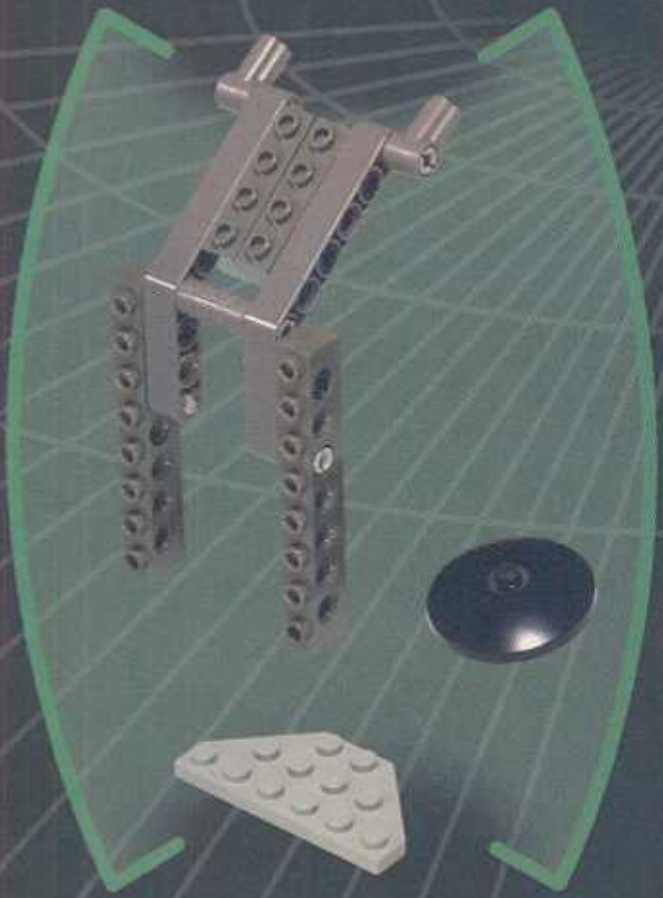
Wait until the sound stops. When you lift your finger, the AT-AT will walk. Cover the Light Sensor or turn off the lights in your room and the AT-AT will stop.
You can also use flashlight to control the AT-AT. See Book 1 page 8 for more details

AAT - CHALLENGE

If you have not yet built the X-Frame go to page 8

Are you ready for the ultimate test of your skills Sith Master? If so, study these plans for the Trade Federation AAT and see if you can build one of your own.

(1) Forward Armor Support (locks into X-Frame)

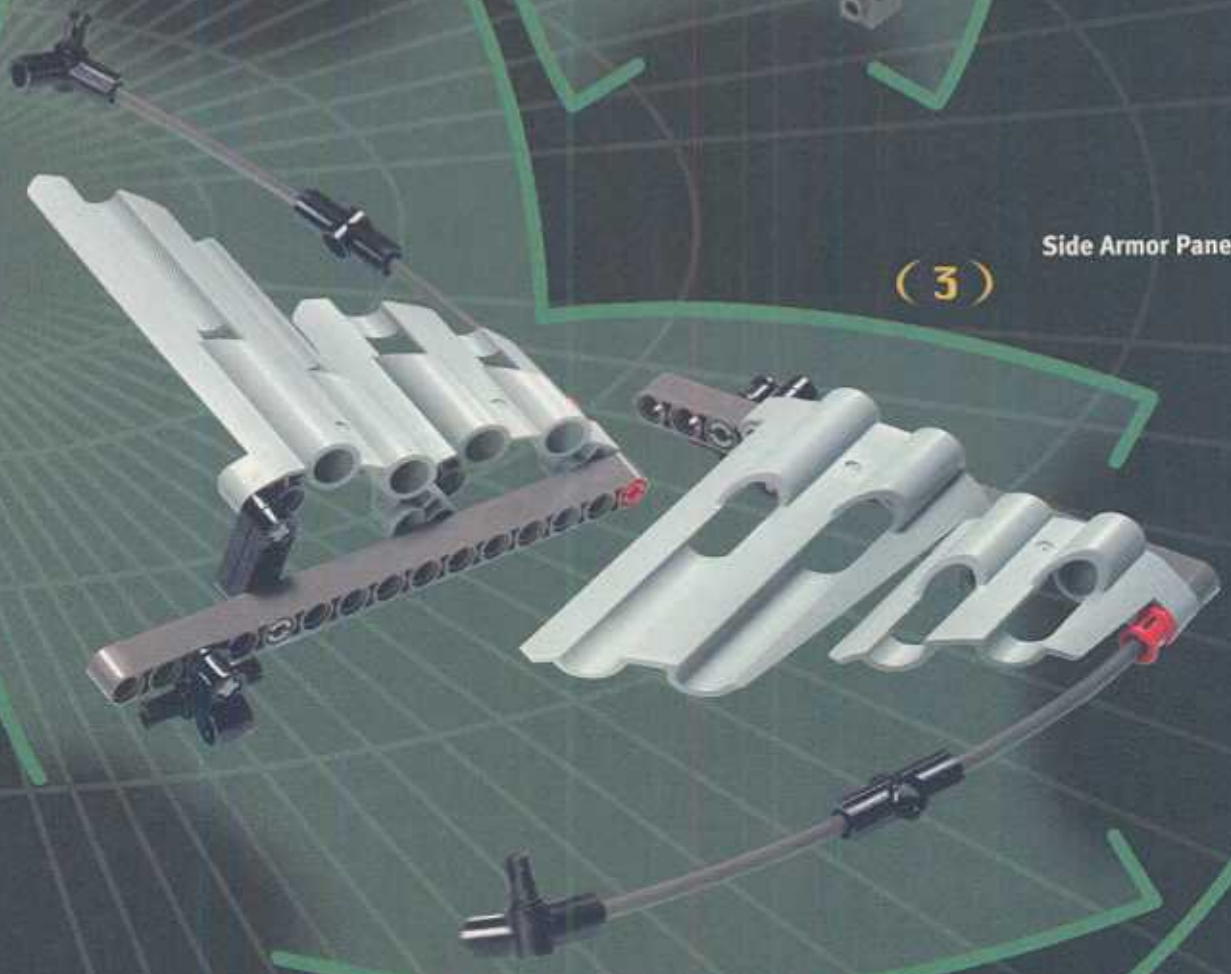


(2)

Tank Turret Drive
(attaches to rear power gear)

(3)

Side Armor Panels



If you require more assistance,
you may find useful information at
www.legomindstorms.com/darkside

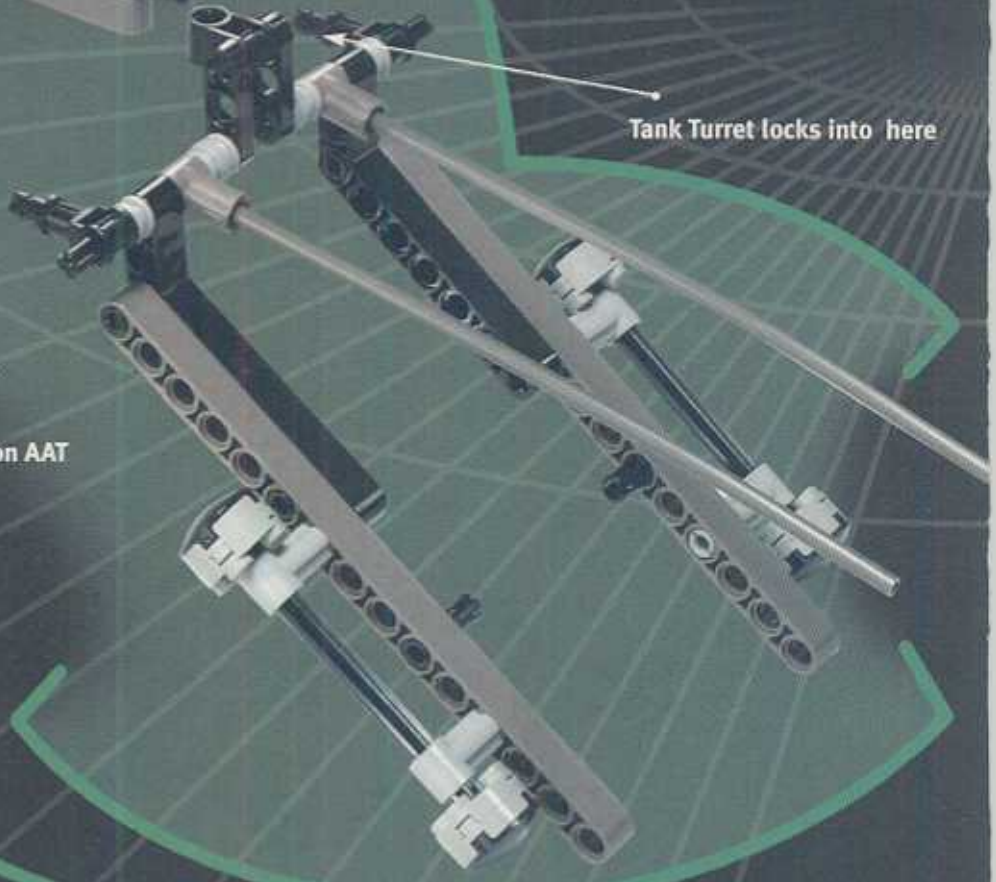
(4)

Front Grill

Attach wheels to forward and rear axle drives

(5)

Tank Turret locks into here



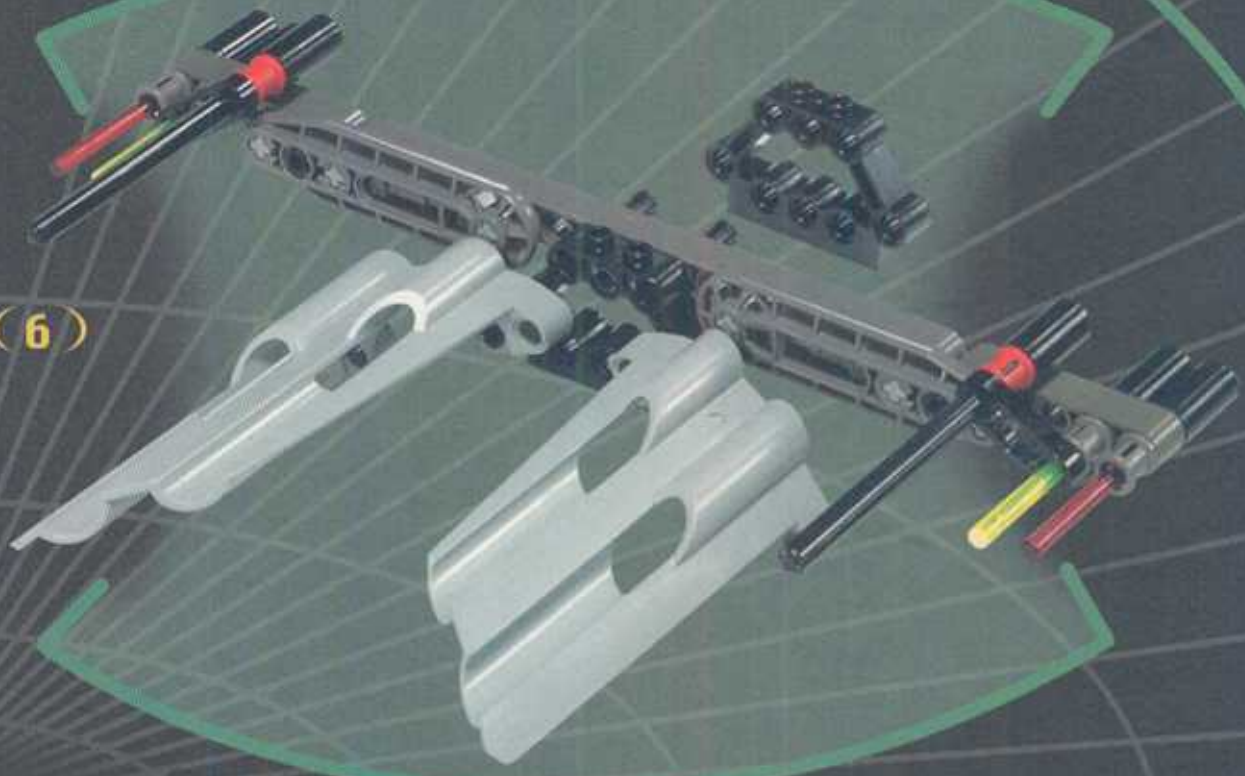
Core Frame for Trade Federation AAT

3/4

4-5

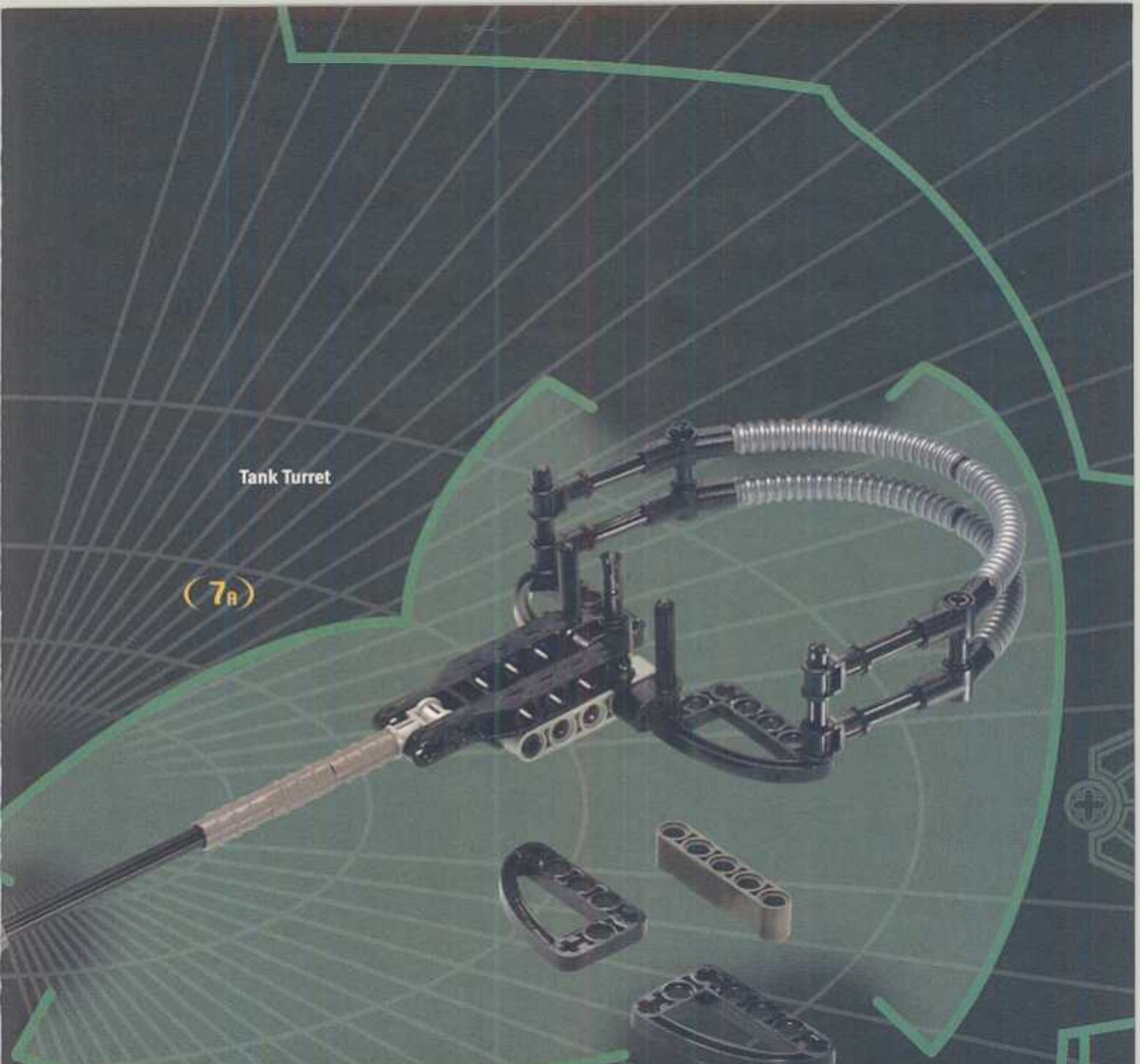
21

(6)



Tank Turret

(7A)



(7B)

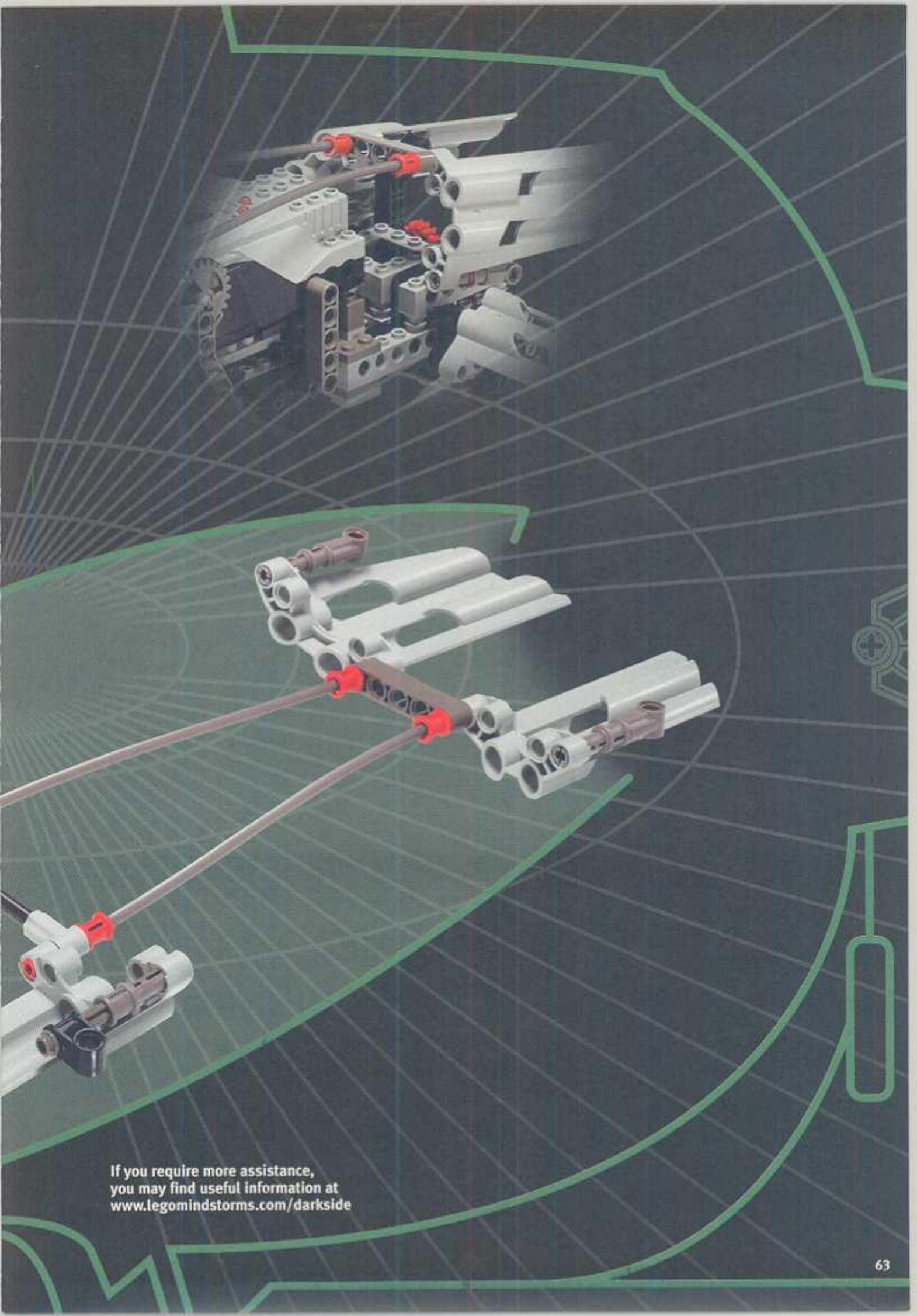
SWAMP CREATURE CHALLENGE

If you have not yet built the X-Frame go to page 8

Sith Master, study these secret plans to build a walking Swamp Creature.

(1)

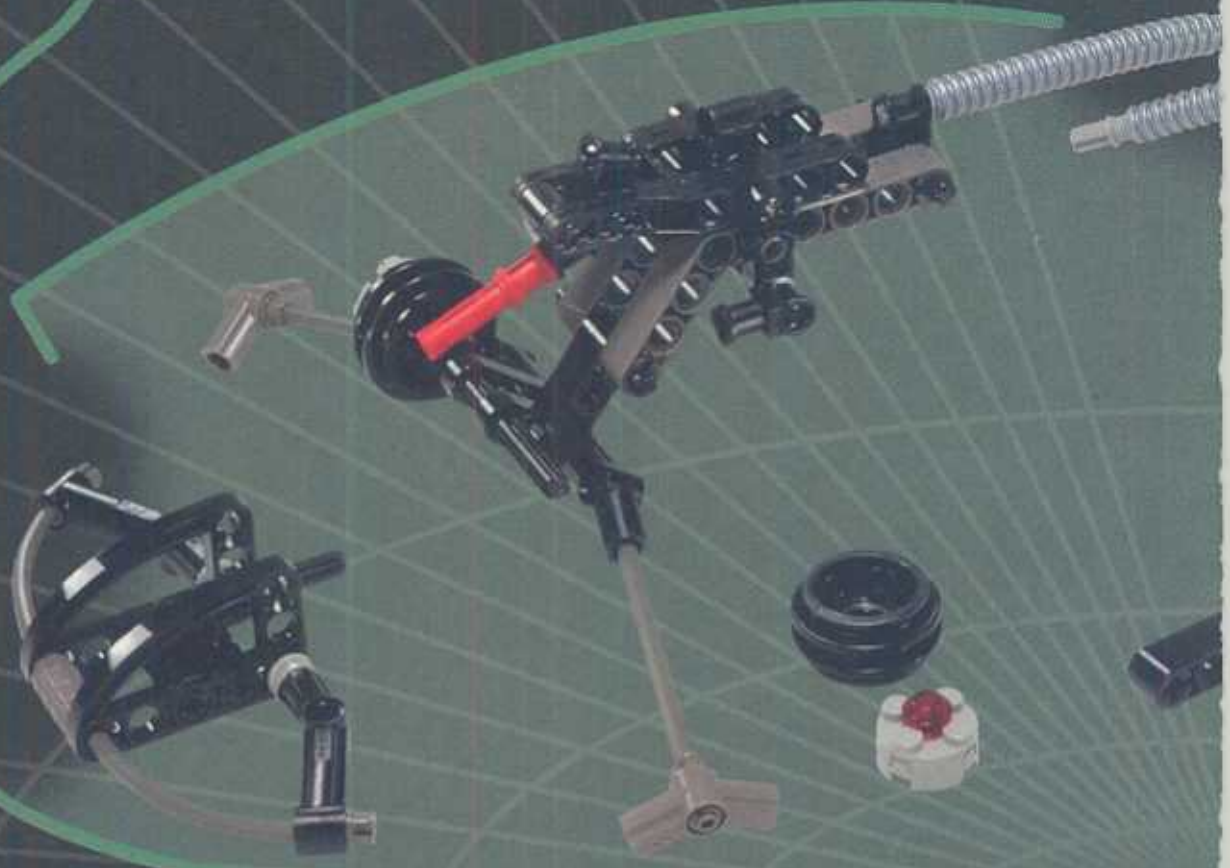
Swamp Creature Shell

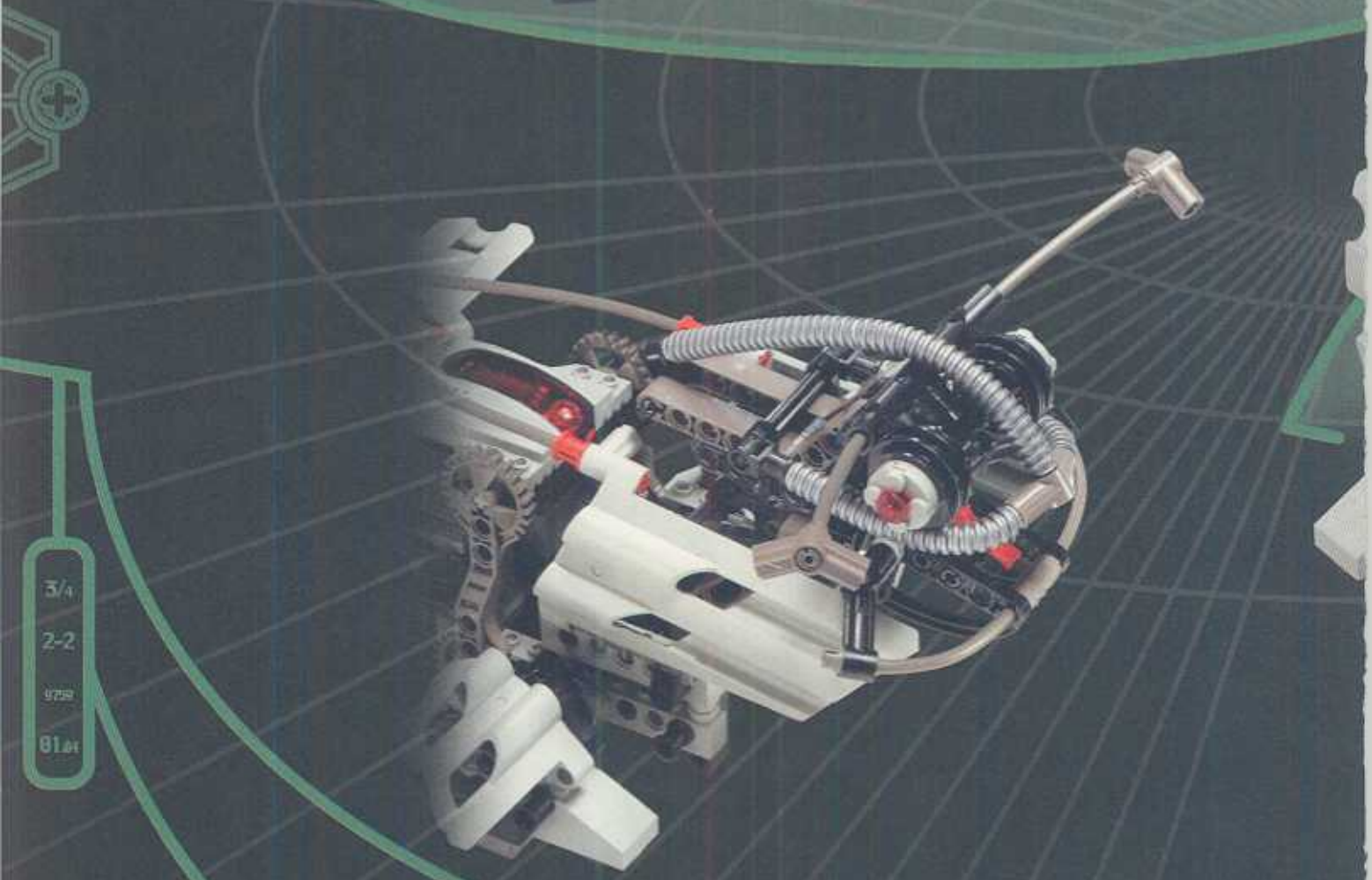


If you require more assistance,
you may find useful information at
www.legomindstorms.com/darkside

(2)

Swamp Creature
head and mouth
(shell upside down)





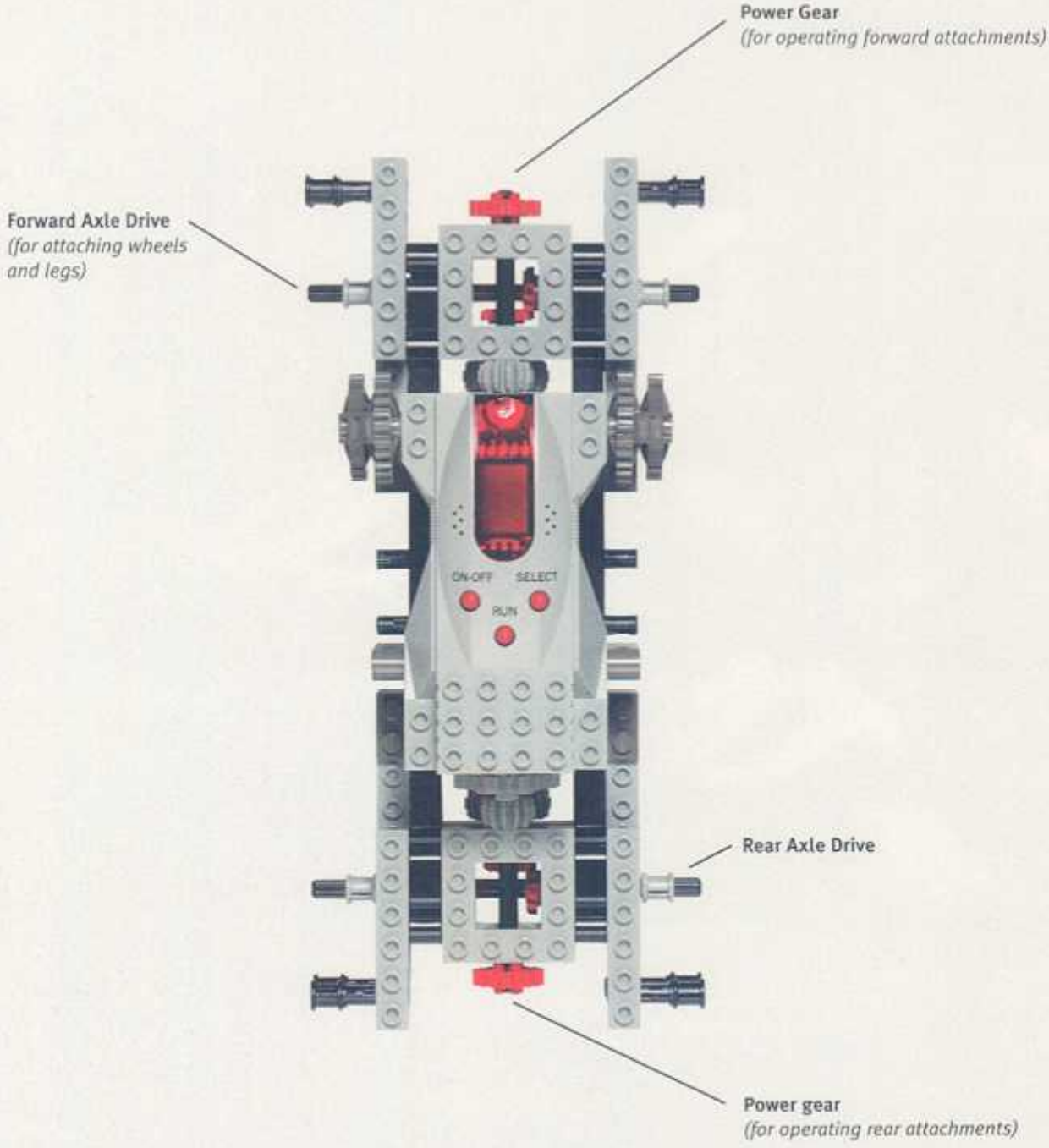
Head Control
(attach to forward power gear to make the head and mouth move)

(4)

Legs
(attach to forward and rear axle drive to make your creature walk)

(3)

TIPS & TRICKS

To understand the way the X-Frame works, look at the picture below.

You can use the Micro Frame, the Y-Frame, and the X-Frame as the core of your own inventions. Just build your Robots, Transports, and Creatures around one of the frames.