

BUILDING WITH LEGO



What my parents think I do



What my friends think I do



What society thinks I do



What the Lego company thinks I do



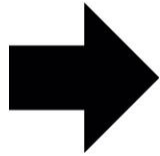
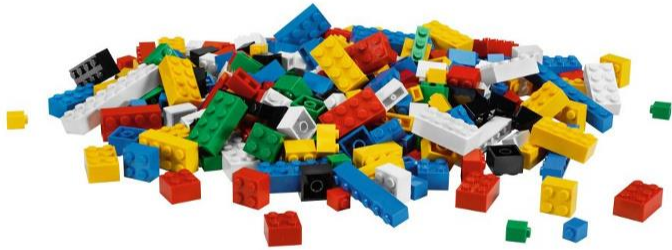
What I think I'm doing

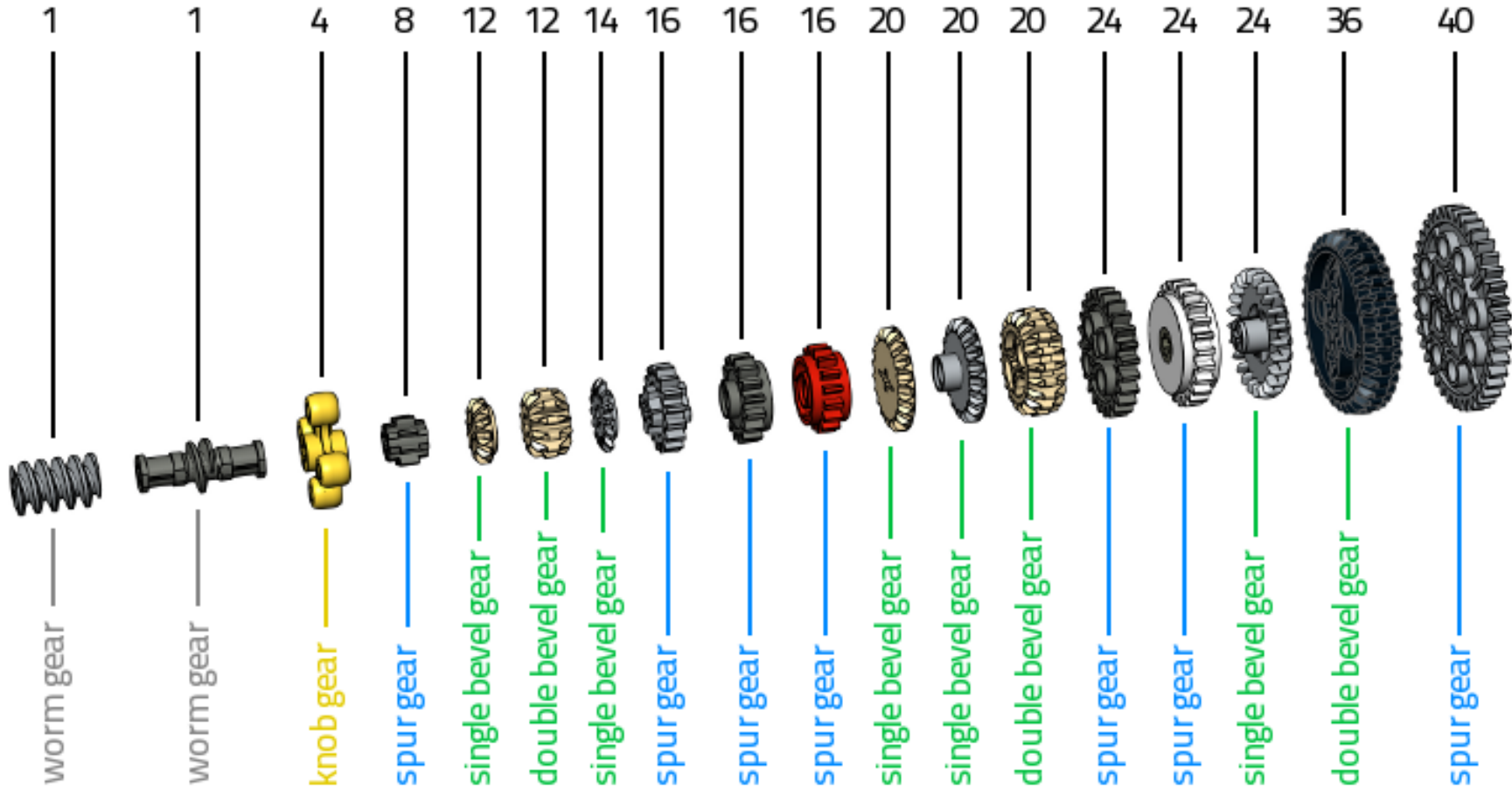
bricklink

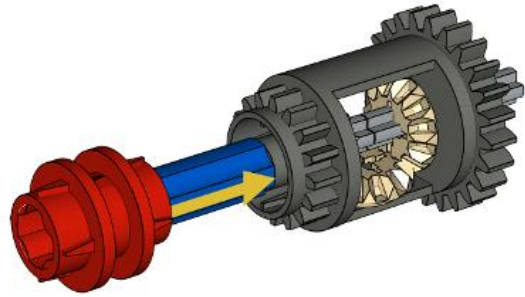
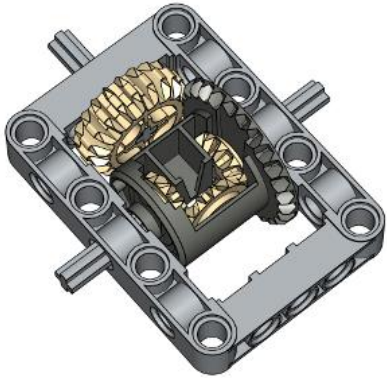
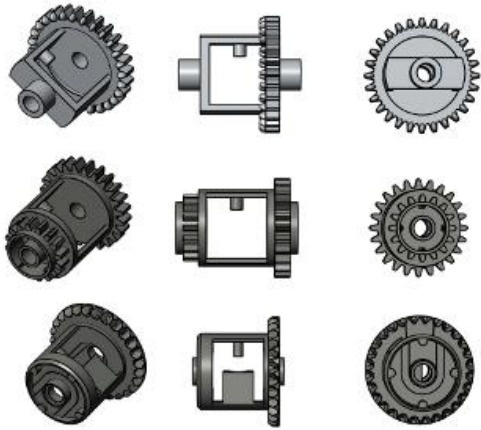
Orders Placed

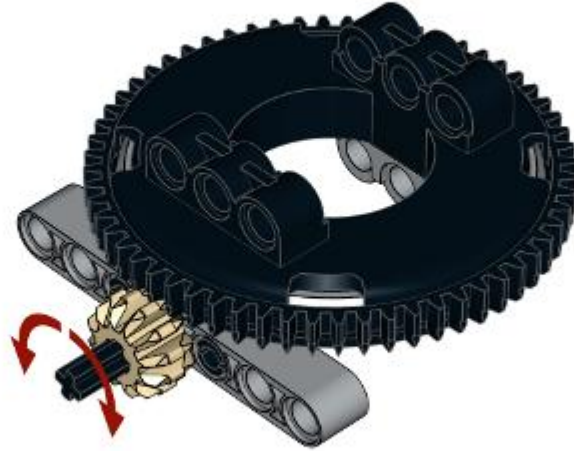
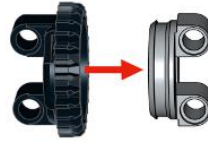
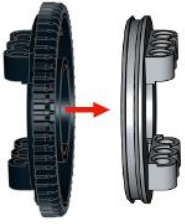
Order ID	Date	Status	Item	Quantity	Price	Notes
10000001	May 5, 2017	Shipped	LEGO 11330	1	\$19.99	
10000002	May 6, 2017	Shipped	LEGO 11330	1	\$19.99	
10000003	May 7, 2017	Shipped	LEGO 11330	1	\$19.99	
10000004	May 8, 2017	Shipped	LEGO 11330	1	\$19.99	
10000005	May 9, 2017	Shipped	LEGO 11330	1	\$19.99	
10000006	May 10, 2017	Shipped	LEGO 11330	1	\$19.99	
10000007	May 11, 2017	Shipped	LEGO 11330	1	\$19.99	
10000008	May 12, 2017	Shipped	LEGO 11330	1	\$19.99	
10000009	May 13, 2017	Shipped	LEGO 11330	1	\$19.99	
10000010	May 14, 2017	Shipped	LEGO 11330	1	\$19.99	
10000011	May 15, 2017	Shipped	LEGO 11330	1	\$19.99	
10000012	May 16, 2017	Shipped	LEGO 11330	1	\$19.99	
10000013	May 17, 2017	Shipped	LEGO 11330	1	\$19.99	
10000014	May 18, 2017	Shipped	LEGO 11330	1	\$19.99	
10000015	May 19, 2017	Shipped	LEGO 11330	1	\$19.99	
10000016	May 20, 2017	Shipped	LEGO 11330	1	\$19.99	
10000017	May 21, 2017	Shipped	LEGO 11330	1	\$19.99	
10000018	May 22, 2017	Shipped	LEGO 11330	1	\$19.99	
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10000026	May 30, 2017	Shipped	LEGO 11330	1	\$19.99	
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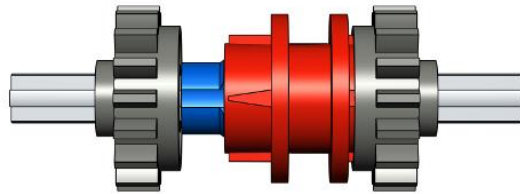
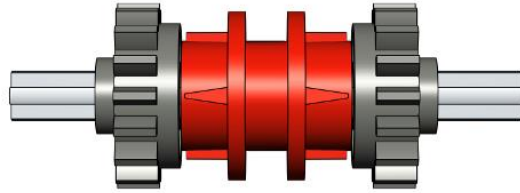
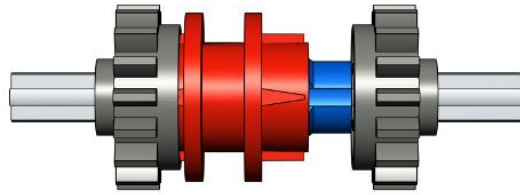
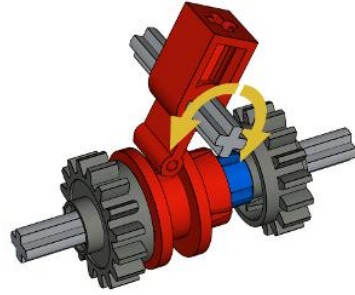
What I actually do

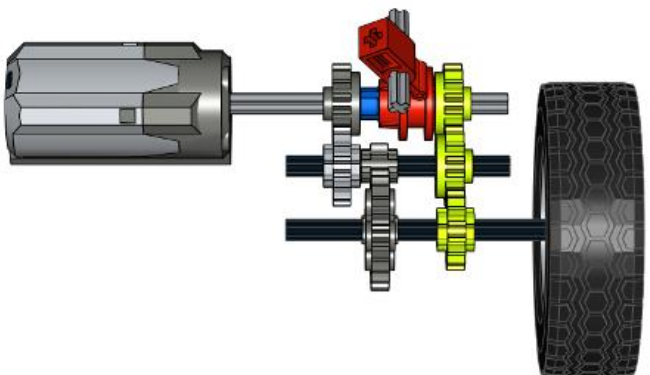
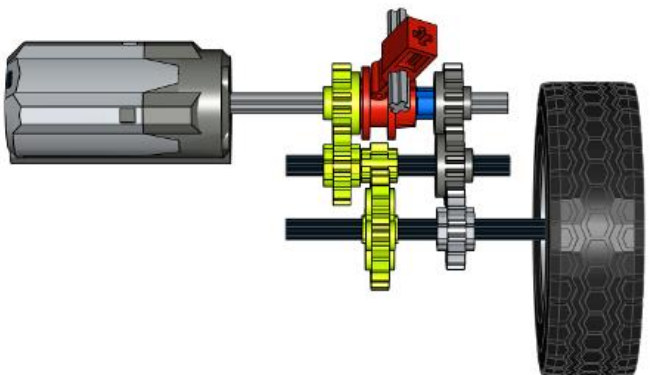
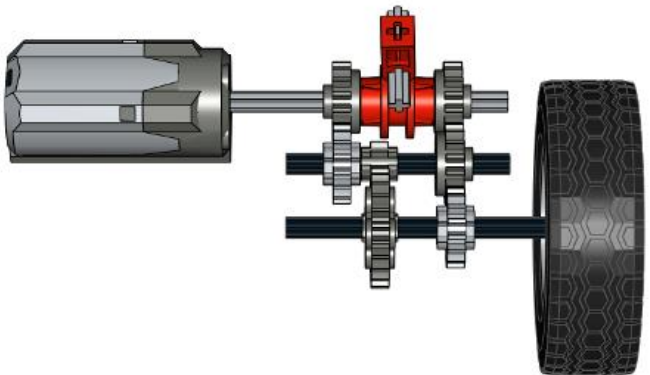


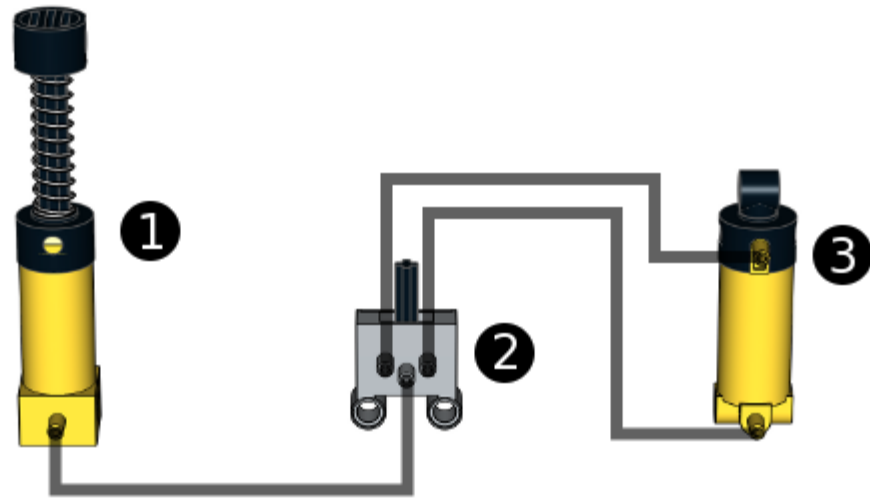


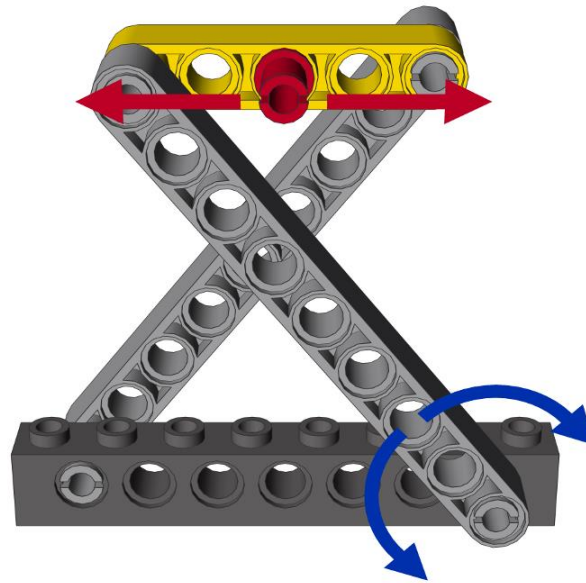




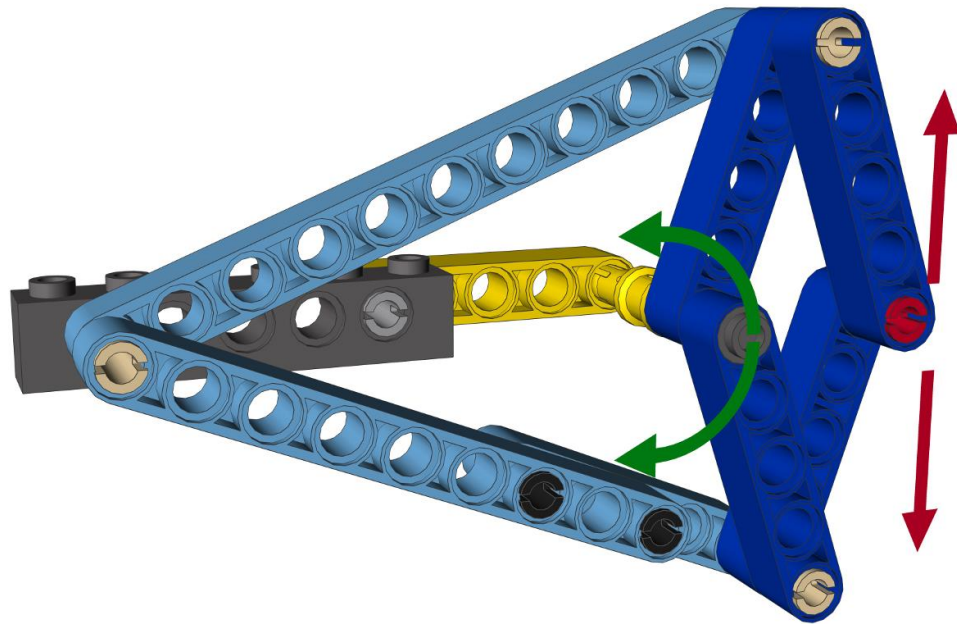




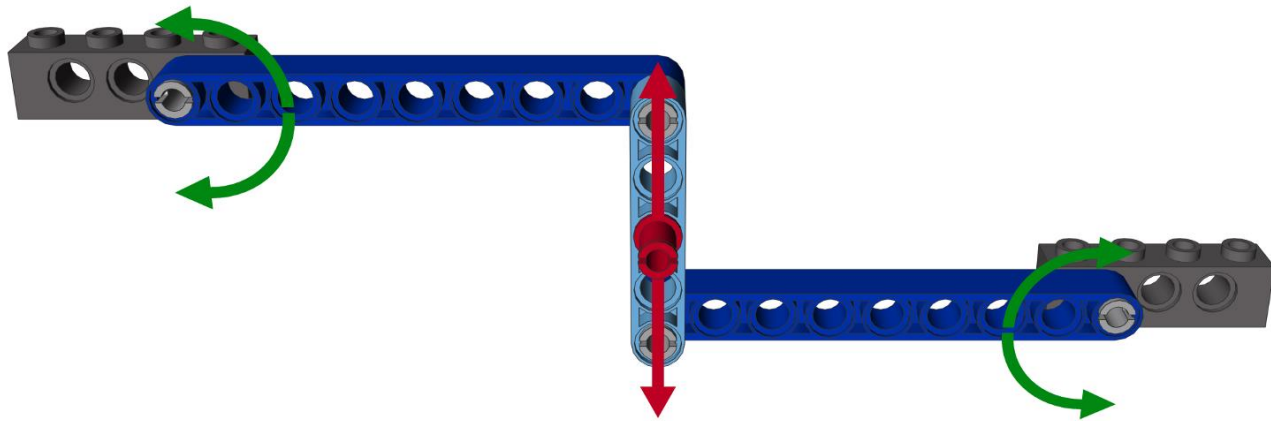




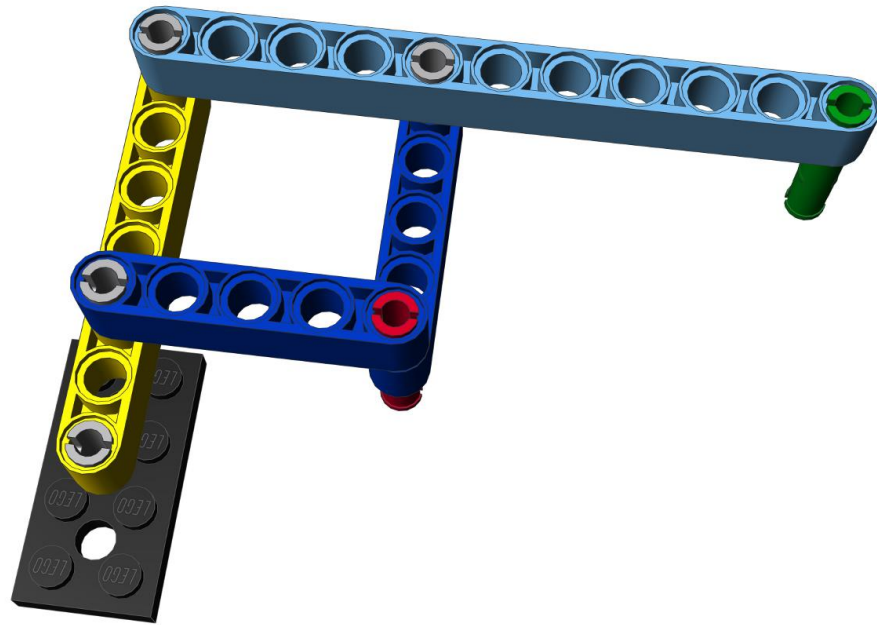
Chebyshev linkage



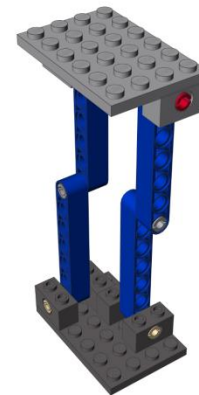
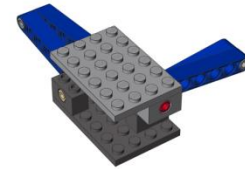
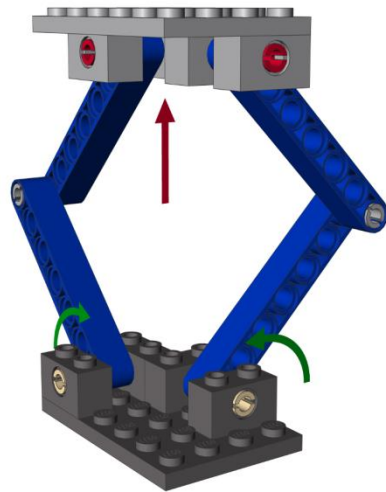
Peaucellier–Lipkin cell



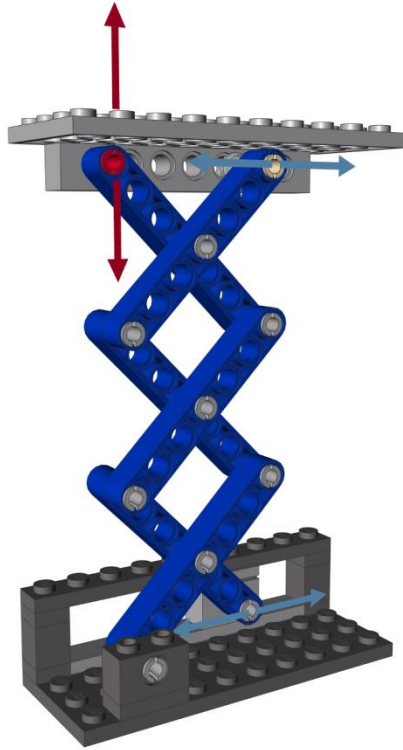
Watt's linkage



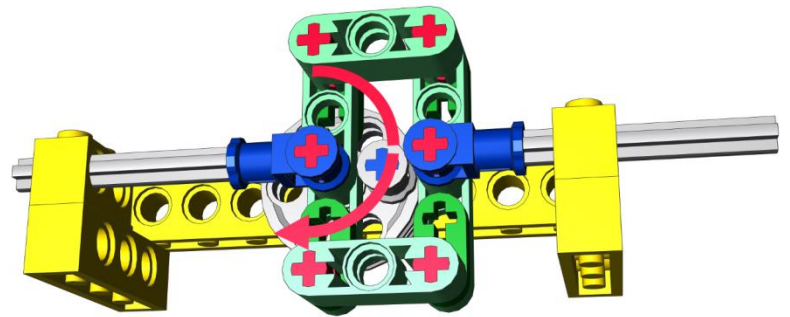
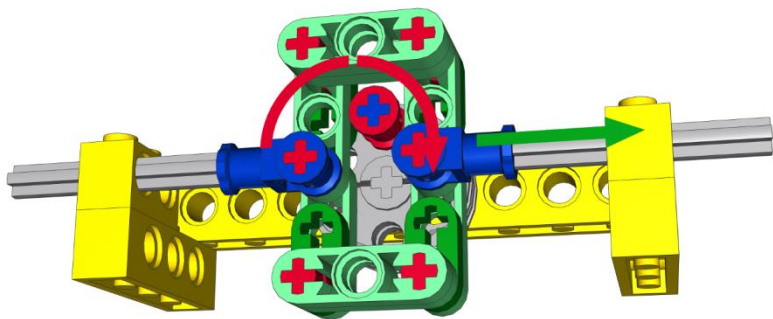
Pantograph



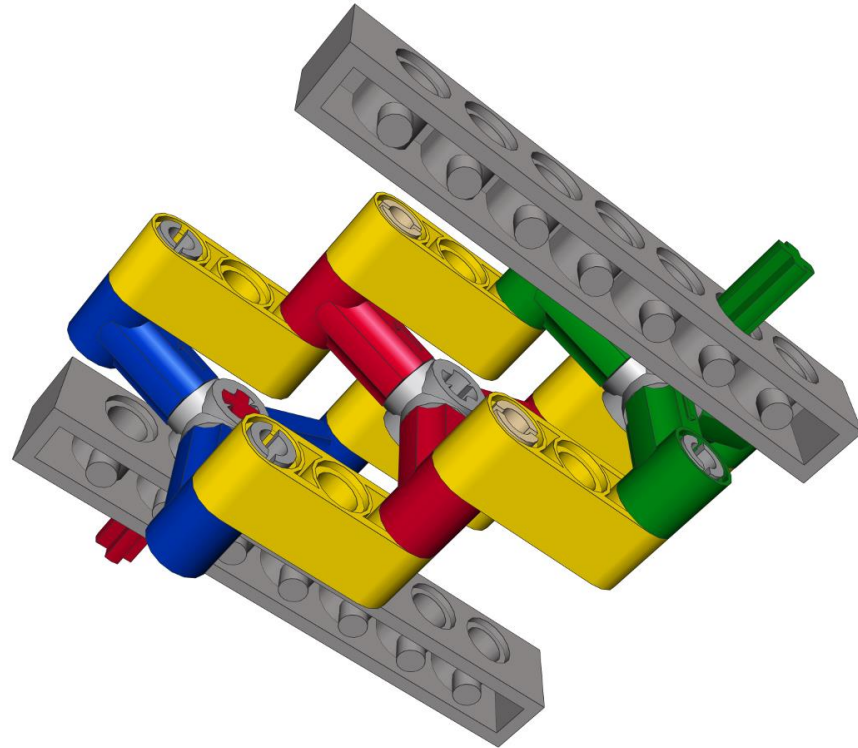
Sarrus linkage



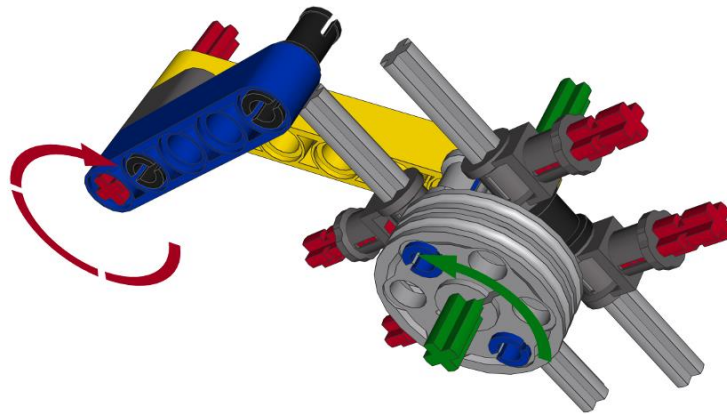
scissor linkage



Scotch yoke



Schmidt coupling



Geneva mechanism

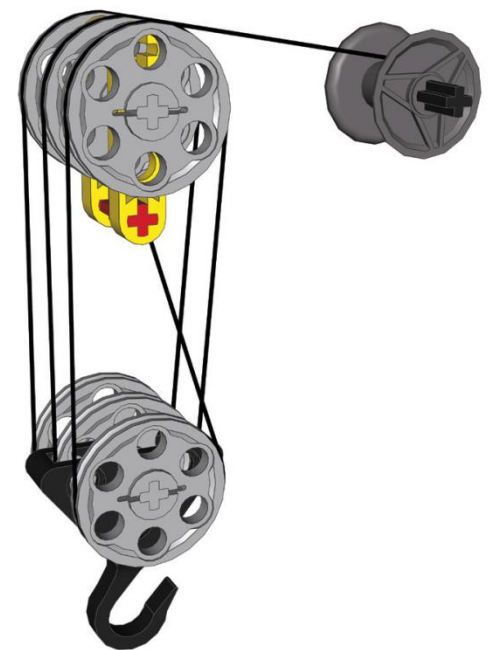
Pulleys:



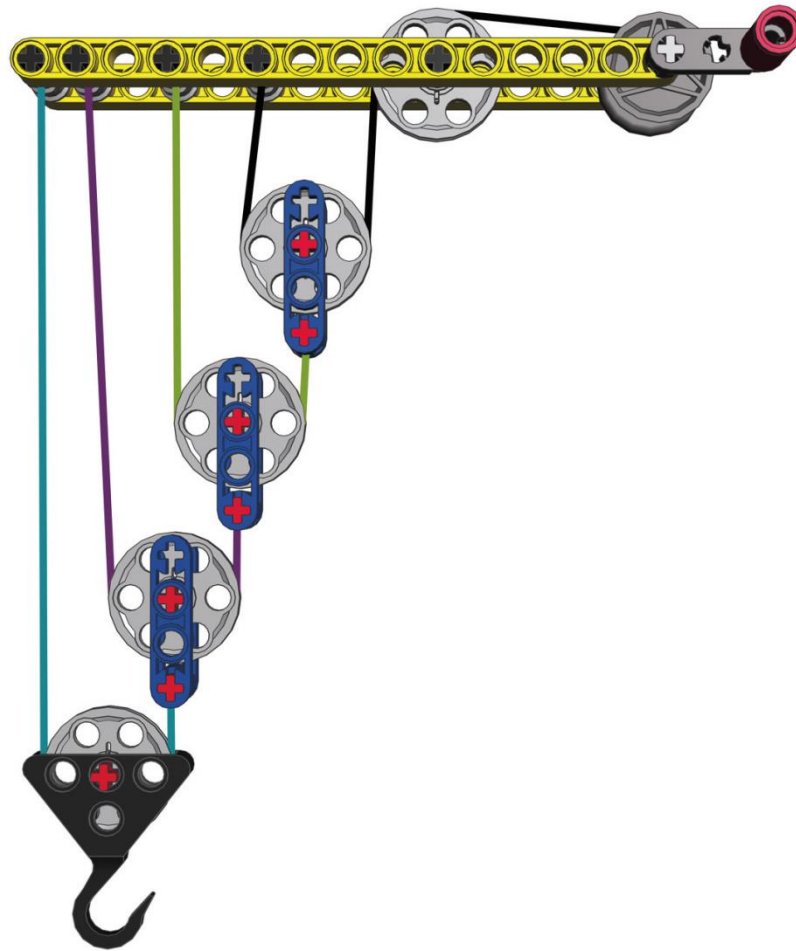
Gun tackle



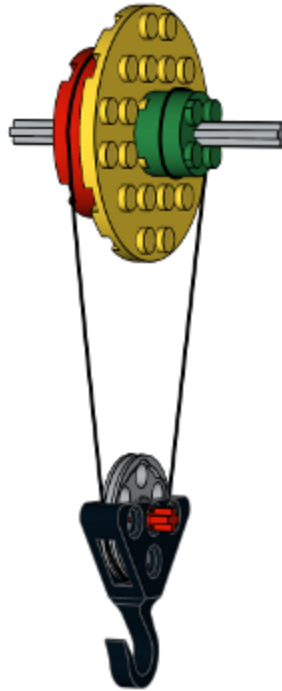
Luff tackle



Threefold purchase



Power pulley system



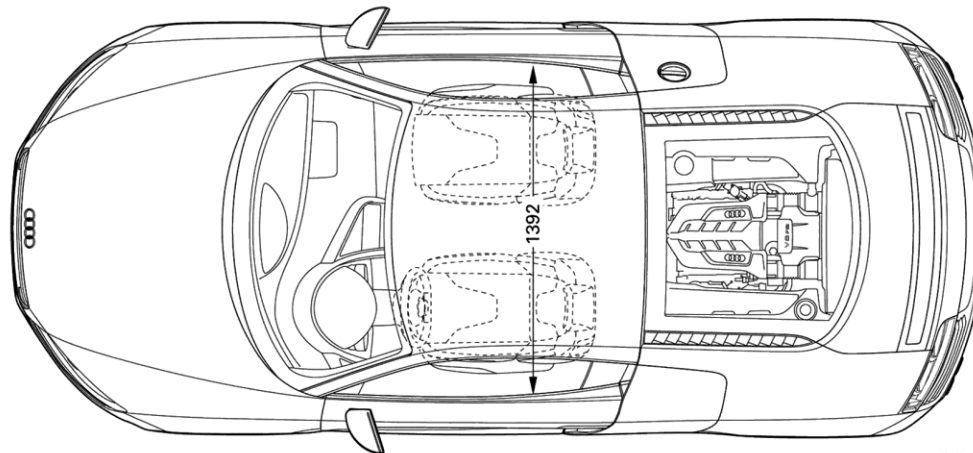
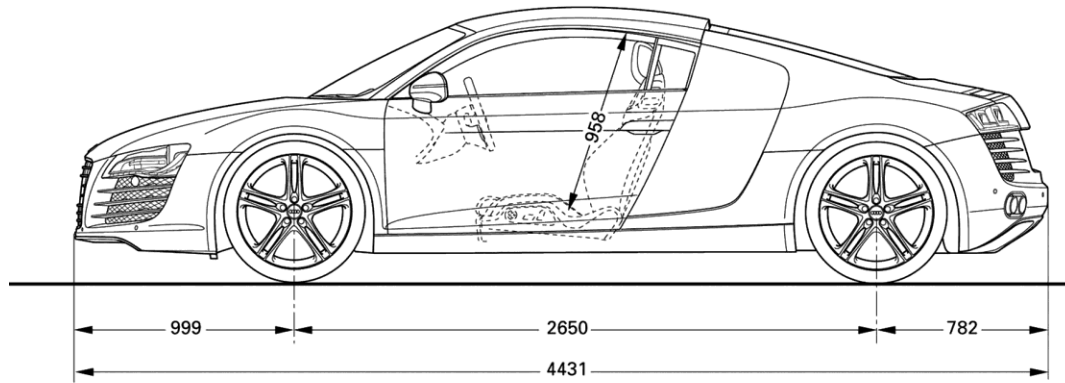
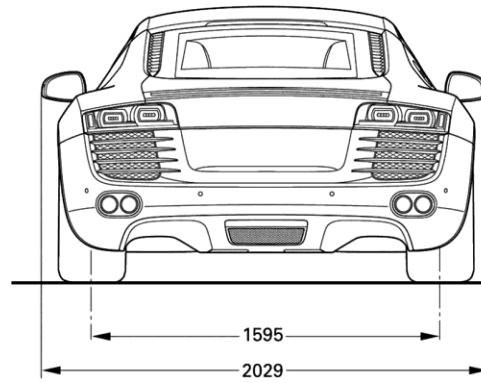
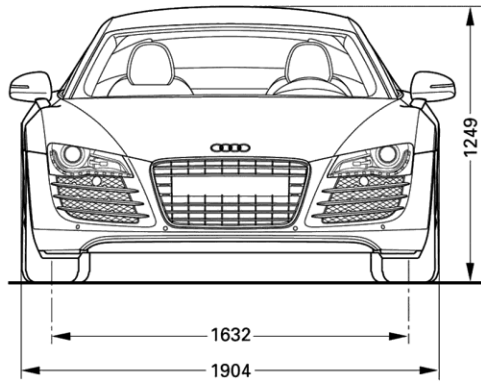
$$m_a = (2 \times R) / (R - r)$$

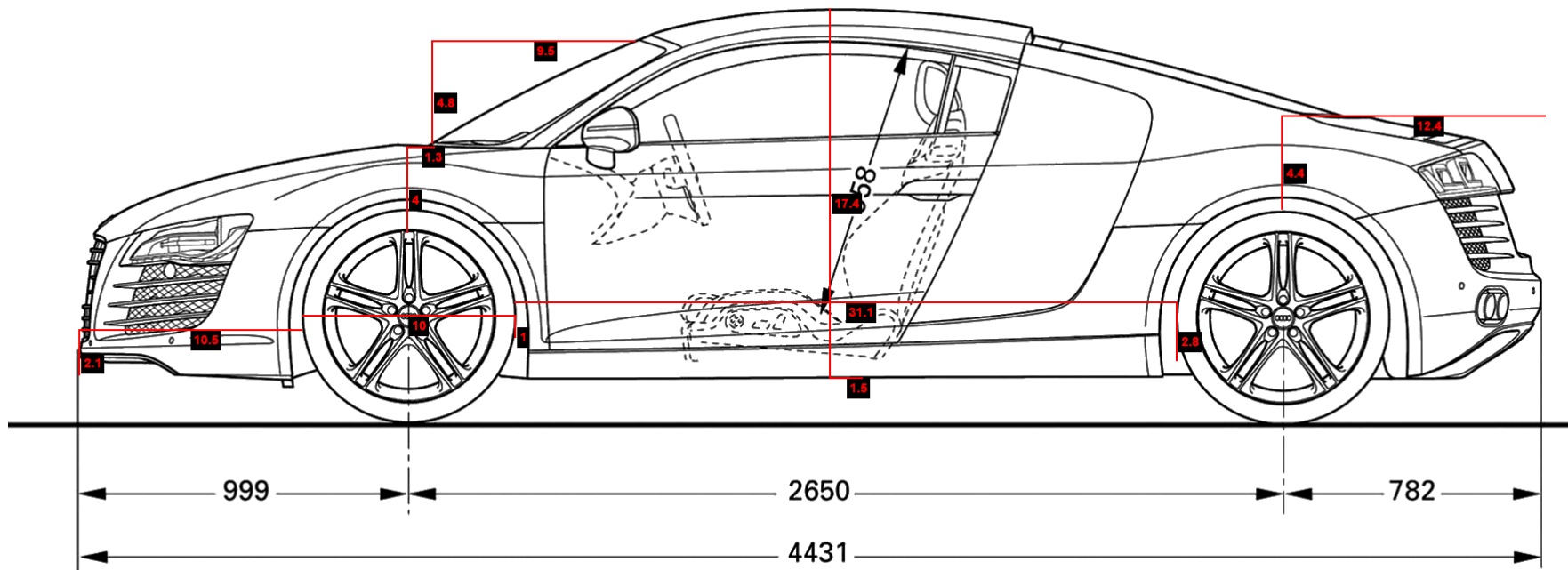
$$(2 \times 2) / (2 - 1) = 4 / 1 = 4$$

Differential pulley system
(AKA Chinese windlass)

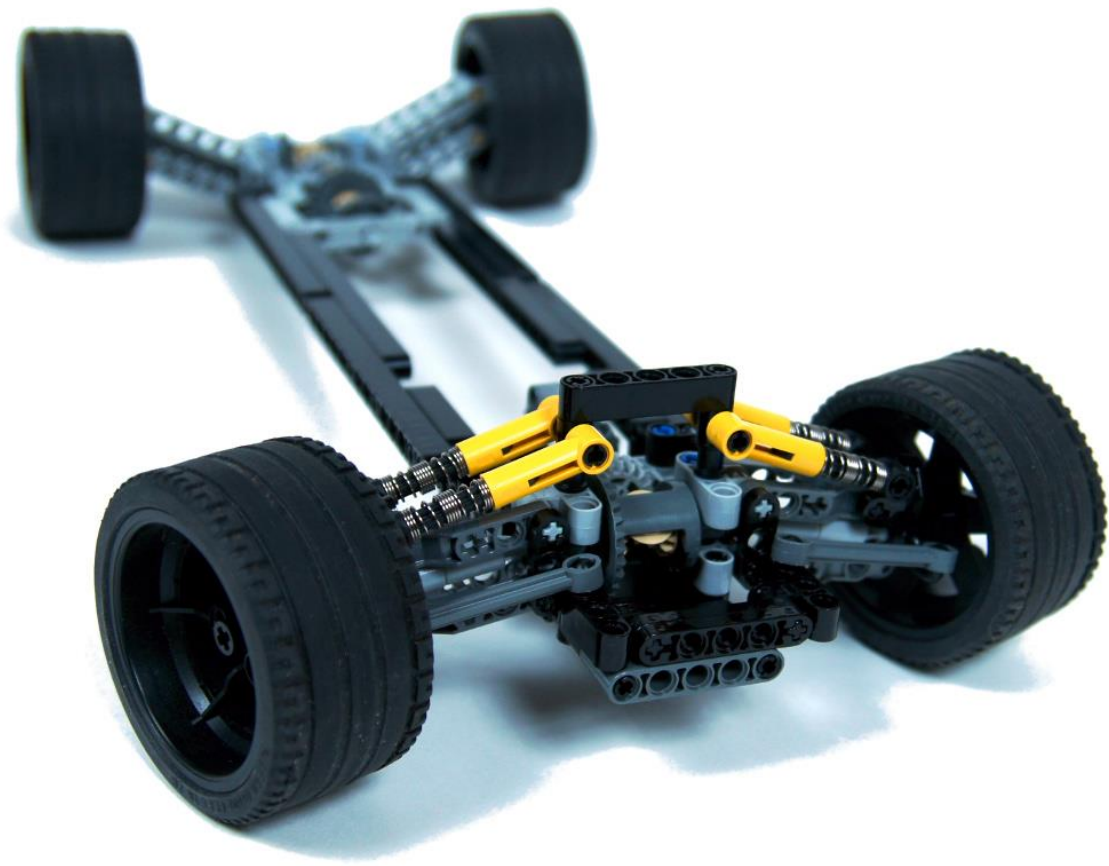


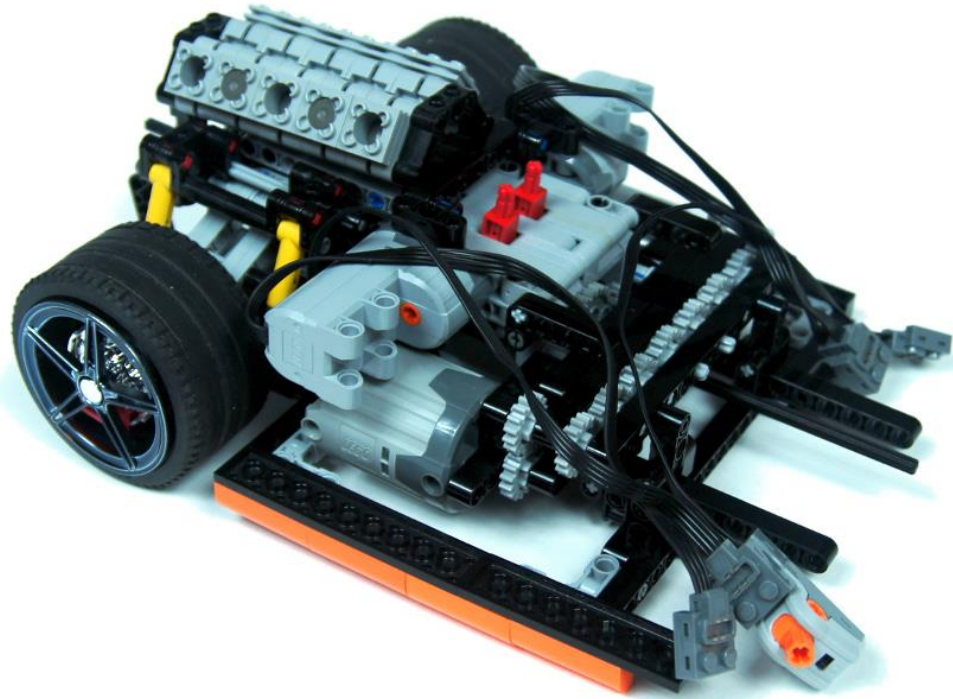
 **R8**





scaler.sariel.pl











PF IR RECEIVERS
Two, one V1 and one V2

ENGINE BAY COVER
Can be opened manually

V10 PISTON ENGINE
*Illuminated with Lifelites RGB LEDs,
connected bypassing the transmission
so it works on idle gear, too*

REAR WING
*Retractable,
connected to the drivetrain*

TAIL LIGHTS
With Lego LEDs

REAR WHEEL
Suspended and driven

FUEL CAP
*Custom-chromed,
with semi-transparent custom foil sticker*

DOOR
*Opening assisted
by damped shock
absorber*

DISC BRAKE
*Fake, rotates together
with the wheel*

STEERING WHEEL
Rotated by a Micromotor

CUSTOM STICKER
Printed on transparent foil

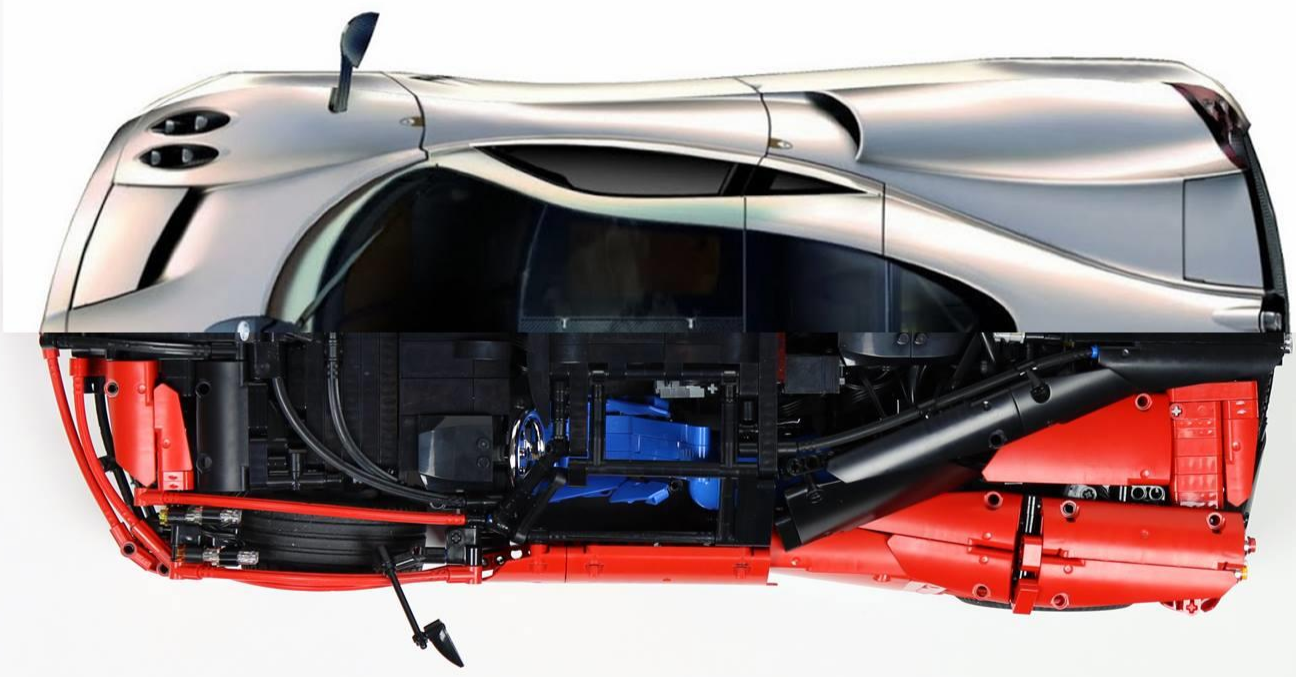
HEADLIGHTS
With Lego LEDs

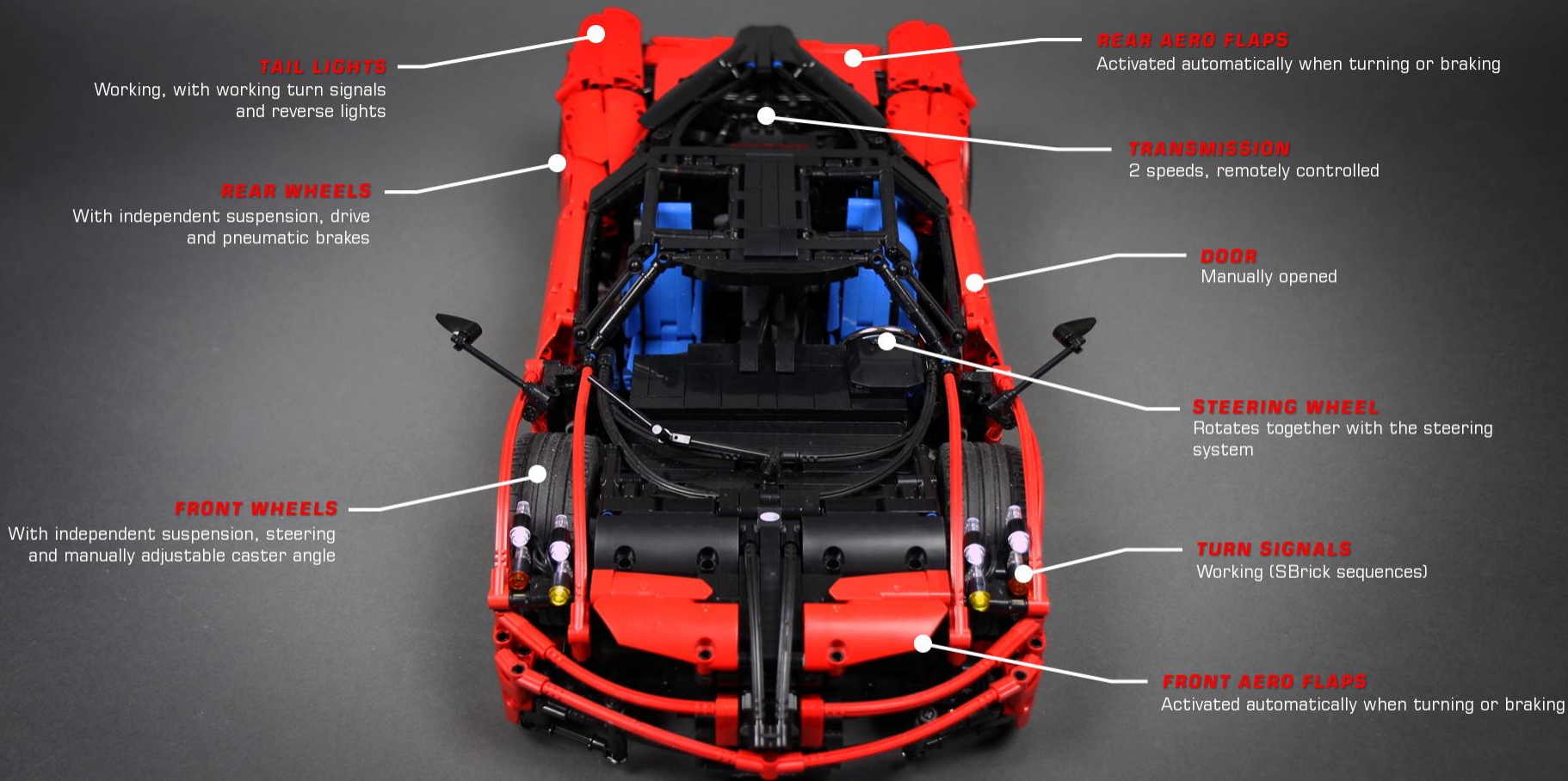
FRONT WHEEL
Suspended, driven and steered





Huayra





TAIL LIGHTS

Working, with working turn signals and reverse lights

REAR WHEELS

With independent suspension, drive and pneumatic brakes

FRONT WHEELS

With independent suspension, steering and manually adjustable caster angle

REAR AERO FLAPS

Activated automatically when turning or braking

TRANSMISSION

2 speeds, remotely controlled

DOOR

Manually opened

STEERING WHEEL

Rotates together with the steering system

TURN SIGNALS

Working (SBrick sequences)

FRONT AERO FLAPS

Activated automatically when turning or braking

Huayra

KENWORTH

ROAD TRAIN



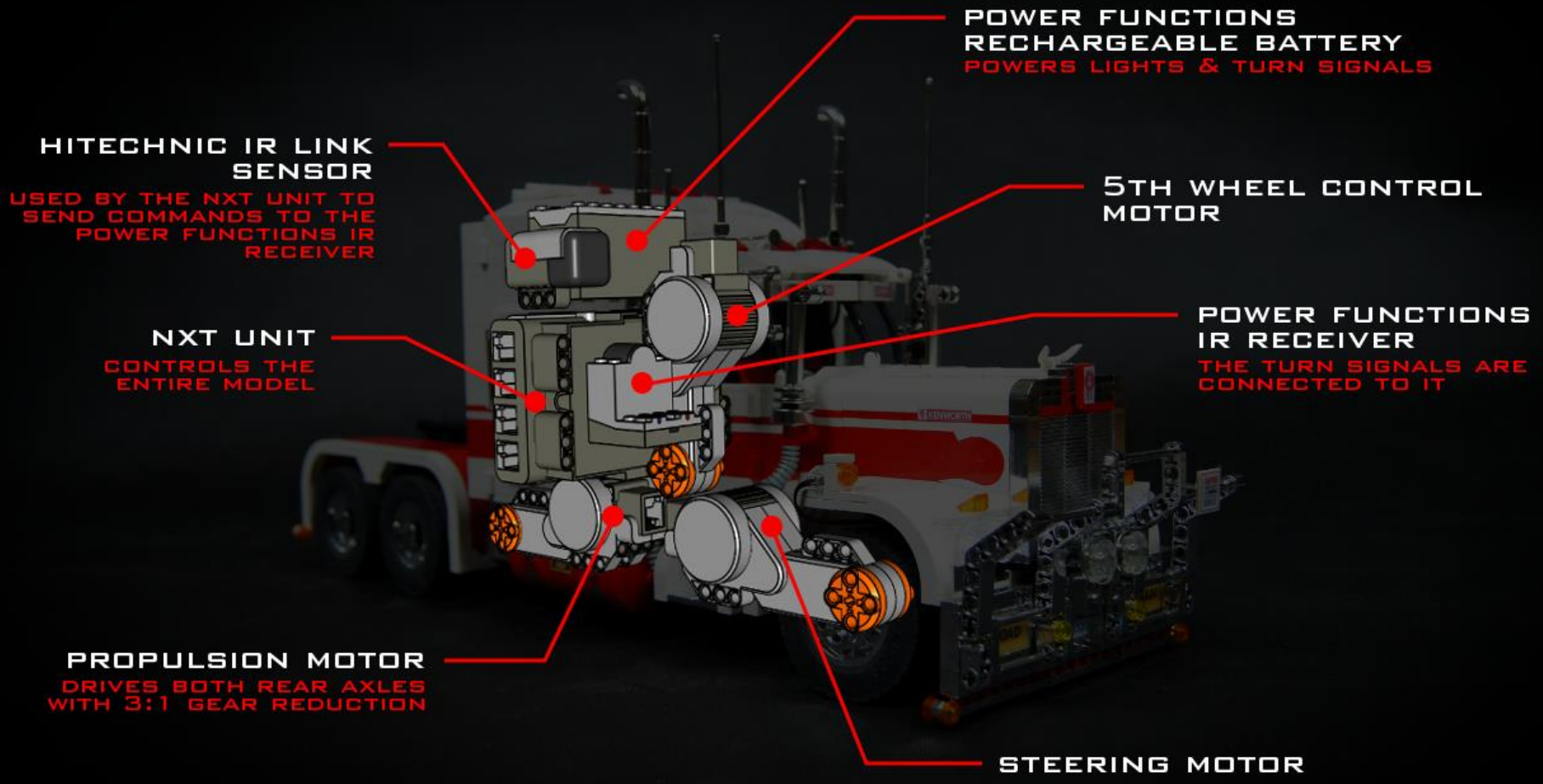
DESIGNED BY SARIEL 2012 | MORE AT SARIEL.PL | AVAILABLE AT YOUTUBE AS "LEGO MOTORIZED KENWORTH ROAD TRAIN"

KENWORTH

ROAD TRAIN



DESIGNED BY SARIEL 2012 | MORE AT SARIEL.PL | AVAILABLE AT YOUTUBE AS "LEGO MOTORIZED KENWORTH ROAD TRAIN"



**HITECHNIC IR LINK
SENSOR**

USED BY THE NXT UNIT TO
SEND COMMANDS TO THE
POWER FUNCTIONS IR
RECEIVER

NXT UNIT

CONTROLS THE
ENTIRE MODEL

PROPULSION MOTOR

DRIVES BOTH REAR AXLES
WITH 3:1 GEAR REDUCTION

**POWER FUNCTIONS
RECHARGEABLE BATTERY**
POWERS LIGHTS & TURN SIGNALS

**5TH WHEEL CONTROL
MOTOR**

**POWER FUNCTIONS
IR RECEIVER**

THE TURN SIGNALS ARE
CONNECTED TO IT

STEERING MOTOR

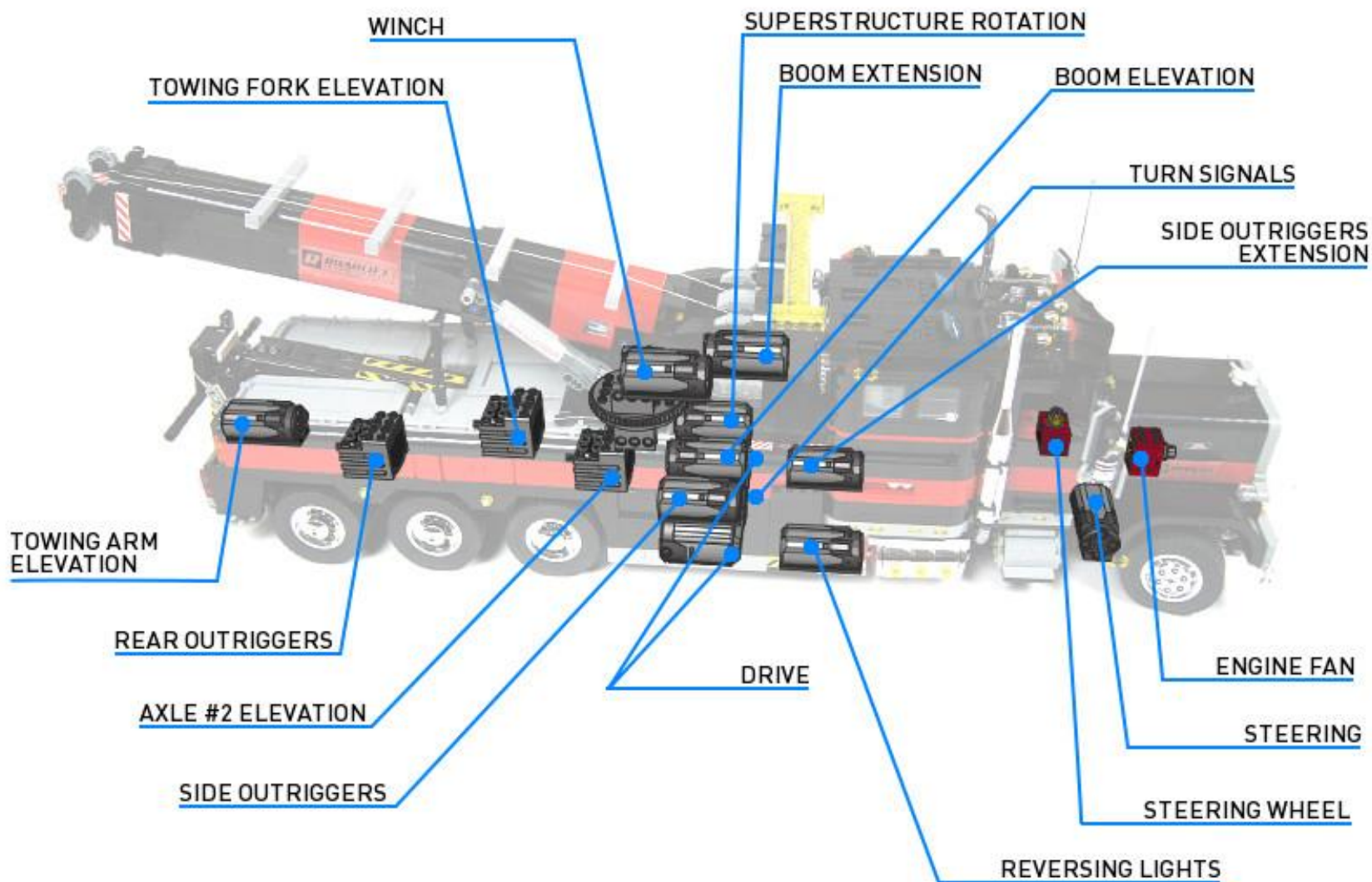


TOW TRUCK II

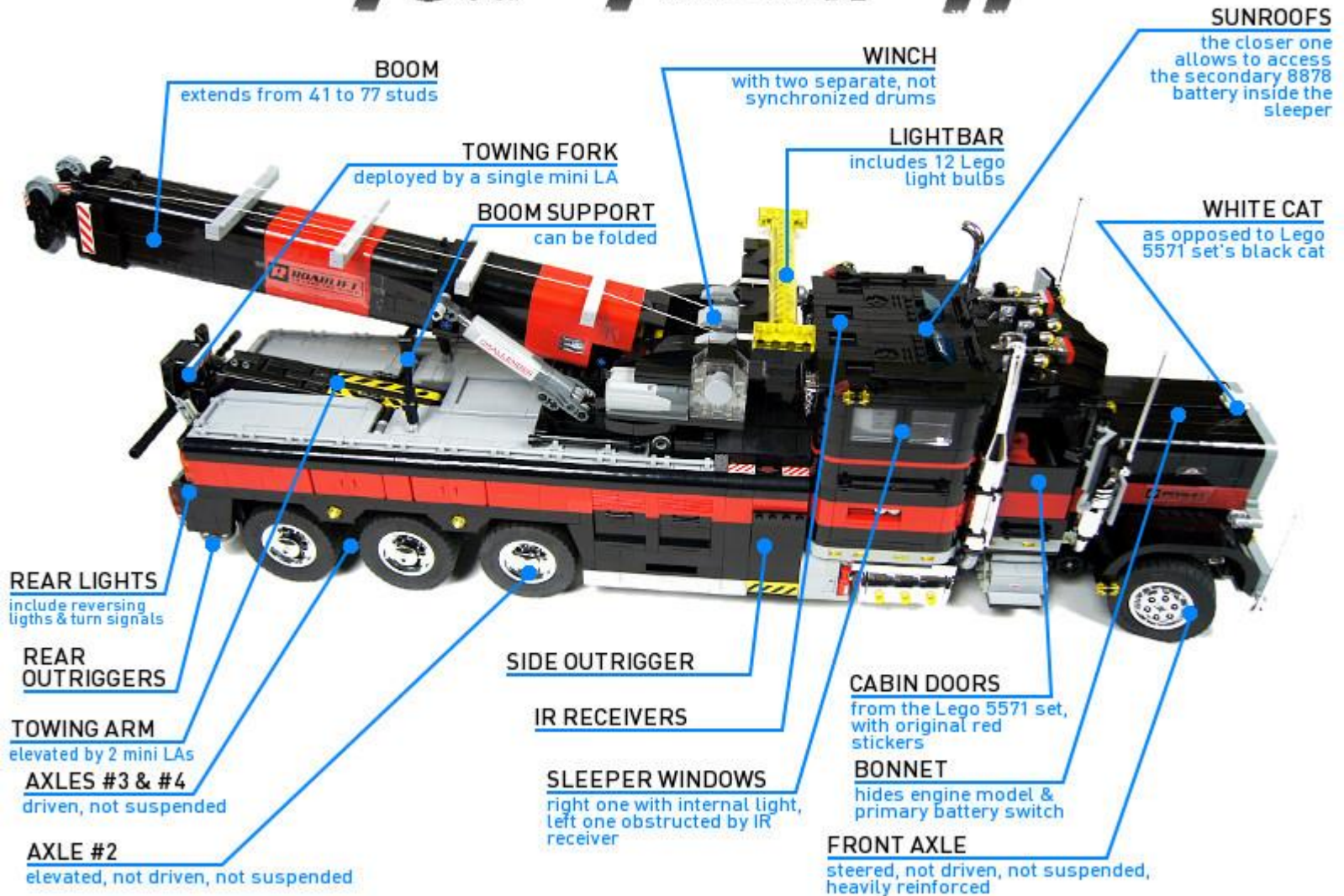


TOW TRUCK II

TOW TRUCK II



TOW TRUCK II





LONG *er* VEHICLE

LOST YOUR CAT?
TRY LOOKING UNDER MY TIRES



HUMMER

HUMMER



2010

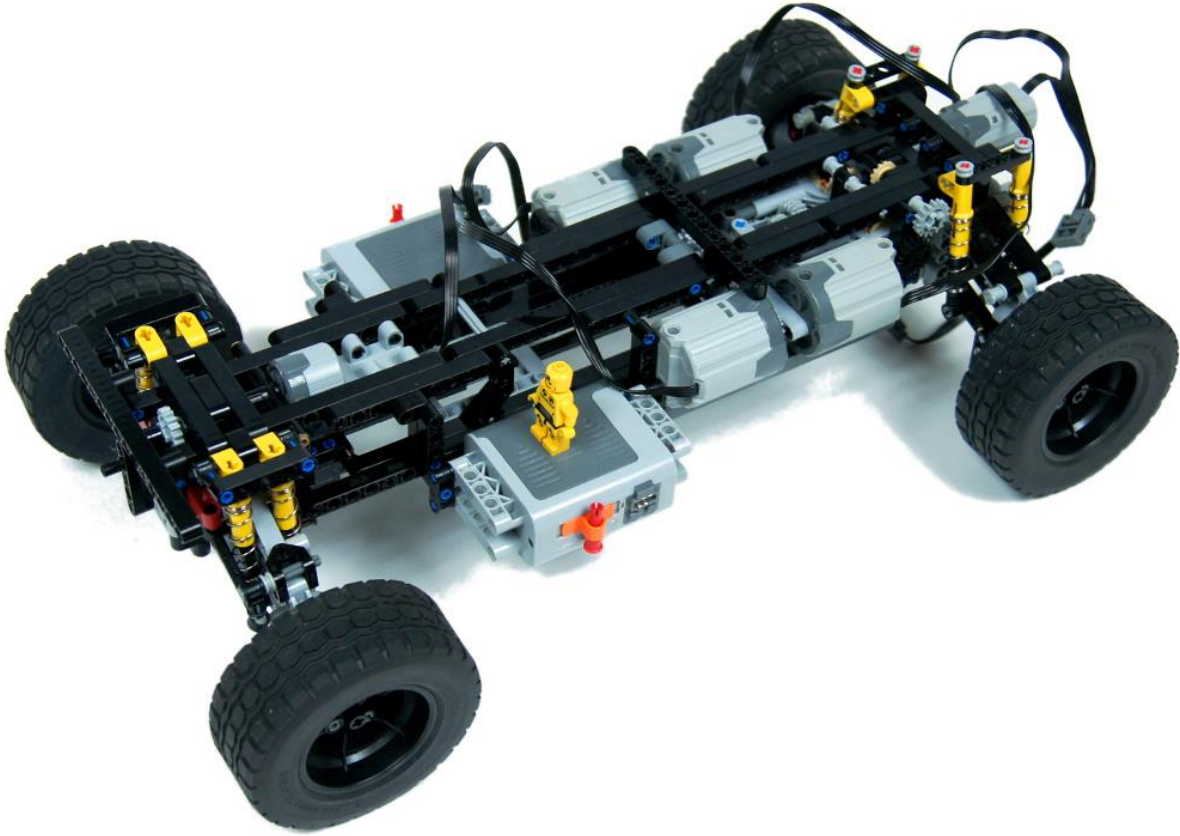


2011



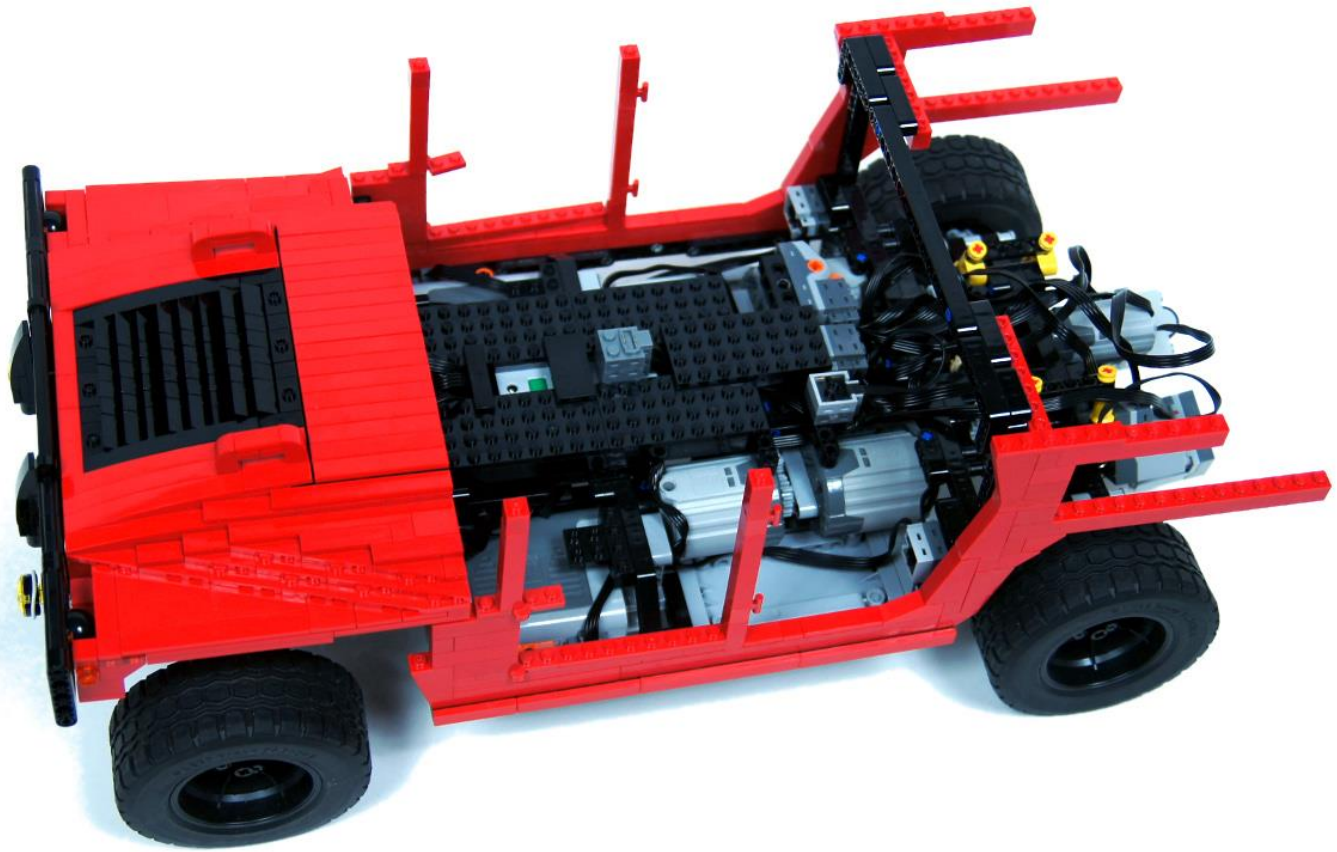
2014







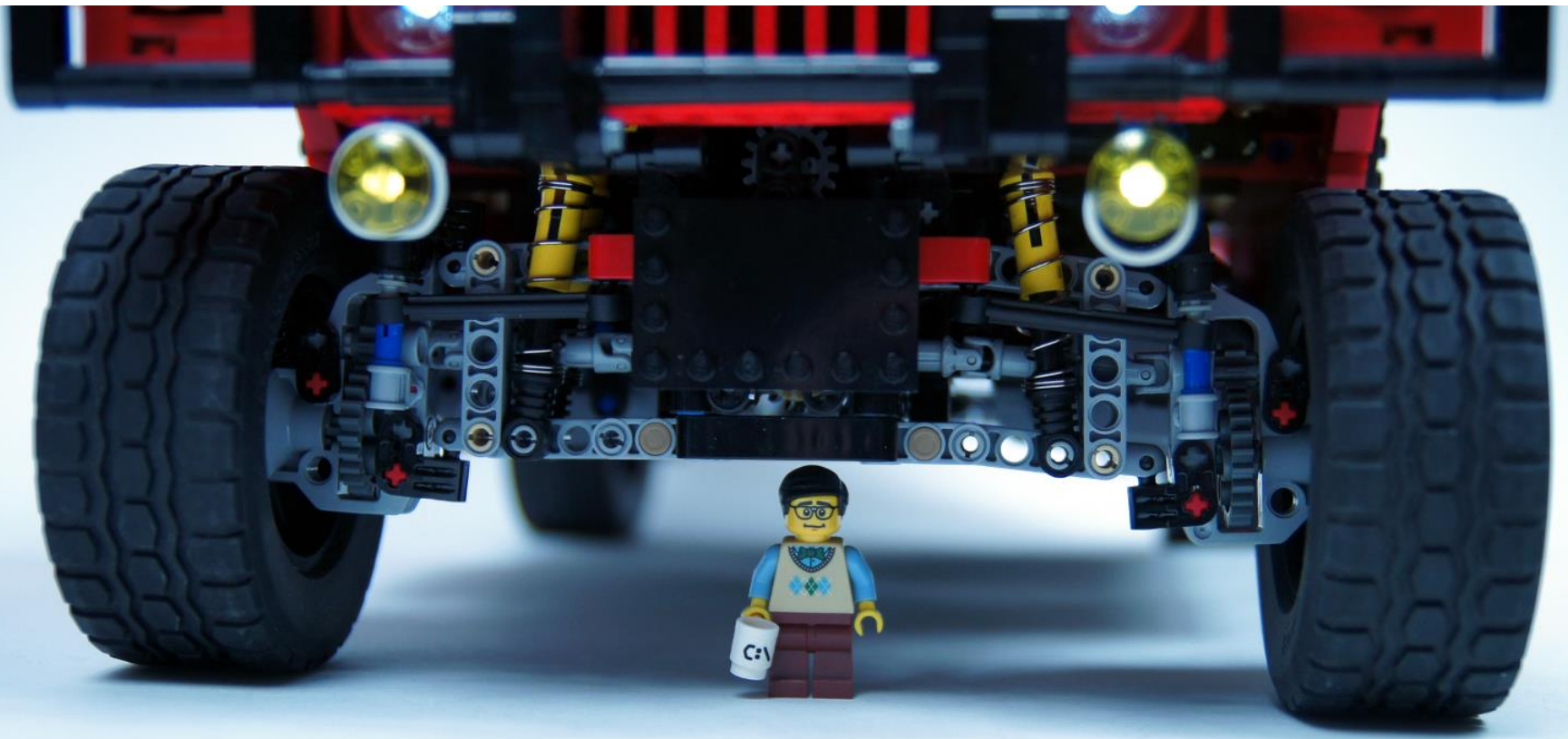


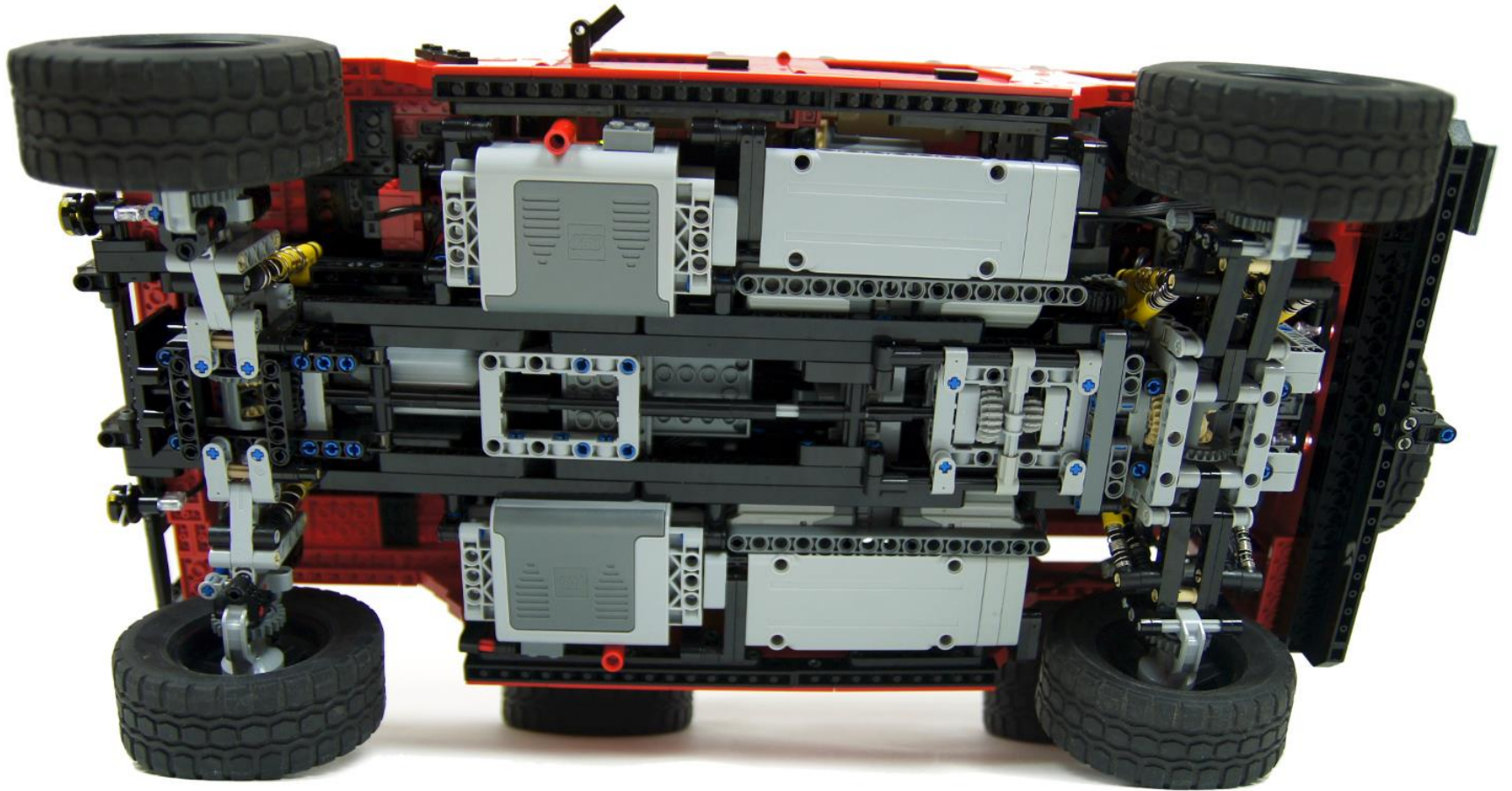






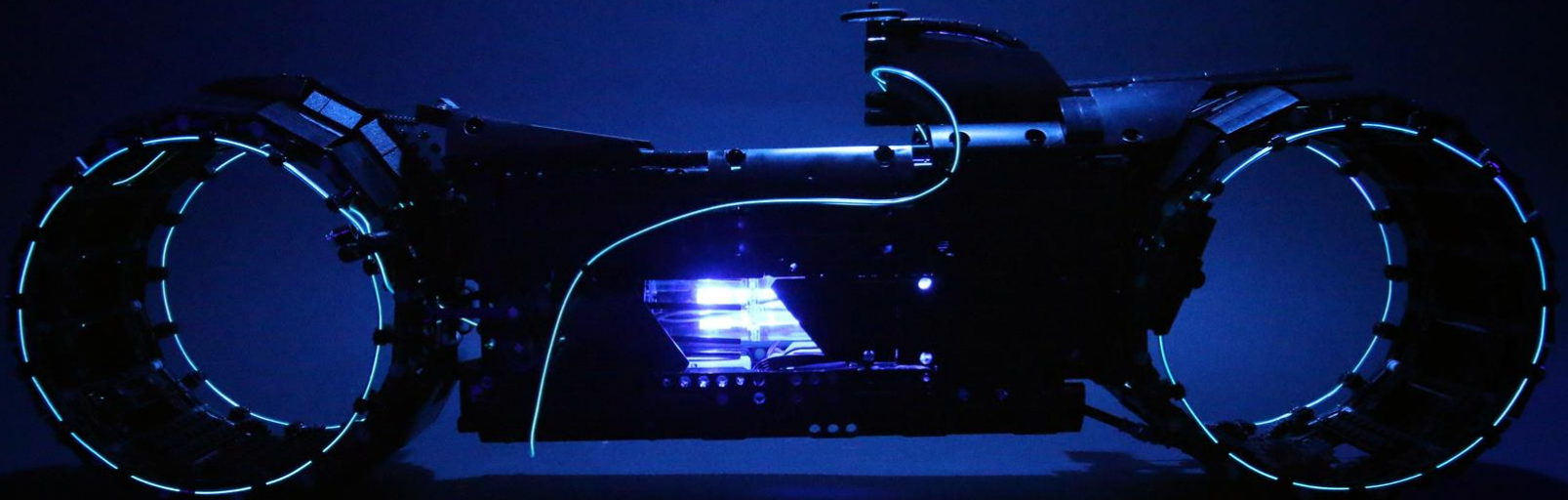






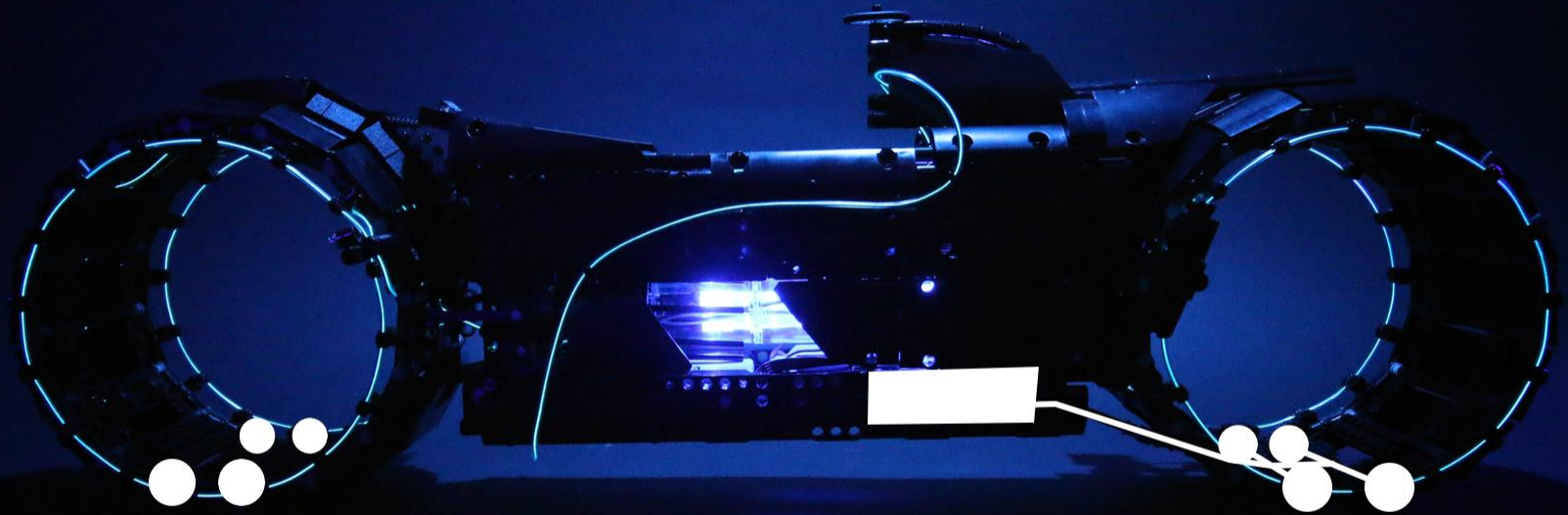
TRON

LIGHT CYCLE



TRON

LIGHT CYCLE





PEACE WAS NEVER AN OPTION







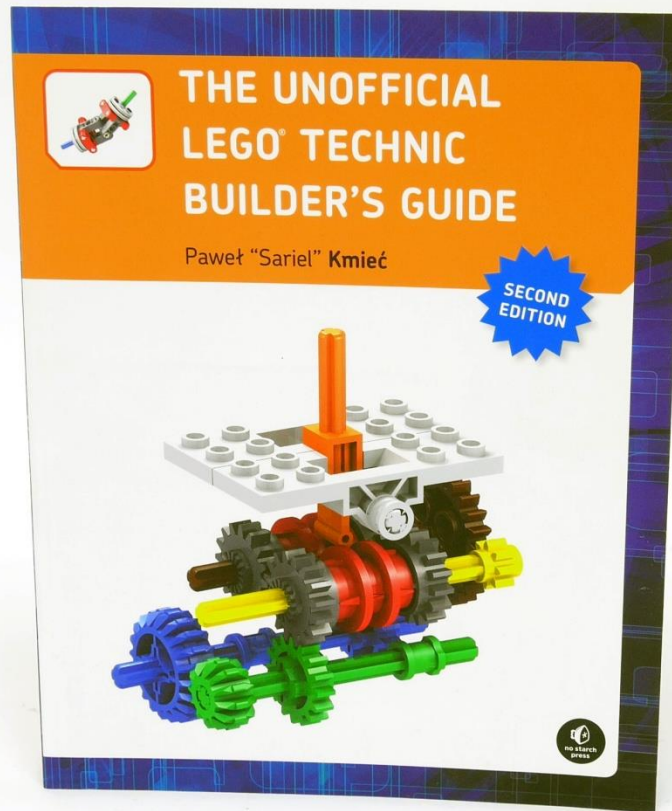
K2 BLACK PANTHER
M A I N B A T T L E T A N K



Mercedes-Benz 540K
Special Roadster



Sariel's LEGO Workshop



NOW 424 PAGES LONG

25 CHAPTERS COVERING:

- » characteristics of LEGO motors
- » Power Functions and RC system
- » gear wheels and gear ratios
- » levers and linkages
- » suspensions and transmissions
- » LEGO pneumatics
- » studless and studfull building
- » reinforcing your construction
- » scaling your models

AND MORE!