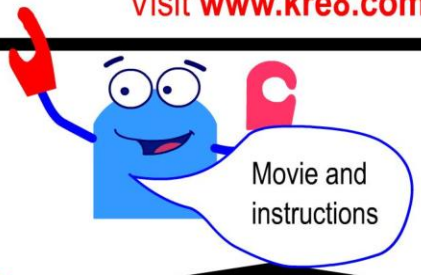
Kre8® Monster Truck with Remote Cable Control

Visit **www.kre8.com** for movies, zoomable pages and other support

Kre8® Making System

Contents



NOW Also makes SUMO Robot

see extra pages for variations

manual controller

About 3-4 hours to make

Sumo page 11 +12

Steer this 22cm long customisable monster truck model over objects on the table such as your eraser, pens, a roll of tape etc. Connect up the 3volt hand controller provided to make it move forward, move backward and turn OR
Make SUMO robot using the same instructions till last few steps for decoration.

Making skills - Assembly and construction skills
Designing - You can design your own top or use the given design as shown (also printable on website)
Control, Electrics and Mechanisms - Learn how to connect up and control the two electric motors. Assemble the mechanism to reduce the speed and for steering

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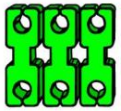
Kre8® Monster Truck with Remote Cable Control

Also same parts for SUMO Robot

Kre8® Making System

Trim all sharp edges after cutting

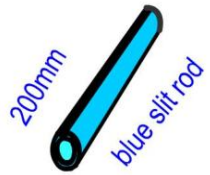
3 x clip connectors - blue



8 x Multiblocks (green)

IMPORTANT
keep two uncut

4 x 4mm dia. snap rods grey

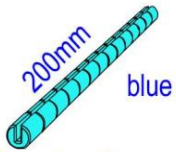


6 x 5mm slit rod

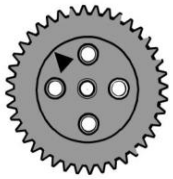
2 x 5mm slit rod

2 x 5mm slit rods
(Used on card top not the chassis)

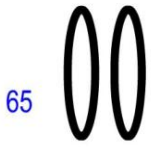
3 x thin spacer tube
clear or black (1 spare)



1 x 5mm snap rod

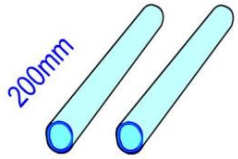


4 x 40mm dia
wheel grey



6 x 60mm bands

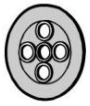
2 x 45mm bands



2 x Light blue tubes

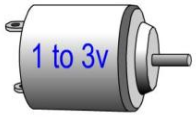
8 x Cap end

Making Instructions on www.kre8.com print your own or order seperate



8 x 28mm dia
wheel grey

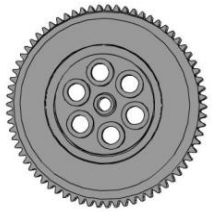
8 x washers
4mm ID



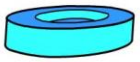
2 x Electric motors

Abrasive paper

2 x pulley



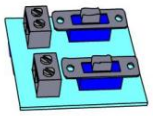
8 x 70 dia wheel grey



6 x
blue collar

8 x
grey collar

Manual controller
3 volt type (2 a AA)
and ribbon cable



***Monster Truck**
2 sheets
Laminated

OR

***SUMO**
1 sheet
Laminated

For Easy Assembly

The rods are easier to insert into the connectors if twisted as they are pushed into place.
Younger students should 'round off' and smooth the tube and rod ends using the abrasive paper.

Tools

Snips
Use to cut Kre8 connector hinges, plastic sheet, light blue tubing etc

Scissors *for cutting out the decoration*

Emery Cloth
Use fine 'emery cloth' or other 'abrasive paper' to round and smooth the slit rod or blue tube ends to make assembly easier.

Abrasive paper

Pencil and Rule
Use to mark lengths of blue tube or slit rods before cutting. Can also be used on plastic sheet before shapes are cut out.

ALSO NEEDED

Clear tape (easy tear) and
2 x standard AA batteries

Hole punch - to punch holes in card

4mm drill - optional to make hole in card OR cut with scissors then tape access slit afterwards

SAFETY WARNING

Care needs to be taken with all sharp tools - Students under 9 years old need to be suppervised by an adult.
Never use rechargable batteries as they can catch fire if the circuit is shorted

*= specials for this

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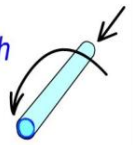
3 - 1- Kre8® Monster How to Make - 1 -

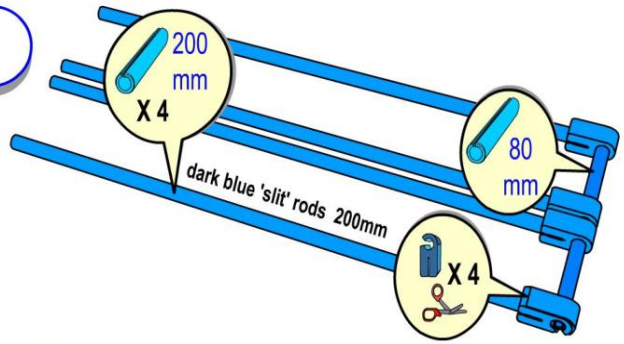
Note *- To make assembly easy* ***smooth and round the ends*** *with* ***abrasive paper*** *before pushing and twisting into the connectors.*



All sizes in mm

Note -TWO green connectors must NOT be cut up

1



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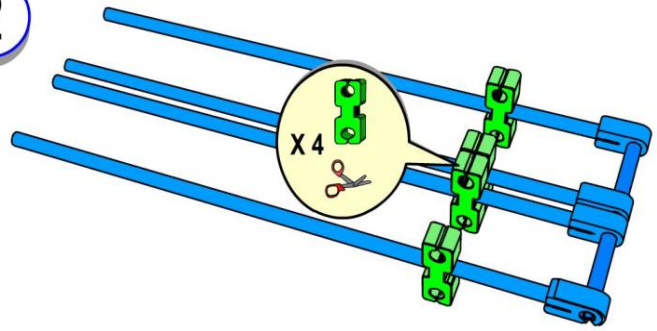

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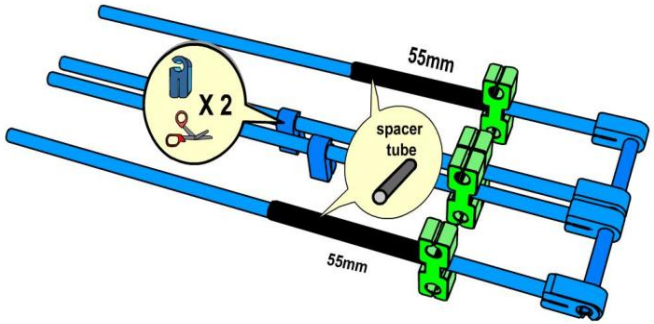

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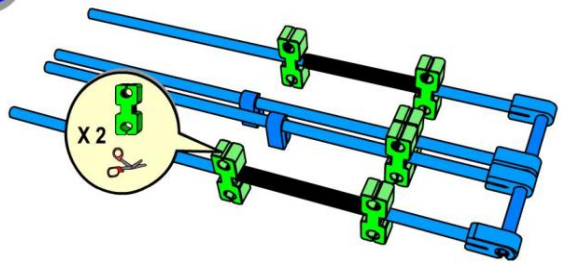

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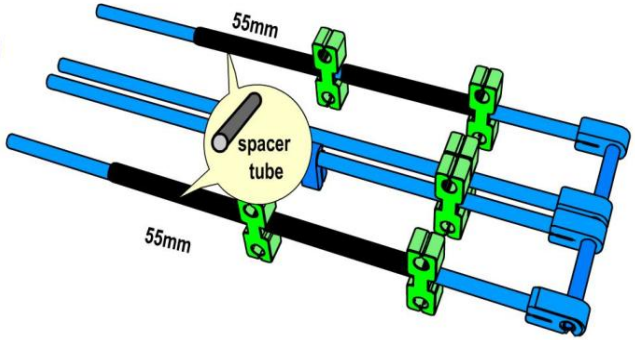

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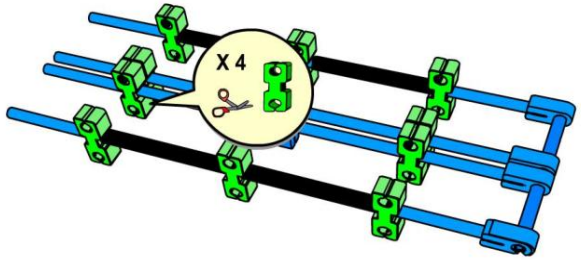

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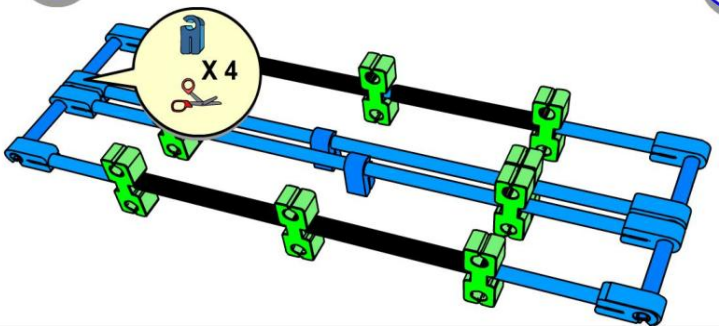

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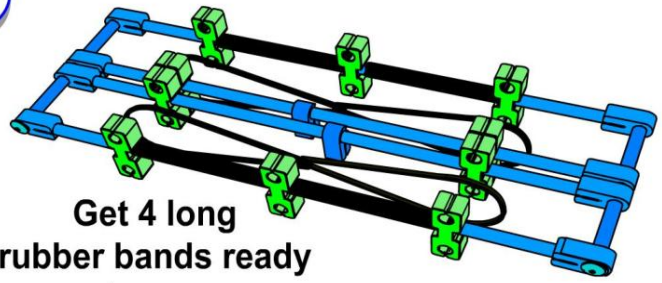

Get 4 long rubber bands ready to use

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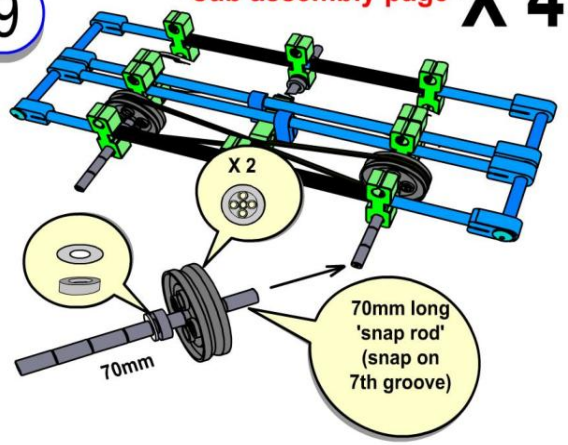
9

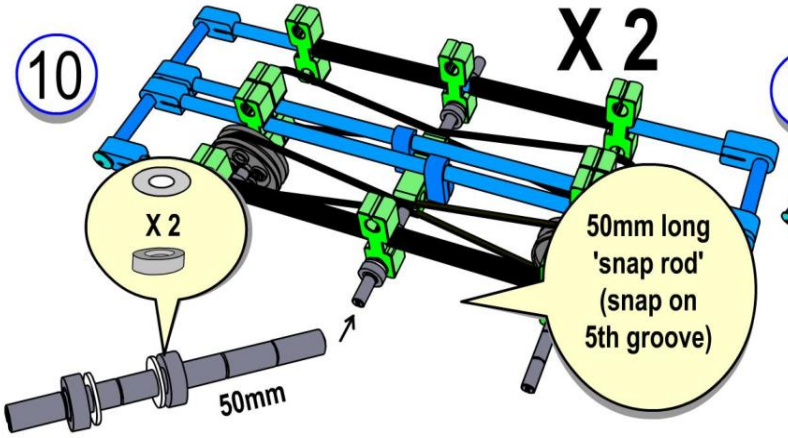
For pulley now see
- sub assembly page -

X 4



10

X 2



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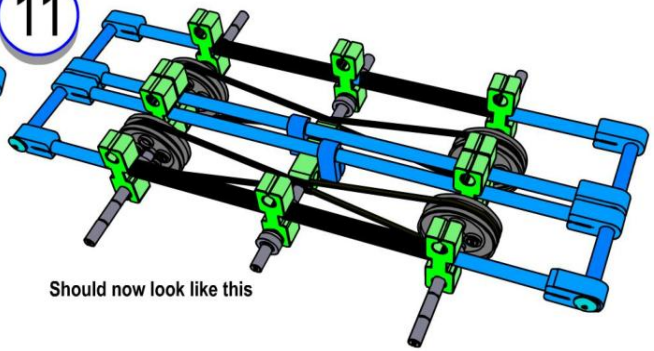
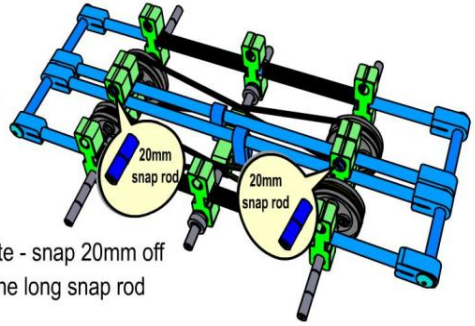


Should now look like this

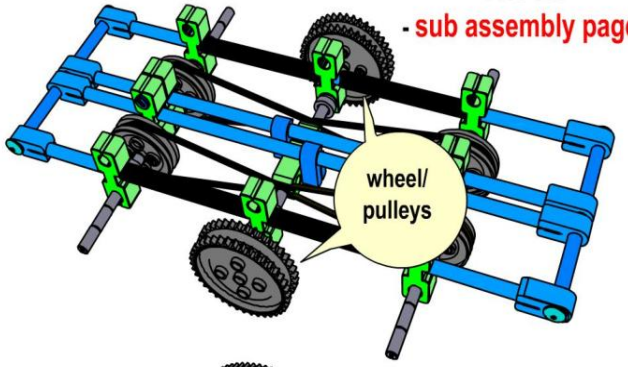
12



Note - snap 20mm off the long snap rod

13

Also see
- sub assembly page -



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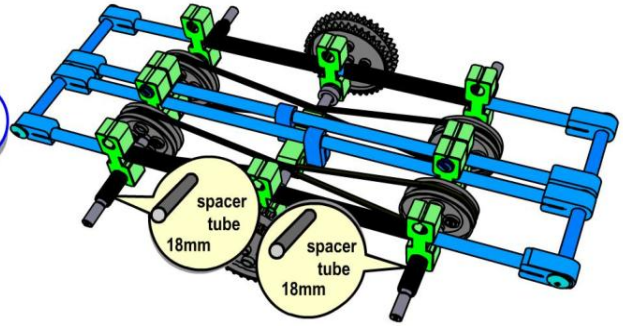

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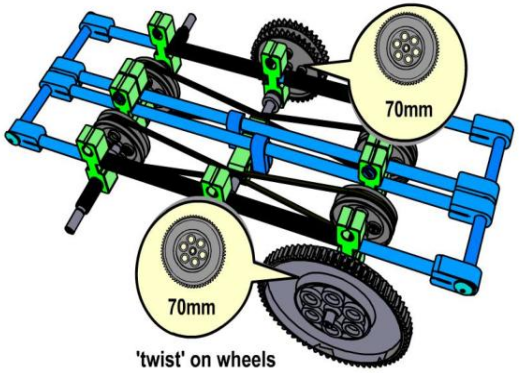
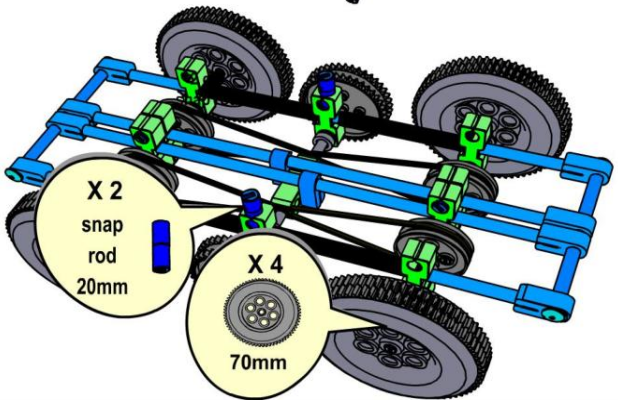


'twist' on wheels

16



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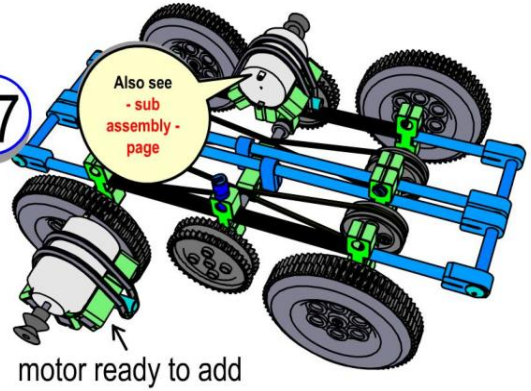

motor ready to add

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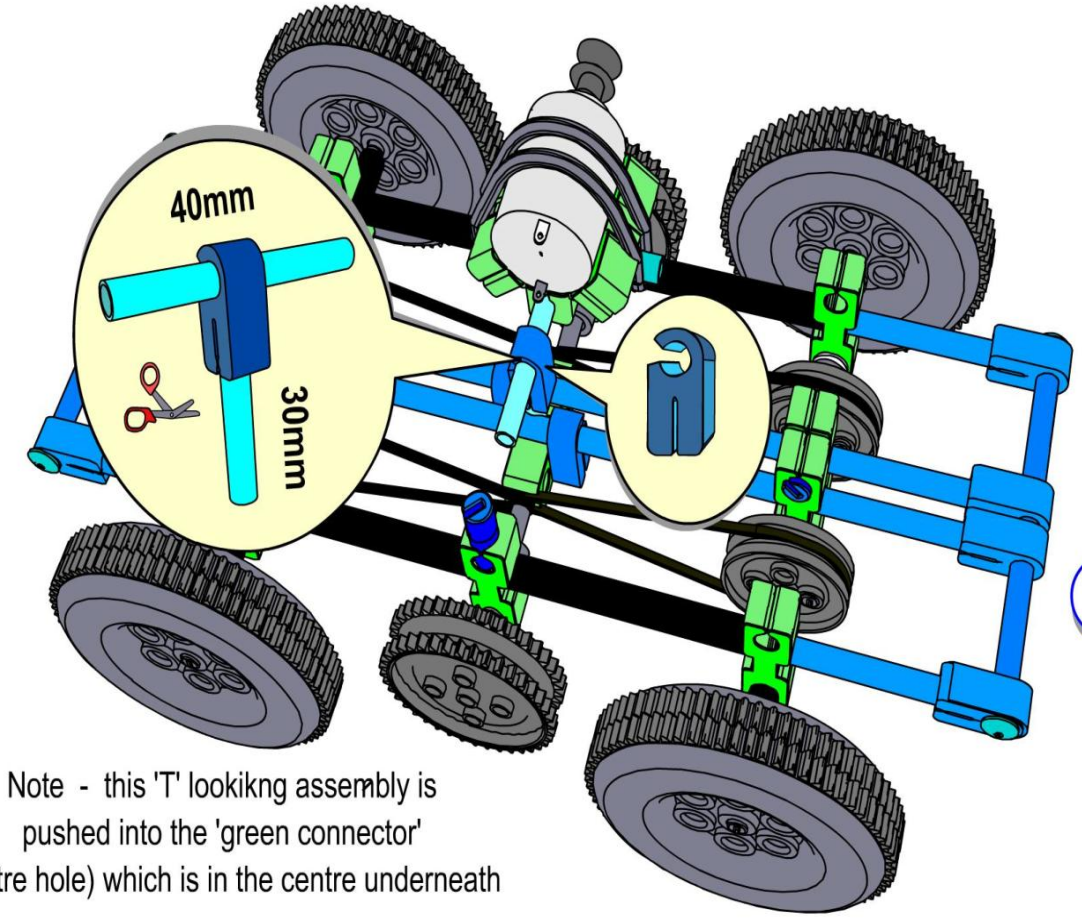
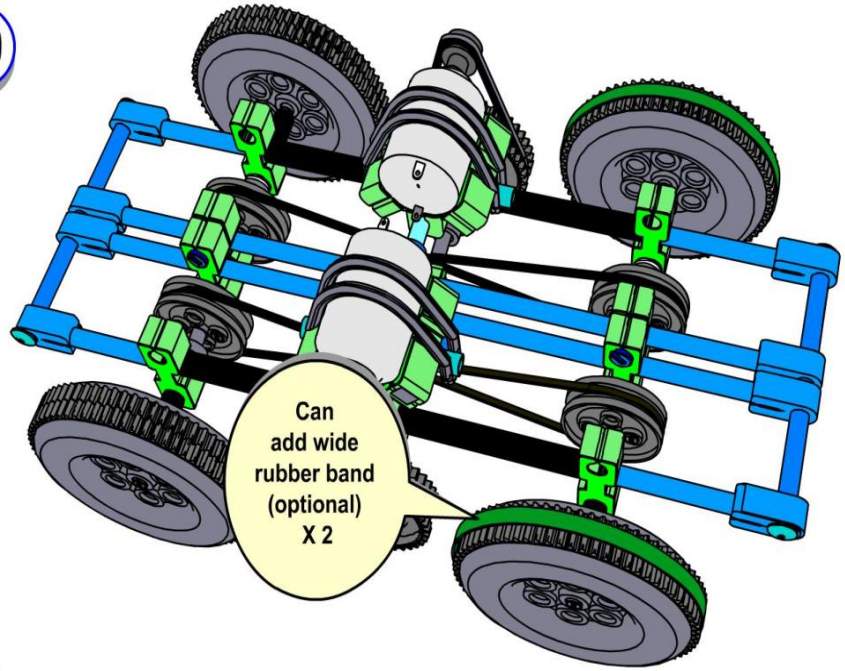


Note - this 'T' lookikng assembly is pushed into the 'green connector' (centre hole) which is in the centre underneath

19



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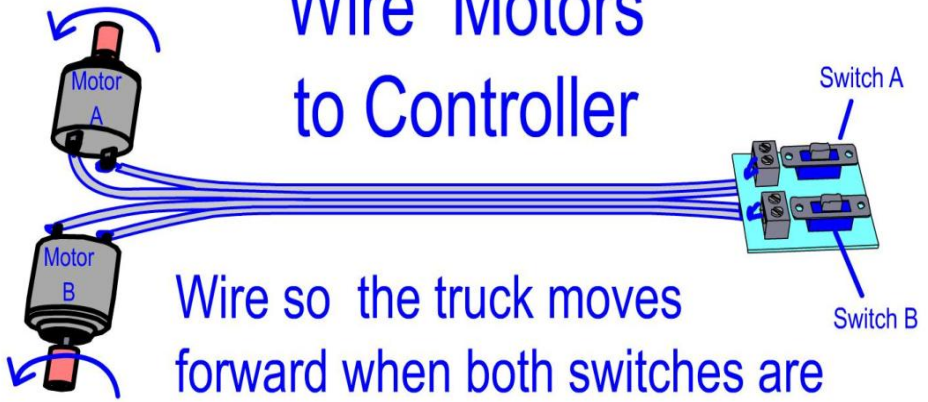
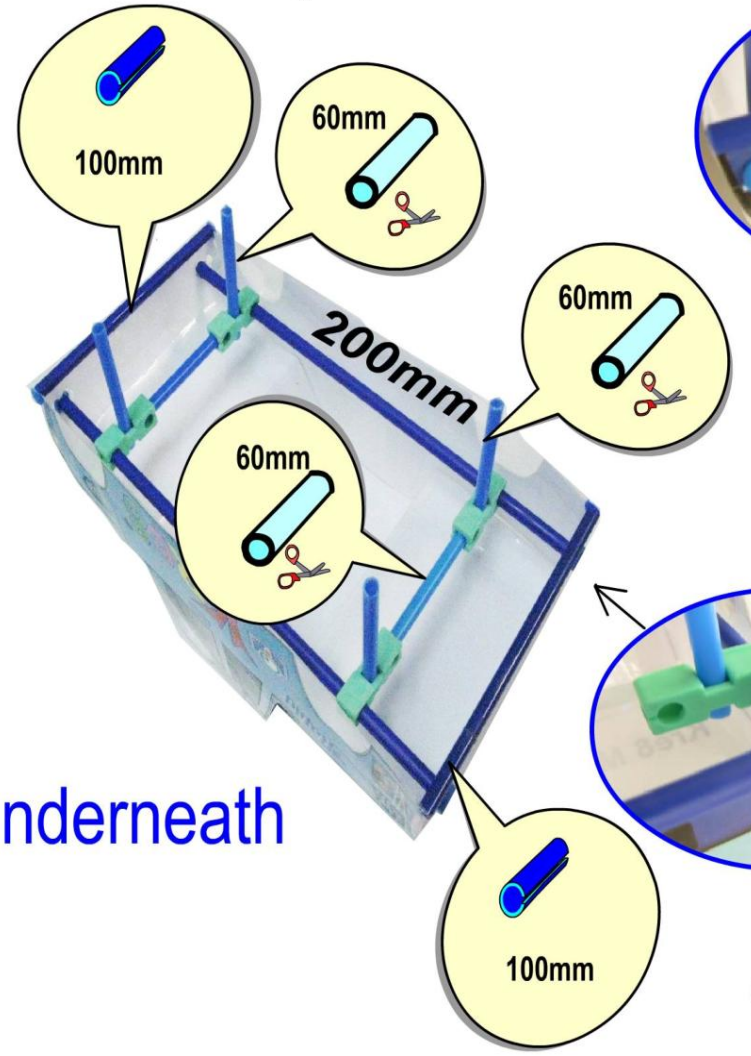
Wire Motors to Controller



Wire so the truck moves forward when both switches are in forward position.

- 4 - Kre8® Monster How to Make TOP - 4 -

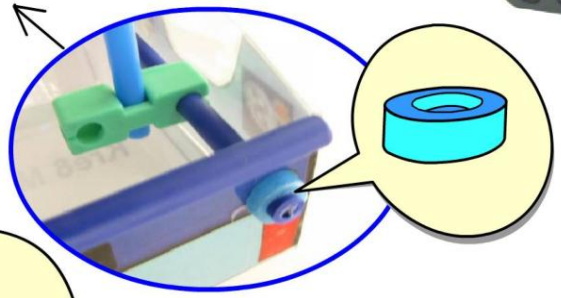
slit rod slides over the edge



underneath

slit rod slides over the edge

front



back corner close up detail

Use cap ends to hold top on - push into end of slit rods

Sub - Assembies Needed

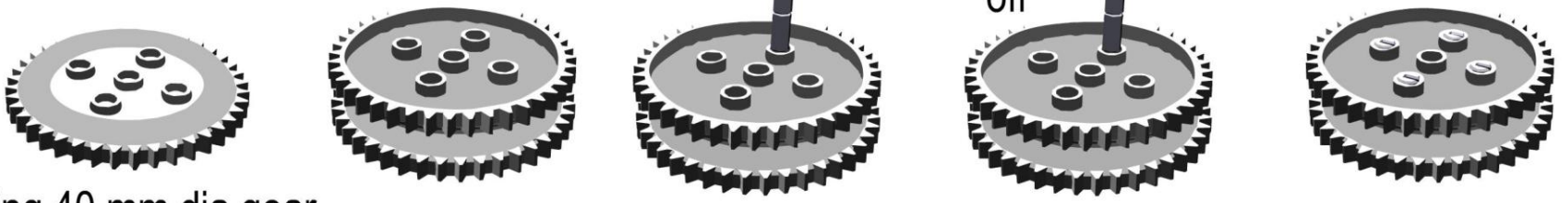
REFER TO THIS PAGE AS NEEDED

Two 40mm pulleys and four 28mm pulleys needed

Making a 40mm Pulley

bevelled side uppermost

bevelled sides face each other



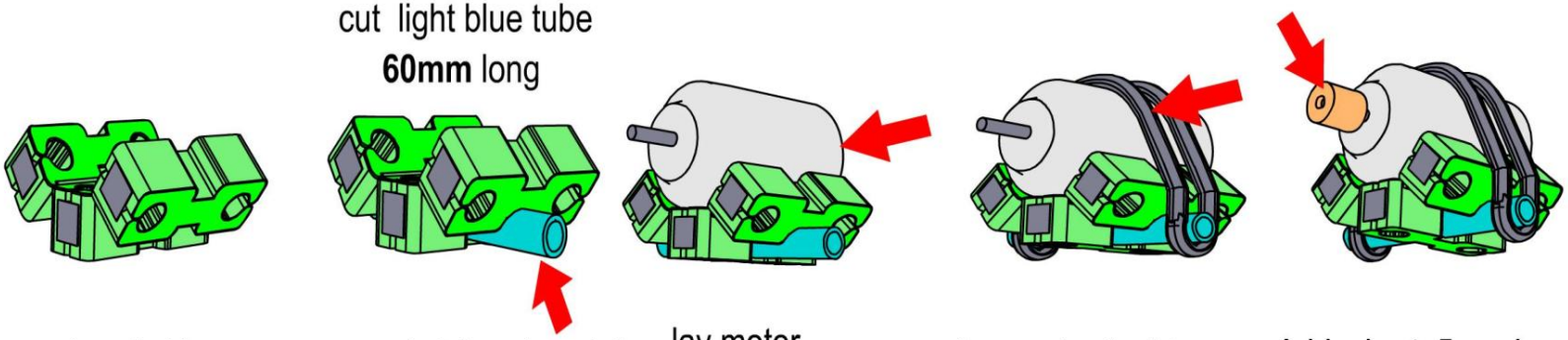
repeat for two or more opposite holes (NOT the centre hole)

using 40 mm dia gear

Two of these needed

Making a Motor Assembly

cut light blue tube **60mm** long



bend sides upwards

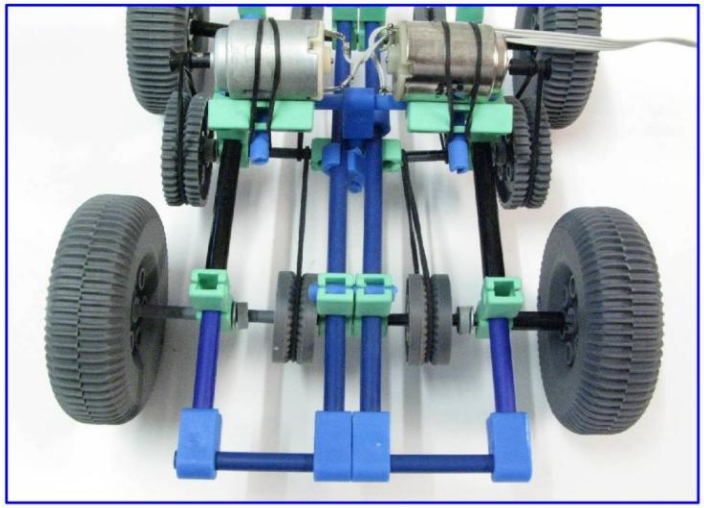
twist and push in central hole

lay motor in place

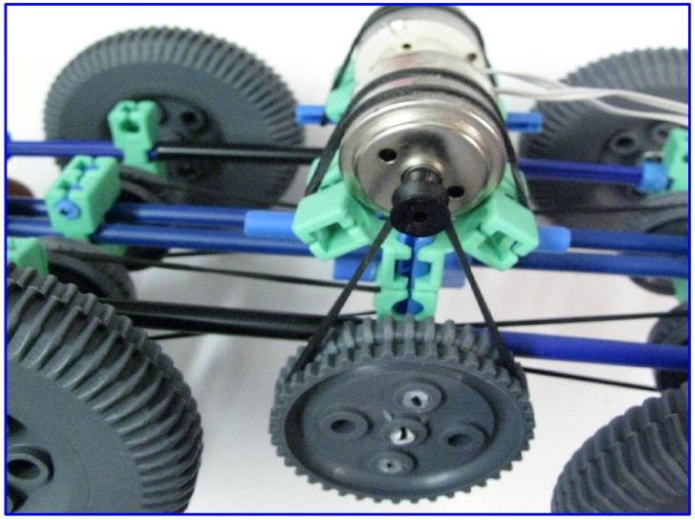
Loop short rubber band over the top

Add short 5mm long orange tube leaving 2mm gap from motor

Kre8® Monster Truck - Extra Photos

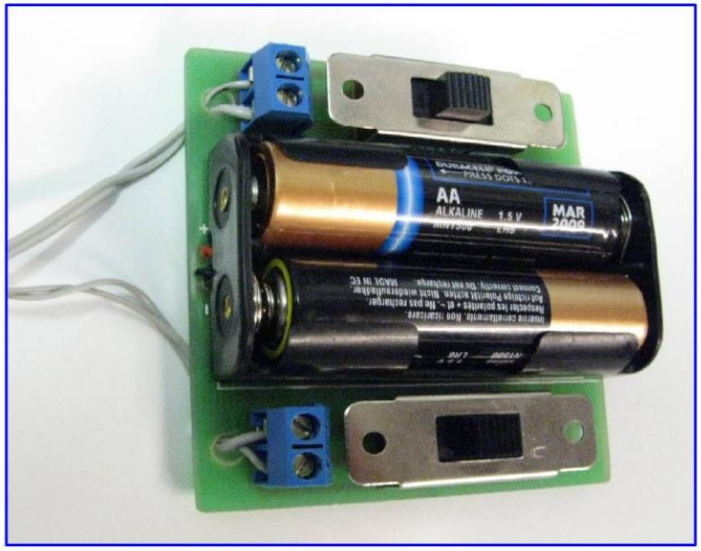


Front View



Side View

Side View

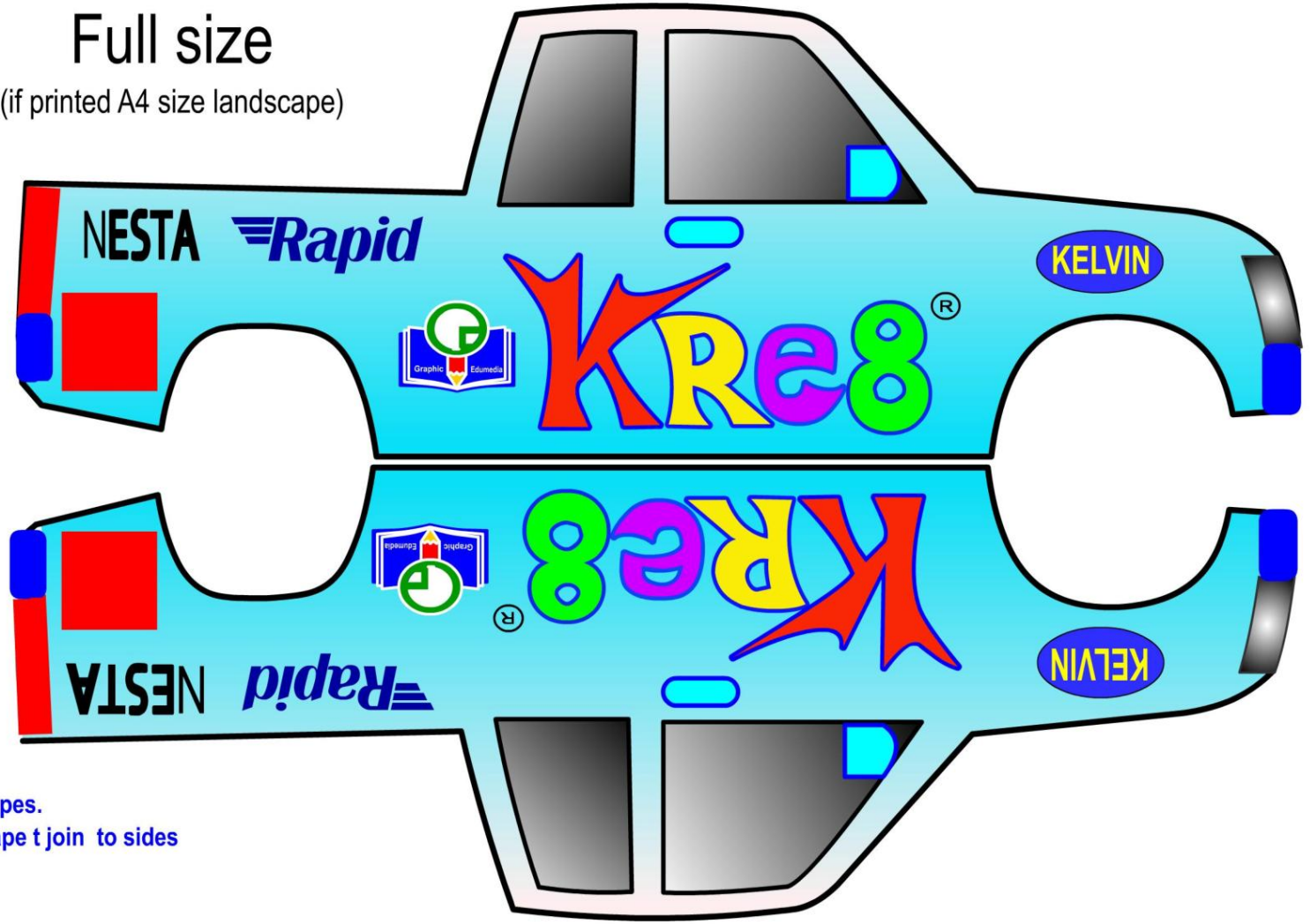


Manual Controller

Kre8® Monster Truck - Decoration

Full size

(if printed A4 size landscape)



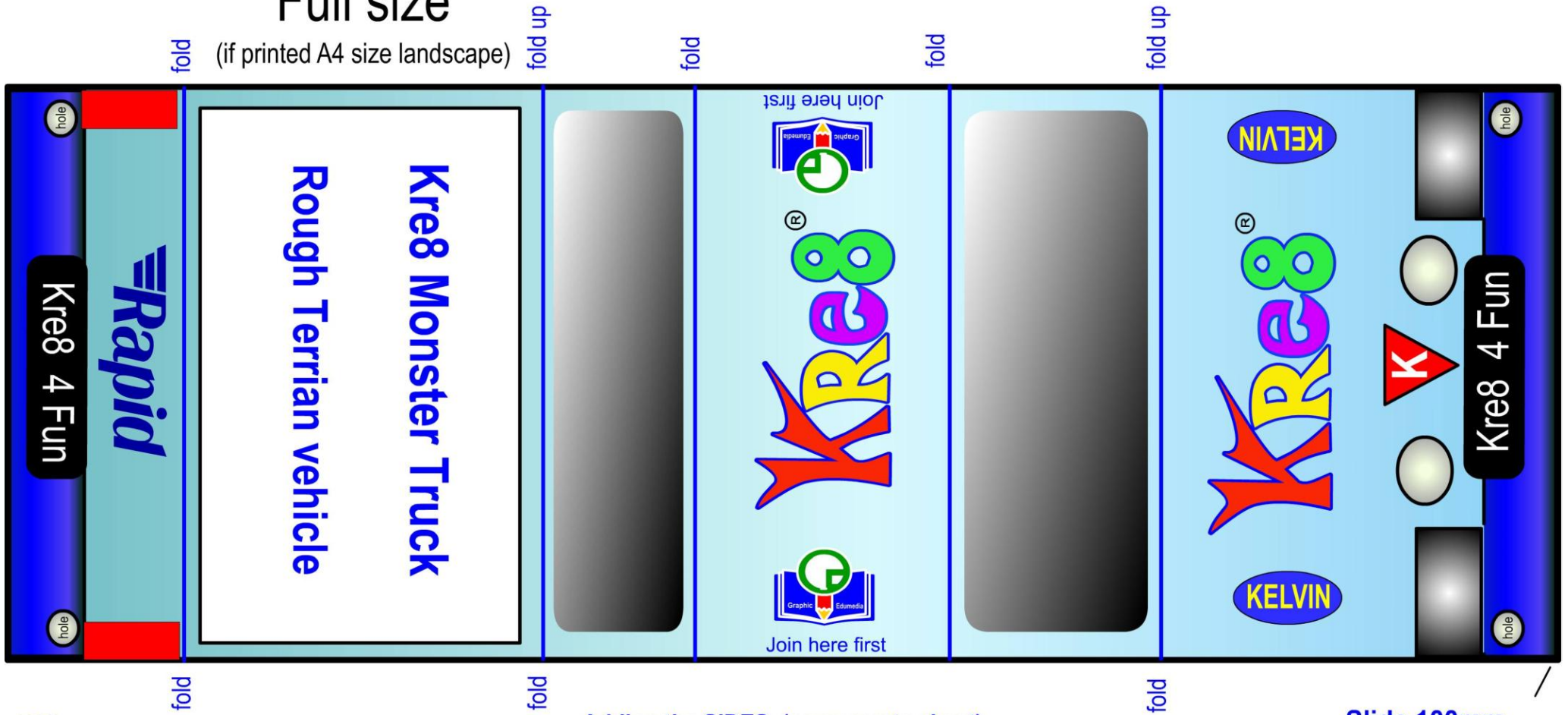
SIDES

1) Cut out shapes.
2) Use clear tape t join to sides

10 Kre8® Monster Truck Top

Full size

(if printed A4 size landscape)



TOP

1) Cut out rectangel shape.
2) then punch 4 holes marked 'hole' at front and back (can use office paper punch)
3) score along 'fold' lines marked and bend card (score using a ball point pen)

Adding the SIDES (on seperate sheet)

Tape sides on - starting at the 'join here first' position. (easy tear clear tape is recommended)

Note

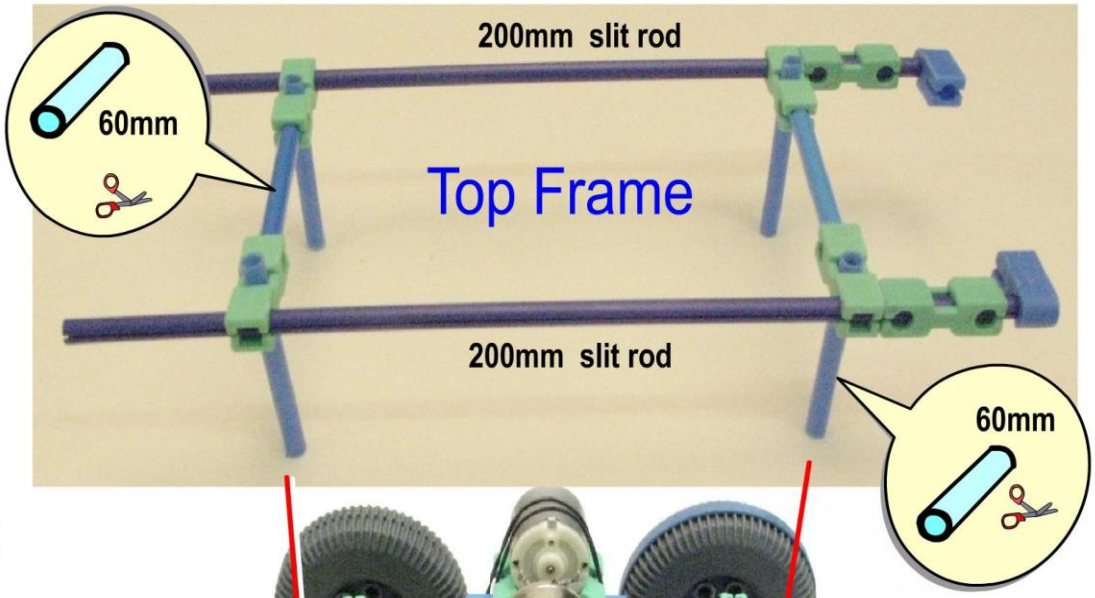
You may need to ope up the hole punched holes using sharp scissors, or hole punch.

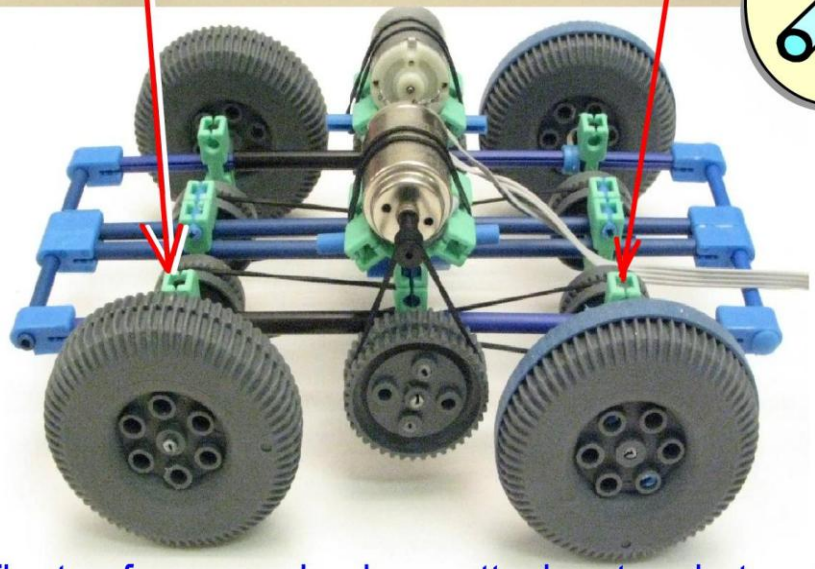
Slide 100mm long slit rod on front as shown in photo on page 6

Kre8® Sumo Robot - Decoration

NOTE - you first need to make the Monster truck robot part p3 -p8

NOTE - After making the main robot body part on pages 1 - 8 you may want to decorate like this. (see page 12 for front decoration part)





The top frame made above attaches to robot part

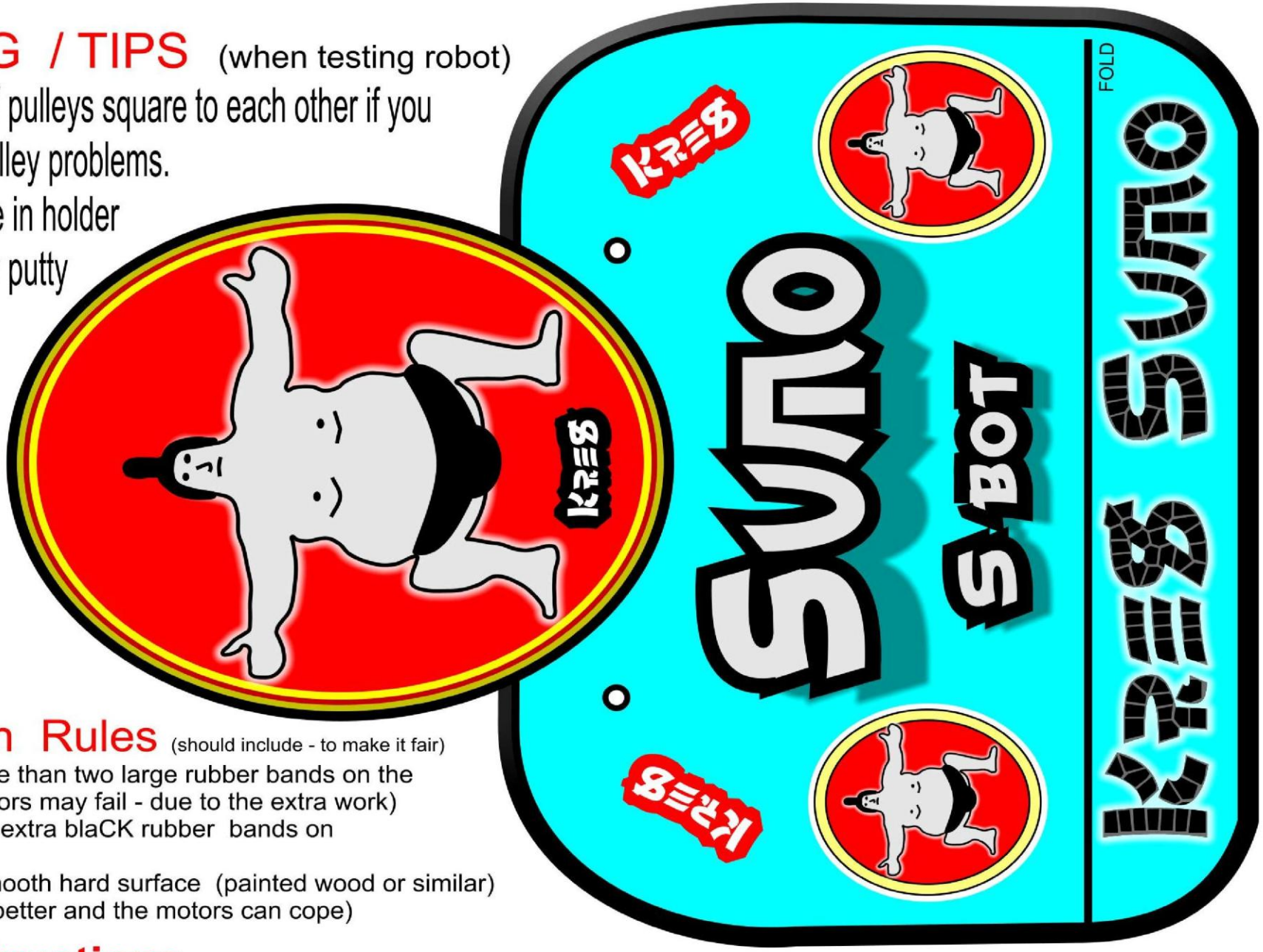
Kre8 Sumo Cut Out

12

WARNING / TIPS (when testing robot)

(1) Line up axles / pulleys square to each other if you have any drive pulley problems.

(2) If motors move in holder Add a bit of tacky putty (e.g. blu tack) under the motor.



Competition Rules (should include - to make it fair)

1) DO NOT use more than two large rubber bands on the robot tires. (the motors may fail - due to the extra work)
2) DO NOT use any extra blaCK rubber bands on drive mechanism.
3) USE only on a smooth hard surface (painted wood or similar) (the robot will steer better and the motors can cope)

Cutting Instructions a) Cut out the shape b) Punch two fixing holes c) Score fold lines and fold bottom forward