

Assembly Instructions

Low Bed multi axle Trailer

By Retunga

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2: Few Notes

BEFORE YOU BEGIN:

Look at the Assembly pictures if available. They show how to put the model together in the order that works best. Assembly should take at least twice as long as you think. If you build it faster (you can) you're rushing the build and your model will look better if you slow down. It always does. The best thing to do is read these instructions first then start building the model.

SUPPLIES NEEDED:

Sheets of cardstock ISO A4 (297mmx210mm) (>80 g/mm. bond) -- may be labelled as cover weight, cover stock, Cardstock, etc. It is readily available at any office supply store, and it runs though your computer printer without issue, however you should check your printer settings as it probably has a 'thick paper type' that will work better.

Sturdy ruler, Craft knife (e.g. X-Acto© or equivalent) and/or scissors, I prefer the break-away blade box cutter style. You always should work with a sharp blade.

White PVA glue, and use it very sparingly!!!! Always apply glue to paper with a toothpick or unrolled paper clip, never directly from the bottle.

Markers to colour the edges of your model. I use a grey mostly but you can colour match .any extra tools to roll and form paper is also useful.

Please refer to the list of tools that should be a part of any paper modelling, in this model one may not use all of the tools shown in the tools document as a separate document with photos of the tools in question.

NOTES:

Avoid cutting out parts before you're ready to assemble that particular portion of the model -- whole sheets are harder to lose than little tiny parts.

Score along folding lines before cutting out shapes. To score parts run your craft knife VERY LIGHTLY over the line to be scored, one can also use scoring tools to help with a more consistent mark.

Cut out inner shapes (like the pass through holes for the solar array arms) before cutting the outer edge.

Remember there is no rush to complete the model you are the only one that can set the pace and how good you want the model to turn out.

PRINTING AND GENERAL INSTRUCTIONS:

Print out the model parts on cardstock.

Keep everything at the same scale, i.e., print at 100%, it is not recommended to print as 'shrink to fit' or the parts won't go together correctly.

Make sure the cardstock is compatible with your printer -- office supply stores may have several different types, depending on whether you are using a laser or inkjet printer.

If the printer won't accept the cardstock (paper jams or other mishaps during printing), print on regular paper and glue to cardstock or very thin cardboard -- spray glue is ideal for this, as other types may not hold correctly, and might cause the paper to buckle.

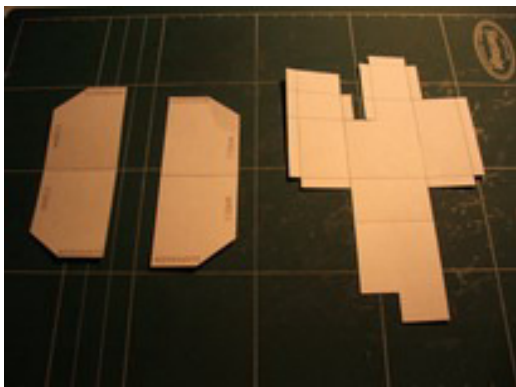
Score along all folding lines (centre of panels, interior lines on tabs, etc.)

Have fun with the model! Don't be afraid to try building the shape. In the worst case, you'll have to reprint the sheet and try again!

SAFETY!!!!

Be sure you're working with sharp knives, dull knives are unpredictable; Work on a flat, stable surface, and keep body parts out of the way of the knife!

3: Templates



Cut items 80 and 81 as above.



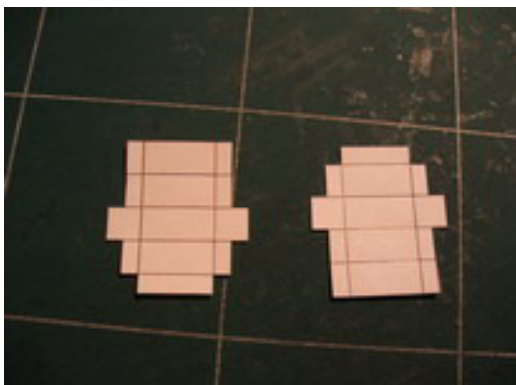
Fold items 80 and 81 to make a spacer Blocks as above.



Glue items 80 and 81 together as shown.



Make 4 sets of blocks as suspension Spacers.



Cut items 83 as above.

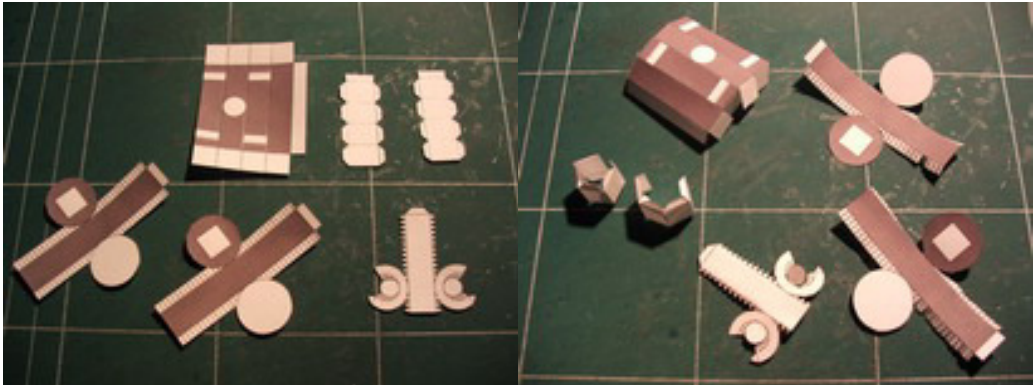


Glue the parts as above.



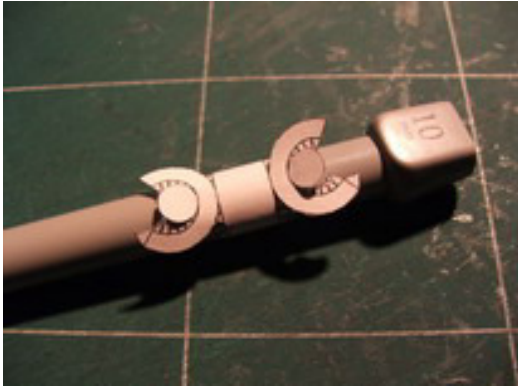
Glue the two items 83 together.

4: Axles



Cut items 68, 69, 70 and 71 as above.

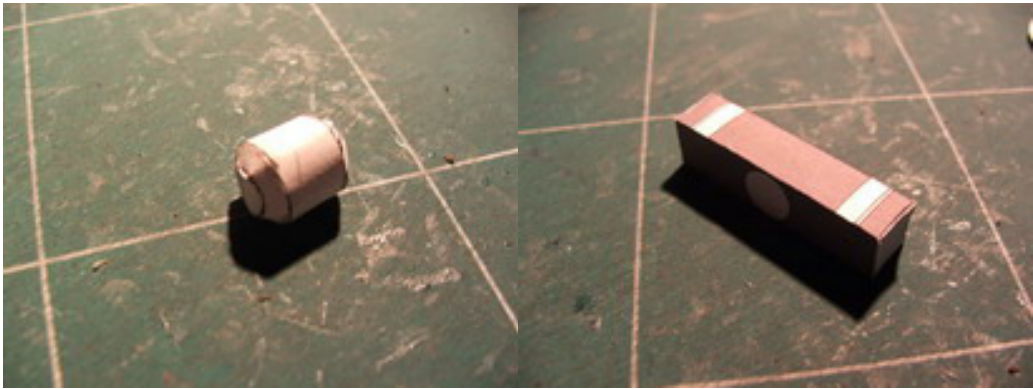
Fold and roll the items as shown.



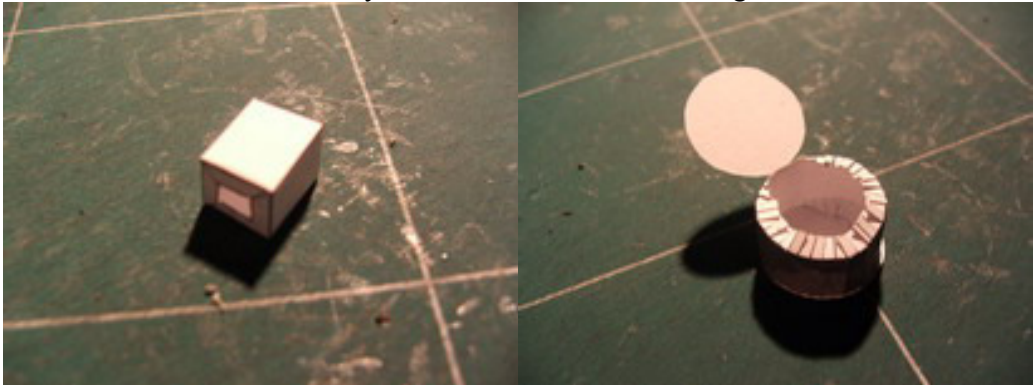
Roll item 69 as above around a 10mm needle.



Glue the ends together as above.



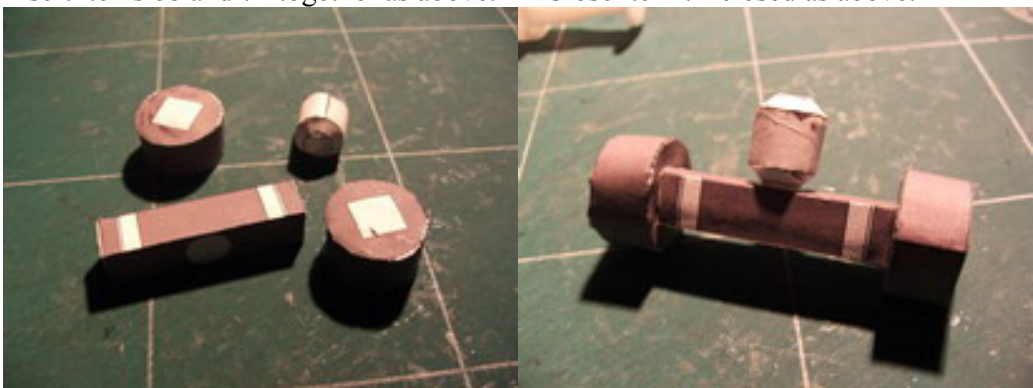
Glue the ends to the main body as above. Glue item 70 together as above.



Glue item 68 together as above. Glue item 71 together as above

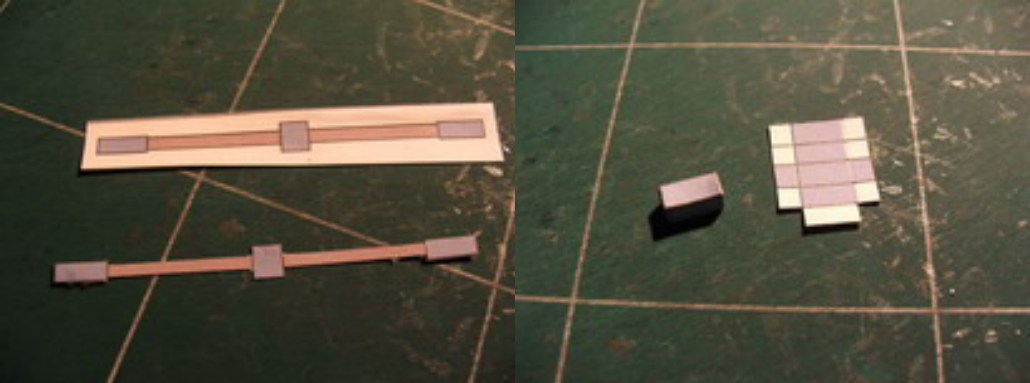


Insert items 68 and 71 together as above. Close item 71 closed as above.



Glue items 69, 70 and 71 together as shown.

5: Suspension



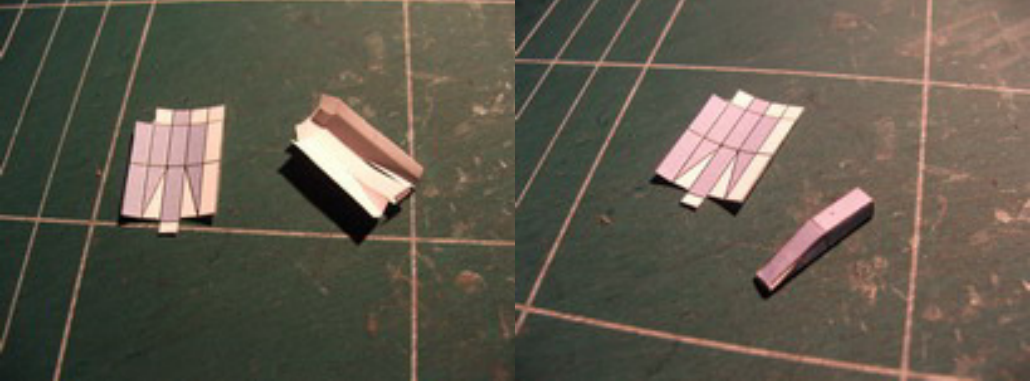
Cut and glue item 82 as above.

Cut and glue item 66 as above.



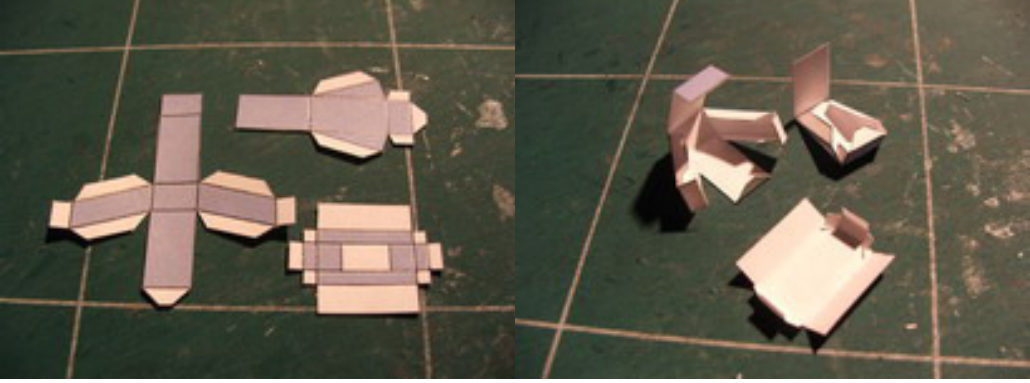
Cut and fold item 62 as above.

Glue and seal item 62 as above.

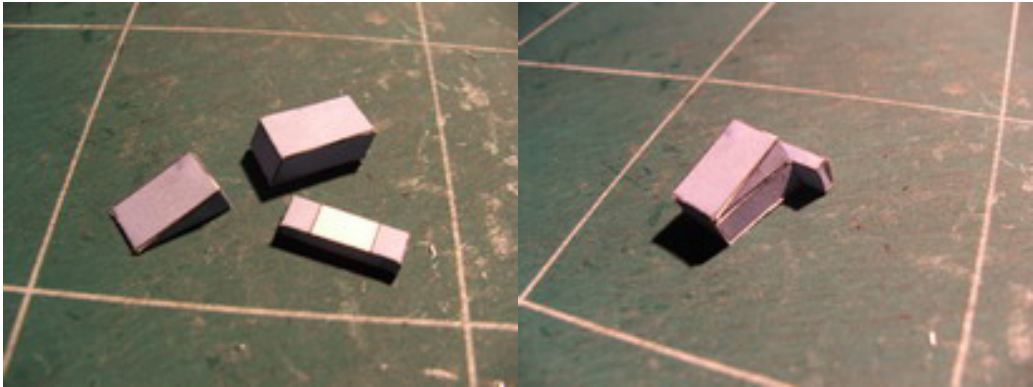


Cut and fold item 67 as above.

Fold and glue item 67 as above.

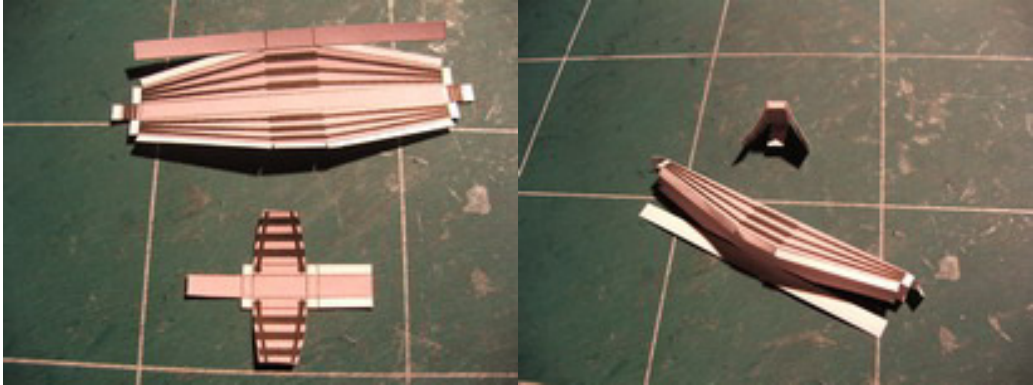


Cut and fold items 63, 64, 65 as above.



Glue items 63, 64, 65 as above.

Glue the part together as shown.



Cut and fold items 60 and 61 as above.

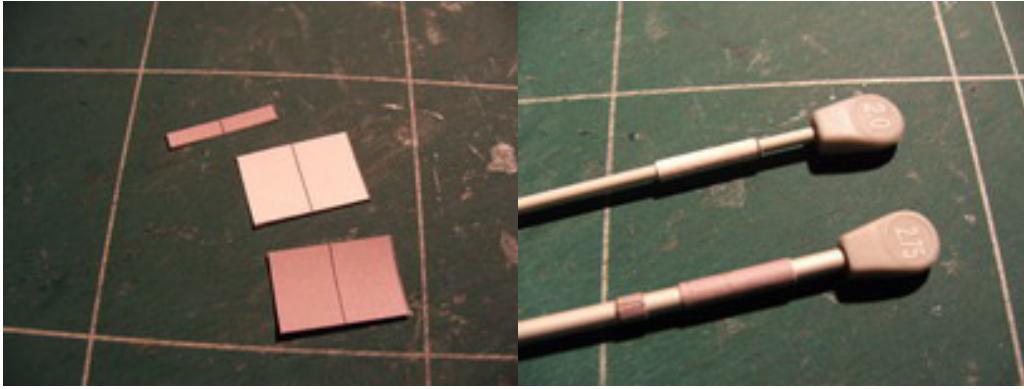


Glue item 61 as shown.

Glue item 60 as shown.



Combine item's 60 and 61 as above.



Cut items 57, 58, 59 as above.

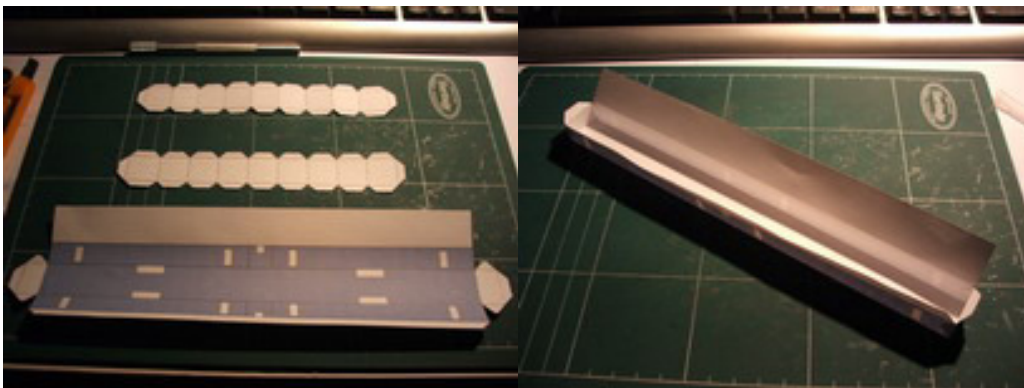
Roll items 57 and 59 around a 2.75mm needle and item 58 around 2mm needle.



Glue item 58 and 59 together as above.

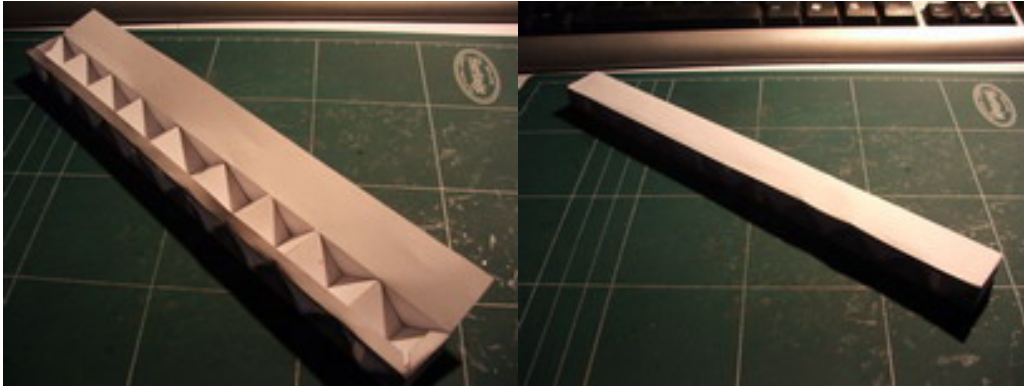
Combine the 57 to the assembly, insure that the assembly is free in movement.

6: Main Suspension Chassis Support



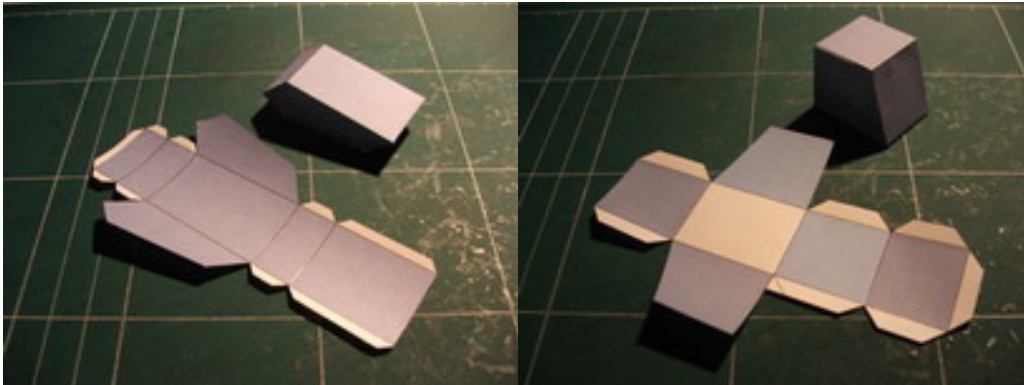
Cut items 3 and 4 as above.

Fold and part assemble item 4 as above.



Insert item's 3 as above.

Close item 4 as shown.



Cut fold and glue item 2 as above.

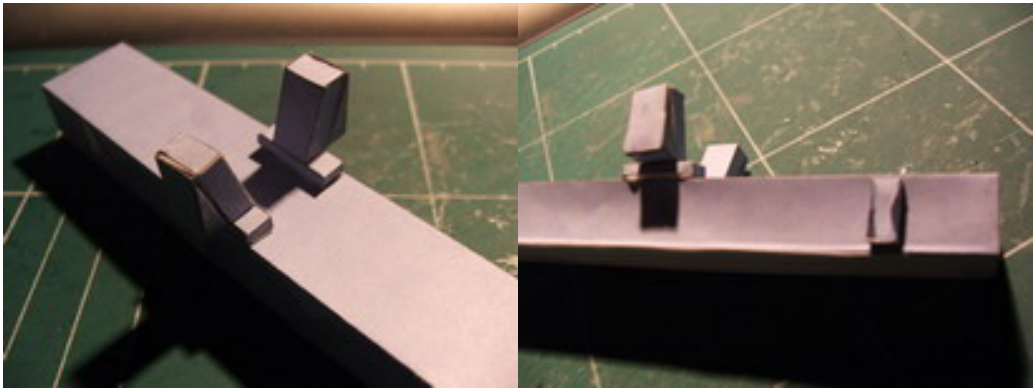
Cut, fold and glue items 47 (both) as Above.

7: Suspension Chassis Assembly



Take the completed item 4, 62 and 64 For assembly.

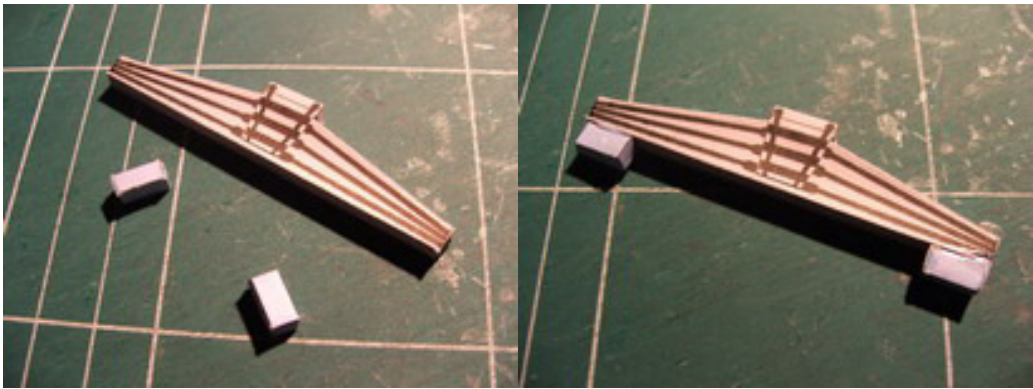
Glue items 4 and 64 as above on the white openings as above.



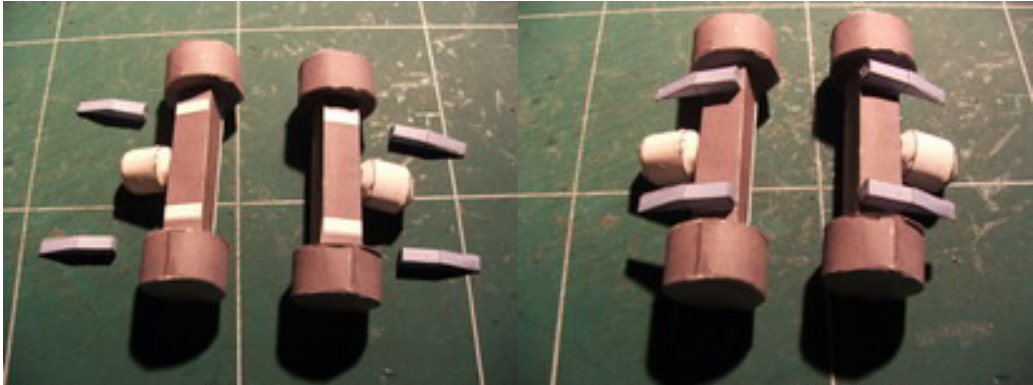
Glue item's 62 to item 4 as above.



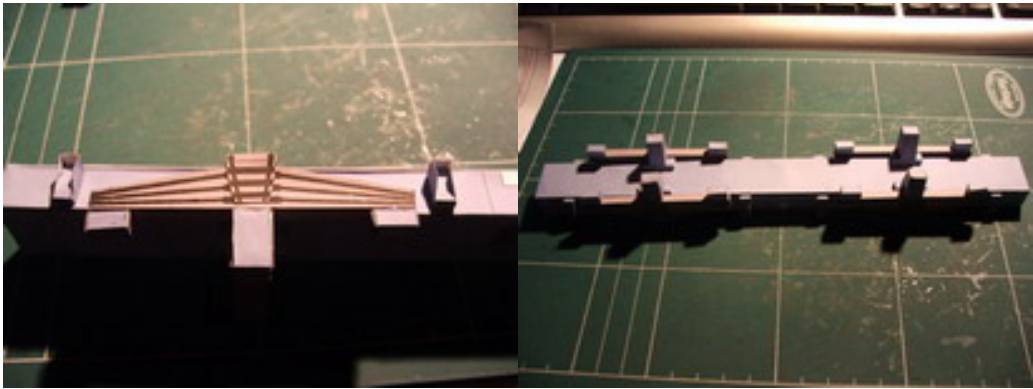
Completed assembly.



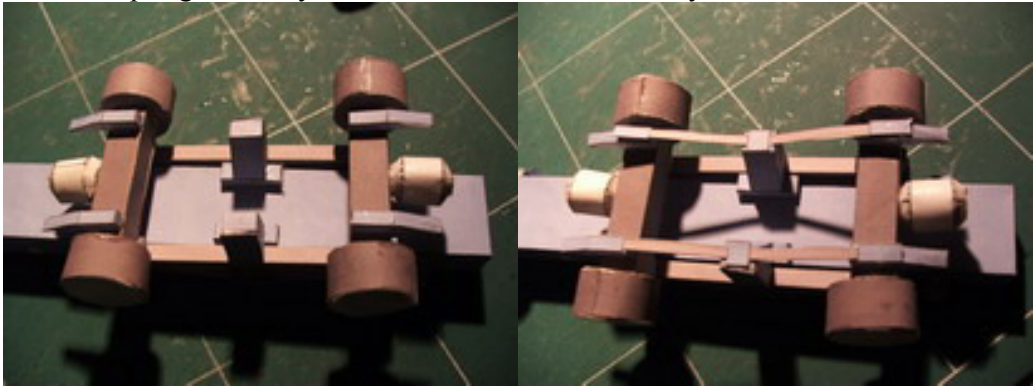
Combine item's 60 and 66 as shown above.



Combine the Axle assembly with item 67 as above.

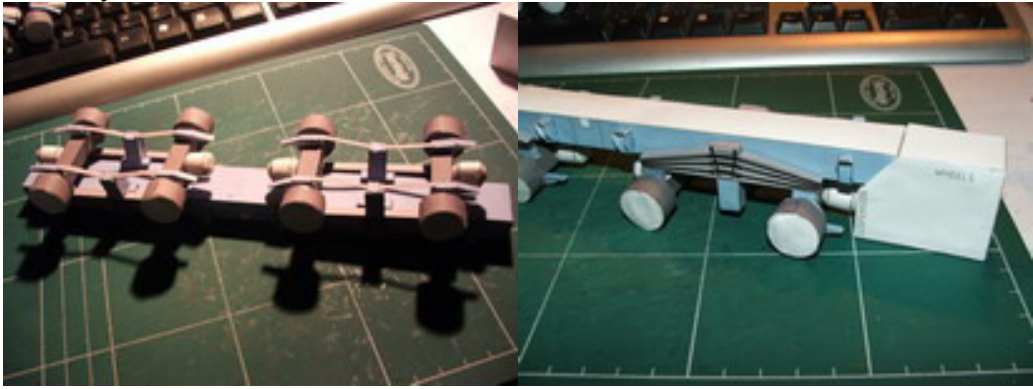


Glue the Spring assembly as above to the item 4 assembly all round.

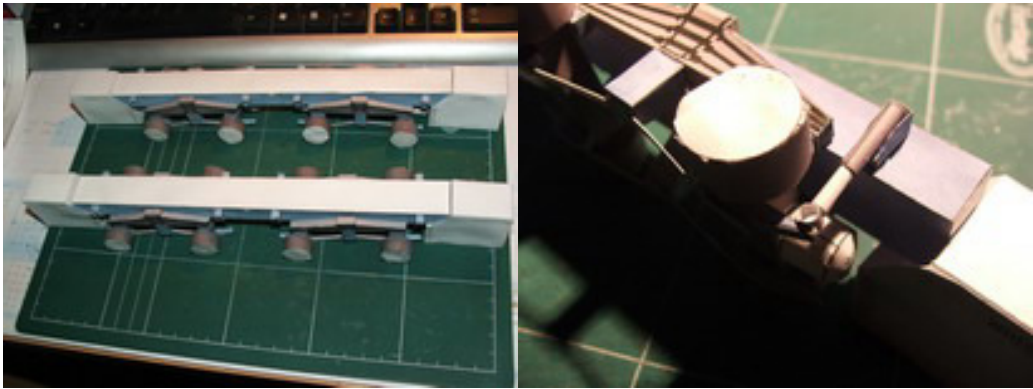


Glue the axle assembly to the spring assembly as above.

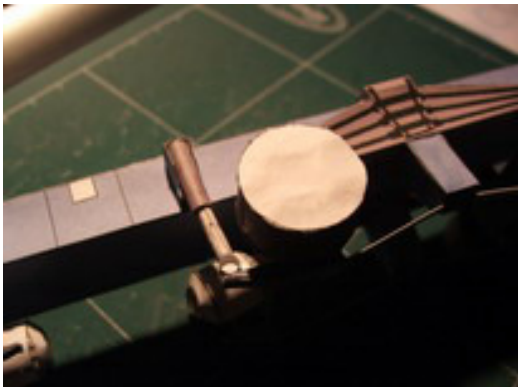
Attach the item 82 as above.



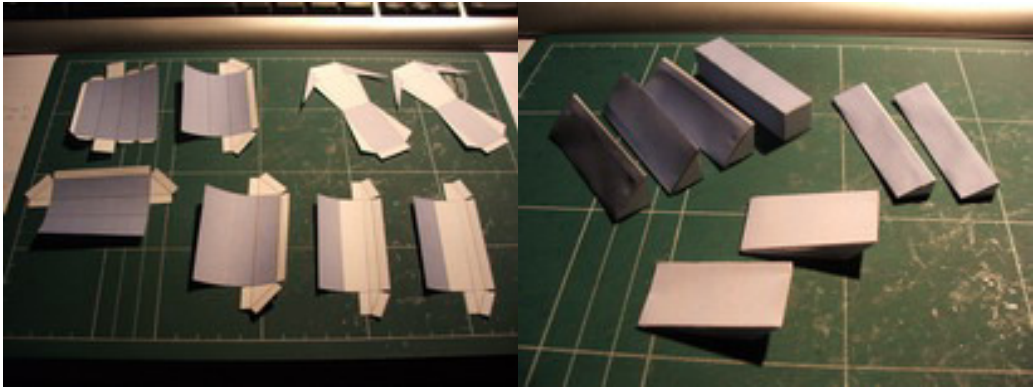
Use the templates to set the axle height as set all the wheels level at a later assembly. insure that the low level part of the template is used.



After the axles have been left to dry
Attach the shocks as above to the axle
and item 4 assembly.

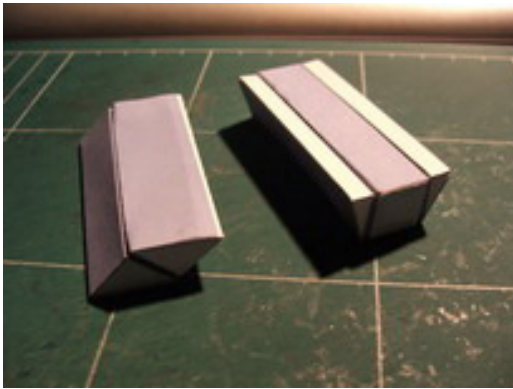


8: Rear Chassis

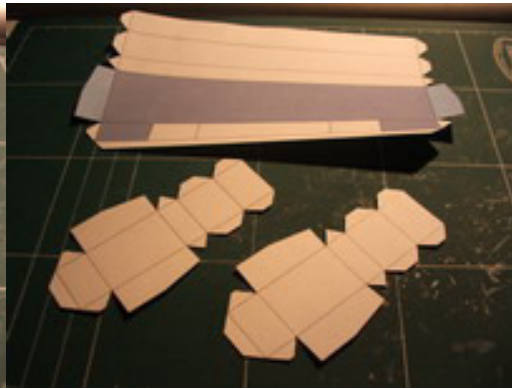


Cut item's 45, 50, 76 and 79 as above.

Fold and glue the items as above.



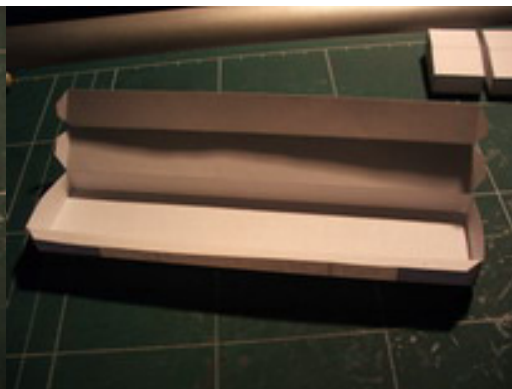
Combine item's 50 and 45 together as above, combine two item 76's together as above.



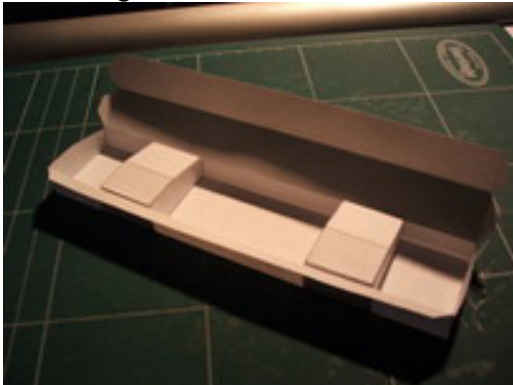
Cut items 46 and 77 as above.



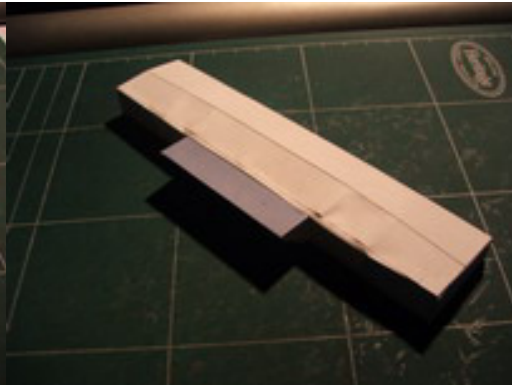
Fold and glue item 77 as above.



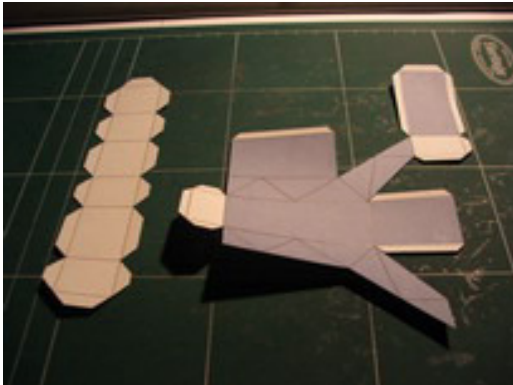
Fold and Glue item 46 as above.



Combine items 46 and 77 as above.



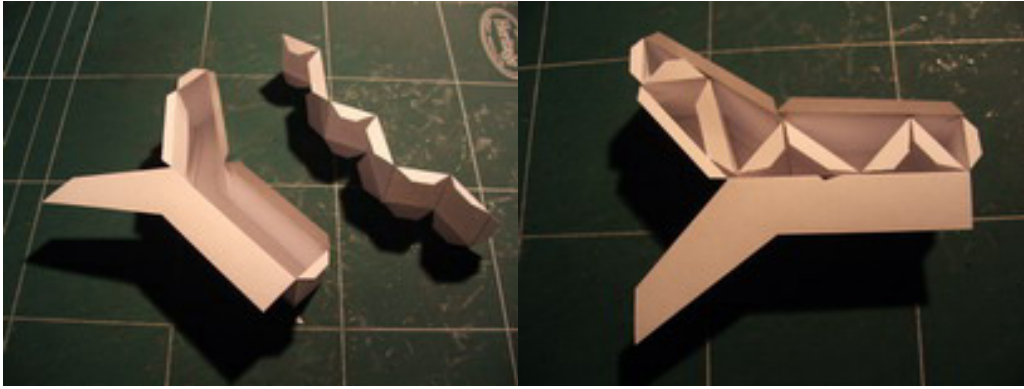
Attach item 46 and 76 together as above.



Cut item's 1 and 78 as above.

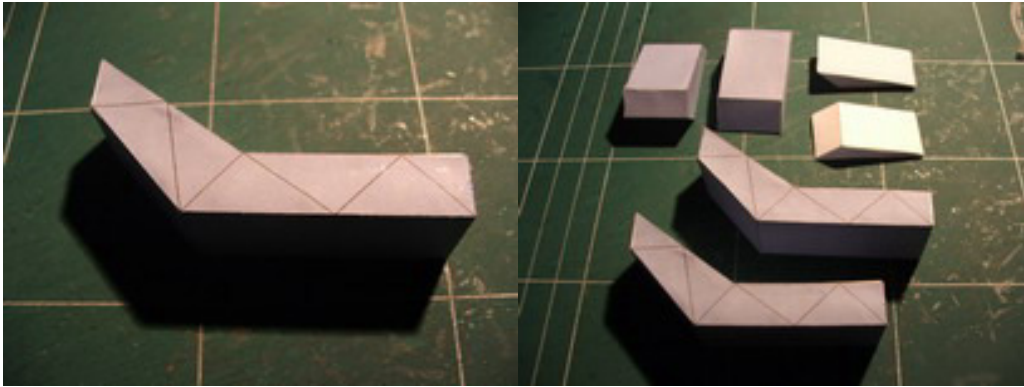


Fold item's 1 and 78 as above.



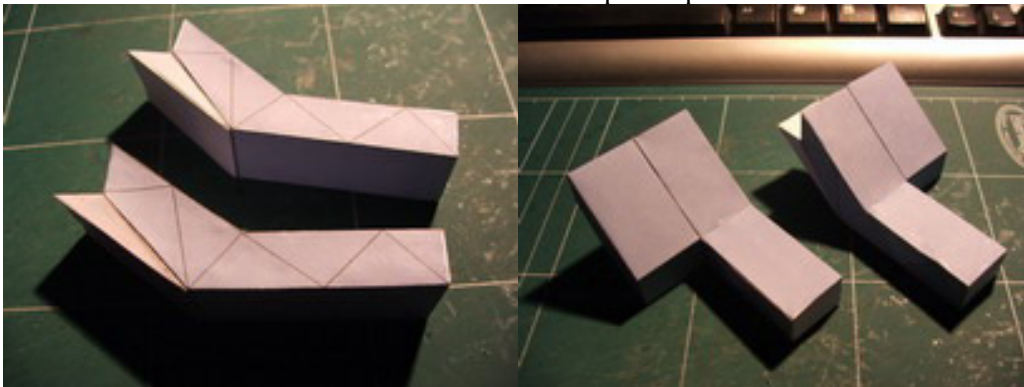
Part assemble item 1 and 78 as above.

Insert item's 1 and 78 as above.



Seal item 1 as above.

Completed parts.



Attach item's 1 and 79 as above.

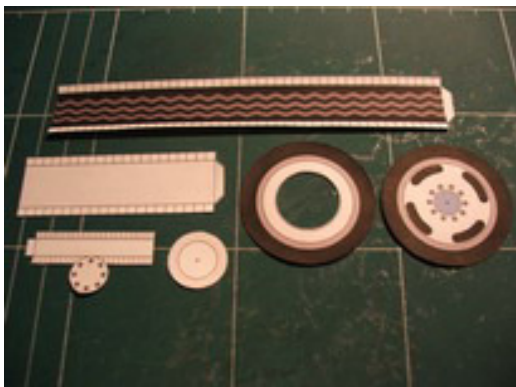
Then attach item 2 to item 1 as above.
Be aware to glue as above as they need to be different for later assembly.



Cut fold and glue item 48 as above.

Cut fold and glue item 49 as above.

9: Wheels



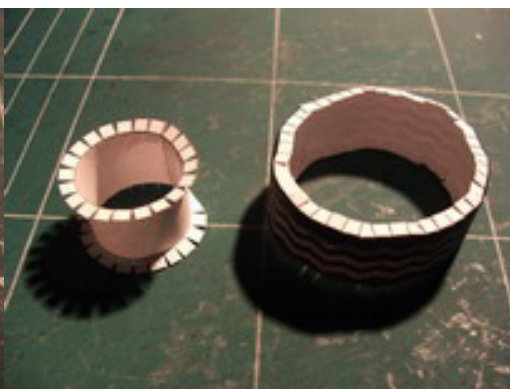
Cut item's 51, 52, 53, 54, 55 and 56 as above.



Roll and glue item's 53 as above.



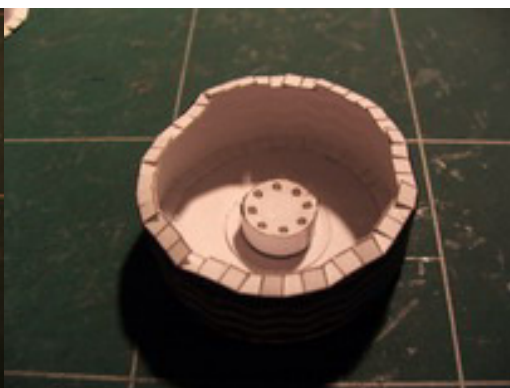
Combine item's 53 and 54 together as Above.



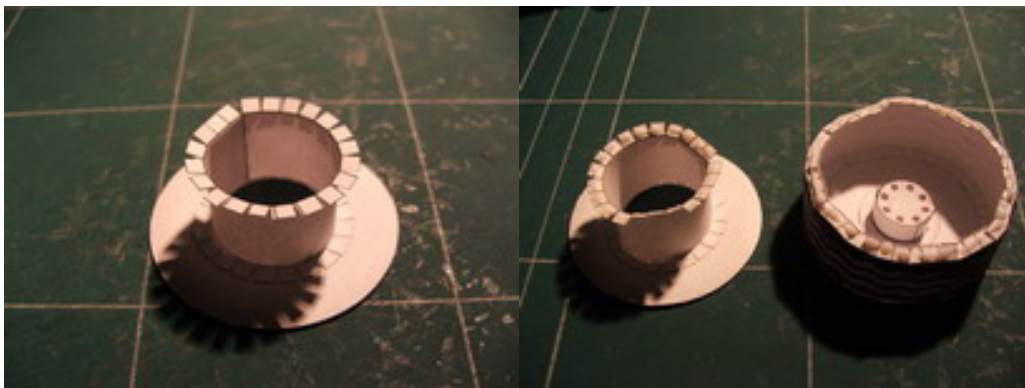
Roll Fold and Glue item's 51 and 52 as Above.



Glue item's 53 and 56 together as Above.



Combine item 51 and 56 together as above.



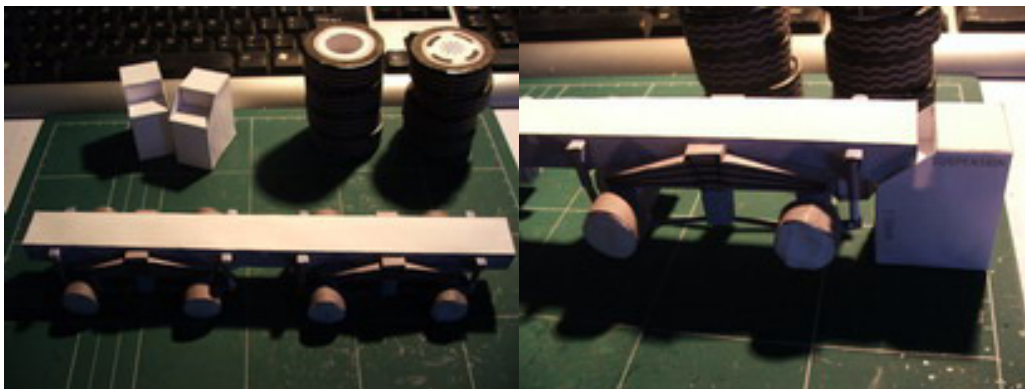
Glue item 52 and 55 together as above.

Glue the two assemblies as above.



Combine the two assemblies together for a Completed assembly.

10: Wheel Rear Chassis Assembly

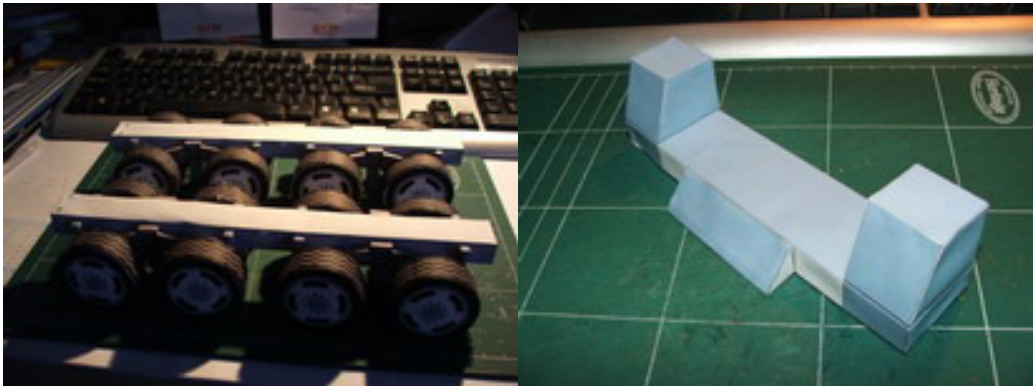


Part's required.

Use the higher part of the template to assemble the wheels to the axle assembly



Assembled wheels to the axles.



Attach items 47 and 46 together, insure That the light colour is showing to the Outside as above.

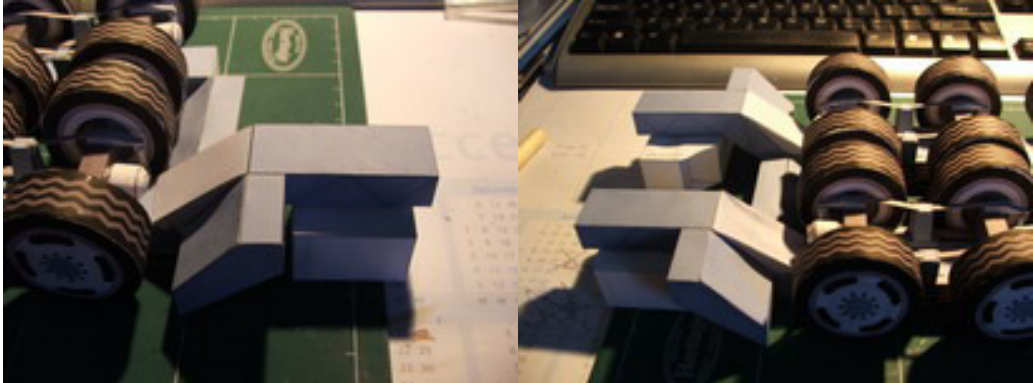


Attach the item 50 assembly in the middle of the two axles assemblies.



Attach the item 46 assembly to the rear
Of the axle assembly

Attach the item 76 assembly the opposite
end of the axle assembly.

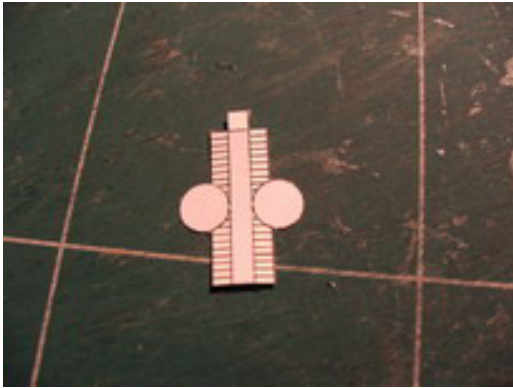


Use the template on it's side to support the assembly of item 1 as above.



Completed sub assembly.

11: Goose Neck Assembly



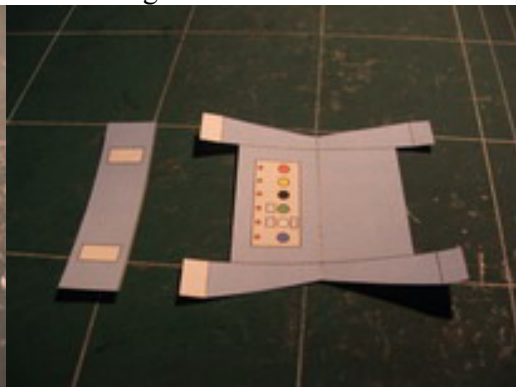
Cut item 17 as above.



Roll and glue around a 7mm needle



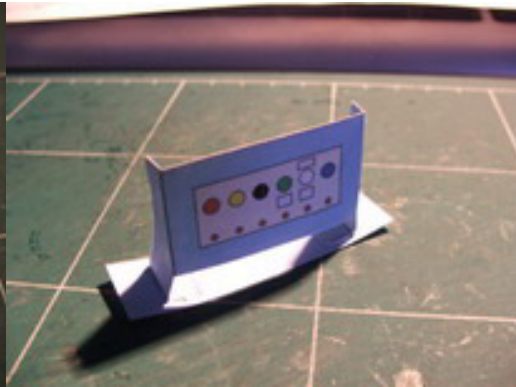
Seal item 17 as above.



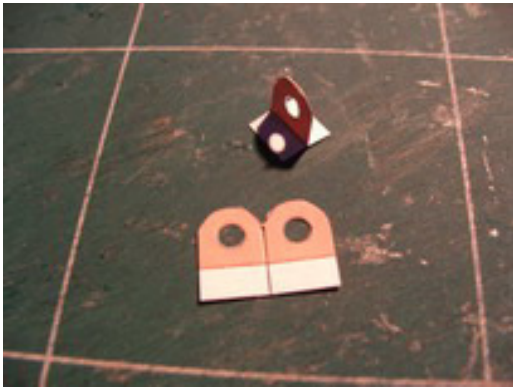
Cut item's 74 and 75 as above.



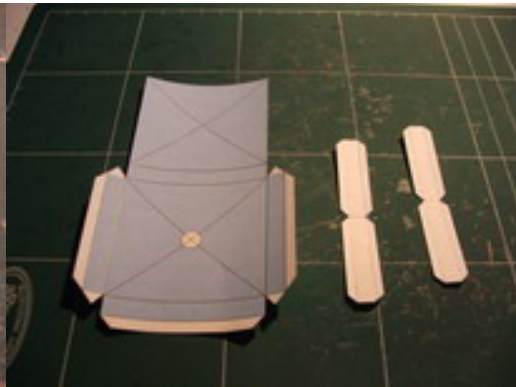
Glue item 74 as above.



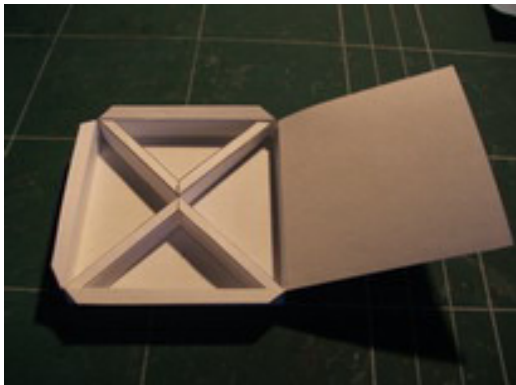
attach items 74 and 75 as above.



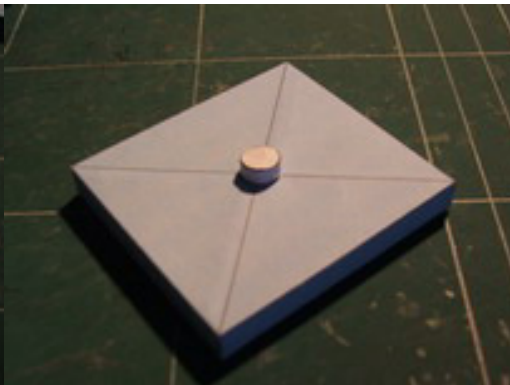
Cut and glue item 84 as above.



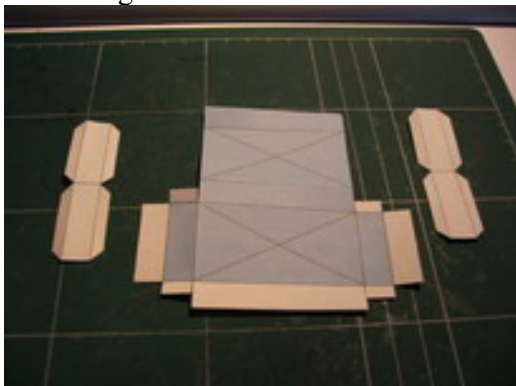
Cut item 12 and 16 as above.



Fold and glue items 12 and 16 as above.



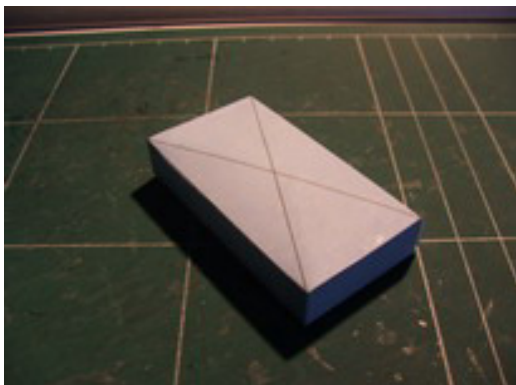
Seal item 12 and attach 17 together.



Cut items 72 and 73 as above.



Fold and glue items 72 and 73 together
As above.



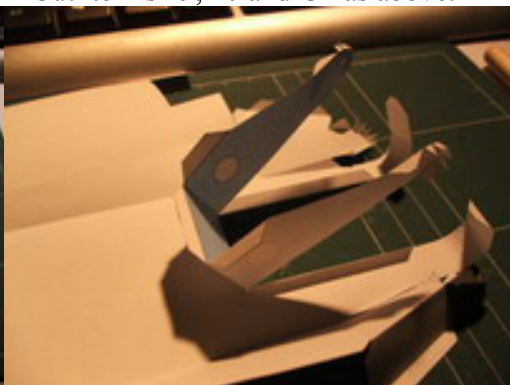
Seal item 72 as above.



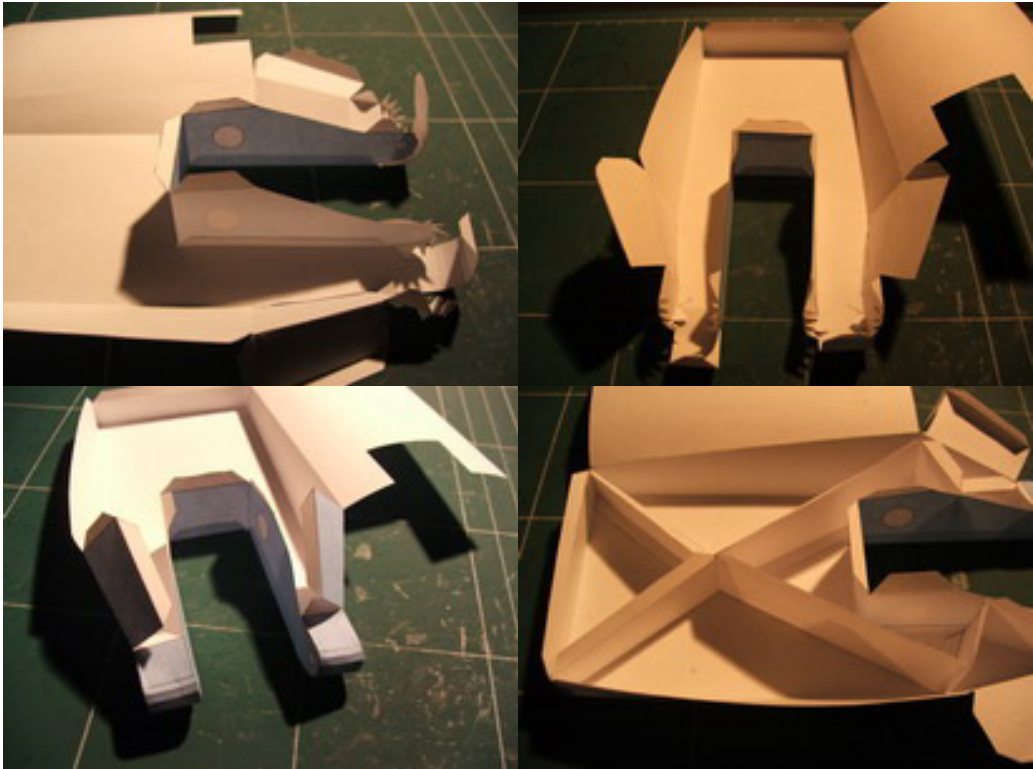
Cut item's 19, 20 and 31 as above.



Fold items 19, 20 and 31 as above.

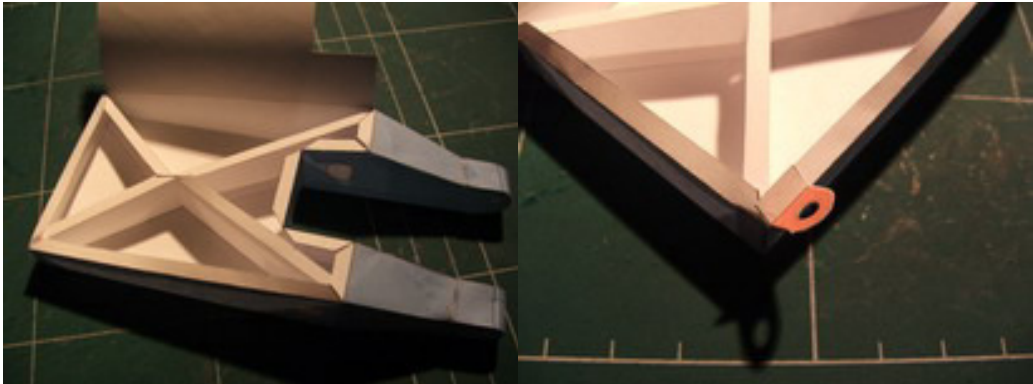


Glue items 19 and 20 as above.



Glue the ends as above.

insert and glue item's 31 as above.



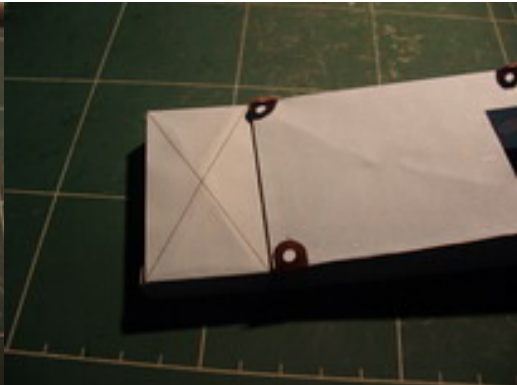
Seal item 19 as above.

Cut small slots into item 19 as to attach 84 as above on all four corners.

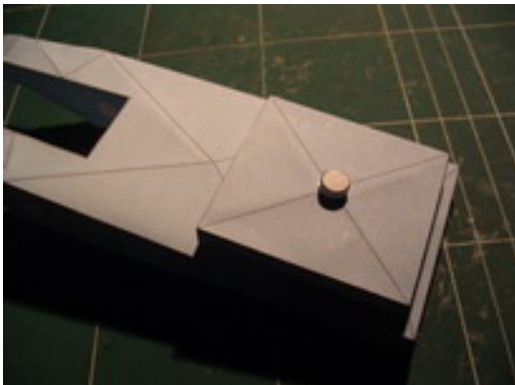




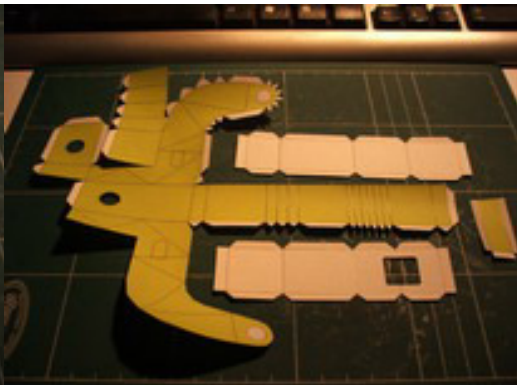
Seal item 19 as above with item 84 attached.



attach item 71 to item 19 as above.



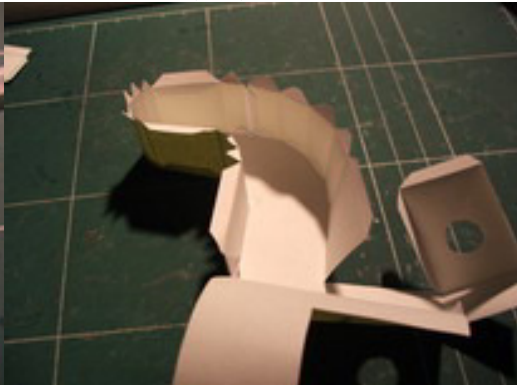
Attach item 16 to item 19 as above.



Cut item's 10, 11, 14 and 15 as above.



Roll and glue item 15 around a 10mm needle.



part assemble item 14 as above.



Insert items 10 and 11 to item 14 as Above.



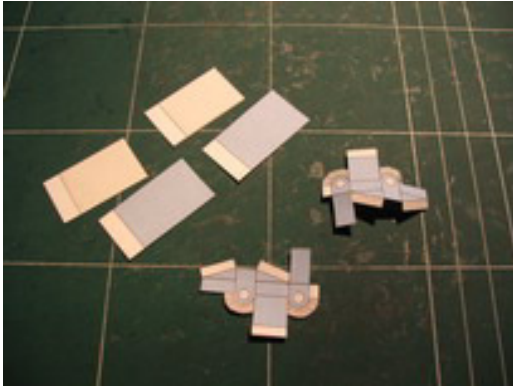
Insert item 15 into item 14 carefully As above.

Seal item 15 as above.



Attach the two main assemblies as above.

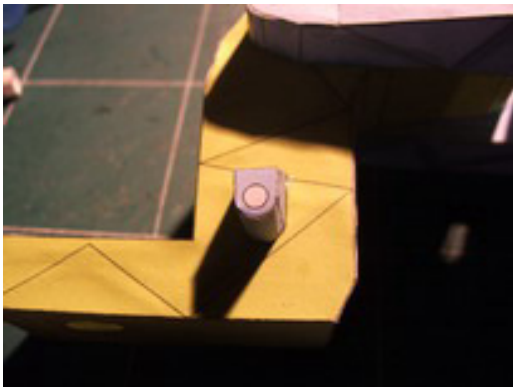
attach item 74 to main assembly as seen.



Cut item's 18, 43 and 44 as above.



fold, roll and glue item 18 as above.
Roll item 43 around a 8mm needle, roll
item 44 around 7mm needle.



Attach item 18 to the main assembly as
Above.

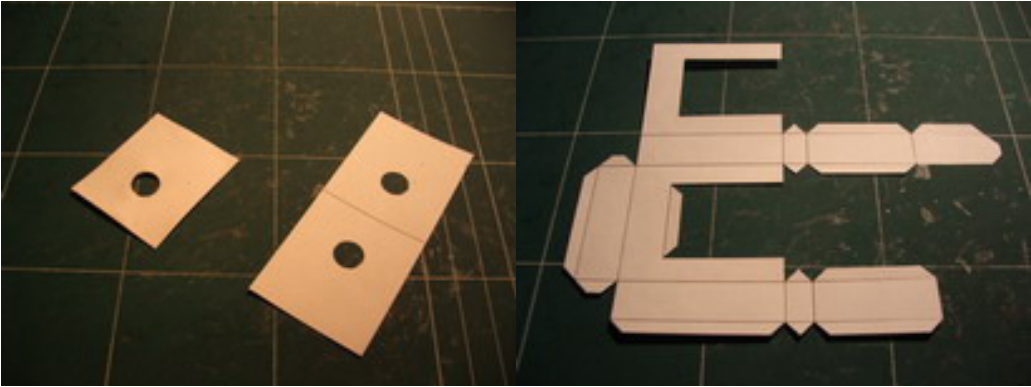


Attach item's 43 and 44 to the main
assembly and custom cut the item 43
To the main assembly.



Cut, fold and glue items 21, 22 and 23 as above. make sure that the assembly will be
able to go into item 15 with ease.

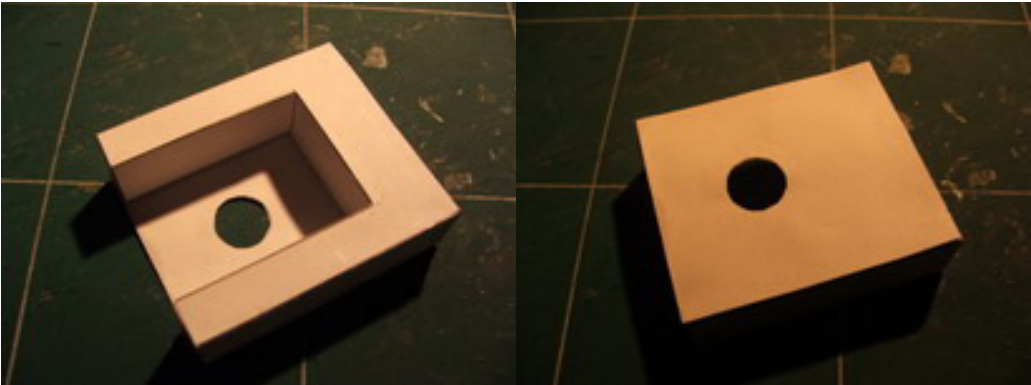




Cut and fold and glue item 30 as above. Cut item 29 as above.



Fold and glue item 29 as above.



Attach items 29 and 30 as above on both sides of item 29.



Cut item's 32, 33 and 34 as above.

Roll and glue item 34 around 8mm needle as above.



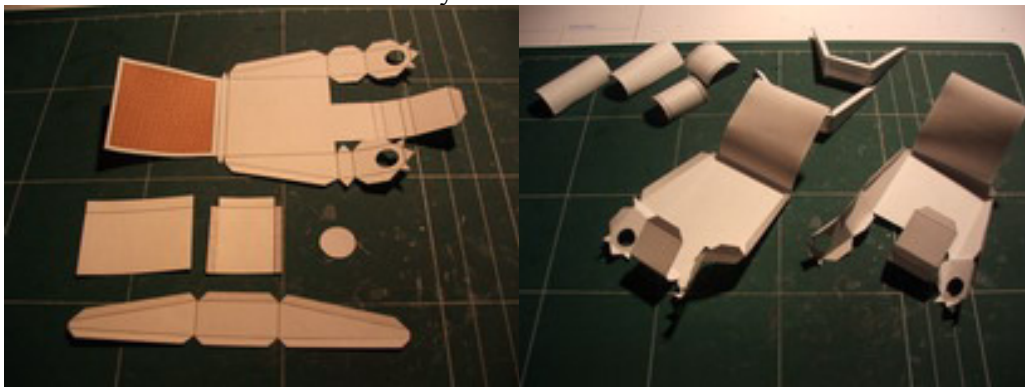
Fold and part assemble item 33 as above.

Glue item 34 to item 33 as above.



Glue item 32 to the item 33 assembly.

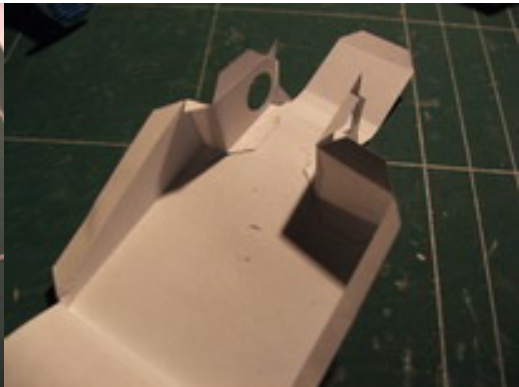
seal item 33 as above.



Cut fold and roll items 13, 24, 25, 26, 27 and 28 as above.



Roll and glue item 25 around a 8mm needle.



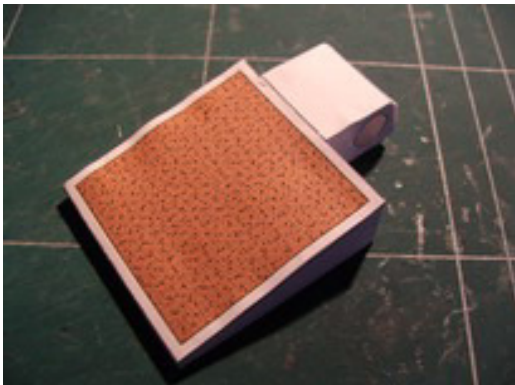
part glue item's 24 and 27 as above.



Glue item's 25 and 13 to item's 24 and 27 as above.



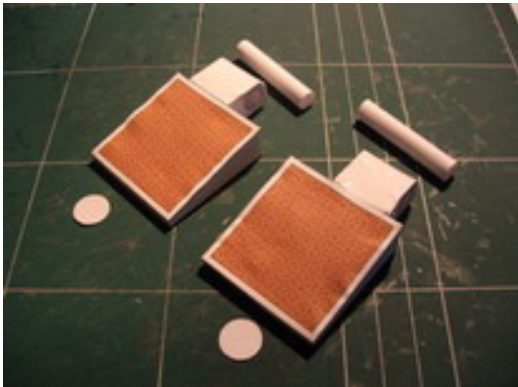
part seal the end of item 24 and 27 as above.



Seal item's 24 and 27 as above.

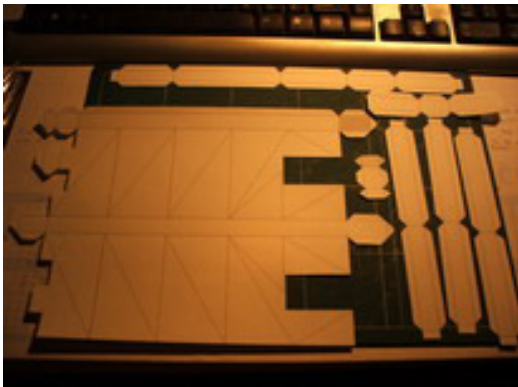


Roll and glue item 26 around 7mm needle

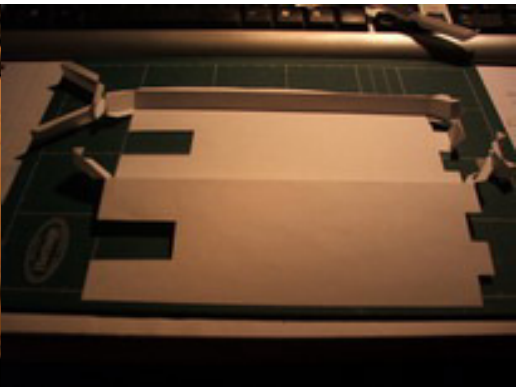


Completed assemblies.

12: Main Chassis



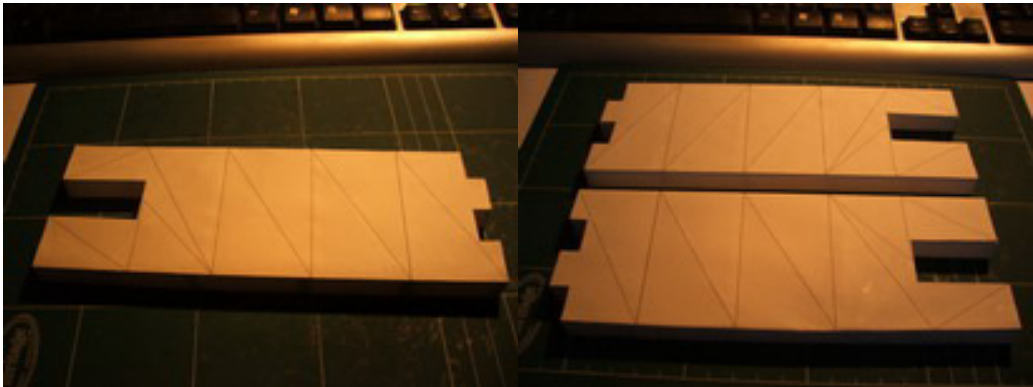
cut item's 5, 6, 7, 8 and 9 as above.



Fold and part assemble item 5, 6 and 7 as above.



Assemble items 8 and 9 into item 5 as Above, the pattern may differ from the above photo.

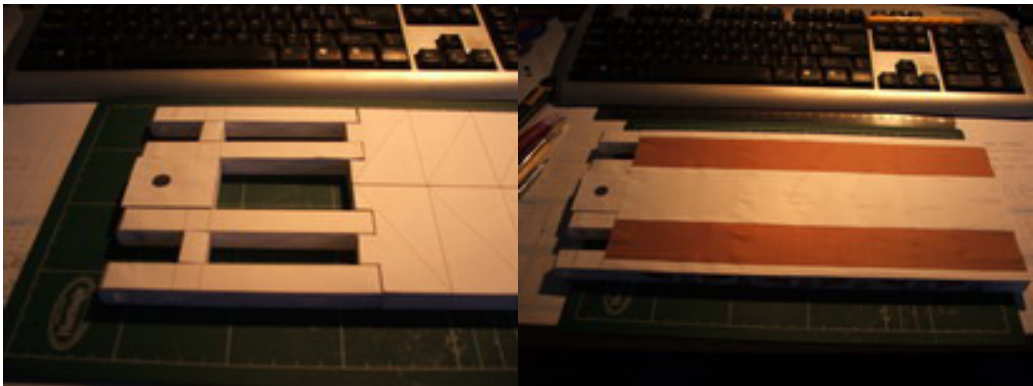


Seal item 5 as above.

Glue the two item 5's together.



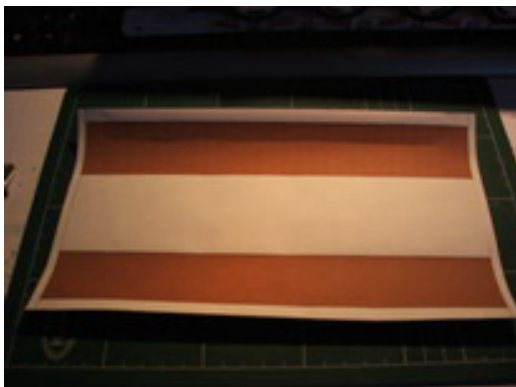
Glue items 33, 48 and 29 together as above.



Attach the two main assemblies as above.

Glue the decking item 41 to the main Assembly as above.

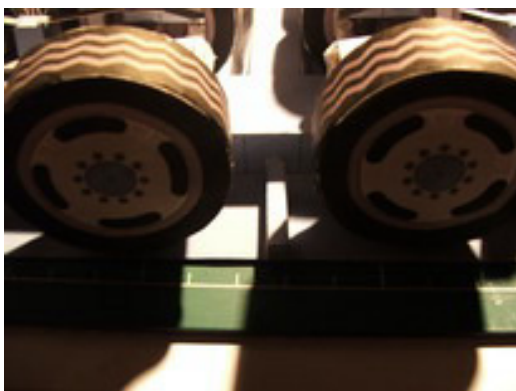
13: Main Chassis to Rear Chassis Assembly



Cut and glue item 42 as above.



Glue item 42 to the main suspension Assembly as above.



Glue item 49 to the main suspension Assembly as above.



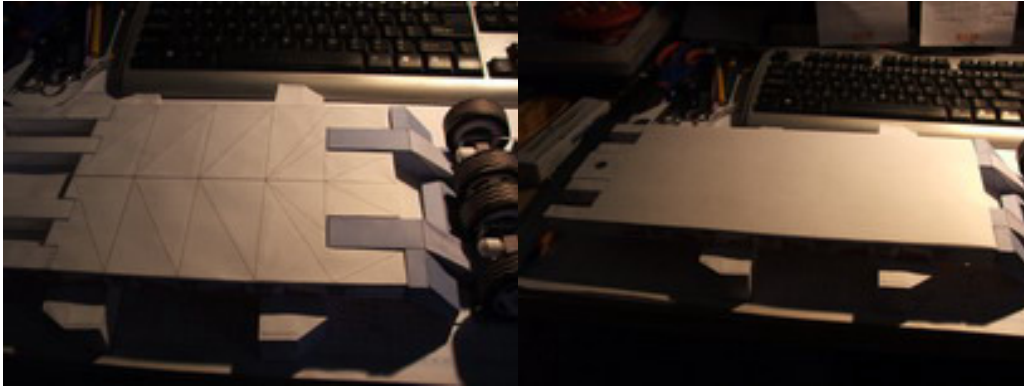
Glue item 38 to the end of main suspension assembly.



Glue item 37 to the suspension assembly As above.



glue item 39 to the end of the suspension assembly as above.

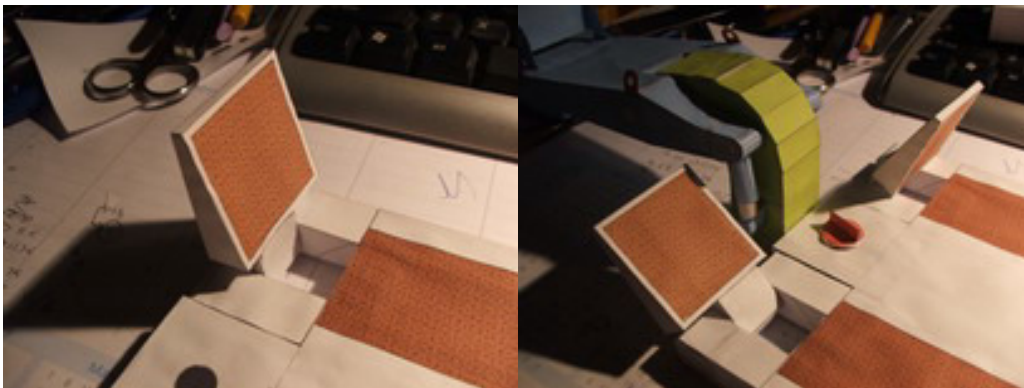


To glue the main deck to the suspension assembly one needs to use the templates
And lay them on there side to assemble the two part together as above.
The assembly is done in the up side down manner to set the deck level.



Attach the flaps and insert item 26 on to
Main deck as above.

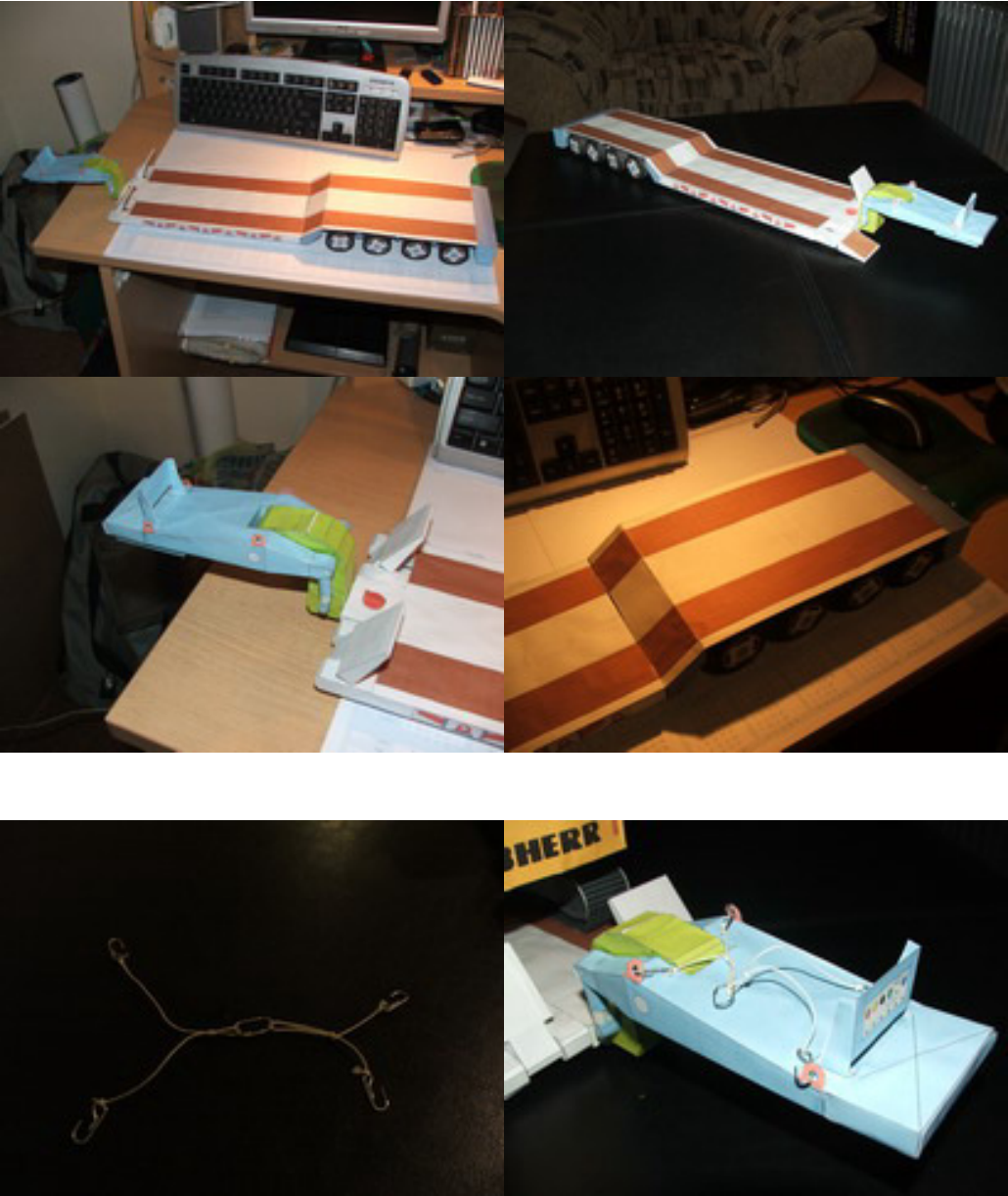
Glue item 28 on seal the hole as above.



Free movement of the flaps.

Fit the Gooseneck and pin to the main
Assembly as above. The assembly is not
To be glued as it should be able to be
Dis-assembled as required.

14: Finished Model



To make slinging ropes, use paperclips
And thin cotton in the as above way.



15: Version Details

0.10	- 3 August 2010	- Project started, research begins.
0.11	- 2 November 2010	- First CAD design Started.
0.12	- 10 December 2010	- First CAD design Completed
0.20	- 4 February 2011	- Development work started, first model started.
0.21	- 24 March 2011	- First complete working model done.
0.30	- 22 April 2011	- Revised design started.
0.31	- 22 April 2011	- Revised design complete.
0.40	- 22 April 2011	- First render work started
0.41	- 22 April 2011	- Render work complete.
0.50	- 9 May 2011	- Final development model started.
0.51	- 27 June 2011	- Final development changes started.
0.52	- 28 June 2011	- Final development changes completed.
0.53	- 28 June 2011	- Final development model complete.
0.60	- 28 June 2011	- Lock down render work started.
0.61	- 28 June 2011	- Lock down render work complete.
0.70	- 28 June 2011	- First written instructions started.
0.71	- 14 July 2011	- First written instructions complete.
0.80	- 14 July 2011	- Instruction proof reading started.
0.81	- 14 July 2011	- Instruction proof reading complete.
0.90	- 15 July 2011	- Project complete.
1.00	- 15 July 2011	- Build Instructions Released and Locked Down. Design Released and Locked Down.
1.10	- 21 February 2012	- Minor Updates.