

# Bugs&Beasts

Manuel Sirgo Álvarez



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### I dedicate this book to Olivia and Manuel, my parents

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#### Bibliographical Note

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# Bugs & Beasts

# rologue

I first met Manuel Sirgo in 2000, when I was in charge of the Spanish Origami Association's (AEP — Asociación Española de Papiroflexia) virtual store, where he was a frequent customer. At first, the only thing that I knew about him was that he bought practically everything that had ever been published on origami. I soon found out that besides being a compulsive "paper folder," he was also the creator of a large collection of models, most of them of insects. The first models I saw were surprisingly good for someone who had been practicing origami for less than a year. They were quite promising, although their potential had not been fully developed. Throughout 2001, I was able to observe the constant evolution of his technique. Even though all of his models started with traditional bases, he achieved incredible results with them.

By May of 2002,
when I met Manuel in
person at the National
AEP Convention, he had
already diagrammed over
80 models. Their level of
difficulty ranged from "not
too difficult" to "absolutely
impossible."

What can I tell you about Manuel? He is neither short nor tall, neither fat nor thin, but he has

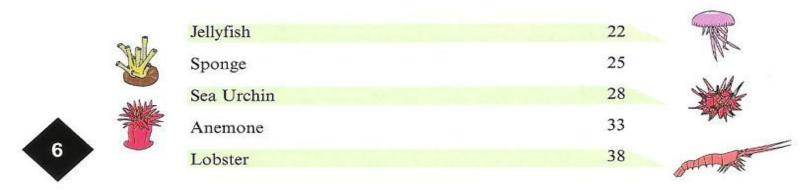
something that is not easy to find among people interested in origami: he understands paper. His folding process constantly tests the paper's resistance, but does not tear it. He is able to stretch internal layers in ways that seem impossible. The most surprising thing of all is that when you fold the paper according to his instructions, it does not turn out to be that difficult at all. You get pointed angles out of thin air, and figures so real that they seem to be alive. Another of his outstanding features is that he works really hard, and when he puts his mind to something, he always delivers; and yet, he still manages to find enough time to fold impossible figures.

J. Aníbal Voyer

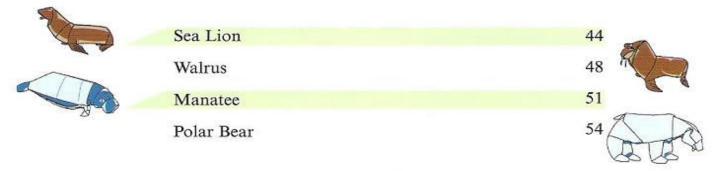
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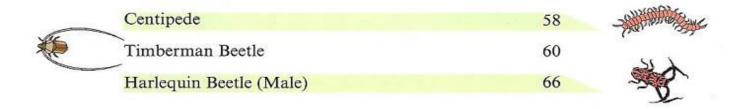
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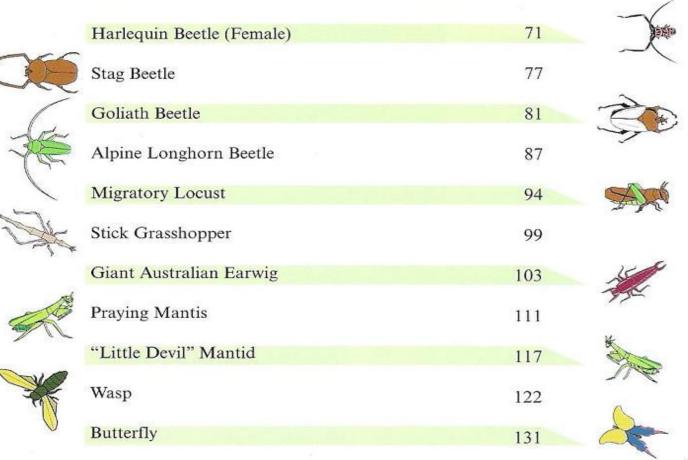


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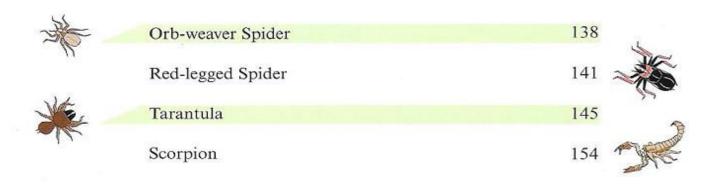


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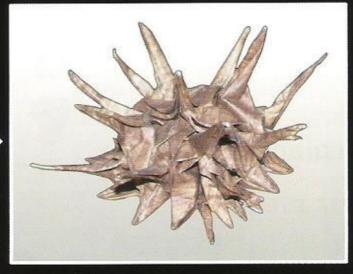


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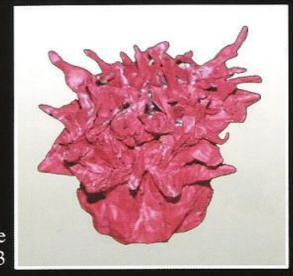
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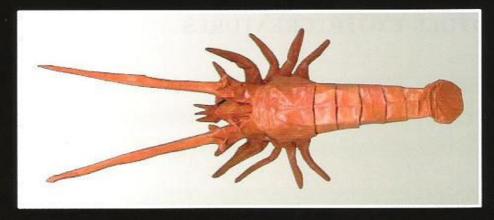
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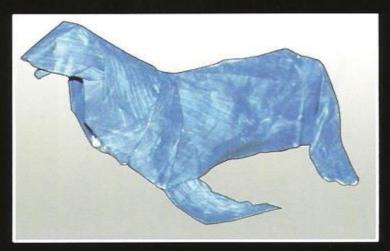


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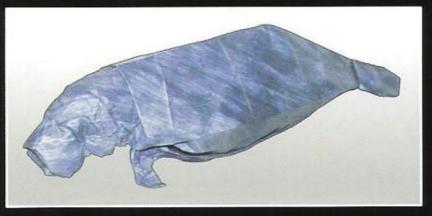




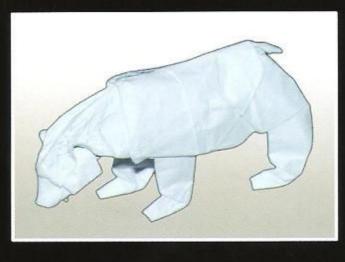
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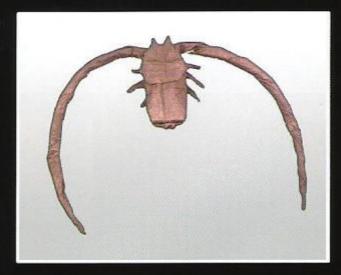


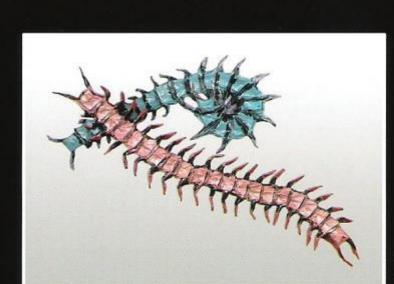
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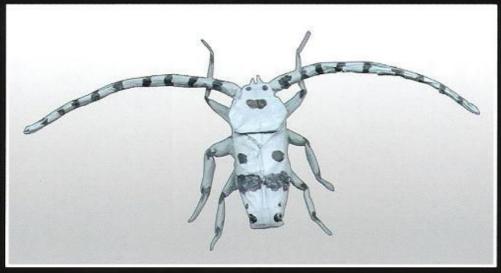
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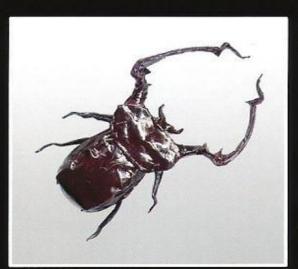
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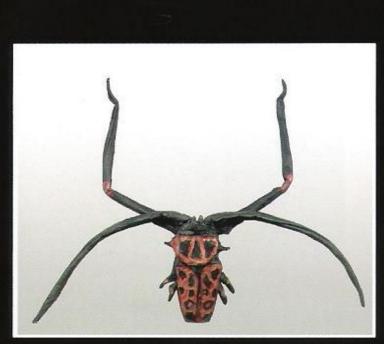


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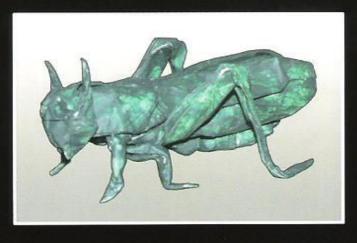
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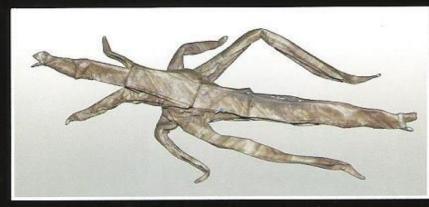
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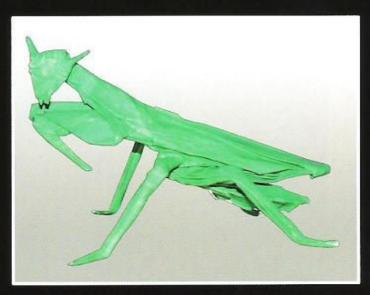
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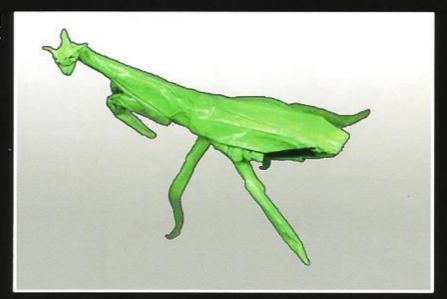
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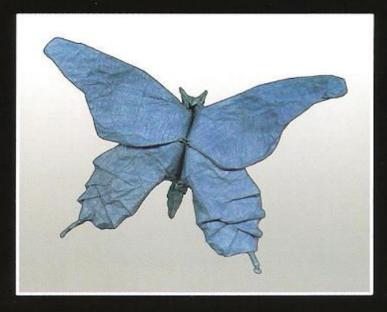




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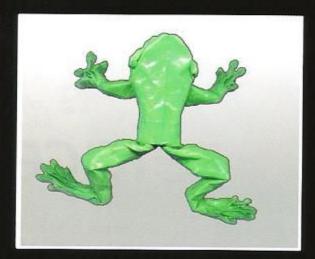


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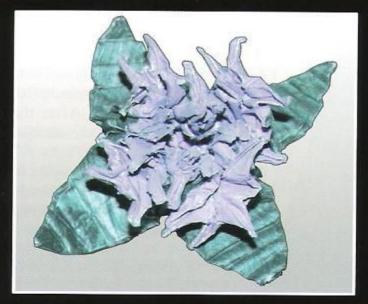


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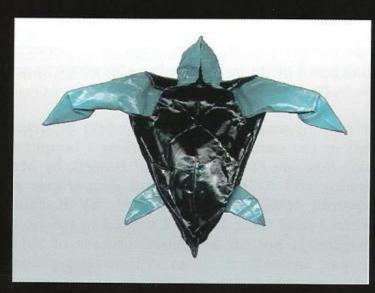
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# reface

My name is Manuel Sirgo and I was born in Valladolid, Spain. I have lived in León, France, for more than 15 years. I teach physics, chemistry, and math to high school students. I have been a member of the Spanish Origami Association (AEP—Asociación Española de Papiroflexia) since 2001 and I am currently the coordinator for their newsletter's editorial group.

I've been interested in origami since I was a child. The first figure I learned to fold was an airplane. My father taught me how to do it when I was six years old. After that, I started to learn the classic figures every kid learns in school in Spain: little birds, boats, etc. When I was twelve, I bought a book called *El mundo de papel* (The World of Paper), written by Dr. Montero, who coincidentally had been my pediatrician when I was a child. By the time I learned how to make all the figures in that book, origami had become a fun hobby.

Over many years, I folded those figures countless times (especially the Japanese Frog and the Flower). Then, I started to fold the figures in *Papirogami*, written by Vicente Palacios. In the mid-90s, I found a book called *El libro de las pajaritas de papel* (*The Book of Folded Paper Birds*), published by the Riglos group. It had some spectacular figures that made me start to think of origami as something other than just a pastime; I started to appreciate its artistic aspects, too.

My current immersion into the world of origami started in the summer of 2000, when I bought two books: Seres de Ficción (Fictional Beings), by Mario Adrados and Aníbal Voyer, and Papiroflexia para Expertos (Origami for Experts), by Kasahara. When I read those books, I started to realize that origami is not an accidental process of folding paper; instead, it is an enthusiastic planning process, which can go well, or not, in order to achieve what one wants.

In only two years, my origami library grew from six to sixty books. I bought books by Montroll, Lang, Brill, Albertino, Kawahata, Gilgado, Halle, etc. I will not list them all here, as I do not wish to bore you, but I am sure that I have forgotten to mention at least one of them.

The first figure I invented was the orb-weaver spider, of which I am quite fond. Most of my figures start out with traditional bases. I am now taking the first steps in designing specific bases, which are adapted to each figure using mathematical methods.

I like models that demand a medium to high level of difficulty. For the most complex models in this book, such as the arthropods, I recommend that you use thin, metallic, or "sandwich" paper. I usually paint the white side of metallic papers with water-based paint (watercolors), depending on the model. "Sandwich" paper is made by gluing together a layer of silk paper, a layer of aluminum foil and then another layer of silk paper. The best glues for this process are glue sticks and spray glues, such as those used in photography.

I would like to thank the many people, such as Ronald Koh and Anibal Voyer, who encouraged me to publish these figures when they saw the photos of them. I would also like to thank my wife (Nelly) and my children (Marta and Victor, who are three and five years old) for the time that I have not spent with them while I was drawing these models. I would also like to thank my parents, siblings, nieces, and nephews for their encouragement and remarks. I would like to thank Anibal Voyer, Mario Adrados, and Fernando Gilgado for their great computer generated drawings based on the drafts I showed them. I also appreciate the help of Alfredo Pérez, Pere Olivella, Francisco Ramón Navarro, and Carlos González Santamaría (who offered suggestions and encouragement during the first folding process of the book's figures), as well as the help of the aforementioned drafters. I would also like to specifically thank Nicolas Terry for the magnificent and selfless distribution of my models through his website: http://design.origami.free.fr and his contribution to the folding process of some models.

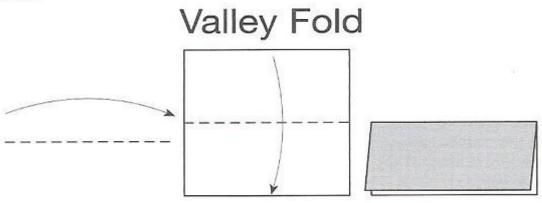
I hope that your figures turn out well.

Kind regards, Manuel Sirgo

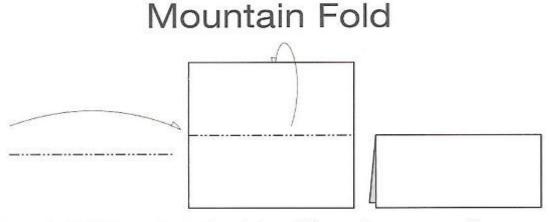
# SYMBOLS

For experienced paper folders, origami symbols are a rich and powerful language, so they do not need any additional explanations. Fortunately for beginners, the meaning of the majority of symbols is so obvious that no additional comments are needed.

In this section, you will find explanations for the basic symbols used throughout the book. We suggest that you spend a few minutes studying them before you start to fold your figures.

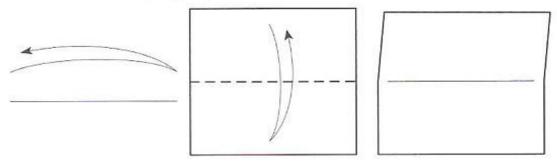


A Valley Fold is indicated by a dashed line and an arrow with a symmetric head that shows how the paper will be folded. In this example, the paper is folded in the middle and the top side joins the bottom side.



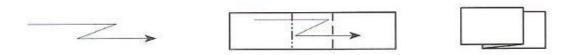
A Mountain Fold has a dashed and dotted line and an arrow with an asymmetric head that shows how the paper will be folded. In general, when these types of arrows are shown, the paper should be folded away from you, which is the opposite of a Valley Fold.

## Fold and Unfold



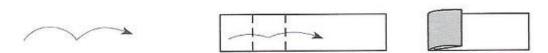
Fold the paper the same way as a Valley Fold. After folding it, unfold it to its original position. The only thing that will change is that there will now be a crease on the paper.

# Layered Fold

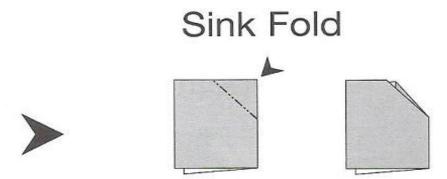


This fold consists of a Valley Fold and a Mountain Fold. The arrow, as usual, will show the movement of the folding and give us an idea of the final result, shown sideways.

### Accordian Fold



This process includes two or more consecutive folds on the same side. They can be Valley or Mountain Folds, since the process is the same.



Press in the corner until it is folded under the upper layer. The model should still be flat after this is done.









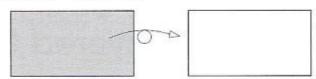




Rotate the model in the direction shown by the arrows in the symbol. The rotation angle is written inside the symbol.

### Turn Over





The symbol is made up of an arrow with a loop, which indicates that we should turn the paper over, putting the side that was facing up, down on the table.

## **Enlarged View**



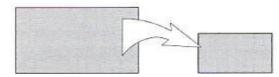




This means that the next step of the diagram is drawn on a larger scale, so that it can be more easily understood.

### Reduced View

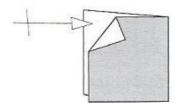




This arrow is usually used after an enlarged figure has been shown, after the folds have been completed, and we have gone back to the smaller scale view.

## Repeat

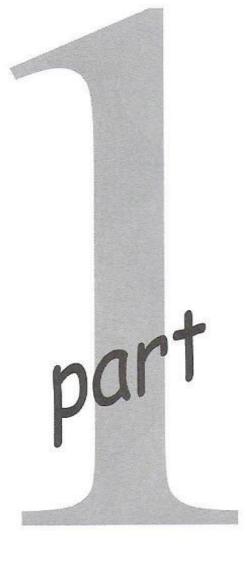






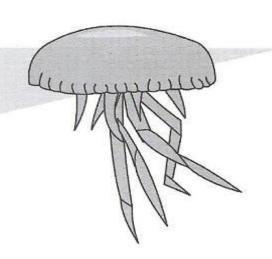
This symbol asks us to repeat the last steps and shows us where and how many times they should be repeated (depending on the number of lines the arrow has).

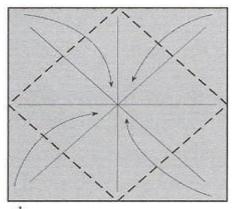
# MARINE INVERTEBRATES

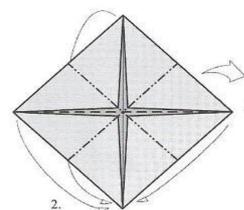


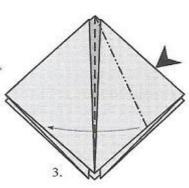
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MARINE INVERTEBRATES

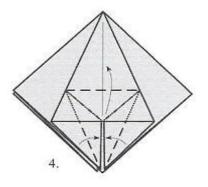


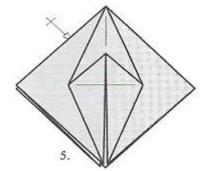


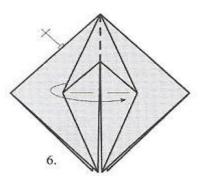


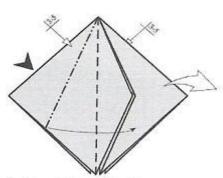


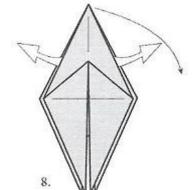
1.

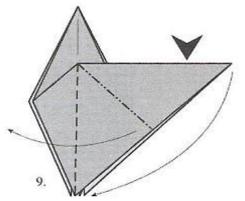




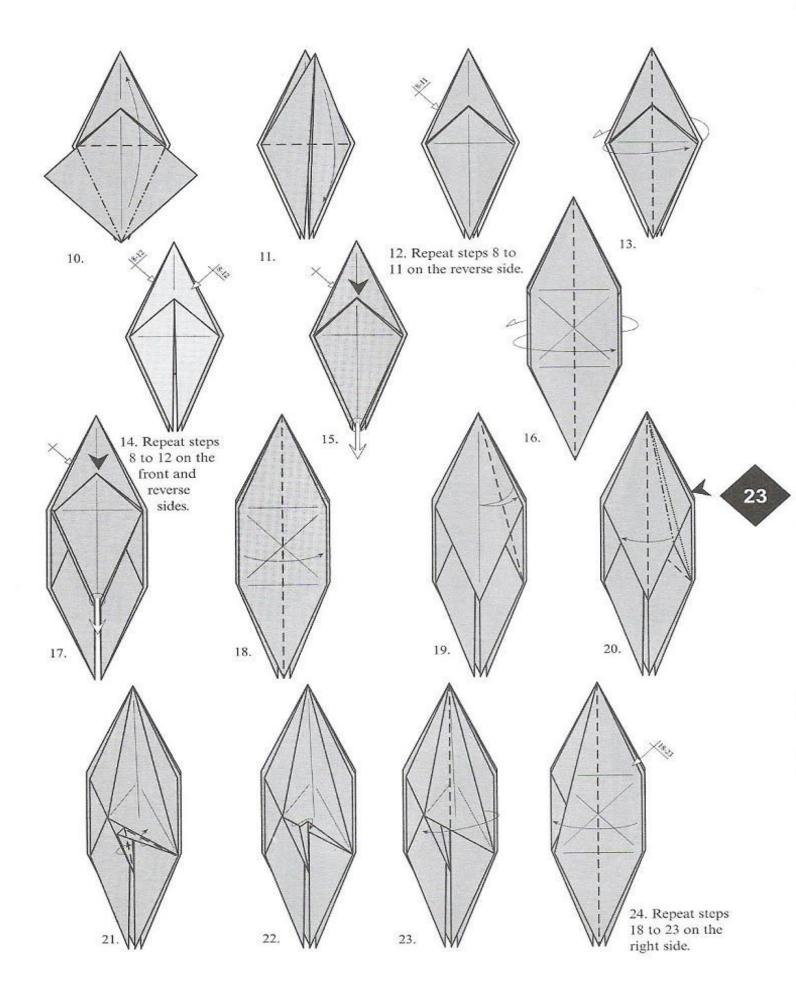


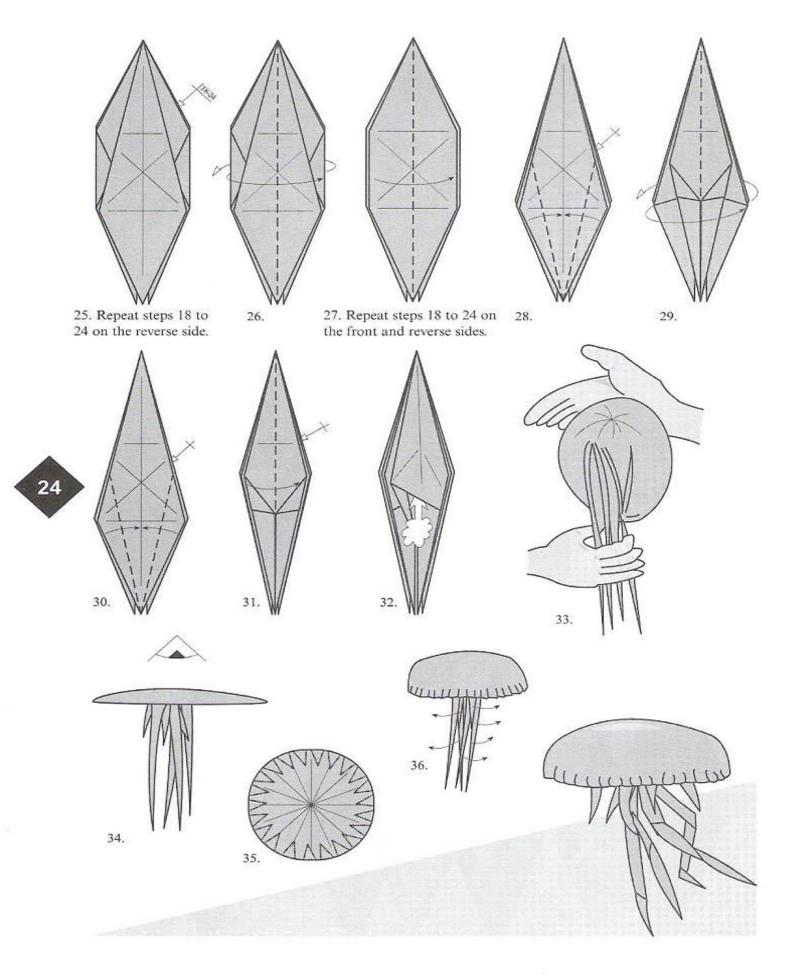




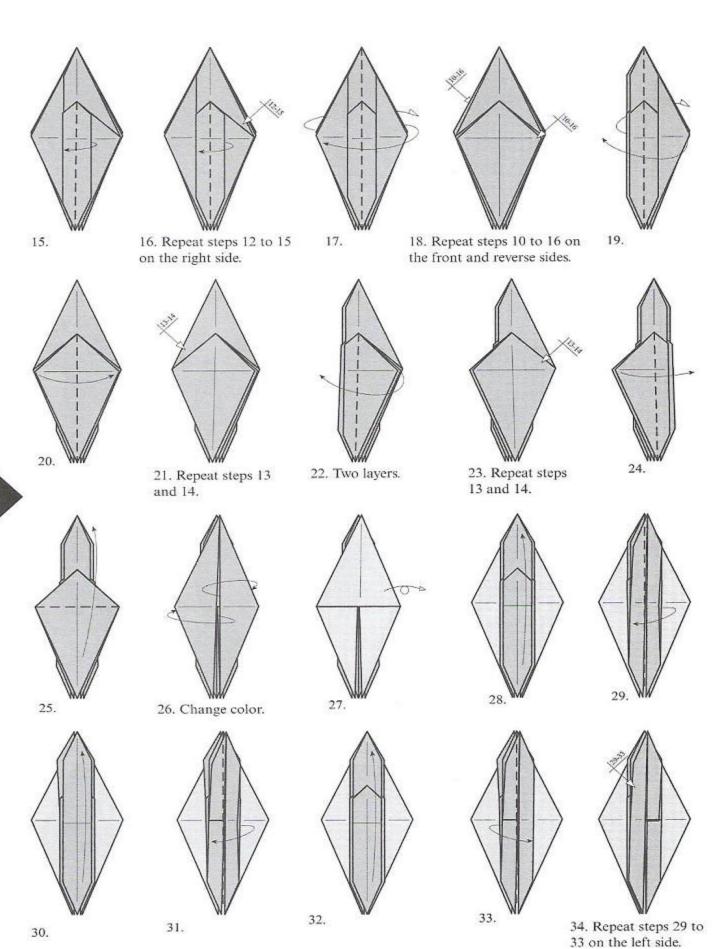


7. Repeat steps 3 to 5 on the front and reverse sides.

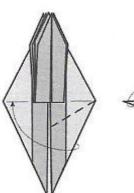


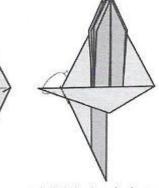


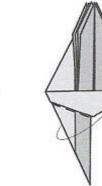


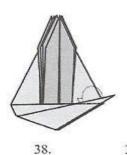


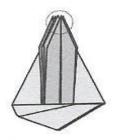








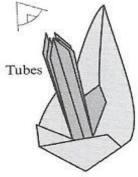




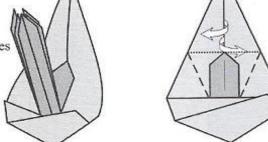
36. Stick the tip into the reverse side pocket.

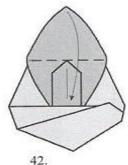
37.

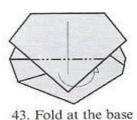
39. Take hold of all the tips and place them in a vertical position.



35.



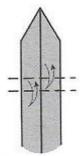




of the tubes.

40. Tubes are not shown on the following steps.

# HOW TUBES ARE FOLDED

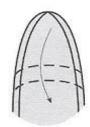






41.

45. Separate.



46. Sink the tube and shape it into a cylinder to form the osculum.



47. Repeat the process for the rest of the tubes, but give them different lengths.



48. Short tubes.

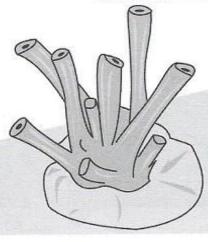


49. Sink the tubes and shape it into a cylinder to form the osculum.

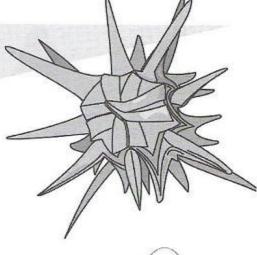


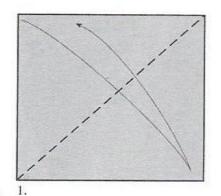
51. The middle tip is similar to smaller tubes.

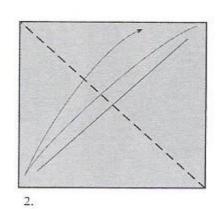


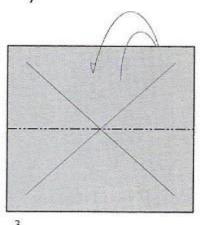


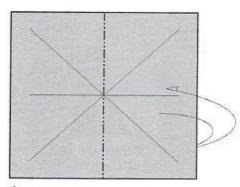
50.

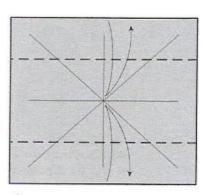


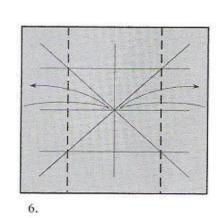


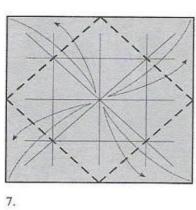


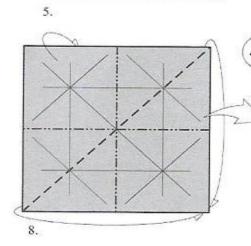


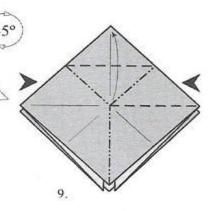


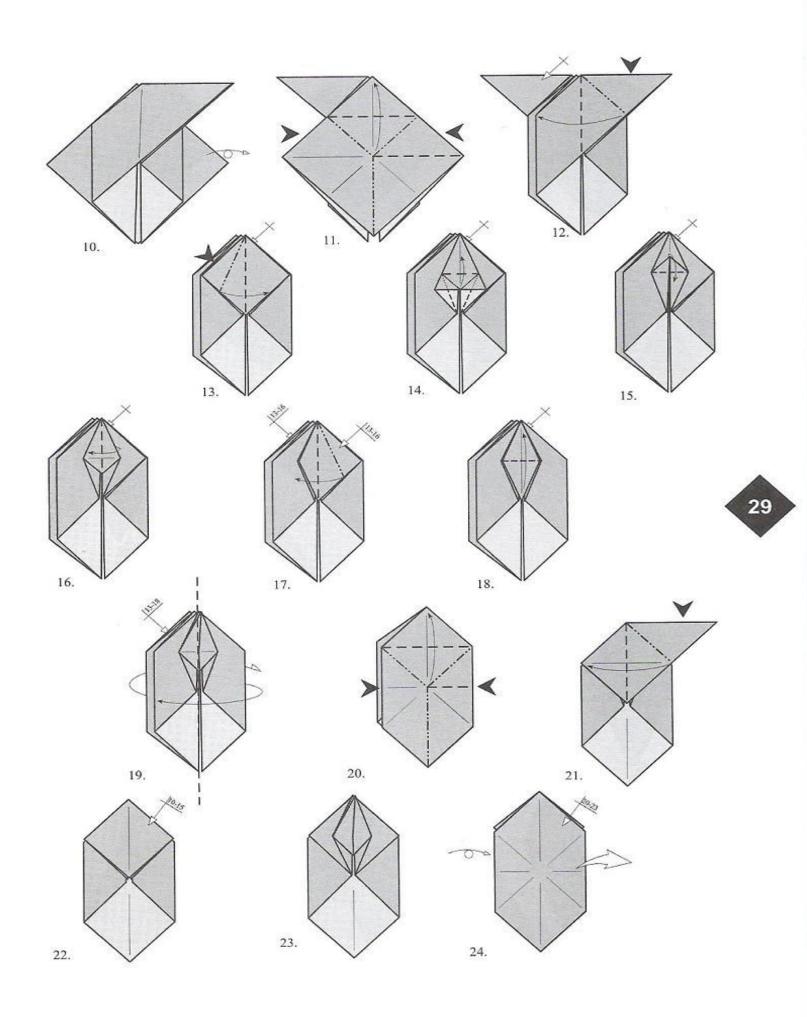




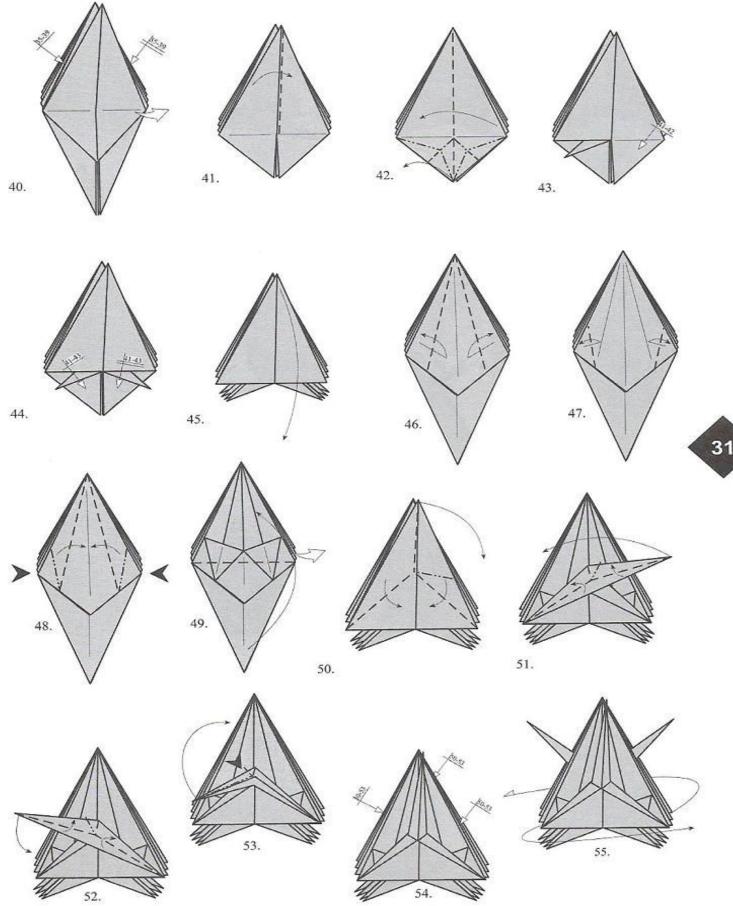




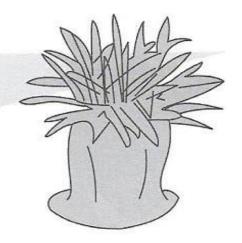


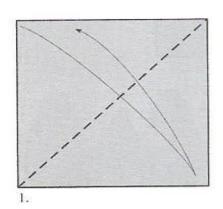


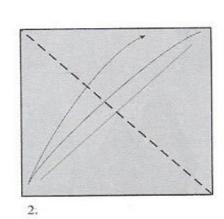


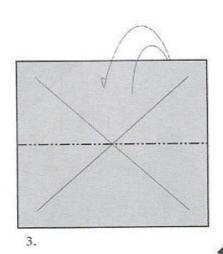


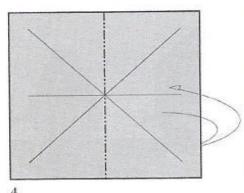
# Anemone

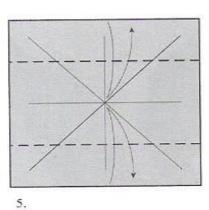


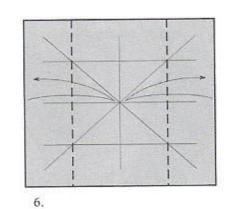


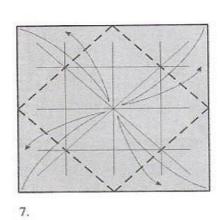


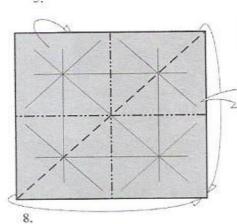


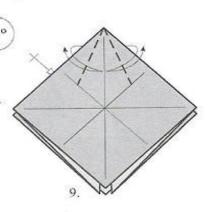


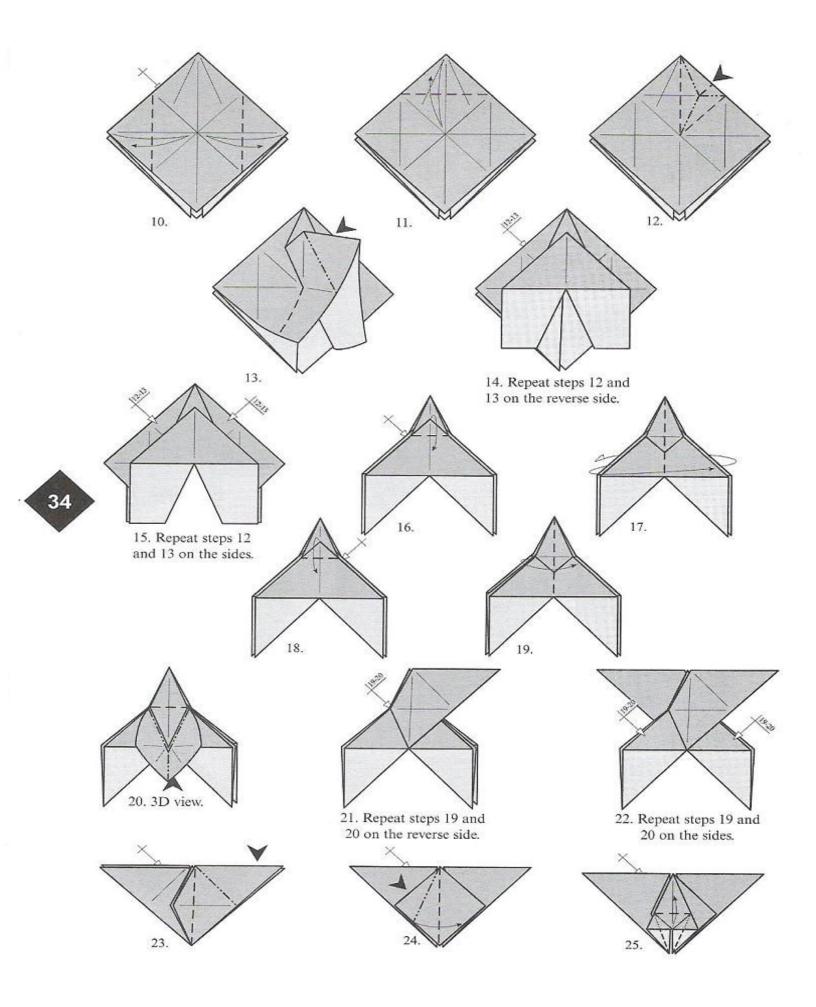




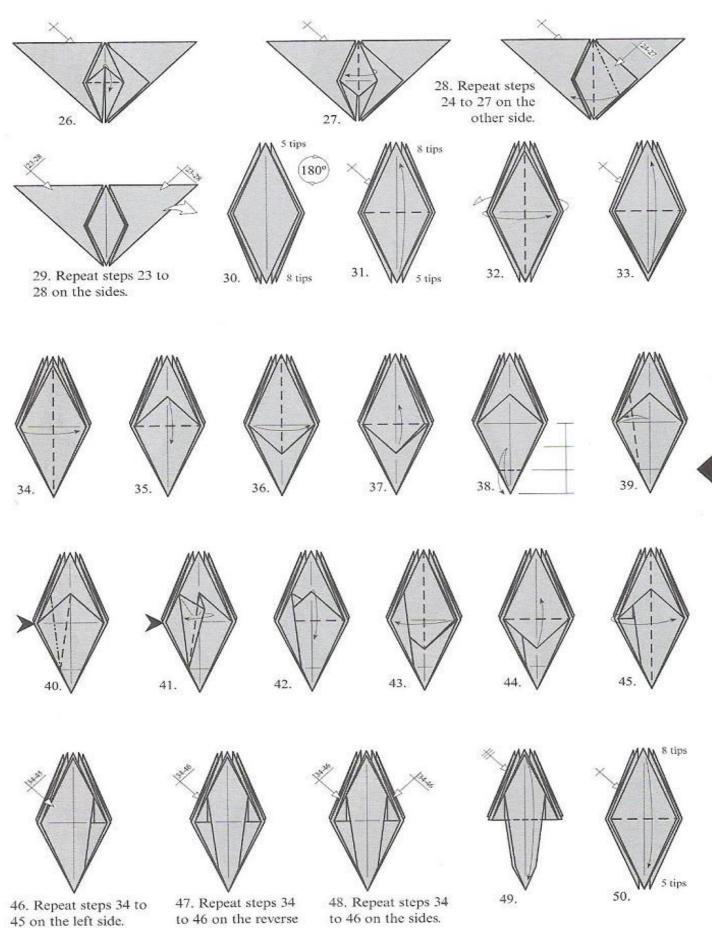




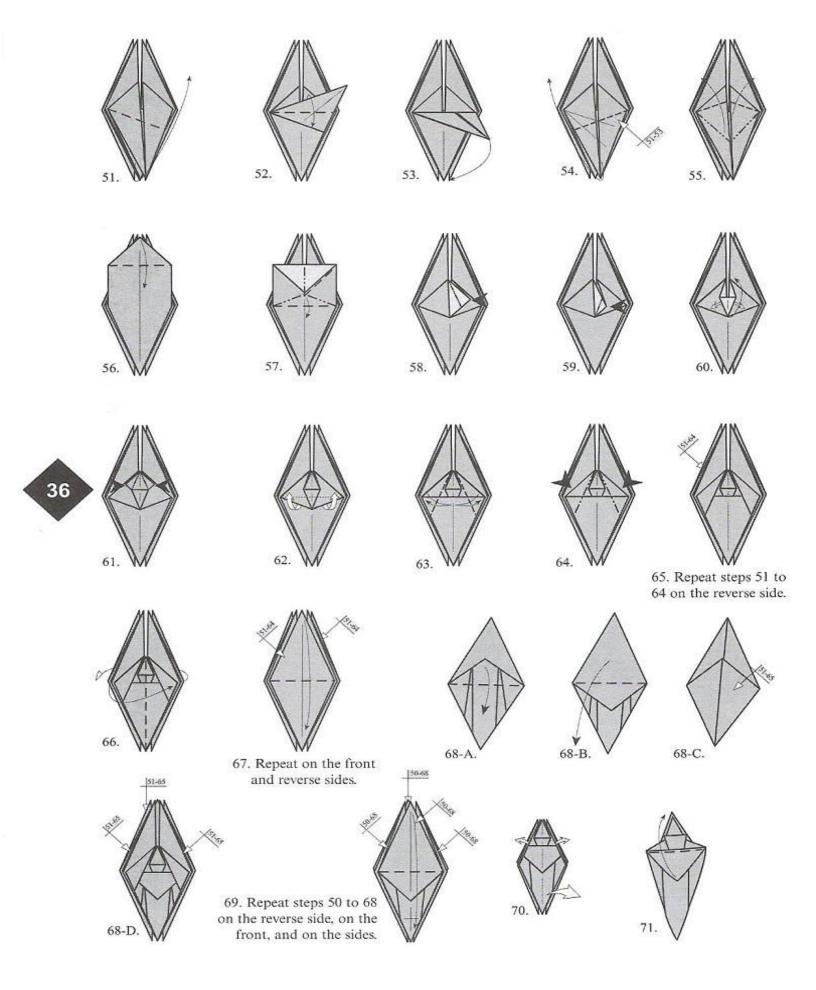




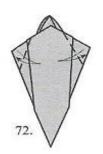


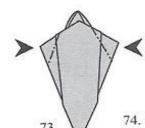


side.

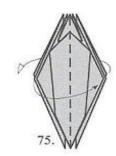


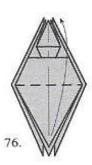






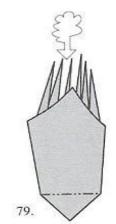
74. Repeat steps 70 to 73 on the reverse side and on the sides.





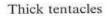






#### HOW TO FOLD THE TENTACLES

Simple tentacles



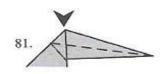
Flat tentacles

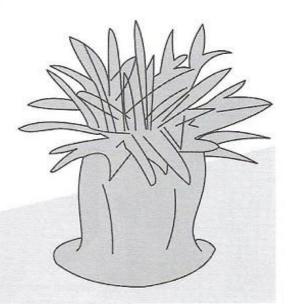






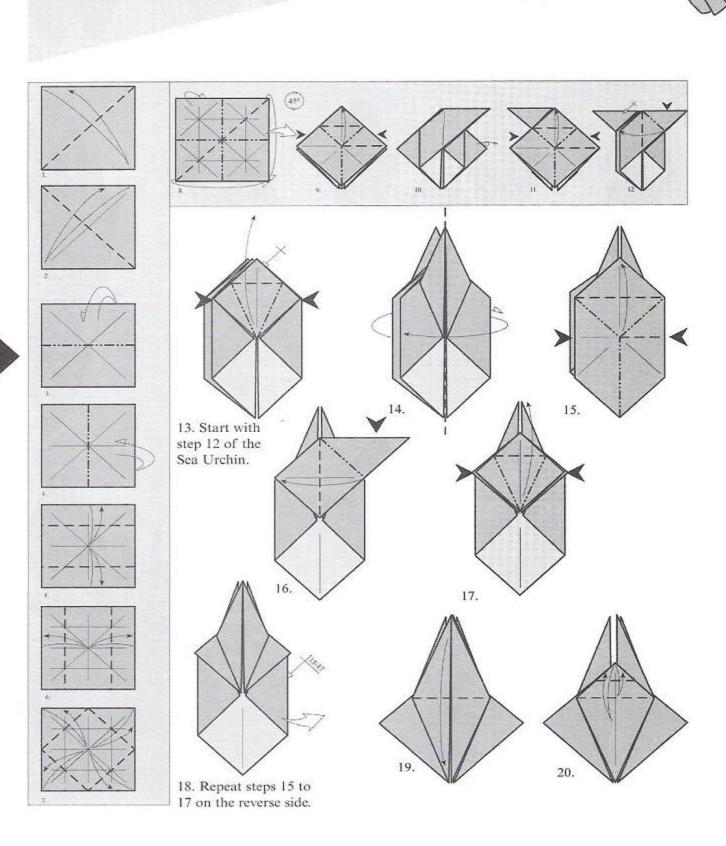
83. Double rabbit ear.

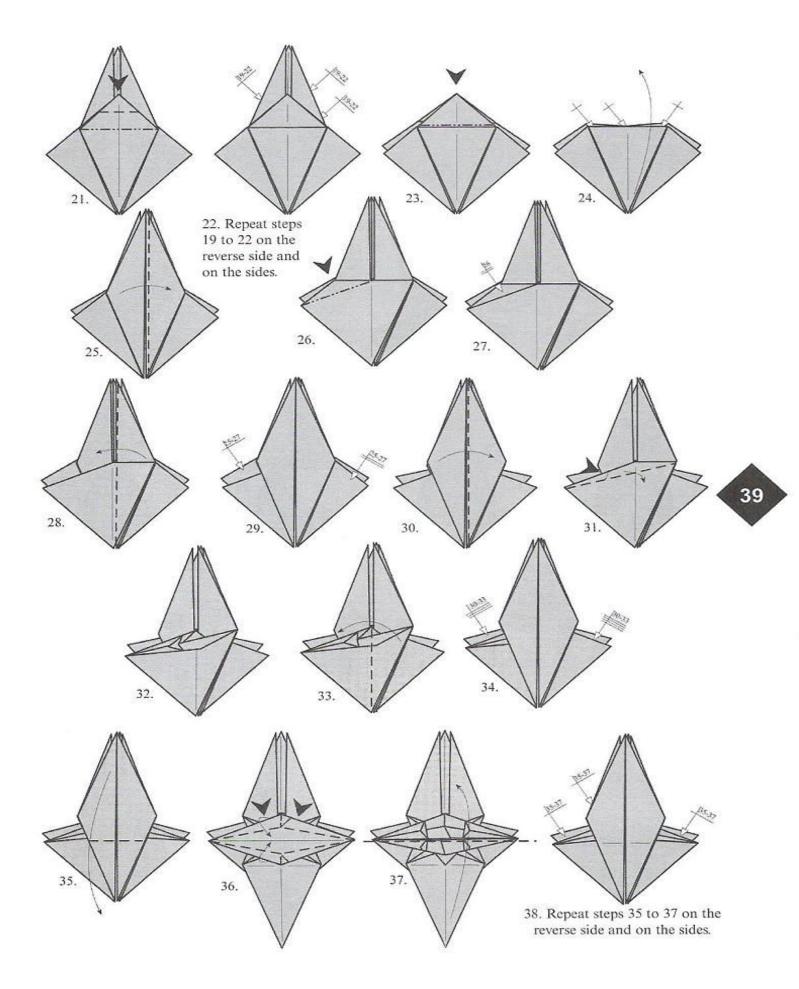


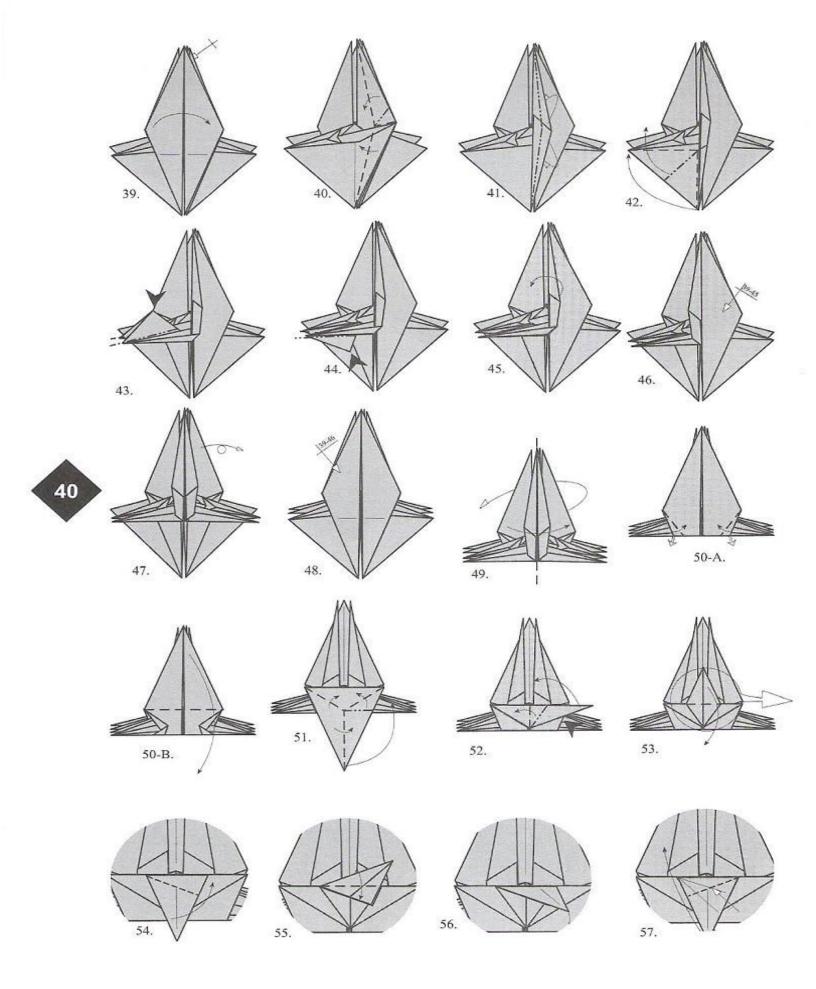


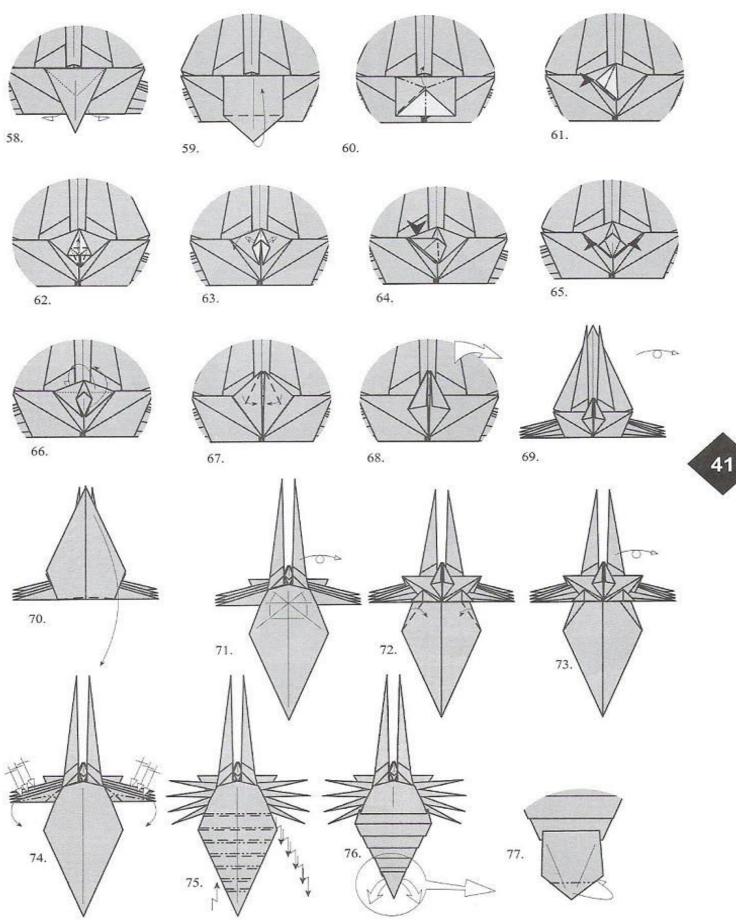
38

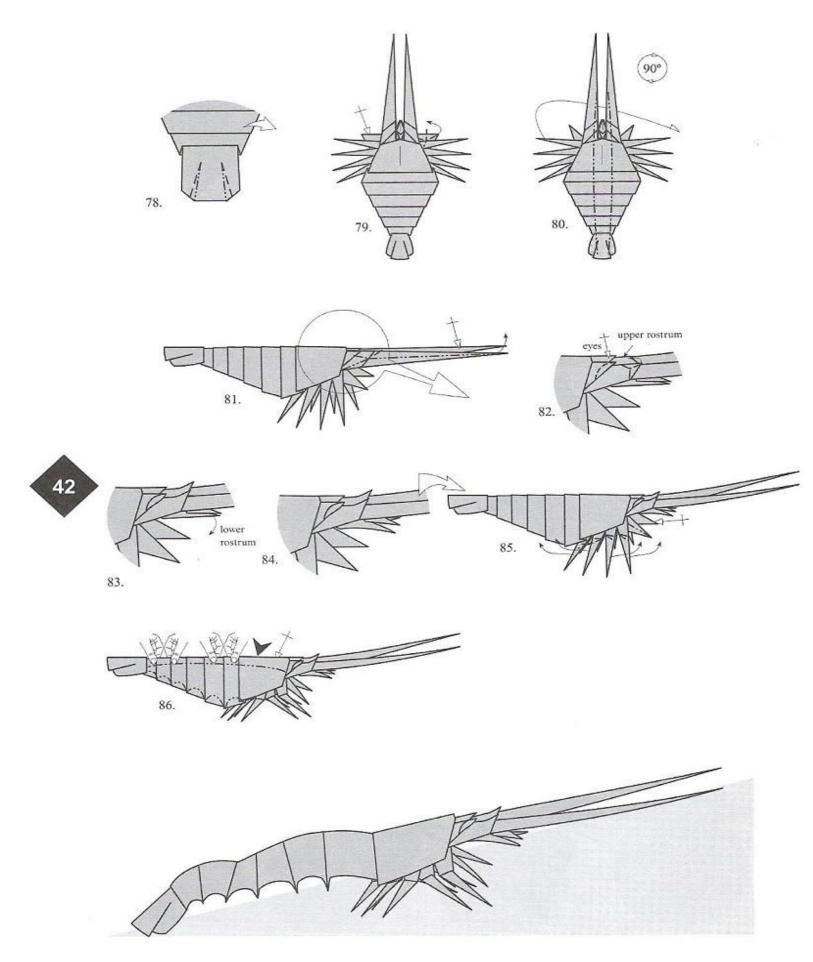
### Lobster











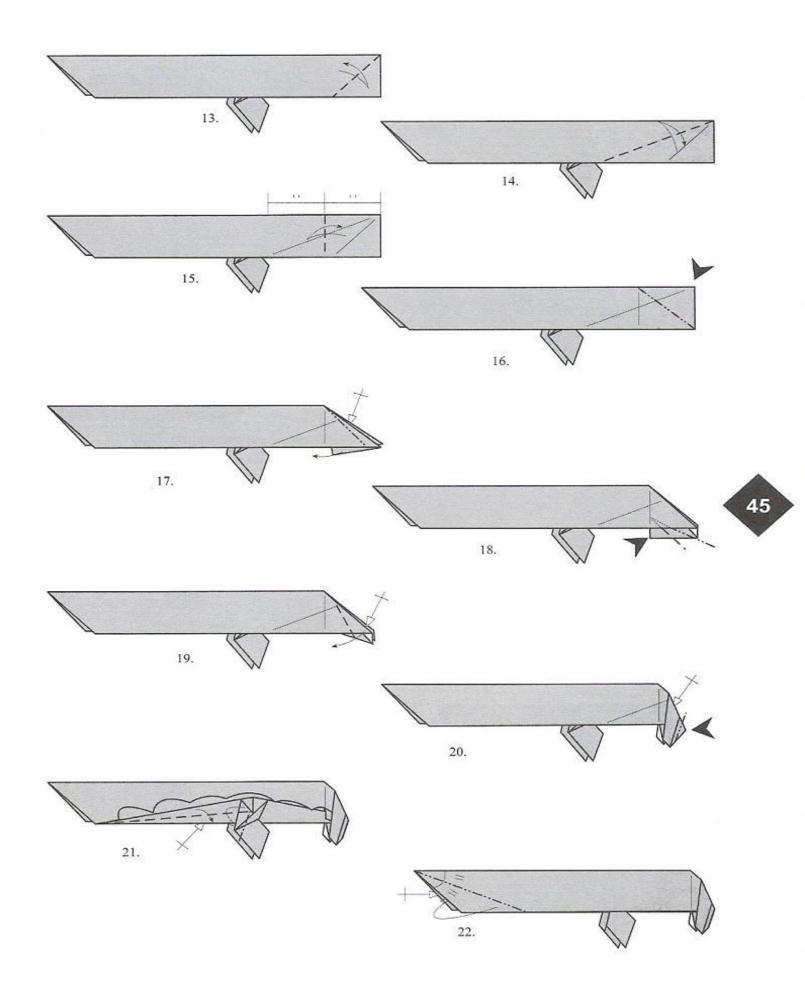
MAMMALS

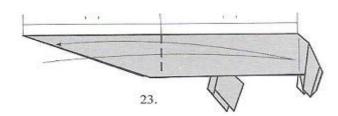


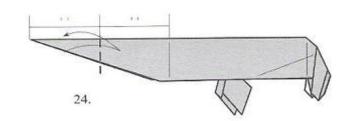
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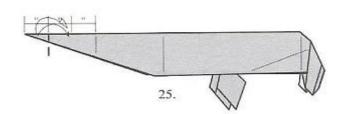
MAMMALS

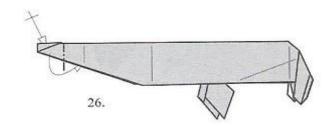
## Sea Lion 2. 1, 5. 10. 12. 11.

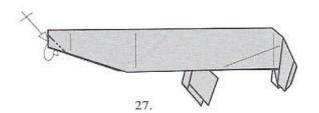


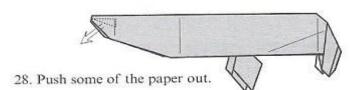


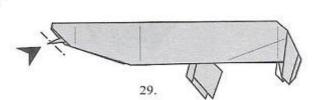


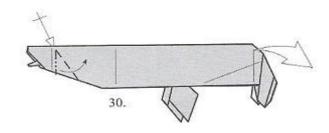


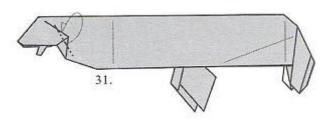


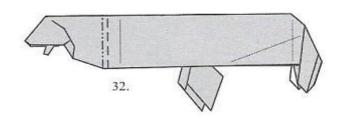


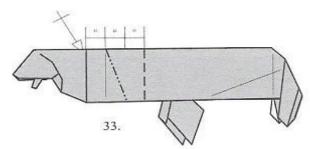


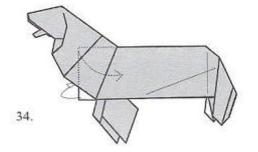


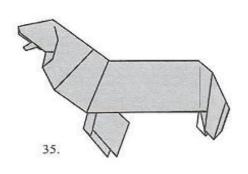


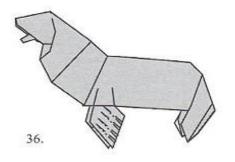


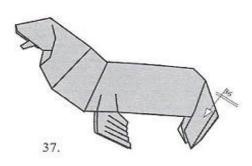


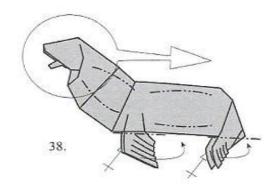


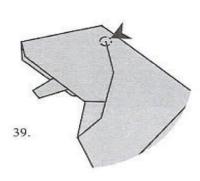


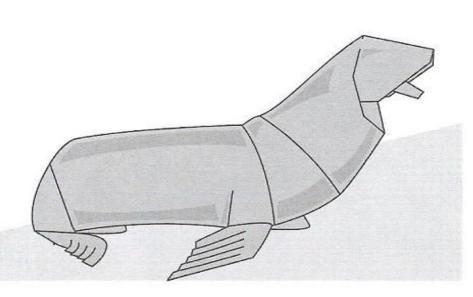




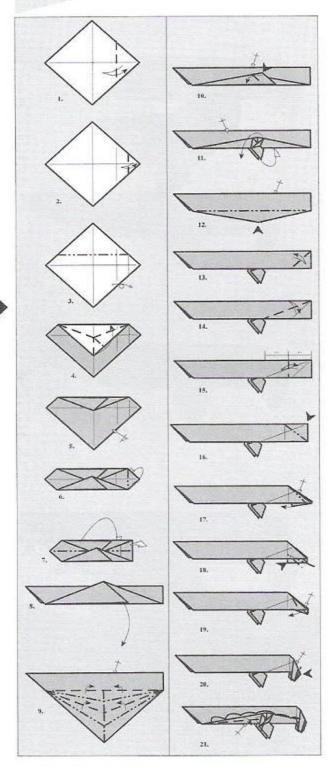


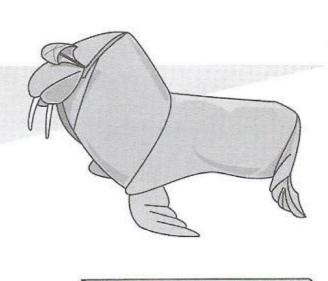


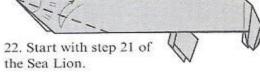


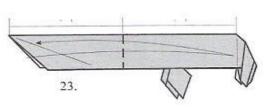


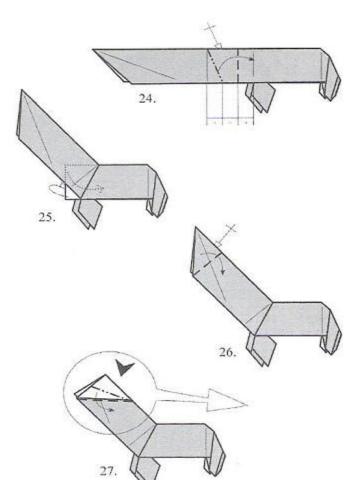
### Walrus

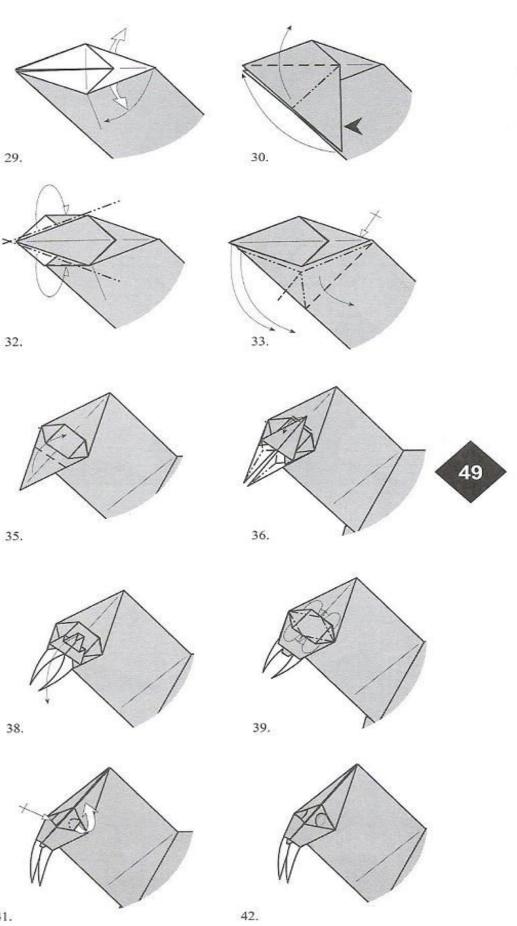












40.

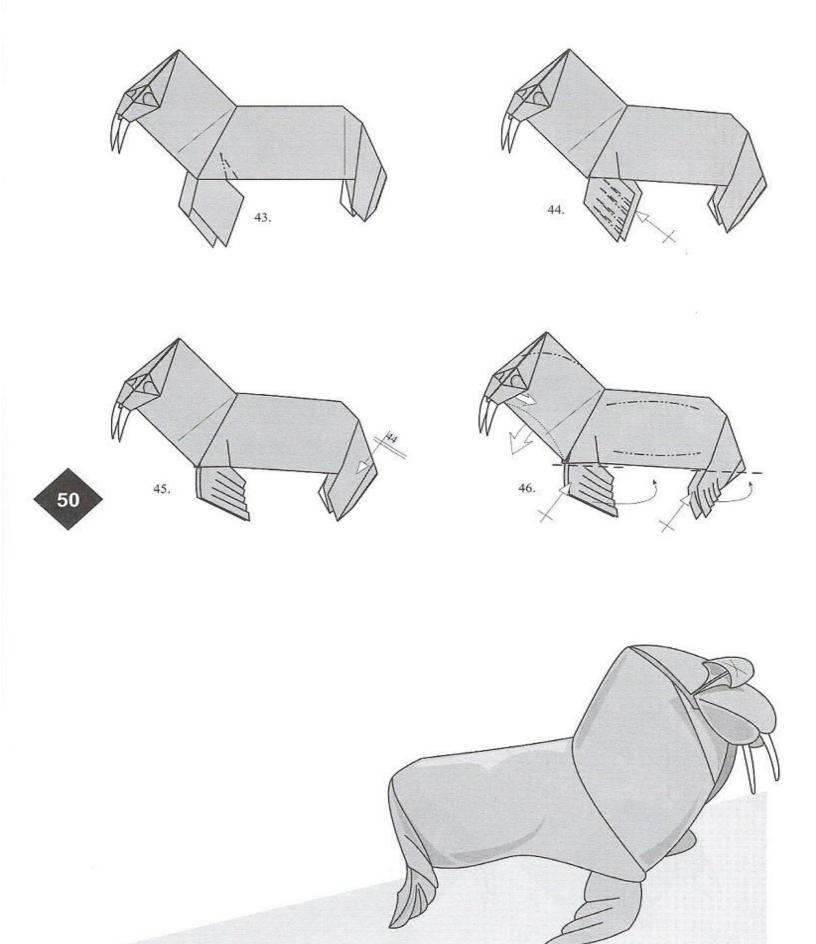
28.

31.

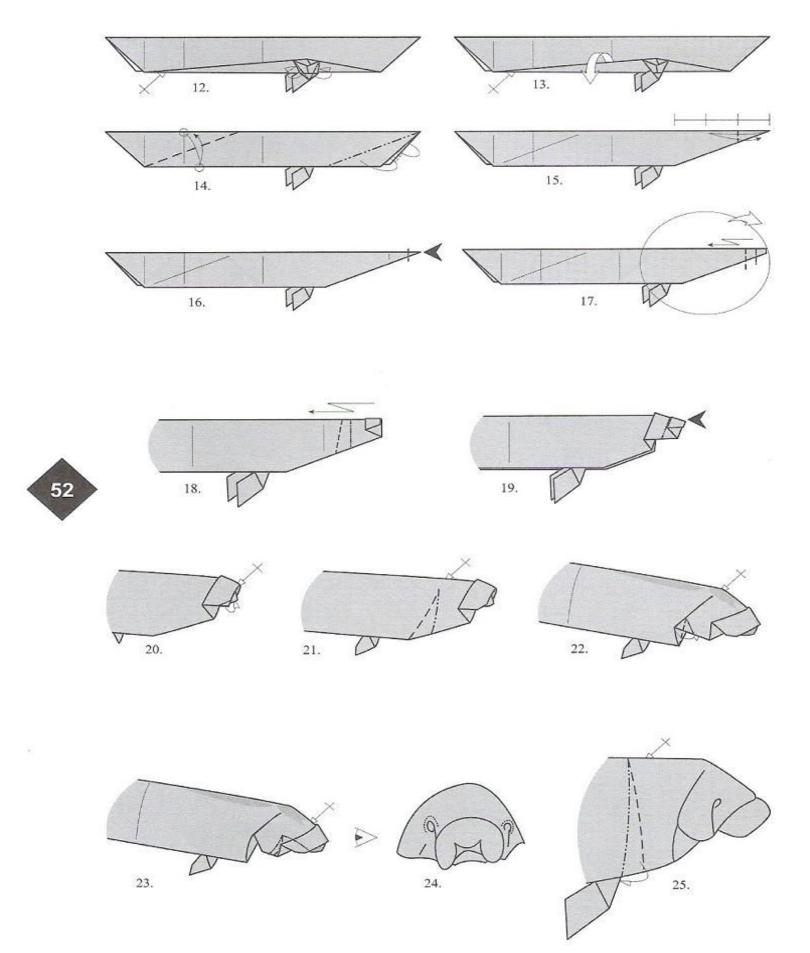
34.

37.

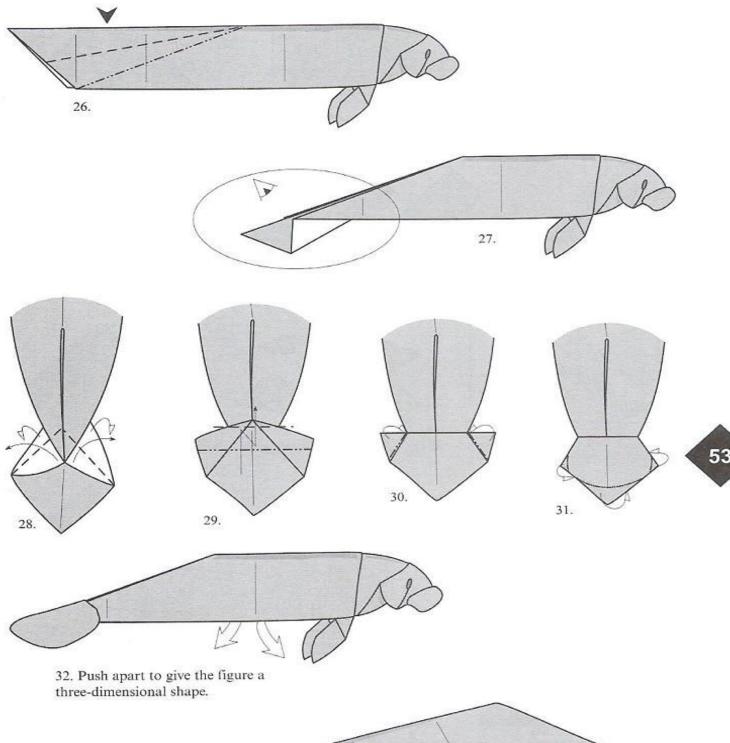
41.

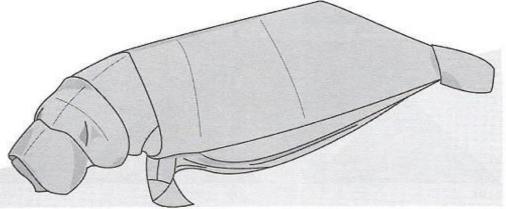


# Manatee 2. 1. 11. 10.

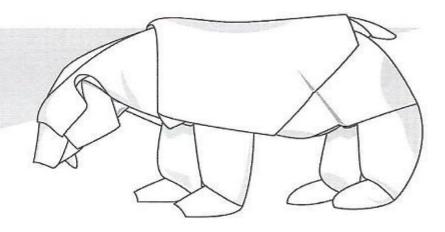


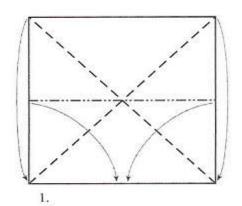


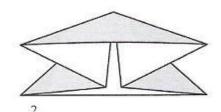


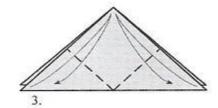


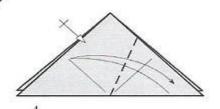
### Polar Bear

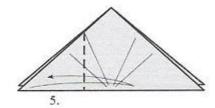


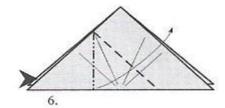


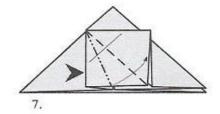


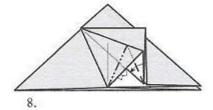


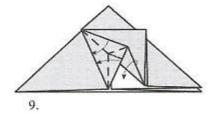


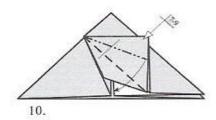


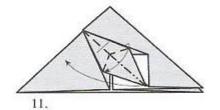


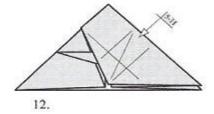




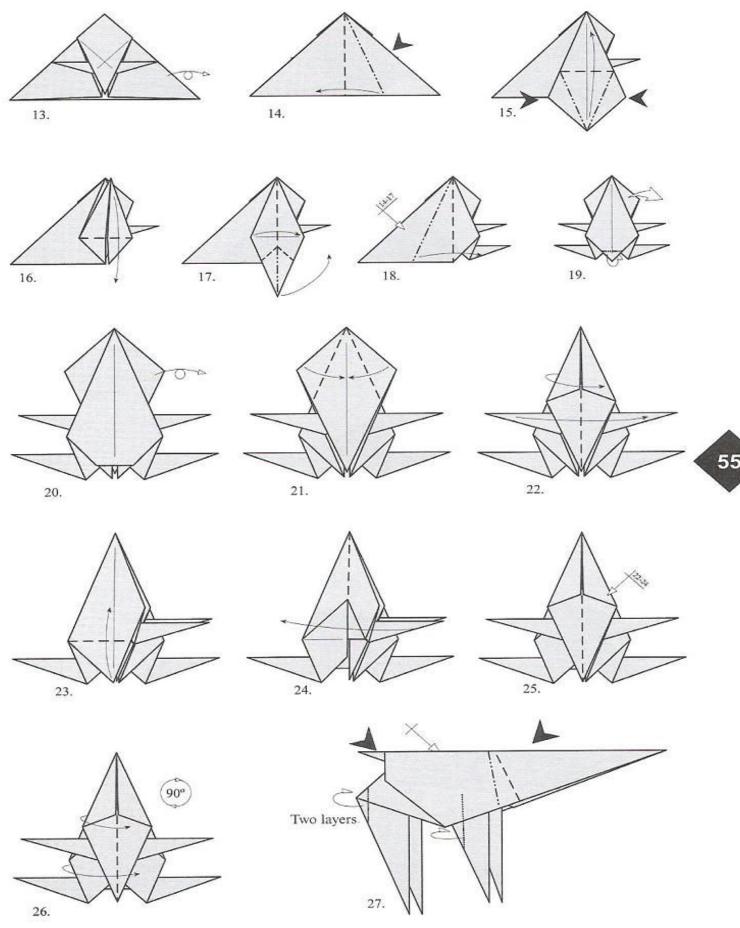




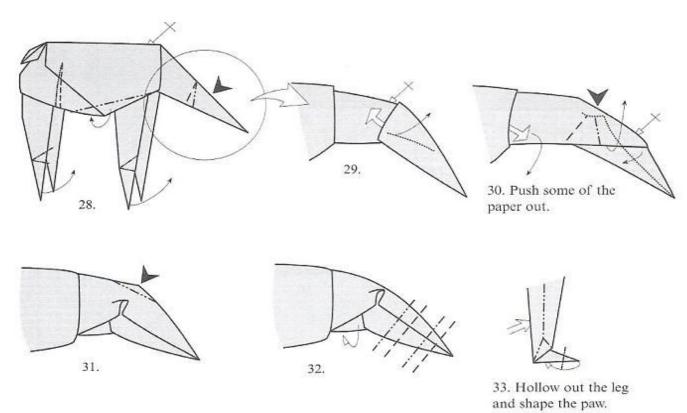




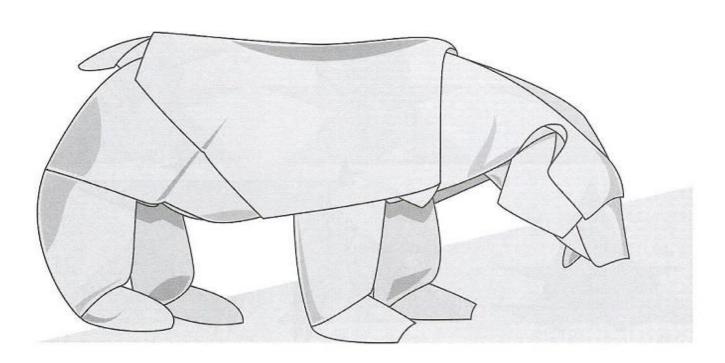












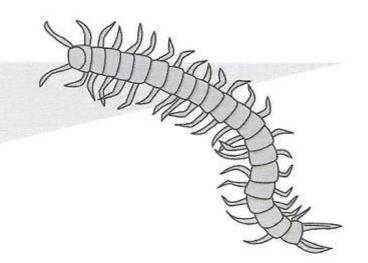
INSECTS

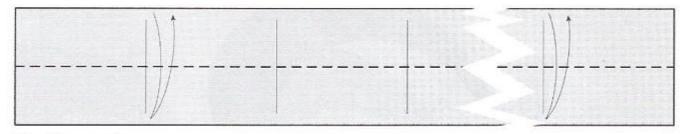
part

57

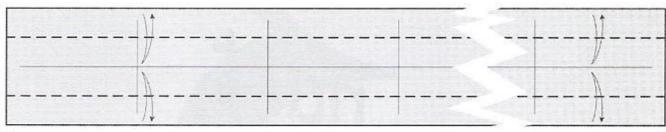
INSECTS

### Centipede

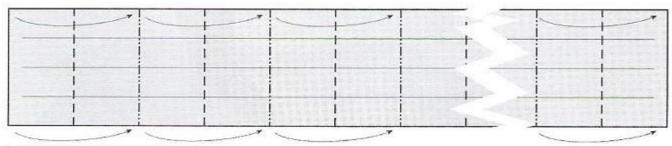




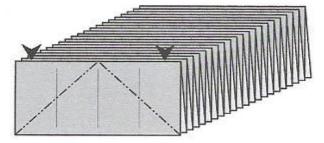
1. 1 x 21 rectangle.



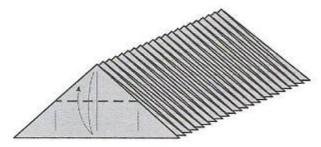
2.



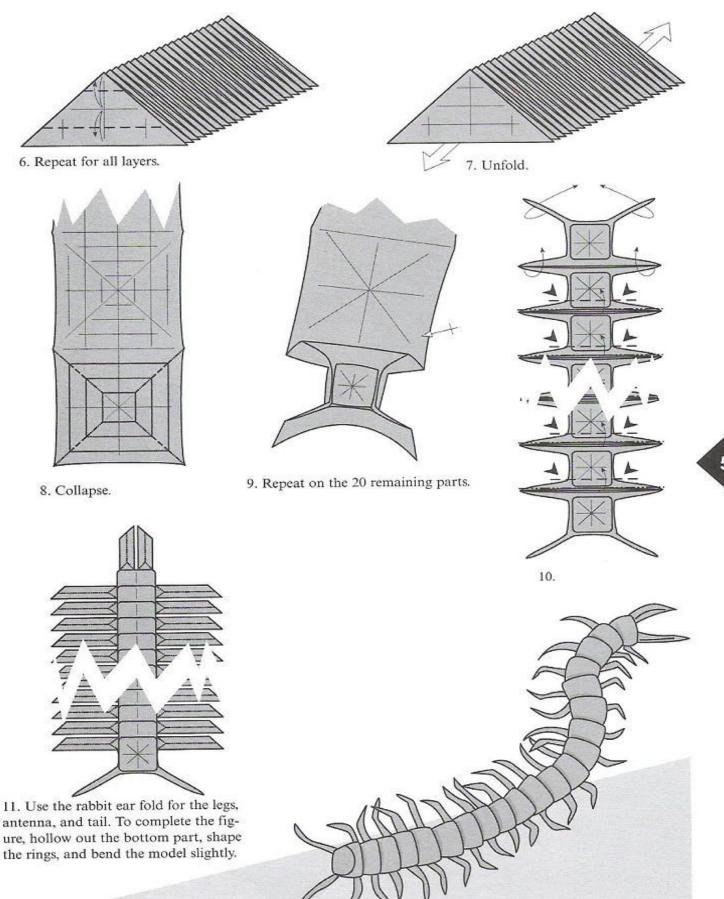
3. Fold to resemble the shape of an accordion.

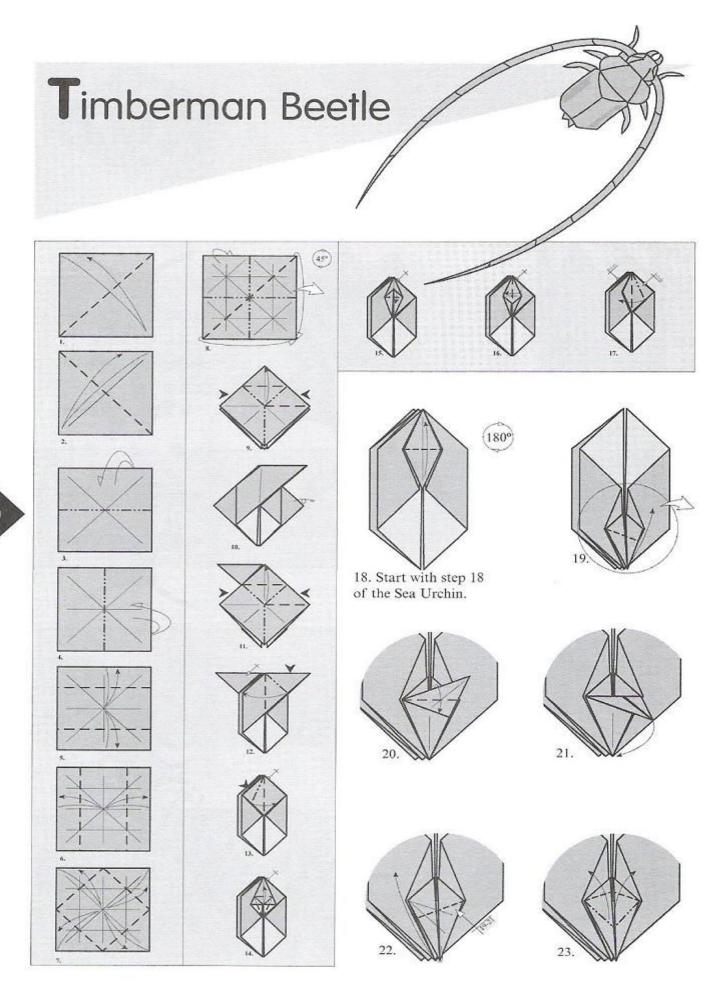


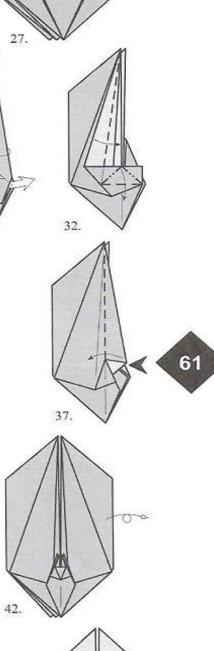
4. Repeat for all layers.

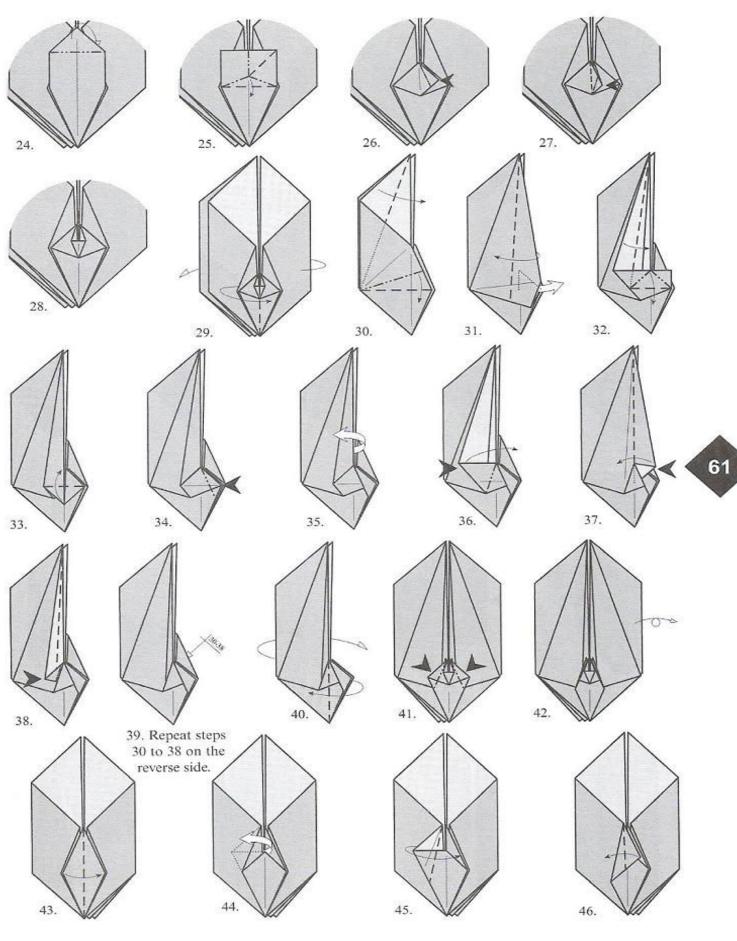


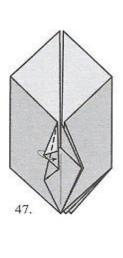
5. Repeat for all layers.

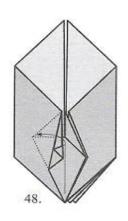


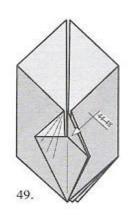


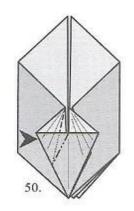


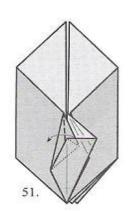


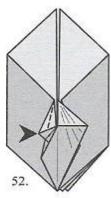


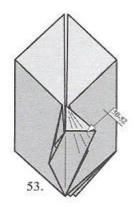


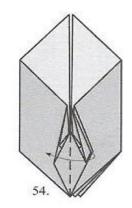


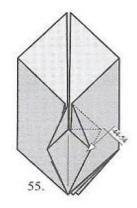


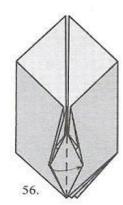


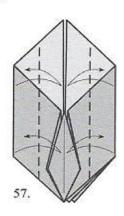


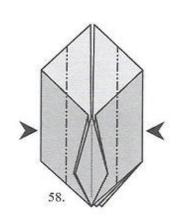


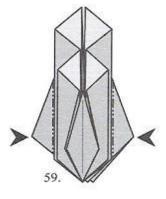


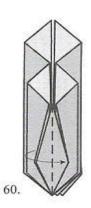


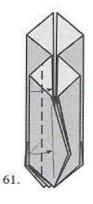




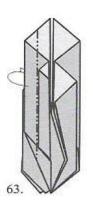


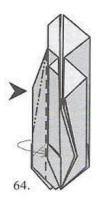




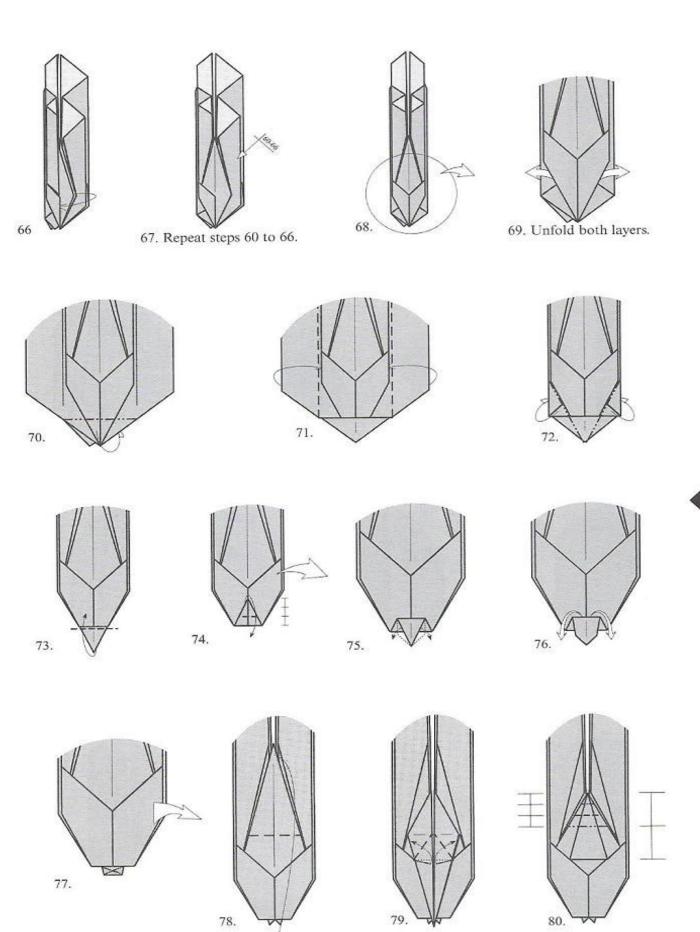


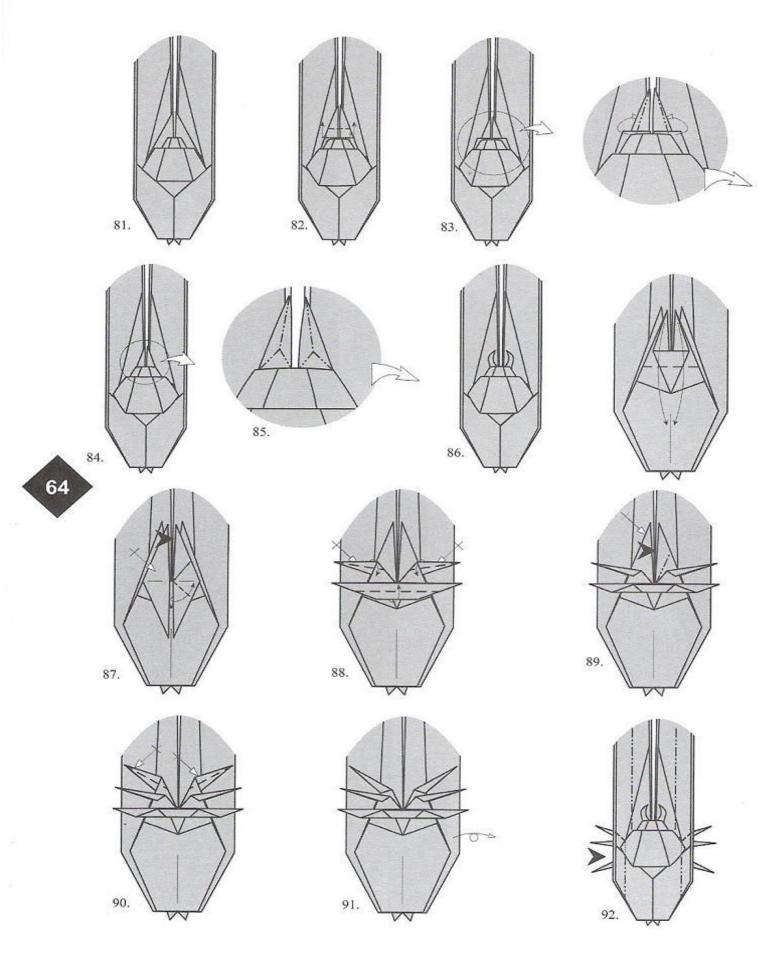


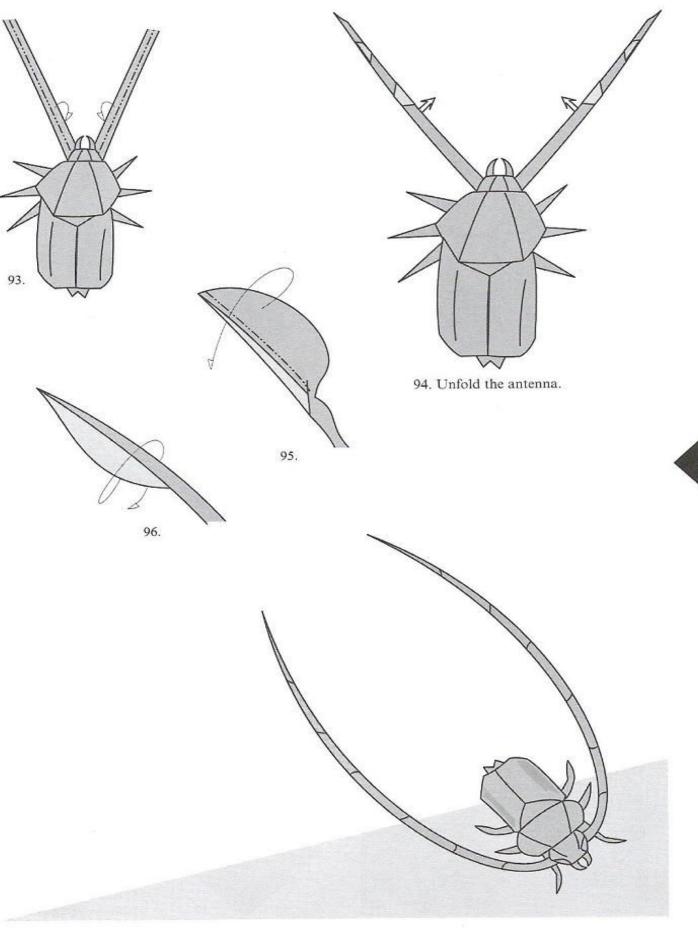




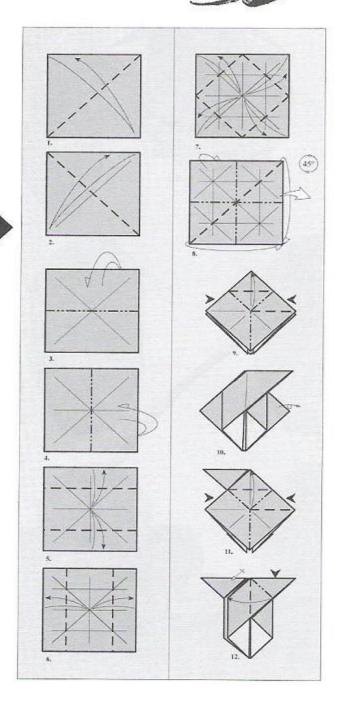


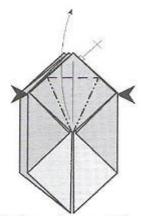


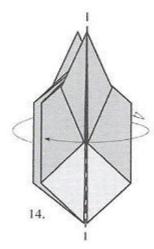


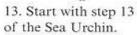


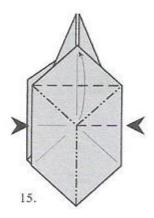
### Harlequin Beetle (Male)

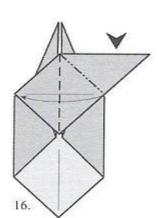


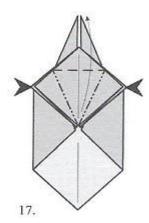


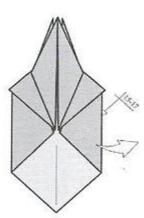




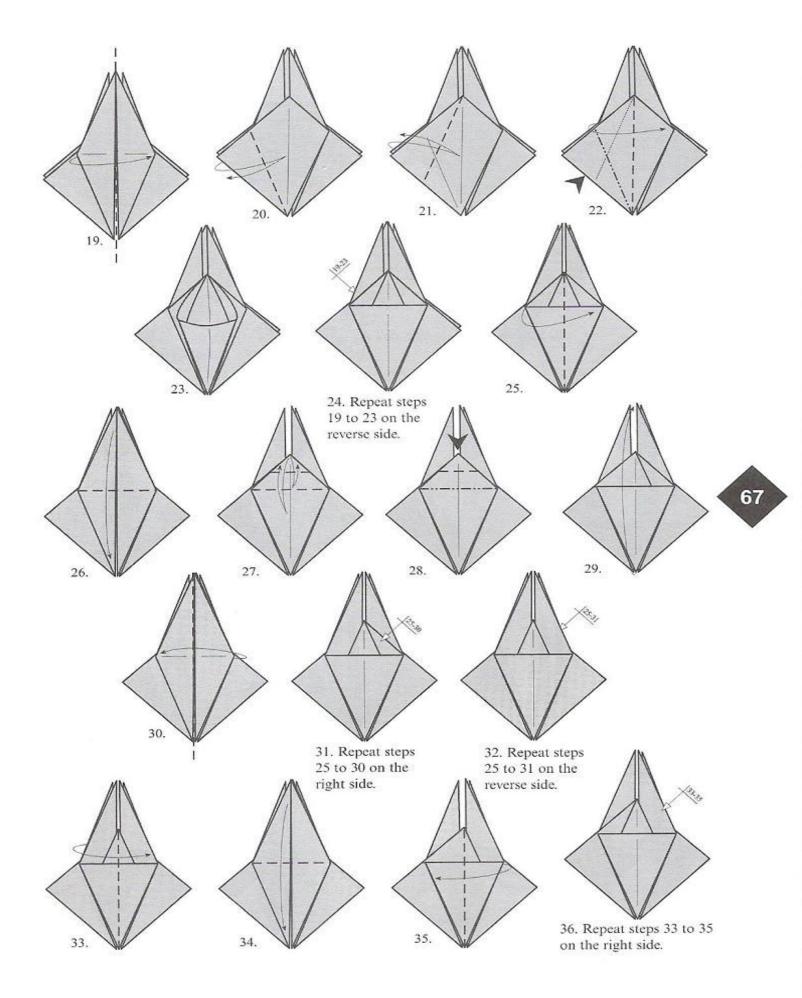


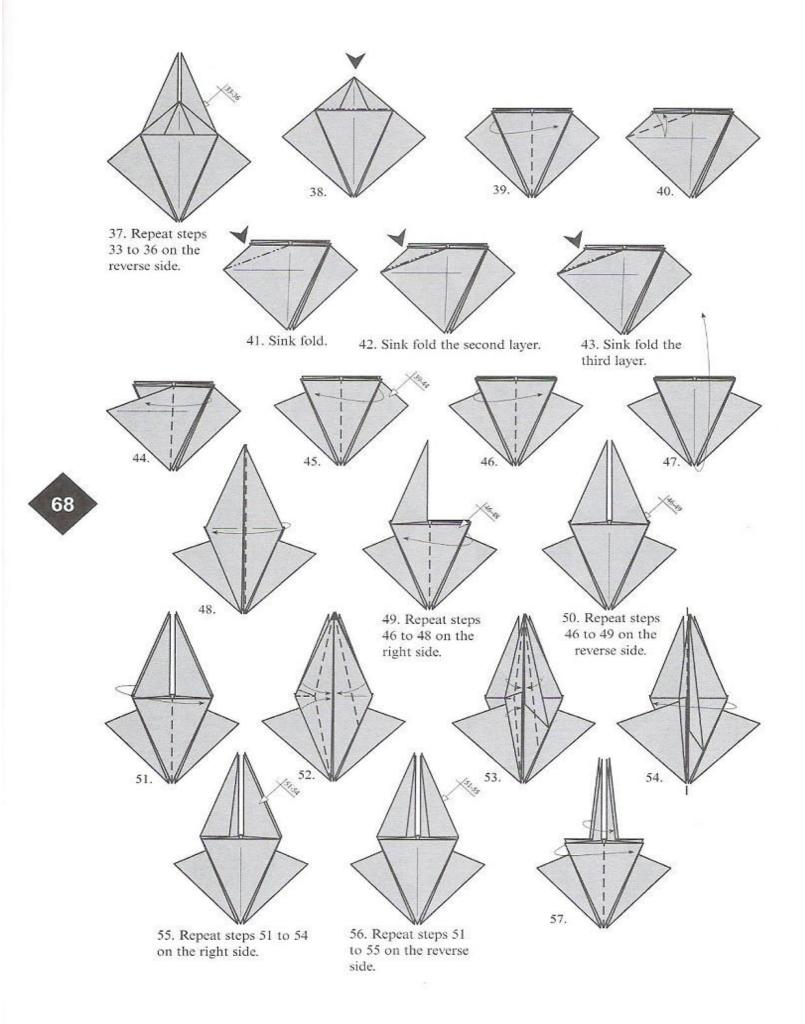


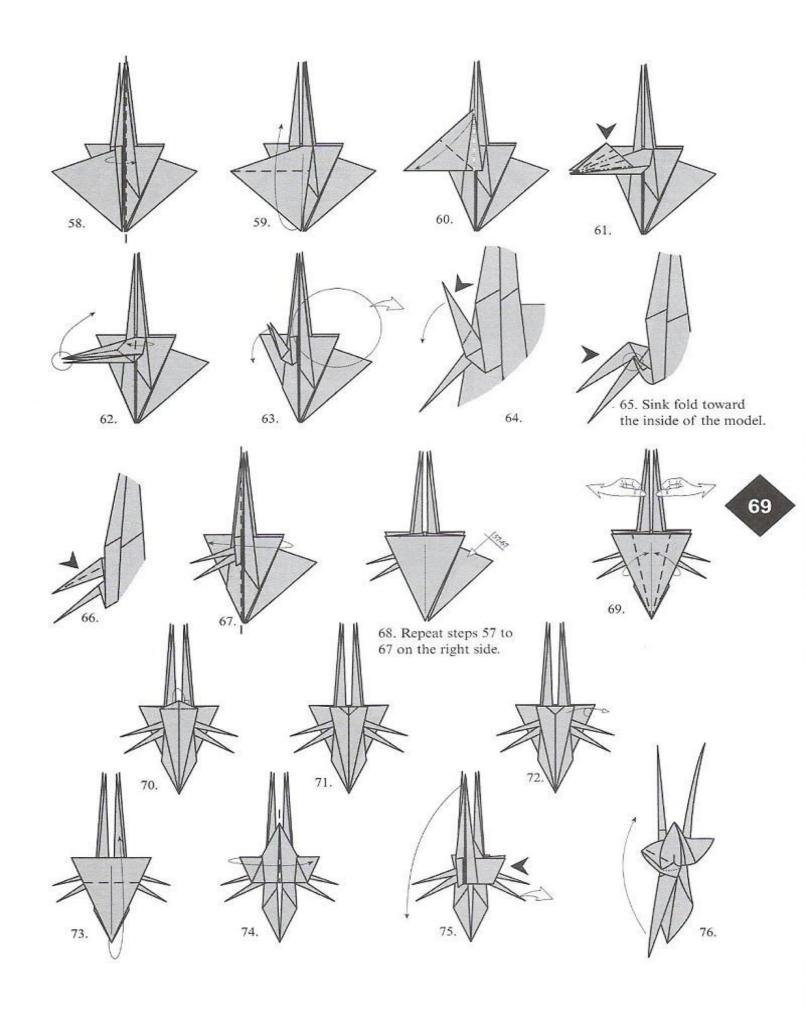


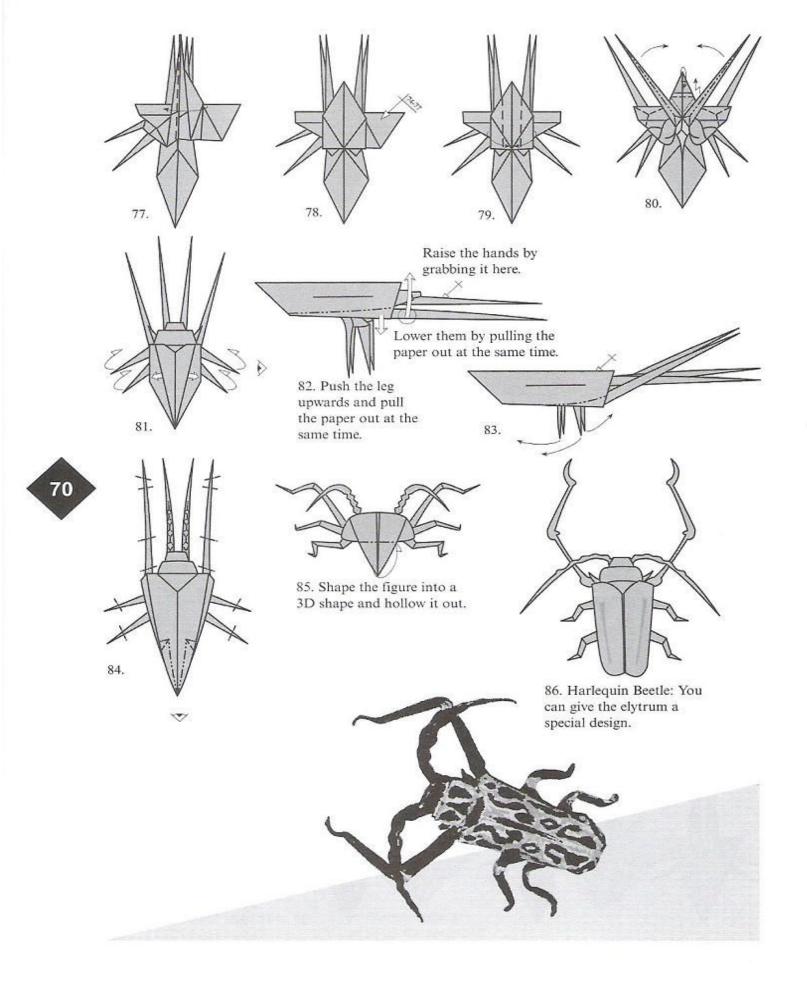


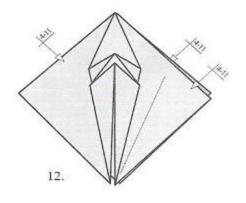
18. Repeat steps 15 to 17 on the reverse side.

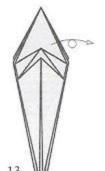




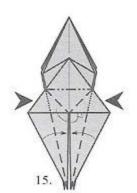




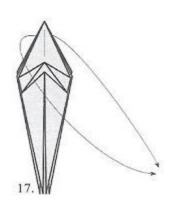


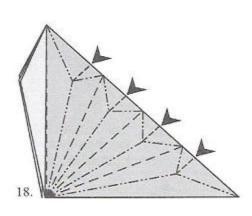




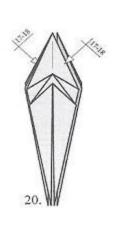






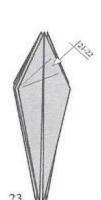






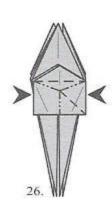




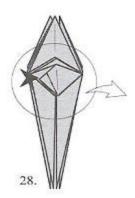




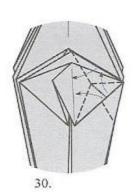




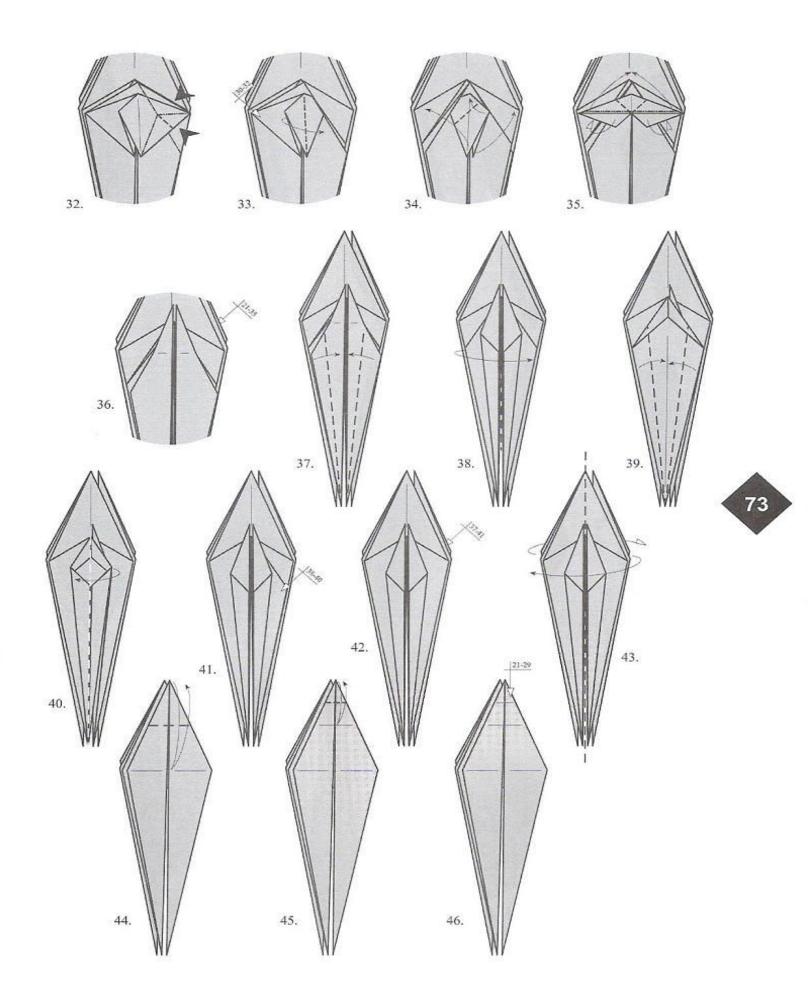


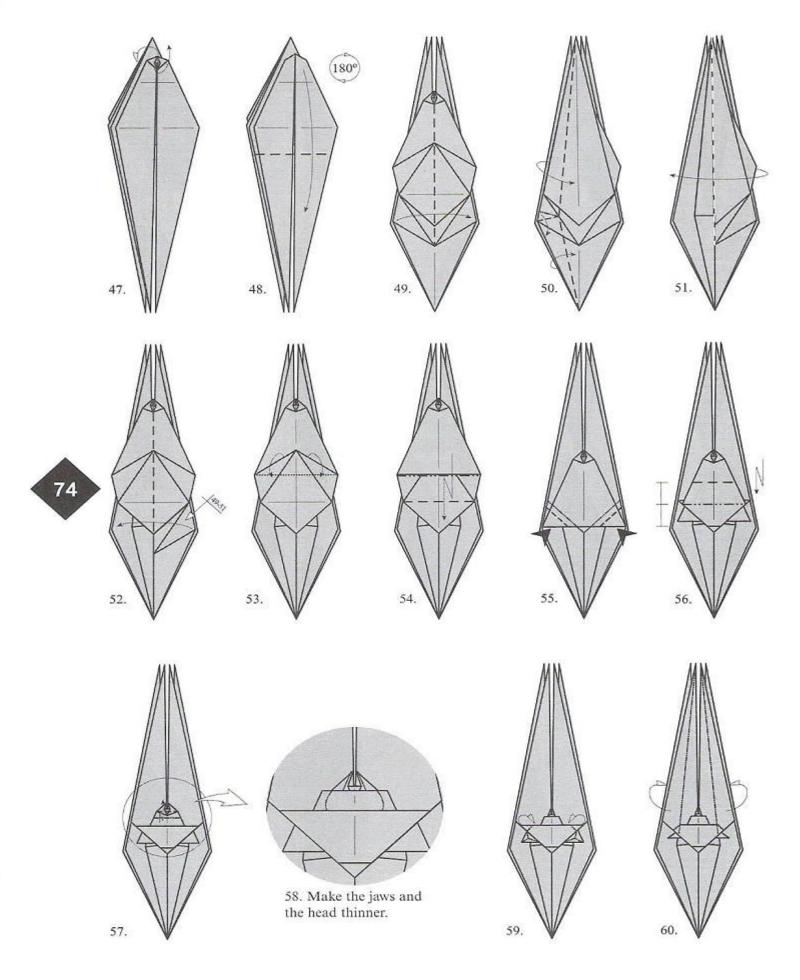


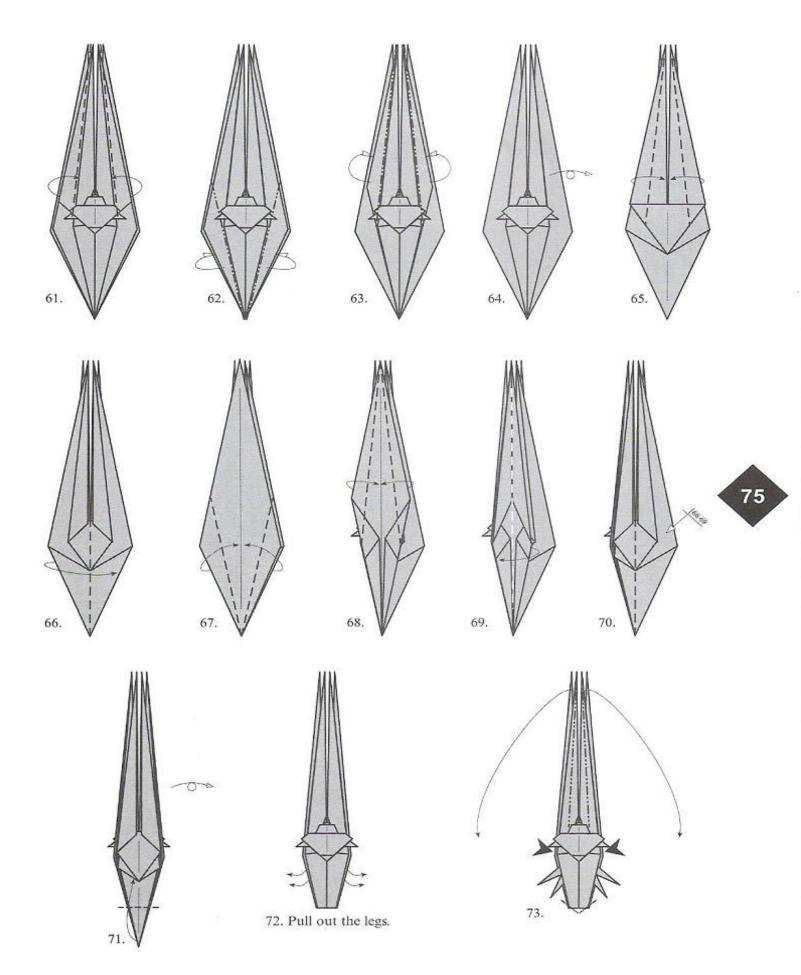


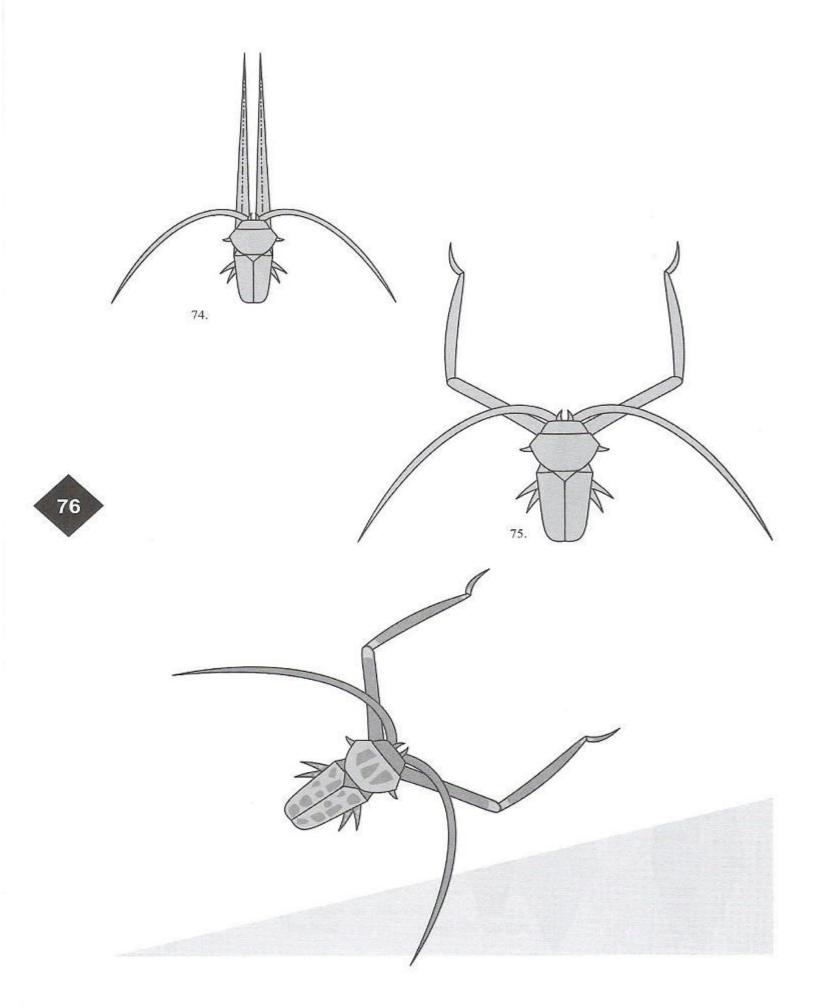




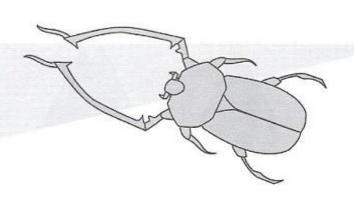


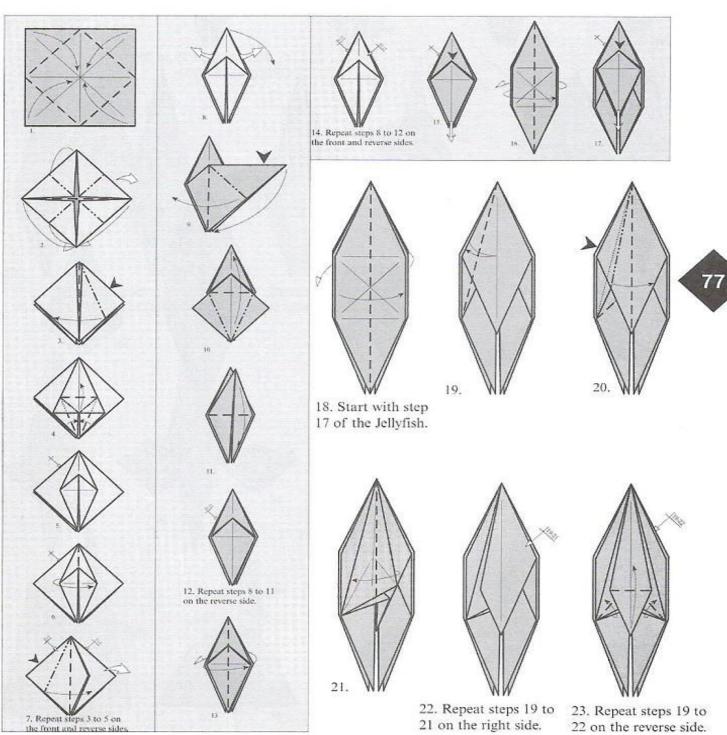


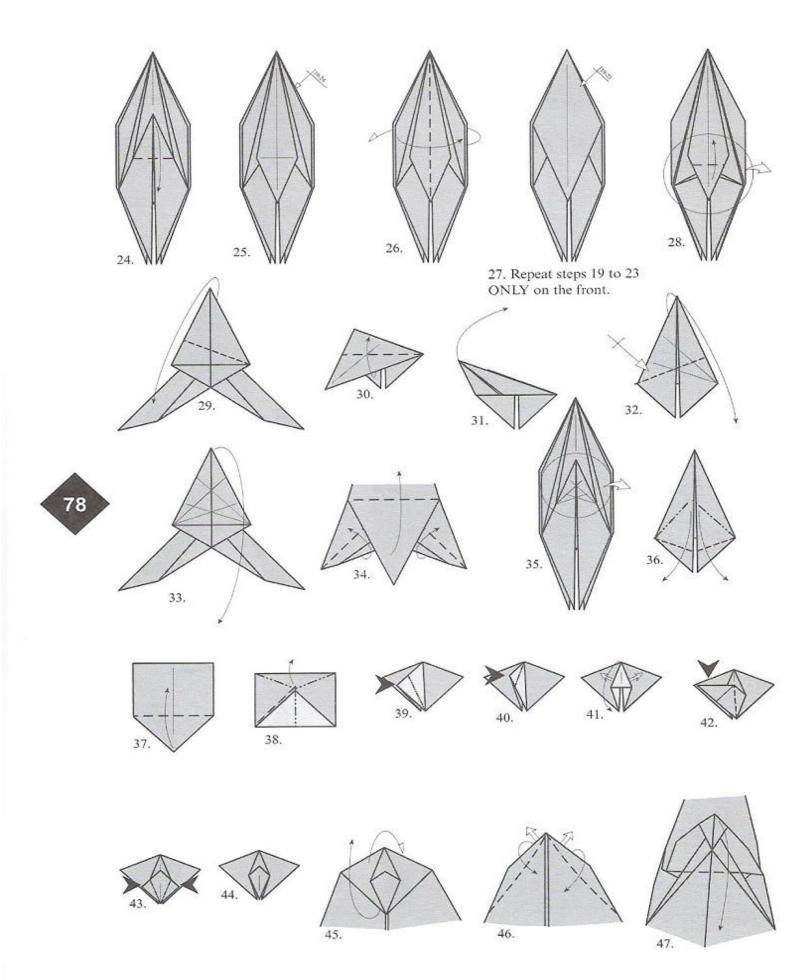




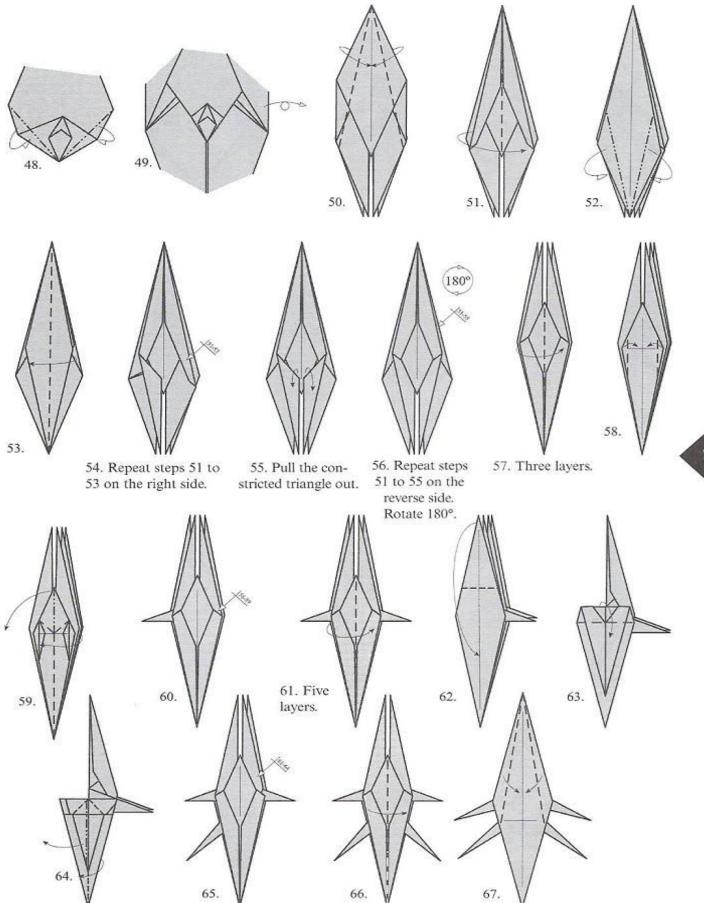
## Stag Beetle

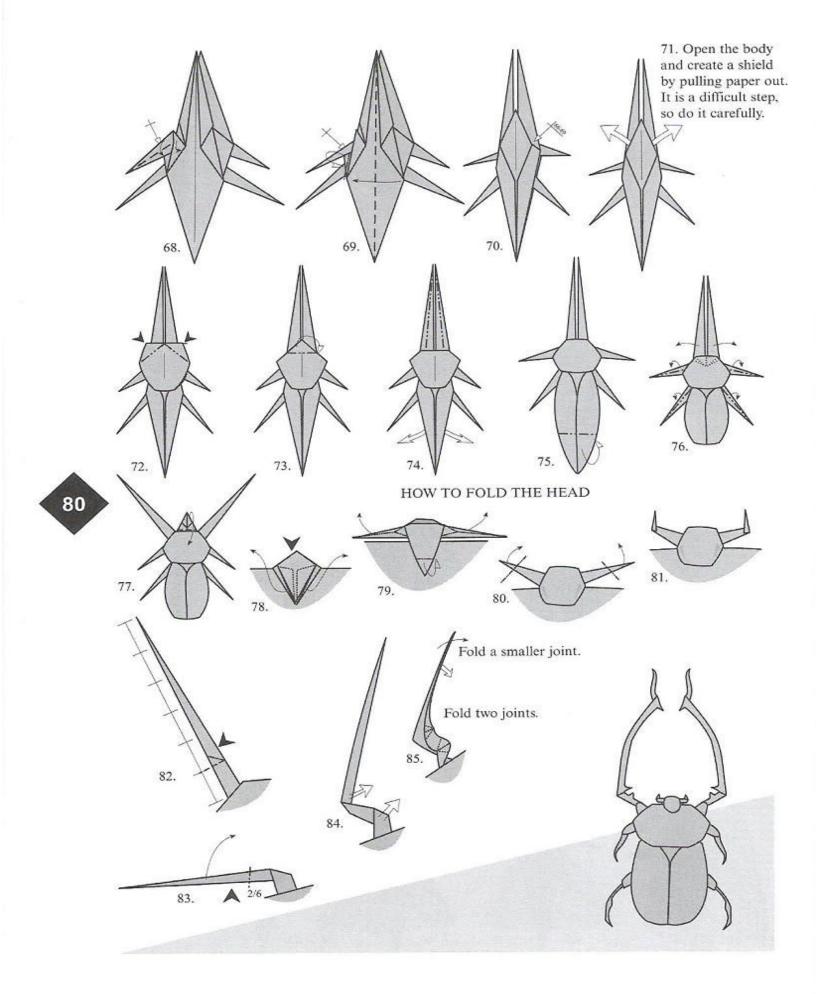




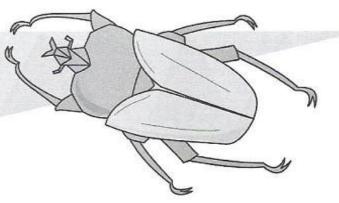


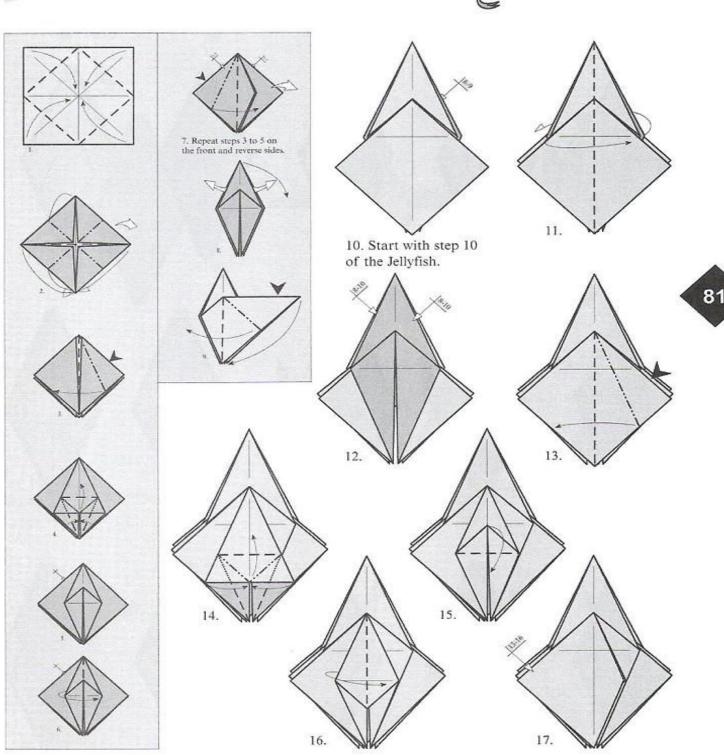


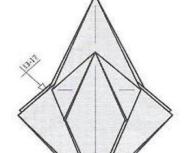


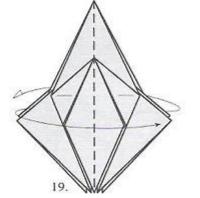


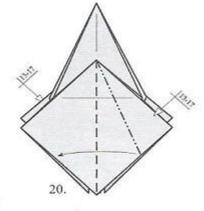
### Goliath Beetle

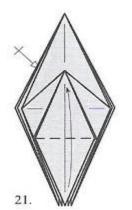


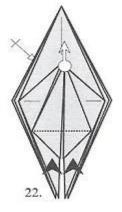


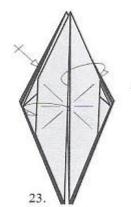


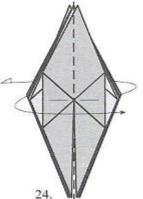


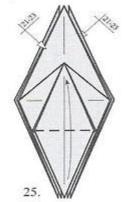


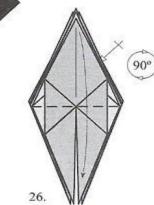


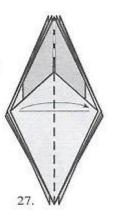


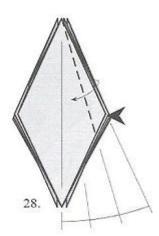


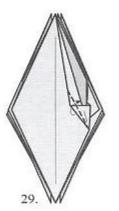


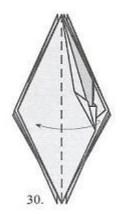


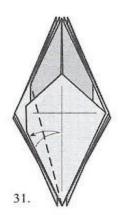


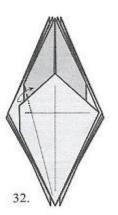


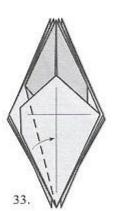


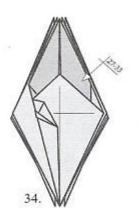


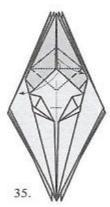




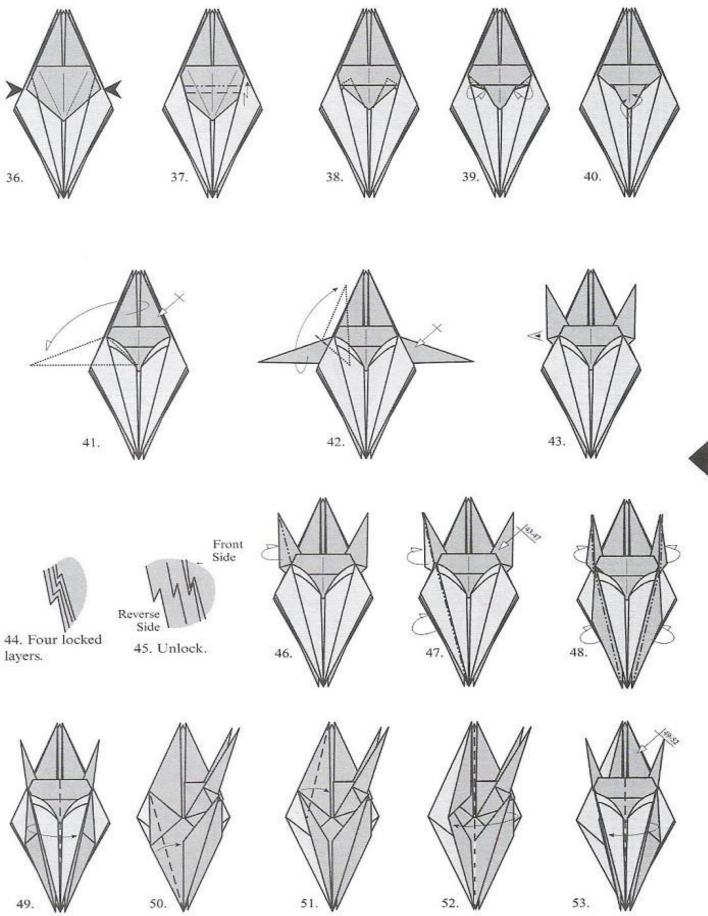






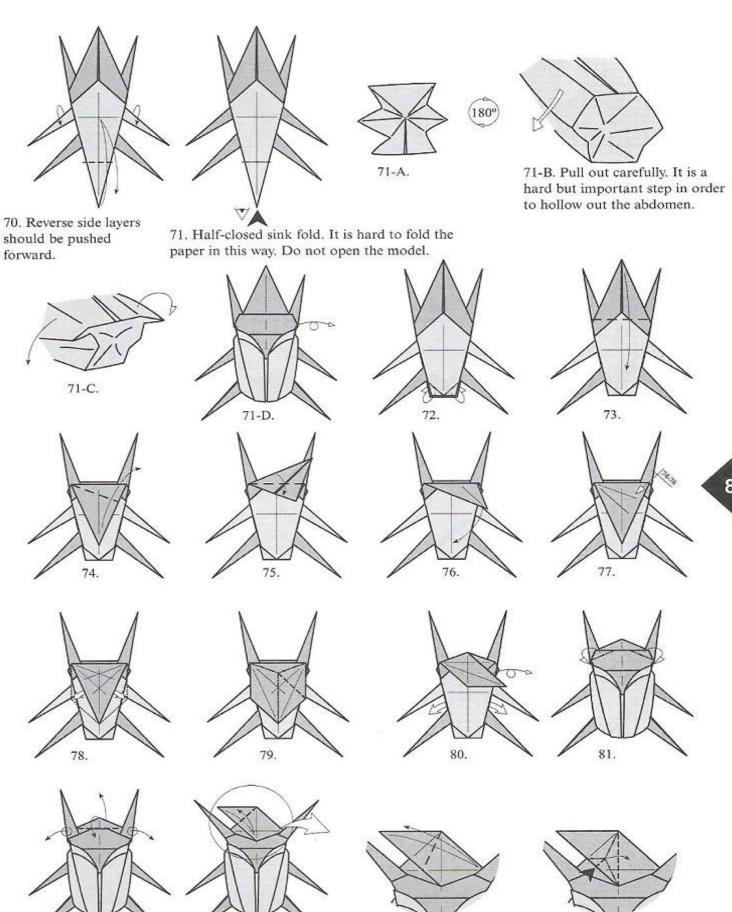


82



the front and two on the

reverse side.

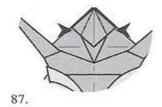


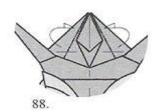
85.

83.

82.





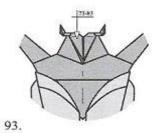




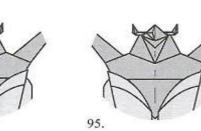




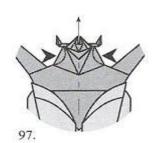






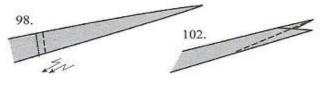






94.

### How to fold the legs



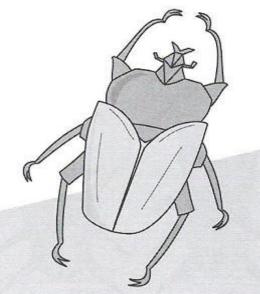




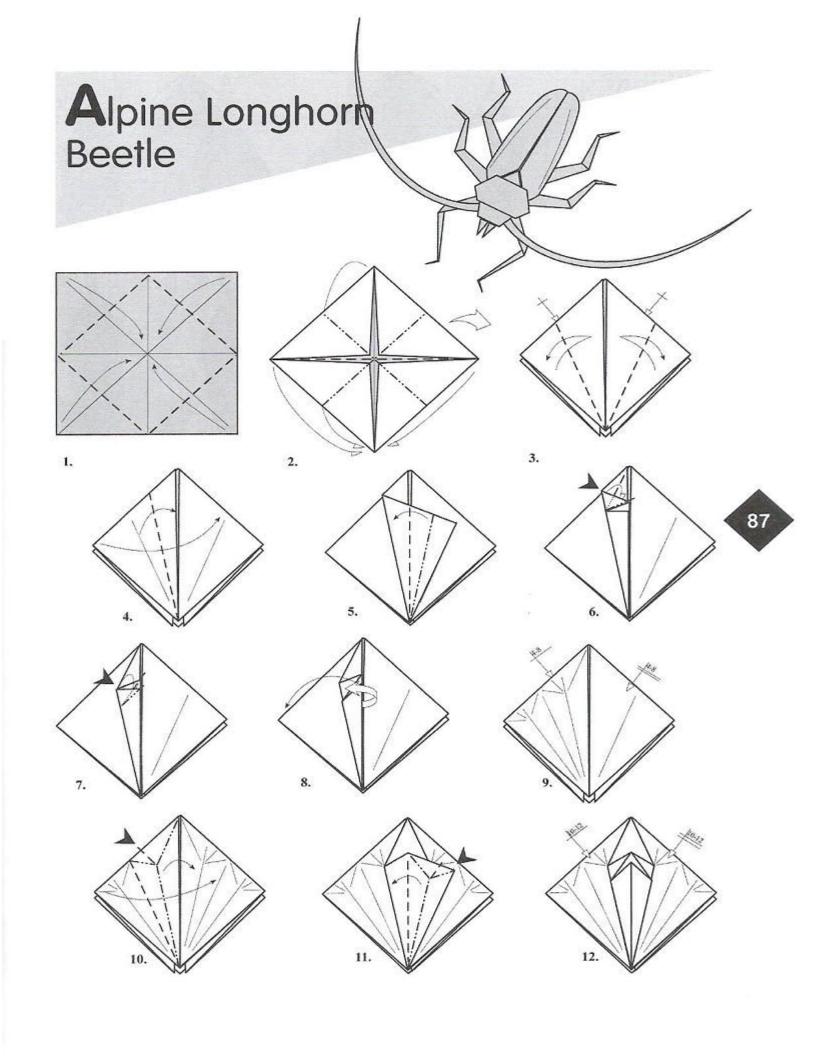


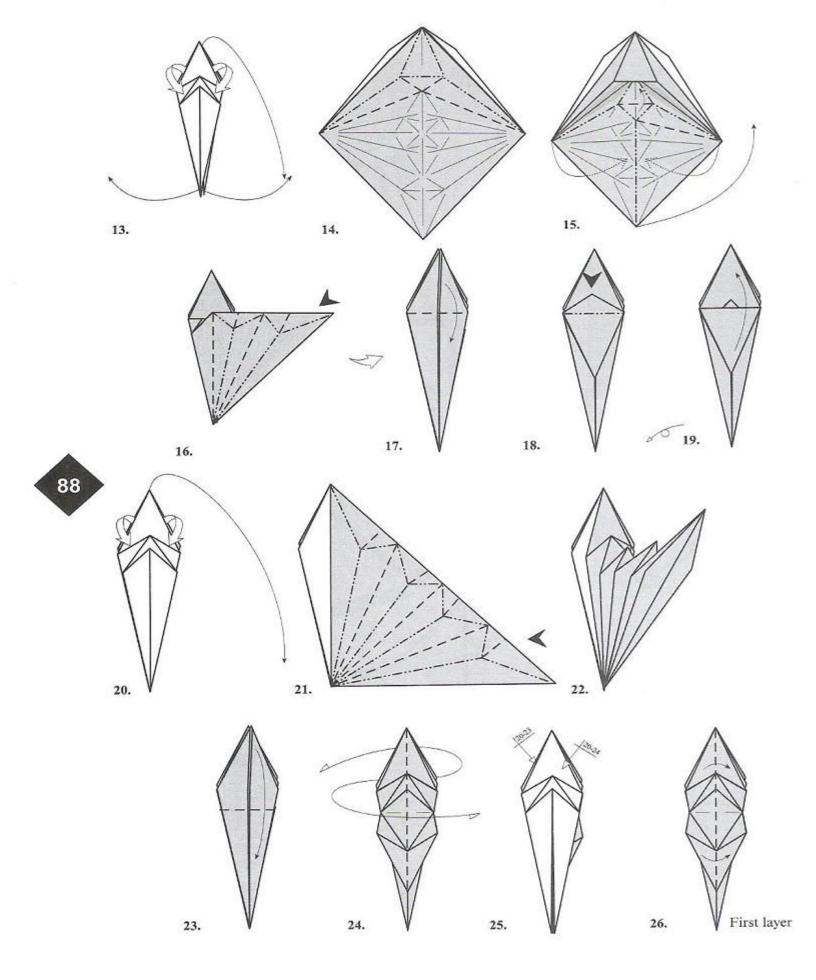


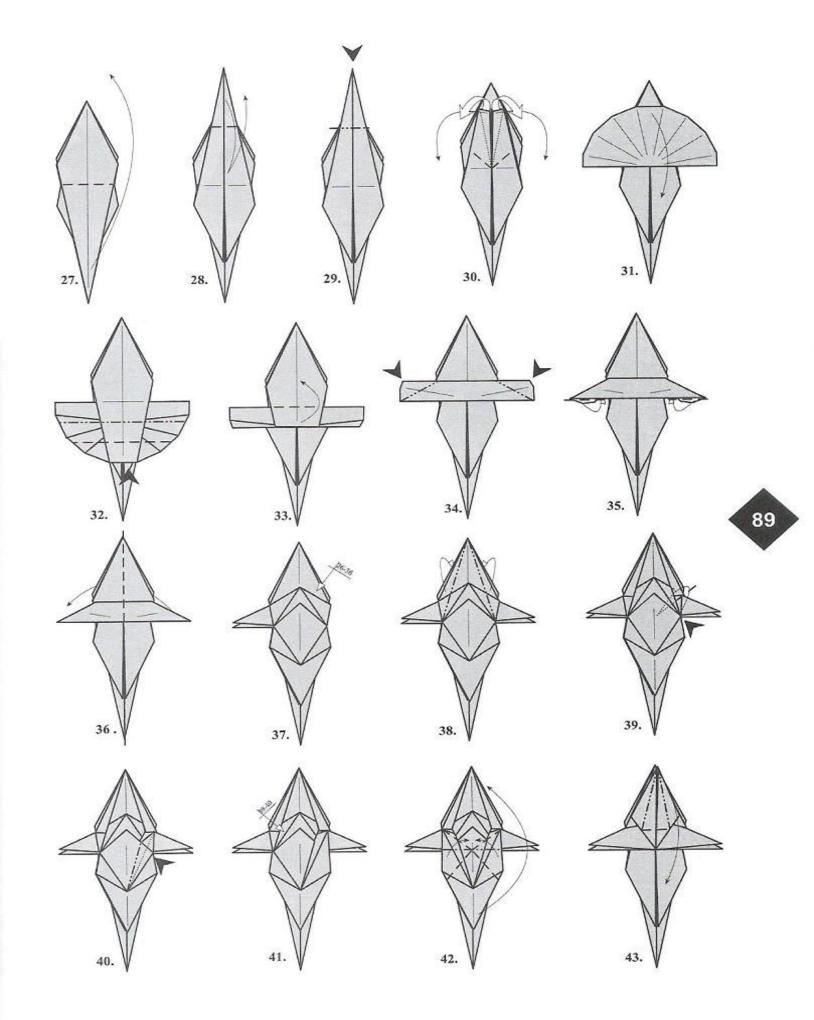


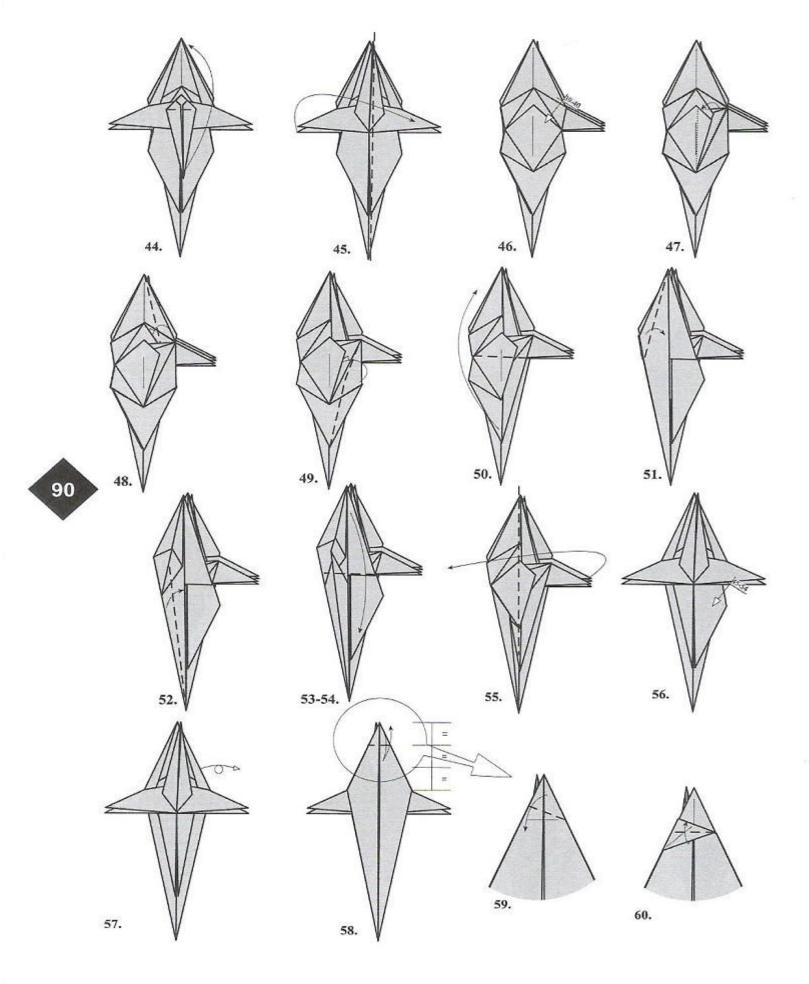


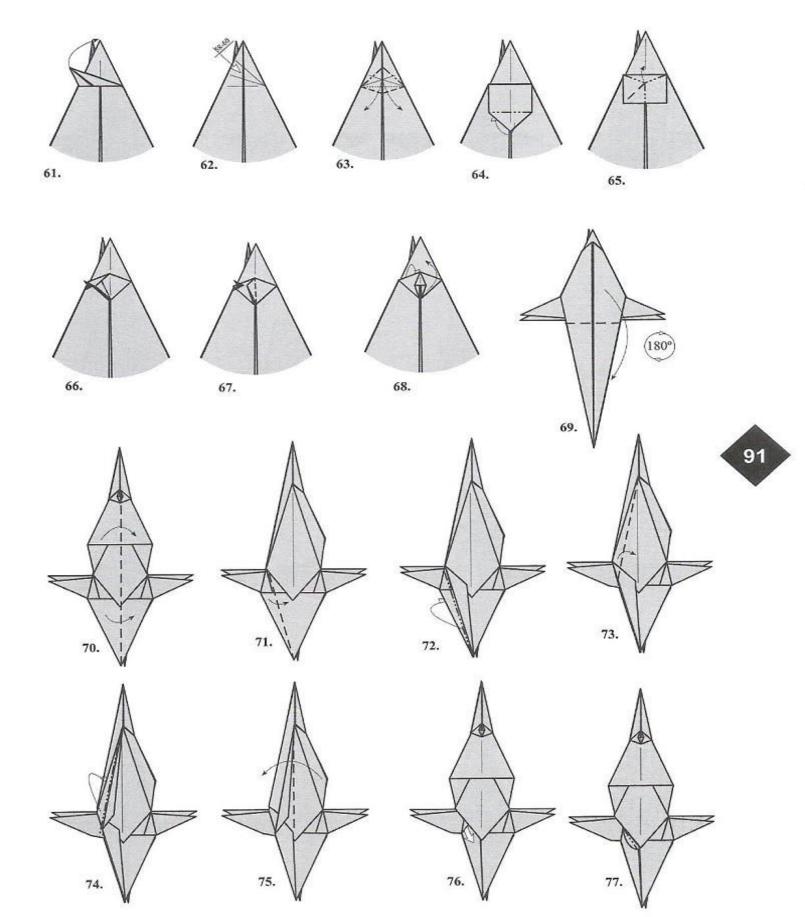
86

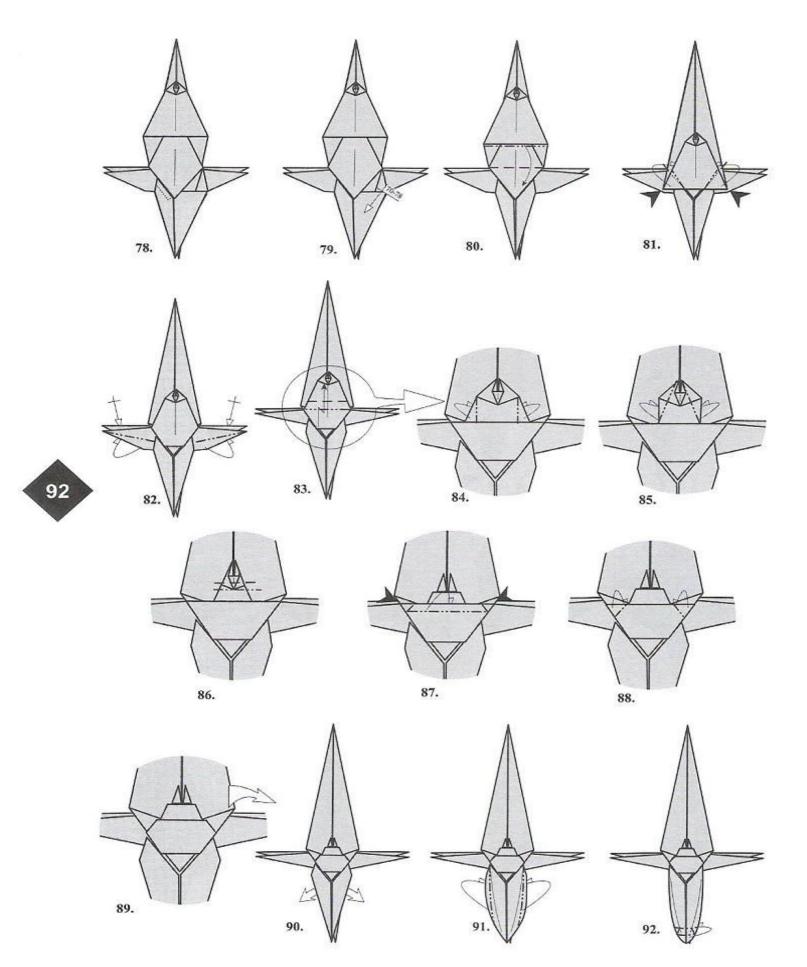


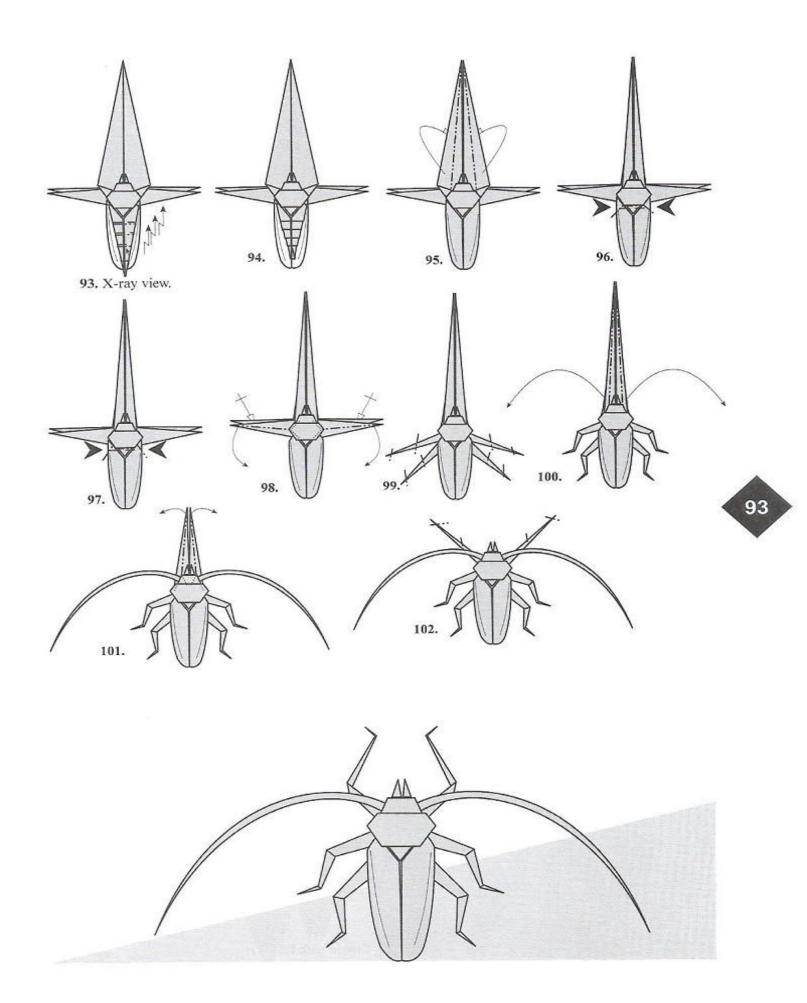




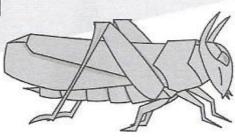


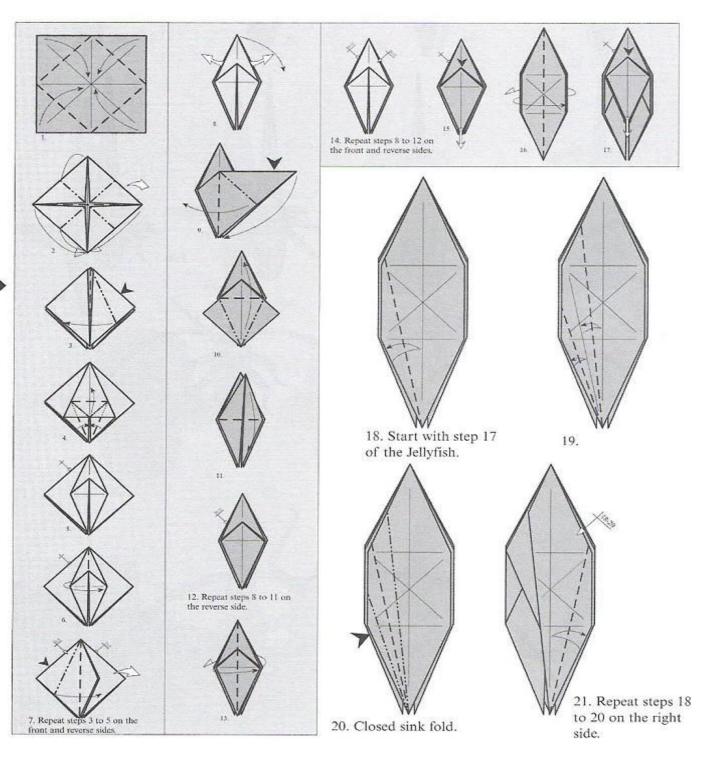


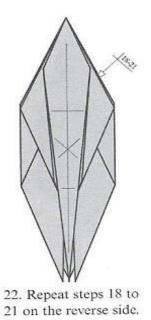


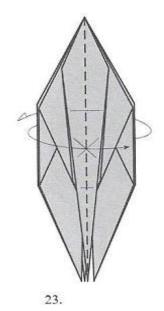


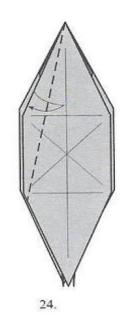
### Migratory Locust

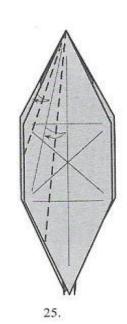


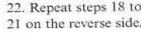


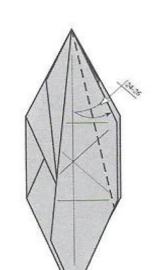


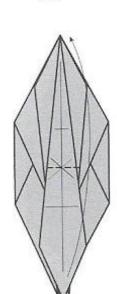


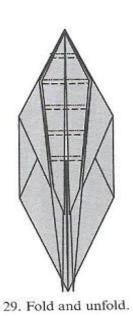


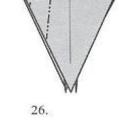




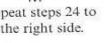


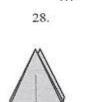


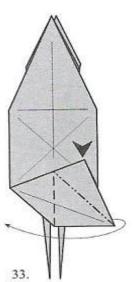




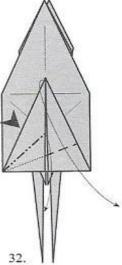
27. Repeat steps 24 to 26 on the right side.

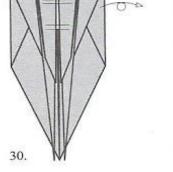


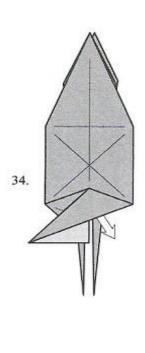


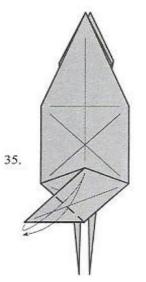


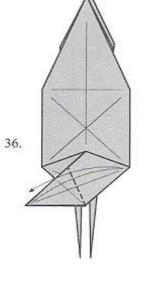


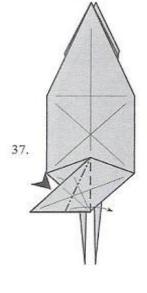


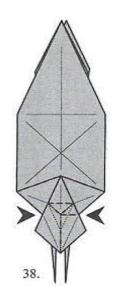




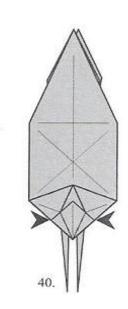


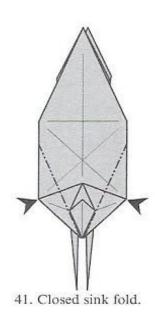


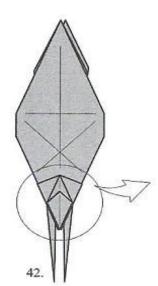


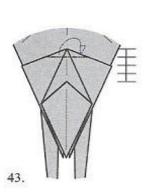




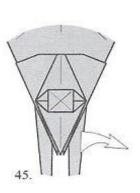


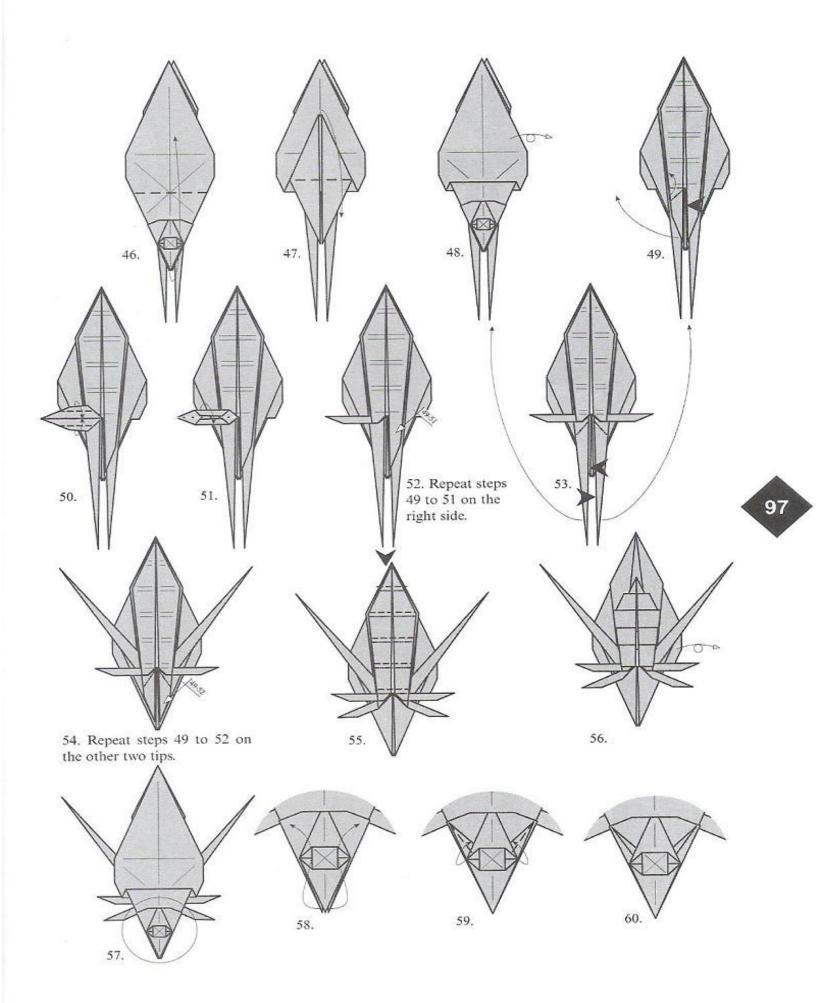


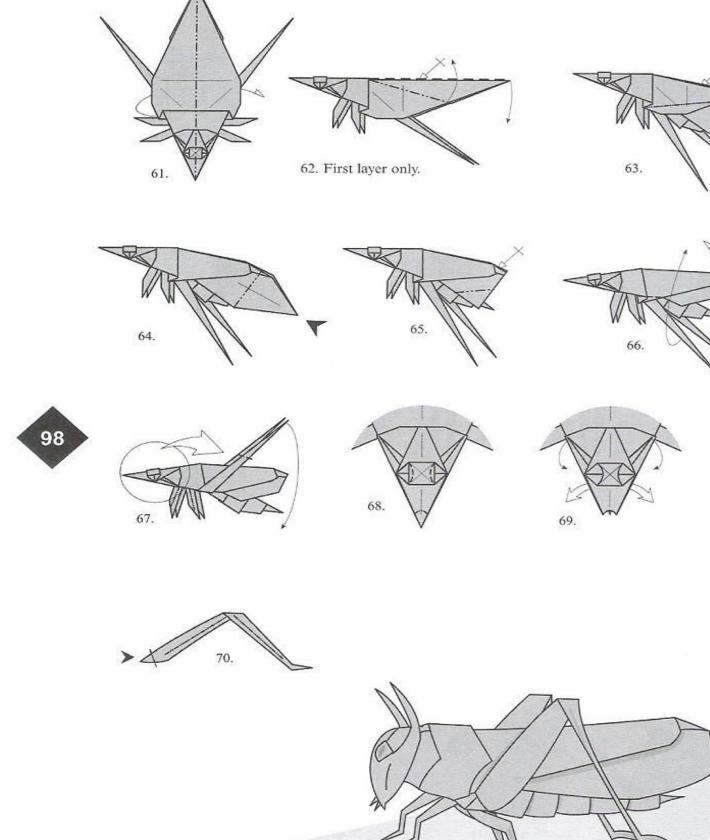




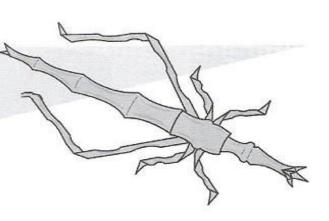


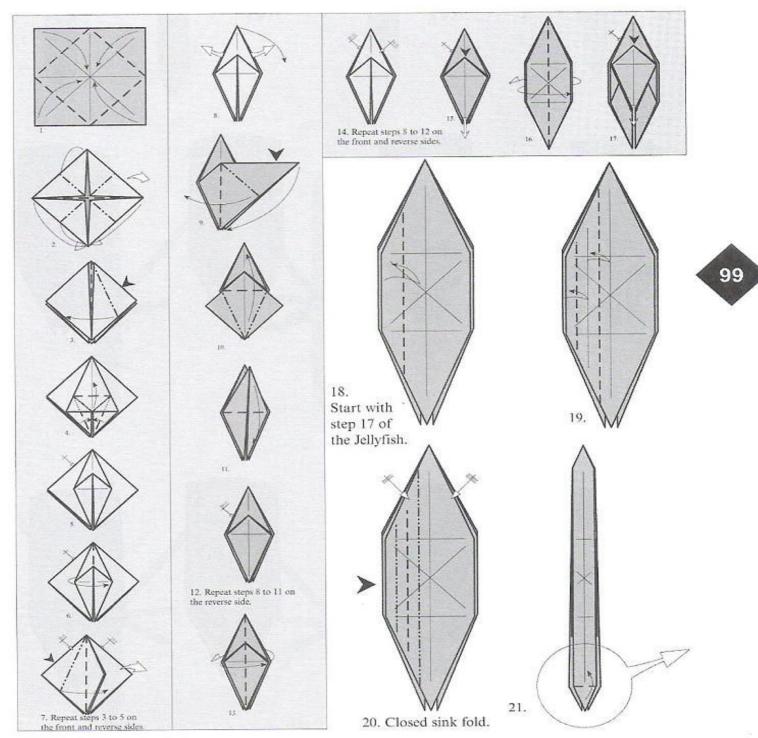


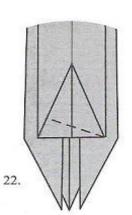


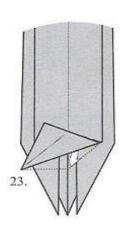


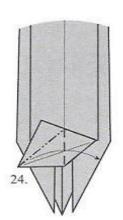
# Stick Grasshopper

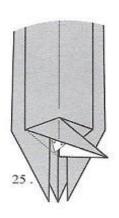


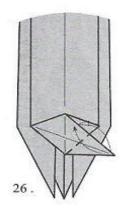


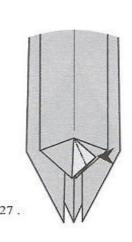


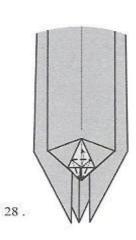


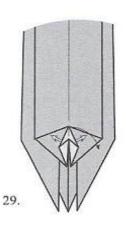


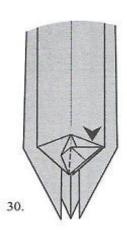


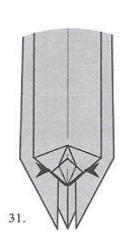


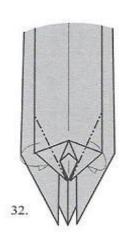


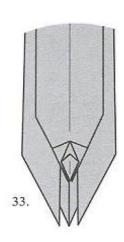


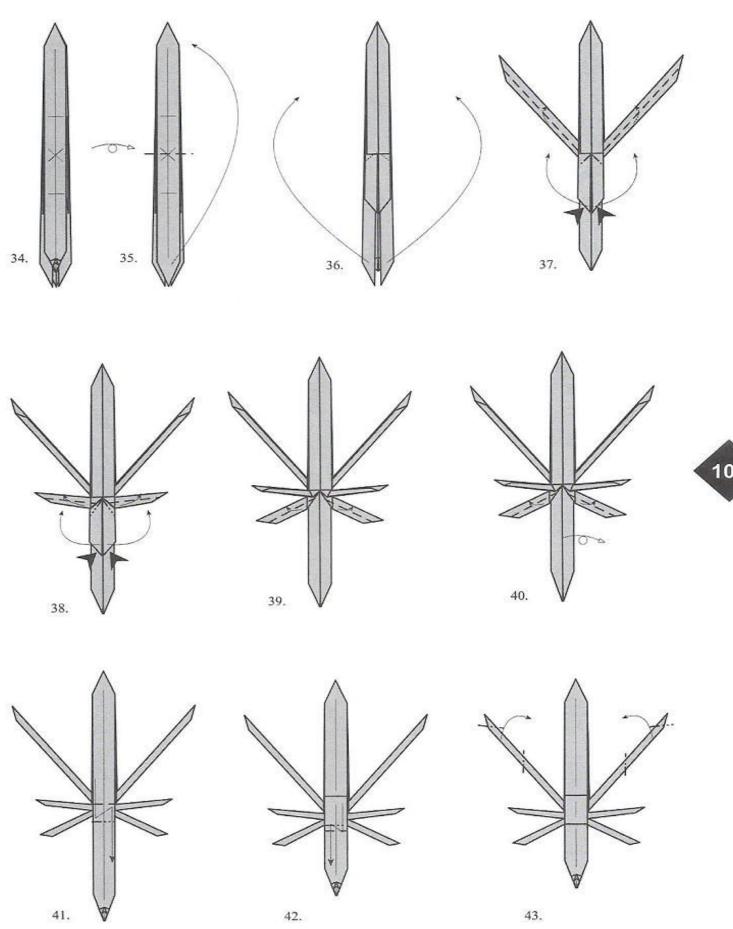


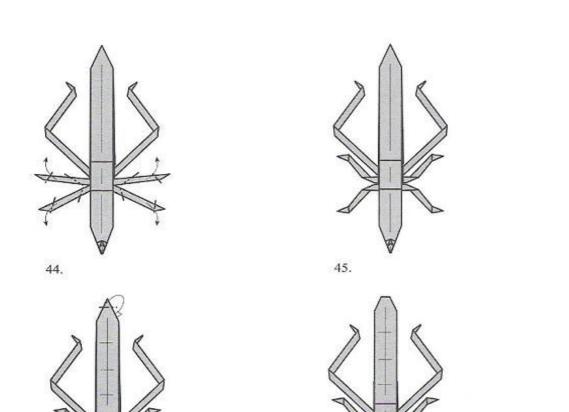


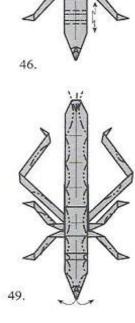


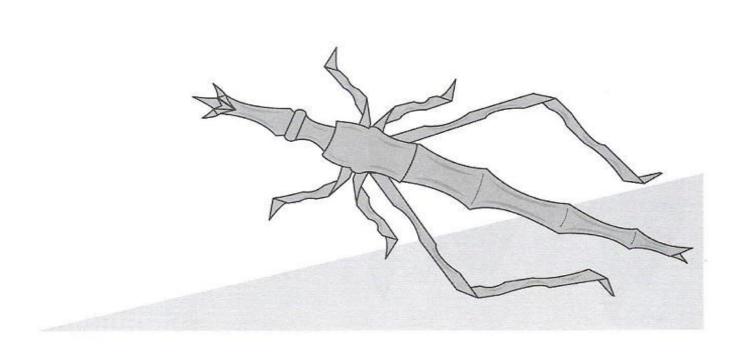


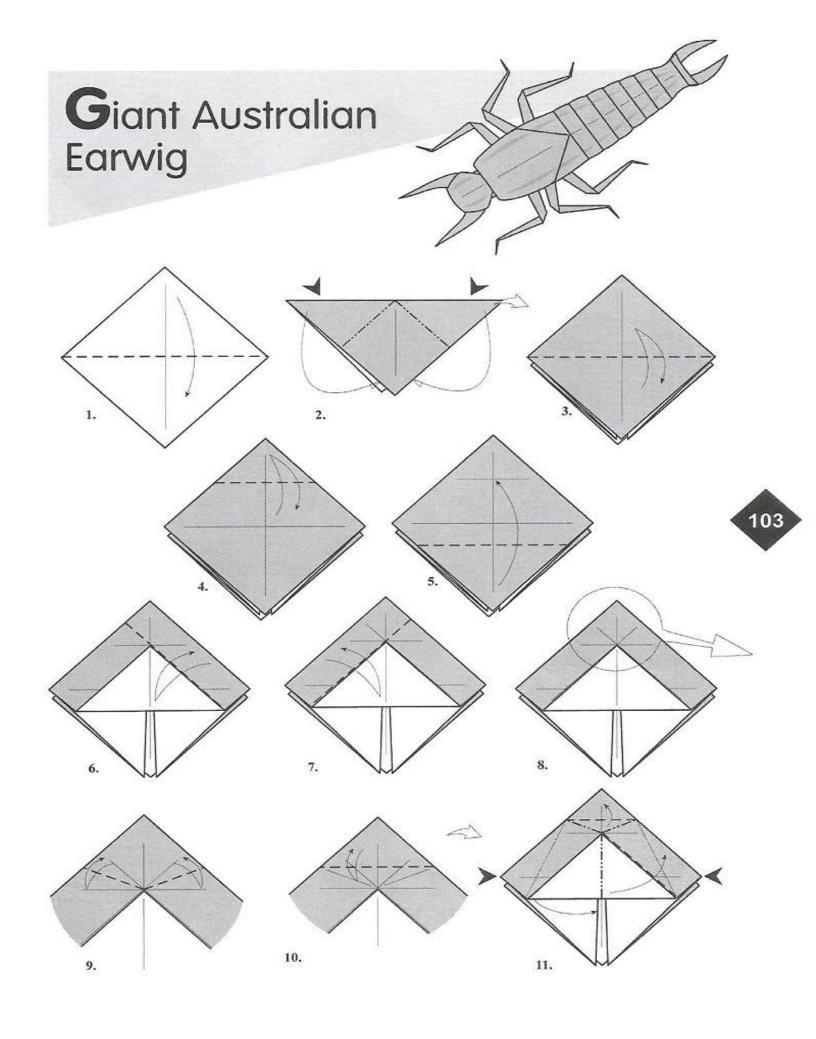


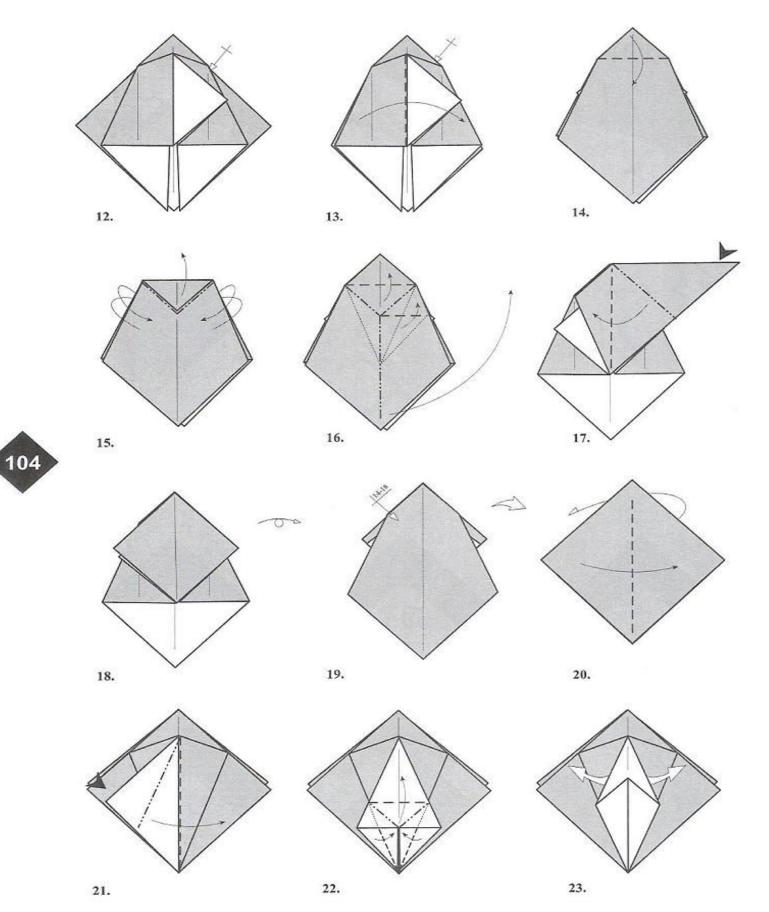


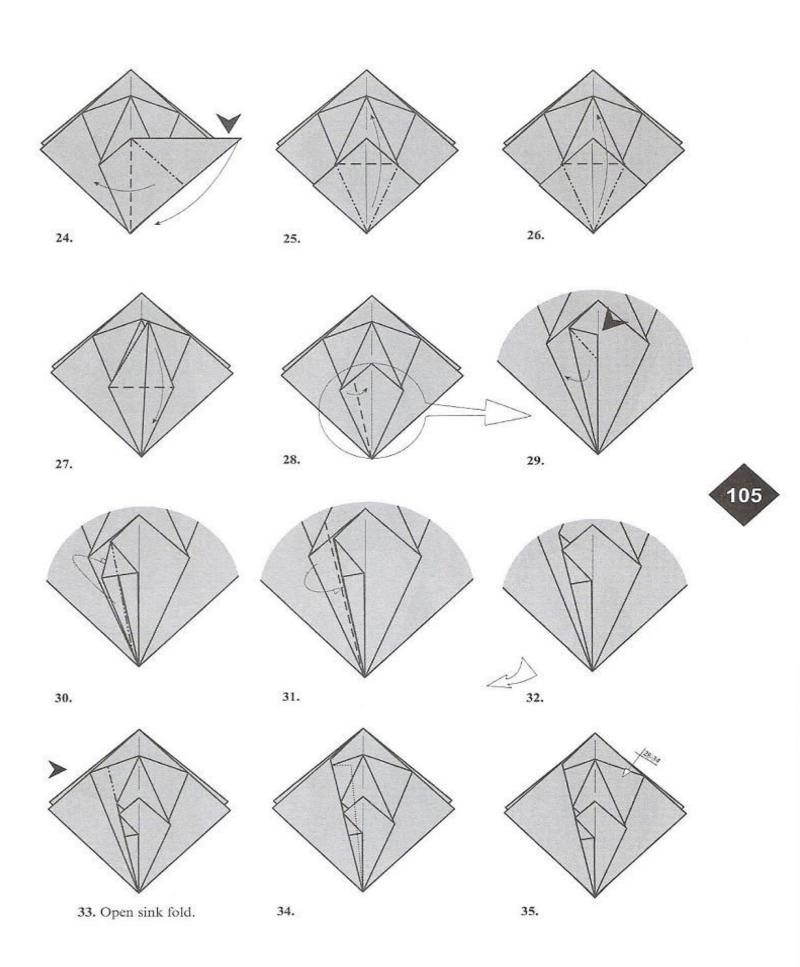


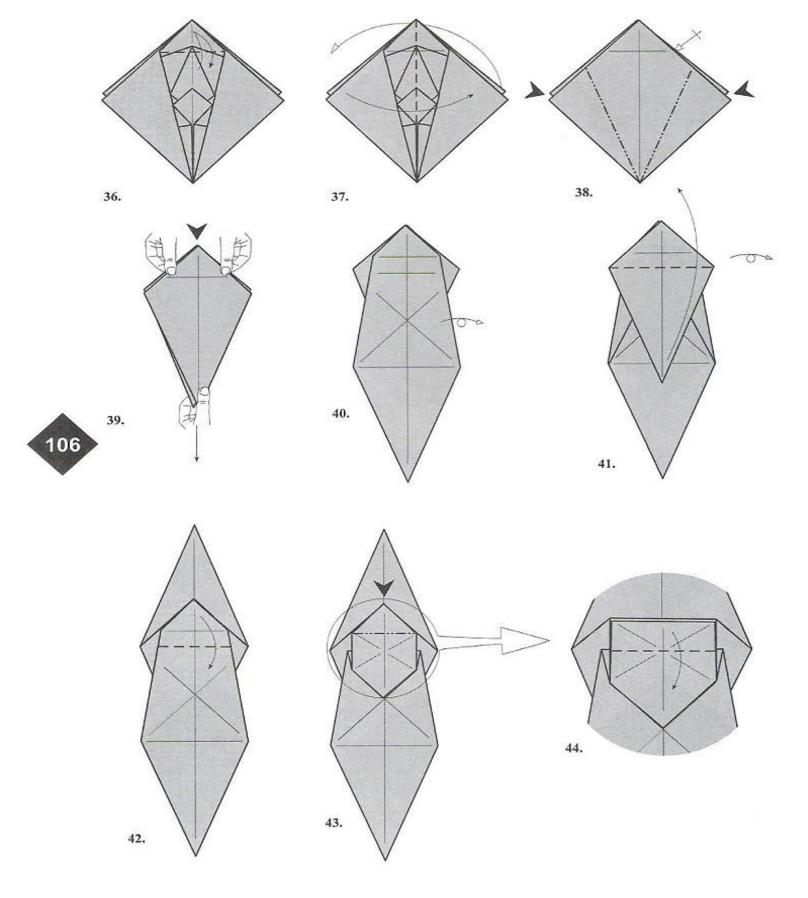




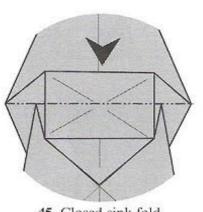




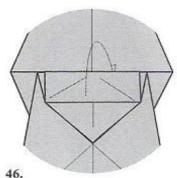




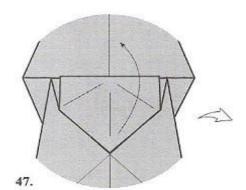


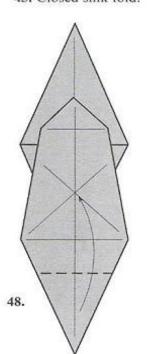


45. Closed sink fold.

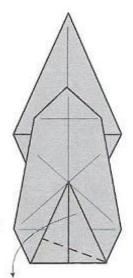


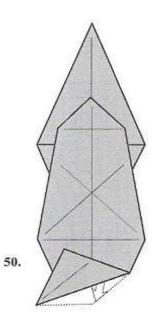
46.

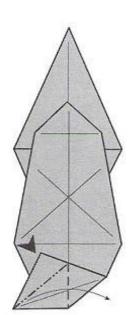


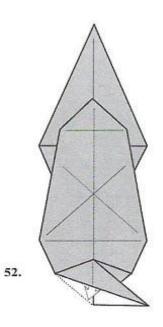


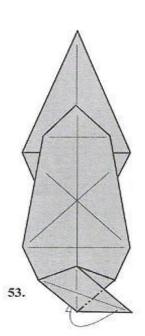
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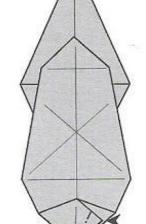






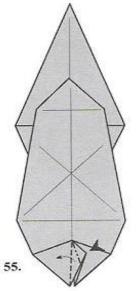


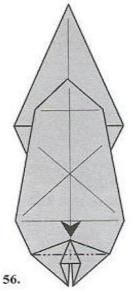


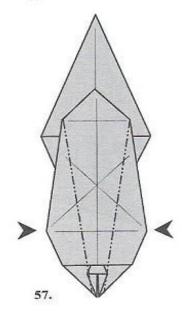


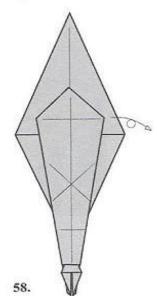
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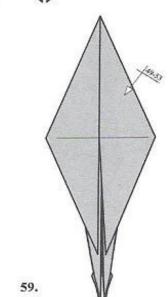
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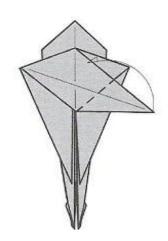


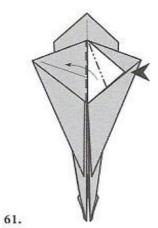


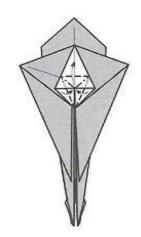




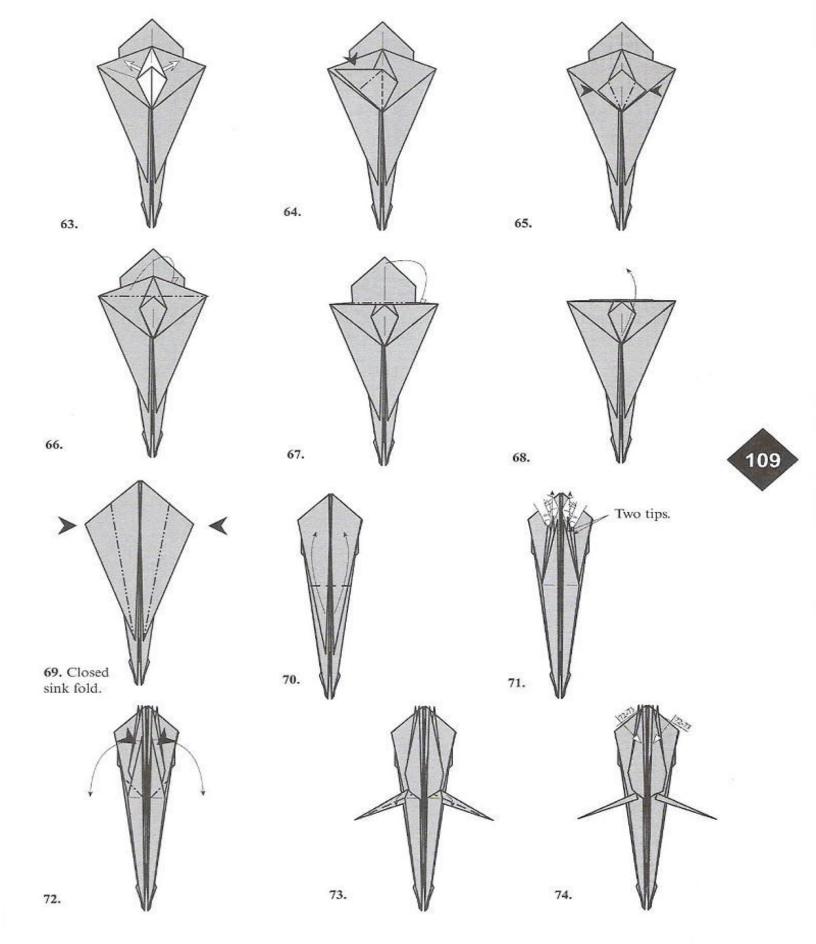




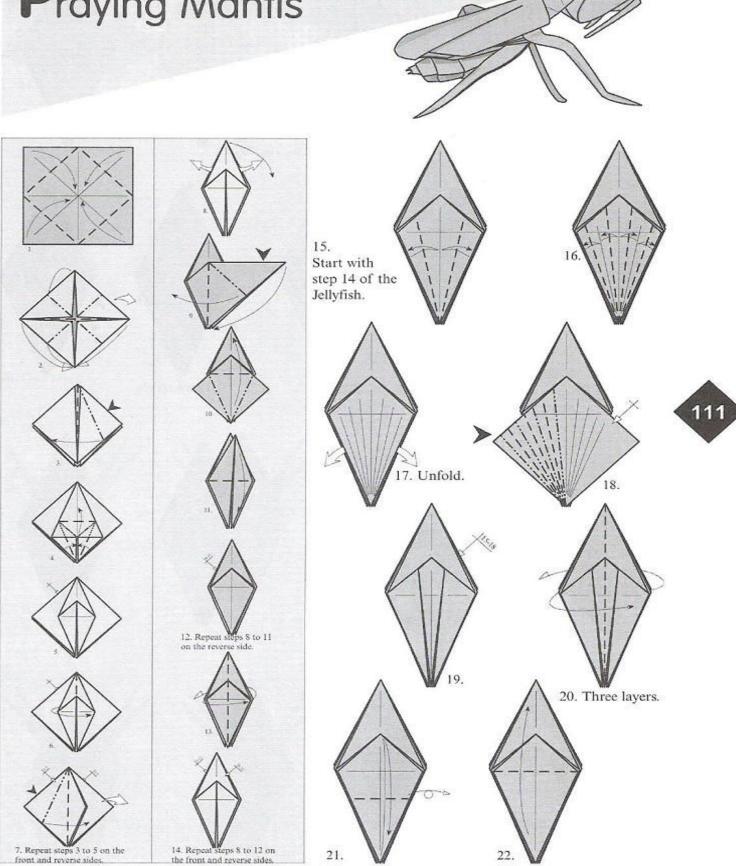


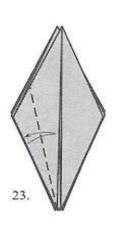


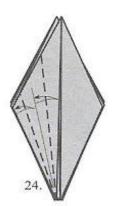
62.

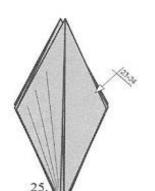


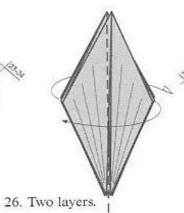
### **Praying Mantis**

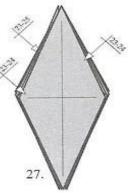


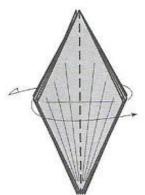


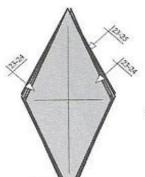


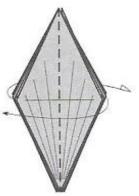


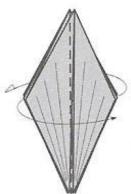


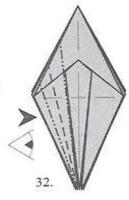








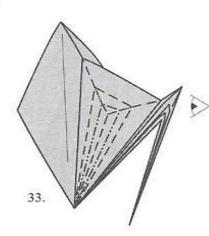


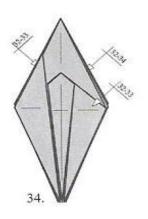


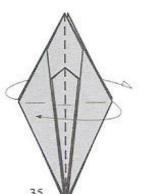
28. Four layers.

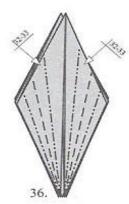
30. Two layers.

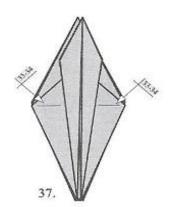
31. Three layers.

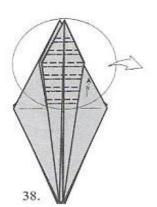


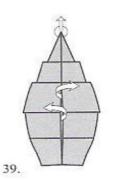


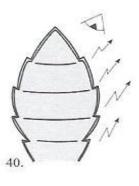




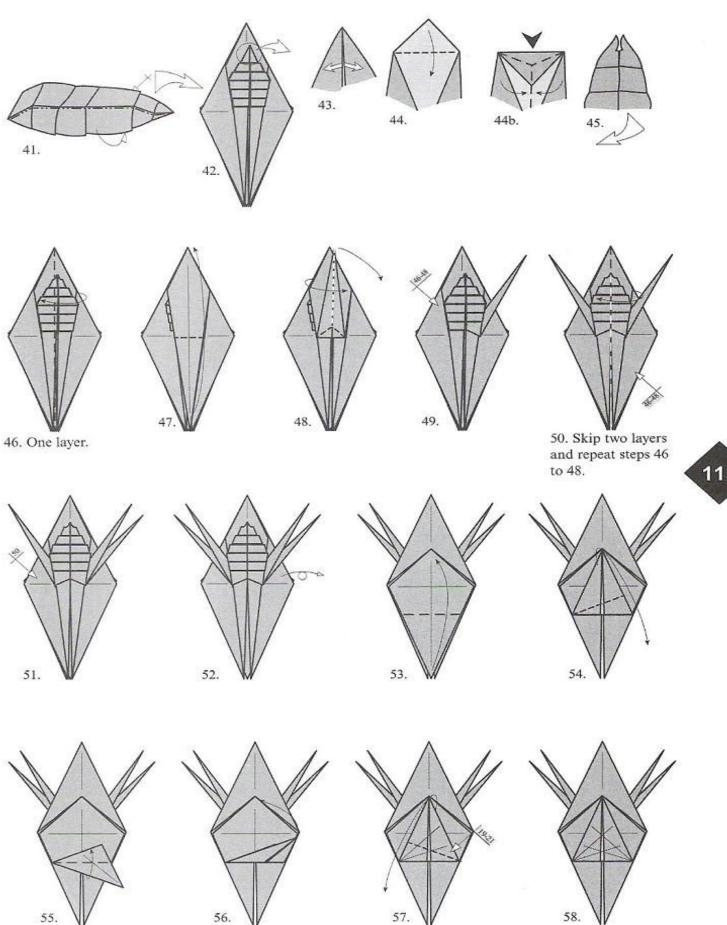


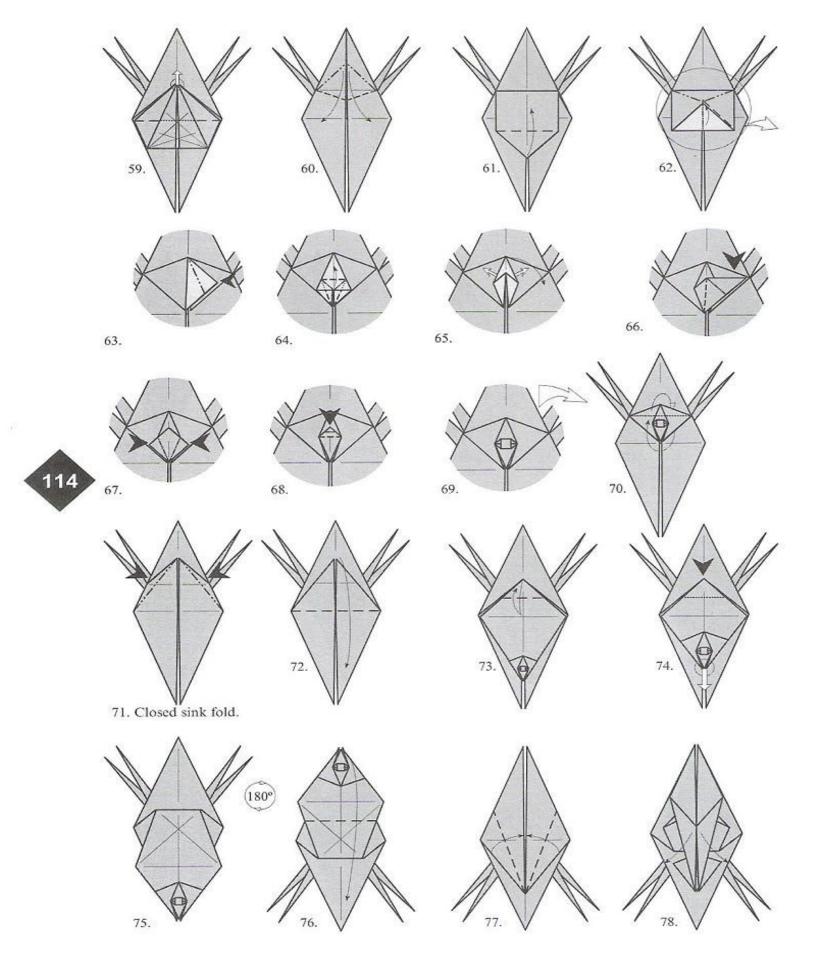


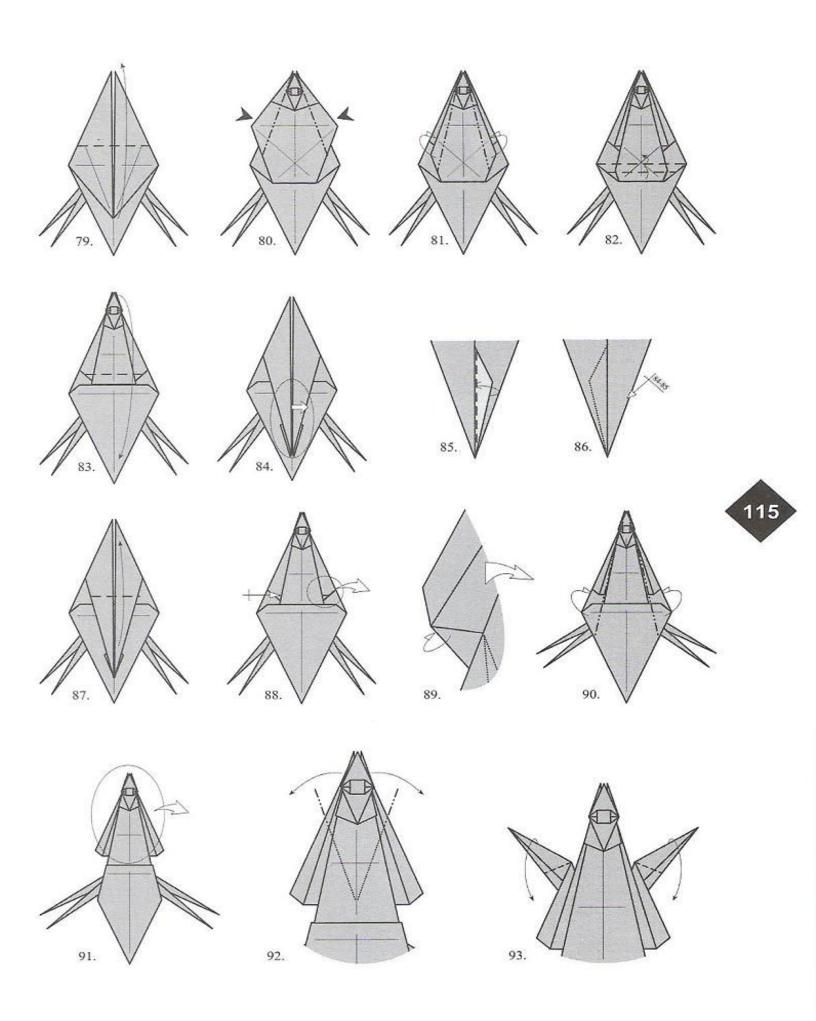


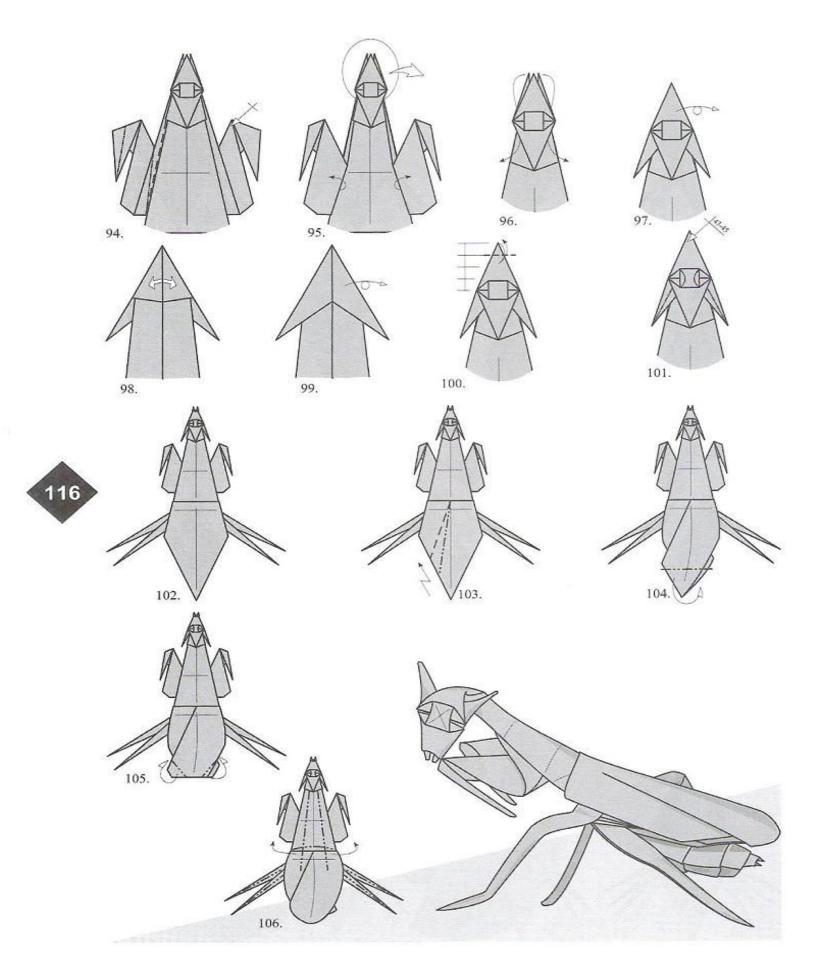




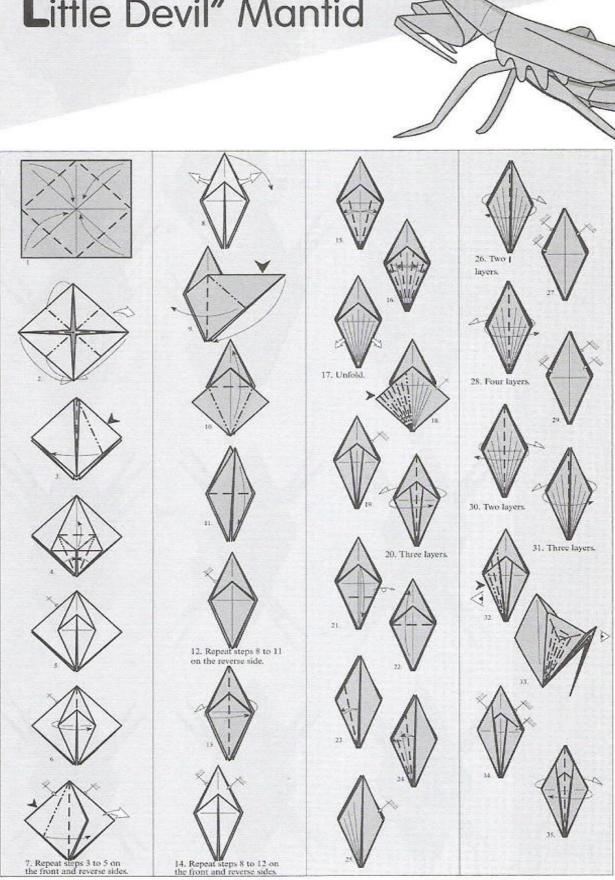


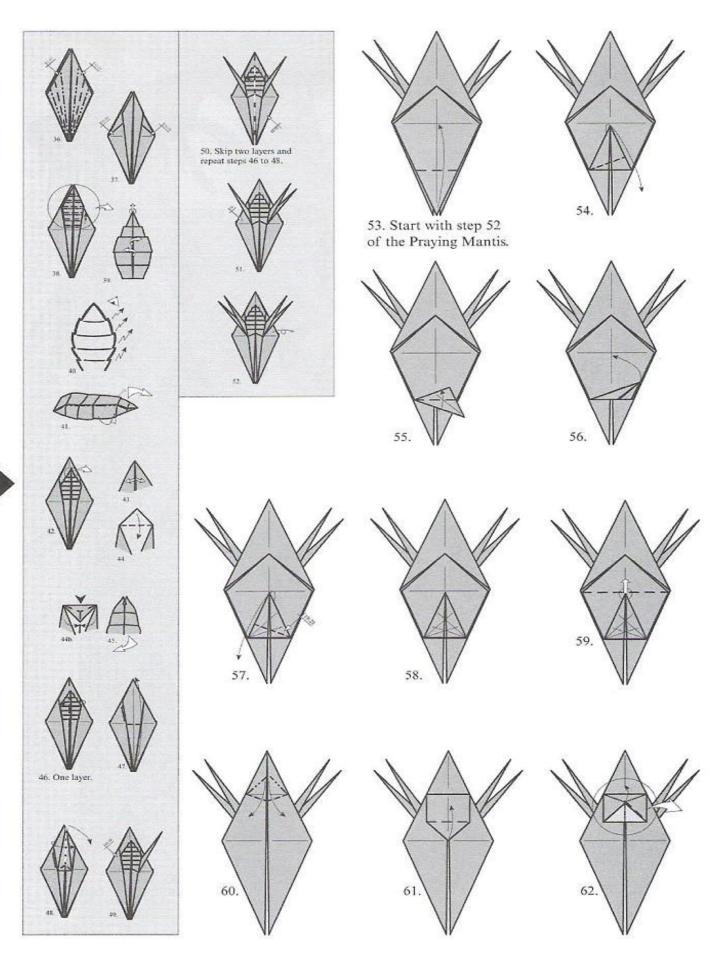




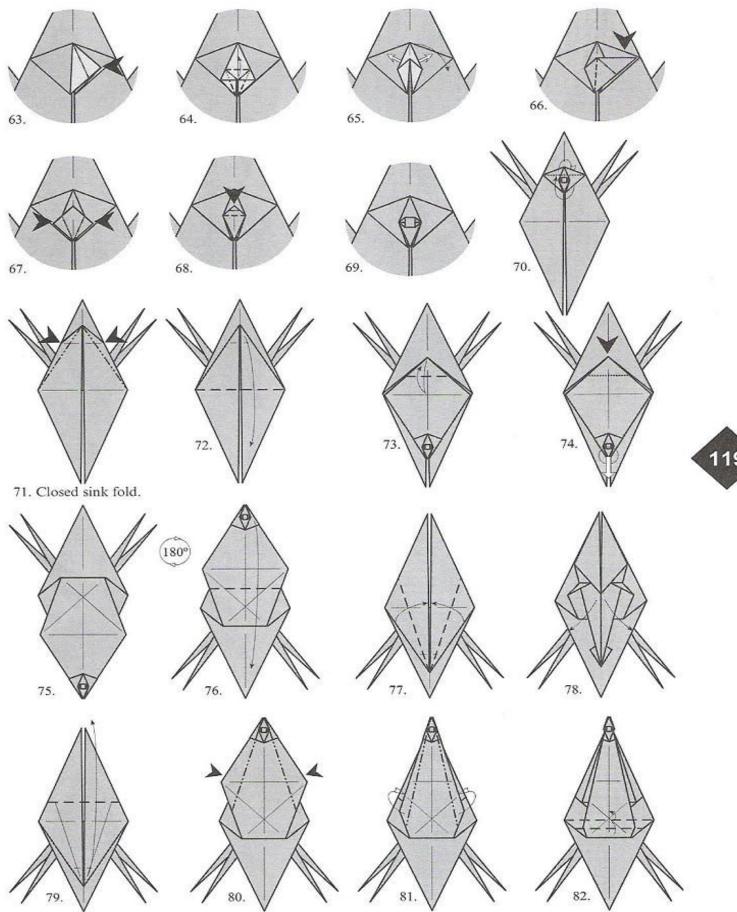


# "Little Devil" Mantid



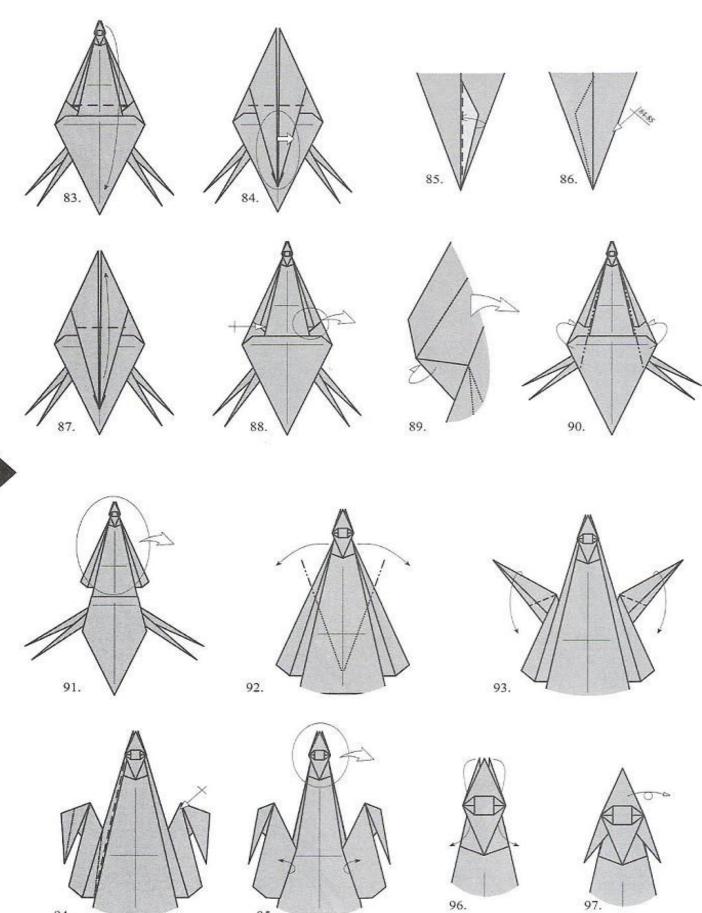


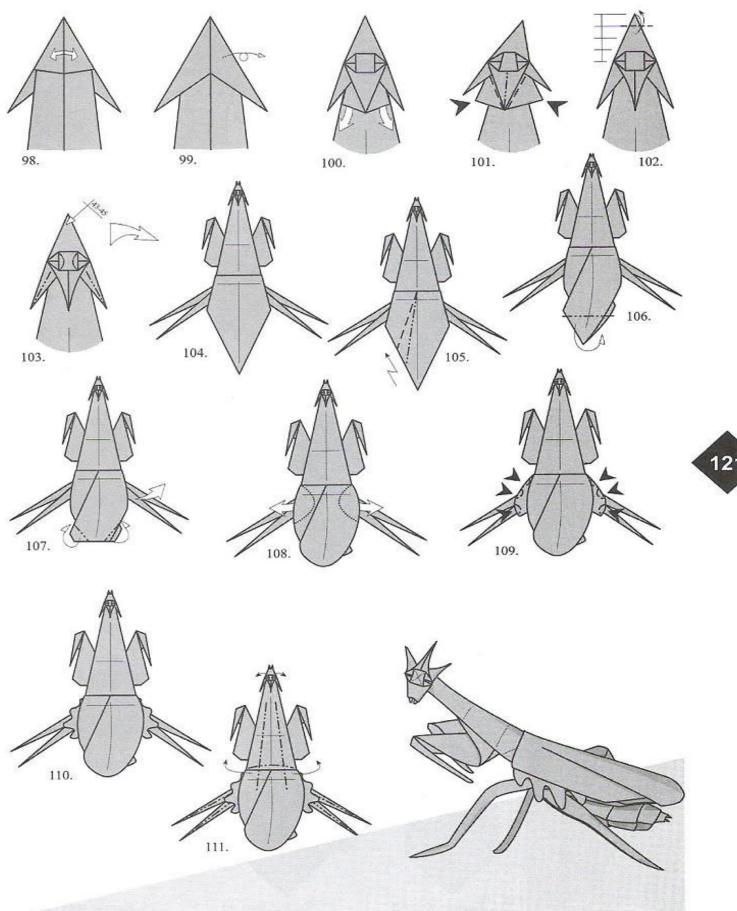


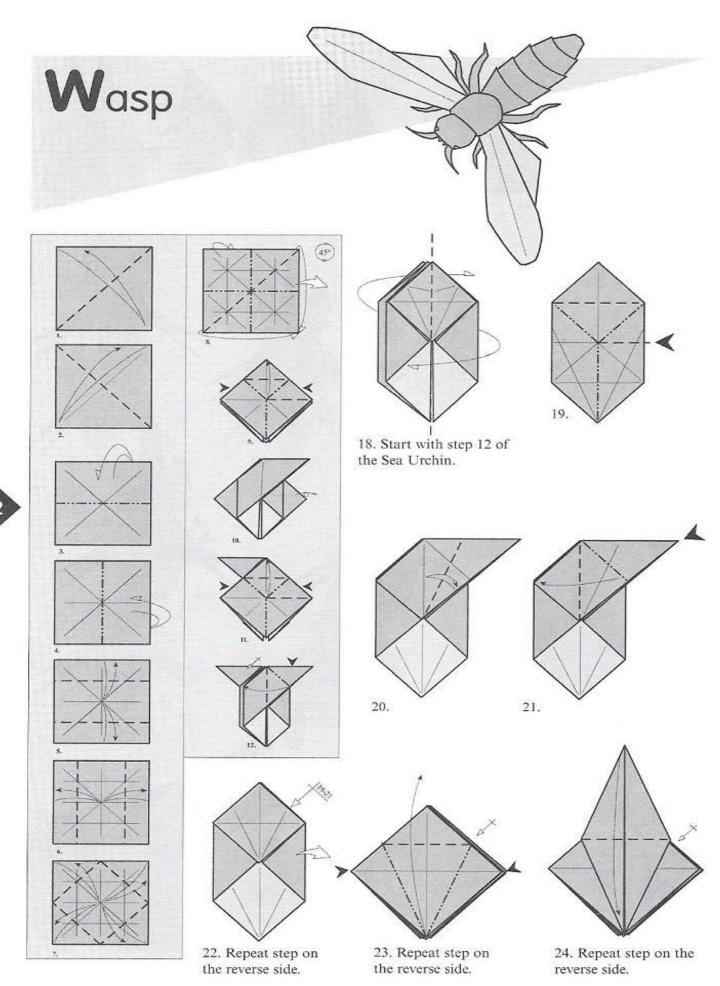


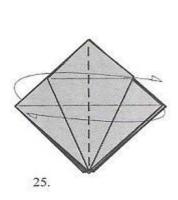


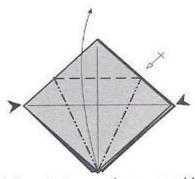
94.



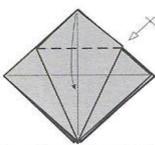




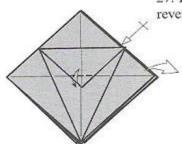




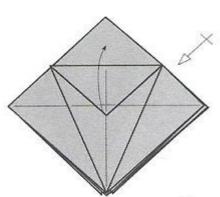
26. Repeat step on the reverse side.



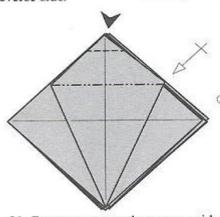




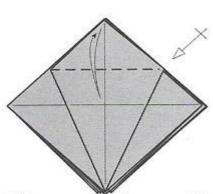
29. Repeat step on the reverse side.



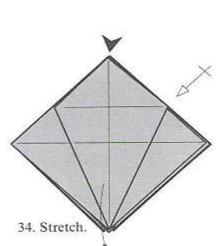
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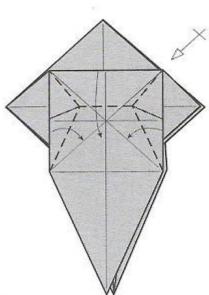


31. Repeat step on the reverse side.

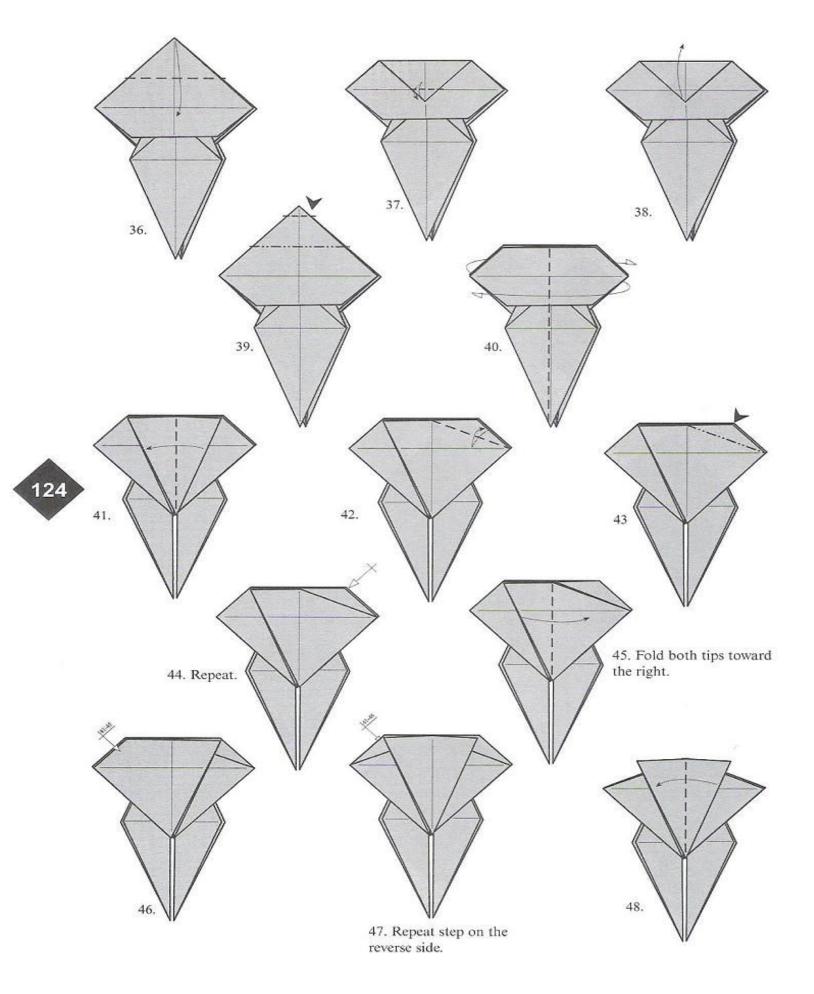


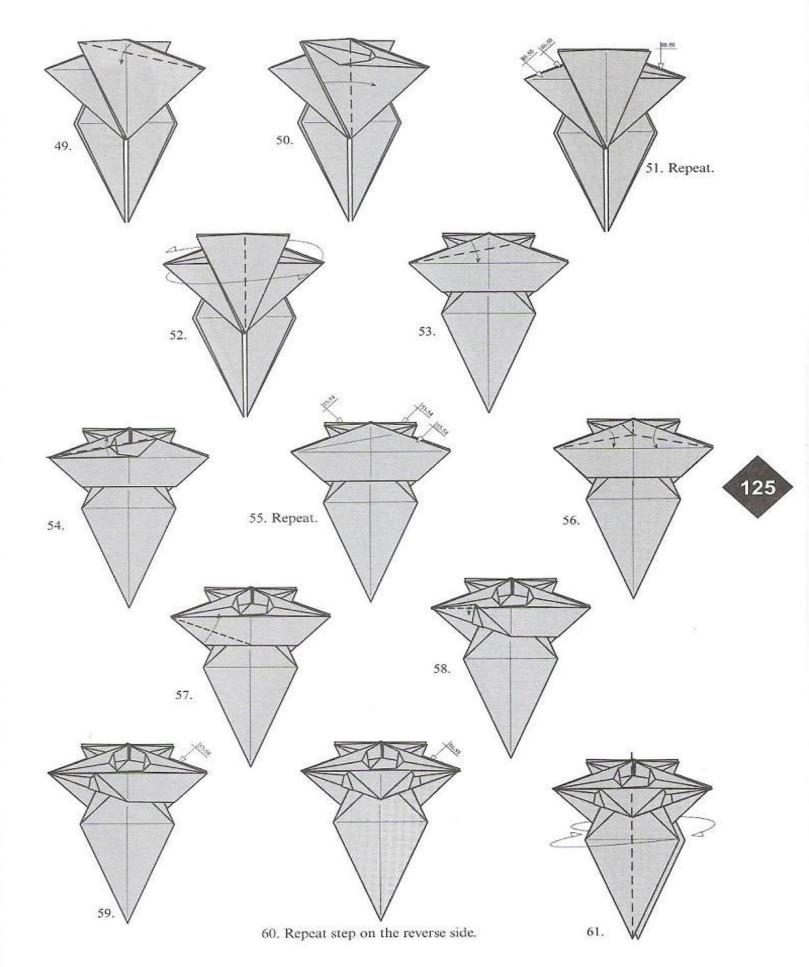
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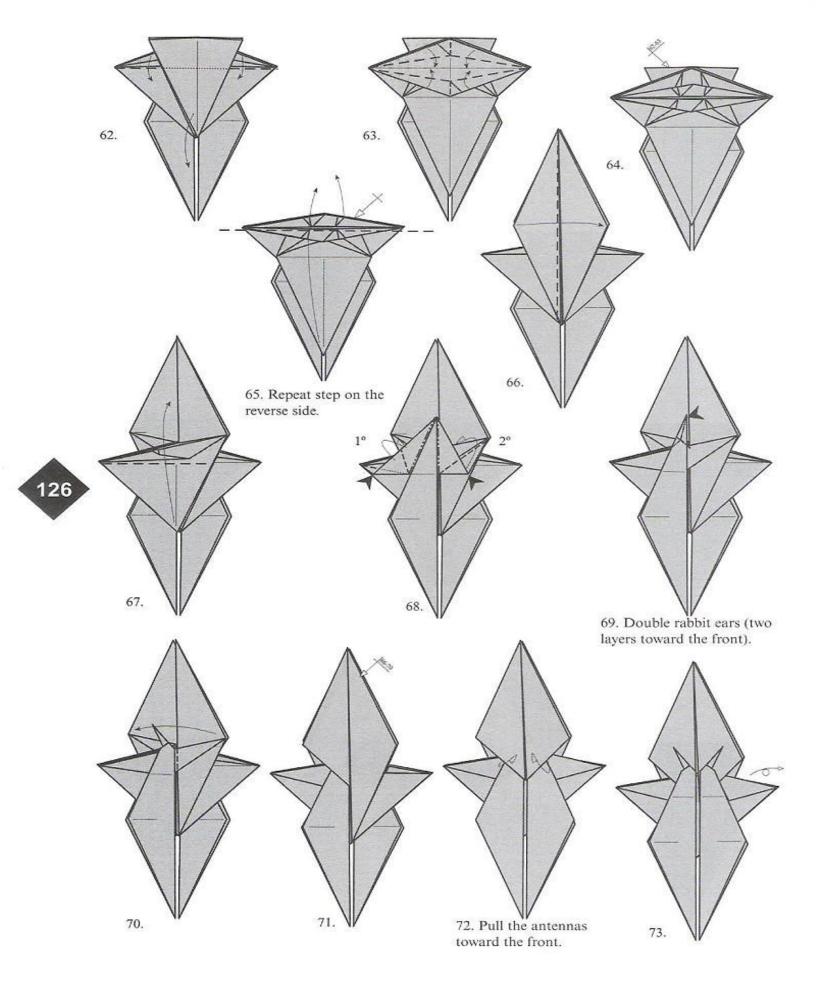


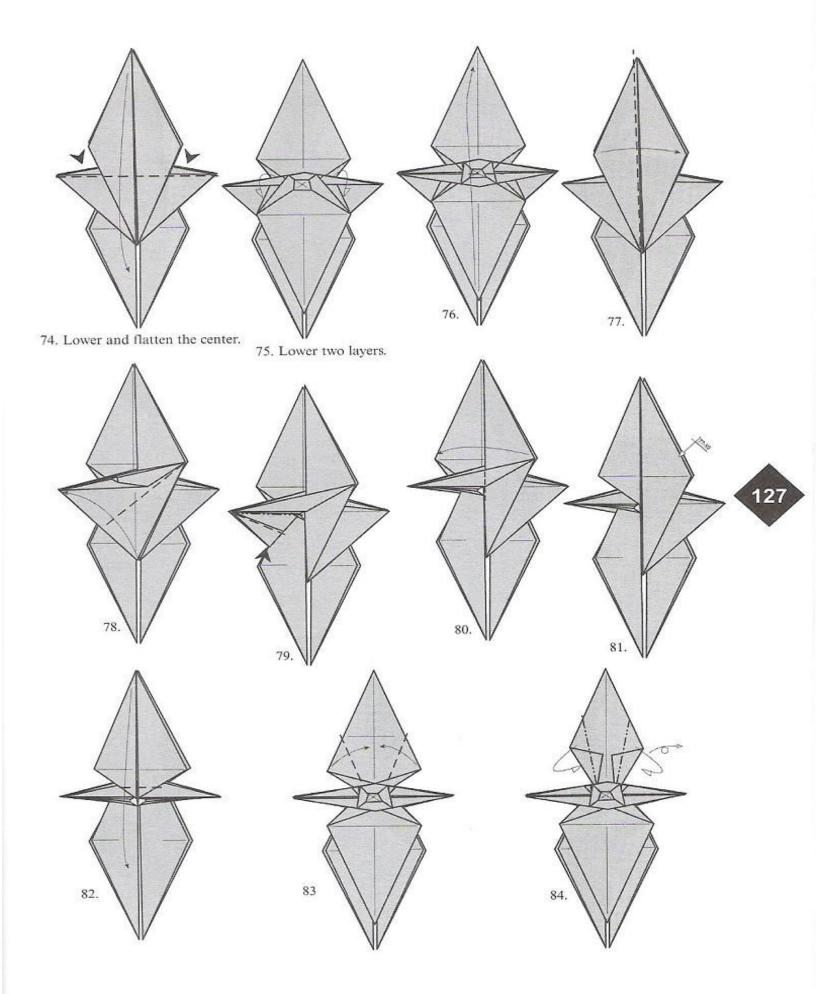


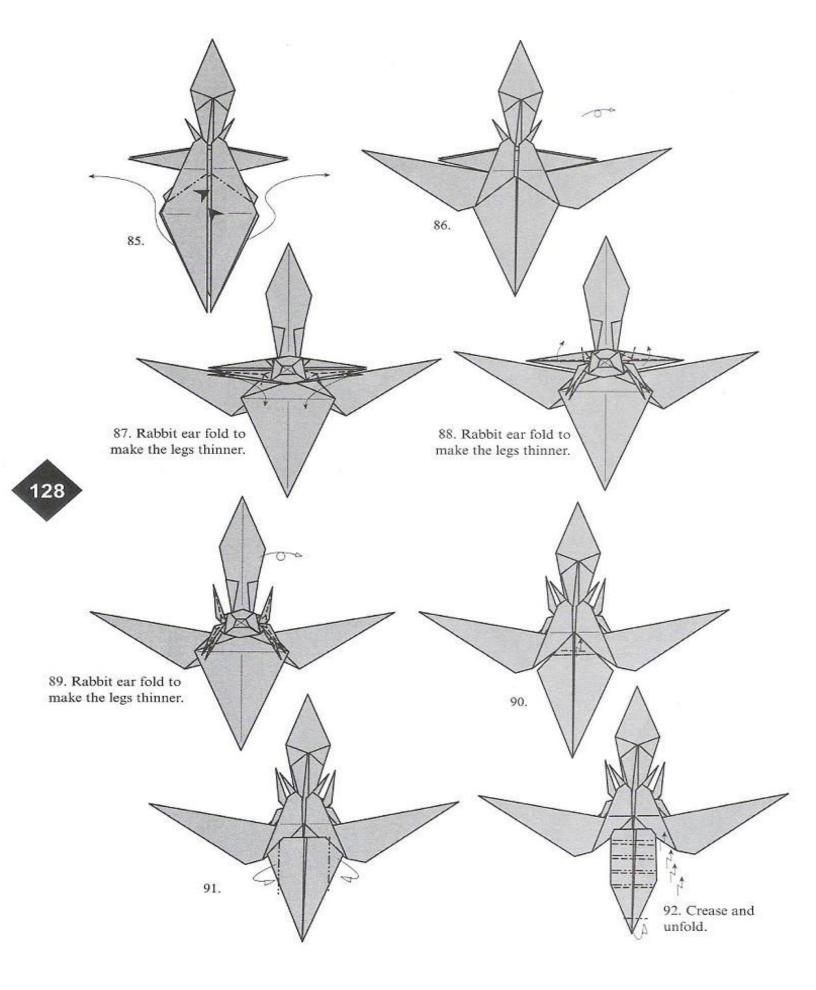
35. Repeat step on the reverse side.

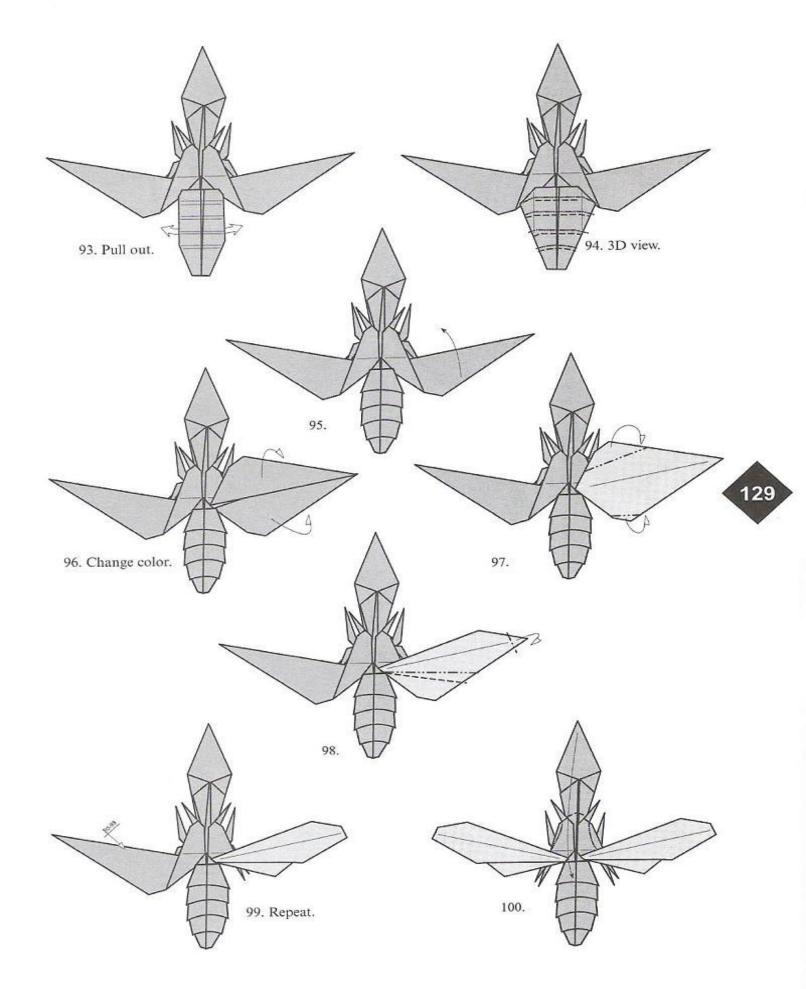


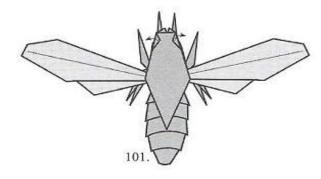


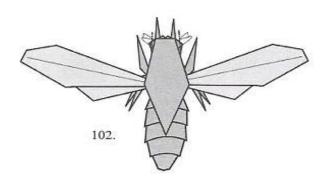


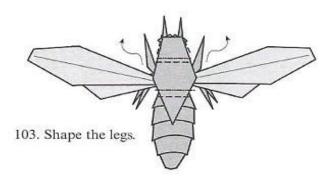


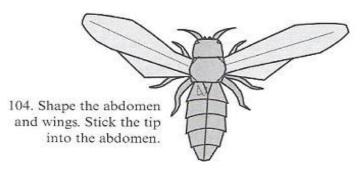




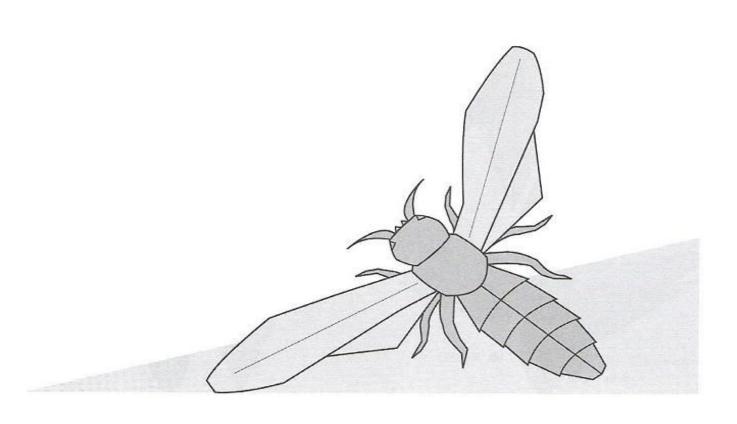


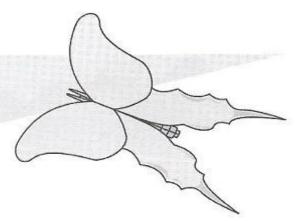


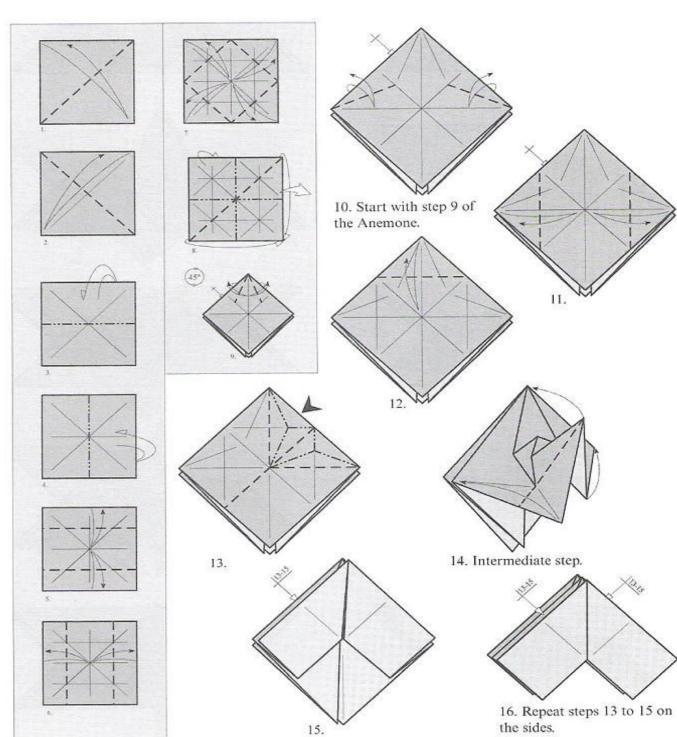


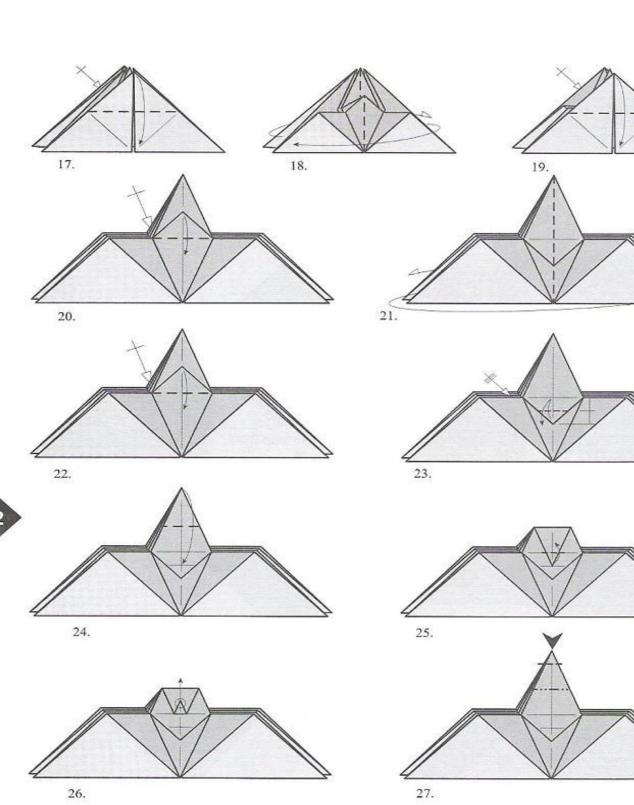


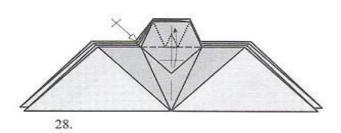


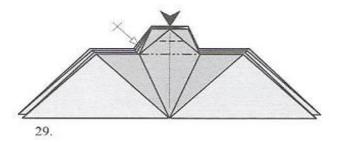


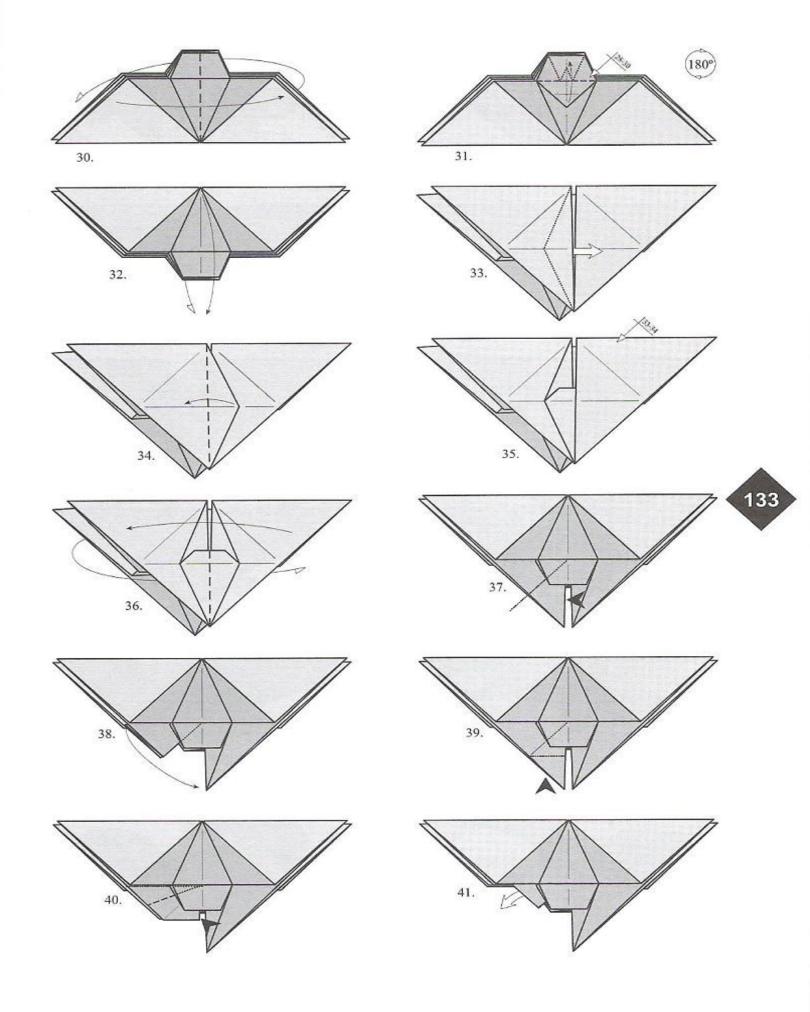




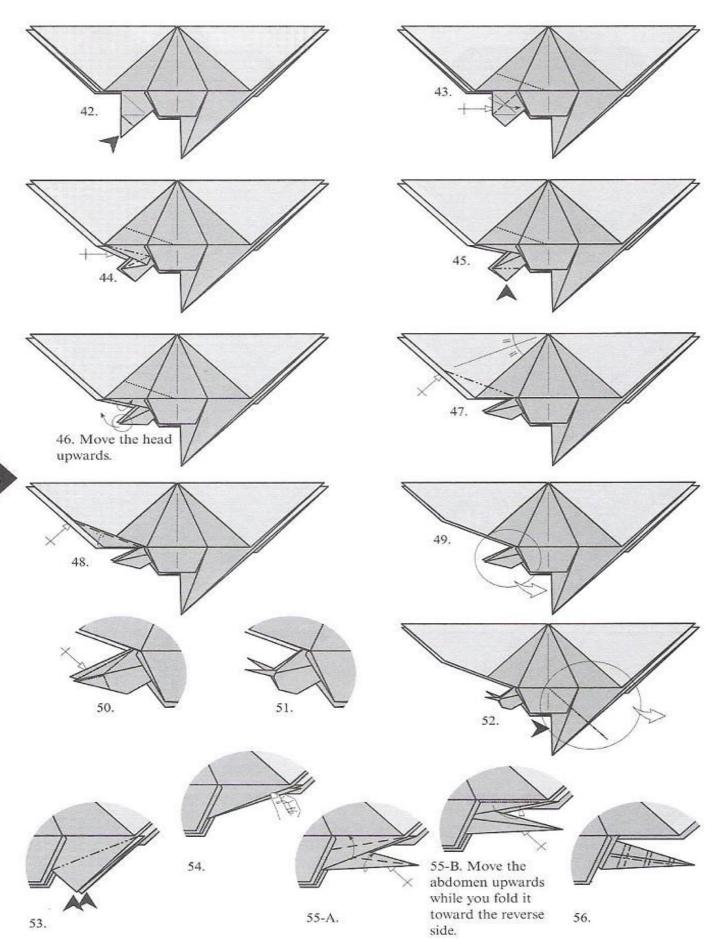




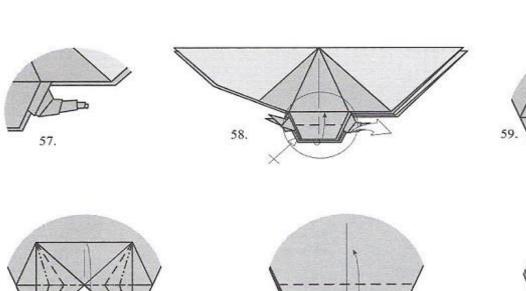


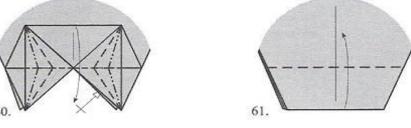


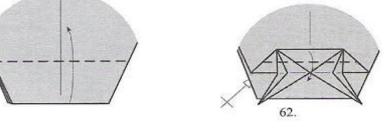


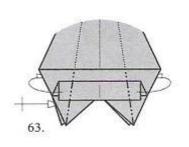


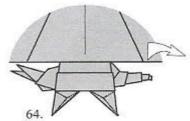


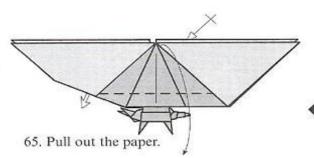


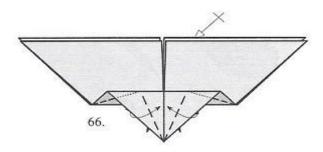


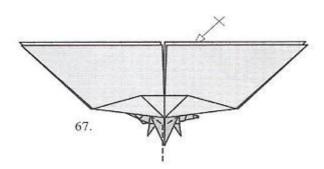


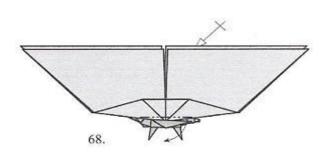


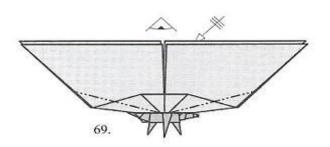


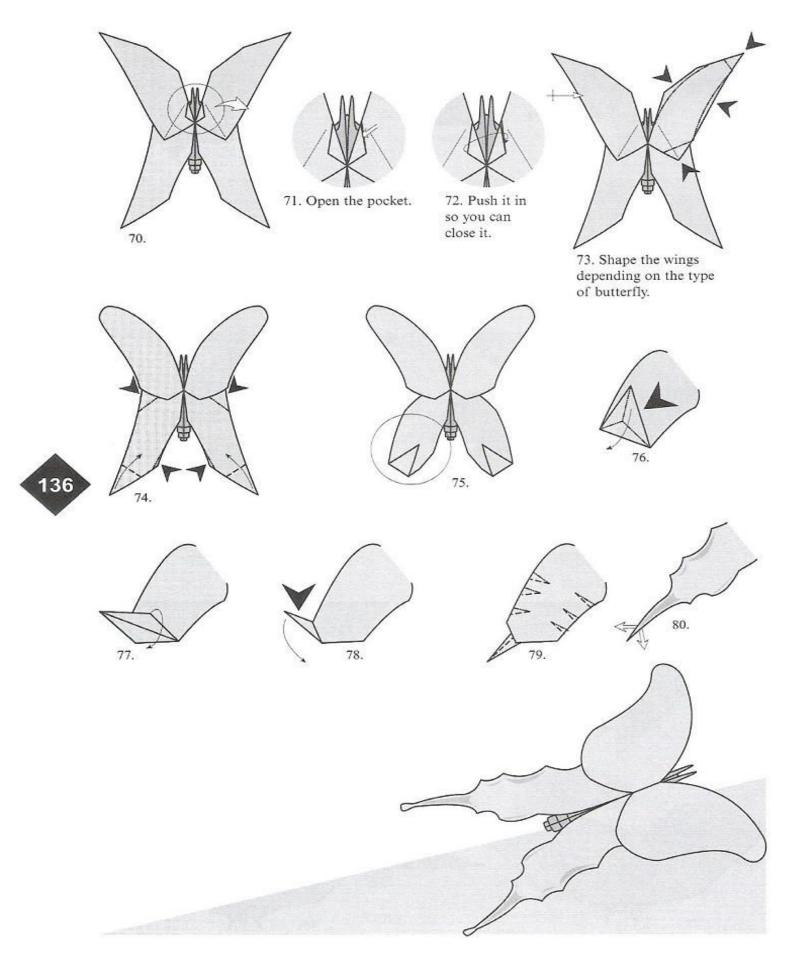












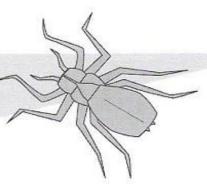
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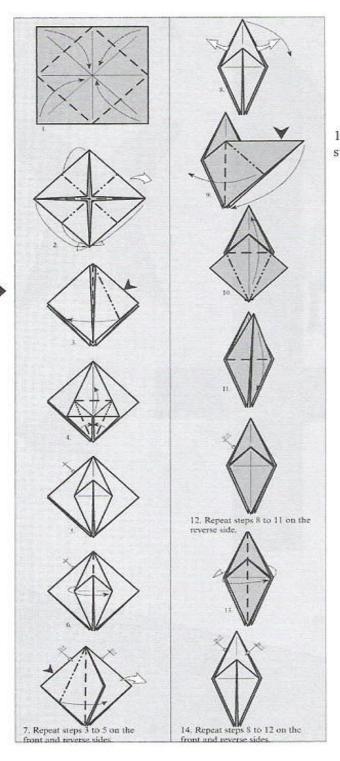
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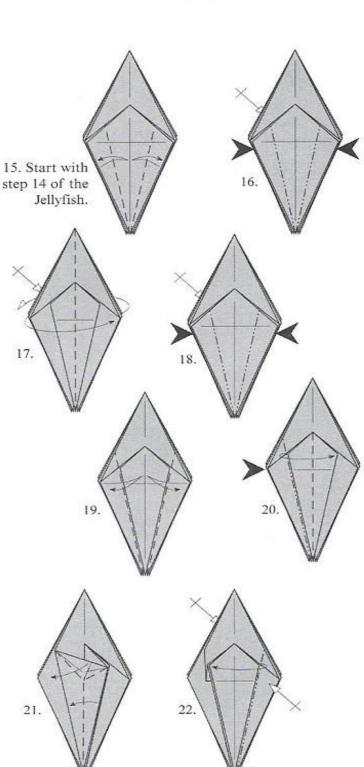
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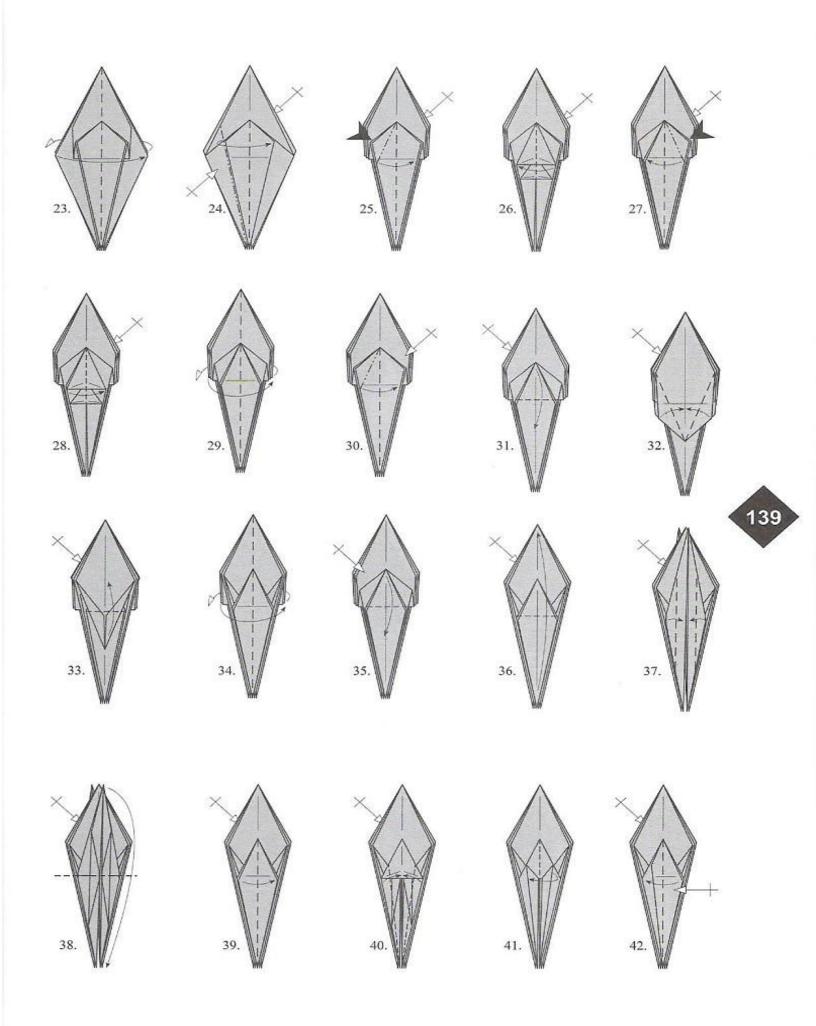
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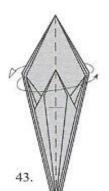
## Orb-weaver Spider

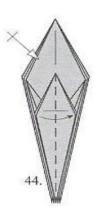


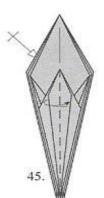






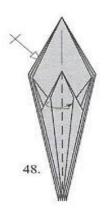


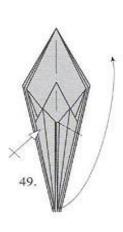


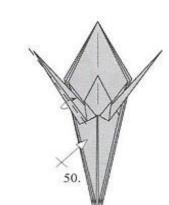


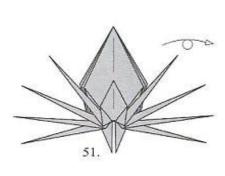


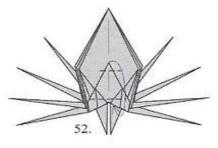


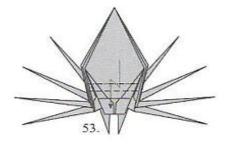


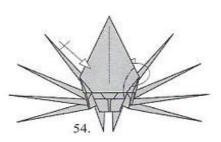


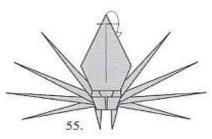


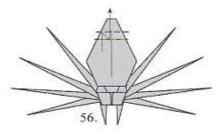


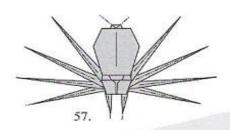


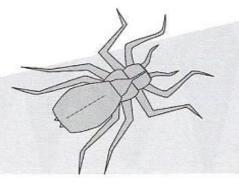


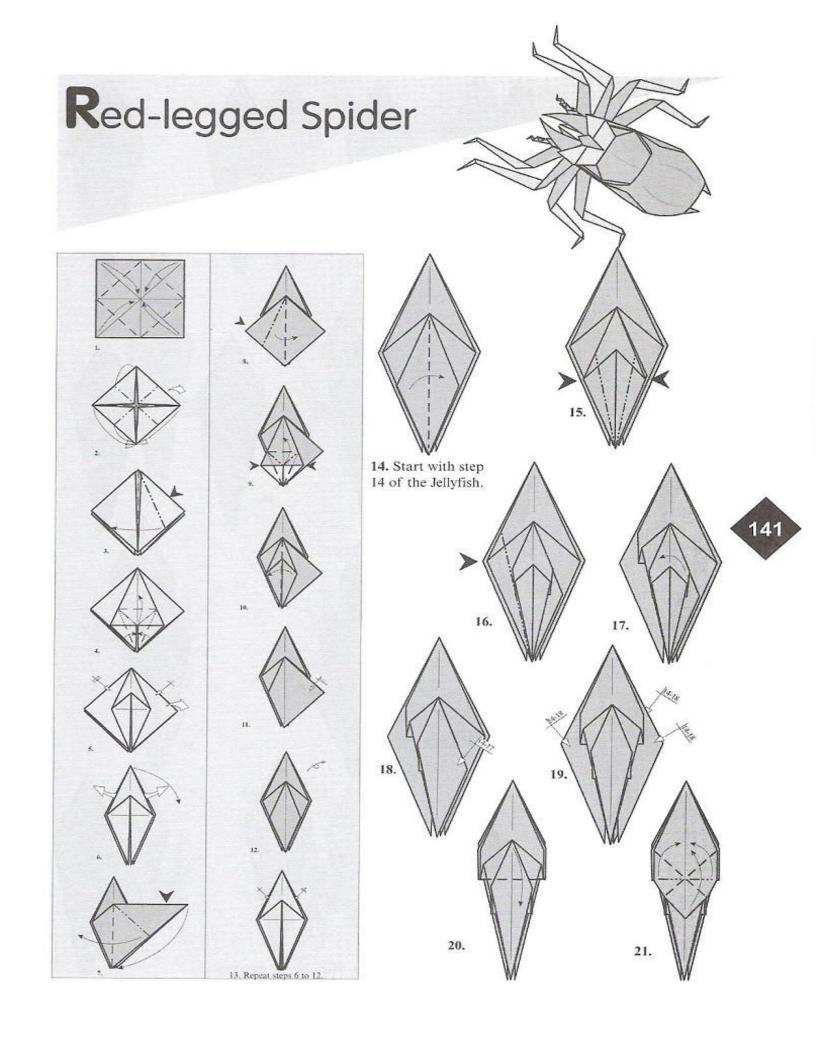


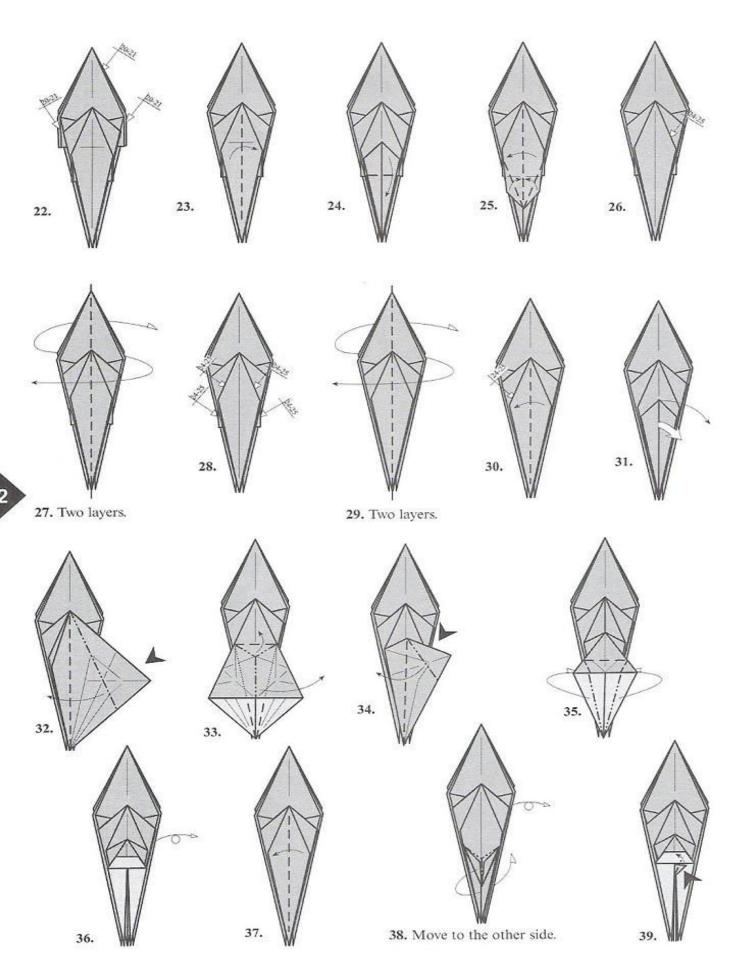




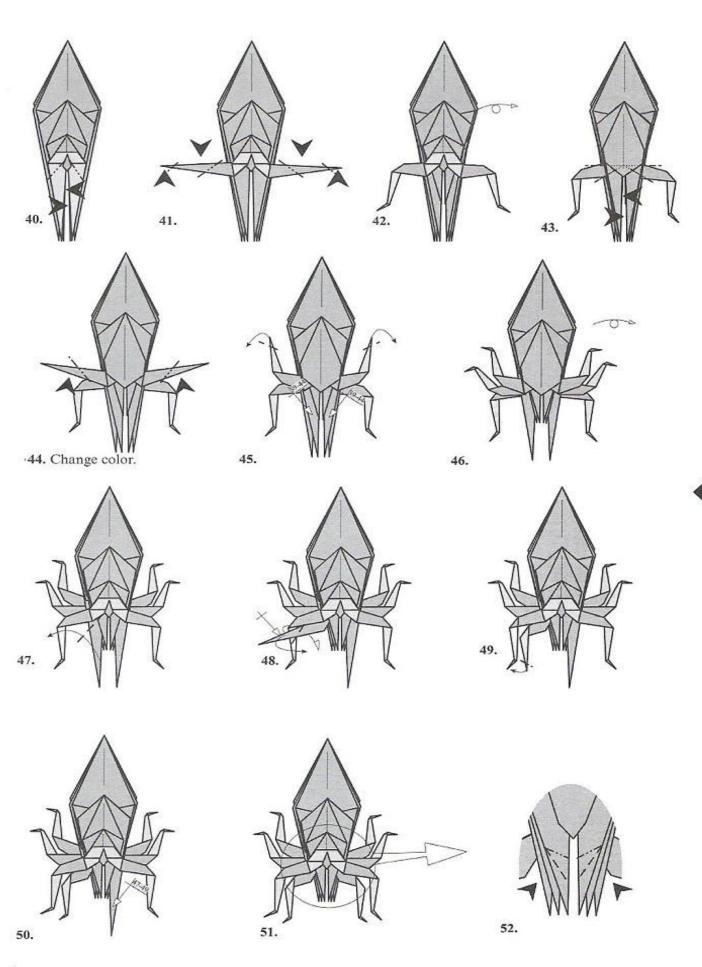


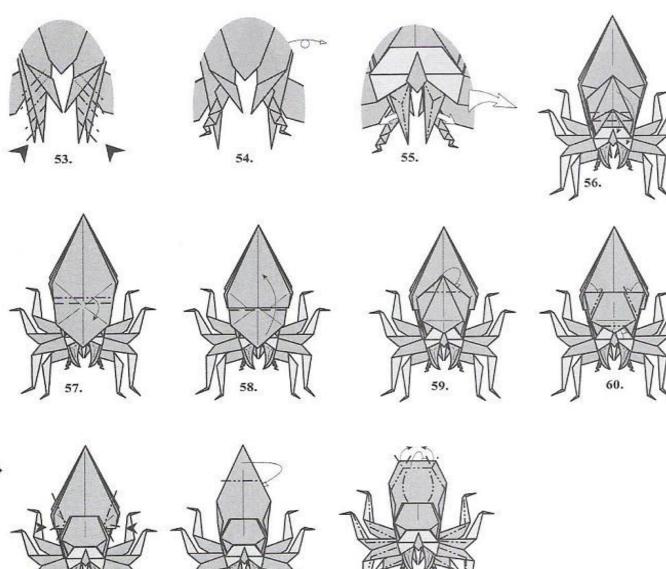


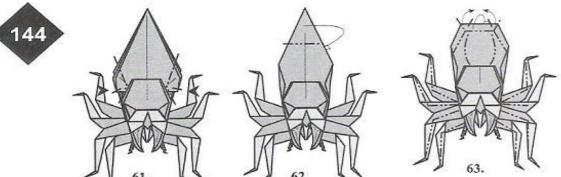


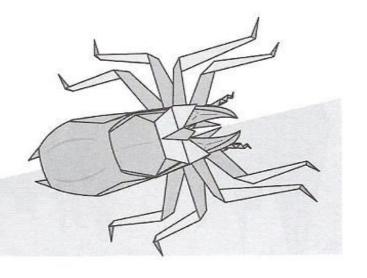






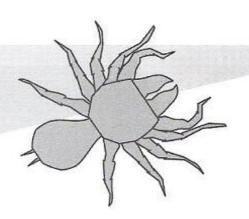


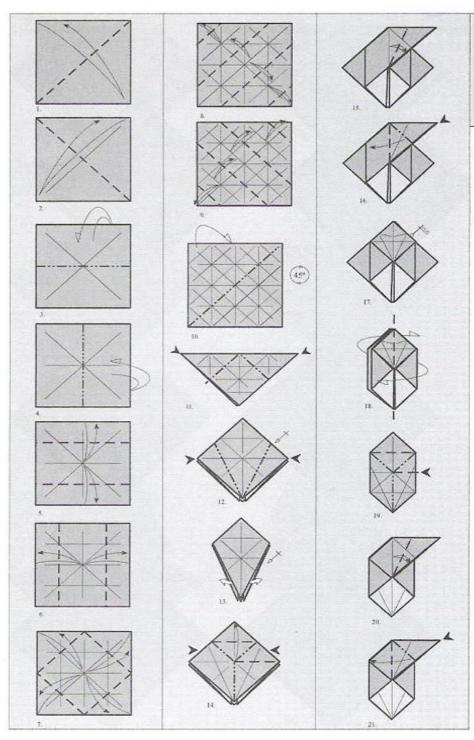


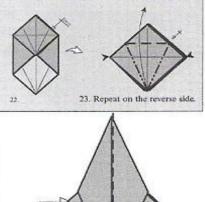


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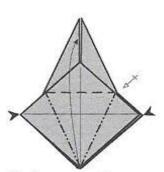
## Tarantula



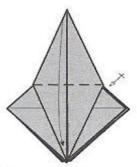




24. Start with step 23 of the Wasp.



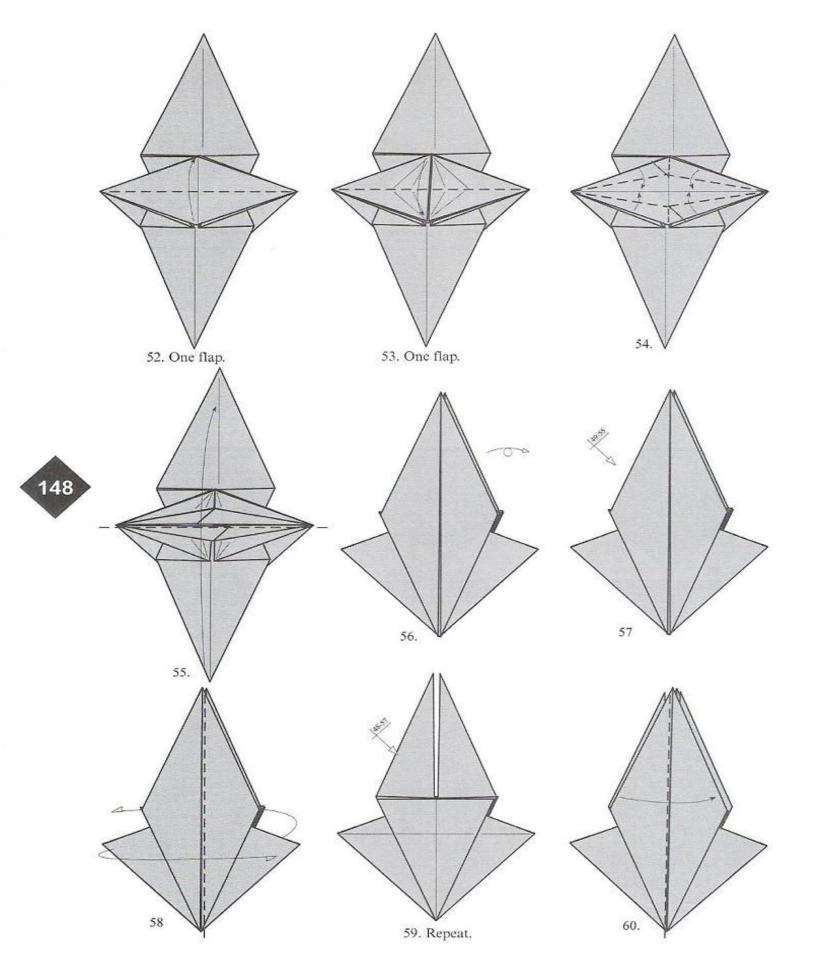
25. Repeat on the reverse side.

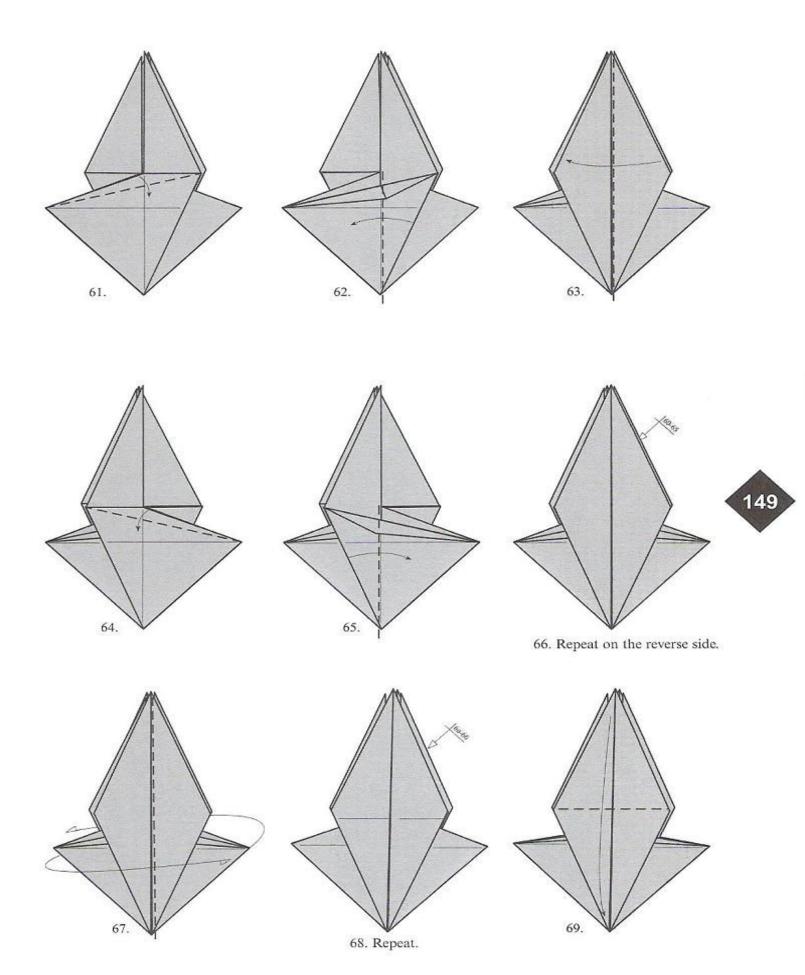


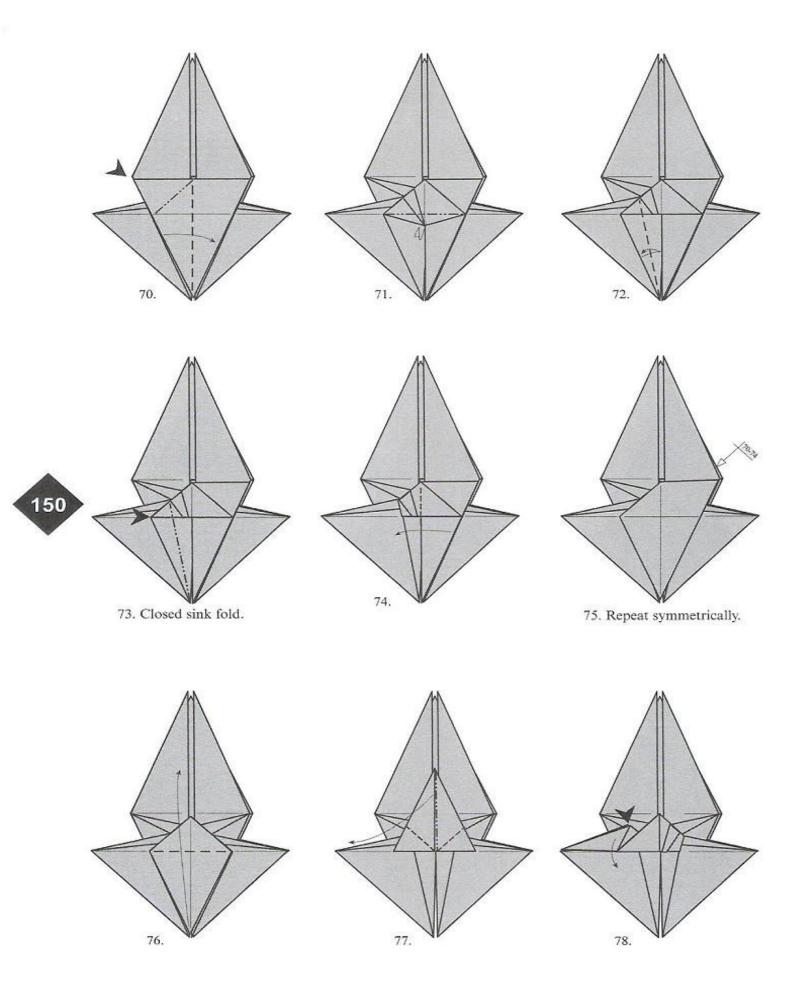
26. Repeat on the reverse side.

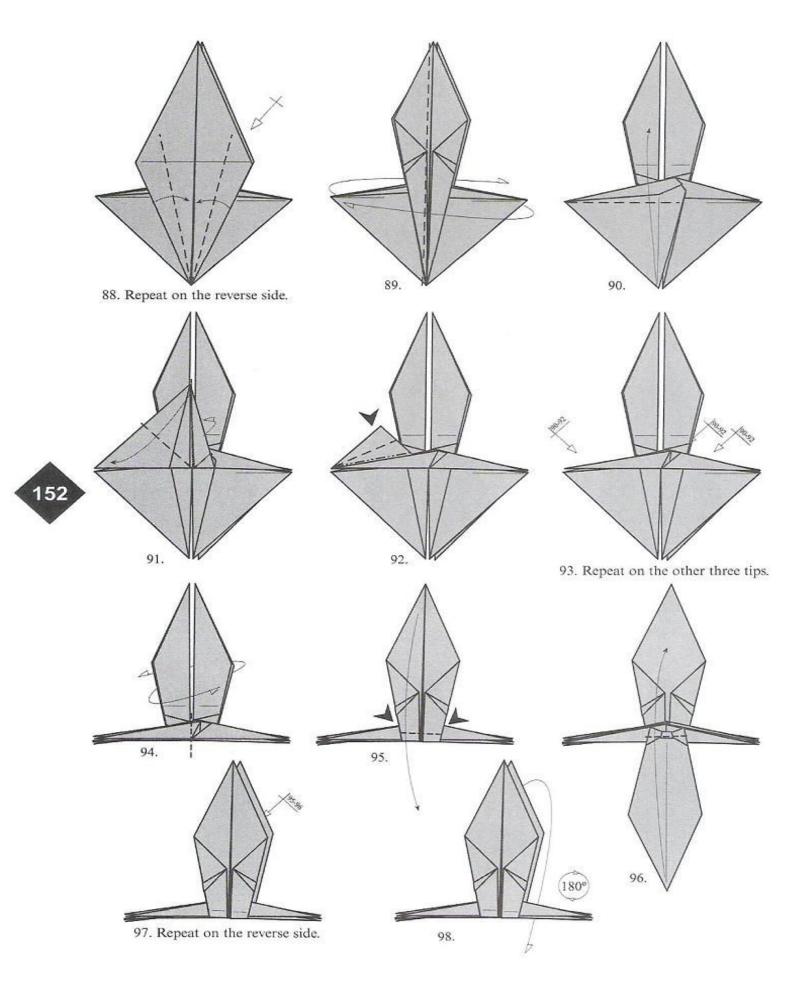
37.

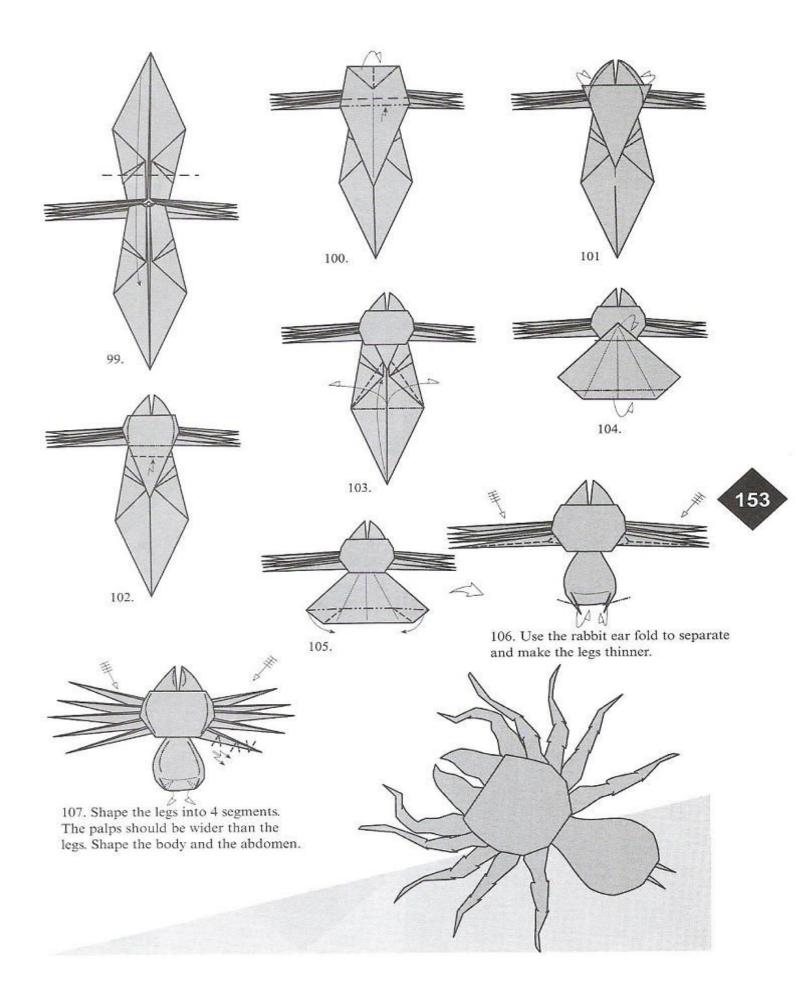
39.



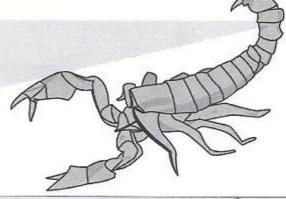


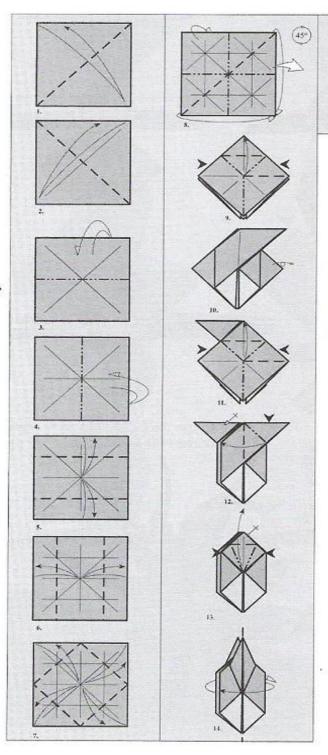


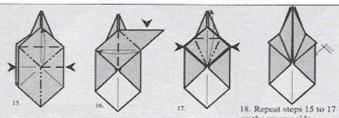


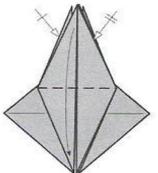


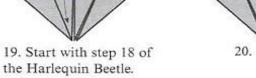
## Scorpion

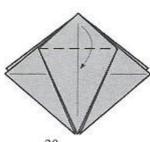


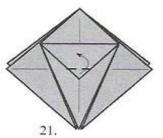


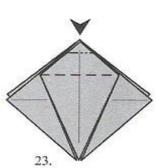


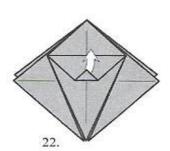


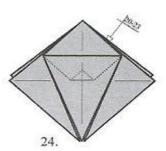


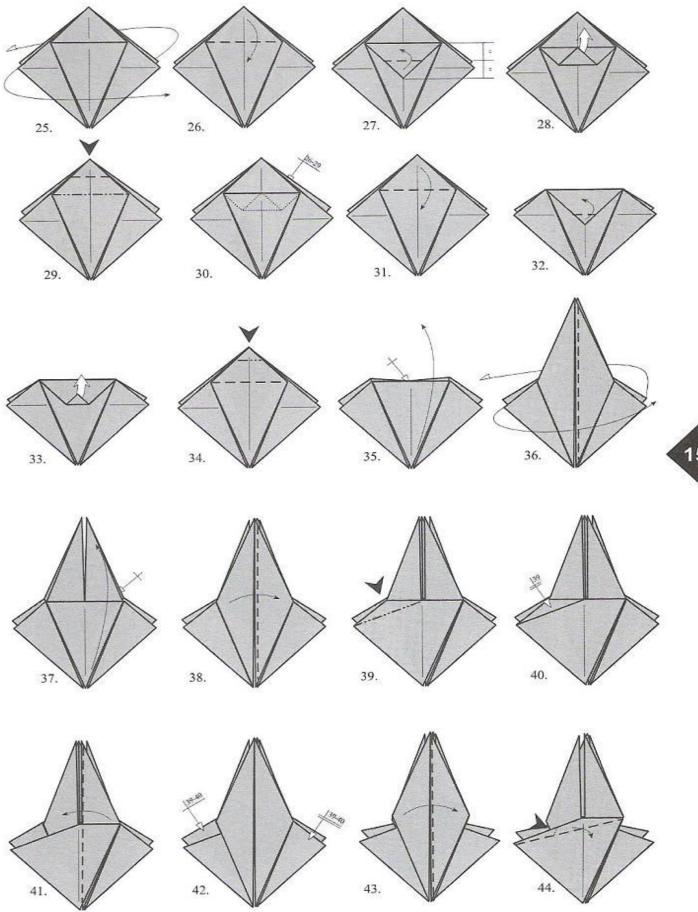


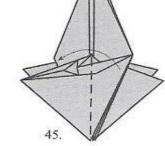


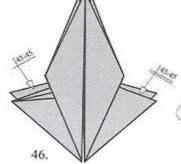


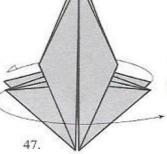


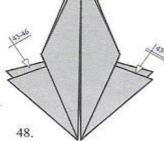


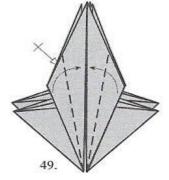


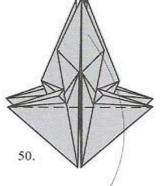


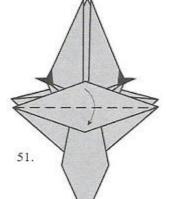


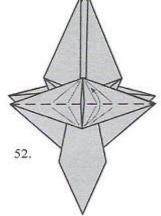


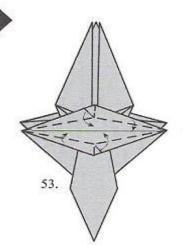


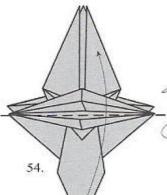


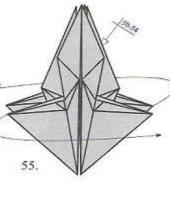


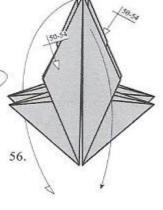




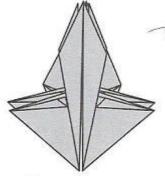


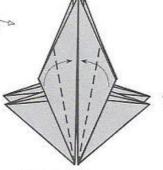


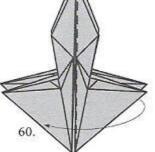




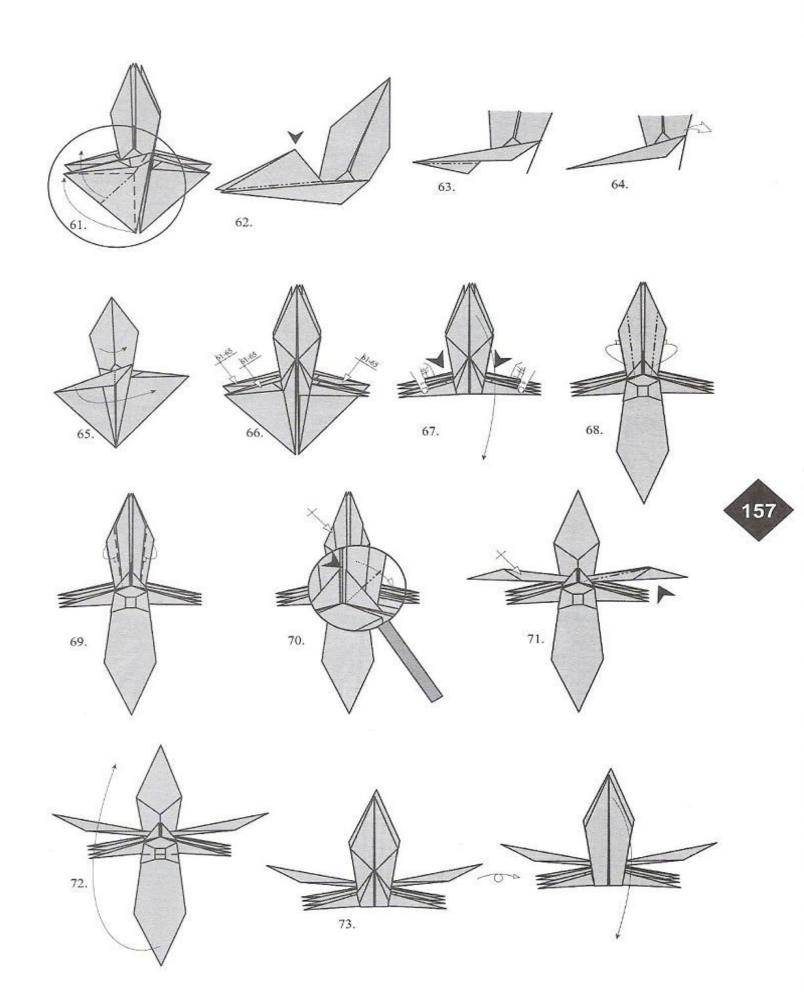




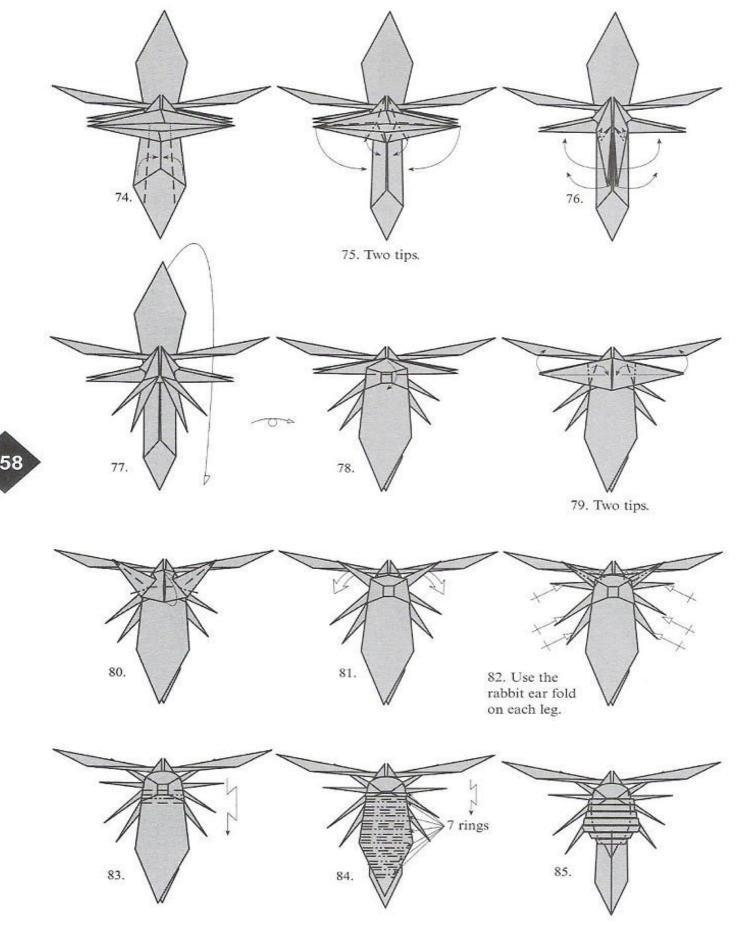


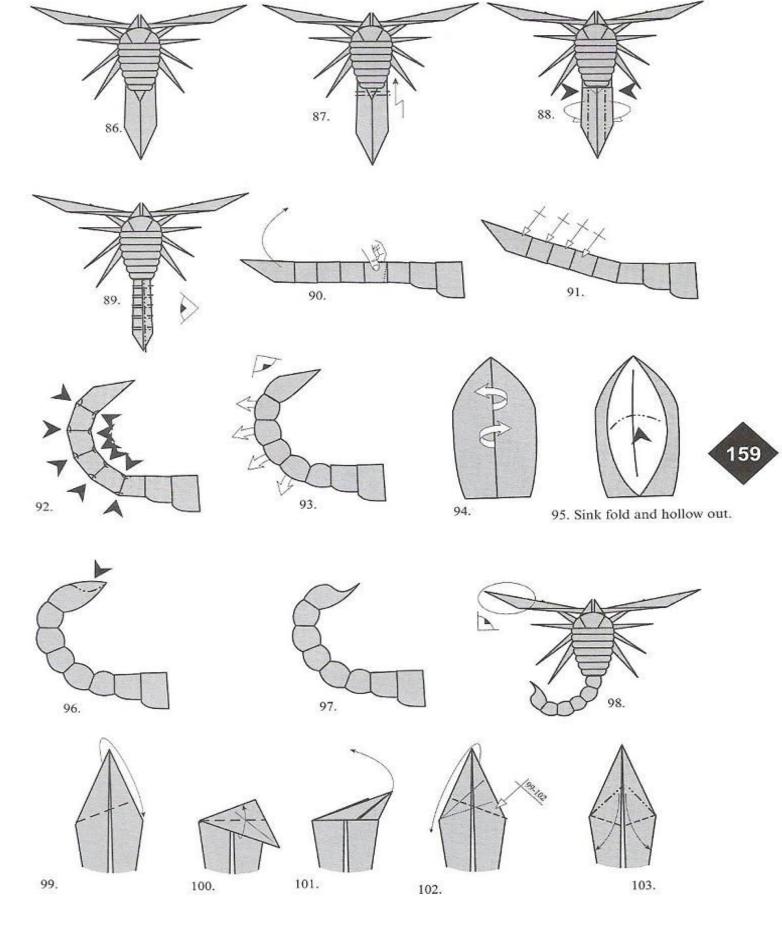


59. Thorax















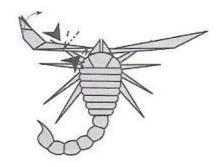


107.

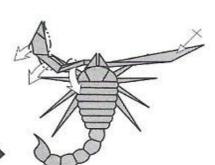
108.





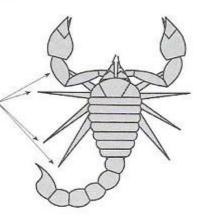


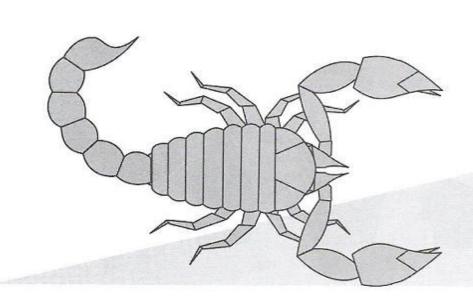
111.



112. Pull out the paper and shape into a round form.







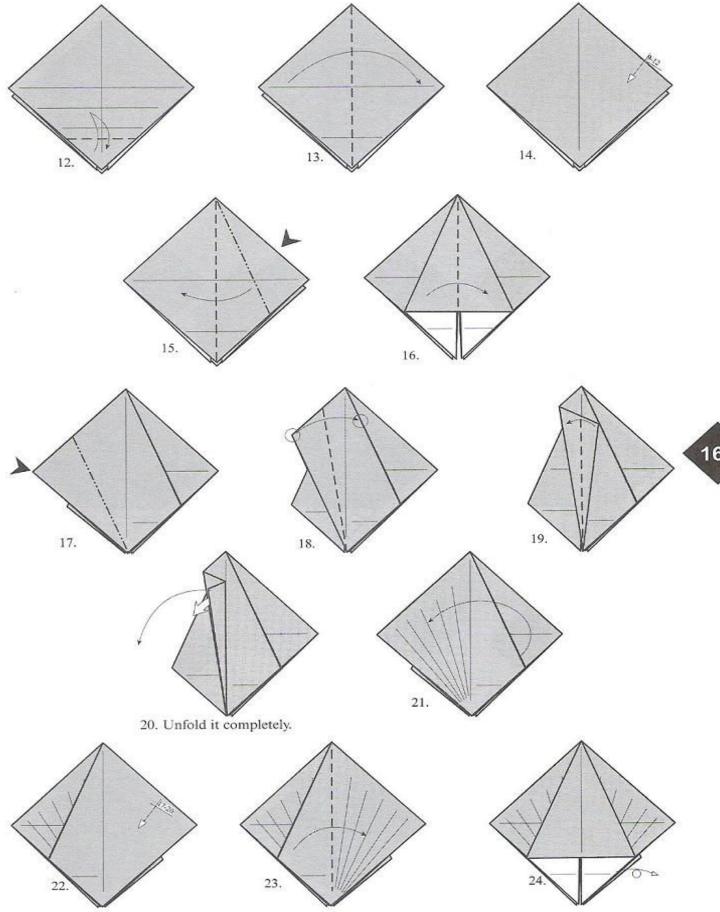
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# OTHER EXOTIC CREATURES

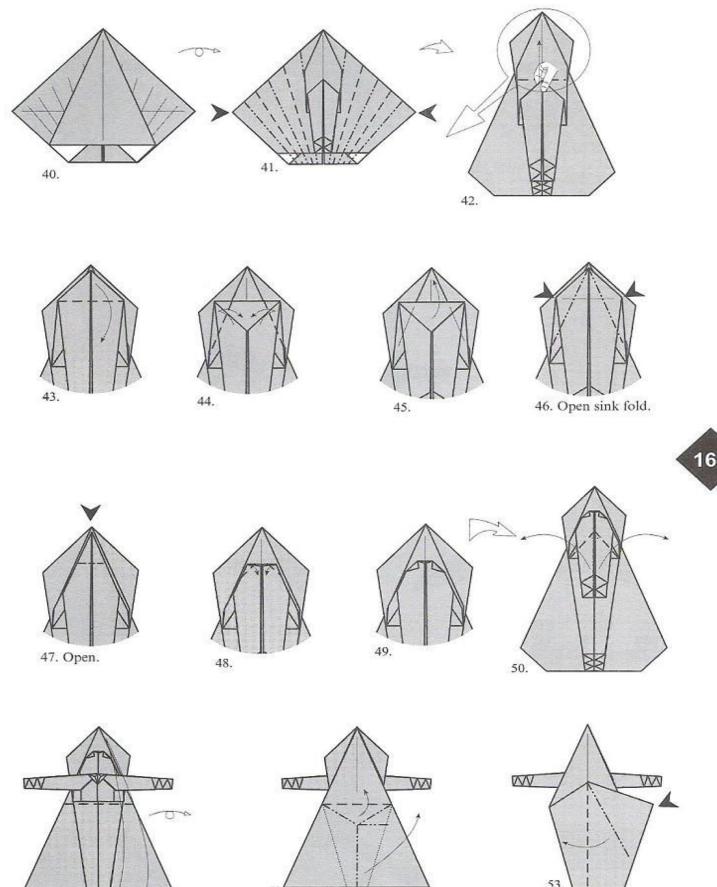
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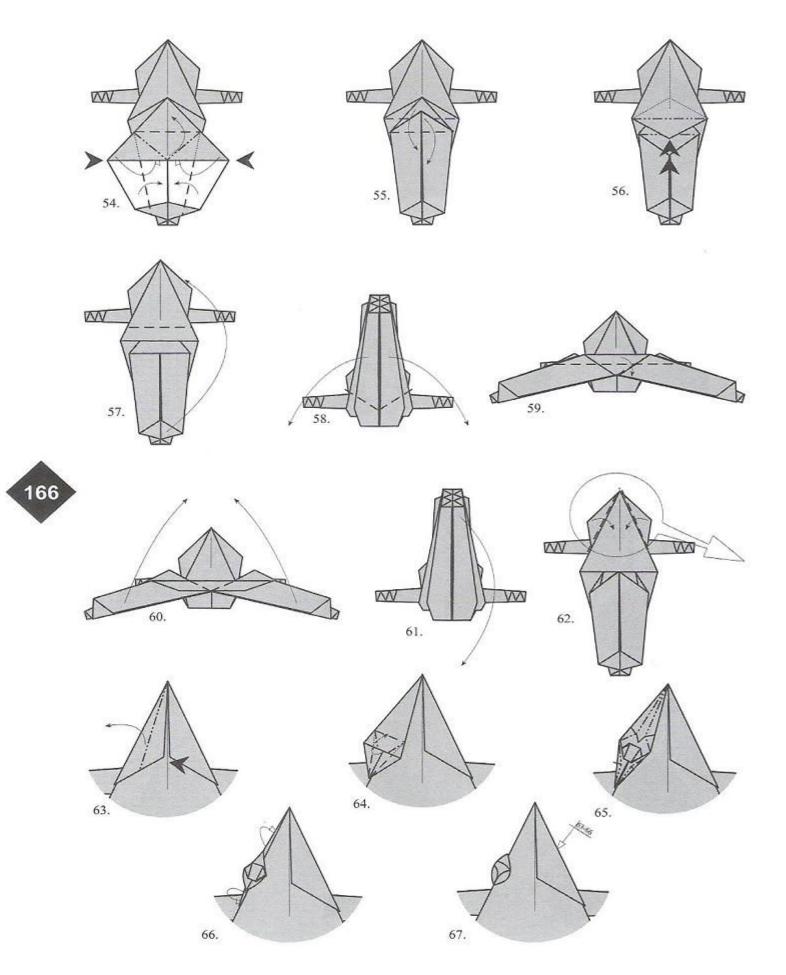
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OTHER EXOTIC CREATURES

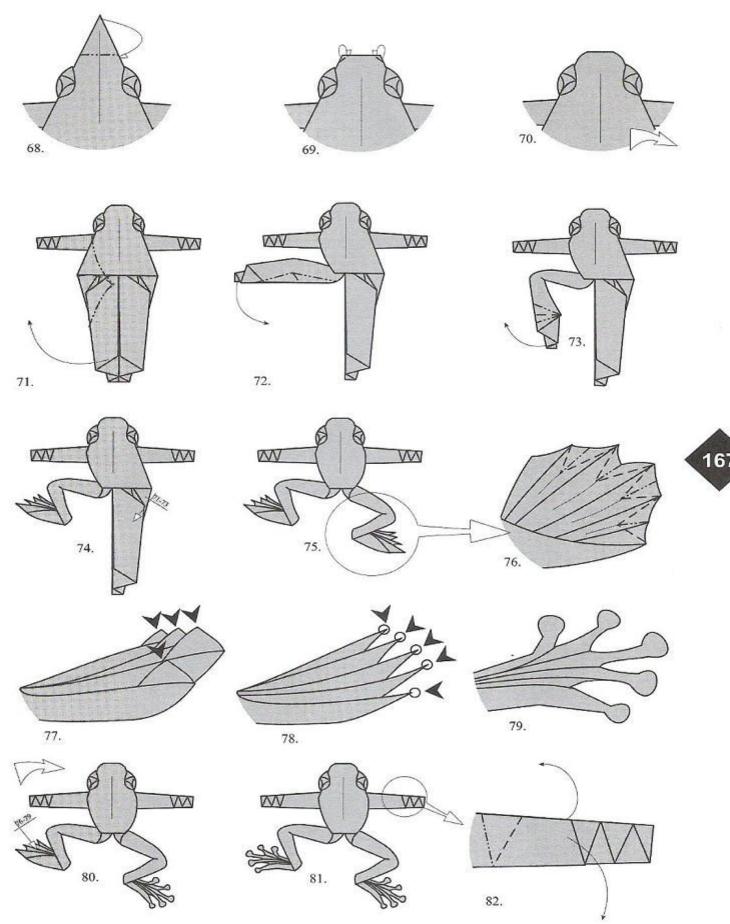


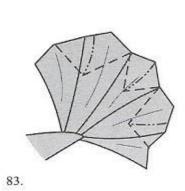


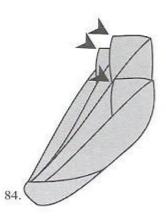


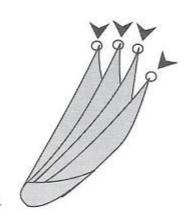


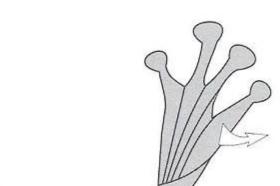


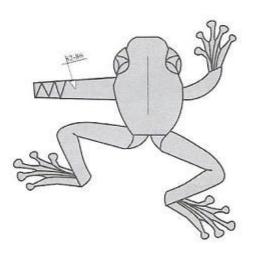




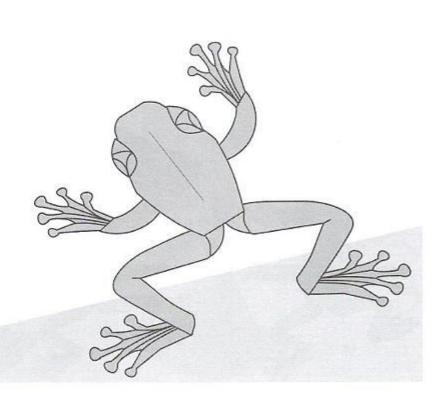






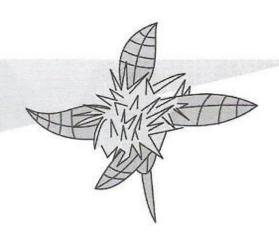


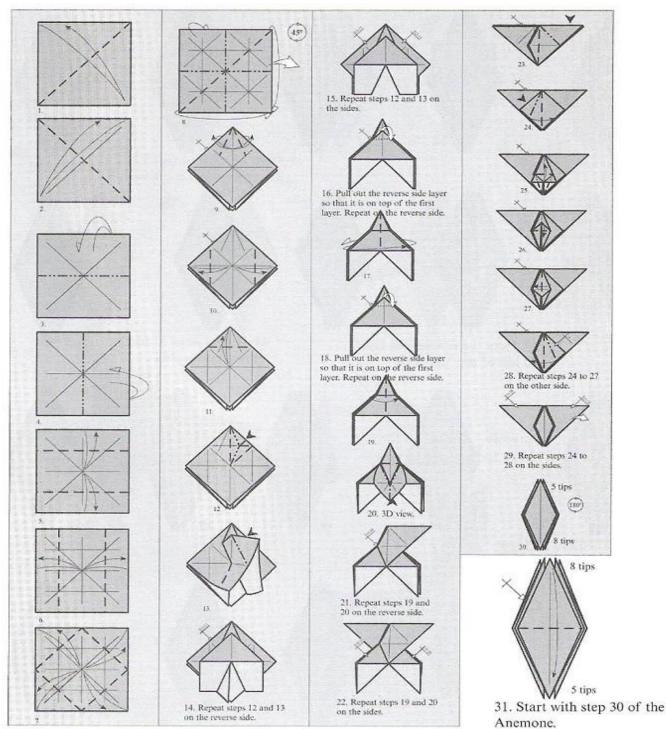
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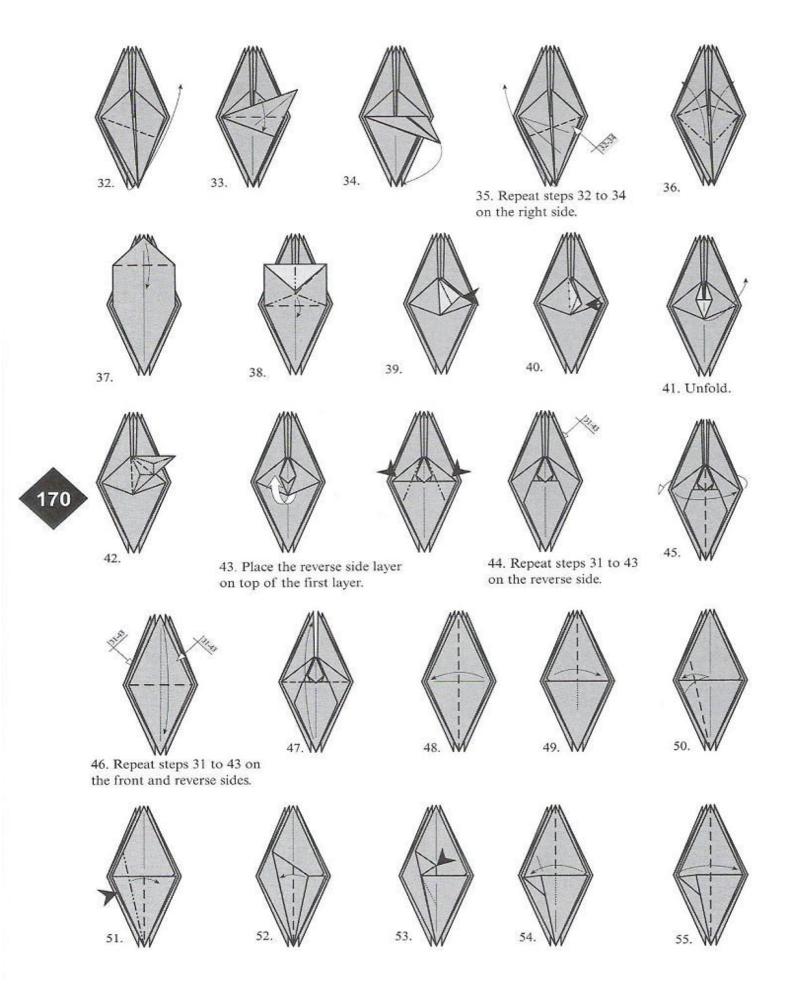


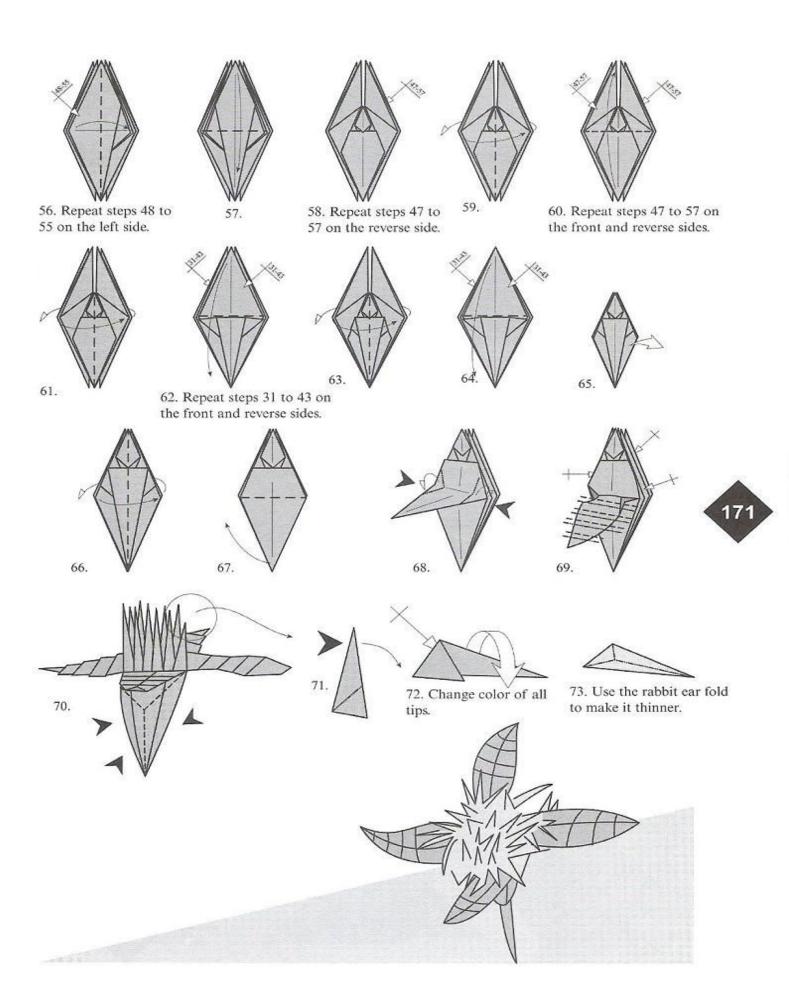
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## Centaurea



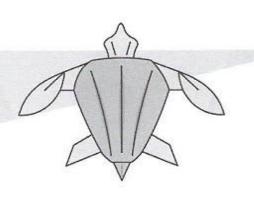


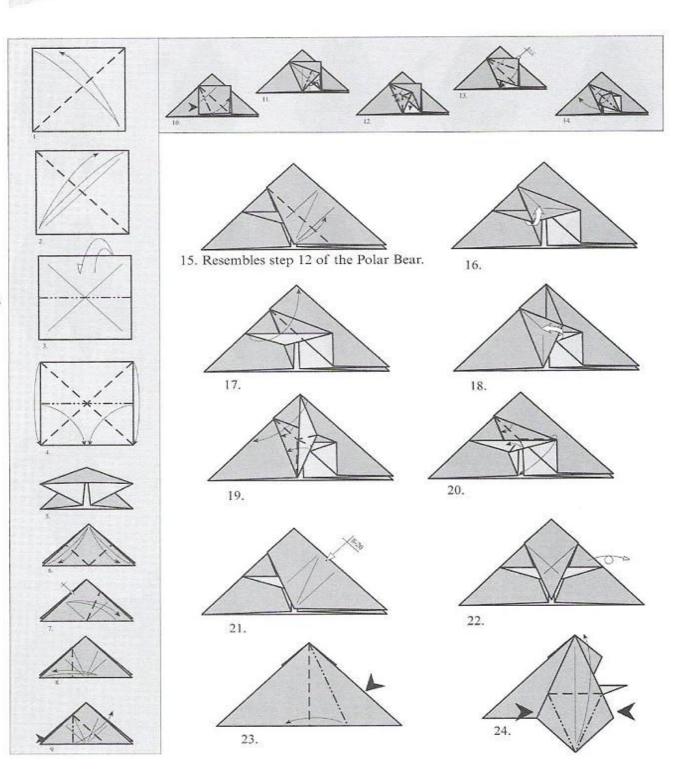


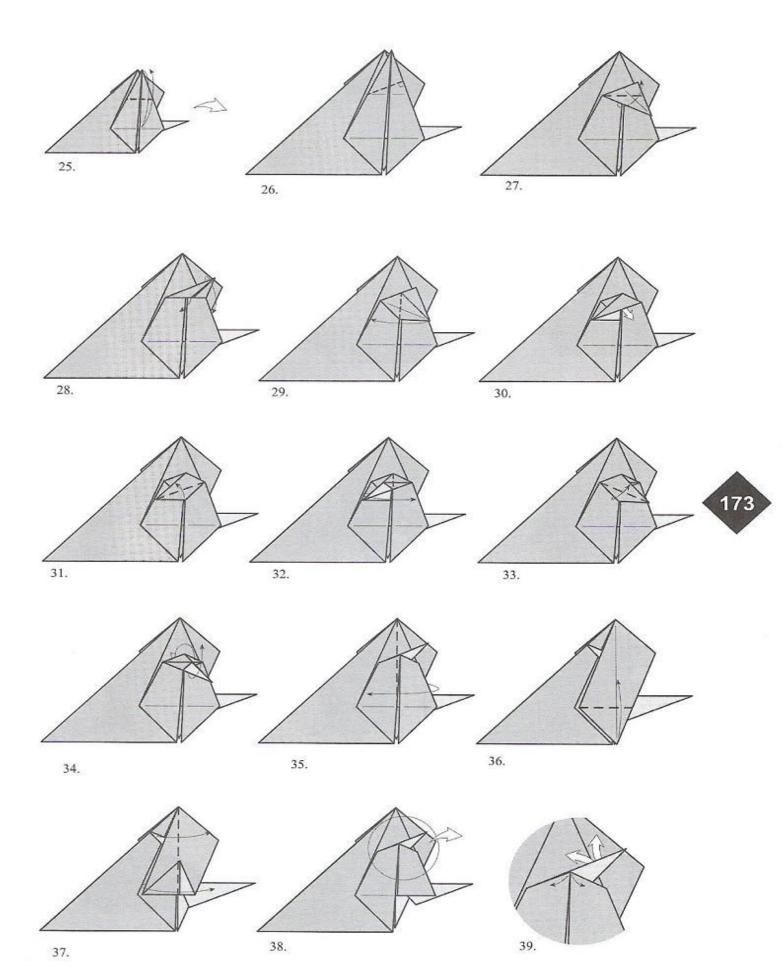


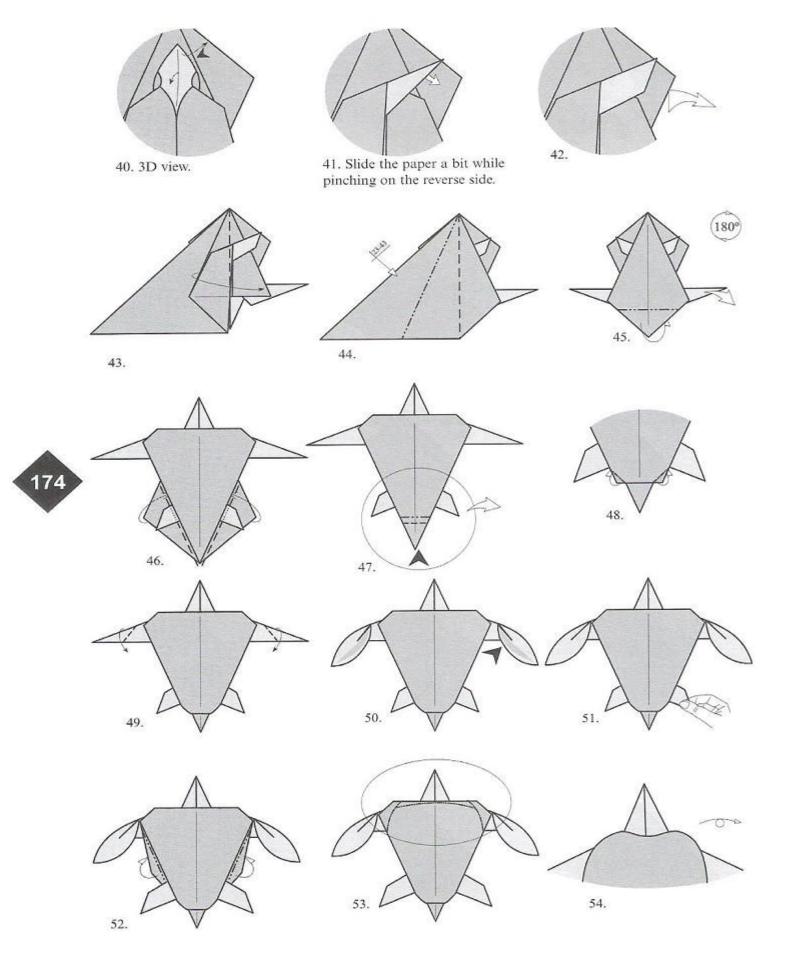
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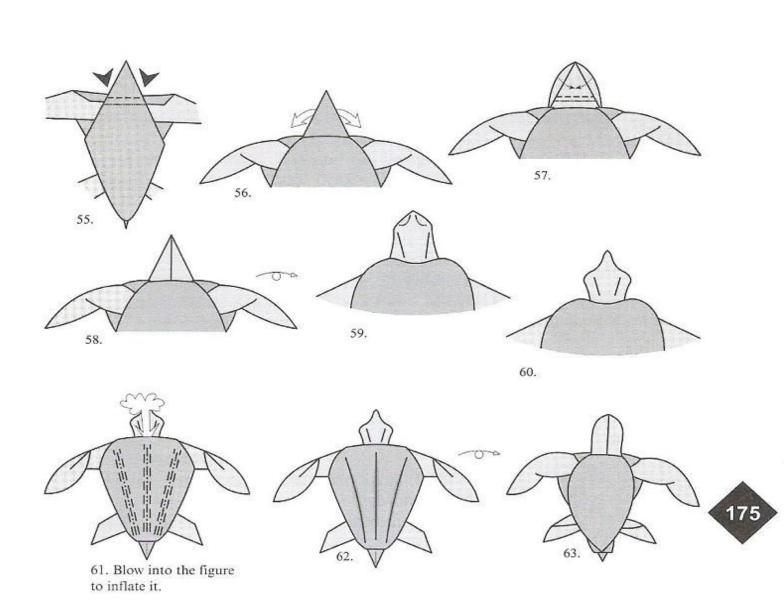
## Leatherback Sea Turtle

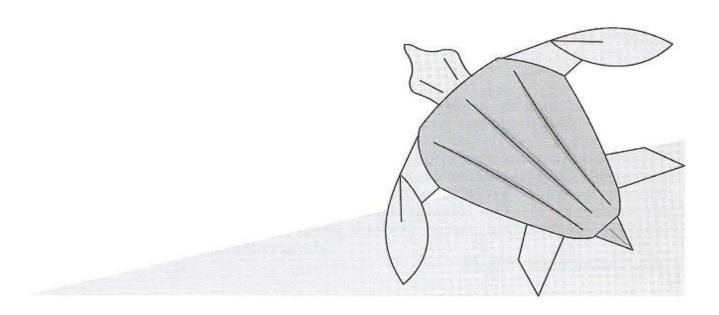












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#### MANUEL SIRGO ÁLVAREZ

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