

The Joerg Sprave „Panther“

A „Dankung“ slingshot, designed for
the advanced shooter

User's manual and handbook for
successful modifications

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A word from the designer

Thanks for purchasing the „Panther“! I put in all of my experience in slingshot design with the goal to create a frame that shoots great right out of the box, but also is an ideal „blank“ for advanced modifications. Plus, it is made to accomodate both popular shooting styles, „Hammer Grip“ and „Finger Support“.

Burgkunstadt, Germany, July 2011
Jörg Sprave

Just unpacked it?

If you have ordered your Dankung „Panther“ directly from the Chinese Dankung website, chances are you are holding something like THIS in your hands now:



Factory Setup

As you see, the Panther is paracord wrapped and shipped with the typical „Chinese looped“ bands. Short rubber sleeves ease the „Finger Support“ grip style, where you wrap your thumb and index finger around the trigger like fork hooks.

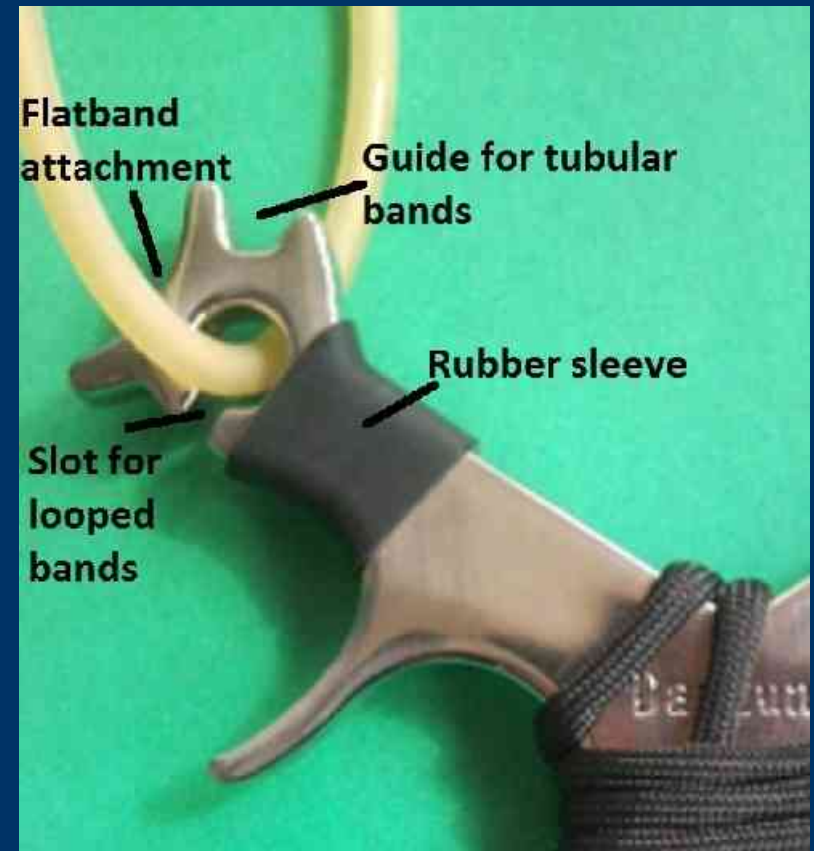


The Panther fork tip explained

The fork tip is designed to accommodate both flat bands and looped tubular rubber.

Tubular bands are aligned into the topmost „guide“ for consistent shots.

Flat bands are attached „over the top“ and align themselves.



Shooting the Panther in „Finger Support“ Style

1. Put on your safety glasses.
2. Set up your target in a safe place.
3. Load a ball in the pouch.
4. Hold the Panther in your frame hand, wrap the thumb and index finger around the „triggers“
5. Turn the frame sideways, „Gangsta style“
6. Now you can aim over the top of the upper fork tip. You will have to adjust for the height. Use an „anchor point“, like the corner of your mouth or your ear lobe.
7. Now draw out and shoot.
8. Adjust your aim until you are hitting well.



Shooting the Panther in „Hammer Grip“ Style

1. Put on your safety glasses.
2. Set up your target in a safe place.
3. Load a ball in the pouch.
4. Hold the Panther in your frame hand, like you would hold a hammer or a pistol.
5. You can hold the slingshot any way you like, just make sure to avoid canting (both fork arms must be aligned).
6. You can aim, but this style is often used by „instinctive“ shooters.
7. Now draw out and shoot.



Changing the „looped“ bands

You can simply slip the bands out of the slots at the underside of the frame. Just stretch the bands a bit so they get thinner, then you can easily get them out.

You can do the same trick when slipping on new bands.



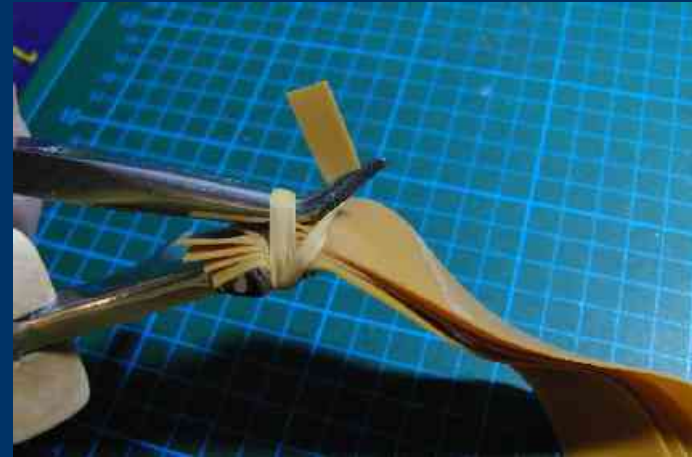
Flatbands - Why?

Flat bands can be purchased from many different suppliers, or you can make them at home, from rubber sheets or gymnastics bands (see the instructions on page 13).

Flat bands are faster, but do not last as long as tubular bands. They are also not as easy to attach and detach. But they are easy to draw and shoot harder than tubes.



Attaching Flatbands



You need a set of flatbands and two thin strips of rubber. The strips can be made from the same material as the bands, or simply strong office rubber. You also need a set of pliers.

Put one of the ends of the rubber band over the fork tip. Let it „fold over“ about to the end of the hole for the tubular bands.

Press your finger onto the end so it does not slip off.

Put the end of the rubber strip onto the end, press it down with the same finger. Draw out the strip and wrap it around the fork tip and rubber band tightly, about six times.

The last two turns, put the closed tip of the pliers between the band and the strip.



Attaching Flatbands



Grip the end of the strip with the pliers and pull. Release the pliers. The band end is now attached.

Repeat with the other end. Make sure the bands are not twisted or entangled.



Making your own flatbands



Want to make your own flatbands? Here is how to do that.

Making your own flatbands



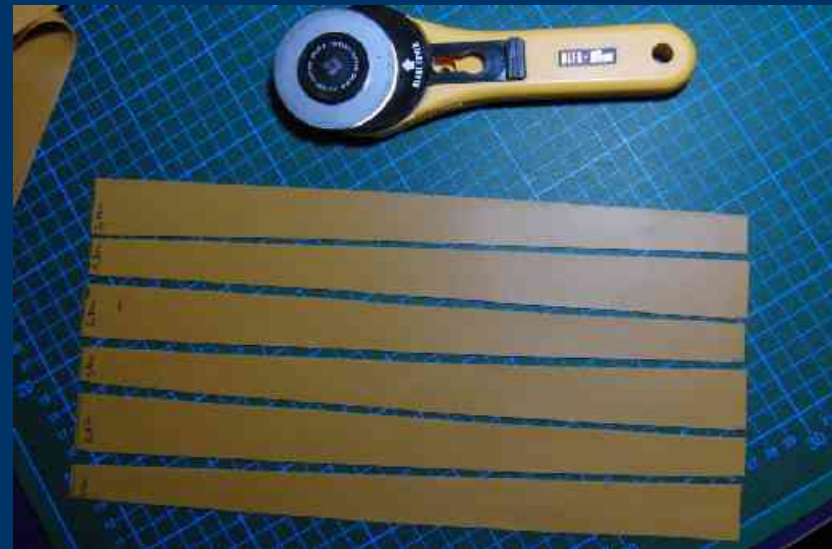
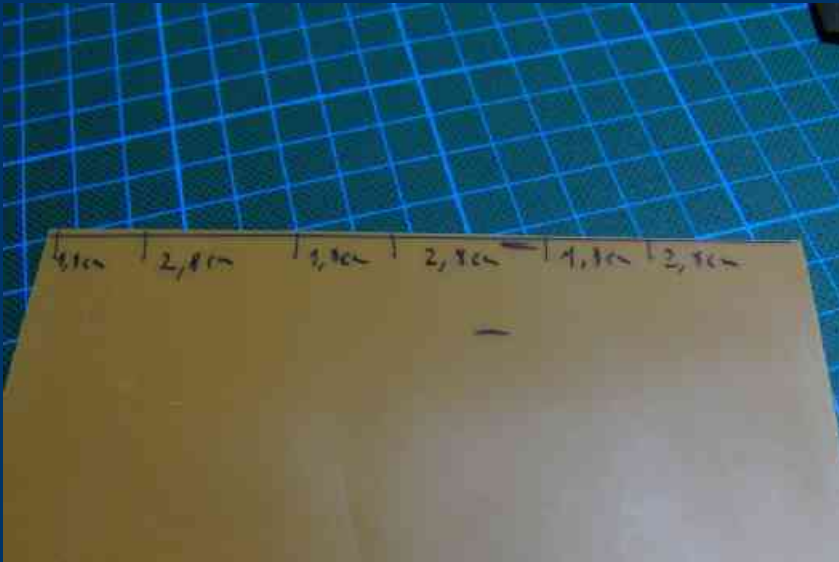
You will need a roll of Thera Band (in this case „Gold“), a metal ruler, a roll cutter, some thick leather and some string. You can find all of this on ebay.

Making your own flatbands



First, cut a length of Thera Band from the roll.
 20% of your draw length + 3 cm is a good start.

Making your own flatbands



Now, use a pen and draw 1,8cm and 2,8cm cut marks (alternating) onto both ends of the rubber. Cut the stripes. You will get six in total.

Making your own flatbands



Use one stripe per side for smaller ammo (10mm steel), two for bigger ammo (15mm steel), and three for very big ammo (20mm).

Making your own flatbands



Cut the pouches from the leather hide. Larger ammo needs larger pouches. A center hole is often helpful, but not absolutely required.

Making your own flatbands



A pouch should be big enough to accomodate the ammo of your choice.

Making your own flatbands



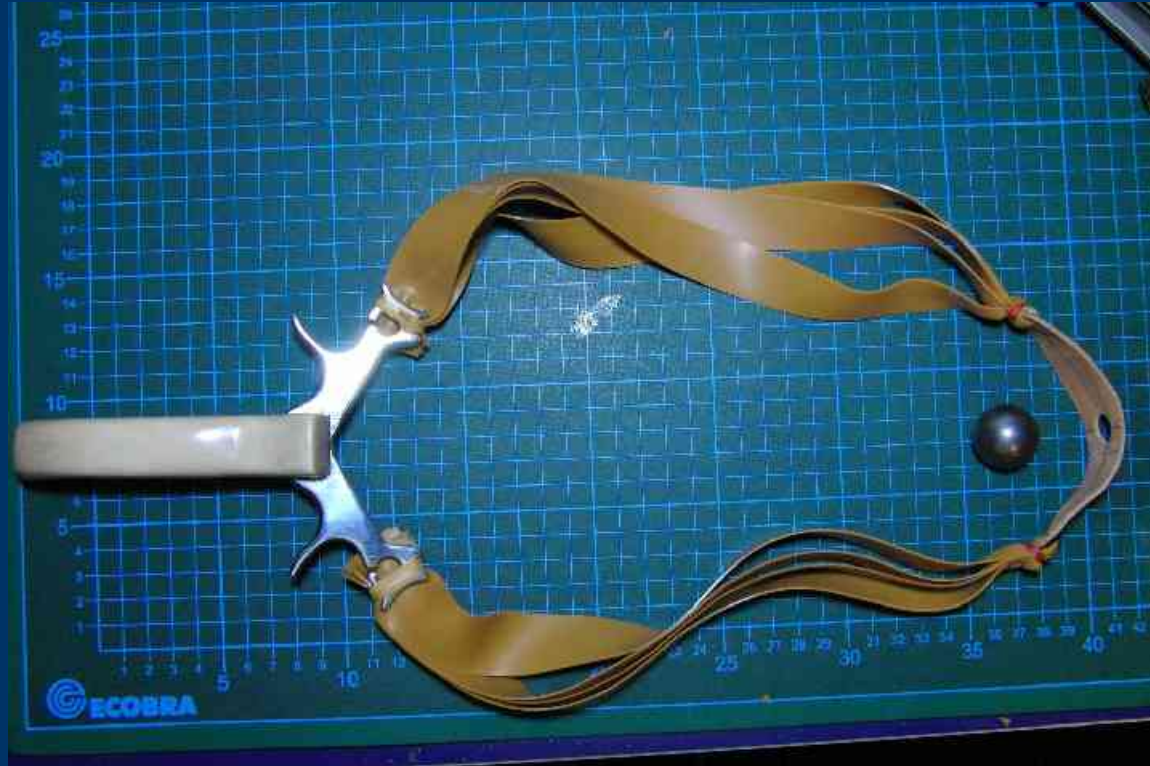
Pull the thinner end of a band stack through one of the holes. Slip the pretied string (constrictor knot, tutorials on youtube, Find a good one here) over the pouch.

Making your own flatbands



Tighten the knot. You can prestretch the rubber a bit if you want. Cut off the excess rubber and string. Repeat on the other side.

Making your own flatbands



Your band set is now ready for the „Panther“!
Good shooting.

Frame Modifications



The Panther is ideal for any kind of modification. The frame is made from stainless steel, but it is not hardened – which is good. Unlike a knife, a slingshot is not supposed to „cut“. Its main job is to hold under stress. Therefore, unhardened steel is much better as it would rather bend, but not crack. But this also allows you to saw, file and sand the frame into different shapes.

You can attach wooden scales, you can remove the „triggers“, you can even replace parts of the handle with a wooden knife handle block.

This chapter will show you three typical modifications. But the possibilities are endless!

Multiplex scales, pure hammergrip



This model shows the following modifications:

1. Scales made from 18 mm Multiplex
2. Finger support „triggers“ removed



Multiplex scales, pure hammergrip



Saw the „triggers“ off and file the fork arms smooth.



Multiplex scales, pure hammergrip



Saw out the scales from multiplex wood. Make sure you have a bit of a reserve, don't cut too tight. Use car body filler to close the gaps in the frame. File flat and roughen the surfaces with coarse sand paper.

Multiplex scales, pure hammergrip



Glue on the scales with two component epoxy. File into shape. Sand the surface. Oil the the handle to protect it from weather.

„Teardrop“ shaped wooden handle



This model shows the following modifications:

1. Handle made from Caucasian Walnut
2. Panther frame cut down at the sides



„Teardrop“ shaped wooden handle



Cut off the side bars of the Panther frame, then take a wood piece and drill a 7,5 mm hole into the middle.



„Teardrop“ shaped wooden handle



File in a groove for the 7mm Panther frame.

„Teardrop“ shaped wooden handle



Saw, rasp and file wooden block into shape.
Sand it, the oil it. Finally glue it in place with epoxy glue.

„Full tang“ wooden handle



This model shows the following modifications:

1. Scales made from olive wood
2. Scales go up all the way to the fork



„Full tang“ wooden handle



Fill the frame slots with car body filler. File flat. Roughen the surface of the frame with coarse sandpaper.

„Full tang“ wooden handle



Saw out the scales. Glue them on with two component epoxy.

„Full tang“ wooden handle



Let the glue harden. File the wood flush with the frame.

„Full tang“ wooden handle



Shape the scales with rasp and file.

„Full tang“ wooden handle



Round it with file and sand paper. Polish. If you want, you can oil or coat the wood now.
