

Clamp set for Spiderbeam 18m fiberglass pole

For smaller masts, most people simply use sticky tape for locking the individual tube segments. For a pole of this large size, clamps are a better method to securely lock the segments of the fiberglass mast for a long period. They are especially suitable for permanent installations and superior to all other locking mechanisms (tape, glue, cable ties,...). They have a very strong grip, yet can be removed easily even after years of installation. The rubber padding protects the mast against any damage. Due to the rubber providing good grip, only little force is needed when tightening the clamps.

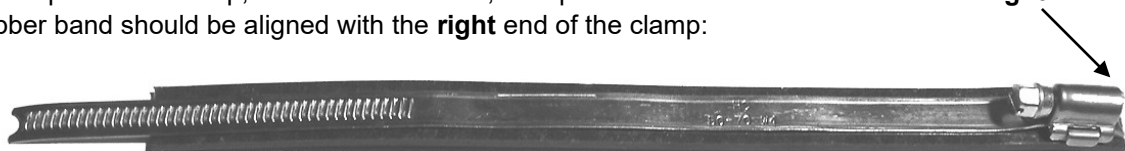
Fabricating the rubber padded Clamps

Start with cutting a piece of rubber band (15x3mm) and a piece of heat shrink tube (13mm diameter), suitable for each clamp:



fiberglass tube segment	stainless steel clamp	length of rubber band	length of heat shrink tube
2	50 – 70 mm	220 mm	190 mm
3	50 – 70 mm	205 mm	175 mm
4	50 – 70 mm	190 mm	160 mm
5	40 – 60 mm	170 mm	140 mm
6	40 – 60 mm	155 mm	125 mm
7	32 – 50 mm	140 mm	110 mm
8	32 – 50 mm	120 mm	90 mm
9	25 – 40 mm	110 mm	80 mm
10	20 – 32 mm	85 mm	55 mm
11	16 – 27 mm	65 mm	45 mm
12	10 – 16 mm	35 mm	30 mm
Total:	11 clamps	1495 mm	1200 mm

Now open each clamp, flatten it somewhat, and place it onto the rubber band. The **right** end of the rubber band should be aligned with the **right** end of the clamp:



Push the heat shrink tube over the clamp and rubber band assembly. The **left** end of the heat shrink tube should be aligned with the **left** end of the rubber band:



After heating & shrinking, the fully assembled clamp will look as pictured below:



As shown in the photo, the right end of the heat shrink tube should have a distance of approx. 15mm from the screw casing.

Now close the clamp and it is ready to use.

In case the heat shrink tube shows wrinkles when closing the clamp, simply apply some more heat and the wrinkles will go away easily.



Installing the Clamps on the Mast



- ← tube segment # 2
- ← clamp
- ← tube segment # 1

The **first** clamp (50-70mm diameter) is mounted at the **bottom end of the second tube segment**. Here it will act as a stopper and prevent the second tube from sliding downwards into the first tube segment. The rubber padding safely protects the mast against any damage from the clamps.

The second clamp is mounted at the bottom of the third tube segment, etc ... (see table on page 1).

There is **no need** to tighten the clamps strongly. The rubber ensures a strong grip to the mast, preventing them from sliding down. They will act very well as a stopper and only moderate force is needed when tightening them.

N.B: There have been misunderstandings about how to install the clamps. Some people mount them on the top of each segment, trying to squeeze the tube to prevent the upper tube segment from sliding downwards. This is not the correct installation method and may result in damaging the mast. Please make sure to install the clamps correctly as described above.