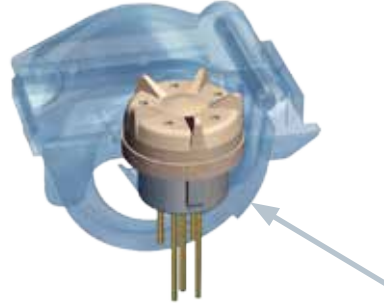


## Volume Control PJ 185

## 1. Handling

Handle the VC by the body to avoid mechanical stress to the leads.



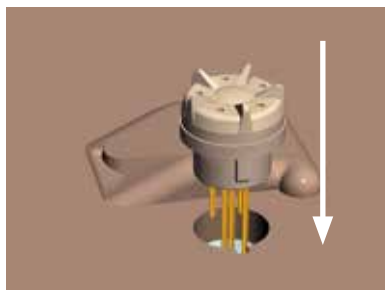
## 2. Tools

Proper tools should be used for cutting and bending, such as sharp cutters and soft-sided tweezers.



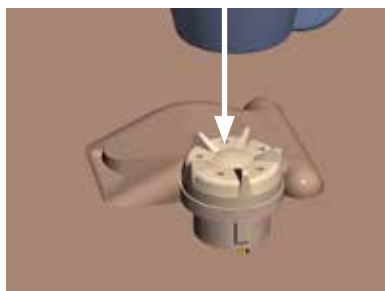
## 3. Mounting/Assembly

The diameter of the hole in the faceplate must fit the mechanical dimension of the volume control body. If the hole is too big, the adhesive bond may not be strong enough and the cosmetic appearance will be negatively affected. If the hole is too small, the volume control might be deformed during mounting and, subsequently, damaged during the soldering process.



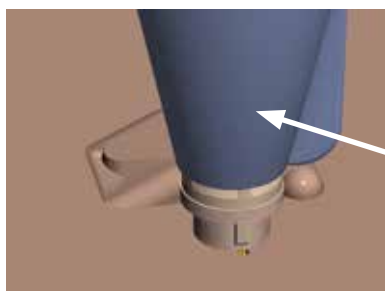
**a.**

Carefully press the top of the knob with the appropriate knob-mounting device that fits the specific knob style (only available for the PJ 185).



**b.**

Make sure that the VC is completely seated in the hole of the faceplate before gluing - use special mounting tool.



**c.**

Check again to be sure that the VC is completely seated in the faceplate.



## 4. Gluing

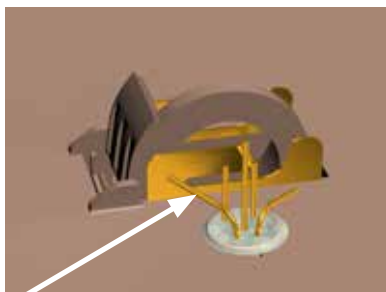
In order to obtain sufficient attachment between the volume control and faceplate, it is recommended to apply a minimum of leveled glue into a ring around the volume control as close to the body as possible.



Please refer to the Data Sheet of the PJ 185 for our recommendation of glue types, which have been tested and proven not to degrade the plastic or the resistance element. Use of other glue types may be harmful to the resistance element or the plastic, for example due to curing fumes from the glue.

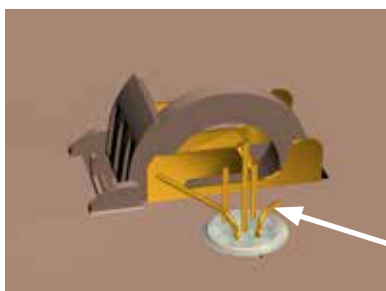
## 5. Bending

Bend the leads before cutting to ensure a minimum of mechanical stress during further processing of the volume control.



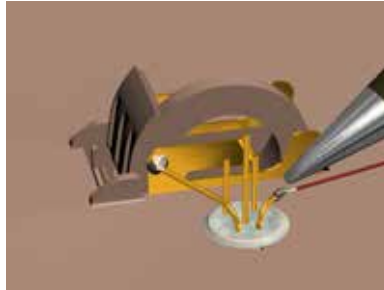
## 6. Cutting

Cut the leads without pulling or pushing them prior to soldering.



## 7. Soldering

Recommended soldering temperature and time: 260°C [500°F] for 3 s or 315°C [600°F] for 1 s.



### **WARNING!**

**During soldering, the knob must be turned to the end stop position opposite the switch position.**

**a.**

Avoid pressure on the leads by the soldering iron, and keep a minimum distance from the housing of 0.5mm (0.02”).

**b.**

Avoid mechanical stress to the leads during processing and 3-5 s after soldering, as a potential heat build-up might degrade the component specifications.

**c.**

If additional flux is needed, use the smallest amount possible. Some types of flux have high alcohol content, and excessive exposure may damage the resistance element or the plastic parts.

## 8. Cleaning

Flux residues may need to be removed by solvents, or cleaning agents. Please refer to the recommended cleaning solvents below:

- Aqua wash (Alpha 2110)
- Benzine

These cleaning solvents have been tested and proven not to degrade the plastic, or the resistance element. Use of any other solvents, or cleaning agents may be harmful to the resistance element, or the plastic (ref. data sheet on PJ 185). We strongly advice against the use of any ultrasonic cleaning of the component.

## 9. Knob Replacement

The knob can be replaced by following the guidelines below:

### Step 1

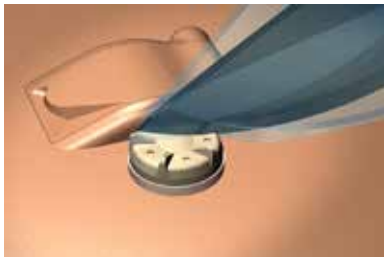
Use a sharp scalpel to make a small cut at the rim of the knob.

Move the scalpel across the knob shoulder, while applying some pressure.



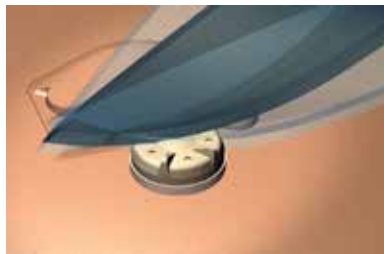
### Step 2

Make a similar cut on the shoulder across the knob.



### Step 3

Place the scalpel across the knob in line with the two cuts from step 1 and 2. Move the scalpel from side to side – from cut to cut – while applying some pressure to the scalpel.



## Step 4a

After a few cycles the knob will separate in two halves.



## Step 4b

Be careful not to damage the knob base below when the knob separates.



## Step 5

The new knob can be mounted by using a special mounting device for the PJ 185. The mounting device has to correspond to the knob to be mounted.



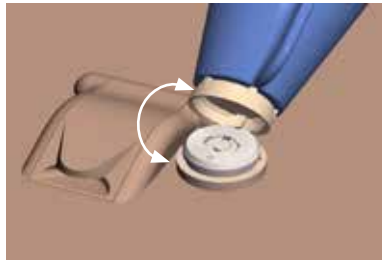
## Step 6

Place the knob in the mounting device and align the knob with the knob base. Align the key with the keyway.



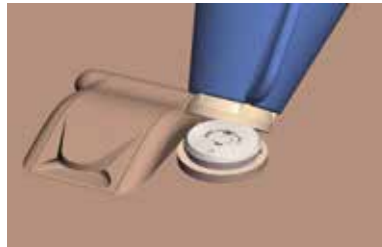
## Step 7a

Mount the knob loosely on to the knob base.



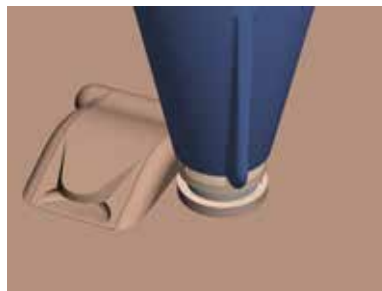
## Step 7b

Make sure that the key and keyway interlock.



## Step 7c

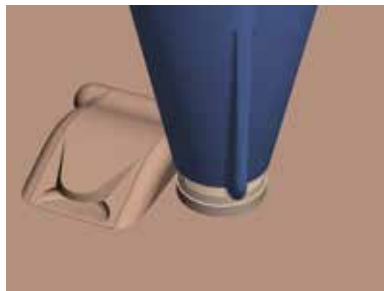
The knob can now be pushed into its locking position.





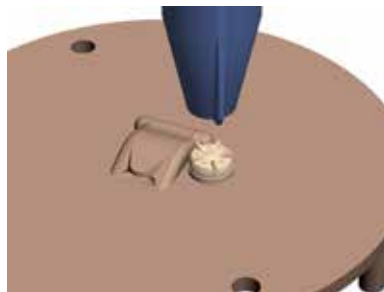
## Step 8

The knob is fixed correctly when a click is sensed while the knob is pressed into position.



## Step 9

Remove the mounting device in an axial direction.



## 10. General Operating Conditions

To minimize any risk of degrading the component quality, avoid any sideways stress during normal rotation and hearing instrument processing.