# INSTRUCTIONS

Thank you for purchasing your own Campbell Tunable Chanter.

## ENJOY YOUR NEW CHANTER

This revolutionary chanter will provide you with many hours of enjoyable playing while being easy to tune and maintain. Campbell Tunable Chanters are the result of many years of prototypes and testing by some of today's best pipers in a multitude of conditions.



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# **GETTING STARTED**

For best results from your Campbell Tunable Chanter please make sure that your instrument is correctly hemped. These chanters have been designed to essentially be 'plug-and-play' but some adjustments and familiarity with its features are required. Please read through the following instructions before making any adjustments to your new chanter.

The use of a bagpipe tuner is a must to properly set your chanter pitch. Use a tuner of your choice. Many pipers have had great success with the "Bagpipe Tuner" iPhone app - as it will allow you to fine tune individual notes on the chanter. This process might take some time If you are a new piper and don't have a lot of experience with tuning a chanter, but have fun with it!

# WHAT REED TO USE IN YOUR NEW CHANTER

Through extensive testing, it is most likely that your new chanter will require a specific type of reed to sound properly. However, not all reeds are made the same so your experience might produce different results. Depending on the type of chanter you have purchased will determine what reed you will need.

### **BAND CHANTER**

This is an example of a "ridge cut" reed. Notice the distinct step at the shoulder. These reeds tend to naturally have a sharper pitch and work best in the Band chanter.



RIDGE CUT REED

## **CONCERT PITCH CHANTER**

The picture to the right is an example of a "molded" reed. These reeds tend to play at a flatter pitch and work very well in the Concert Pitch – Bb chanter.



MOLDED REED

# FUNDAMENTALS OF PITCH

**FLATTEN PITCH** - Lengthening the distance between the reed and the top of the holes will lower their pitch. If your reed pitch is too sharp, you must move the reed upwards by turning the tuning dial counterclockwise.

**SHARPEN PITCH** - Shortening the distance between the reed and the top of the holes will raise the pitch. If your reed pitch is too flat, you must move the reed downward by turning the tuning dial clockwise.

# **BEFORE YOU USE YOUR CHANTER**

You will need to prepare your new chanter to work in your bagpipes. The following steps are necessary to familiarize you with your new instrument.

- 1. **HEMP** Be sure to install new hemp on your chanter. The first few rows of hemp need to be wrapped tightly around the chanter without leaving slack. This will prevent future issues where the chanter freely turns around the hemp making it difficult to remove your chanter from the stock. Ideally waxed hemp should be used for longevity. Once completed, the hemped chanter should fit snuggly into the pipe stock.
- VISUAL INDICATOR Look for the visual indicator slot on the side of the chanter. Within this slot, you will see a small screw. This small screw directly correlates to the reed seat height. DO NOT USE ANY TOOL TO ADJUST OR REMOVE THIS SCREW. This screw will be used as a visual indicator only.
- TUNING DIAL Gently turn the tuning dial on the side of the chanter. You will see that the visual indicator screw moves up and down with the reed seat. Do not force the tuning dial beyond the top or bottom of the reed travel.
- SETTING THE REED SEAT HEIGHT Set the visual indicator in the middle of the slot. This position will set the reed seat at the mid-adjustment point allowing you to sharpen or flatten while you are playing later.
- REED Set the reed into the reed seat and twist ¼ turn clockwise to engage the reed hemp into the threaded reed seat.



# SETTING A NEW CHANTER REED

When trying to set a reed for the first time you will need to consider that all reeds have a natural balance point. While you might want to play your new chanter at a specific pitch (ie. 482Hz) you may find that it will not naturally balance at that high pitch. If your chanter and reed naturally wants to balance at 478Hz (High A & Low A), you must use tape to push the pitch higher.

# **COARSE TUNING**

- 1. Adjust the tuning dial so that the visual indicator is in the middle of its stroke. Do not use the dial for coarse adjustments.
- 2. Set your bagpipe tuner. Remember that if this is a new reed, it will not likely be able to reach a high pitch like 480 or higher. You will need to find the reed's sweet spot and play it for a while before being able to crank it up in pitch.
- 3. Insert your chanter reed by turning it ½ a turn into the threaded reed seat. Mouth blow your chanter to determine roughly where the pitch of your "High A" and "Low A" settles. If your "High A" is sharper or flatter than your "Low A" make a quick adjustment to the reed based on the following information:
  - a. "High A" too Flat Sink the reed by turning the reed clockwise in the reed seat. Twist a ¼ turn at a time until it balances with the low A.
  - b. "High A" too Sharp Raise the reed by turning it counter- clockwise, and add hemp as necessary.
- 4. Repeat the above step until your chanter pitch is closely balanced. Do not worry about getting it perfect during this process as this is only coarse tuning at this point. You will need to install it into your pipes to really perfect it. Ideally you should have a balanced chanter while the visual indicator is centered in the slot. This will allow further adjustment when you are playing your pipes.

## **FINE TUNING**

- 1. Carefully insert your new chanter into your pipes and be sure not to damage your reed.
- 2. Blow your pipes up and adjust your drones to match your "High A".
- 3. Turn on your tuner to the pitch you have chosen.
- 5. Check balance of the chanter by swiftly playing "High A" to "Low A". Without changing your air pressure (ie. Blowing or squeezing) while playing one note to another, they should read the same reference number on your tuner. If your "High A" is sharper or flatter than your "Low A" make a quick adjustment to the reed by adjusting the tuning dial on the chanter as stated below:
  - a. "High A" too flat turn the adjusting dial clockwise.
  - b. "High A" too sharp turn the adjusting dial counter-clockwise.
- 6. Repeat the above step until your chanter pitch is closely balanced. Keep in mind that as you play more, your chanter will naturally sharpen in pitch.
- 7. Now you may need to use tape to balance certain notes that are too flat or sharp.
  - a. Add small amounts of tape to the top of the note hole that is too sharp.
  - b. Play your chanter to see how it worked. Further adjustment may be necessary.

# WHEN SHOULD YOU TUNE YOUR CHANTER?

Of course you will tune your chanter whenever it is not balanced, however there are a few considerations that you should think of when you use your new Campbell Tunable Chanter. If you are only playing on your own, feel free to adjust your chanter tuning dial at any chance you can so you better understand how it works. On the other hand, if you are playing in a band be courteous of the "sound guy" who manages your band's sound. The following notes are only a guideline.

## Playing in a Band

In a band setting it is advisable for each band member to leave their chanter adjustments to a tuning specialist. That may be your Pipe Major, Pipe Sergeant or a "sound guy". It may be tempting to quickly tune your own chanter while you play in a band setting, but it is very difficult for an individual to pick out their own chanter while playing in a band setting. Here are a few points to consider if you expect to use your new chanter in a band setting:

- 1. Don't adjust your chanter between plays. If everyone has adjusted their chanters it will make tuning the full band difficult as they will not have a constant starting point.
- 2. Your chanter will naturally be flat when you start playing. Your chanter reed will automatically be 3-5Hz lower than the pitch you prefer to play at, but it will come up quickly.
- 3. The entire pipe section should begin playing together, not separately or at different times. Play for 5 10 minutes until the chanter reeds have warmed up.
- 4. Let your "sound guy" adjust the tuning dial as necessary while you are playing, and only after everyone's pipes have warmed up.

## Solo Playing

If you only play on your own, or this new chanter is specifically for solo gigs, you should adjust your chanter pitch any time you would like. One thing to note is that when your pipes are cold your chanter will be 3-5Hz lower than the pitch you would like to play at. With this chanter you can quickly correct this by adjusting the tuning dial as necessary.

# ALWAYS TUNING YOUR DRONES?

When it sounds like your drones are out of tune with your chanter, stop for a moment and consider an adjustment to your chanter first. Never before could we adjust our chanter quickly, so it is engrained in us to automatically adjust the drones first. By sharpening your chanter pitch, your chanter will now match your drones. This is especially true if you are playing plastic drone reeds.

Be sure to learn more about this process on the next page.

# A NEW CONCEPT | TUNE YOUR CHANTER TO YOUR DRONES

This concept allows you to blow up your pipes, tweak your drones, and twist the tuning dial clockwise to sharpen your chanter. Everything is balanced quickly so you can play right away.

To make this possible you will need to set up your pipes differently than you would expect. Follow these steps to make your tuning process much shorter:

- 1. Follow all chanter tuning procedures provided in the earlier steps (coarse & fine tuning).
- 2. Ensure your drone slides are snug with the proper amount of hemp that allows you to adjust them with some force, but still only one hand adjustments. Your tenor drones need to stay in place between plays so when you retrieve your pipes from your carrying case they will be set to the same pitch you last played at. This will greatly speed up the process of tuning.
- 3. Providing you followed these previous steps you can now blow up your pipes so the drones become stable with no double toning. You might need to sound your High A to ensure your drones stabilize. Quickly adjust your bass drone to match your tenors – ignore your chanter sound for now. This step should only take 30 seconds to accomplish – any longer will cause your chanter reed to sharpen and become further unsettled.

#### QUICK TUNING IS BEST

The tuning procedure should take very little time if you do it properly. The first mistake is that most pipers begin adjusting their drones too soon when they blow up their pipes for the first time. Within a few moments, the pipes have begun to warm up and become unsettled.

In most cases, the reeds in the drones and chanter are made of different materials which cause them to change pitch at different rates. It is more common for the chanter reed to change quicker than the drones.

With this in mind, set your drones and leave them. Then adjust your chanter to your more stable drones.

- 4. At this point you will note that the chanter sounds flat compared to your drone pitch. Twist the tuning dial in a clockwise direction to sharpen your chanter reed. Most times it takes 2 twists to bring the chanter in with your drones. Further adjustment of the tuning dial may be necessary. In most conditions you will not even need to move tape on any of the finger holes.
- 5. Set your pipes down, they are ready for your gig.

## FINAL THOUGHTS

Once you have followed the above instructions for your Campbell Tunable Chanter you should now be ready to play and enjoy!

In the unlikely event that you encounter any problems, please email: info@campbellbagpipes.com

#### CHANTER REED ISSUES?

A huge resource for chanter reed troubleshooting is available on the Campbell Bagpipes website. Please take a moment to look there if you need further help.