

## Kinnaird Carbon Fibre Drone Reeds

By R. J. Kinnaird Bagpipes and Reeds

Thank you for purchasing a set of *Kinnaird Carbon Fibre Drone Reeds* from *R.J. Kinnaird Bagpipes and Reeds*. These drone reeds are designed to be easy to set-up and give you the closest sound to cane reeds without all the hassles. The reeds have been set-up to play in most instruments, however, due to variations in drone designs the following adjustments can be made to optimize the sound of your instrument.

### Installation and Adjustment Procedures:

#### Drone Reed Installation:

1. Remove your drones from your instrument and lay them on the table.
2. Remove your existing reeds and install the *Kinnaird Carbon Fibre Drone Reeds* in your bagpipe. When inserting the reeds into the reed seats, hold them by the sides with the black rounded nose cone in the palm of your hand. Ensure that the reeds are seated firmly in the reed seats and aligned with the bore of the drone. If you have large reed seats, you may have to add some additional waxed hemp to make the reeds fit securely. If you have small reed seats, remove some of the black hemp to seat the reeds securely. In some pipes the reeds seats are very small and you may need to remove the hemp and wrap some finer thread such as waxed dental floss on the reeds to make them seat securely.

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### Strength (Airflow) Adjustment:

1. Start with the outside tenor and blow the reed in the drone by mouth. Increase your blowing pressure until you are blowing as hard as you can. The reed should continue to play or just shut off at your strongest blowing.
2. If the reed is taking too much air, move the o-ring bridle very slightly towards the black rounded nose cone. Test again as in Step 1 and continue to make adjustments until the reed just shuts off. Once you have the reed adjusted to this strength, move the o-ring bridle back slightly towards the reed seat end so that you cannot shut off the reed.
3. If the reed shuts off when you blow your hardest, move the o-ring bridle very slightly back towards the reed seat end of the reed. Test again as in Step 1 until the reed continues to play at your strongest blowing.
4. If you move the bridle too far and the reed is not behaving, move it back to its original position marked on the side of the reed with a black line. Use this mark as a reference for any adjustments.
5. Once you have the outside tenor adjusted, repeat Steps 1 through 3 for the middle tenor and bass drone.

### Pitch (Drone Tuning Position) Adjustment:

1. Once all your reeds are set-up for the proper airflow, install your drones back in your bagpipes with your chanter and blow them up. Tune all the drones to your chanter and note where they are tuning on the tuning slides. The tenors should be tuning on the hemp with as much as ¼" of hemp showing. The top section of the bass drone should be on the hemp similar to the tenors, while the bottom section should tune ¾" to 1-½" above the projecting mount.

### Strength (Airflow) Adjustment:

6. Start with the outside tenor and blow the reed in the drone by mouth. Increase your blowing pressure until you are blowing as hard as you can. The reed should continue to play or just shut off at your strongest blowing.
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### Pitch (Drone Tuning Position) Adjustment:

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If the drones are tuning too low on their tuning slides, adjust the tuning screw inside the round black nose cone of the reed. To do this, gently pull on the black nose cone while holding onto the body of the reed. Inside the nose cone is a small adjustment screw. Use the supplied Allen wrench and turn the screw counter clockwise to move the screw closer to the top of the nose cone. Press the nose cone back into the reeds and test again to see where the drone is tuning. Continue making similar adjustments until the drone is tuning in its proper position or the screw is as far out of the nose cone as it will go. If the drone is still not tuning in the proper position and you have no more adjustment with the adjusting screw, remove some hemp from the reed and seat the reed further into the reed seat.

3. If the drones are tuning too high on their tuning slides, adjust the tuning screw inside the round black nose cone of the reed. To do this, gently pull on the black nose cone while holding onto the body of the reed. Inside the nose cone is a small adjustment screw. Use the supplied Allen wrench and turn the screw clockwise to move the screw further into the nose cone. Press the nose cone back into the reeds and test again to see where the drone is tuning. Continue making similar adjustments until the drone is tuning in its proper position or the screw is bottomed out in the nose cone. If the drone is still not tuning in the proper position and you have no more adjustment with the adjusting screw, add some hemp to the reed so that the reed seats further out of the reed seat.

Once all of your drones are properly adjusted for your bagpipe, fire up your pipes and enjoy the sound of *Kinnaird Carbon Fibre Drone Reeds*.

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