

# AirVolution™ Kayak Tips And Tricks, Version 1.6

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I will continue to add to this article as I learn more about my Advanced Elements AirVolution Solo Kayak.

## Contents

Hull ID Number (HIN) .....	2
The Handpump.....	3
Smart Phone Support .....	4
Emptying The Sump .....	5
Placing the Folded Up Kayak In its Case .....	6
Foot Support.....	7
Securing the Seat Straps.....	8

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## Hull ID Number (HIN)

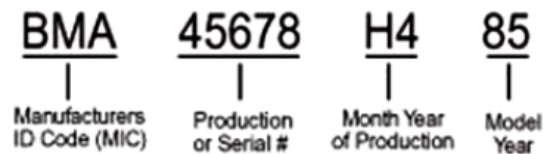
I found the hull ID number of my kayak on the lower gunnel, port side, on the stern. It is a patch of vinyl with gold letters printed on it. According to a FAQ entry on the Advanced Elements site<sup>2</sup>, the first three characters are XZE, which means it was manufactured by Advanced Elements. The last two digits are the last two digits of the year it was manufactured<sup>3</sup>. The eighth character from the left is the model type. Mine says “D,” but Advanced Elements list that as a Dragonfly2.

I found this information on the HIN format<sup>4</sup>:

### How is a HIN currently structured?

A HIN consists of three components –

1. **The Manufacturer's Identification Code (MIC)**
2. **Serial Number**
3. **Month and Year of Certification**



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<sup>2</sup> <https://www.advancedelements.com/phpBB3/viewtopic.php?f=2&t=360>

<sup>3</sup> <https://www.advancedelements.com/phpBB3/viewtopic.php?f=2&t=361>

<sup>4</sup> <https://www.info-link.com/hin-rules/>

## The Handpump



I put a strip of white tape on the base and bottom of the pump cylinder after they fit together but before locking them.



This eliminates the guessing game of finding the right orientation during assembly.



I put some white tape on the side of the handle support that has the inflation port. My old eyes have trouble seeing the tiny molded text.



A piece of tape over half of the pressure gage lets me quickly see when the needle is at 10 PSI.

## Smart Phone Support



I use my iPhone to monitor my speed and heart rate while paddling plus for music. This support puts the phone in just the right place.

The support is made from 3/8-inch thick 1½ inches wide expanded PVC trim board, which I bought from Lowe's. The board was bent to 45° using a heat gun. Warm it slowly, so the plastic does not burn. Then spray with water to fix it into position.

I would have shown my phone in the belt clip case, but I needed it to take the picture.



My phone is in an Otter case. The belt clip can go around a thickness of about 1/8-inch, but the trim board is more like 3/8-inch. I filed the back side of the trim board to this thickness. All edges are rounded and smoothed.

The support extends under my seat, so it is secure. Yet it lifts out when my voyage is over.

PVC board floats, but my phone will not, so I have a secured light-duty line tied to the phone belt part of the case.

## Emptying The Sump



While underway, my sump fills with water. Rather than stopping to unscrew the drain plug, I push a soft car-wash sponge down the hole. It removes almost all of the water. One squeeze overboard, and I'm ready for a second dunk. The sump is then dry.

## Placing the Folded Up Kayak In its Case

This procedure is a lot easier on my back than with the case laying on its back.



Open up the case, so the bottom is flat on the ground. The zippered front and back (with all of those straps) are lying next to it.

Pick up the folded kayak and lower the end into the case. This solidly placed the end of the folded kayak on the end of the case.



Then lift the back of the case by the top handle and drape it over the top of the package.



And finally, lay the case down on its back for final strapping and filling.



## Foot Support



I paddle using my core muscles and legs. My feet must contact something solid and flat. The curved front of the cockpit is the right height and position plus is solid. But as I push on it with my feet, it forces my feet to bend inward, which is uncomfortable.



I threw together this proof-of-concept foot support. It is made from 1-foot of PVC drain pipe cut axially. Then I drilled a  $\frac{3}{4}$ -inch hole in the center and fitted it with a  $\frac{1}{2}$ -inch PVC pipe. This pipe has a 2-inch long pipe around it to act as a stop. A  $\frac{1}{2}$ -inch coupler has been forced on the top to lock it together. That plate on the bottom is PVC trim board  $\frac{3}{8}$ -inch thick and 2-inches long. The trim board and PVC pipe have been friction welded together<sup>5</sup>.



Now my feet are in alignment and comfortable. Once I'm sure this works, I'll make a nicer looking foot support.

Out on the lake, I found it annoying that the support fell down when I removed my feet. It also tended to walk its way down over time.

<sup>5</sup> [https://rick.sparber.org/PVC\\_FrictionWelding.pdf](https://rick.sparber.org/PVC_FrictionWelding.pdf)



Version 2 uses a thicker plank which has a 90° bend at the bottom. This prevents the support from sliding down.



I'll test it on my next voyage.

## Securing the Seat Straps

If I was sure that my seat was in the perfect position, I would use cable ties to secure the seat straps. I'm not there yet.



So, instead, I use short lengths of spiral cut cable management tube. It gently holds the excess strap in place yet can be easily peeled off for adjustment. If you use two pieces and put one around the other, it holds even better.

Notice that the upper strap across the back has been rerouted plus has a homemade buckle.

There is also a new strap across the bottom that is loosely held in place with O-rings. Details of the new strap configuration can be found at

<https://rick.sparber.org/AirVolutionSeatFix.pdf>

and the buckle is described in

<https://rick.sparber.org/StrapBuckle.pdf>



I welcome your comments and questions.

If you want me to contact you each time I publish an article related to my AirVolution kayak, email me with “Subscribe kayak” in the subject line.

If you are on the list and have had enough, email me “Unsubscribe kayak” in the subject line.

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