

# *Escape - Modifying*

By TubeDude

Dave Scadden designs and produces great “floatation” craft. However, because it is virtually impossible to anticipate all possible features that buyers may want, his fishing systems are designed largely for fly fishermen. The good news is that these fishing platforms are well-made and they can be easily modified for specific fishing styles.

My first Scadden craft was an H3 Freestyle...a super float tube designed to compete with the Outcast Fat Cats. It more than competed. It was slightly larger, with numerous features that were superior to any other float tube of the time.

My second Scadden purchase was an Outlaw Renegade...one of Dave’s frameless and bladderless pontoons. It had 3 air chambers...left, right and seat. With no frame and no air bladders the craft was light enough and small enough to fold up and store easily in a small space. If you have an SUV...with a fair amount of cargo area...you can take your craft...pockets rigged and partially inflated. Or you could take it to the water fully rigged in a pickup or small trailer...or securely lashed to a rooftop rack.

I had experience with “tricking out” pontoons from other manufacturers. But they all had frames upon which to attach the rod holders, sonar systems, tool holders and other modifications desirable to “warm water” anglers who used spinning or bait casting gear. And most of them came with built-in motor mounts and rear platforms for batteries.

Dave’s craft come with oars, footrest bars, a seat and removable storage pockets. If you want to add an electric motor you can either purchase an aftermarket motor mount from Dave...or make your own. I made my own from PVC...and it worked great.

My biggest challenges came in designing a modular PVC frame and the rod holders and utility (tool) holders for each side of the Renegade...without having anything to which I could attach them. I came up with something that I could rest on top of the inflated air chamber and then cinch down with the straps for the removable pockets. These worked fine too, but I couldn’t help thinking there might be a better way.

While I really liked my “Renny”, I found it just a bit larger than I liked for my style of fishing. I use the oars very little...preferring to fish hands free as much as possible. So I use my fins a lot...both for short moves and for maintaining position while casting or vertical jigging. “Big Blue” (the Renegade) was quite a bit larger than the float tubes I had been using for the past few years. I could really feel the extra wear and tear on my aging body at the end of a fishing day...from using the fins on a bigger craft.

When Dave first introduced his new Escape I thought it might be the answer. It was a bit larger than my old Fat Cat, but somewhat smaller than the Renegade. As Goldilocks might say...”It was just right.” However, I was reluctant to jump in one because it seemed there would not be enough space between the back of the seat and the end of the air chambers to tuck in the big deep cycle battery I use for my electric motor.

I was not in need of a new craft for a while, and I put the Escape out of my mind. But I recently had an opportunity to see one “up close and personal”. Sonofagun! It looked good. Just the right size and THERE WAS ROOM FOR A BATTERY. So, even though I did not actually NEED a new tube, I added an Escape to my stable.

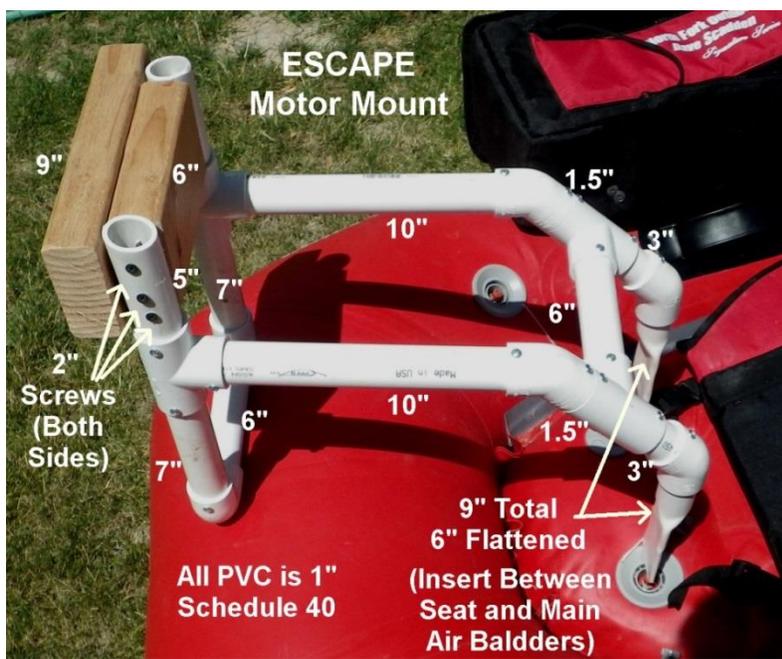
The Scadden toons are easily big enough to accommodate an electric motor. A metal strap-on motor mount is available as an aftermarket accessory. However, I designed one for my previous Renegade...from PVC (what else?). It worked fine so I used the same design for my new Escape...even though the new red ride was much smaller and not intended to be motorized. It actually came out about the same size...and fit.

## MOTOR MOUNT

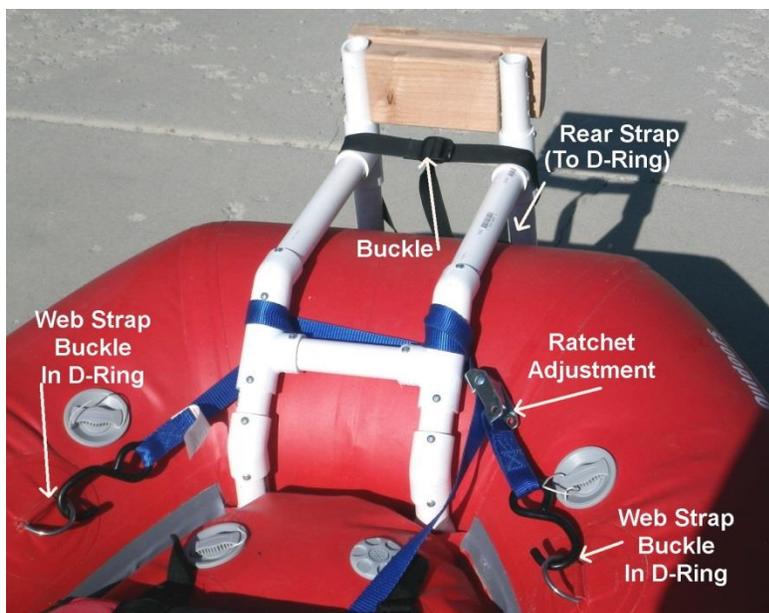
The PVC motor mount is made of 1" schedule 40 PVC...and a couple of short lengths of 2x4. The exception is the two pieces of 1" type 200 (thin wall) PVC that are heat-flattened to allow easy insertion between the seat and the side air chambers. Once the mount is securely lashed to the D rings it is very stable and withstands the pull of the motor. Measurements of the PVC lengths are shown in the picture below.



*This picture shows how the motor mount has flattened bottom pieces to slide in the tight space between the main air chambers and the seat bottom. When all chambers are properly inflated...and straps connect the mount to the D-Rings...this motor mount is rock solid.*



*This picture provides the measurements for anyone who would like to duplicate this motor mount. NOTE: The lengths given are for the entire piece of PVC...not just the distance between connectors. Any PVC fitting project should involve some custom measuring and cutting As my electrician and plumbing father used to say: "Measure twice...cut once."*



*The PVC and wood motor mount fits snugly, but it requires straps to secure it against the motor pulling it out of position. Use strong and adjustable straps (blue ones) to hook the mount to the inner side D-rings as shown. The black straps go down to secure the bottom of the mount to the front bottom D-ring.*

## **MOTOR BATTERY**

Most pontoons and more and more large size float tubes are sporting electric motors as a part of their propulsion system. Most pontoons with metal frames actually have built in motor mounts and platforms upon which to keep a large 12 volt battery. Scadden's frameless craft require adding a motor mount and coming up with a place and method for carrying the battery.



*To avoid having a corner of the battery (or battery box) causing damage to the uncovered seat cushion you should put some kind of pad under the battery. I used a piece of discarded carpet.*

As previously mentioned, I was happy to find that there was sufficient room behind the angler's seat to hold a battery and install a motor mount. It required some engineering but I am able to mount my 40# thrust motor and carry my 65# series 27 deep cycle AGM battery. And with the extra floatation built into the front of the Escape the craft rides almost level when fully loaded with all my gear and with the motor and battery.



*There is not much room behind the seat...when it is back far enough to hold a guy with long legs. But it is enough to handle a large deep cycle battery...snugly.*

If you have never bought a battery for any marine use...boats, pontoons, etc....there are a couple of things to remember. First of all, do not buy just any old 12 volt car battery. They are made for “cranking power”...not slow sustained release of power to the point of failure. Good deep cycle batteries are made to withstand many cycles of discharging and recharging.

That being said, you will get more life out of your battery if you do not always run it to complete depletion. It is better to make sure it is fully charged before each trip...and to put it on the charger as soon as you return.

## MOTORS

Once you have a motor mount and battery you need to choose an electric motor that with both fit your craft and your angling needs. The good news is that almost any electric motor...of any size...can be made to fit your craft and to get you between point A and point B. But there are factors which should be used to guide you in your selection.

Before you install your motor you should reverse the control head. Most transom mount motors are designed to go on the back of a boat...and to push the boat forward. But motorized tubes and toons perform better if the motor is set up to pull it backward.



*Electric motors mounted on tubes and toons work best if they are in this configuration. The motor control head is easily rotated 180 degrees after removing the hex head bolt and nut at the base.*

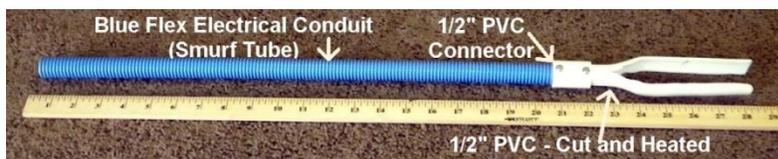
I originally started out with a MinnKota Endura 30# thrust motor on my Fat Cat. It had all the power I needed and was frugal on battery power. But it only had a 30" shaft length. That was not enough to raise the control head up within easy reach and to keep the prop from chewing up my craft. So I upgraded to a 40# thrust motor...not for the extra power but because it had a 36" shaft. That is what I still use on my Escape.



*This picture shows a side by side comparison of the 30# and 40# motors. The 40 has a longer shaft which allows for running the motor deeper under your craft...or bringing the control head higher for easier reach.*

*Note that the heads are reversed to make the craft move backward.*

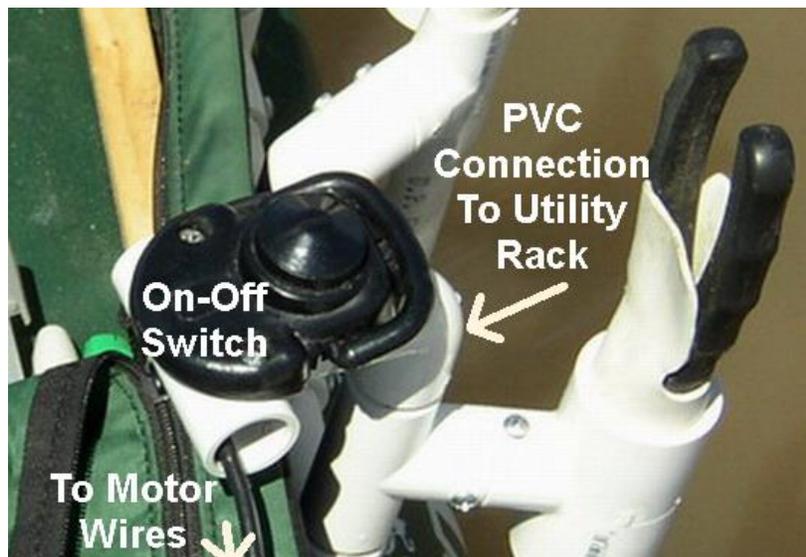
Most electric motors have control handles that will extend a few inches. And there are aftermarket extension handles you can buy to increase the length of the handle. But I found these to be heavier than I liked...and more costly. So I experimented with making my own. After several trials I finally came up with one that is simple, inexpensive, flexible and works very well. It uses blue flex conduit for an extension handle...connected to a heat formed 1/2" PVC joint...held on the handle with a screw-on hose clamp.



*This is my "Smurf tube" motor extension handle. It is strong enough to run the motor but light and flexible. A full 8' long piece is usually less than \$3 in the electrical section of Lowes.*



Another modification I have been making to my electric motors...for tubes and toons...is to wire in a separate ON-OFF switch between the battery and the motor. You normally use the motor control handle for on, off and speed settings. But if you get a strike while trolling or bottom bouncing it is easier and less stressful to simply flip the off switch than to try to remember which way to turn the control handle.



#### *BIG FOOT SWITCH*



*These switches come with a couple of feet of wire. I splice mine into the black motor wire.*

## **POCKET MODS**

The pockets on the Escape are about 50% larger than those on my previous Outcast Fat Cats...and even my old H3 Freestyle. I really appreciate the extra room...and the rigid insulated walls of the pockets.

These pockets are removable...with nylon straps that run through a couple of D rings and quick-connect buckles. You can optionally remove them for transport and storage...or leave them on for faster setup. This can be either a blessing or a curse...depending on your mode of transportation and your preferences for having the pockets installed when you get to the lake.

I like the modularity of the pockets more than I dislike it. But it can be time consuming and troublesome to run the straps around through the D rings, clip the buckles together and to cinch the straps down to secure the pockets. So I buckled the straps together under the pockets...and used inexpensive carabiner or other clips to hook directly to the D rings. Click - click and they are installed. Unclick and you can remove them.



*This shows how I put the two ends of the pocket straps together and then rigged a couple of clips over those straps to clip to the D rings.*



*The clips make it faster and easier to attach and remove the modified pockets. This picture shows the left side pocket, with the rod holder tubes attached. A suggestion is to make them a tight fit and then fasten them before fully inflating the air chambers.*

When I previously “tricked out” my Renegade...also with removable pockets...I made PVC frames for each side...for the rod holders and tool rack. Then I secured them in place by attaching the pockets on top of them and cinching them down. It worked fine, but required a couple of large PVC rod and tool racks.

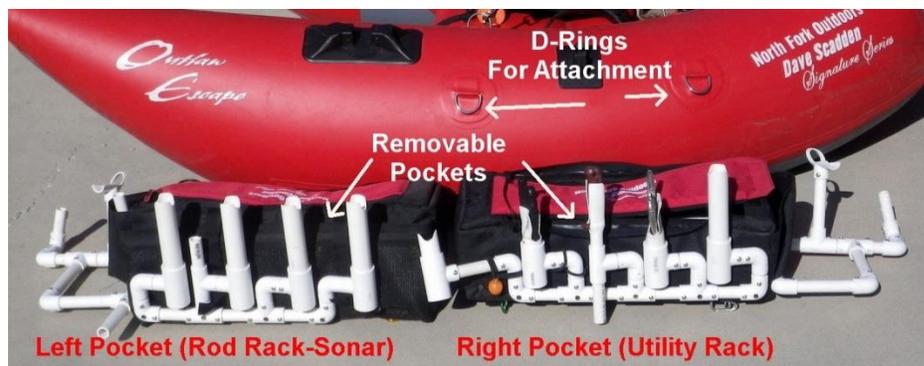


*This is my first attempt at setting up rod holders and tool racks on a Renegade. These consisted of stand-alone frames that were held in place by the strapped down pockets.*

By the time I received my new “Rojo” (red) Escape, I had already worked out the basic design and started assembly on the PVC modifications. For the past couple of years I had been installing a small wooden frame inside the pockets of my Fat Cats...using sturdy screws to attach the PVC basics from the outside. This design has been well tested and proven. So, why not do the same with the removable pockets on the Escape?

This simply requires a wood frame inside each pocket for attaching PVC bases from the outside. And these bases allow a choice of rod holders or tool rack that can be slipped on or off...and which swivel in or out for position adjustment or compactness.

It occurred to me that I could do the same thing with the removable Escape pockets by making the modular rod racks and Utility racks attached to the removable pockets. So I made the wooden frames, screwed them in place and had my anchor base.



## ROD HOLDERS

The first step in setting up a rod rack is installing the inner wood frame. I used 2x2 pine. It is not too heavy but will allow the use of longer (better holding) screws.

The shape of the frame will be an L...with the shorter end at the front. This is the portion to which you will later attach the "front deck".

If you are going to be using sonar on your craft, you may wish to build in a small compartment at the rear of the pocket in which to hold a 7ah gel cell battery.



*These are the wood pieces that will make the left pocket base for the rod holders and sonar. There will be a 3" pocket at the rear for holding the separate sonar battery.*



*Here is the frame for the left pocket screwed into place...including the 3" compartment for the sonar battery.*

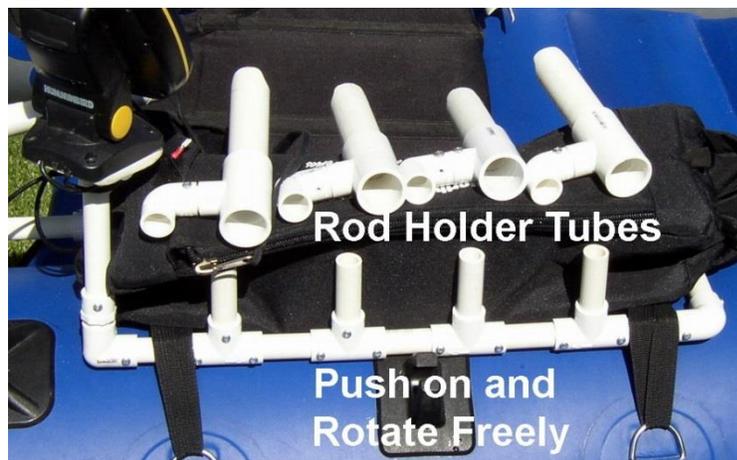


*The wood frames are screwed firmly to the pockets by running long drywall screws through the heavy pocket exteriors and into the 2x2 frame. Note the use of metal washers to avoid having the screw heads go through the pocket material.*

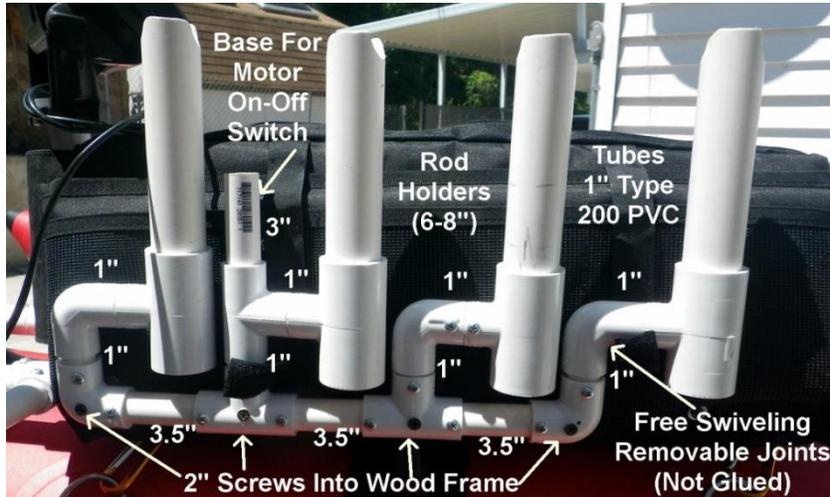


Once you have the wooden frame secured through the walls of the pocket you can fabricate the PVC base...for the rod holders. The pocket is long enough to accommodate up to 6 rod tubes...about 3" apart. But I made only 4 rod tubes for the left side and one "utility" holder on the right side for the rod in use. And if you keep your rod tubes closer to the front you will not have to turn around as far to remove or insert rods as you fish.

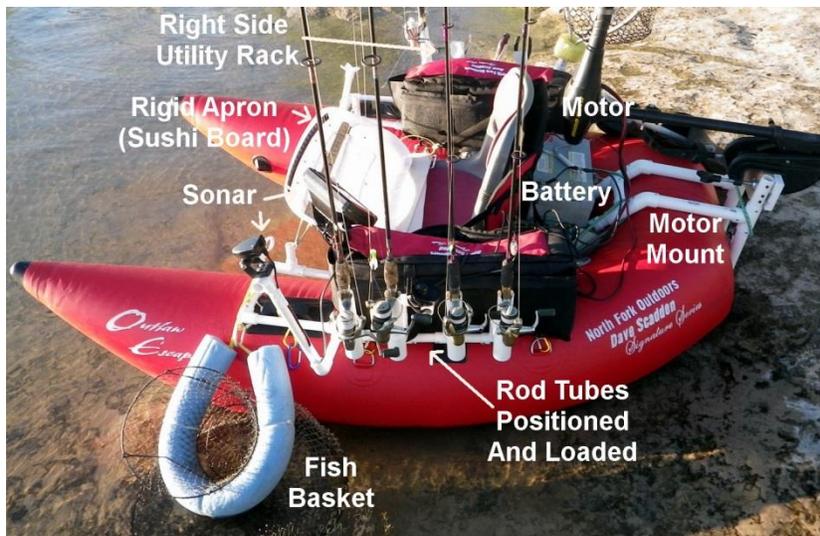
The size and strength of the PVC you use will depend upon what kind of rods you will be keeping in the tubes...and how big the handles are. Most spinning rods are 1". They fit inside class 200 (thin walled) PVC tube but not schedule 40 1" PVC. If you have larger rod handles or want stronger tubes you will have to use 1 1/4" schedule 40...or larger depending on handle type and size.



*For a modular system, you make the PVC base first...then the rod tubes. The rod tubes swivel freely to adjust for position...and may be removed for more compact transport. This picture is of my old Renegade...with the rod rack held in place by the strap-down pockets.*



*This is the modular rod rack on my Escape. The pocket is 21 inches long but I made the rod rack only 13" long...to keep the rods forward and easier to reach. Again, the rod tubes swing out for position adjustment and may be removed for more compact transport.*



*The left side rod rack, with four rods in the tubes.*

## **UTILITY RACK**

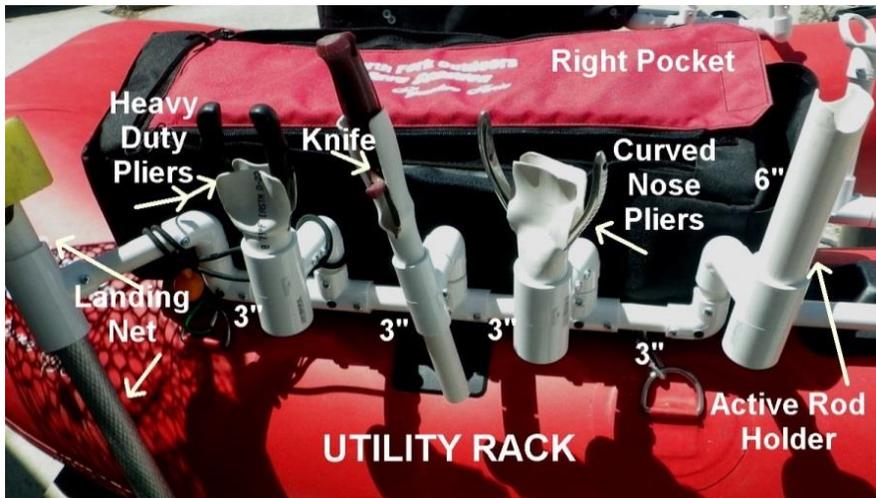
Adding a utility (tool) rack is pretty much the same as a rod rack...except for the heat-shaped holders for knife, pliers and net. Fly flingers can usually get by with a set of hemostats clipped to their vest, but anglers who fish for bigger, toothier and spinier warm water species make good use of the extra hardware carried in their on-board rack.



*There are only two wood pieces for the utility rack inner wooden frame. The short piece is at the front, for attaching the right front deck. The utility rack will attach to the longer side piece.*



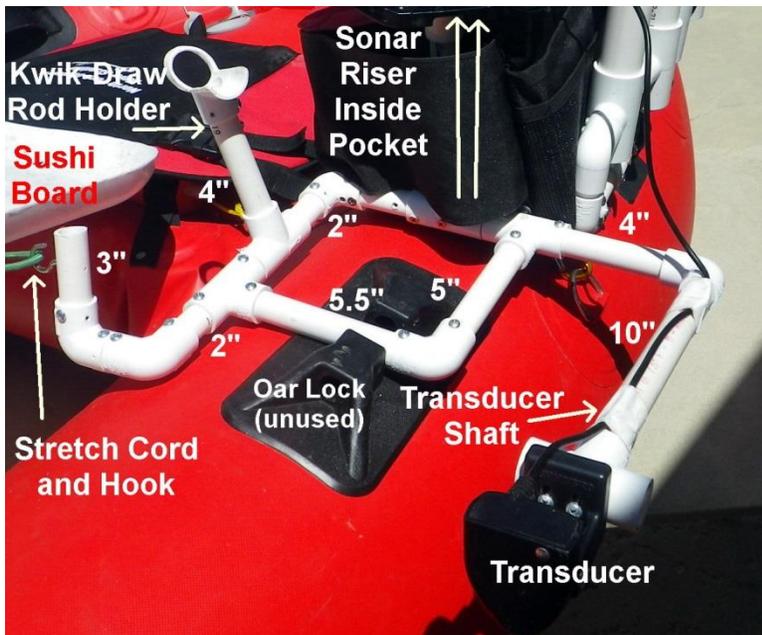
*The utility rack, assembled prior to having the base screwed onto the inner wooden from inside the right pocket.*



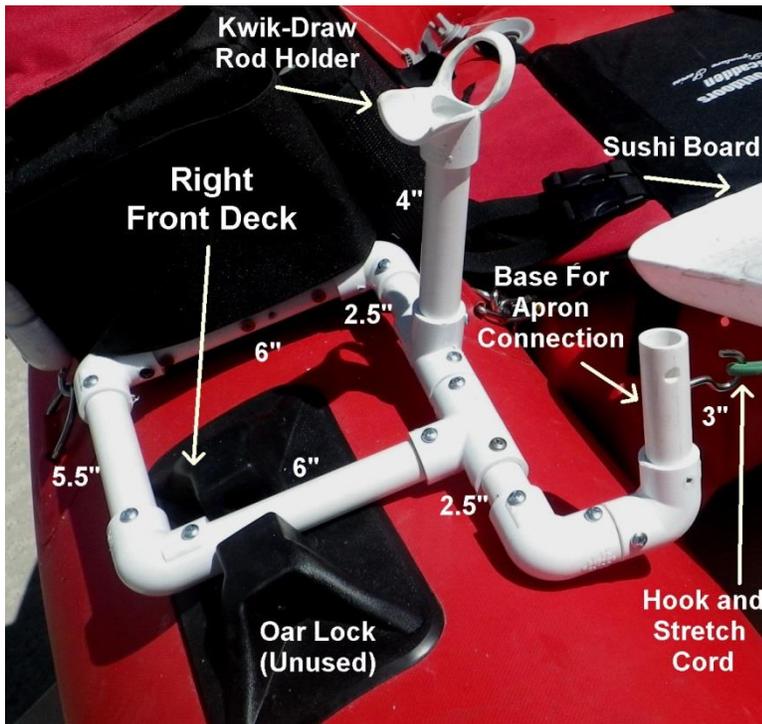
*Right side utility rack installed. The base is securely screwed onto the inner wooden frame.*

## FRONT DECKS

Like the rod rack and utility rack, the front decks are screwed onto the wooden frame inside the pockets. Unlike the original design for the Renegade, my Escape front decks are separate PVC structures. The right and left sides are the same in that they both have the riser/connection for the rigid plastic apron (sushi board) and a fitting for a “Kwik-Draw” rod holder. However, the left side includes a horizontal shaft for attaching the sonar transducer...and a riser to which to attach the sonar display.



*This is the left side front deck. It is a “multi-tasker”. It holds a riser for the sonar display, the horizontal shaft for the sonar transducer, a riser to attach the left side of the rigid apron and a “kwik-draw” rod holder. It is secured to the wood frame inside the pocket by 3 long screws. It is held more securely by fitting the front crosspiece down inside the unused oar lock.*



*The left front deck is simpler than the right. The only attachments are the riser for the rigid apron connection and the rod holder. Again, this deck is securely screwed into the inner wood frame and is further held in place by pushing the front cross piece down into the unused oar lock*

## SONAR

Regardless of what kind of fishing you do, you will usually improve your rate of success if you learn and use a quality sonar system. You do not need to spend big bucks for a high-tech system with GPS, side-scanning, down-imaging, etc. Tuning and tooning usually require little more than accurate fish finding, temperatures, bottom contour and structure. Once you become more familiar with sonar and the refinements available you can upgrade whenever you want.

I began experimenting with sonar in the 1990s. My first unit was a large and noisy flasher. And my 12 volt power supply consisted of 2 6-volt lantern batteries wired together to produce the necessary voltage. I progressed through a series of "low end" LCD sonars and 12 volt motorcycle batteries. These batteries were acid-filled and I had to keep them in small boxes to hold them upright and keep them from tipping in my tube.

During the past decade there have been many new innovations in the field of sonar systems...and in batteries. Today I am using color display sonar. It was less than \$200, without a lot of the bells and whistles. But it provides accurate readings for fish, bottom and temperature. I power it with an SLA (sealed lead acid) battery that is leak-proof.

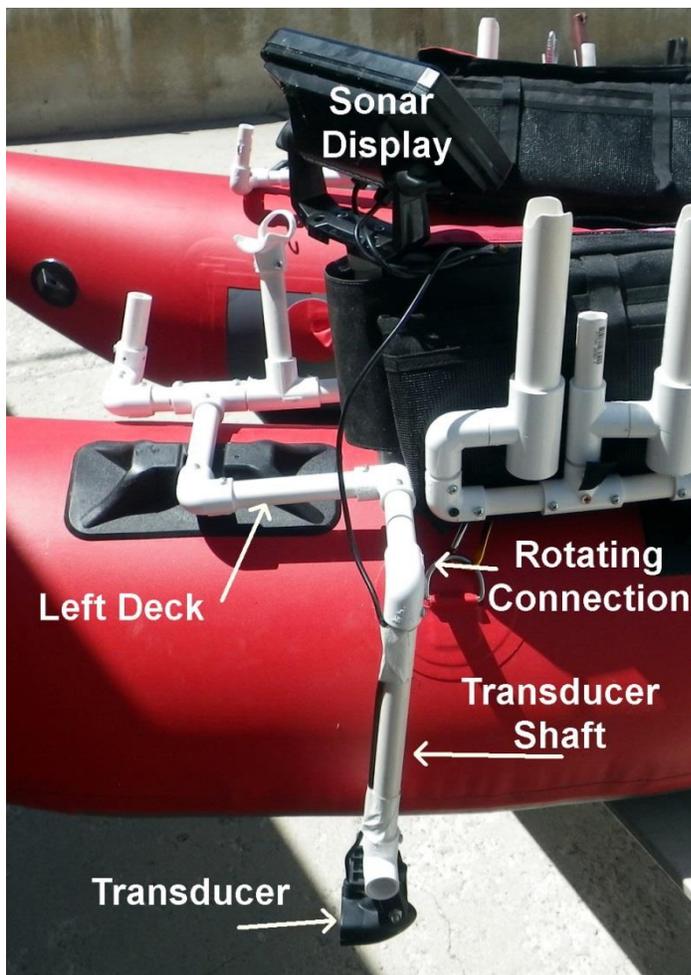
There are several things you must decide upon when installing a sonar system on your craft. 1. Method and location for mounting the transducer. 2. Method and location for mounting the display unit. 3. Location for storing extra wiring. 4. Location for storing the battery...if not running off the large 12 volt battery for your electric motor. But even if you have the larger battery, it is usually better to run the sonar off a separate smaller battery...for less chance of interference.

The picture below shows how my removable left pocket is rigged to provide connections for the sonar display and transducer. It also shows the spare wiring coiled and zip-tied inside the bottom of the pocket. And, lastly, it shows how the 7 Amp-hour gel cell battery for the sonar is kept in the specially designed rear compartment of the pocket.





*This picture shows the sonar transducer in a full upright position. It is wise to raise the transducer while launching and beaching to avoid hard impacts on the transducer...from rocks or ramps. The sonar display is mounted so that it rides just above the left pocket. It is easily visible and may be adjusted left or right by twisting on the vertical PVC riser...up or down with the side knobs.*



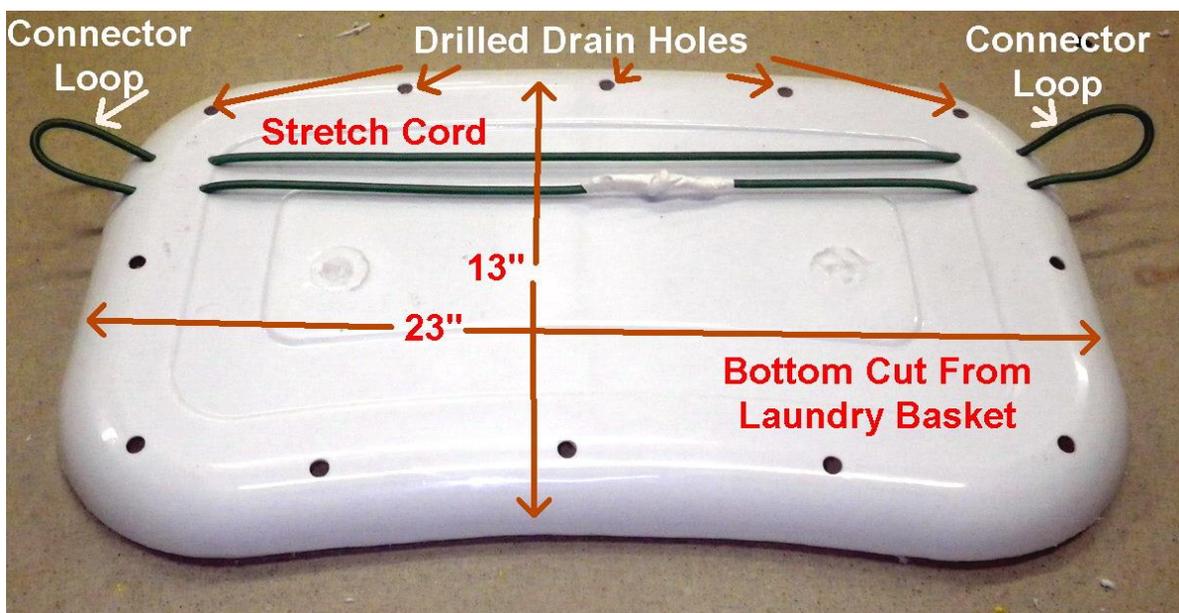
*The transducer shaft freely rotates on the unglued connection. It moves down to the desirable 90 degree angle during fishing time. The more vertical the shaft the more accurate the sonar will read depths, bottom contours and fish targets.*

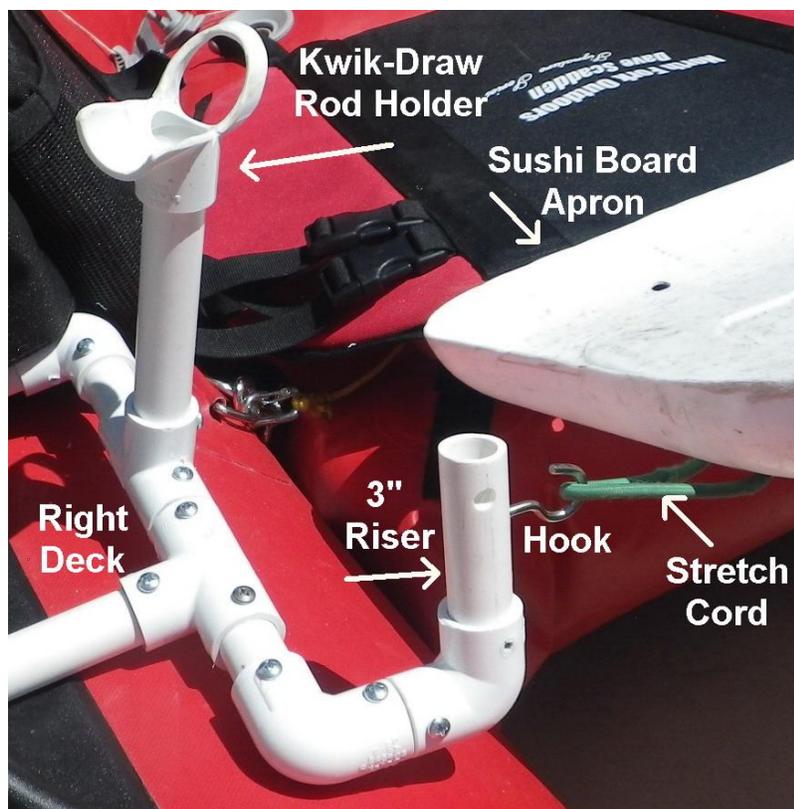
## APRON

Dave Scadden's frameless craft usually do not come with stripping aprons as a standard accessory. However, you can buy a mesh apron as an aftermarket item.

I have had aprons on virtually all of my craft over the years...from my earliest "donuts" to the more recent Fat Cats and Scadden craft. I seldom use them as fly line stripping aprons but I do employ them a lot as platforms for tackle tinkering, fish control and loss prevention...catching dropped items that might otherwise be lost.

Since about the year 2000 (Y2K) I have been making and using rigid plastic aprons rather than using the wimpy mesh aprons that come standard with some tube models. My first "sushi boards" were fashioned from the plastic lids pilfered from large plastic storage containers. All I had to do was drill a couple of holes for the cord attachment...a few more for drainage...and I had a firm stable work surface. They have also proven to work great as stripping aprons for my fly fishing trips...and for other tubers as well.





*The rigid plastic apron is fitted with stretch cord. The loops on either side fit over either the PVC riser or the metal hook.*

## SEAT

I am a person with high numbers...of age, height and weight. Plus, I have occasional back problems. My seat needs are more demanding than most anglers smaller and younger than myself. I am most comfortable with a seat that has some bottom contour and good back support. Seats that are too hard on the behind and too wimpy in the back create discomfort that shortens my fishing day.

During my many years of “floatation fishing” I have gone afloat in lots of different makes and models of float tubes and pontoons. Precious few had seats that fit my basic needs. Most required modifications...or the addition of some aftermarket seating. This ranged from simple foam pads on the bottom...to Plexiglas inserts in either or both the bottom and the back. On some of my craft I actually used cut-down PVC patio chairs on top of the factory seats...both for contour and rigid back support.

My greatest seat problems have occurred with craft that had inflatable seats. In theory, inflatable seats should allow you the luxury of adjusting the air pressure to an ideal comfort level. In practice, I found that airing them up to the max created a hard “board” seat. It may as well have been concrete. And letting even a small amount of air out of the bottom cushion made it a wishy-washy seat with varying support. Even worse, on some craft with inflated seats a partially deflated seat semi collapses at the front and allows the rider to slip forward...or even out of the tube.

Sadly, the Escape falls into the latter category. It actually has a slightly forward pitch to the seat...even when resting level on the water. The slightest loss of air pressure in the seat results in the rider having to continuously push themselves back in the seat to avoid sliding out the front. And if you launch into cold water the seat WILL shrink.



After a couple of trips in which the seat lost air pressure and let me slide forward I created a partial remedy by installing a "butt bumper". This was a length of foam swim noodle with a piece of 1/2" PVC in the middle.



Once the butt bumper is in place you simply fasten the front buckles of the seat bottom over it to hold it in place...creating a bit of a "bucket seat" feel.

After installing a "butt bumper" I managed to get even more comfort and security by adding a fold-up stadium chair. It has more seat comfort and rigid back support.



## **OTHER MODS**

In addition to the previously pictured and discussed modifications to my Escape, there were a couple of other things I changed from the factory model.

First were the oars. As I mentioned, I add an electric motor to my craft so I have less need for oars. And the standard oars on this craft are small. Furthermore, they are difficult to use effectively if the angler has long legs...or any kind of PVC mods. So, I removed the oars and used the oar locks as anchors for my PVC front decks.

Second was the foot bar. Again, it is useless for anyone with long legs. At my age and with my size I was unable to get my finned feet up inside the foot bar even with my seat set back as far as possible. And if I had to use the foot bar for rowing I would not be able to row around my raised knees.

I had the same problem with my previous Renegade...but not quite as bad. To be able to use the oars as a third means of propulsion...after fins and motor...I had to change the foot bar to a pair of PVC "stirrups". They worked fairly well on the Renegade but with the shorter front sections of the side air chambers I still could not extend them far enough to be practical and effective. So I removed the stirrups from the Escape after one trip.



## AFTERMARKET ACCESSORIES & ADD-ONS

There are various additions and/or accessories available for float tubes and pontoons. These include motor mounts, anchor systems, upgrade oars, stripping aprons, rod holders, etc. Some of these things can be easily lashed to existing D-rings or other fasteners. Some...like Scotty rod holders...need to be attached to the air chambers with special adhesives. Still others can be added by fashioning your own connector system, using PVC, wood or some other construction material.

One of the things you will have to have with an Escape...and most other tubes and toons...is an air pump and the proper connectors for the type of valves you have. In the box I got from Dave Scadden...with the Escape...there was a good double action pump and some adaptors. But I gotta say that the wimpy piece of rubber hose for the valve connection is tough to use.



*The double action pump included with my escape is a good pump. I have been using one just like it for years. It works well and pushes out a good volume of air and good pressure as well as anything similar on the market.*

Fortunately, I already had a small 12 volt air pump...the Air Head...with multiple adaptors. One of them fits the valves in my Escape very well. This pump hooks up either to my main electric motor battery or the sonar battery. It will completely air up all 3 chambers on my craft within a few seconds. By changing the connection on the pump you can rig it to suck out the air and to completely deflate your craft for compact transport.



*This 12 volt air pump makes short work of airing up your ride...to ideal pressure. It comes complete with several valve adaptors...including one that fits the valves on Scadden craft perfectly.*

## **PVC BASICS**

I have been creating my own tube and toon mods for many years. Some of my first innovations were wood. These were generally effective but required more work and were heavier than the PVC I soon adopted as my preferred material. After working with PVC for making tool racks, rod racks, sonar installations and other mods over the years I put together a 14 page PDF writeup on **WORKING WITH PVC**. I will be glad to send a copy of that to anyone who is not already PVC proficient.

Most of my PVC work uses one of three different kinds of PVC. First is schedule 40 (thick wall) PVC...in both 1/2" and 1" diameters. The thicker walls are important for all installations that are subject to torque or stress while in use...like motor mounts, rod holders, etc. The other kind of PVC I use is 1" type 200 (thin walled) PVC pipe. The inside diameter of this pipe is just right for rod holder tubes for most standard spinning rods...with a 1" handle. It also works well for the handles on many landing nets.

A plumbers PVC cutting tool will make your modification projects faster and easier. But you can also cut PVC pipe with a hacksaw...or just about any other kind of saw. PVC is strong but it is soft enough to cut easily.

Plumbers use special PVC cement to glue the joints they make. This cement melts and fuses the parts together...helping to make watertight seals. But you don't need to worry about any leaks when using PVC for tube or toon mods. What is more common, in glued joints, is cracking or separation. By screwing your connections together you make repairs or alterations much easier...ultimately saving time and material. I use 1/2" #8 machine screws for most of my PVC connections. Only rarely will I use larger 3/4".

If you buy your PVC supplies from a well-stocked building supply outlet you can choose from a wide array of connectors and joints...in both the 1" and 1/2" sizes. 90 degree elbows and Ts are the connections I use most. But I also have need of a few 45 degree elbows. And for making modular rod holders and tool racks I use some 1/2" to 1" Ts. You can see these in the pics on rod holders.

Finally, some folks don't like the appearance of a lot of white PVC all over their craft. No problem. Get some Krylon plastic paint in the color you desire and paint the white stuff whatever color you like.