

## Rebuilding the Yakima Rudder by Tom Holtey - photos by author

The Yakima Rudder components are no longer in production. Some people break a blade, others break the housing (rudder head). Those with broken rudders should seek others with a broken rudder. With luck the parts of two rudders can be used to rebuild one. There were two versions of the head, the same blade was used for both and will fit into both heads. (See the other housing version at the bottom of this page.)

This article will guide you through a blade replacement, or the replacement of the rudder lifting line, aka rudder rope. If you cannot fix your Yakima rudder you will have to replace the rudder assembly with a Long Pin style replacement rudder.

Early in the 21st century, the Yakima car-top roof rack company was part of the Watermark family of paddle sport brands, including Perception and Dagger. Yakima made all plastic rudders assemblies for their kayaks at that time. Perception and Dagger joined with Confluence Watersports, some years later, and Yakima went its separate way, thus ending the need to produce Yakima rudders.

It is recommended that you do not disassemble the rudder housing until you are immediately ready to re-build the rudder. Memorize the assembly so you can reassemble it in the exact same configuration. It is actually very simple.

Untie the rudder lift line and pull it through the line guides. Replace with new rudder rope if needed. It is recommended that you have about 2-3 feet of **3/16 bungee cord**, new, on hand to replace the tension line anytime you perform this operation. Disconnect the steel control cables if you feel so inclined.



The Yakima Rudder Assembly (shown above is a circa 2003) has four screws side to side, One is large: the central pivot screw. Three are much smaller. All hold the two halves of the rudder housing together. Other version of the assembly should be very similar.

The blade is identical in both types of Yakima rudder housing. All four screws need to be removed. The large bolt through the hull does not. If at any point you become aware of damage to the rudder assembly stop and reconsider. It may be possible to mend components with a good quality epoxy.

The Yakima rudder blade is similar to a machete.

The butt end is much like a pommel. A short strait section (machete grip) with 3 holes leads to the wider and flat blade area.

The top section of the Yakima rudder blade looks like the letter P.

The strait side of the P points forward when the rudder is down in the water. The curved part of the P points aft. This P top is the pommel of the blade.

The center section of the rudder rope is the part in contact with the rudder blade, passing in and out of three holes in the blade. (see images left)

The two long free ends of the rope will lead to the cockpit. These two long lift lines run in parallel on the right hand side of the kayak (starboard). One rope is outboard or starboard, the other inboard or port.

When finally assembled, with the rudder blade in the down position, the starboard, or outboard, side of the rudder rope enters the rudder housing through the starboard hole in the leading edge of the assembly.

The starboard side rope then passes over the pommel of the blade, heading aft and downward on the curvature of the P, passing over to the port side of the blade. It then enters the aft most of the 3 holes, back through the center hole exiting the starboard side of the blade.

The rudder rope exits the port side hole in the leading edge of rudder assembly and becomes the inboard or port side rudder rope. The two free ends of the rudder rope will be joined in a loop with the bungee tensioner, tied with the rudder knot. (When facing forward: Port = Left and Starboard = Right)

Once you have the rudder rope passing through the rudder assembly on the correct path you should tighten all four screws immediately. The lift line will pass through several guides on the way to the cockpit. The guides used at the time the Yakima rudder was common are the same used to fasten the rudder tubes. They are called Rudder Tube Clamps.

The rudder knots in the lift line will be tied last. Reconnect the cables and rudder pin as needed. Test the rudder function, raise and lower, as well as right and left steering.

At this time it may be wise to replace the rudder hook and



3/16 inch bungee. A rudder rest may be molded directly into the deck, or is a separate V shape fitting.

To the right is a photo of the alternative Yakima rudder head, often called the "Streamline" Yakima rudder. It functions the same as the other version and both take the exact same blade.

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### Links to commonly needed parts:

- **Rudder Rope 1/8 in. X 20 ft.** comes with rudder knot diagram
- **Bungee Cord, 3/16 in., (sold by the foot)** about 3-4 feet, extra for rudder hook.
- **Rudder Tube Clamps 1/4 in., 2 pack** lift line guides.
- **Nylon J Hook** rudder hook.
- More options in the **Rudders + Skegs** Dept.

### Related Articles:

- **How To Install A Rudder On A Sit-on-top Kayak**
- **Kayak Rudder Cable Connection Options**
- **Confluence Rudder Install Video part 1**

