

Columbia Sailing Yachts

By Whittaker Corporation, 1976-78

By Hughes Boat Works, 1979-1982, 1986-?

By Aura Yachts, 1982-86

GENERAL SPECIFICATIONS

Model Name	Columbia 8.7, BUILD #299	
Designer	Alan Payne	
Rig	Sloop	
Sleeping Capacity	5	
Length Overall	28'7"	8.7 m
Designed Load Waterline Length	23'2"	7.1 m
Beam	10'0"	3.0 m
Draft	4'8"	1.4 m
Displacement	8,500 lbs.	3,900 kg
Ballast	3,500 lbs.	1,600 kg
Maximum Cabin Headroom	6'1"	1.85 m
Vertical Clearance	41'3"	12.6 m

SPECIFIC TECHNICAL SPECIFICATIONS: (UPDATED 2014)

BOAT NAME: FULL SAIL **MODEL YEAR:** 1977 **HULL MATERIAL:** FIBERGLASS **STYLE:** CABIN

COOKING FUELS: CNG (FORCE 10 OVEN; TANK UNDER STARBOARD SITTEE)

ENGINE

Manufacturer: BETA MARINE
Model: BETA 16 (BZ602)
Fuel Type: Diesel
Power: 16 H.P. @ 3600 RPM
Batteries: 400 amp-hr (bank 1) + 100 amp-hr starter battery (bank 2)

PROPELLER SHAFT

Material: Stainless Steel
Diameter: 3/4 inch
Length: 48.75 inches

PROPELLER

Material: Bronze
Style: Solid 2 Blade
Size: 15 in. Dia x 9 in. Pitch x 3/4 in. Bore
Rotation: Right Hand (Left Hand with Diesel Option)

CAPACITIES

Fuel Capacity: 15 Gallons (LOCATED UNDER COCKPIT)
Water Capacity: 20 Gallons (75 LITERS) (LOCATED UNDER PORT SITTEE)
Holding Tank: 15 Gallons (LOCATED UNDER PORT VBIRTH)

SAIL AREA

150% Genoa 346 sq. ft. (EQUIPPED WITH ROLLER FURLER)
Main 185 sq. ft. (EQUIPPED WITH 2 REEF POINTS)
Total (100%) 531 sq. ft.

COLOR

Sunbrella Forest Green Canvas 4637

I= 37'5" (Length of top of forestay to foredeck)
J= 12'3" (Length from forestay chain plate to mast)
P= 32.25" (Length from boom to top of mast)
E= 11'5" (Length of Boom)

Previous Owners:

John Stevens (Original): WEBMASTER@SVSARAH.COM SOLD BOAT 4/29/01
Robert Fowler: VMIDAISSY@GMAIL.COM SOLD BOAT 3/29/14
William Kinsman: KINSMAWC@CLARKSON.EDU

LEGAL INFORMATION OF COLUMBIA 8.7: (UPDATED 2014)

HULL IDENTIFICATION NUMBER: CLYC7031077
TITLE NUMBER: 1372871 (ISSUED 4/16/14)
VESSEL IDENTIFICATION NUMBER: MD 1233 AB
REGISTRATION NUMBER: 144341 good thru 2015

The Columbia 8.7 was designed by an Australian America's Cup designer, Alan Payne. It was one of a series of yachts in the new cruiser line of boats, deemed the "wide body super cruisers", built by Columbia.

The Columbia 8.7 has a turbulent production history. The first 8.7s rolled off the line in 1976, but in 1978 Columbia closed down because of labor problems. In 1979 Howard Hughes, from Hughes Boat Works, picked up all the molds and brought them to Centralia near London, ON. Hughes went

into receivership in 1982. Aura Yachts then took over until 1986, at which point Hughes took the line back again. After this, Hughes built a few more 8.7s, until a fire destroyed his factory in Orangeville.

The unique wine glass transom and flat sheer was a look that people tended to either love or hate, and the 10-foot beam, carried well aft, was a design feature that didn't become popular until the mid-eighties. But the Hughes' acquisition paid off, and the 8.7's debut at the Toronto Dockside show in 1979 was a big hit. Buyers found it was one of the few boats to offer over six feet of head room in a boat less than 30 feet in length. Hughes was also offering hot and cold pressure water with a shower, 110-volt shore power with a built in battery charger along with a diesel inboard. The base boat even came complete with sails. The only compromise on style was the rather high coach house (to achieve the 6' 1" headroom), which needs some getting used to, or as Aura versions did, some deceiving sleek ports to make her look less porky top-sides.

On the Water My first experience sailing the 8.7 was in the summer of 1980. I was doing a sea trial for a couple of potential buyers, while working for Hughes Columbia's Port Credit division. It was a typical Lake Ontario sailing day, we left about 3 p.m., and ended up coming back after midnight. While on the water, we experienced every possible wind condition under 20 knots and sailed her at all points. The most impressive performance feature, I discovered, was the way the boat tracked with the helm locked. It basically sailed by itself on a beam reach for over two hours. Although this is quite typical of well-balanced full keel boats, the Columbia has a modified keel with a partially skegged rudder, which provides for better off-the-wind performance. In light winds you might find yourself looking for more sail to put up, as it feels quite heavy, but in anything over 10 knots the boat comes to life, and the symmetrical underbody with the wineglass transom glides through the water, leaving very little turbulence behind her. With an average PHRF of 200, it is not a boat for the racers, but cruisers of all abilities will appreciate the winning combination of performance and ample amenities. And with the accommodation of a floating cottage, the Columbia 8.7 will help ward off two-footitis for a good while.

The rig Characteristic of its design era, the rig is a low-aspect sail plan totaling 424 sq. ft. between main and jib. A long boom supports the massive main sail, and the mast is deck stepped with a single set of spreaders. Hughes used a Cinkel painted spar, which boasts internal halyards, built in wiring conduits and an integral pole car track. Although not as well constructed as the similar Isomat mast, the spar is a definite upgrade from the US built boats, which used raw aluminum sections. The shrouds are well inboard to allow for close sheeting, and a strong upwind performance, while the rig is stayed with forward and aft lowers, to keep the mast stable in choppy conditions. The main sheet is located on the bridge deck and has a good sheeting angle with the boom, eliminating the need for more than the standard four-to-one main sheet system.

So what is so special about down below? It is usually the spacious interior accommodations that convinces boat browsers to come back and take a second look, after shopping for other boats in the same price range and size. The steps going down are not a suicide drop, but on a gradual grade. The galley is off to port with plenty of cupboard space and a large, but relatively shallow, ice box so you won't go missing when you pursue that run-away radish. There is a custom cover over the stove which provides additional counter space, and slides back and down while the stove is in use. Every possible type of stove has been found on these boats, ranging from two-burner pressure alcohol, to stoves with ovens, and full propane stoves with ovens. The galley has a large single sink with hot and cold pressure water (at least since they were made in Canada). This boat was also one of the first to have a garbage bin built in.

Going forward on the port side, there is a long single berth with a foot well for sleeping. Beyond that, in the forward cabin, is a set of drawers and a full hanging locker. You can close off the forward V-berth for privacy and still enjoy good ventilation with opening ports on both sides and the large over-head hatch. The length of the V-berth is a bit short for people over six feet, but it does provide ample storage space underneath and on each side. There is a removable filler piece which enables you to change in privacy with the door closed.

Moving aft again, the head is on the starboard side, across from the drawers and hanging locker. It is a little tight, but all the amenities of larger more expensive boats have been squeezed in. Storage is adequate for most toiletries, but no more. There is hot and cold pressure water with a shower attachment, but the shower creates a bit of a problem, as it drains directly into the bilge. Not a good idea! Most bilge pumps do not macerate so you will likely spend a lot of time unclogging them.

The saloon has a roomy feel to it because the main table folds up and into a recessed cavity with a book shelf on the bulkhead, beside which, is a concealed bar that pops out. The starboard double is designed for basketball players. It is joined to the quarter berth with a small variance in height (which a cushion would easily fix), and folds out to a full double. Each settee has a swing-up, hinged back which increases the bunk width and provides ample storage for bedding when it is not in use.

If you lucky enough to find a brochure on the Columbia 8.7, you will see that it shows a swing down chart table at the quarter berth. The Canadian versions do not have this, instead, the quarter berth has been widened to the width of, dare I say it, a comfortable twin.

Now you are probably thinking something must suffer as the result of all these amenities, and the engine compartment would seem the logical choice. But you would be wrong in this assumption. Engine access is simply a matter of removing the steps, sliding the bottom of the storage compartment above the engine out, and then removing the two front panels. This arrangement ensures full accessibility to the front, and sides of the engine.

Hughes and Aura thoughtfully put a 12-volt light in the engine area, so you can always see what you are doing when servicing the engine. Most boats came with the standard 15-horsepower, twin-cylinder Yanmar diesel. Hughes offered an upgrade to the 22.5 horsepower three-cylinder Yanmar. The older ones built in the US by Columbia had either the Atomic gas engine or the Volvo MD 7 A, a 13-horsepower diesel. I have seen a rare 18-horsepower Volvo 2002 diesel on a later Aura-built boat once. The shaft is a bit light as it is only $\frac{3}{4}$ of an inch instead of the more common 1" thickness.

The electrical system is probably the most unique thing about the Canadian-built Columbias. Hughes used a converter instead of a separate charger to provide the 12-volt source. What this means is that when you plugged into shore power, (a standard feature on all boats) the 12-volt system for the boat actually runs off of the converted 110 volt AC current, which is half-wave rectified, while at the same time, a built in 15-amp battery charger charges your batteries. The advantage of this is that you do not have to worry about your battery charger having to do double the duty to charge the batteries while you are draining them with your house circuits. The disadvantage is that you get a 60-cycle hum from your stereo if it is a typical automotive set up for the high frequencies of a car's ignition. The 12-volt refrigeration and instruments do not like this impure DC voltage either, and tend to act radically as a result. The solution however, is simple. Connect your stereo and refrigeration directly to your battery terminals, and wait until you unplug to go sailing before you trust your instruments.

Construction The Columbia's hull is solid, hand laid glass, and the deck is a balsa sandwich construction. The interior is all teak, comprising of some solid components and marine ply, (only the deck head is a fibreglass liner). During construction the entire interior is clamped to a massive jig and

lowered inside the hull where the bulkheads are bonded to the hull and the stringers are glassed the full length. This, along with the hull shape, keeps the boat free of distortion while underway. Prospective buyers should be aware that the decks are known to leak around the toe rail and windows, primarily due to the lack of proper caulking at the factory.

The Hughes Columbia 8.7 has been the sleeper of the used-boat market over the past 8-10 years. It is commonly confused with the Hughes 29, and the manufacturer's tumultuous history deterred some buyers. Because of this, the value of the boats has stayed relatively low, making it a bargain in today's market

So How Did Columbia Make C-8.7 Rudders?

...in the case of the 8.7, there 's a 1/4" SS plate 9" by 19" welded to the rudder stock (which has a 9" long key machined into it to take the plate). From what John B. told me, they had a mold for the rudder, put gelcoat onto it, closed it with the rudderstock in place and injected foam. There were three 3" diameter holes in the plate to anchor it better in the foam. There didn't appear to be any glass material when I repaired my rudder and this seems to be a standard method of making them.

Mike Keers provided the following information:

From a 1975 Sail review, the price then was between \$29,990 and \$32,600 new, plus delivery. A little earlier than your vintage, but hope it's helpful.

Ron Coules provided the following information:

"I just happen to have a 1978 price list . List price for base boat with atomic four was \$25,995. My boat without tax in the water cost \$39,505. This was very well equipped."

Famous 8.7s and owners

The old SSS (singlehanded sailing society) history states that *Joshua H*, a 1976 Columbia 8.7, was sailed by Mr. Harold Upham to a first place class III finish (third overall) in the 1982 Transpac (San Francisco to Hawaii) race. What is equally impressive is *Joshua H*'s homeport is Fethiye, Turkey. It was recently moved there from Massawa, Eritrea which is on the Red Sea on the eastern coast of Africa

Also, John Somerhausen has singlehanded *Pampero IV* across the Atlantic and back and to Bermuda and back. Until recently, Dr. David M. Parker, author of *Ocean Voyaging* (c1975), sailed Columbia 8.7 #4 *Psyche*.

Bruce & Kathy Piltingsrud write:

Based on the original bill of sale, our '79 model #339 was built in Virginia by the Wittaker Corp. The original buyer (I'm the second owner since '81) said it was the last one built by Wittaker and that he watched it built over a couple of weeks. I don't know if that's true or not, but I mention it because of the statement in the history section of the site says that all '79's were built by Hughes.

John & Gwen Sunderson back this up. *Scalawag*, their 1979 boat is hull #337 and was built in February in Virginia by Whittaker. Here is some info on the 8.7 rudder:

The rudder was one of the weak spots on my 8.7. I assume the 8.3 rudder was constructed and attached in the same manner.

The rudder is attached to the skeg with a two-piece gudgeon that wraps around the rudder post where it is exposed by a notch in the rudder. The gudgeon is through-bolted to the skeg. I encountered two big problems with this configuration.

1. The skeg is hollow where the gudgeon is through-bolted. This means the 1/4" bolts are only supported by the walls of the skeg. This allows the bolts to wallow and enlarge the holes which can result in the loose rudder that you have noticed. The other problem is that once the seal on the gudgeon bedding compound is broken it will start to leak. The interior portion of the skeg is very difficult to inspect, hence any leak is very difficult to find.

2. The original rudders were constructed with a very thin fiberglass skin (not much more than gelcoat). Any stress cracks in the surface will allow water to enter the rudder. This could cause delamination of the rudder or at least destroy the foam core and thus the structural integrity of the rudder. You may be seeing the beginning of this problem in the cracks, or they may be only cosmetic.

I experienced both of these problems, including the leaking skeg. My solution for the first problem was to fill the skeg with epoxy. I glassed a plywood dam at the forward interior end of the skeg, covered the through-bolts with release wax (also known as PAM cooking spray), then filled the skeg with epoxy. Now the bolts are fully supported by solid glass for their full length, and the skeg cannot leak.

For the second problem I just threw money at it. I had the marina build me a new rudder. They removed all of the old glass, replaced most of the foam core then recovered it in glass. Cost around \$600 in 1980. One of unexpected benefits is that they got the rudder post a little out of line so that my tiller is about 10 deg off-center when the rudder is dead ahead. This allows me stand next to the rudder when under power.

Dropping the rudder is fairly simple. Just remove the gudgeon. Put something under the rudder to hold it up, and remove the rudder head. Then slowly allow the rudder to drop to the ground. If you don't fill the skeg after you re-attached the rudder, use a lot of bedding compound or you will have a persistent leak.