

9.9 Outboards Face Off



Suzuki and Yamaha challenge reigning champ Mercury.

The Yamaha 9.9 outperformed the Suzuki in tests on Sarasota Bay. However, neither four-stroke engine topped the performance of the Mercury 9.9, which we evaluated in the June 2007 issue.

We're all glad the old, carbureted two-stroke outboard is fading into history. Four-strokes run quieter, burn less fuel, and produce less smoke. But four-stroke manufacturers still haven't figured out that weight thing, no matter what size we're talking about.

The four-stroke's undeniable qualities carry with them a considerable weight penalty. For instance, the two 9.9-horsepower outboards we evaluated in this test exceed 90 pounds. One is just shy of 100 pounds. (Engine manufacturers actually label the 9.9 models as "portable.")

Remember the 75-pound two-stroke? Or *Practical Sailor's* 59.4-pound favorite—the Nissan/Tohatsu 9.8-horsepower two-stroke (*PS*, Nov. 15, 2000)? That's no typo. It was really 59.4 pounds. Unfortunately, that engine is no longer available. The Tohatsu MFS9.8A, an 81.5-pound, four-stroke, which we evaluated in June 2007, replaced that model. The '07 article also reported on 9.9s from Mercury and Honda. More than a year later, *PS* finally has been able to test the remainder of the field—Suzuki and Yamaha 9.9s—for this report.

THE 9.9

The 9.9-horsepower engine makes a good fit for larger rigid inflatable dinghies like those featured in the July and October 2008 issues. Some sailors don't mind rowing or will put up with the putt-putt of a smaller outboard. (*PS* reported on 2.5-horsepower engines in December 2006.) But for far-ranging exploration or quick provisioning runs ashore, an 11-foot RIB with a 9.9-horsepower outboard makes an attractive alternative.

An 8-horsepower four-stroke (*PS*, Jan. 15, 2004) may still struggle with a fully loaded RIB, while other RIBs are too light to rate a 15-horsepower engine. Even a 9.9 can push a RIB at close to 20 knots, so caution is required.

The major downside, as we mentioned, is the weight, which all 9.9s have going against them. So, other factors—ease of starting, ease of maintenance, throttle and shifter position, position and comfort of the carrying handles, and noise levels—become all the more important when trying to decide on an engine.

WHAT WE TESTED

Both the Yamaha 9.9 FMSH and the Suzuki DF15 are offered with 20- or 15-inch shafts. They can also be found with electric starters and power trim and tilt. We tested the basic models—pull start and manual tilt and trim.

Engines are often identical in dimensions to others in a manufacturer's lineup. The Suzuki 9.9, for example, is a detuned version of the company's 15-horsepower motor. The Yamaha 9.9, however, utilizes its own engine block. The engines that sandwich the 9.9 in Yamaha's fleet—the 8- and 15-horsepower motors—are manufactured with different powerheads.

Many of our conclusions about these short-shaft models should be useful for sailors considering the long-shaft models.



PS VALUE GUIDE	9.9-hp, FOUR-STROKE OUTBOARDS		
Make/Model	SUZUKI DF9.9	YAMAHA F9.9F	★ MERCURY F9.9M *
Retail Price	\$2,753	\$2,830	\$2,290
Warranty	3 years	3 years	3 years
Weight (pounds)	97 lbs.	91 lbs.	84 lbs.
Prop material, diameter X pitch	Aluminum, 9.25 x 9 inches	Aluminum, 8.5 x 8.5 inches	Aluminum 8.9 x 8.5 inches
Emissions Rating	Three Star	Three Star	Three Star
Top Speed (knots)	13.4 knots	15.5 knots	17 knots
Noise @ Idle (decibels)	64 dB	63 dB	63 dB
Noise @ 10 Knots	90 dB	88 dB	84 dB
Noise @ WOT (decibels)	93 dB	90 dB	89 dB
Fuel Burn @ 10 Knots	0.5 gph	0.75 gph	0.6 gph
Fuel Burn @ WOT	1.3 gph	1.8 gph	1.5 gph
Starting Rating	Good	Good	Excellent
Flush Port	Fair (accessory)	Excellent	Fair (accessory)
Cowling/Cowling Clamps	Good	Excellent	Fair
Ease of Tilting	Excellent	Excellent	Fair
Portability	Fair	Fair	Fair
Maintenance	Fair	Good	Good
Stowage	Good	Fair	Good

★ Best Choice * See June 2007 issue for the full Mercury report. Note: All 15-inch shafts, pull start.

WHAT WE FOUND

Both the Suzuki and Yamaha are carbureted two-cylinder, water-cooled engines that take about a quart of oil. The Suzuki is a significantly larger engine, with a displacement of 18.2 cubic inches, compared to 12.9 for the Yamaha and 12.8 for the Mercury.

Our pull-start models have chokes that need to be used when the engine is cold. Standard equipment includes a 3.1-gallon plastic fuel tank, a fuel hose, a mini tool kit with extra spark plug, and an aluminum propeller. Both manufacturers back their engines with three-year warranties, and both carry the highest emissions rating: three stars.

The Suzuki, at 97 pounds, is the heavier outboard compared to the Yamaha at 91 pounds. The Suzuki, in fact, weighs more than any of the 9.9-horsepower four-strokes we've tested.

The Suzuki carries a \$2,753 retail price, while the Yamaha comes in at \$2,830.

SHIFTERS, TILLERS, and STOPS

The Suzuki's gear shift is on the forward section of the engine, on the starboard side. A metal rod links the shifter, which is made of plastic, to the components inside the engine.

The Yamaha shifter is mounted on its tiller, aft of the throttle. We prefer this setup as it's easier to reach. Also, *PS* testers found the Yamaha easier to shift than the Suzuki.

On the downside for the Yamaha, its shifter and longer tiller require more stowage room. The Yamaha tiller is 4 inches longer than the Suzuki's (23 inches vs. 19 inches). This allows the driver to sit farther forward in the boat, which is important given the weight-sensitive nature of dinghies.

PS testers liked the longer tiller while driving but not while wrestling it from the truck to the dinghy and back. It seemed to always get hung up on something, particularly the carrier's clothing.

Suzuki DF9.9



Both manufacturers placed the engines' kill switches on the inboard side of the tiller, just forward of the elbow. We still prefer the Mercury's tiller/shifter/kill switch setup, which integrates the shifter into the tiller handle and has the stop button on the throttle face.

TRIM, TILT, and STEERING

Tilting and trimming both the Suzuki and Yamaha can be done with little fuss. A lever at the front of the mounting bracket on the tilt tube locks and releases the engine. The Suzuki has five trim positions for shallow-water operation, while the Yamaha has four.

The throttle-tensioning knob on the Suzuki we tested failed to increase tension, our testers noted. The Yamaha's tension adjuster worked just fine. Yamaha has placed its knob in a convenient location—just aft of the throttle on the tiller's inboard side. The Suzuki's is under the tiller forward of the elbow.

Both engines come with nearly identical levers for adjusting steering tension. These are above the trim tubes, and both are covered with rubber for grip and comfort.

MAINTENANCE and STORAGE

The engine oil for these outboards must be changed after the first 20 hours of operation and then after every 100 hours of use. Neither has an oil filter.

Both must be stored on the tiller (port) side, making them less stable than other engines—like the Honda 9.9—that rest on their non-tiller (starboard) sides.

The Suzuki rests on two shims on the lower portion of the cowling. These "feet" are covered with rubber to help prevent movement during storage. The Yamaha test engine, which rests its full weight on the elbow of the tiller, sustained some

A Feel for Four-strokes

A Walker Bay Genesis 270 rigid inflatable boat served as *Practical Sailor's* testing platform. The 119-pound Hypalon RIB has an 8-foot, 10-inch LOA and a beam of 5 feet, 4 inches. It can take up to a 10-horsepower outboard. The field tests were run on Sarasota Bay, Fla., in a light breeze and light-to-moderate chop.

PS testers used a FloScan digital fuel meter to record fuel usage, and they took noise measurements with a Radio Shack decibel meter. A Garmin GPSMap72 handheld was used to determine top speeds. Speed and noise levels were taken in two directions and averaged to account for wind and current.

Testers closely examined all operational components and vital access areas, such as the oil dipstick and oil fill, carrying handles, tillers, throttles, forward/reverse shifts, flushing ports, ease of engine tilting, cowlings, their clips and fasteners, etc.

Both male and female testers evaluated both engines' smoothness and ease of starting on cold and warm starts. We also rated the engines for how difficult they were to carry, mount, remove, trim, and tilt.

The ratings and performance numbers for these two engines were compared to each other and to those of the other 9.9s we last tested: the Mercury 9.9, Honda 9.9, and Tohatsu 9.8 (June 2007).

In the small-outboard tests, *PS* has determined that the better

scratches during transportation and storage. We'd like to see the elbows of the tillers covered with rubber since the engines also rest on them.

One bonus noted on the Yamaha was its flush port with a garden hose connection on the starboard side of the engine. It's perfect for quick, easy flushing. Flushing the Suzuki, however, is a complicated affair, in our opinion. First, users must buy an adapter, which does not come standard with the engine. A garden hose connects to the adapter, which is located just above the lower unit. Before turning on the water, the water intake hole on the underside of the ventilation plate must be plugged. The engine's owner's manual recommends using a piece of duct tape. Blocking the intake prevents air from getting sucked into the water pump and damaging it.

It's easier to check the engine oil level on the Suzuki. Its dip stick is in plain view on the port side, about halfway aft. The Yamaha's dipstick is near the base of the engine, behind the lower cowling. Spark plugs

are easier to get to on the Yamaha, however.

Testers found changing the oil in both engines to be easy. Each has a drain plug.

SUZUKI

The Suzuki's heavier weight made it more difficult to carry and to trim or tilt when it was mounted.

Removing the cowling on the Suzuki was no problem—just flip the latch on the back of the engine and slip off the hood. There is no latch on the forward end. Getting the cowling back on was only slightly challenging. You have to get the hood down all the way over the lower cowling's gasketing to ensure a correct install.

PS's male testers had no problem starting the Suzuki, but only one female tester was able to cold start the engine. The shifter on the Suzuki also was slightly stiff.

One thoughtful edition on this Suzuki was its coiled wire guide on the engine face that prevents the fuel hose from getting tangled with the tiller.



To evaluate each engine's ease of tilting and starting, multiple testers put them through their paces.

engines are usually the ones that are easy to operate, transport, store, and maintain. Performance numbers among the engines in the various horsepower groups have varied little; therefore, they carry less weight in our overall conclusions.

On the water, the Suzuki pushed our dinghy to a top speed of 13.4 knots—2 knots slower than the Yamaha. The Suzuki was also louder than its competitor. Testers recorded 90 decibels at 10 knots and 93 decibels at full throttle. On the plus side, the Suzuki burned less fuel: 0.5 gallons per hour (gph) at 10 knots and 1.3 gph at full blast.

Bottom line: The Suzuki DF9.9 is the heaviest and loudest-running 9.9 outboard we've tested, and its duct-taped freshwater flushing setup leaves a lot to be desired, in our opinion.

YAMAHA

The Yamaha is more compact than the Suzuki. Its circumference—where the top and bottom cowlings meet—measures 50 inches, compared to the Suzuki's 54 inches.

But at 91 pounds, the Yamaha is no lightweight, and the large tiller presents a challenge when carrying the engine. Storing the Yamaha requires that it rest on its tiller. We'd prefer it be better protected, but the cowling

User-friendly Features

► Testers preferred the Yamaha's longer tiller and its gear shift's location.

► The engine oil fill and dipsticks on the Yamaha and Suzuki are easy to find, but the Suzuki's is a bit more accessible. Testers found both the Yamaha dipstick's looped handle and the Suzuki dipstick's molded rubber handle easy to grasp and pull.

► Both engines had notable features. The Suzuki has a coiled wire clip that keeps the fuel hose from getting in the way. The Yamaha offers a unique freshwater-flush setup that makes this task a cinch. The Suzuki's flush system was less desirable and left too much room for operator error.

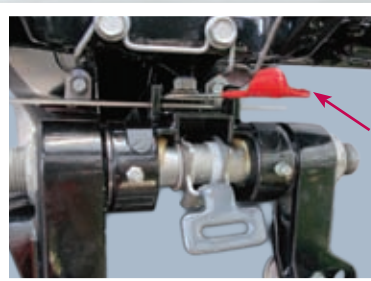
► The steering tension adjuster is nearly identical on these engines. The rubberized grip made them easy to use.



Suzuki dipstick



Suzuki fuel line clip



Suzuki tension adjuster



Yamaha throttle and gear shift



Yamaha dipstick



Yamaha freshwater flush port



Suzuki freshwater flush port

is easier to put on and take off than the Suzuki's.

The Yamaha shifter worked smoothly, as did all of the other operational components. The engine burned more fuel than the Suzuki at cruising speed (0.75 gph) and top speed (1.8 gph), but it pushed the dinghy noticeably faster: 15.5 knots. (That's slower than the Tohatsu and Mercury, which propelled the boat to 17 knots.) The Yamaha also ran smoother and quieter, registering 88 decibels at cruise and 90 at WOT.

Bottom line: The Yamaha's strengths include its long tiller and smooth shifter. We also like its easy freshwater flushing attachment.

CONCLUSIONS

The engines *PS* tested for the June 2007 article impressed us more than these two. In that report, we recommended buyers beware the heavy Honda if they anticipated having to mount and unmount the engine frequently. The same goes for the Yamaha, which is a pound lighter than the Honda, and the Suzuki, the heaviest motor tested. All three weigh too much to be called "portable."

In this test, the Yamaha gets the nod over the Suzuki. Of the three heavier engines, we prefer the Honda despite its higher price tag. The Honda has a five-year warranty (versus the others' three-year warranties) and runs quieter than the

others. The Yamaha ranks second. Its flushing setup stands out as one of its best features, in our book. We wish all of the engines had this kind of arrangement.

PS still ranks the Mercury as Best Choice and the Tohatsu MFS 9.8A (\$1,752, www.defender.com) as Budget Buy in this outboard category. ▲

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