

VALUE GUIDE: ENGINE SPECIFICATIONS

ENGINE	MERCURY VERADO	HONDA BF150	SUZUKI DF150	YAMAHA F150	MERCURY OPTIMAX	EVINRUDE E-TEC
Engine Type	4-STROKE INLINE 4 CYL.	4-STROKE INLINE 4 CYL.	4-STROKE INLINE 4 CYL.	4-STROKE INLINE 4 CYL.	2-STROKE V6	2-STROKE V6
*Weight	527 lbs.	478 lbs.	474 lbs.	475 lbs.	443 lbs.	427 lbs.
RPM Range	5800-6400	5000-6000	5000-6000	5000-6000	5250-5750	4750-5750
Displacement	105.7 cu. in.	144 cu. in.	174.9 cu. in.	162.8 cu. in.	153 cu. in.	158 cu. in.
Alternator	70 amps	40 amps	44 amps	35 amps	60 amps	50 amps
Gear Ratio	2.08:1	2.14:1	2.5:1	2:1	1.87:1	1.85:1
Bore & Stroke	3.23 x 3.23	3.43 x 3.9	3.81 x 3.81	3.7 x 3.79	3.5 x 2.65	3.6 x 2.6
Oil Capacity	6.3 quarts	7.1 quarts	7.6 quarts	5.5 quarts	NA	NA
Engine MSRP	\$12,765	\$13,871	\$13,187	\$13,870	\$12,190	\$15,179
Boat/Engine MSRP	**\$34,400	\$32,660	\$30,810	**\$33,220	\$30,430	\$32,660
**Ad Price	\$27,965	\$26,225	\$24,375	\$26,785	\$23,995	\$26,225

Notes: All have 3-year factory warranties. All are fuel-injected engines. *Weight for 25" shafts. All without oil, prop, steering components. **Includes pre-rigging fee of \$1,430 (Verado), \$560 (Yamaha). ***Average price offered to consumers by Angler dealers.

gine noise. The Mercury fuel system cannot be monitored with external fuel meters due to the fuel surges through its large fuel reservoir tank. Only the SmartCraft gauges, which are linked to the engine's computer, can be used to read the Mercury fuel flow. In our experience, the SmartCraft gauges have been accurate. Bombardier technicians at the test site argued that the Verado had an advantage because fuel data taken from the engine's computer may be more accurate than from a FloScan. We took this under advisement and

decided to allow Bombardier to hook up its fuel-reading device to the E-TEC engine. We ended up taking fuel numbers generated by both the FloScan and Bombardier's equipment. The numbers were right on top of one another, within 0.2 to 0.5 gallons per hour at various settings. Therefore, the numbers that appear in our charts are from the FloScan.

We also conducted a "drag-race" test to evaluate acceleration. Testers timed how long it took each engine to push its boat from one fixed mark to another, a distance of 0.15 mile or 792 feet. See "Number Crunch" on the

previous page for further data-collection details.

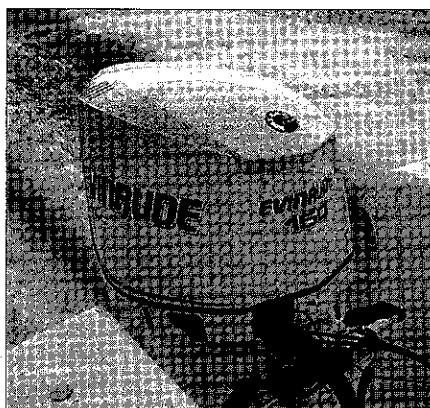
What We Found

In the drag race, the Yamaha (16.8 seconds) and the Mercury OptiMax (17.1 seconds) finished one and two, followed by the Suzuki (18 seconds), the E-TEC (19 seconds), the Verado (19.7 seconds) and the Honda (20.5 seconds). All of the engines were plenty quick for us. We did notice that the E-TEC had a slight hesitation before initial acceleration. In addition, it vibrated significantly at 2100 rpm.

In the fuel-economy department, both Mercurys scored well at 30 mph. The OptiMax actually burns a bit less than the Verado four-stroke. At 35 mph, however, the Verado starts to chew up the fuel. It placed last in mileage and range at this speed. The Honda did well at both 30 and 35 mph.

In our performance testing by rpm increments of 500, the Honda and the OptiMax were the only two engines to crack the 5-mile-per-gallon (mpg) mark at high speeds. At 3500 rpm, the Honda got 5.3 miles to the gallon at about 23 mph, while the OptiMax boat got 5.0 mpg at 3000 rpm while cruising at the same speed. This serves as a good example of performance curve differences between two- and four-strokes. The Honda has to work a little harder (3500 rpm) to achieve the same speed as the OptiMax (3000 rpm).

While the fuel economy (mileage) of the Mercury Verado decreased from 30 to 35 mph, the Yamaha's increased. The Yamaha placed fourth at the slower speed, but first at the higher. We sent all manufacturers



MERCURY VERADO					
RPM	DECIBELS	MPH	GPH	MPG	RANGE
1000	64.0	4.0	0.6	7.2	471.8
1500	71.0	6.0	1.0	6.3	411.5
2000	73.5	7.1	1.8	4.1	266.6
2500	79.0	7.8	2.8	2.8	186.3
3000	80.3	10.6	4.3	2.5	163.9
3500	85.0	21.8	5.2	4.2	278.1
4000	87.0	27.8	6.2	4.5	294.1
4500	91.0	32.0	8.6	3.7	245.9
5000	93.5	35.8	11.9	3.0	198.5
5500	94.5	39.1	16.3	2.4	157.8
6000	95.5	44.4	19.0	2.3	153.4
6200	96.0	45.1	19.2	2.4	154.9
Prop: 14" x 17" x 3-blade SS					

EVINRUDE E-TEC					
RPM	DECIBELS	MPH	GPH	MPG	RANGE
1000	69.0	5.0	0.6	8.3	542
1500	75.0	6.9	1.7	4.2	272.9
2000	77.5	8.0	3.1	2.6	171.3
2500	83.0	10.8	5.6	1.9	127.3
3000	84.5	22.0	5.7	3.9	253.6
3500	84.0	29.0	7.4	3.9	259.2
4000	89.0	34.4	10.3	3.3	219.4
4500	94.5	39.5	14.0	2.8	185.4
5000	96.5	46.0	16.5	2.8	183
5500	97.5	48.8	16.4	3.0	195.5
Prop: 14-3/4" x 19" x 3-blade SS					