YAMAHA MARINE

HOT SHEET

New

EFFECTIVE NOVEMBER 1, 2009

F70

Mid-Range

four stroke

Yamaha proudly announces a new addition to its mid-range four stroke stable; the F70. Using advanced features and technology to make it extremely light yet very powerful, it is the ideal outboard for a myriad of lightweight fishing boats and an outstanding alternative to Yamaha's soon-to-be-retired 90hp two stroke (effective 12-31-2009).

Featuring the lightest weight and highest horsepower-per-liter-of-displacement in the 70hp class, the Yamaha F70 takes advantage of the leading edge of technology while maintaining the fuel-efficient, smooth, and quiet operation Yamaha four strokes are known for. And it has benefits like Yamaha's available Multifunction Tiller Handle or our Command Link® System, which let you harness its Variable Trolling RPM capability.

The new Yamaha F70. Big-league technology in a very light weight, fuel efficient outboard.

- **Best-in-Class Horsepower-per-Liter** – advanced 16-valve, single overhead camshaft (SOHC), in-line 4 cylinder engine design.
- **Lightest Weight In Class** – at 260 pounds, it's lighter than all four stroke and two stroke outboards of similar horsepower.*
- **Remarkably Responsive** – a single throttle valve works in concert with a tuned, long track intake system and high-ratio gearcase.
- **Outstanding Fuel Efficiency** – Yamaha's Multi-point Electronic Fuel Injection System and dependable ECM microcomputer engine control.
- **Proven Reliability** – designed, built, and extensively tested to Yamaha's stringent standards for reliability.
- **Smooth, Dependable Mechanical Shifting and Throttle** – works with all Yamaha binnacle and most side-mount mechanical control boxes.
- **Operator Convenience** –compatible with conventional analog or optional Command Link gauges, for even more up-to-the-instant information.
- **Quiet, Smooth Operation** – Yamaha's labyrinth exhaust and Long-Span Mounting System combines with a stylish yet functional exterior.
- **Ease of Service and Lasting Value** – computerized Yamaha Diagnostic System (YDIS), Ultimate Corrosion Protection System, and water-draining air intake cowling.
- **Peace of Mind** – advanced engine warning and protection system and standard three year pleasure or government limited warranty.

AVAILABLE MODEL: F70LA

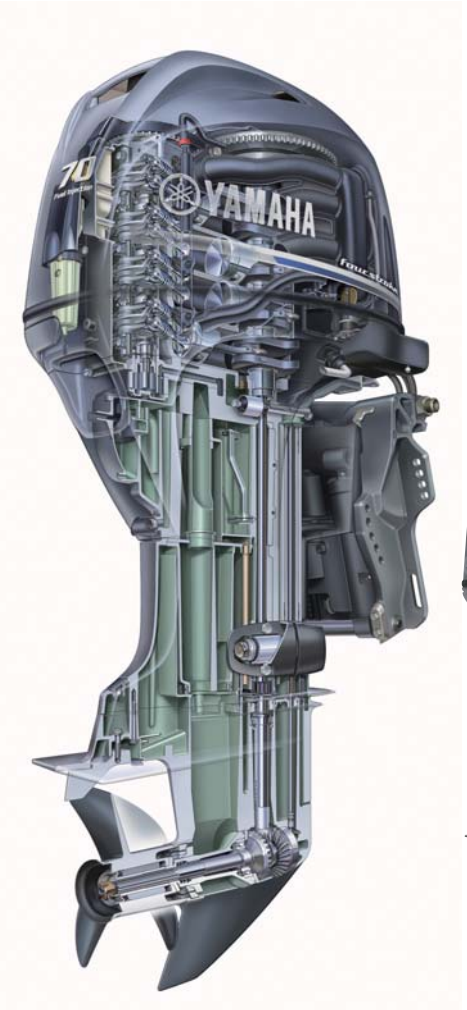
* Published weight

▲ Consult appropriate Yamaha rigging information and Yamaha Rigging Sheet (YMBS) for complete rigging compatibility information and requirements for particular configurations. All rigging items sold separately.

YAMAHA

F70 Four Stroke

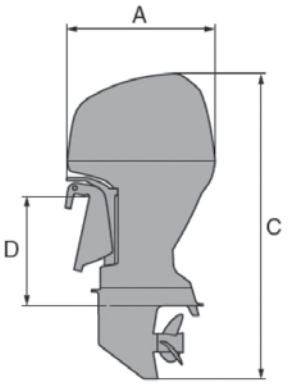
FEATURES

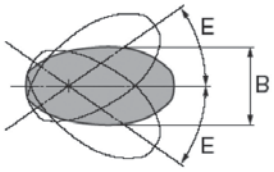


MODEL CODE CHART

F Fuel Induction	70 Horsepower	L Shaft Length	Starting Method PTT	Control Method	A Generation
F = Four Stroke		S = 15" **L = 20"** X = 25" U = 30" J = Jet	**Blank = PTT & E start** P = PT & E start E = Electric Start M = Manual Start	**Blank = Remote Control** H = Tiller Handle C = Command Link Control	**A = 1st change on motor** B = 2nd change on motor C = 3rd change on motor Etc.

DIMENSIONS





Overall length . . . A	713 mm (28.1 inches)
Overall width . . . B	386 mm (15.2 inches)
Overall height . . . C	1476 mm (58.1 inches)
Engine transom height . . . D	534 mm (21 inches)
Steering angle . . . E	40 deg. each direction

RIGGING OPTIONS

GAUGES▲

• Command Link®	Compatible
• Yamaha Multifunction	Compatible
• Analog	Compatible
• External NMEA-2000® Display	Compatible▲
• Command Link Plus	Not Compatible

CONTROLS▲

• Mechanical (Cable)	Compatible
• Multifunction Tiller Handle	Compatible
• Command Link Plus Digital Electronic Controls	Not Compatible
• Command Link Digital Electronic Controls	Not Compatible

KEY SWITCHES AND LANYARDS▲

• Command Link	Compatible
• Conventional	Compatible
• Command Link Plus	Not Compatible

MISCELLANEOUS▲

• Command Link Gateway	Compatible
• Analog Gauge Interface	Compatible
• Command Link Triducer®	Compatible
• YCOP™ (Immobilizer)	Compatible
• Variable Trolling RPM	Compatible

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F70 Four Stroke

FEATURES

Power/Performance

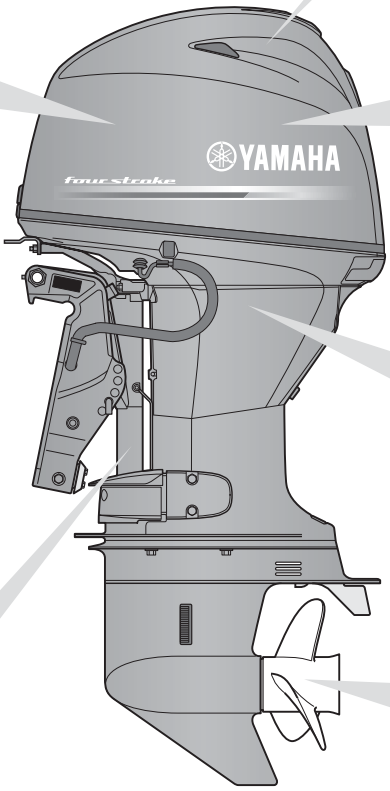
- ECM Micro-Computer Control
- Vapor Reduction Fuel Return System
- Vapor Burning System
- Variable Trolling RPM Switch (VTS™)
- Large Water Separator with Water Sensor

Reliability/Durability

- Water Draining Air Intake Duct
- Four-Stroke, 16-Valve SOHC, In-Line
- Multi-Point Fuel Injection
- Long Intake Manifold, Single Throttle Valve
- Blow-By Gas Reburning System
- Labyrinth Exhaust
- Two Piece Upper Case
- Combined Upper Case with Oil Pan
- Water-sealed Outer Wall
- 2.33 High Gear Ratio

Convenience/Control

- Long-Span Mounting System
- Single Action Steering Friction (optional)
- Multifunction Tiller Handle (optional)
- Large Anti-Splash Plate
- Command Link Network and Gauges (optional)



Warning & Protection Systems

- Over-Heat Warning
- Over-Rev Limiter
- Start-In-Gear Protection
- YCOP™ Immobilizer System (optional)
- Sensor Compensation System
- Low Oil Pressure Warning
- Shift-In Prevention at Open Throttle
- YDIS: Yamaha Diagnostic System

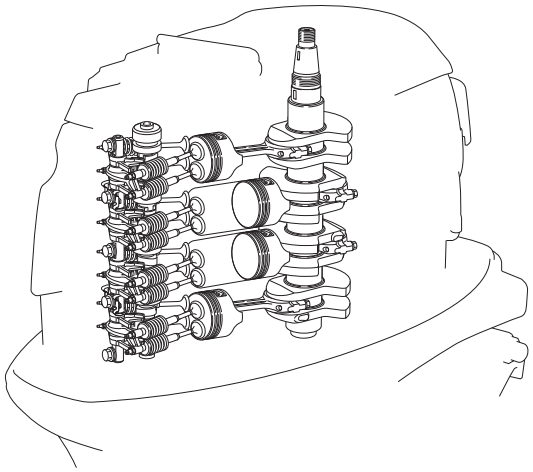
Ultimate Corrosion Protection System

- Special Aluminum Alloy: YDC30
- Self-Sacrificing Anodes
- Freshwater Flushing Device
- Anodic Exhaust Coating (Alumite)
- Electro-deposited Inside/ Outside Paint Process

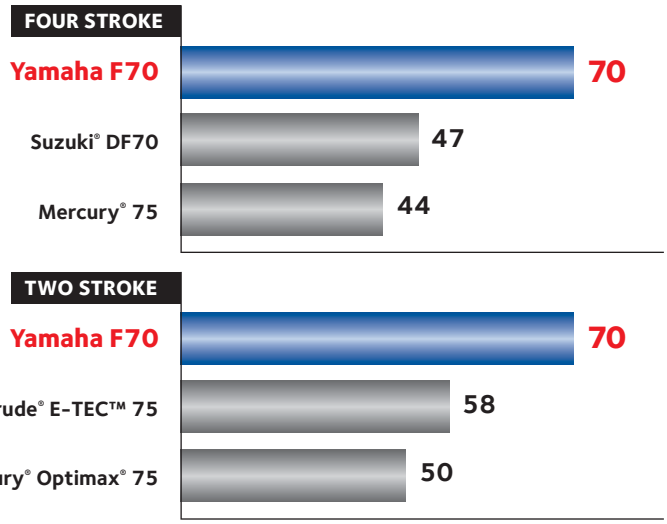
F70 Four Stroke

POWER AND PERFORMANCE

HORSEPOWER-PER-LITER



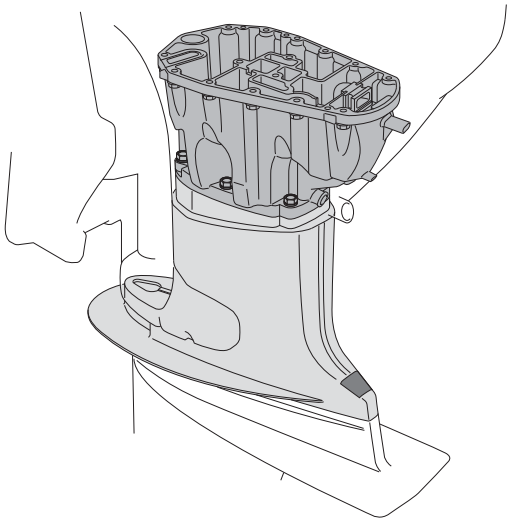
HORSEPOWER-PER-LITER* COMPARISON



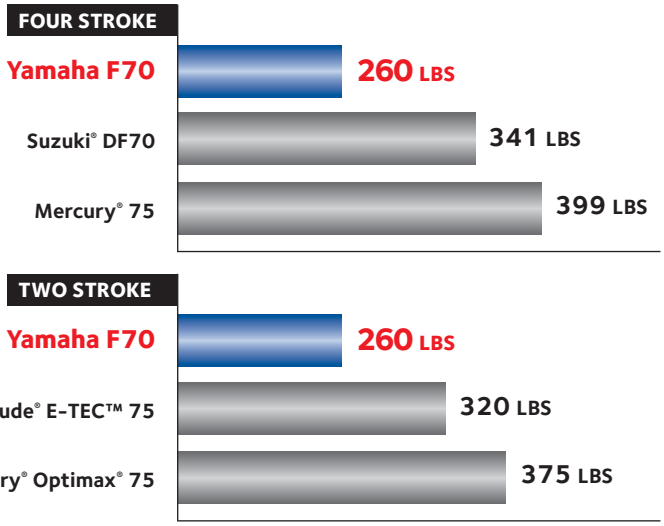
An advanced powerhead design features a single overhead camshaft (SOHC), yet with four valves per cylinder, for maximum power and efficiency. Total intake valve area is increased 17%, while the pistons and valves are up to 10% lighter (when compared to our T60 model), giving it substantially more horsepower-per-liter of engine displacement than competitive outboards, both four stroke and two stroke direct-injected.

*Of engine displacement, rounded to nearest liter and horsepower

LIGHTEST WEIGHT IN CLASS



WEIGHT COMPARISON**



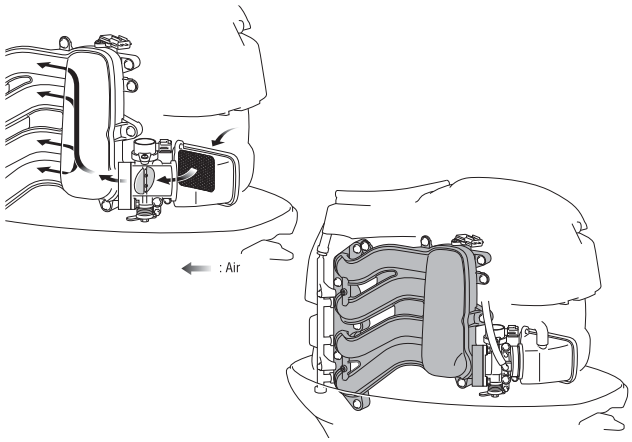
From the specially designed engine block to the two-piece upper case, every ounce of weight-savings has been realized for maximum performance without sacrificing durability. Yamaha's new F70 is not only the lightest four stroke 70 horsepower outboard, it's even lighter than competitive two stroke direct-injected outboards.

**Published weight

F70 Four Stroke

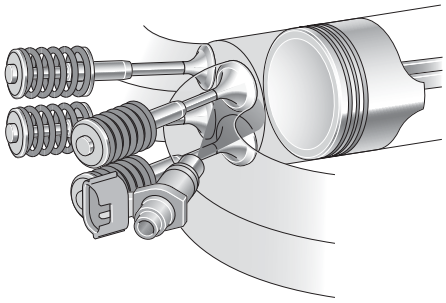
POWER AND PERFORMANCE

PRECISE THROTTLE CONTROL



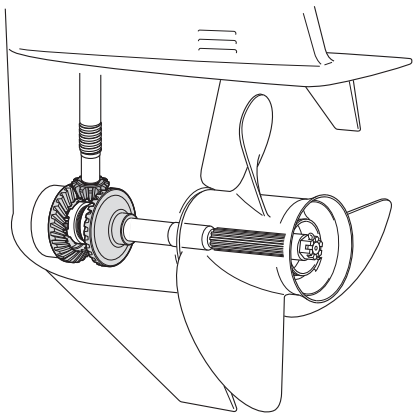
All air entering the engine block of Yamaha's new F70 four stroke is routed through a single throttle valve, to ensure the precise amount of air necessary for optimum power and fuel efficiency. It then enters each cylinder through individual long intake tracks, which are 'pulse tuned' to provide air at the precise volume and timing for maximum density and power.

MAXIMUM POWER AND EFFICIENCY



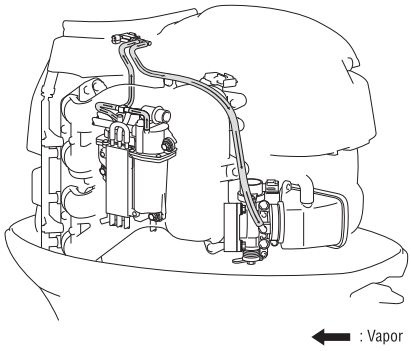
Four individual compact electronic fuel injectors deliver the exact amount of fuel needed for optimum performance and economy. Controlled by the Engine Control Module via input from an array of on-engine sensors, their location just above the intake valves enhances fuel atomization, resulting in more efficient combustion.

HOLE SHOT AND ACCELERATION



Yamaha's F70 provides outstanding hole shot and acceleration thanks in part to an advanced sensor that allows maximum safe ignition timing and a gearcase featuring a high 2.33:1 gear ratio, with specially hardened pinion, forward, and reverse gears for increased durability.

MORE POWER, CLEANER EMISSIONS

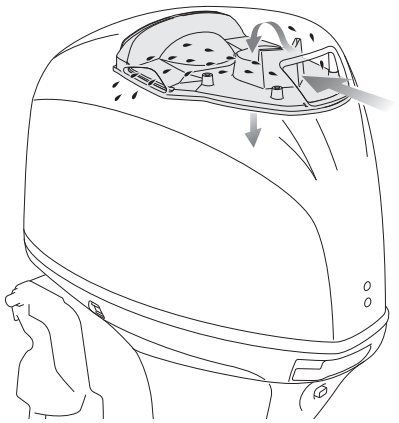


The F70 derives every bit of power available from the fuel by using Vapor Reduction and Vapor Burning Systems. By eliminating vapor from the fuel rail and re-routing it back to the Vapor Separator Tank, only fuel is injected in the cylinders for better combustion and power. A fuel vapor valve prevents fuel vapors from escaping to the atmosphere when the outboard is not running, and re-routes fuel vapors through the intake when the outboard is running. This helps achieve maximum fuel efficiency and minimum emissions.

F70 Four Stroke

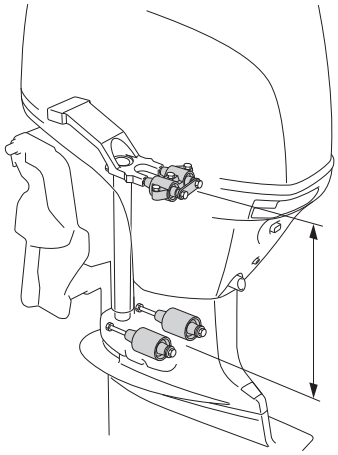
RELIABILITY AND DURABILITY

PROTECTION FROM THE ELEMENTS



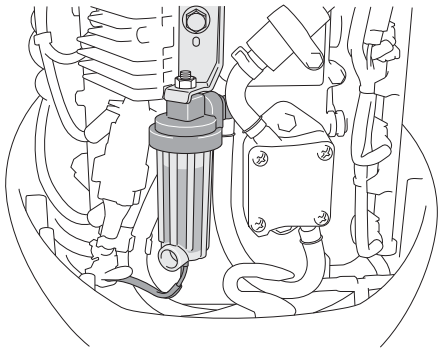
The new F70 features a new outer cowling design with an intake air drain system, to easily and efficiently drain away any water that enters the cowling during normal engine operation. Incoming air is routed through a labyrinth of passages that help trap and drain water before it enters the engine's intake, for maximum reliability.

QUIET, YET STRONG



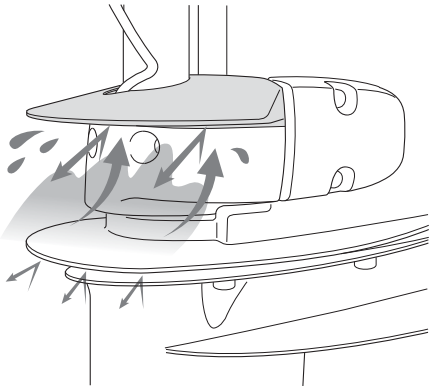
Yamaha's F70 four stroke outboard utilizes a Long Span Mounting System, which uses large specially-constructed rubber engine mounts placed as far apart vertically and horizontally as practically possible. Smooth and quiet operation, yet with strength and durability, is the result.

LARGE WATER SEPARATOR



All new F70 outboards feature a large, on-engine water separating fuel filter with a water sensor. Used in conjunction with Yamaha's optional boat-mounted 10-Micron Water Separating Fuel Filter, it helps separate water and contaminants from the fuel before they can reach the outboard's other filters and fuel injectors.

DRYER OPERATION

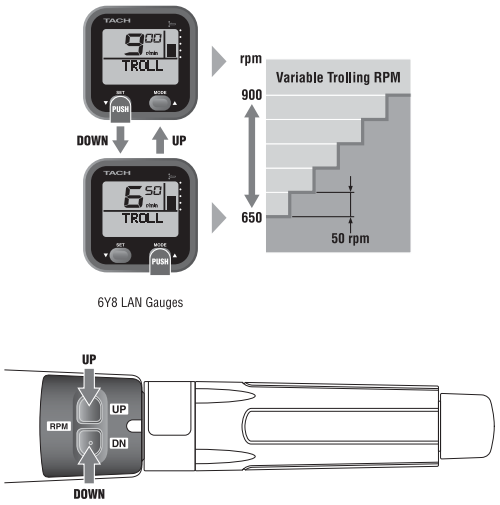


Yamaha's large anti-splash plate, standard on F70 models, helps keep water from splashing up between the leading edge of the outboard and the boat, resulting in a much dryer ride. Located on the front of the lower mid-section just above the lower unit, it excels in applications where the outboard is normally run deep in the water, such as pontoon boats.

F70 Four Stroke

CONVENIENCE AND CONTROL

PRECISE TROLLING CONTROL

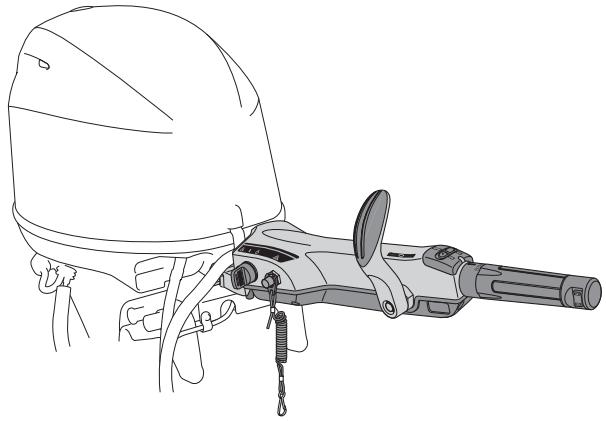


By just pressing a button on the Command Link® tachometer or the VTS™ switch on the optional Multifunction Tiller Handle, the operator can adjust the engine's trolling speed from 620 ~ 900 rpm in 50-rpm increments. This helps provide precise and consistent trolling speeds in wide array of conditions.

MORE INFORMATION

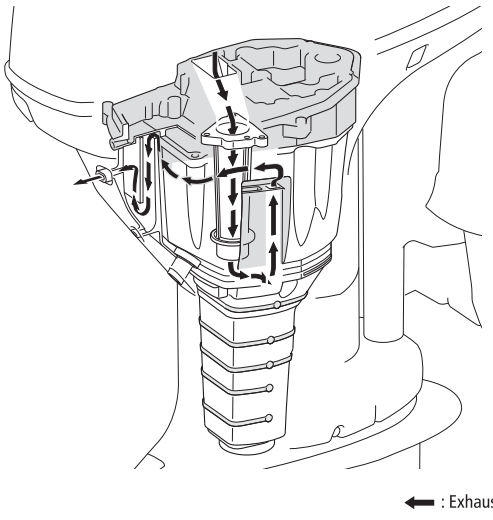
Optional Command Link gauges offer a wealth of information to the operator in order to help provide efficient and effective operation. Available in square or round style to fit a wide range of tastes and applications.

TILLER HANDLE CONVENIENCE



Yamaha's award-winning optional Multifunction Tiller Handle offers the benefits demanded most in a tiller control. From its front-mounted gear shift and ignition key switch controls, to the easy-to-use Variable Trolling RPM Switch, it's ergonomically-designed to provide maximum control with maximum comfort.

SMOOTH AND QUIET



Engine exhaust is routed through a maze before exiting above the waterline through the idle exhaust relief outlet for unbelievably smooth and quiet operation.

F70 Four Stroke

SPECIFICATIONS

ENGINE

Type	16-Valve, SOHC In-Line Four Cylinder
Displacement	996cc (60.8 ci)
Bore x Stroke	65 x 75mm (2.56 x 2.95 in)
Full Throttle RPM Range	5300 ~ 6300
Horsepower Rating at Propshaft	70hp at 5800 rpm
Compression Ratio	9.4:1
Fuel Induction/Scavenging	EFI/SOHC/4 Valves Per Cylinder
Alternator Output	17 Amp
Starting Method See Model Code	Electric w/ PTT
Ignition	TCI Microcomputer
Lubrication	Wet Sump
Degree of Trim	-4° through +16°
Degree of Tilt	65°
Exhaust	Through Propeller
Cooling	Water/Thermostatic Control

DRIVE

Gear Shift	Forward, Neutral, Reverse
Gear Ratio	12:28 (2.33)

SHAFT LENGTH

See Model Code	L = 20"

FUEL AND LUBRICATION

Recommended Fuel	Regular Unleaded (Minimum Pump Octane 87)
Recommended Fuel Filtration	Yamaha 10-Micron Fuel/Water Separating Filter (external)
Ethanol Blend Limit	10% Maximum
Recommended Oil	Yamalube® 4M (See owner's manual)
Engine Oil Capacity	2.1L (2.2 qt) with filter

WEIGHT

F70LA (Estimated)	118kg (260 lbs)

LIMITED WARRANTY

Pleasure	Three Years
Government	Three Years
Commercial	One Year

FEATURES

POWER/PERFORMANCE

- Lightweight SOHC, 16-Valve Design
- Powerful 4 Cylinder 60.8 cu in.
- Multi-Point Precision Fuel Injection
- Long Track Induction System
- Blow-By Gas Reburning System
- Fuel Vapor Burning System
- California C.A.R.B. Ultra Low Emissions 3 Star Rating
- Meets all current Federal EPA Emission Standards

RELIABILITY/DURABILITY

- Single Throttle Valve
- TCI Microcomputer
- Sacrificial Anodes
- YDC 30 Aluminum Alloy
- ACP 221 Paint Process
- Electro-deposited Powerhead Paint Process
- Engine Warning System
- Wet Sump Lubrication
- High Output Alternator
- On-Engine Fuel/Water Separating Filter
- Water Draining Air Intake Duct
- Engine Warning System
- SST Drive, Prop, Shift Shafts
- Magnetic Drain Plug

CONVENIENCE/CONTROL

- Command Link System▲
- Power Trim & Tilt
- Freshwater Flush
- External Tilt Switch
- Spin On Oil Filter
- Long Span Mounting System
- Labyrinth Exhaust
- Yamaha Diagnostic System

YAMAHA Customer Outboard Protection Security System

(Optional)

Primary ID Prefix: 6CJ

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