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Rick & Proddie Become American Champions

**AMA NATIONAL
 MOTOCROSS
 CHAMPIONSHIPS**



The '85 Yamaha American Model Line-up

Building up the Yamaha image of Hi-performance and Hi-technology

The 36 models making up the '85 Yamaha American line-up were introduced during the motorcycle dealers convention held from October 21st to 25th in Las Vegas, Nevada, USA. In the development of these models, Yamaha has made its theme the building up of the Yamaha image in the large-sized street sports field with "Hi-performance" and "Hi-technology" models; to maintain the lead Yamaha has attained in the field represented by the Virago and Venture etc.; to provide countermeasures to the two diverging market trends, hi-tech/performance thirsty and price conscious; and to secure a solid market in the 3-wheeler and 4-wheeler fields.

Along with the world's first 5-valve engine FZ750 unveiled at the IFMA show in West Germany, the new American line-up includes three brand-new street models designed exclusively for the U.S. market. The ultra-high performance "V-MAX" tops the list creating a "New American Macho" image in the cruising category. The stylish hi-tech XJ700X MAXIM with a 5-valve engine and XJ700 MAXIM with a 2-valve engine are sure to consolidate the Yamaha lead in their own category. In addition, the Venture Royale, a luxury touring flagship, comes out with a number of detail improvements for '85. In the off-road field, the all-new BW200 and YFM80 are designed to create a new market in family-fun riding.

See pages from 2 to 6 for pictures and technical features of the '85 American models.



In the recently concluded AMA National Motocross championship series in the U.S.A., the champion's crown went to Rick Johnson riding a Yamaha YZ250 in the 250cc class. This class is considered the most competitive of the three classes, which include the 125cc and 500cc class, but even so, Rick was able to win a total of 10 of the twenty heats that make up the series.

In spite of the fact that the races were full of works machines, Rick and his "proddie" left them all in the dust behind him. His victory was truly a credit to Johnson's technique and the high level of performance of Yamaha production machines.



6. K. Bowen	Yamaha	287 points
7. K. Howerton	Kawasaki	281 points
8. J. Holley	Yamaha	204 points
9. J. Hicks	Honda	197 points
10. B. Hannah	Honda	191 points

By the way, in October, Rick Johnson came to Japan to race in the Japan GP Motocross Meet, where he rode to another magnificent victory over such top class riders as B. Hannah and G. Jobe.

FINAL POINT STANDINGS

1. R. Johnson	Yamaha	419 points
2. R. Lechien	Honda	411 points
3. B. Liles	Kawasaki	366 points
4. A. King	Honda	306 points
5. M. Barnett	Suzuki	292 points



A gathering of champions at Yamaha's Head Office in Iwata



Charity autograph session -- From the front, G. Agostini, W. Rainey, E. Lawson, R. Johnson and T. Taira

Meeting with President Eguchi



Yamaha's Head Office in Iwata was the site of a recent gathering of Yamaha champions, including the '84 500cc road race world champion and Japanese champion as well as the American AMA 250cc motocross champ. After reporting to President Eguchi and staff on their victories, they all volunteered their time for an autograph session for Yamaha employees. The participants in this autograph session included world champ Eddie Lawson, Japanese champ Tadahiko Taira, American champ Rick Johnson, along with Marlboro Yamaha Team manager Giacomo Agostini, Wayne Rainey of Team

Kenny Roberts and the second finisher in Japan's 500cc Road Race Championship Hiroyuki Kawasaki. The proceeds from the session were donated to the local police department which will use the money for safe driving campaign activities. Among the participants in this event, Lawson, Taira, Kawasaki and Rainey had just come from the TBC Big Road Race where they had finished 1st, 2nd, 3rd and 5th respectively. And shortly after this visit to Iwata, Johnson took part in the Japanese Motocross Championship at Suzuka where he scored yet another impressive victory.

The 1985 Yamaha American Model Line-up

Building up the Yamaha image of "Hi-performance"

Introduced here are 8 selected models of the 1985 Yamaha American model line-up.

In addition to these models, the line-up includes the improved YZ production motocrossers, along with the FJ1100, FJ600, XV1000

Virago, XV700 Virago, RZ350, Yamahopper QT50, PW80, PW50, IT200, XT350 and the XT600. With this strengthened line-up Yamaha is leading the way into the mid-eighties.

V-MAX

Good looks and exciting power

This is a muscle bike like no other. Designed exclusively for America, not only to look good, but to deliver all the horsepower Americans ever dreamed of. It'll accelerate fast enough to shift the motorcycling world on its axis. We're talking raw power here and the rugged good looks that let everyone know you mean business.

The aggressive styling could have come straight from the very best Custom shops. In back there is motorcycling's biggest rear tire, a 150/90-15 monster that looks big enough for a dragster. It's wrapped around a new disc-type solid aluminum wheel that looks sharper than any custom wheel around. The rear end's set off by a skinnier front tire mounted on a 5-spoke 18-inch wheel. Both ends are covered by chopped fenders and accented by deep chrome. There's even a three-piece stepped seat with a lockable center section that pivots forward to reveal the filler for an under-seat fuel tank that helps keep the V-Max's center of gravity low. Between the bars is a chrome and gold speedometer: nothing else. Where the fuel is stored on other motorcycles there's a large air filter providing improved air flow to downdraft carbs. Mounted in a panel above the air filter cover is a revcounter and a temperature gauge.

There are lots of other good looking features to impress everyone down at the drive-in, but when the V-MAX starts rolling it's the incredible motor that will turn the heads. This 1198cc monster produces power like nothing else before it, thanks, in part, to a radical cam and four massive valves per cylinder. Short eclipical mufflers do their part to boost power and let everyone know it too. But what really gets this hot rod screaming is a unique new V-Boost System. At lower



rpm each of the four downdraft carburetors feeds its own cylinder. But as the revs rise a servo motor opens a butterfly valve between each pair of inlet tracts. Suddenly there are two carbs feeding each inlet port on an intake stroke.

Engine close-up

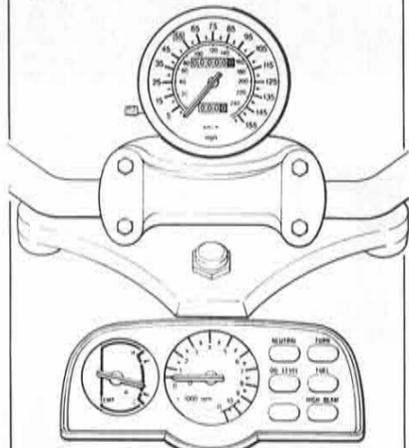
The 1198cc liquid-cooled V-four engine has double overhead camshafts and four valves per cylinder. A specially lightened piston and wrist pin improve engine performance. A new hardening and heat treatment process improves crankshaft and con rod strength. Large 30.5mm intake and 25.0mm exhaust valves are controlled by stronger valve springs. A special high-performance high-lift camshaft is designed to produce maximum horsepower. Four 35mm downdraft Mikuni carburetors mix fuel for the V-MAX motor.

A unique V-Boost System gives a Turbo-like power boost to the V-MAX motor. Four downdraft carburetors feed the cylinders through individual inlet tracts. However, the tracts between cylinders one and two and cylinders three and four are separated by butterfly valves. The valves are controlled by servo motors that measure engine rpm. Power is transmitted through a five-speed gearbox and a shaft

final drive. Short eclipical mufflers help to maximize power output.

Chassis close-up

The tubular steel frame has a specially lowered center section to reduce seat height. The right front downtube and left rear frame tube are removable to ease maintenance.



V-MAX'S INSTRUMENT PANEL LAYOUT

Dual rear shocks have four-way adjustable rebound damping and five preload positions for the massive chrome springs. Wheel travel is 100mm.

A large 40mm fork is air adjustable and has a balance pipe for ease of adjustment. An integrated aluminum fork brake increases front-end stability. Wheel travel is 140mm.

Triple ventilated disc rotors—282mm diameter—are gripped by large 45mm opposed pistons. A newly designed 18-inch cast wheel is used in front. A radical 15-inch solid disc wheel is used in rear.

The world's largest production-bike tire is used in rear. It is a V-rated 150/90-15 with a V-pattern tread.

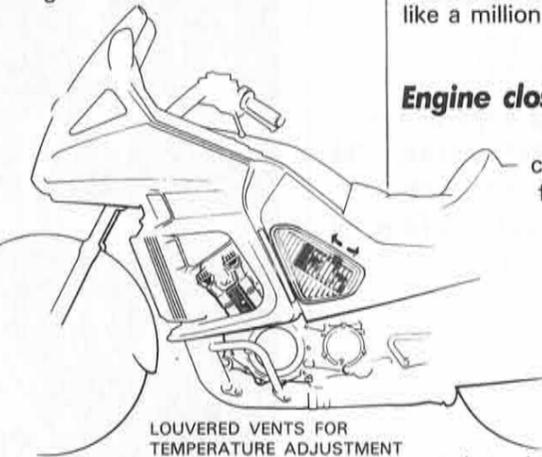
A newly designed shaft drive with stronger bevel gears transmits the V-MAX's tremendous power. A 4-gallon fuel tank is mounted below the seat. Fuel is delivered by an electric pump and an electric reserve switch is mounted on the handlebars.

The V-MAX has a 3-piece stepped seat design. The lockable center section pivots forward to provide access to the fuel filler cap.

VENTURE ROYALE

The most popular tourer in America

There's little left to be said about the most popular touring bike ever to hit the highways of America. Magazine testers were unanimous



Engine close-up

The 1198cc liquid-cooled V-four engine features double overhead camshafts and four valves per cylinder. Four 34mm Mikuni carburetors meter fuel to the Venture motor. Power is transmitted through a five-

speed gearbox and a silent shaft final drive.

Chassis close-up

Yamaha's unique rising-rate Monocross rear suspension features a DeCarbon-type shock with adjustable damping and air-adjustable ride height.

The front fork features an anti-dive system and a fork brace for greater stability.

A special unified braking system links one of two ventilated front discs to the rear brake for more controllable stopping.

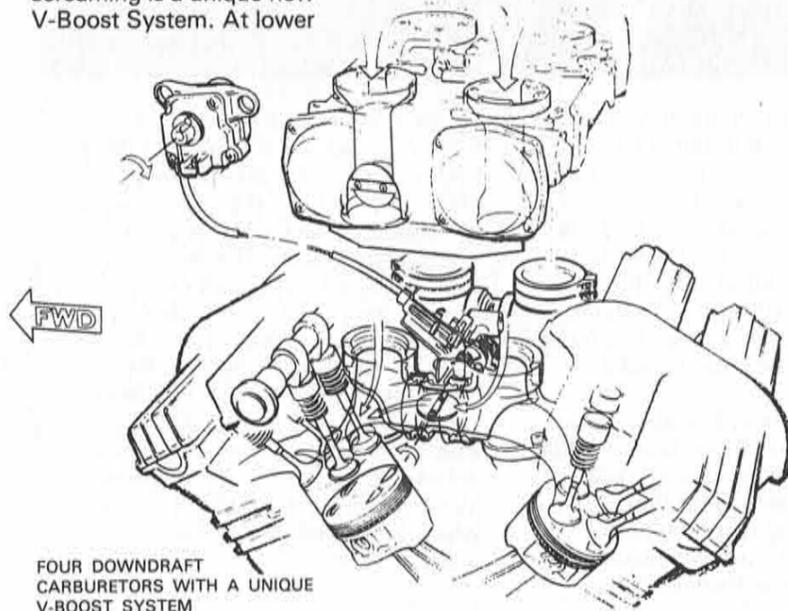
Yamaha's exclusive Computer Leveling Air Suspension System uses a micro computer and an on-board air compressor to adjust the suspension to suit the load.

Tonal quality of the integrated audio system has been improved at low and high frequencies. The system includes an AM/FM stereo tuner with ten presets, an auto-reverse tape deck and 12-amp weatherproof speakers. An internal sensor automatically adjusts sound levels to suit ambient noise levels. An intercom and 40-channel CB are also available.

An automotive-type cruise control can automatically regulate road speed.

in their praise of the Venture Royale in its first two years of existence. The Venture was a favorite with the public too, and across the country long-distance travelers snapped up every Venture they could find.

The Yamaha's tough liquid-cooled V-four motor pumped out lots of the smooth power that touring riders wanted. There were all the long-day-in-the-saddle conveniences that touring folk have come to expect, like Yamaha's exclusive Computer Leveling Air Suspension System (C.L.A.S.S.), an automotive-type cruise control and a full stereo system. Just as importantly, the Venture Royale's swoopy styling won over more than a few buyers. Those features were so unanimously popular they're back again in 1985. And to make things even better, Yamaha has added new features and improvements that will ensure that the Venture Royale remains the most popular tourer in America. Forty percent more luggage capacity will make packing for long trips easier and four removable pouches and one fixed pouch will handle the smaller essentials. And you won't always have to use a key to get things out of the travel trunk because of a new latch sys-



FOUR DOWNDRAFT CARBURETORS WITH A UNIQUE V-BOOST SYSTEM

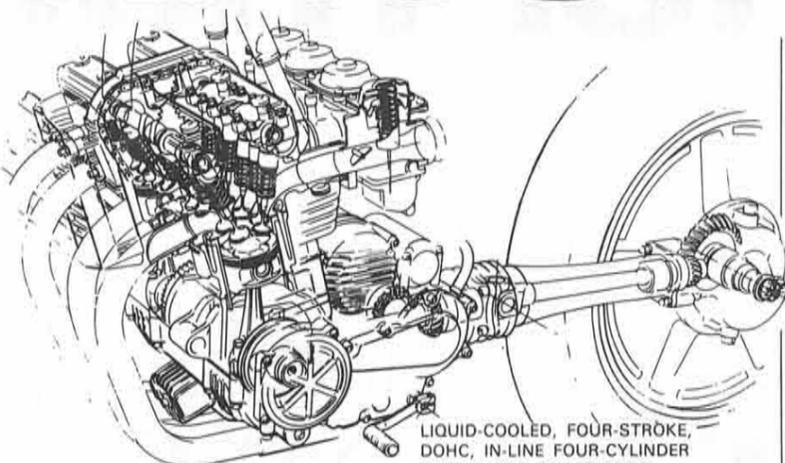
and Hi-technology”

XJ700X MAXIM

A high-tech cruiser with new 5-valve engine

Yamaha's Maxim has always been the most stylish hi-tech Cruiser around town. It set the original standard for four-cylinder Customs and now the all-new X-model Maxim has pushed those standards of style and hi-technology even further forward. The X model shares all the latest styling with the new air-cooled Maxim and adds liquid cooling and a revolutionary new five-valve-per-cylinder head.

No other production motorcycle has ever had anything as advanced as Yamaha's patented five-valve combustion chamber. The Maxim's three inlet valves give a massive port area and a smooth gas flow to efficiently fill the liquid-cooled combustion chamber. Reduced valve masses also mean that a single light spring is all that's needed to close each valve, reducing wear on valve seats. Light weight also allows the Maxim motor to rev higher than conventional two- and four-valve motors without suffering from valve float. Cylinder head design and liquid cooling aren't the only advanced features of Yamaha's hi-tech cruiser. There's an alternator mounted behind the cylinders to reduce



LIQUID-COOLED, FOUR-STROKE, DOHC, IN-LINE FOUR-CYLINDER ENGINE AND SHAFT-DRIVE SYSTEM

num rear wheel that is almost solid.

Those are the sort of features you might find on a hand-built Custom, but now Yamaha's made it all available on the showroom floor. But the 700X Maxim is just the combination of high technology and Custom styling that you'd expect from the company that set the standard in Cruiser motorcycles.

Engine close-up

The rubber-mounted engine's lower end is based on the shaft-driven XJ900 motor. The new liquid-cooled cylinder is removable while the motor is mounted in the frame. A unique and highly efficient new cylinder head features five valves per cylinder. Three 21mm intake

nator is mounted behind the cylinders.

The water pump is driven off the alternator shaft behind the cylinders.

The XJ700 uses a clutch from the XJ900.

An almost maintenance-free shaft drive transmits power to the rear wheel.

A cross-flow aluminum radiator and electric fan regulate the Maxim's coolant temperature.

Chassis close-up

A redesigned frame helps to reduce seat height. For ease of engine maintenance the right-front downtube is removable.

The leading-axle fork with 38mm stanchion tubes is lengthened and more raked than the 750 Maxim's. Air adjustment can be made to each fork leg. A short fender is incorporated into an aluminum fork brace.

Dual rear shocks with spring preload adjustments provide 99mm of wheel travel.

Dual front discs with opposed-piston calipers are a new feature of the Maxim. A drum rear brake is incorporated into a new rear wheel.

A new five-spoke aluminum wheel is used front. An almost-solid disc-type aluminum rear wheel adds to the Maxim's Cruiser look.

Short chrome pipes with stubby oval mufflers increase performance.

A small teardrop tank is decorated with a small circular Yamaha emblem.

Chromed covers and white dial faces are new features of the speedometer, tachometer and temperature gauge.

XJ700 MAXIM

Packing all the punch of the 750cc predecessor

The ever-popular Maxim is back with a redesigned downsized motor that packs all the punch of the former 750. Yes, it's still a performer and now it looks even better than ever. The Maxim already had more than its share of high-tech good looks, but that wasn't enough for Yamaha. The engineers went to town on the Cruiser styling, adding to the bike's rakish looks with a lengthened fork and a shallower head angle. The seat

was changed to a two-piece design and a fat rear fender was added to emphasize the heavy look of the big-tired rear end. There are even two of the most upswept exhaust system ever seen on a production motorcycle. Yamaha even answered owner requests for plainer tank decoration by replacing the large tank emblem with a smaller circular name plate. Another request was granted with the addition of more chrome and deep gloss paint to make the 700 Maxim stand out even more in a crowd.

You won't find the Maxim standing around for long, though. Its all-new motor is too good to sit

Control System (Y.I.C.S.). This system interconnects all four inlet ports with small sub passages that supply an additional high-speed jet of fuel into each inlet port as it opens. This increases mixture swirl for improved combustion. Compression ratio is increased from 9.2 to 9.8 : 1.

Redesigned piston rings reduce pressure on the piston lands. An automatic cam-chain tensioner reduces engine maintenance.

Lightweight rods and crank from the XJ650 Turbo reduce engine weight.

Four 33mm Hitachi carburetors mix fuel for the XJ700 motor.



Chassis close-up

A redesigned frame helps to reduce seat height 30mm to a shortlegged 750mm. For ease of engine maintenance the right-front downtube is removable.

The leading-axle fork with 38mm stanchion tubes is lengthened and more raked than the 750 Maxim's. A short fender is incorporated into an aluminum fork brace.

Dual rear shocks with chrome top caps provide 99mm of wheel travel.

Dual front discs are a new feature of the Maxim. A drum rear brake is incorporated into a new rear wheel.

New five-spoke aluminum wheels are used front and rear.

Short chrome pipes with stubby oval mufflers increase performance.

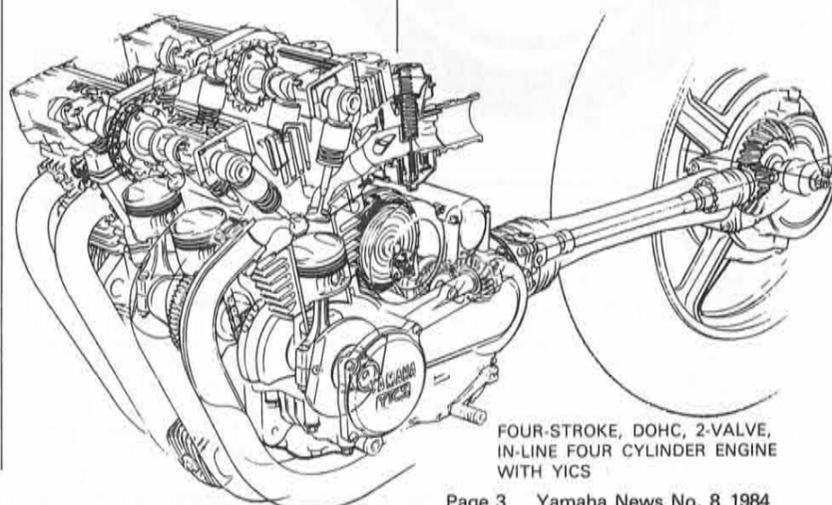
A small teardrop tank is decorated with a small circular Yamaha emblem.

Chromed covers and white dial faces are new features of the speedometer and tachometer.

A redesigned two-piece stepped seat has a single-button cushion.

Engine close-up

The rubber-mounted engine's transmission and clutch are based on the shaft-driven XJ900 motor. A high compression head from the European XJ750 motor features large valves and a high-lift cam. Additional cooling passages help lower the temperature of the valve lifters. The head also features Yamaha's exclusive Induction



FOUR-STROKE, DOHC, 2-VALVE, IN-LINE FOUR CYLINDER ENGINE WITH YICS



engine width. There's also a newly designed shaft drive for smooth and reliable power transmission. Dual-disc front brakes employ the latest opposed-piston calipers for quickly stopping this Cruiser missile.

For all its high-tech mechanicals, the 700X Maxim doesn't neglect its Custom heritage. Styling is still an essential part of the Maxim line and the latest liquid-cooler continues that tradition with some of the most aggressive looks ever seen on a production motorcycle. The traditional teardrop tank and stepped seat are, of course, there as are the Custom bars and forward-mounted footrests. That's standard, but what sets the Maxim apart are features like a longer fork with a shallower head angle, chrome gauges with white faces, chromed spring cable covers and adjustable twin shocks with barrel springs. Even more distinctive are the new V-pattern Bridgestone tires and a radical disc-type alumi-

valves and two 23mm exhaust valves are arranged radially around a central sparkplug. Because of the reduced mass of the smaller valves, only one valve spring is required for each valve, reducing pressure on the valve seats and helping to extend maintenance periods. Reduced valve mass also allows much higher rpm (10,500 rpm redline) without valve float. A larger total valve area increases gas flow as do much small valve angles; exhaust 13.75 degrees, inlet 17.25 (center) and 11.5 degrees.

Hollow forged chromoly cams act directly on the five valves.

An automatic cam-chain tensioner reduces engine maintenance.

Lightweight rods and crank are specially designed to reduce weight in the new Maxim.

Four 33mm Mikuni carburetors mix fuel for the XJ700 motor. Chrome covers highlight the carburetor location.

To reduce engine width an alter-

The 1985 Yamaha American Model Line-up

Building up the Yamaha image of "Hi-performance a

VENTURE ROYALE



XJ700X MAXIM



V-MAX12

• Engine type: Liquid-cooled, 4-stroke, DOHC, 4-valve, V-4 • Displacement: 1198cc • Bore x stroke: 76.0 x 66.0 mm • Ignition: TCI • Transmission: 5-speed • Seat height: 30.1 in. (765 mm) • Fuel tank capacity: 4.0 gal. (15.0 lit.) • Reserve capacity: 0.8 gal. (3.0 lit.) • Tire size (front/rear): 110/90V 18/150/90V 15 • Brakes (front/rear): Dual ventilated discs/Single ventilated disc • Suspension/Travel (front/rear): Telescopic/5.5 in. (140 mm)/Dual Shocks/3.9 in. (100 mm)

VENTURE ROYALE

• Engine type: Liquid-cooled, 4-stroke, DOHC, 4-valve, V-4 • Displacement: 1198cc • Bore x stroke: 76.0 x 66.0 mm • Ignition: TCI • Transmission: 5-speed • Seat height: 30.9 in. (785 mm) • Dry weight: 719 lbs. (326.0kg) • Fuel tank capacity: 5.3 gal. (20.0 lit.) • Reserve capacity: 0.1 gal. (0.5 lit.) • Tire size (front/rear): 120/90-18 65H/140/90-16 71H • Brakes (front/rear): Dual ventilated discs/Single ventilated disc • Suspension/Travel (front/rear): C.L.A.S.S. Telescopic/5.5 in. (140 mm)/C.L.A.S.S. Monocross/4.1 in. (105 mm)

XJ700X MAXIM

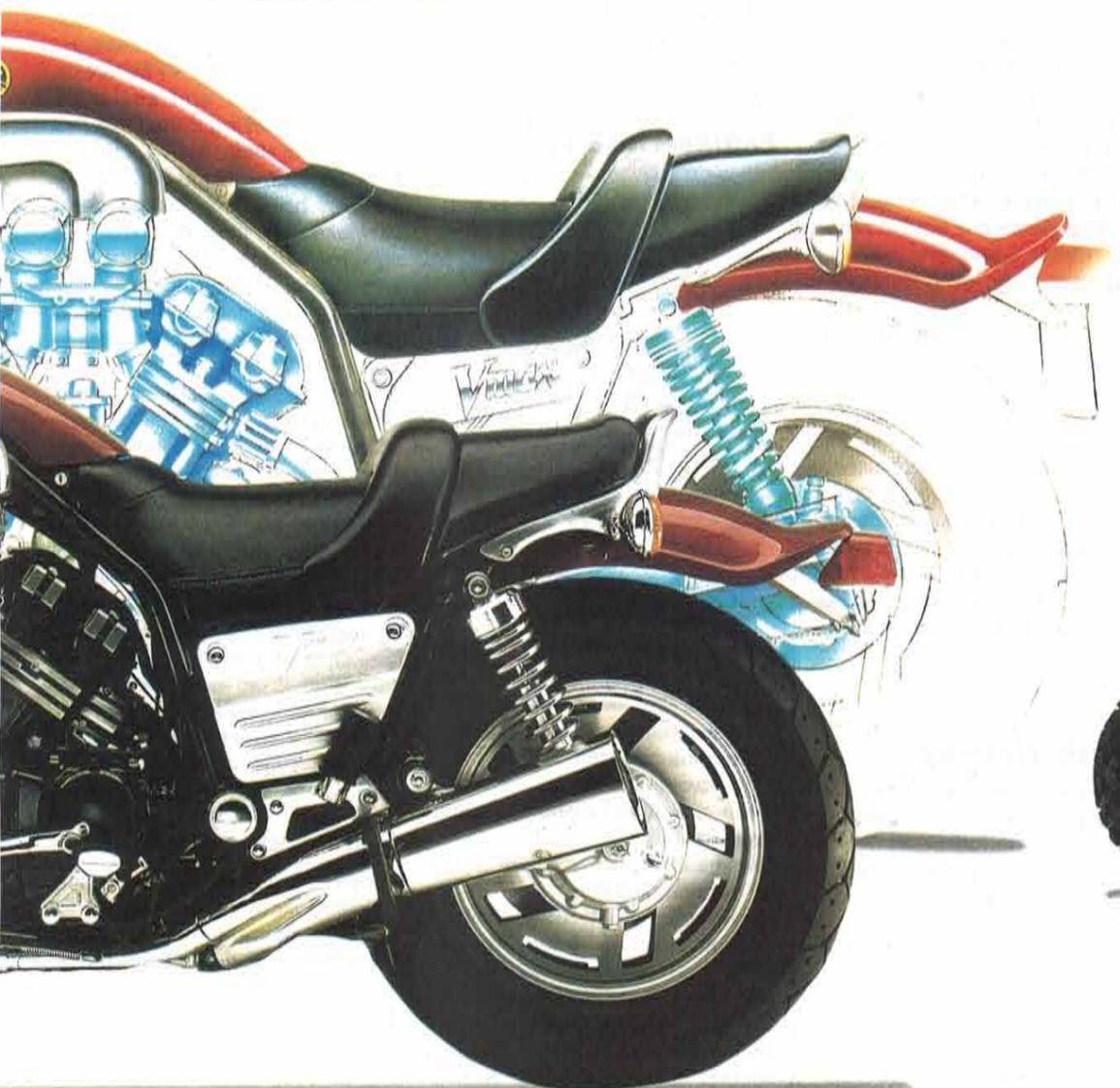
• Engine type: Liquid-cooled, 4-stroke, DOHC, 5-valve, in-line-4 • Displacement: 697cc • Bore x stroke: 68.0 x 48.0 mm • Ignition: TCI • Transmission: 5-speed • Seat height: 29.9 in. (760 mm) • Fuel tank capacity: 3.4 gal. (13.0 lit.) • Reserve capacity: 0.8 gal. (3.0 lit.) • Tire size (front/rear): 100/90-19 57H/130/90-16 67H • Brakes (front/rear): Dual ventilated discs/Drum • Suspension (front/rear): Telescopic/5.9 in (150 mm)/Dual shocks/3.9 in. (99 mm)

XJ700 MAXIM

• Engine type: Air-cooled, 4-stroke, DOHC, 2-valve, in-line-4 • Displacement: 696cc • Bore x stroke: 65.0 x 52.4 mm • Ignition: TCI • Transmission: 5-speed • Seat height: 29.5 in (750 mm) • Fuel tank capacity: 3.4 gal. (13.0 lit.) • Reserve capacity: 0.8 gal. (3.0 lit.) • Tire size (front/rear): 100/90-19 57H/130/90-16 67H • Brakes (front/rear): Dual ventilated discs/Drum • Suspension/Travel (front/rear): Telescopic/5.9 in. (150 mm)/Dual shocks/3.9 in. (99 mm)

and Hi-technology™

V-MAX 12



BW200N



YFM80N MOTO-4

XJ700 MAXIM



TY350RN



TT600N

• Engine type: Air-cooled, 4-stroke, SOHC • Displacement: 595cc • Bore x stroke: 95.0 x 84.0 mm • Ignition: CDI • Transmission: 5-speed • Seat height: 36.8 in. (935 mm) • Dry weight: 296 lbs. (122.0kg) • Fuel tank capacity: 2.9 gal. (11.0 lit.) • Reserve capacity: 0.8 gal. (3.0 lit.) • Tire size (front/rear): 100/80-21 4PR/140/80-18 4PR • Brakes (front/rear): Single disc/Drum • Suspension/Travel (front/rear): Telescopic/11.8 in. (300 mm)/Monocross/10.6 in. (270 mm)

TY350RN

• Engine type: Air-cooled, 2-stroke • Displacement: 341cc • Bore x stroke: 80.0 x 68.0 mm • Ignition: CDI • Transmission: 6-speed • Seat height: 29.3 in. (745 mm) • Dry weight: 190 lbs. (86.0kg) • Fuel tank capacity: 0.9 gal. (3.5 lit.) • Tire size (front/rear): 2.75-21/4.00-18 • Brakes (front/rear): Drum/Drum • Suspension/Travel (front/rear): Telescopic/7.1 in. (180 mm)/Monocross/6.3 in. (160 mm)

BW200N

• Engine type: Air-cooled, 4-stroke, SOHC • Displacement: 196cc • Bore x stroke: 67.0 x 55.7 mm • Ignition: CDI • Transmission: 5-speed • Seat height: 31.3 in. (795 mm) • Dry weight: 243 lbs. (110.0kg) • Fuel tank capacity: 1.7 gal. (6.5 lit.) • Tire size (front/rear): 25.0 x 8-12 Tubeless/23.0 x 12-9 Tubeless • Brakes (front/rear): Drum/Drum • Suspension/Travel (front/rear): Telescopic/6.3 in. (160 mm)/Swingarm/6.3 in. (160 mm)

YFM80N MOTO-4

• Engine type: 4-stroke, air-cooled, SOHC single • Displacement: 79cc • Bore x stroke: 47.0 x 45.6 mm • Ignition: CDI • Transmission: 4-speed • Seat height: 22.0 in. (560 mm) • Dry weight: 207 lbs. (94kg) • Fuel tank capacity: 1.43 gal. (5.4 lit.) • Reserve capacity: 0.29 gal. (1.1 lit.) • Tire size (front/rear): 17 x 7-7/18 x 9-7 • Brake (rear): Drum

* Specifications are subject to change without notice.

The 1985 Yamaha American Model Line-up

Building up the Yamaha image of "Hi-performance and Hi-technology"



TT600N

A high-speed terrain runner with motocross technology

Yamaha's four-valve TT600 single is the fastest means of points in the dirt. It has plenty of horsepower at any engine speed thanks to Yamaha's dual Intake system (YDIS). Two interconnected carburetors provide a small effective venturi size for good low-speed operation and both open to give a much larger venturi size for wide-open throttle. The TT600 is also counterbalanced to make the motor feel smooth no matter what the speed.

The big TT works even better in the dirt this year thanks to some major chassis changes. Both fork and Monocross shock have heavier springs and damping to improve the 600's already impressive handling. There's also a brand new disc brake up front to make sure this high-speed thumper really stops. Yamaha's also improved the TT600 with some motocross technology in the form of an '85 YZ250 rear hub with the latest Z spokes. Weight has also been reduced with new rims and a hollow front axle. All of which should make the new TT600 even faster than ever between any two points in the dirt.

Engine close-up

The TT600 has a four-valve SOHC cylinder head. Maximum torque of 36.2 lbs/ft is produced at 5500 rpm. A dry-sump design allows the motor to sit low in the frame. A five-speed gearbox transmits power to an O-ring chain.

Chassis close-up

Yamaha's Monocross shock has increased damping to match a stiffer spring. Spring and damping rates are both

REAR HUB WITH Z-SPOKES

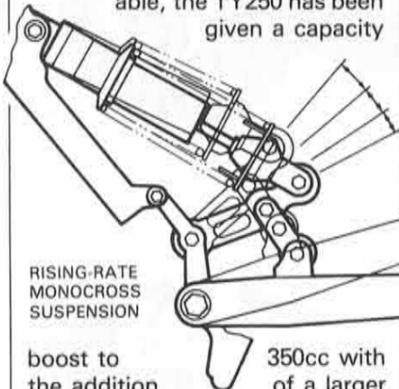


increased. A new hollow front axle now bolts into the threaded fork leg rather than a separate nut. A single disc brake with a shrouded rotor replaces last year's double-leading shoe front brake. A new brake master cylinder prevents air entering the fluid line when the bike is inverted. The TT600 uses the same rear hub as the '85 YZ250.

TY350RN

An entirely-new Monocross trials bike

Heralded in Europe as one of the best production trials bikes available, the TY250 has been given a capacity



RIISING-RATE MONOCROSS SUSPENSION

boost to the addition of a larger cylinder. The new TY also has a larger crank to give it even more low-end torque than before. There are lots of smaller details that make the TY350RN a winner too. Refinements like closer gear-dog engagement tolerances to reduce driveline snatch at very low engine speed and an aluminum, rather than zinc, carburetor body to save precious weight. The special motor also has its gearbox drain plug at the rear, rather than underneath, to increase ground clearance and a special crankcase drain plug in case the motor is submerged in a water section. Chassis design is as highly refined as the TY's new motor. From its unique single-shock Monocross rear suspension to its beefy 36mm fork the TY350RN displays the leading edge in trials technology. Yamaha has also combined its new Z-spoke technology with special lightweight brakes and super-strong rims to give the TY an advantage in ground-hugging traction. All of which makes the new TY350RN a winner that could keep winning trophies for another ten years.

Engine close-up

A new cylinder increases the original TY250's bore size 12mm to 80mm to improve engine performance.

A new squish-band design improves engine performance under heavy load at low rpm.

A large YZ490 crank is modified for use in the TY350RN. Balance holes are filled to increase crankcase compression for improved low-speed performance.

The ignition system is specially designed to provide a hot spark at low engine speeds.

A more expensive aluminum-bodied 26mm carburetor saves 300g. over a standard zinc version.

The air filter is housed in a water-tight compartment high under the seat. The element is held in place by a rubber band and can be changed quickly, even during an event.

The short (620mm) exhaust system gives maximum torque at low engine speeds.

A flat aluminum muffler reduces weight.

The first four gears are closely spaced for optimum gearing in sections. Fifth and six gears are more widely spaced to provide overdrive gearing for fast between-section riding. Close tolerances between engaging dogs reduce driveline snatch at low speeds.

Chassis close-up

The single-downtube frame uses the motor as a stressed member. The motor is doubly protected by an aluminum grid plate covered by a 5mm-thick aluminum sump shield.

A large 36mm stanchion-tube fork gives 180mm of wheel travel. Yamaha's unique Monocross rear suspension features a single De-Carbon shock with six-way adjustable spring preload. Forged aluminum links connect the shock to a tapered box-section swingarm. A unique front brake backing plate mounts the brake arm inside the hub to protect it from dirt, rocks and branches. Special E-section rims are laced with Z spokes to lightweight hubs.

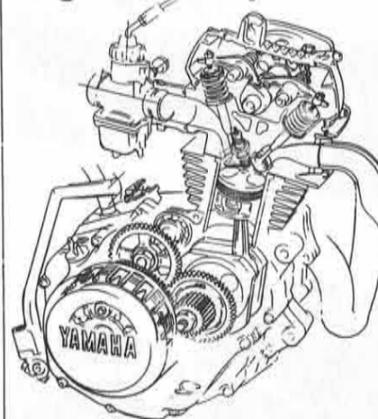
BW200N

A unique playbike with balloon-tired wheels

Yamaha's bringing the fun back to playriding with the all-new BW200. It's the perfect answer for everyone that just wants to get away and have a good time in the dirt. It doesn't matter whether they're an experienced dirt rider or a first-time beginner, the BW200 can entertain anyone with a fun time in the dirt. Its counterbalanced 200cc four-stroke motor pumps out enough smooth power to keep mom, dad and the kids coming back for more. Even the youngsters will be able to reach the

ground from the low seat and the whole family will appreciate the plush oil-damped suspension. Best of all they'll enjoy the stability and precise steering of Yamaha's unique balloon-tired wheels. Whether in mud, sand or plain old dirt, the BW200 steers better than any playbike ever built. The BW200 does just about everything better than any playbike ever built. That's why the BW200 will be found everywhere from campsites to canyons, in fact, just about anywhere a dirt rider can have fun.

Engine close-up



COUNTERBALANCED FOUR-STROKE, SINGLE ENGINE

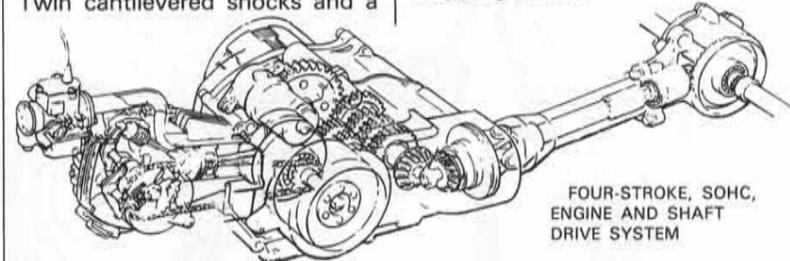
An oversquare 196cc engine produces a wide powerband. Capacitor Discharge Ignition (CDI) provides maintenance-free riding. An engine counterbalancer smooths power pulses.

A low-mounted kickstart provides easy starting. Five gearbox ratios cover every off-road situation.

Power is transmitted by chain to a sprocket on the inner end of an idler shaft at the front of the swingarm. A second sprocket on the outer end of the idler shaft then transmits power through a second chain to the rear wheel.

Chassis close-up

A single downtube frame uses the motor as a stressed member. Giant balloon tires offer precise steering and excellent stability over any terrain. Two drum brakes give excellent stopping power. An oil-damped leading-axle fork provides a plush ride. Twin cantilevered shocks and a



FOUR-STROKE, SOHC, ENGINE AND SHAFT DRIVE SYSTEM

box-section swingarm provide supple rear suspension.

YFM80N (MOTO-4)

The family fun machine

Yamaha is proud to introduce a new member of the Moto-4 family, one that will be a perfect addition to families who want to get involved in off-road recreation. The four-wheeled YFM80N is smaller, lighter and easier to maneuver, making it the ideal fun machine for dads, moms, and the kids to share together. Many features have been incorporated to make this new machine just right for families, especially entry-level riders. The comfortable seat is extra-long to accommodate almost everyone, and has a compartment underneath for convenient storage. The sure-footed handling of this Moto-4 is enhanced by taller, narrower front wheels with a special tread pattern. And the peppy 4-stroke 79cc motor offers plenty of smooth, controllable power. To make sure that the YFM80N keeps delivering the fun without a lot of care, there is shaft drive, electric starter, enclosed brakes, and a snorkel-type air intake that is up high, out of the way when crossing water. The YFM80N is sure to get high marks for convenience, high marks for fun!

Engine close-up

Peppy 4-stroke SOHC 79cc engine delivers plenty of power. Almost maintenance-free shaft drive transmits dependable power to the rear wheel. Proven CDI system supplies a hot spark at all times. Electric starter with two-position choke ensures smooth, easy engine start.

Chassis close-up

Frame construction is designed for easy, comfortable ride even by an adult. Taller, narrower front tires offer excellent handling. Wider, thicker rear tires give great traction. Rear drum brake gives excellent stopping power.



AN INTERVIEW WITH THE CHAMPION

EDDIE LAWSON



This past season Eddie Lawson rode his YZR500 to victory in the '84 500cc class Road Race World Championships. At the outset of the season very few had even guessed that the quietnatured Lawson would win the Championship. A rider since the age of seven, Eddie was already a big fan of motorcycle racing by the age of twelve. About this time he remembers going to see his hero Kel Carruthers race, only to come home in tears when Kel was beaten.

The Eddie Lawson who came to race in the TBC Big Road Race at Sugo still shows some of the quiet sensitivity of that 12 year old boy, but at the same time he showed that he is now the possessor of that special confidence and ease that goes with being the World Champion. We can certainly expect to see more great things from him next season.

—Congratulations on your championship season. How does it feel now that it is over?

Eddie: I'm really happy. I'd like nothing better than to ride a Yamaha and win it again next year!

—Last year you rode as a support rider for the team, but this year you rode as the number 1 rider. Do you feel that this fact made any difference in your performance?

Giacomo Agostini:
Marlboro Yamaha
Team manager



I would like to say "Thank you, Eddie!"

Eddie: Of course, this year was a much better season for me. This year everything in the organization centered around me, and I feel that I gained a lot of confidence in my riding. With Kel Carruthers as the

leader, the team functioned very smoothly. The mechanics never made a mistake. There was absolutely nothing I can complain about.

—What were the advantages for you of riding with Yamaha this year?

Eddie: With Yamaha I had a good team organization and a good staff behind me, and a good bike under me.

—How would you analyse your own riding technique?

Eddie: I think I'm a smooth rider. I feel I'm pretty consistent and have good control of my machine. Our strategy from the beginning of the season was to ride as consistently as I could. And, of course, when I'm in the race itself I always give 100%. I concentrate completely on what I am going. In a race you can't afford even one little mistake.

—Do you do anything in particular to get yourself mentally prepared before a race, like praying, for instance?

Kel Carruthers: Marlboro
Yamaha Team chief
mechanic



I didn't know at that time, but he has been to my shop in San Diego to buy a 250cc bike.

Eddie: No, I just try to stay relaxed. The only time I pray is when I've gone into a corner too fast!

—Some people call you "Steady Eddie". What do you think of this as an evaluation of your riding style?

Eddie: Well, I would say that it was my consistency that contributed more than anything to this year's win.

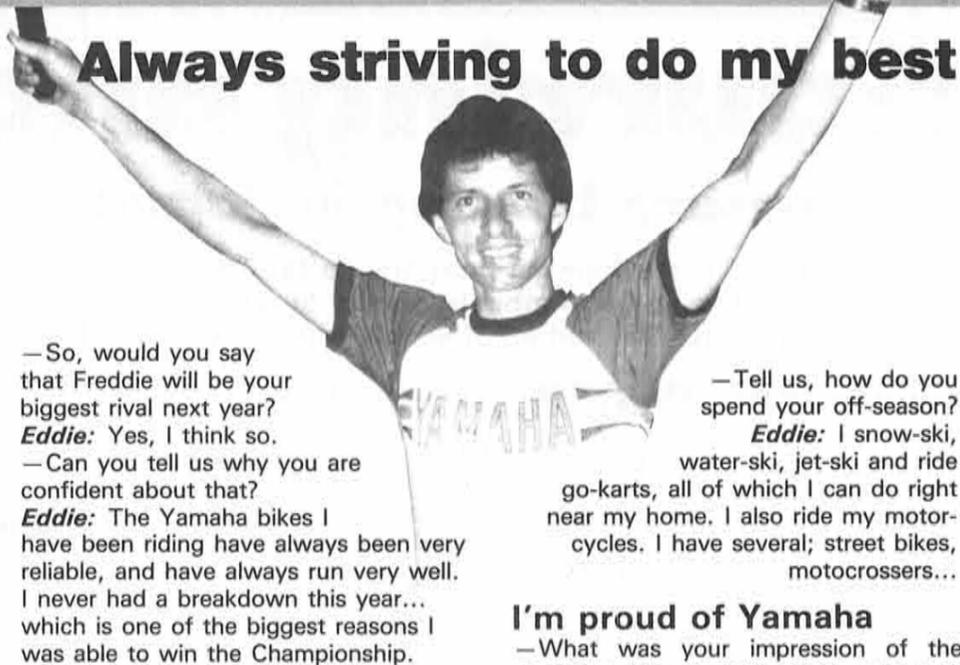
—I imagine that Kenny Roberts gave you some advice over the years. Didn't he?

Eddie: He did, not by words but by practice! I learned much from the actual process of setting a bike while riding with him.

—This year there were a number of American riders besides yourself who did well. Can you comment on some of them?

Eddie: Spencer definitely has a lot of talent and drive. You have to consider him one of the top riders around. Also, Randy Mamola ran very well this year. Although he's not an American, Raymond Roche also came on very strong, especially in the second half of the season. You can probably look for him to do well next year. Ron Haslam was strong at times, but he still has trouble with his consistency.

Always striving to do my best



—So, would you say that Freddie will be your biggest rival next year?

Eddie: Yes, I think so.

—Can you tell us why you are confident about that?

Eddie: The Yamaha bikes I have been riding have always been very reliable, and have always run very well. I never had a breakdown this year... which is one of the biggest reasons I was able to win the Championship.

A whole family of bike-lovers

—You started out on the dirt track and then progressed to superbike and finally to Grand Prix. Can you tell us something about the difference between these races?

Eddie: Although the bikes have gotten bigger with each event, one thing has always remained the same. That is the constant effort to perform to the best of my ability. When I first started racing I was so young and so enthusiastic that just being in the race itself was all the satisfaction I needed.

—What made you start riding motorcycles?

Eddie: My whole family loves motorcycles. My father used to enter a lot of races, too.

—We have heard that it was your grandfather who first put you on a bike.

Eddie: That's right... when I was seven years old. At that time I couldn't even reach the ground when I straddled a bike, but he took me to the desert near our home and taught me how to ride. So, when I won the Championship this year he was one of the happiest of all.

—Does he still advise you today?

Eddie: No, not anymore.

—During the season you didn't have many chances to return home, did you?

Eddie: No, I didn't. My home is in California, and I was only able to get home once this season. I really missed my family being away for so long.

—Tell us about your family.

Eddie: Besides my Mom and Dad, I have one sister who is 21 this year.

—How about a girl friend.

Eddie: There is no one in particular right now. I guess you could say I'm looking for one.

—Tell us, how do you spend your off-season?

Eddie: I snow-ski, water-ski, jet-ski and ride go-karts, all of which I can do right near my home. I also ride my motorcycles. I have several; street bikes, motocrossers...

I'm proud of Yamaha

—What was your impression of the Japanese rider, Tadahiko Taira, who took part in two of the races in Europe this year as a support rider?

Eddie: He made a lot of progress. I know how hard my first season on the Grand Prix was, so I know what he had to get through. Taira proved that he has a lot of ability. He helped me out at both Assen and Spa. With a bit more experience I'm sure he'll gain a lot of confidence in his riding.

—Do you have any advice you could give the Japanese riders as a whole about how to train?

Eddie: They seem to be doing very well, recently practicing on the track as much as possible.

—Do you have any requests that you would like to make of Yamaha?

Tadahiko Taira: Japanese
500cc road race champion



I feel like we have a lot in common, and I want to have Shushi with you again, sometime, Eddie...

Eddie: I make requests of them every day! —Well then, what would be your request for today?

Eddie: (laughing) Make me a faster machine to ride in tomorrow's TBC Big Road Race!

—Now, in closing, we'd like to ask you what comes to mind when you hear the name Yamaha?

Eddie: Proud! It is the fine bikes that Yamaha has built that brought me to the World Championship title. And, as for the bikes that Yamaha makes for the general consumer, I think we all agree that they are very "well-finished" machines.

S P O R T S F L A S H

Eddie and Taira Finish 1—2

The 12th TBC Big Road Race

On October, 7th, about 20,000 people gathered at the Sportsland



Sugo, located 400Km northeast of Tokyo. For the vast majority of these fans, their main reason for coming was to see the competition between the World Champion, Eddie Lawson, and Japan's Champion, Tadahiko Taira, in the 500cc road race. And, as it turned out, the two riders didn't let their fans down.

In Saturday's practice Taira won himself the pole position for race day, with Eddie taking the second position, H. Kawasaki third, and Wayne Rainey of the Kenny Roberts Race Team in the fourth position. In the first heat Taira failed to get a good start from the pole, leaving Eddie to run with the lead from the start. After a few

laps Taira succeeded in moving up into second position, but for all the reminder of the 30-lap race he was unable to catch the fleeing Lawson. The heat finished with H. Kawasaki in third and W. Rainey in fourth.

In the second heat, again, Taira failed to make a good start and the race followed almost an identical pattern to the first heat. The first three places where the same as in heat 1, with fourth going to M. Mizutani and fifth to Rainey.

Overall results

1. E. Lawson	Yamaha	YZR500
2. T. Taira	Yamaha	YZR500
3. H. Kawasaki	Yamaha	YZR500
4. M. Mizutani	Suzuki	RGB500
5. W. Rainey	Yamaha	YZR500
6. S. Ueno	Yamaha	YZR500
7. S. Asami	Yamaha	YZR500

8. O. Suzuki	Yamaha	TZ500
9. T. Ito	Suzuki	RGB500
10. S. Shimada	Honda	RSR500

Taira takes championship, too

Japanese Road Race Championship Series

In the World Grand Prix race series Eddie Lawson clinched the championship in the 500cc class in the 10th round of the 11-round series, and now, in Japan, Tadahiko Taira has done the same thing, clinching the Japanese 500 championship in the 10th round (of 11 rounds). What made Taira's win especially impressive was the fact that, after missing the first round of the series in order to take part in the Daytona Race in the

U.S.A., he returned to Japan to win seven of the next ten races in the series and clinch the title.



Yamaha Boat Line-up for '85

Spurring another growth of pleasure boating in Japan...

Introduced here is the Yamaha boat line-up for '85. It is a striking line-up of 13 models, eleven of which are completely new for '85, and all of which feature substantial

improvements in cruising and handling performance, along with greater comfort and better design in every aspect and every piece of equipment.

POWER BOATS

PACIFIC CRUISER-35



New Model

•LOA: 10.98m •Breadth: 3.99m •Depth: 2.04m •Hull weight: 4,800kg
•Recommended max. power (gasoline): 240PS x1 •No. of crew: 12 •Fuel tank capacity: 500 lit. x2

SALON CRUISER-750



New Model

•LOA: 7.55m •Breadth: 2.84m •Depth: 1.62m •Hull weight: 2,000kg •Recommended max. power: 230PS
•No. of crew: 10 •Fuel tank capacity: 270 lit.

SR24 O/B



New Model

SR24 I/O



New Model

▲ •LOA: 7.36m •Breadth: 2.50m
•Depth: 1.13m •Recommended max. power: 180PS (148PS) •No. of crew: 12
•Fuel tank capacity: 175 lit.
Note: Horsepower given in parentheses means an I/O type.
▲ •LOA: 6.64m •Breadth: 2.18m
•Depth: 0.98m •Hull weight: 615kg
•Recommended max. power: 90PS
•No. of crew: 7 •Fuel tank capacity: 24 lit. x (2 portable fuel tanks)

SR22 O/B



New Model

FISHING BOATS

FISH-24 EX O/B



Model Change

FISH-24 EX I/O



Model Change

•LOA: 7.36m •Breadth: 2.50m •Depth: 1.13m
•Hull weight: 1,000kg. •Recommended max. power: 180PS (148PS) •No. of crew: 12 •Fuel tank capacity: 175 lit.

Note: Horsepower given in parentheses means an I/O type. A diesel engine can also be used. The Yamaha Diesel D343K is recommended for this model.

SAIL BOATS

YAMAHA 37



New Model



Above: Main cabin is roomy enough to include a hanging locker and beverage bottle rack.

Below: Galley is equipped with a 170-liter ice box and double foot-action type water pump.

•LOA: 11.30m •Waterline length: 8.86m •Breadth: 3.61m •Draft: 2.00m •Hull weight: 6,275kg •Sail area: 61.09m² •Recommended max. power: 24PS

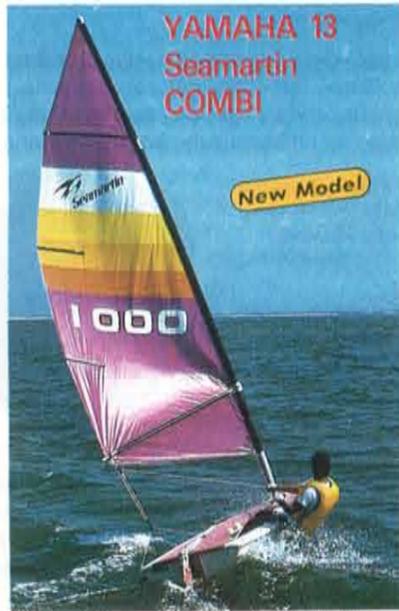
YAMAHA 23



New Model

•LOA: 7.01m •Waterline length: 6.35m
•Breadth: 2.70m •Draft: 1.45m •Hull weight: 1,291kg •Sail area: 23.1m²
•Recommended max. power: 8PS

YAMAHA 13 Seamartin COMBI



New Model

•LOA: 3.96m •Waterline length: 3.70m
•Breadth: 1.41m •Draft (C.B up/down): 0.10/0.75m •Hull weight: 61kg •Sail area: 8.7m²

New Model



TSURIKKO-TARO 90

•LOA: 2.81m •Breadth: 1.28m
•Depth: 0.46m •Hull weight: 55kg •Recommended max. power: 4PS •No. of crew: 2

New Model



TSURIKKO-TARO 110

•LOA: 3.30m •Breadth: 1.37m
•Depth: 0.57m •Hull weight: 71kg
•Recommended max. power: 8PS
•No. of crew: 3

New Model



TSURIKKO-TARO 100

•LOA: 2.97m •Breadth: 1.09m
•Depth: 0.45m •Hull weight: 61kg
•Recommended max. power: 4PS
•No. of crew: 2