

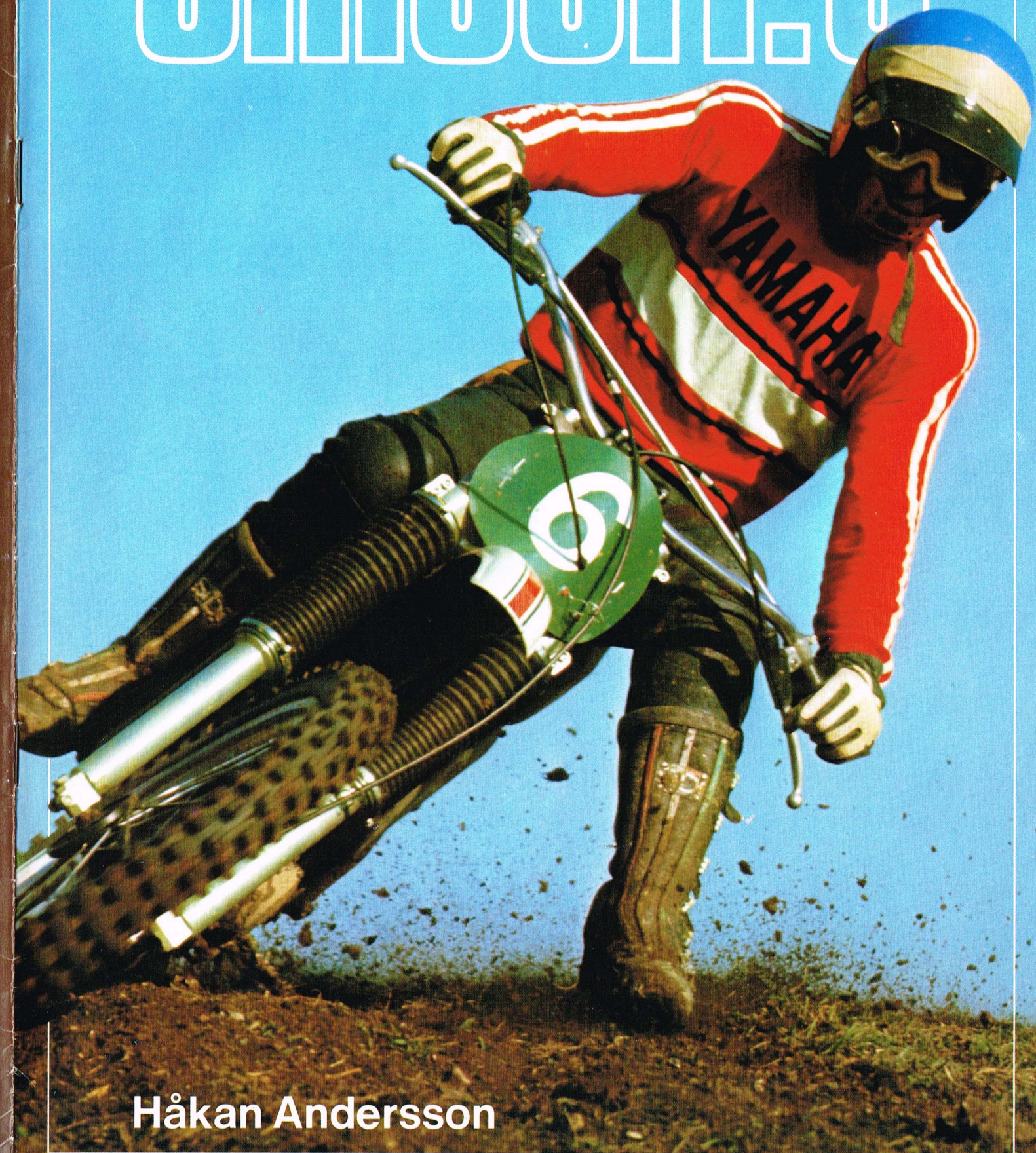


YAMAHA

1975

CIRCUIT.8

Yamaha RS 100/125



Specifications



RS 100/125

PERFORMANCE

max. speed range 94/120 km/h
min. turning radius 2000 mm

ENGINE

type 2-stroke
air-cooled
reed valve
single cylinder

displacement 97-123 cc
bore & stroke 52x45.6/56x50 mm
compression ratio 6.7/6.9 : 1
max. horsepower (din) 11/12.5 hp at 8000 rpm

max. torque 1.01/1.15 kgm at 7500 rpm

lubrication system autolube
starting system kick starter
transmission 5-speed gearbox

DIMENSIONS

overall length 1870 mm
overall width 775/595 mm
overall height 1035/945 mm
wheelbase 1205 mm
min. ground clearance 150 mm
weight: net 98/101 kg
fuel tank cap. 9.0 lit.
oil tank cap. 1.5 lit.
tyres: front 2.75-18-4pr
rear 2.75-18-4pr

Håkan Andersson



GIACOMO AGOSTINI
Giacomo Agostini, fifteen times world champion, on his Champion-equipped Yamaha.

Formula for Success

After years of second class status, motorcycle racing has finally and firmly established itself as a major sport. More and more spectators flock to the excitement, giving rise to a new breed of superstars. Factory teams contest World Championships in every class from 50 cc to 500 cc, and competition has never been fiercer. The winners' names can change from one race to another, and often do.

But one name stays the same. You'll see it at all major racing events around the world. On the shirts of racing engineers giving ignition advice. On the racing machinery. Even in the crowds. Champion. Champion spark plugs are consistently used by more winners than all other brands combined. Because

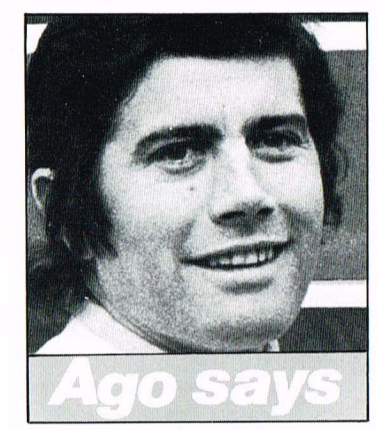
winners know from experience that Champions give them top performance and reliability.

We've been in racing for more than sixty years. What we learn at the track, we use to keep on making better spark plugs for all types of engines.

For the Champions... and for you.



Champion. We support the sport.

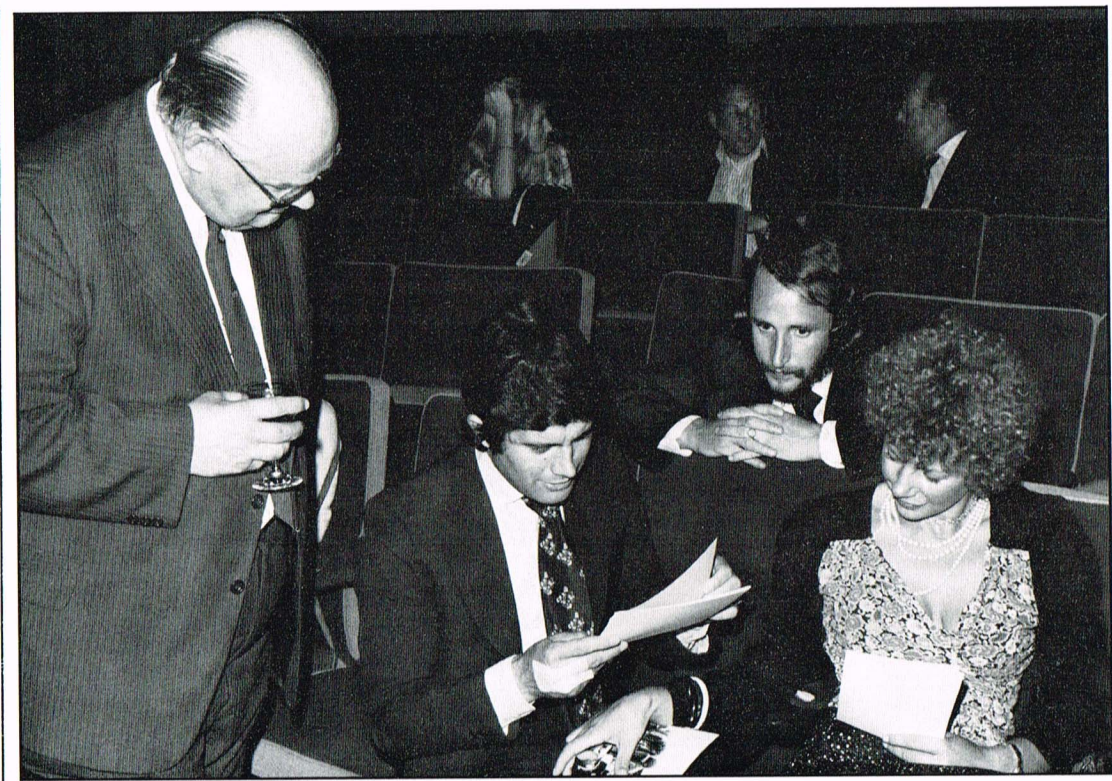


The West German Grand Prix was certainly the hardest race for me so far this year. Throughout practice my Yamaha persisted to run on only three cylinders. The mechanics were still making adjustments as we were called to the starting grid. My Yamaha had an advantage over Read's MV on the twisting stadium section of the circuit. This slight edge enabled me to set a new absolute lap record on the penultimate lap and I then won by 3½ seconds.

Naturally the Grand Prix of Italy is very important to me, even more so this year after last year's unhappy experience. I had no trouble at the start and paced myself at a speed which was faster than any other rider that day. Winning in Italy was my happiest victory this year.

The Moto Journal 200 miles of Paul Ricard race I must admit, was a lucky win. Cecotto and Baker retired, so Duhamel was the only rider to worry about. We were not sure his Kawasaki would have to pit twice for fuel, but as he made one stop early in the race a second one might be necessary. It was and this gave me the time I needed to win.

The Dutch Grand Prix, well... I came to win both the 350 and 500 races but I didn't. On the 350 I was running a slick tyre for the first time. I wish I hadn't. The tyre just wasn't running true and I finished fourth. The 500 race must have been a good race for the spectators, it wasn't for me. I knew that Sheene could pass me on the straights but I thought that if I could hold him off on the back part of the circuit, he would not be able to pass me before the finish line. I was wrong. □



Film Review

"Narrow Edge"

On the evening of June 11 in a small screening theatre in London, two new Yamaha films were shown for the first time to members of the press and representatives of the motor-cycle industry.

The first film, "Trial - Vintage Sancerre", a colourful 18-minute report on Mick Andrews' 1974 French trial victory, was warmly received. The second film, "Narrow Edge", a startling 60 minute long documentary about 14 times world champion Giacomo Agostini and the 1974 Grand Prix season drew excited comment from the audience. Here is a review of the film.

"Narrow Edge" is different from other motorcycle films.



Mike Wilson, David Wood and Richard Harding who wrote the music for the film, with Ago and Rodney Gould.

To begin with it is possibly the longest motorcycle documentary ever made. More than 10½ miles of colour film were shot and edited, special music was written and hundreds of hours were involved in its production. For this film is not just about racing, it is also about a man and a world champion.

"Narrow Edge" has an unusual beginning for a racing film. It begins in a screening room at Yamaha's European headquarters, moves to Yamaha's workshop and only then to where it all counts, the Grand Prix circuits.

The cameras stay with Ago as he rides around the Assen circuit at the Dutch TT, they film from the air his tragic crash at the Swedish Grand Prix and record his "come-from-behind" wins at the rainy Austrian Grand Prix. "Narrow Edge" includes not only Ago's joy at his victories, but also the tears of despair after his defeat at the Italian Grand Prix.

The cameras follow Ago into his villa in Bergamo, Italy, where the man who is mobbed

"Narrow Edge" sound editor Mike Wilson and director David Wood surround Ago and his girlfriend Lucia at London premiere.

by admirers at the circuit, is surrounded by friends at home.

"Narrow Edge" director David Wood used his cameras to capture Ago at play as well as at work, and he succeeded in catching the human side of a hard man whose demanding profession is road racing.

Ed. note - "Narrow Edge" and "Trial - Vintage Sancerre" are now available to clubs and dealers through Yamaha's local importers. □



Yamaha Circuit

Contributions
Strictly Technical - Douglas Bonner, Castrol
The Safe Line - Paul Butler
YZR500 Model - Courtesy Protar
Circuit Coordinator - Rodney Gould



Håkan Andersson Seeking a second world title

Yamaha's 1973 250cc motocross world champion, Håkan Andersson, is back on the winning trail after an unlucky 1974 season. Hakan started the season off with a victory in the first heat of the Spanish Grand Prix and has been steadily collecting championships points throughout the season. But making it to the top, the 1973 world champion, was not easy for the 29-year-old Swede.

He was born in the small town of Uddevalla and while still a boy he became fascinated by motocross. Near his home was a circuit and Hakan became a regular spectator with his friends. By the time he was 16, Hakan was riding in local events on a Husqvarna.

During the next few years, Hakan rode hard and learned well alongside Torsten Hallman, four times 250cc world champion. By 1968, Hakan had reached the big time and was holding down second place in the 250cc world champion-

ship when he broke his leg. Eleven months later he broke the same leg again, while practising for the 1969 season.

In spite of this double injury and missing two years of racing, Hakan fought his way back to the top and finished second in the 1971 250cc world championship on a Husqvarna.

After the season was over, Hakan made the change that was to bring him his world title. After so many years with Husqvarna, he signed with Yamaha.

Hakan had been keeping his eye on Suzuki and liked the way the Japanese worked. "So when Yamaha offered me a contract and a new machine, I accepted," he said.

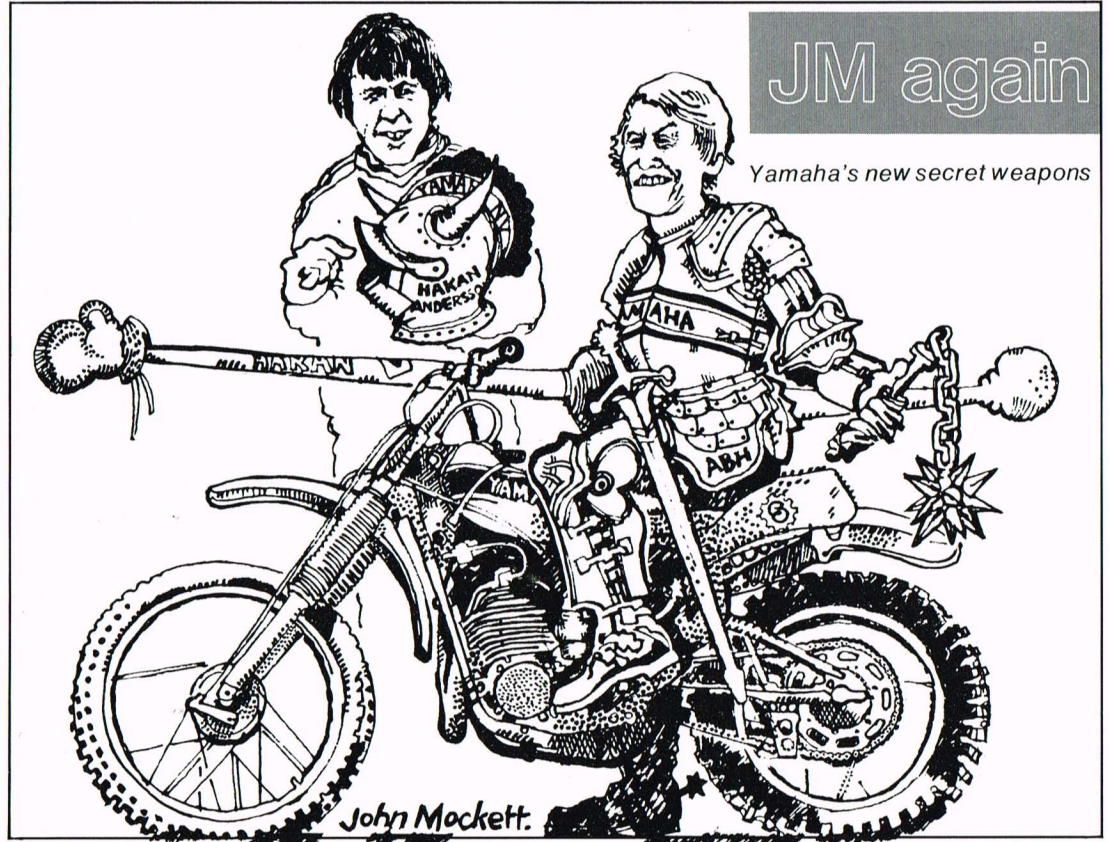
1972 was the trial year and Hakan rode the Yamaha to a second place in the title race. Then in 1973 Hakan's Yamaha was fitted with a revolutionary new suspension system called

Monocross. The combination of Monocross and Hakan was the right one for a world championship.

In 1974 Hakan wanted to make it "two in a row" but once again the hazards of racing caught up with him at the Czechoslovakian Grand Prix. "I fell during training and another rider rode over my back," Hakan said. The back injury put him out of action for two months and ended his title hopes for that year.

But he trained hard during the off season by doing a lot of cross-country skiing, gymnastics and weight-lifting. Now Hakan hopes 1975 will be the same story as 1973 but he says it will be tougher.

"There are about 10 very good riders in the 250cc class this year and now everyone has something similar to Yamaha's Monocross. But I'm in good shape and the bike is good too. So perhaps we'll pull it off again this year." □



Race results

ROAD RACES - 750
Paul Ricard, France - 8 June
 G. Agostini - Yamaha
 Y. Duhamel - Kawasaki
 P. Pons - Yamaha

Mettel, Belgium - 15 June
 P. Pons - Yamaha
 d. potter - Yamaha
 J. Findlay - Yamaha

ROAD RACES - GRAND PRIX
Hockenheim, W. Germany - 11 May
125 cc
 P. Pileri - Morbidelli
 P. Bianchi - Morbidelli
 K. Andersson - Yamaha

250 cc
 W. Villa - Harley-Davidson
 M. Rougerie - Harley-Davidson
 V. Palomo - Yamaha

350 cc
 J. Cecotto - Yamaha
 D. Braun - Yamaha
 P. Korhonen - Yamaha

500 cc
 G. Agostini - Yamaha
 P. Read - MV Agusta
 T. Lämsivuori - Suzuki

Imola, Italy - 18 May
125 cc
 P. Pileri - Morbidelli
 P. Bianchi - Morbidelli
 H. van Kessel - Condor

250 cc
 W. Villa - Harley-Davidson
 J. Cecotto - Yamaha
 M. Rougerie - Harley-Davidson

350 cc
 J. Cecotto - Yamaha
 G. Agostini - Yamaha
 P. Pons - Yamaha

500 cc
 G. Agostini - Yamaha
 P. Read - MV Agusta
 H. Kanaya - Yamaha

Assen, Holland - 28 June
125 cc
 P. Pileri - Morbidelli
 P. Bianchi - Morbidelli
 B. Kneubühler - Yamaha

250 cc
 W. Villa - Harley-Davidson
 M. Rougerie - Harley-Davidson
 D. Braun - Yamaha

350 cc
 D. Braun - Yamaha
 P. Korhonen - Yamaha
 A. George - Yamaha

500 cc
 B. Sheene - Suzuki
 G. Agostini - Yamaha
 P. Read - MV Agusta

MOTOCROSS - 250
Stettin, Poland - 11 May
 H. Everts - Puch
 H. Andersson - Yamaha
 W. Bauer - Suzuki

Trzic, Yugoslavia - 8 June
 E. Ribaltchenko - CZ
 H. Everts - Puch
 J. Pomeroy - Bultaco

Beuern, W. Germany - 15 June
 Z. Velky - CZ
 T. Hansen - Kawasaki
 H. Everts - Puch

Portsmouth, Great Britain - 22 June
 H. Everts - Puch
 H. Maisch - Maico
 H. Andersson - Yamaha

MOTOCROSS - 500
Casale Monferato, Italy - 11 May
 H. Mikkola - Husqvarna
 C. Hammargren - Kawasaki
 A. Jonsson - Yamaha

Helsinki, Finland - 25 May
 R. Decoster - Suzuki
 H. Mikkola - Husqvarna
 A. Jonsson - Yamaha

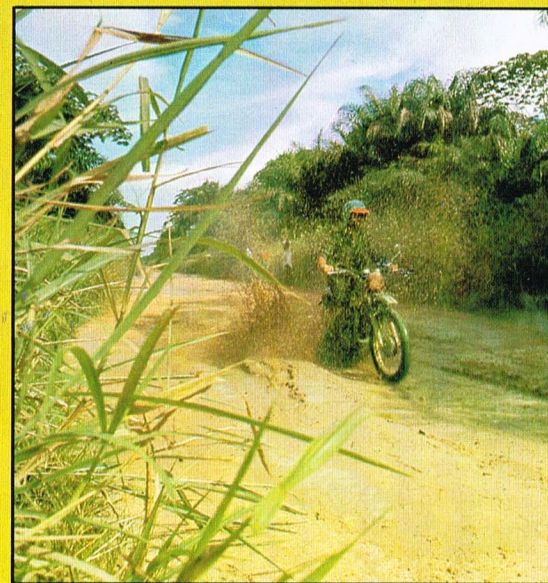
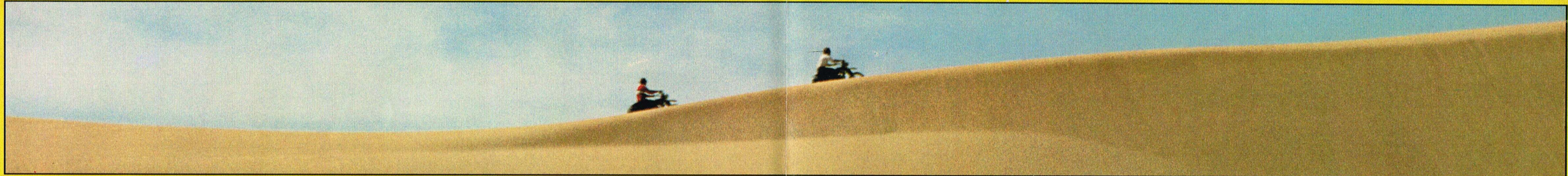
Kichinev, Russia - 8 June
 A. Jonsson - Yamaha
 R. Decoster - Suzuki
 H. Mikkola - Husqvarna

Lavour, France - 15 June
 R. Decoster - Suzuki
 H. Mikkola - Husqvarna
 J. van Velthoven - Yamaha

Carlsbad, USA - 22 June
 G. Wolsink - Suzuki
 R. Decoster - Suzuki
 P. Karsmakers - Honda

TRIAL
Poland - 24 May
 M. Rathmell - Montessa
 B. Sellman - Montessa
 C. Coutard - Bultaco

Italy - 15 June
 M. Lampkin - Bultaco
 M. Andrews - Yamaha
 M. Rathmell - Montessa



AFRICAN JOURNEY

The end of the trail

David Smith's 20,000 kilometer off-road motorcycle expedition through the Sahara Desert and the jungles of Central Africa came to a successful end in Nairobi. Soon after reaching Kenya, David and his chief mechanic, Tom McNish, returned to Yamaha's European headquarters in Holland to tell about it.

In Tamanrasset we loaded the van with enough fuel and supplies for 1200 kilometers and set off on December 13th. The Yamaha DT360s were running great and Tom only had to change the air filters.

For the next 12 days we rode over 300 to 400 foot high sand dunes, rocky hills and flats up to 50 kilometers long. It was a real test for us as well as the Yamahas to ride over unknown territory. We approached the Niger border with much apprehension. We were all worried about our film equipment because movie making here was forbidden. At customs the two girls in our expedition, Lynne Aubrey and Monica Bruna, did their utmost to distract the officials. Fortunately our film equipment was not discovered and we were off to Arlit, a uranium factory in the middle of the Sahara. We had heard that there would be petrol here and luckily there was.

The next part of the journey - the five day ride to Niamey, the capital of Niger - was the roughest to date for we had to travel over heavy corrugated roads with deep ruts and sand. In Niamey we changed our

route because of Nigerian border problems and rode through Dahomey to Ganvié on the Atlantic Coast. Here we hit the first paved roads in 3,500 kilometers and crossed easily into Lagos, Nigeria.

In Lagos, Tom changed the chains, sprockets, cleaned the carburetors, lifted the cylinder heads and adjusted the bikes' suspension. All the Yamahas were still in excellent condition. We left Lagos January 22 but without William Warren who had to return to New York.

At our next stop in Douala, a port city of Cameroun, Tom had to change a cylinder on one of the bikes and this turned out to be the only major repair during the entire trip. We hurried on to Yaoundi, the capital of Cameroun and ran into an unforeseen problem: The government of Zaire had closed its borders to tourism.

After waiting in Yaoundi for 12 days where we attempted to get visas through friends and the American Embassy, they were finally granted.

The first day out of Yaoundi we had our second bad accident on the bikes. As Michel Lavallay, the expedition's doctor had done earlier near Beni-Abbes, where he fell off and broke his leg, Monica did the same five hours out of Yaoundi. It was our first day in the jungle and Monica just didn't brake hard enough for a sharp turn. She went off the road and broke her thigh.

Tom flew back with Monica to Paris and rejoined the expedition later in Banqui. We continued on without them and entered the Central African Republic February 14th.

Then only 30 kilometers from the town of Banqui, the Mercedes engine overheated and

seized. In Banqui we had to wait a month for parts. Tom had rejoined us by this time and we finally entered Zaire March 17th.

We made good headway through the Zaire jungle, crossed many rivers and just enjoyed riding the Yamahas. At Kisangani, formerly Stanleyville, we took a two-day break.

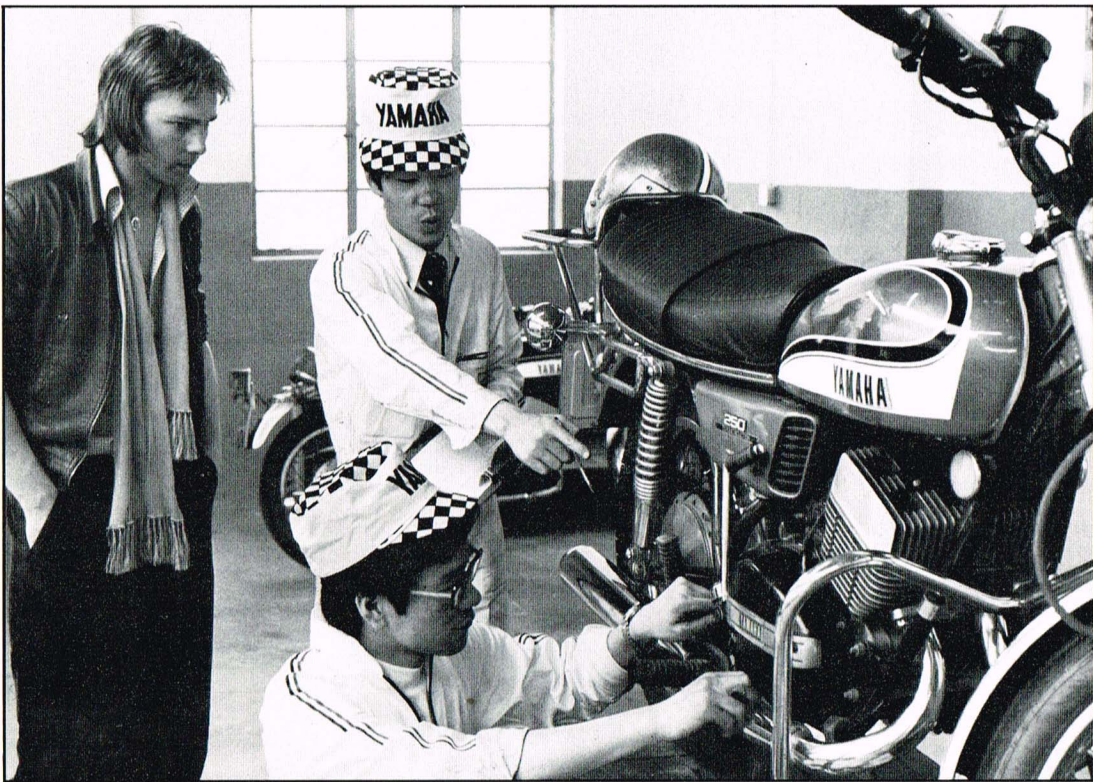
The next leg of our journey was very interesting because we were in the land of the smallest people in Africa - the Pygmy. From here we rode into Watusi country where the tallest people in Africa live.

By now we were moving pretty quickly. We rode through Birunga National Park where we saw huge herds of elephants and antelope, passed through Rwanda April 1st and finally Uganda, where we hit the paved road that took us all the way to Kenya.

It was thrilling to ride the Yamahas through the Great Rift Valley surrounded by wild game and then out to Mombasa on the Indian Ocean. Finally on April 6th, we rode into Nairobi.

Looking back on the long journey, the bikes fared far better than we did. During the 20,000 kilometers the Yamahas had a combined four flat tyres caused by thorns and only one scored cylinder. We had two badly broken legs, jungle sores and sunburns. But we also had the wonderful feeling of conquering the deserts and jungles of Africa. □





Thousands participate in YAM-EXAM

More than 3,000 Yamahas in France and Great Britain recently received a free safety and service examination as part of Yamaha's new YAM-EXAM safety campaign.

Japanese teams of experts were flown over from Yamaha

headquarters in Japan to conduct the safety and service examinations held during June and July at 40 Yamaha dealers throughout France and Great Britain.

Yamaha customers in these countries were invited to bring their machines in to be checked free by the Japanese teams, which comprised two mechanics and an engineer from the Yamaha Motor Company of Japan. Each machine received a 30 minute examination and the bike owner received a check sheet which indicated his machine's specific problems. The examination included all electrics, brakes, ignition and carburetion.

According to Mark Ezra, a Yamaha technical advisor, the problems in France were mostly lack of chain care and many of the riders had removed the baffles from the silencer which can cause holes in the pistons and rapid wear of the small end bearings. In Great Britain worn brake linings and rear tyres were the major problems on the bikes. Riders even brought in their motor-cross machines on trailers to be checked.

In addition to the safety examination riders were invited to a free Yamaha film show held each evening at a theatre near the local Yamaha dealer. Yamaha racing films were shown along with a film on motorcycle safety. During an intermission a draw was held and lucky ticket holders walked off with Yamaha anoraks and transistor radios.

Ezra said that the entire programme was very well received by the riders. More than 13,000 enthusiasts attended the YAM-EXAM film shows in France and Great Britain.

YAM-EXAM was jointly sponsored by Sonauto and Mitsui Machinery, Yamaha's French and British importers and by the Yamaha Motor Company of Japan. *It was just part of Yamaha's extensive safety programme to insure safer and more enjoyable motor-cycling around the world.* □



I like to thank all motorcyclists who have answered my request for comment on the use of headlights in daylight and the wearing of bright conspicuous riding clothing.

The replies showed that motorcyclists are more than ever aware of the increased danger to their safety in today's traffic. In order to be seen, riders need to help themselves by helping other road users. The following are excerpts from two of the many letters I received.

"I am all for the use of headlights in daytime hours. I am a youth group instructor in my club and advise our younger members to keep their headlights on when riding in daylight. I also urge the boys to wear reflecting clothing and helmets. To this day we haven't had a single accident and I feel these safety factors should be brought to the attention of other youth groups."

Sepp Bürzer, Youth Leader, Motor Club, Traunreut, Germany.

"I am writing in reply to your request asking for opinions on motorcycle safety. My opinions are based on two accidents I had. No matter how bright your clothing or helmet is, or even if your headlight is on, it is no guarantee that you will be seen. In both cases I had all these things and my speed was legal, still I was involved in accidents. Bright clothing and headlights on in daytime etc. does not guarantee that the motorcyclist will be seen by other road users. The best security is riding defensively. Watch out for others."

Mike Hoare, Yamaha Owners Club, Ilkeston, Derbyshire, England.

It is clear from the replies received that there remains a great deal of room for debate on these and other safety questions. Address your letters to: **Paul Butler, P.O. Box 7829 Amsterdam, Holland** ○

Mick wins Scottish two years straight

Yamaha works rider Mick Andrews scored his second successive Scottish Six Days Trial victory and became only the second man ever to win the event five times. By winning the trial this year, Mick tied legendary trials rider Sammy Miller's record for victories. Mick took the lead at the half-way mark in the trial and kept it until the end. He finished the sections with 38 marks lost, 11 less than his nearest competitor.

Various mishaps kept Mick out of the high place finishes in the first few rounds of the Trial World Championship. But after an intense training session at his home in Derbyshire, England, Mick bounced back with two British Championship wins and then won the French round of the world championship. Mick followed up his Scottish win with a second place at the Italian world championship trial. □



Small Wonder

Ago's YZR 500 by Protar Micro Models

Our model expert reported that it took him 50 hours to assemble the 200 pieces that form this 9:1 scale replica of Ago's 1974 500cc road racing machine.

"Everything fits beautifully. This is a very detailed, high quality model. The beginning is relatively easy, but it became more interesting and difficult as it neared completion."

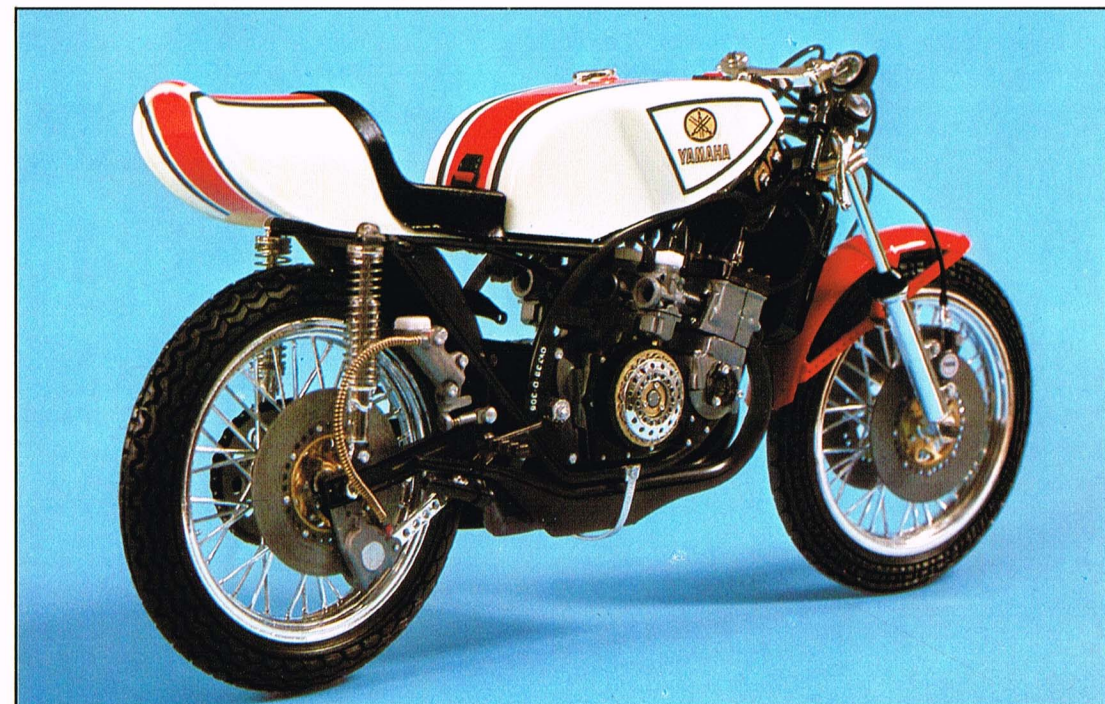
Steady hands and tweezers were required for the small intricate springs and cables.

"But the finished product was worth the effort. The Yamaha really moves, not only the wheels, but the chain, shocks and steering too!"

The model, which stands 12.3

cm, is 22.3 cm long and 6.6 cm wide, comes with painted parts, decals and attachable racing fairing. It is now available at the better toy shops throughout Europe for about Dfl. 35.-.

Protar Micro Models of Bologna, Italy, is owned by ex-125 and 250cc world champion Tarcquino Provini and specializes in plastic motorcycle models. □



OIL and the two-stroke

Lubricating problems. The "petrol" system is quite effective in supplying lubricant to piston and rings but as the oil must then be burnt, a build-up of carbon deposits in parts of the engine and exhaust system can occur. Other problems involve spark plug behaviour and ring sticking.

Carbon deposits. There is no doubt that carbon formations can be influenced by fuel and lubricant. The correct choice of both will ensure proper engine performance. The amount of carbon left by the

brication is unlikely to be achieved with conventional four-stroke crankcase lubricants as these have a tendency to leave heavy deposits in the combustion chamber and exhaust system.

Whiskering. This is the formation of a very fine filament or "whisker" between the spark plug electrodes, causing abrupt engine stoppage.

The lubricant can assist in the control of whiskering if it has been formulated to give the minimum amount of ash.

It is generally accepted that a well-refined SAE 30/40 base oil of naphtenic rather than paraffinic origin is likely to

se they are either (a) ineffective or (b) likely to introduce more trouble-some side effects such as plug bridging or

Oil-fouling



give best results in two-stroke (petrol-fuelled) engines. Such oils provide good lubrication, leaving less severe carbon deposits after combustion.

Carbon deposits are more friable and are removed by the exhaust gases before they can cause serious blockages.

The use of high viscosity brightstock oils (though these are excellent lubricants) is not recommended as they tend to leave troublesome deposits of hard carbon.

Additives As a general rule one cannot use the same additives which are effective in four-stroke lubricants because

engine deposits. Therefore top quality modern two-stroke lubricants employ specially developed ashless additives of detergent/dispersants, antioxidants and for anti-corrosion, anti-rust.

Mixing. It is a fact that many two-stroke problems arise from incomplete mixing. Although an SAE 30/40 base oil will form a stable mix with petrol, it will not do so instantaneously. To make mixing easier, competent lubricant producers have formulated their products to provide the best possible safety margin for the two-stroke user with their two-stroke oils.

oil after combustion depends on two main factors: (a) how it burns, and (b) how much is used. If you expect the lubricant to cause problems by leaving carbon, then this can be reduced by cutting down the quantity of oil.

Unfortunately there is a definite limit to which this may be taken without reducing the lubricating efficiency of the petrol mixture. Therefore it is better to use an oil that produces minimum carbon.

Two-stroke lubricants are generally formulated from base oils having low carbonforming characteristics. So completely satisfactory two-stroke lu-

Other deposit formations can seriously affect performance by reducing spark efficiency and causing preignition. The build-up of these deposits is a different mechanism but similar recommendations apply and they are: (a) be sure to use ashless or low-ash lubricants, and (b) ensure efficient electrics. □

(Courtesy: Castrol Research)



All the stuntmen swear by the DT250 used in the "Tunnel of Death" stunt. This feat involves riding through a tunnel of fire - a burning inferno that has taken the lives of other stuntmen. Two hundred litres of high octane petrol is poured over a straw-covered, wire-mesh tunnel and ignited. The stuntmen must then ride through this blaze of glory in unprotective clothing.

"This stunt must be done in under six seconds", Arne explained. "Otherwise you burn to death".

According to Arne, nothing on the bike is altered for the stunt. The DT250 is also the same machine used to plunge through a flaming brick wall in another stunt.

Other show-stopping feats include a flying car crash handled by Jeanette Mander, the only girl in the show, who specializes in fire stunts and crashes, and the high fall which illustrates the unique technique of surviving from great heights. □



"It's a way of life"

Tore Torell, another Norwegian who specializes in magic tricks lined up six other stuntmen and put together the International Stunt Show.

The show, now touring Scandinavia, performs a series of spectacular car crashes, motorcycle jumps and death defying falls before a live audience. All the motorcycle stunts are done on Yamaha. Arne Berg, the show's head stuntman, has tried other bikes in many films and shows in the Far East, but is now a firm believer in Yamaha.

"They're stronger, more powerful and steadier than anything we've ever used before", he said.

This year the stuntmen are using two YZ360s, a DT250 and the all new Chappy. The bikes were donated by Yamaha of Europe.

The YZ360s are under the special care of veteran stuntman Paul Weston. Paul broke into the trade by doubling for Roger Moore on the "Saint" television series. His film credits include "The Dirty Dozen", "Royal Flash" and "The Land Time Forgot".

Paul's speciality is jumping cars. Last year, when the show was using the old Yamaha MX series, he cleared 15 cars. This year he's only done 10, but Paul said he was only warming up.

The man on the Chappy is Richard Graydon who began his film career doubling for Gregory Peck in "Captain Horatio Hornblower". He's a specialist on rope climbing and free fall. His list of credits include many of the spectacular stunts shown in the James Bond films.



Actor Steve McQueen's daring attempt to jump the Swiss border on a motorcycle in the film "The Great Escape" started a new trend in movie stunts in the sixties.

Cowboys falling off horses and heroes plunging into swift rivers were replaced with massive car crashes and motorcycles leaping over high buildings on a single bound. It seemed as if every film following "The Great Escape" was trying to outdo the other with a greater or more spectacular stunt.

Ninety per cent of the time, these dangerous stunts are not performed by the movie stars, but by a group of seasoned professionals known as stuntmen. Their job is to crash, jump or fall for the star whenever and wherever it is necessary.

Two years ago Arne Berg, a Norwegian stuntman with numerous film credits and

