6 Power struggle: grand prix weaponry (1960 to 1967)

Suzuki's first serious road-racer—the RT60—was directly descended from the 1959 Colleda RB; but whilst the new twin cylinder engine—piston-ported—spun to 11,000 rpm, the RB's longer stroke limited rpm to 9500. The chassis were almost identical, sharing suspension systems and general concepts. To fool the press, Suzuki disguised the crude expansion chambers by clothing them in 'silencers'. Suzuki optimistically claimed 30 bhp for the 13 bhp engine, and to protect the RT60's delicate crankshaft bearings, a rich 8:1 fuel-oil ratio was used! A new air-cooled clutch transmitted the power via Suzuki's first six-speed gearbox. The RT60 was also Suzuki's lightest-ever 125 cc machine; 180 lb (82 Kg).

In 1960, Suzuki noted the successful MZs and their rotary valves. After much testing, Suzuki incorporated similar valves in their RT61 which retained the same basic dimensions as the RT60. The RT61 cylinders were more inclined, with Mikuni M22 carburettors—sporting huge bell-mouths—delivering the mixture. Rotary valves forced the magneto to be repositioned atop the six-speed gearbox. A twin leading shoe front brake was introduced on the RT61, and a fibreglass fairing superseded the RT60's hand-beaten aluminium type.

The engine produced a disappointing 15 bhp at 10,000 rpm with a 1000 rpm power band; to compete with the 23 bhp Honda 2RC143s, RT61 riders had to over-rev the engine, resulting in total unreliability. Other problems appeared during the heat of the races.

ISHIKAWA 'We had many problems with ignition because the drive-line used three spur gears, and to reduce backlash, the meshing was very tight. The teeth were overstressed together with the magneto bearings and we suffered many failures of these components. Piston seizures were also experienced when the ignition timing varied.'

Similar problems were encountered with Suzuki's first 250 cc machine, the RV61. With a power band of only 500 rpm, its six gears were insufficient and riders found they were below the power band despite having changed gear at the maximum allowable rpm. Whilst Honda's dominating RC162s developed 45 bhp, the RV61s produced only 28 bhp and were prone to piston seizures, handling problems and slipping clutches. The 1961 250 cc Suzuki was a total failure.

Suzuki, however, were determined; they had an unlimited racing budget and with the defection of Degner came the missing link—two-stroke expertise. Degner's formula for success—the humble single cylinder—completely reversed previous design philosophies. During a four month stay in Japan, Degner was given a free hand and produced a virtual replica of MZ's RE125





season-end a 125 twin cylinder front exhaust engine, the RT63X, became the top priority. It was raced only twice; at Suzuka and Daytona.

Searching for power and reliability, Suzuki's engineers scoured the racing world looking for that decisive racing edge.

SCHNEIDER 'When we asked, "What are Yamaha doing or what's Honda doing on this part?" Shimizu would open his drawer and already had the part there; he had somebody in all these factories which made it easy for him to get all the parts. As far as I remember, he even had some needle bearings from Kreidler and a Yamaha con-rod in his desk; he was very well informed.'

The 1963 machines comprised an uprated rear exhaust 50 cc—the RM63—which produced 11 bhp at 13,000 rpm, requiring nine speeds instead of eight. Likewise, the RT63 engine had rear exhausts and was provided with a pump that forced oil directly to the crankshaft bearings, improving crankshaft life and boosting power. An oil pump too was added to the RM63 during the season. But in spite of these extra features, and the special attention paid to weight, the RM63s were below the 60 Kg FIM-imposed limit, and strips of lead were lashed to the lower frame tubes to make them 'legal!'

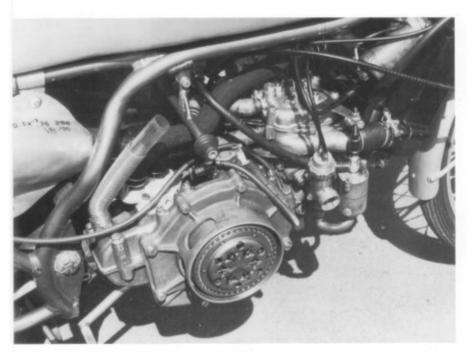
The RT63 produced 26 bhp at 12,000 rpm—2 bhp more than the RT63X—and weighed 207 lb. The air-cooled twin cylinder engine housed an eight-speed transmission of non 'cross-over' type; the clutch and final drive were both on the left hand side, with the gear-driven Kokusan-Denki magneto nestling in the

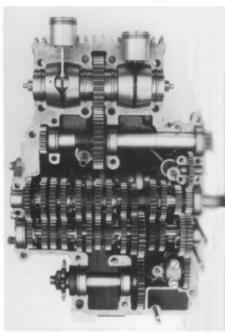
Above left Suzuki's engine test department of the sixties. An RT63 engine is on the dynamometer. Murai developed 112 expansion chambers—some can be seen hanging on the walls—in order to gain just 2 bhp Perris

Above Degner works on his RM63 at the 1963 IoM TT. Kappei Itoh assists while Ichino can be seen behind Willoughby

Right At the 1962 Japanese GP, Anderson rode the RT63X front-exhaust 125 cc twin Archives

Far right The 50 cc RM63 was characterized by its rear exhaust (see p 69). Further weight reduction forced Suzuki to add lead ballast to the RN63 in order to meet the FIM limits MCW





The small Suzukis required a riding technique which the riders developed in unison with the narrowing power band. Were they difficult to ride?

ANDERSON 'You had to be pretty considerate of the motors and it was very hard to ride in a group because you couldn't hear your engine so well. Otherwise you'd tend to oil plugs or seize up. The power band was extremely narrow and up the Mountain Mile in the TT, you'd be slipping the clutch constantly and when you change gear, you don't shut the bike off, you just keep it wound on, and because you're slipping the clutch and pushing the gear pedal you've virtually got automatic drive.

'You had to be really conversant with the motor in order to get the best out of them and after practice, I used to write everything down: I'd modify the notes after each practice session until I'd built up quite a lot of notes. Before the race, I'd read these things and then I'd remember just how many gears to come down for each corner. When you're riding in two classes, one bike you'd come down eight gears, and another bike it'd be six gears for the same corner, and you had to know—or I wanted to know—how many gears to come down. Not what gear you were in. In this way, when I was on the start-line, I knew exactly what I needed to do and eliminated all start-line nerves. They were definitely difficult to ride, there's no doubt about that.'

The 1967 machines closely resembled their 1966 counterparts. Skew gear-driven water-pumps were added to their cooling systems which allowed yet higher power and engine speeds—17.5 bhp at 17,300 rpm on the RK67 and 35 bhp at 14,000 rpm on the RT67. Ten gears were specified for the 125 to deal with the narrowing power band. Despite that, the engine weighed only 70 lb.

During 1967 Suzuki were secretly developing a new 125 cc machine to combat

Above Built like a watch! The 14-speed transmission of the RK67 exposed. The 'accessory' drives were from the gearbox and primary shafts and the extra shaft for the output sprocket facilitated a more central chain-line. The gearbox is less than 8 in. (203 mm) wide Anscheidt

Above left The RK67 developed 17.5 bhp at 17,300 rpm, yet despite its complexity, weighed just 128 lb (58 kg). Note the water and oil pumps mounted behind the clutch. The carburettor settings have been noted on the exhaust heatshield MCN

Right The Makoto Hasedesigned V4 125 cc Suzuki. The engine used twin Kokusan-Denki magnetos and was the first to feature Mikuni's new integral-float carburettors, the 'VM' series. The RS68 model illustrated has a rectangular aluminium swing-arm Crosby lightweight unit, using titanium and elektron for many parts, was housed in a duralumin chassis. The front down-tubes terminated between the cylinders where a substantial engine mounting was provided; the engine was a stressed member of the chassis. The machine weighed 209 lb, only 13 lb more than the twin cylinder model it superseded!

Initial testing of the RS67 lasted one week, and Stuart Graham's diary tells all:

'October 9 (Monday)—Factory. Went testing all day. Tried new 4 cylinder machines. Seized one. Light bike!

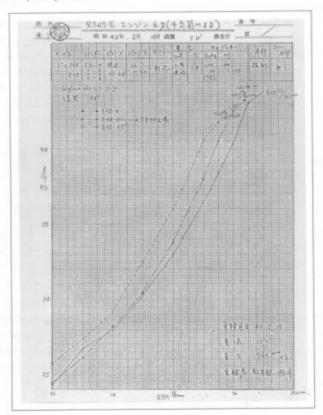
October 11 (Wednesday)—Went to Fisco. Took all day to get there, (typical Japanese)! Caught the 'flu. Machine not bad. Testing all day.

October 12 (Thursday)—More practice. Used 50 and 125s. Still same on 125; 1m 42.5 secs. 50 down to 1m 57.5 secs. in five laps. Then broke.

October 13 (Friday)—Wedding Anniversary. Official practice. 125 down to 1m 41.5 secs. Down to 1m 55 secs on 50. Very warm. Fever coming on.

October 14 (Saturday)—More practice. Pouring with rain all day. 50s in morning, 125s in afternoon. Quick practice with 'flu!'

On 15 October the RS67 made its first public appearance. It represented Suzuki's last titanic effort in the sixties. They'd started with a 13 bhp twin and ended with a 42 bhp four!



Suzuki were still developing the RS67 in February 1968 when these power curves were taken by Shunkichi Matsumoto (43.8 bhp at 16,500 rpm). The three curves represent different exhausts, proving that midrange torque sacrifices top-end power Archives

PART TWO HIGH NOON: THE HEAT IS ON

7 Second front: let battle commence (1966 to 1971)

In 1965, Haruo Koshino went to America with an RK65 and a couple of RT65s which he raced in small west coast events. Now the American public could see the blue and silver rockets in action.

Koshino's activities were part of Suzuki's plan to bolster their US sales, using a race-version of the recently announced 'Super 6'-or X6 in the USA-as a spring-board towards that objective. To race these 250 twins, US Suzuki hired three top-line US riders, Dick Mann, Dick Hammer and UK ex-patriot Ron Grant, with a unique contract allowing them to ride other larger capacity marques alongside the X6s in top-money events. Mann riding BSA and Hammer Triumph. Suzuki paid them only travel and accommodation costs, but the riders retained their prize money which produced racing fast and furious. US pro-racing wasn't for the faint-hearted, breeding tough gritty characters; men who could fall at high speed and still have the guts to re-mount and finish. The AMA Grand National Championships favoured dirt-track racing so with only three road-racing events scheduled for 1966, an exclusive pavement rider stood no chance. The best riders were good all-rounders: like Mann and Hammer. US Suzuki service manager Fred Moxley, became Team manager, with Bob Ellison and Chris Young as tuners. During the winter they built a squad of X6 racers which made their debut at Daytona in March. Hammer qualified, but in the heats his engine blew.

HAMMER 'Bob and Chris took it completely apart and put it back together again. In the race I came from dead last off the grid, caught Gary Nixon on the Yamaha and passed him. Then my rear brake lever broke two laps from the end and I had to slow. Nixon won and I finished 2nd.'

In May, at a non-Championship Carlsbad event, Mann's front wheel locked and he broke a collar bone, whilst Hammer led until his engine expired. In practice, Koshino made his X6 debut but he also fell, returning to Japan with a broken wrist.

Now it became clear that the biggest problem was handling.

HAMMER 'We did a lot of work on them; beefing up the swing arms by welding \(\frac{1}{4} \) inch steel stiffeners down each arm and under the pivot. When you were going fast in a turn they used to flex too much. Strengthening the headstocks with gussets and so forth improved them; they were just too weak for road racing.'

Initially, a twin disc front brake was fitted but was soon replaced.

Koshino demonstrating his RT65 at Riverside Raceway, California Cycle World



and there was a dry line. On the last corner I got off, slid along the racetrack and go up, pushing the bike until I collapsed. But the high humidity had steamed up my face-shield and Suzuki helper John Butcher came over and knocked on the helmet. 'Is anyone in?'....'

Nicholas was holding 3rd place on lap 35 when he crashed, behind leader Grant and 2nd man Baumann. But Baumann too crashed, on the 40th and 46th laps, remounting and finishing 5th. But even crashing was used by US Suzuki to good effect. In a press release they quoted Baumann.

BAUMANN 'The fact that I was able to finish the race in 5th place after two crashes, shows the tough reliability engineered into Suzuki machines.'

At Talladega, a 200 mile race run on the Daytona-styled banked circuit, it was reported that the factory Suzukis had 'speed, reliability, and handling.' But a 250 start-line incident upset the form-book. Jody and Art had by then quit racing the TR250s and were watching as Grant stood on the grid.

NICHOLAS 'He started in the first wave but the bike loaded up on the line and whilst it was eight and twelve stroking—barely pottering along—the second wave came through the smoke-screen. Dave Bloom accidentally hit Grant and left Ron on the line, his left foot literally hanging. Art and I tried to look away because it made our hearts sink. They kept him at the track for about 15 minutes before they moved him.'

Grant had a compound fracture of his left leg.

In training for the 200 miler, Grant had been 5th fastest at 150.258 mph whereas Nicholas had had gearbox problems and barely qualified. But Team Suzuki feared disqualification if they won, because of the illegal fuel tanks.

NICHOLAS 'We had to find some way to take up space inside the tanks so we found some plastic bottles that held outboard motor oil and we figured it would take three bottles in each tank to get them down to the proper capacity. We were in rural Alabama but we went out and found some Texaco station and this big black fellow came out and brought twelve quarts of oil. He was kinda bewildered about what we were going to do with it and his eyes must've been two feet in diameter seeing these crazy Gringos pouring this perfectly good oil down into the waste-barrel!'

Starting from the back row, Nicholas overtook 40 riders in five laps and lay 3rd behind the Tridents of Nixon and Dave Aldana! After a lap 20 fuel-stop he was relegated to 7th place but was soon in 2nd behind Aldana after Nixon fell. Nicholas still needed another fuel-stop but lost only 35 seconds and maintained 2nd place to the flag. Baumann had a steady ride and finished 4th.

The final 1970 event for US Suzuki was at Loudon for the 100 mile championship race where again Nicholas crashed.

NICHOLAS 'That was where I figured out that I had either an overflowing carburettor or a broken fuel-line because as I was coming down off the big bend, I hit the ground and the bike burst into flames. We figured that the little cavity under the carburettors had filled with gasoline and the acceleration caused it to swish back on to the rear tyre when I was still

History in the making! The 1969 Sears Point event where Art Baumann raced his XRo5 to its first US victory. Despite its crudity, this refuelling rig worked. L to R: Garnant, Grant (just visible) and Bud Parker Cycle World



8 American dreams: Daytona disasters (1972 to 1975)

Towards the end of 1971, Ryuyo residents heard the characteristic scream of an open-piped three; Mitsuo Itoh putting through its paces an early version of what became known as the TR750 to the racing buffs, and the 'flexi-flier' to its riders, a nickname coined by Ron Grant (—and the XR11 to the factory).

The debut of the new XR11s was Daytona 1972, where they were ridden by Grant, Baumann, Nicholas and Perry—Pierce was dropped for 1972. Yet again, the refuelling bogey haunted the Team.

NICHOLAS 'The dump-tank was all set up for practice and they pushed the bike up with the Japanese standing around with their stop-watches. Grommet, with the hose in his hand, couldn't get it in the tank and he almost pushed me over a couple of times. Someone suggested they glue some fur around the tank orifice so that he could find it! I remember if it hadn't been for Shoji Tanaka and Bill Buchka on my right side, I'd have been pushed over for sure.'

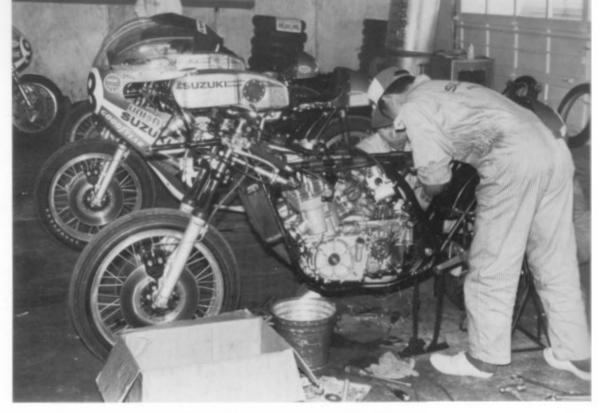
Bill Buchka joined US Suzuki as a race mechanic in the autumn of 1971 and he recalls other difficulties with the XR11s.

BUCHKA 'There was a series of problems we experienced then; shredding tyres in four or five laps—chunks of the tyre coming out. Daytona was our initiation with that motorcycle. I'll tell you that period of two weeks at Daytona was like two months. So much work; so many problems. If it wasn't tyres it was the chains that weren't up-to-date at that time. Man, it was unbelievable!'

Development of 'bolt-ons' such as tyres and chains just hadn't kept pace with the new, super powerful XRII. Prior to Daytona, the fastest machines in the US were the 79 bhp BSA-Triumph factory triples, but they were less powerful and less peaky than the 100 bhp Suzukis. The XRII represented a quantum leap in technology—suppliers of 'bolt-ons' would have to follow, but soon.

Nicholas qualified at 169.81 mph for Daytona with Art Baumann ahead at 171.75 mph—a new record and the first 170 mph-plus officially timed racing motorcycle. The tyre manufacturers were distinctly worried, hoping that race day would be cool, minimising tyre temperatures. Grant and Nicholas used Dunlop tyres for training but Baumann was faithful to Goodyear.

NICHOLAS 'After four laps of practice, Dave Buck of Dunlop knelt down by the rear tyre and stuck his pyrometer into it. I can remember seeing his mouth come open as the needle went up. He said to me that Dunlop would



like us to use their tyres, but they couldn't guarantee them. Then, Tony Mills of Dunlop said that much as they wanted Suzuki to use Dunlops, they'd just as soon we didn't.'

Goodyear then arranged for some tyres to be specially made from a stock-car rubber compound which was more temperature-resistant, but even Goodyear were not too optimistic and their new tyres weren't available until Thursday of practice week. It was frustrating.

NICHOLAS 'We were desperate; we had the fastest things on the track, and no tyres?'

During the race, Mike Babbich, Goodyear's tyre technician, planned to check rear tyre temperature and wear at each fuel-stop, and if required, new tyres would be fitted then, but when Jody stopped after about 80 miles only about two-thirds of the tyre circumference was visible to Mike Babbich—the remainder hidden by the rear fender. The tyre wasn't changed.

NICHOLAS 'By then, I'd got an enormous lead so I backed it off and started cruisin' around. Going through the in-field—about 110 mph left—I just started to pitch it down and it went sideways, just like Ascot on the cinders.'

Nicholas straightened it out going on to the grass, and just stopped it before he re-crossed the track against the traffic-flow! The rear tyre was flat, its cords visible for about 12 inches of its circumference. . . .

Grant, meanwhile, had lost time at his fuel-stop.

BUD WILSON 'They messed it. Paul Garnant just couldn't get the nozzle

Factory mechanics worked lound hours at Daytona 1972, enabling the new XR11s to raise the qualifying speed record to 172 mph (279 km/h). Here, an engine is about to be removed MCN



For the late-season Ontario meeting, the XR11s had been fitted with 'standard' cylinders. US Suzuki mechanics John Alnut (left) and Brian Lunnis warm up Geoff Perry's machine Dixon

into the tank. He was standing there by the tank and twisting it. It took over ten minutes and there was gasoline all over the place.'

Leaving the pits, Grant overcooked the clutch which soon caused his retirement.

BUCHKA 'I recall that we were having a lot of trouble with the clutches overheating and cooking themselves, so we tried several different things to get more air through them.'

And Baumann? Whilst dicing for the lead on the 12th lap he too retired with magneto trouble.

At Road Atlanta, Nicholas and Grant gave the XRIIS their head, finishing 1st and 4th. But the race had been run under protest with rumours that Team Hansen—the factory Kawasaki team—weren't too happy with the cylinder and head specifications of the XRIIS. The AMA, whose rules had only recently been amended to allow the faster 750s into the National Championships, were closely monitoring the situation; only certain engine parts were allowed to be modified from the roadster versions. Merv Wright, like Ron Grant, was an English ex-patriot and originally became involved as Grant's mechanic in 1971. Later, after joining Suzuki's service department, he became Garnant's successor.

WRIGHT 'We had to submit items such as crankcases and cylinders to the AMA which they brought to each of the races in case of protest. In fairness, there really was no intention to cheat; it was actually a mix-up between verbage in the AMA rulebook and the FIM F750 rules. 'I have a distinct feeling that the Atlanta protest had something to do with the fact that two Kawasaki's were in 2nd and 3rd places. Jody won the

The track itself bore out both theories; the tyre was momentarily jammed each revolution of the wheel.

WRIGHT 'There was a black strip, ever increasing in length and going a considerable way down the track which was obviously put down at each wheel revolution indicating that a chunk of tyre was coming off and as it was coming off, making this mark. Theoretically, the back wheel did not lock—the motorcycle did not mechanically seize—but at 150 plus mph with something like that going on at the back-end, it's not surprising that Barry and the bike ended up going down the road separately . . .'.

As in 1972, the Team reluctantly changed to Goodyear tyres for the race, but only Aldana finished, in 10th place. Tepi led for some time but crashed when his chain jumped the sprockets. Wilvert seized on lap 17, probably weakness caused by fuel shortage—he was due to refuel on lap 18. Hennen crashed when his *front* tyre punctured! Nixon, bravely overcoming the pain from his broken arms, qualified 29th but withdrew before the race commenced.

As always, refuelling jinxed the Team.

VUKMANOVICH 'It was a joke. We practiced on Saturday night and it was a joke; nobody could do it right and all they could do was laugh. There was enough people, it was just that nobody could do their job. Just nerves. In the race, they only screwed up Aldana's fuel-stop.'

One report says that Aldana had been 'given a gas-bath at one of his pit stops'.

By now, Sheene was prostrate in Daytona's Halifax Hospital with a broken thigh, broken ribs, cracked vertebrae and multiple cuts and bruises. He was later air-lifted to Heathrow and from there by helicopter to his Wisbech home. Within a few weeks, he was back in the saddle.

With only four scheduled National Championship events for 1975, it was clear that road-racing was low priority for the AMA and when the June Atlanta meeting was cancelled, the result was a five month lull before the second round at Laguna Seca in August. There, Aldana had gained 3rd place when a spark plug electrode broke and he retired. Hennen, with handling problems, finished 5th.

The third and final National meeting of 1975 at Ontario, saw a full team of Suzukis—apart from Sheene. After recovering from his Daytona accident, he then broke his other leg on a paddock bike! The other riders were in bad shape too; Lansivuori with a broken hand and foot—Ontario practice accident, Nixon with a broken shoulder—Ontario practice accident, and Aldana, bruised and battered—Ontario practice accident. Only Hennen was fit and he started the first heat in pole position. Aldana couldn't find neutral gear on the start line and was removed, but Hennen took an early lead which he soon lost to Kenny Roberts. Then Lansivuori's engine blew and he retired. Nixon and Hennen battled for 2nd place with Nixon prevailing, whilst Roberts was winner of the first heat.

Hennen had a poor second heat, finishing 12th overall. Nixon's clutch release bearing failed but Erv Kanemoto made a temporary fix and Nixon re-joined the race. Finally, when he couldn't engage sixth gear, and flames were shooting out of the carburettors, he retired; three laps from the flag. Nixon epitomised the courage of American riders—the specification hadn't changed since 1966—they were still tough, gritty and determined as were Mann and Hammer a decade



Above Preparing for the 1974 Talladega 200 Cycle World

Right Englishman Cliff Carr, who joined the 1974 Team. calmly waits whilst the mechanics and riders sort themselves out at Talladega. L to R: Sheene, Lunnis, Buck, Erv Kanemoto and Ken Bailev Cycle World

9 Battle of Britain: Sheene takes command (1970 to 1975)

In 1967, when Suzuki's UK concessionaire Associated Motorcycles collapsed alongside many other British motorcycle manufactures, Hambros Bank stepped in and conducted a holding operation. Two years later, with Suzuki sales at a low ebb, the franchise was secured by the Lambretta-Trojan Group. Chairman Peter Agg had watched Lambretta's sales falling after the early 1960s boom, as supplies from Italy dried up. To him, the acquisition of Suzuki GB was a lifeline. He already realised the marketing benefits of racing, having nurtured Lambretta competition and even manufactured Trojan go-karts alongside McLaren Formula racing cars, but during 1969, in spite of his personal aspirations, racing was low priority; he was too busy sorting out the mess after the take-over.

In these early days, Suzuki GB relied heavily on their dealers' expertise, and Eddie Crooks, a long-standing Suzuki dealer, was often contacted. It was in early 1970 that Crooks—a dedicated racing man—rang Suzuki's technical manager, Rex White, with a proposition.

WHITE 'Eddie asked me if there was any chance of getting an XRo5—as used at Daytona—to race in the Isle of Man. I put the question to Maurice Knight, our sales manager, and he contacted the factory. What we eventually obtained was an XRo5 engine, fuel-tank and frame, but fitted with roadster forks and wheels. There wasn't even a seat on it.'

The chassis was designed for Daytona use but with Eddie Crooks' help, White rebuilt the machine ready for its debut in the Isle of Man TT four weeks hence, fitting Ceriani forks and rear brake with a Fontana eight leading-shoe front anchor. A new seat and fairing completed the project.

On Crooks' recommendation, ex-Suzuki factory rider Stuart Graham was enlisted as pilot, agreeing to meet White and Crooks for the Tuesday morning practice on the Island. Rex White arrived on Monday with the XRo5 and a few spares—jets and sprockets—meeting up with Crooks and his mechanic Frank Whiteway.

WHITE 'On the Tuesday morning, Stuart hadn't turned up so rather than waste time, Frank took it out for a practice lap. When he came back he said, "If Stuart Graham can ride that machine, he's a better man than me. It's frightening!"

When Graham arrived Frank had a word with him.

GRAHAM 'He said to me, "You can keep that, it's a real pig!" Well I got



The rare Seeley Suzuki monocoque at a Brands Hatch test in January 1973. L to R: Rex White, Barry Sheene and Stan Woods MCN

WHITE 'It was such a Mickey Mouse circuit that Barry felt he'd be better off on the 500 but Stan used his 750, and I had to make a new rear sprocket to lower the gearing for the tight circuit. The local Suzuki dealer took a sprocket off a brand-new road bike and we bored out the centre and welded to it a new outer ring with more teeth. Stan did well in that race but the sprocket weighed a ton!'

On his Seeley 500, Sheene finished 2nd to the Finnish rider Lansivuori, with Findlay 3rd, Mandracchi 4th and Woods 5th. Sheene's place consolidated his overall series lead.

Returning to England Sheene then won the important 'Mellano' Trophy at Brands Hatch, despite coming to grief twice on the wet track, and the following weekend the Team arrived at Silverstone for the British F750 round with Sheene in a strong position. In the first leg Sheene finished 3rd and when the head gasket of his Seeley 750 blew whilst warming up for the second leg, he climbed aboard his Seeley 500 and still finished 6th! His aggregate placing was 4th but the FIM jury decided that changing machine—effectively mid-race—was against the rules, and despite official Suzuki GB protests the matter wasn't finally resolved until three weeks later when the ACU ruled that Sheene's score should be discounted. This put Findlay in the overall series lead.

The Team added to their British Championship scores by contesting a handful of UK International events before setting out for the West German F750 round at Hockenheim. Findlay won the first leg followed by Sheene and Woods, whilst Woods won the second leg with Sheene 4th and Findlay out of the points. Woods won on aggregate with Sheene in 2nd and Findlay 5th. Sheene thus regained a slender lead of one point over his team-mate Woods with only one more round to contest.

After the two day drive to Barcelona the Team attempted to cure (permanently) a season-long problem concerning the expansion chambers which were always fracturing. Assistance came from an unusual quarter.

10 Invasion of Europe: the XRs attack (1971 to 1975)

For 1971, Suzuki agreed to supply semi-factory TR500 (XR05) machines to certain Suzuki importers including those in Italy, Holland and New Zealand. In turn, they sponsored Jack Findlay, Rob Bron and Keith Turner (respectively) to contest the 1971 500 cc World Championship.

Against all but the invincible Giacomo Agostini and his MV Agustas, the Suzukis were highly competitive and Turner became runner-up in the overall series with 2nd places in Austria, East Germany and Sweden amongst his results. With consistent performances, Rob Bron was placed 3rd overall whilst Jack Findlay achieved 1st place in Ulster and finished 5th overall.

Suzuki were elated that with such little effort they had been rewarded with such good results, especially their 2nd place in the World Manufacturer's Championship, So pleased in fact that for 1972, with the new FIM 750 cc class in the offing, Suzuki offered one of the new XR11 machines to Suzuki Italia, whose new rider, Guido Mandracchi, planned to contest the new series. For the 500 cc classics, Suzuki provided him and Rob Bron with the new TR50011 (XR05).

The 1972 500 cc World Championship results were relatively disappointing; Bron finished 13th overall, with Mandracchi 11th, but Mandracchi's XR11 carried him to a 4th place at Misano. For the Isle of Man TT races, Suzuki Italia's XR11 was loaned to Jack Findlay who raced it under the wing of Suzuki GB (see Chapter 9).

The following year, Suzuki Italia were supplied with a new XR11 for Mandracchi who, with Findlay, would also ride new water-cooled XR05s in the classics. Supporting them were factory mechanics Yasunori Kamiya and Shoji Tanaka who bought a Mercedes-Benz truck in which to carry the machines and spares. Their objective wasn't to *min* the 500 cc classics, but to get the measure of the opposition and during the season Makoto Hase, Suzuki's race designer, received many field reports identifying the areas in which the factory MVs and Yamaha excelled over the XR05s.

The power-bonus of the XRo5 was produced at higher revolutions, leading to crankshaft failures, but by mid-season, new crankshafts solved the problem. In France, Mandracchi and Findlay were 6th and 10th and at Austria, Mandracchi finished 4th—his last points-scoring ride that year. Findlay won the Senior TT and with a 3rd in Belgium and a couple of 5ths, he finished 5th in the World Championship. Mandracchi was 14th.

For 1974, Barry Sheene was offered three independent race contracts. Suzuki GB wanted him to race the XRo5 and XR11 machines in the UK and contest the F750 series with the 750. US Suzuki needed him to race XR118 at Daytona



The 1972 Suzuki Italia squad surround their first XR11. L to R: Patrignani (manager), Gilardi, unknown, Sandro, Emilio, Mandracchi, Findlay, unknown and Miyakawa (director) Archives

and other US National Championship meetings. But his biggest commitment was his factory contract to develop Suzuki's 500 cc square-four racer, the XR14 or RG500, in the classics.

Early in the year, Sheene was invited out to Japan to test the new 500 cc machine. There, in spite of its handling deficiencies and its habit of seizing, he reduced the Ryuyo lap record by 1½ seconds!

Suzuki Japan hedged their bets in 1974: veteran GP racer Jack Findlay offset the relatively inexperienced, but quick Barry Sheene. US Suzuki teamster Paul Smart was also signed.

The XR14 made its debut at the French GP at Clermont Ferrand where the Italian MVs of Read and Bonera were threatening, whilst Agostini and Lansivuori were not to be discounted on the factory Yamaha YZR500s! Sheene qualified 4th fastest but experienced plug-oiling in the race and slowed whilst holding 2nd place. However, urged on by a pit signal he swept forth at greater speed, retaining his position only five seconds behind race victor Read. Lansivuori finished 4th, but the Yamaha crew knew then that Suzuki meant business. Smart, who'd broken his arm nine days previously, managed only one painful lap before retiring.

A rider's strike meant that none of the Suzuki teamsters competed at the West German GP but it was business as usual for the Austrian GP at the Salzburgring. There, after a poor start Sheene and Findlay slogged it out in 4th and 5th places until 3rd man Michel Rougerie retired, but by then both the Suzuki riders had been lapped by Agostini's Yamaha and Bonera's MV, such was the pace of the front-line battle. Sheene and Findlay finished 3rd and 4th at the flag putting Sheene and Bonera on equal points in the Championship. After a poor start Smart didn't figure in the results.

Two weeks later, the onslaught was renewed for the Italian classic round at Imola. But here, the factory Suzukis were not on form and Sheene and Findlay qualified in 5th and 6th positions behind the factory MVs and Yamahas. Mixed fortunes befell both Yamaha and Suzuki in the race; Ago's OW20, set a new lap record and then ran out of fuel on the penultimate lap, and Sheene was lying 3rd when his gearbox locked up (a shaft broke) and he went sliding up the road, a regular experience as RG development continued. This accident affected Sheene's eyesight and broke his ankle but after specialist treatment he was soon back in the saddle. Meanwhile, Findlay pressed on, finishing 4th behind Bonera, Lansivuori and Read.

Barry Sheene had requested his factory bosses to give his friend and US Suzuki team-mate, Gary Nixon, a GP ride on the new XR14. The factory agreed that Nixon could test in June at Ryuyo. Nixon and Ken Araoka, a race-shop test rider and another of Barry's US Suzuki team-mates, were lapping on a brace of RGs when Nixon's engine seized a piston. Araoka was riding directly behind and couldn't avoid running into the stricken Nixon. Bikes and riders flew in all directions with the result that Nixon spent most of the remainder of 1974 in hospital.

Sheene was effectively 'psyched out' by the knowledge that the Suzuki could seize so dramatically, and with the memory of his own close inspection of the Imola tarmac fresh in his mind, he started the Dutch TT at Assen with not a little caution. In addition, the Suzuki had exhibited some strange handling traits that the fitting of lower rails to the open-frame design—suggested by Team

