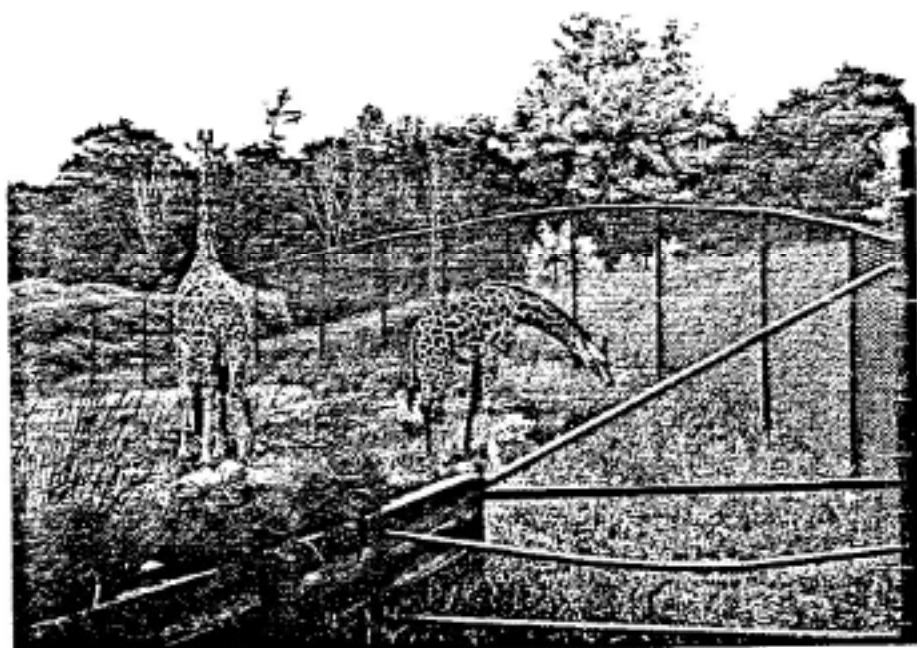


VINTAGE
ROAD
RACING
ASSOCIATION

NEWSLETTER



June 1985

WHO'S WHO

- President:** Ton Feulds
Box 104
Claremont, Ontario
L0H 1E0
Res: (416) 649-2928
Bus: (416) 284-8110
- Vice-Pres:** Jim Garrett
146 Felling Brook Drive
Ancaster, Ontario
L9G 1E6
Res: (416) 648-5265
Bus: (416) 525-9140 Ext 4856
- Recording Secretary:** Ruth Hodge
27 Henry Street
Georgetown, Ontario
L7G 2K5
Res: (416) 877-8572
- Treasurer & Membership Secretary:** Manzi Warwick
1870 Spruce Hill Rd.
Pickering, Ontario
L1V 1S7
Res: (416) 839-7464
Bus: (416) 291-7794
- Competition Chairman:** David Hughes
1345 Roylen Rd.
Oakville, Ontario
L6H 1V5
Res: (416) 842-1843
Bus: (416) 746-1414 Front
(416) 746-7985 Back
- Technical Committee Chairman:** Paul Bowyer
R.R.#6
Cobourg, Ontario
K9A 4J9
Res: (416) 342-3152
- Editor:** Tim Lahey
R.R.#4
Grand Valley, Ontario
L0N 1G0
Res: (519) 928-2036
Bus: (519) 928-2911

SUBMISSIONS:

Submissions for publication are invited! They need not be typed, merely legible. Photos should preferably be black and white. Send all contributions to the editor, address as above.

Please provide identifying information with photos. They will be returned at the next meeting or by mail. Other contributions will be retained on file, unless otherwise requested.

The deadline for submissions is the 10th of the month. The newsletter will be sent for printing on or about the 12th of the month.

COVER:

This month's photo shows giraffes at the Metro Zoo (I warned you!).

UPCOMING EVENTS:

- July 20/21, Shannonville: Molson Superbike.
- Aug 10/11, Shannonville: Castrol XLR Challenge.
- Aug 24/25, Shannonville: VRRR Vintage Classic.
- Sep 2, Shannonville: R.A.C.E. School.
- Sep 14/15 Shannonville: Castrol XLR Challenge.

NEXT MEETING(S):

Until further notice, all "meetings" will be held at the track!

FROM THE EDITOR:

Tim Lahey

This issue contains the results from the May 18-20 weekend at Mosport, and the June 1-2 weekend at Shannonville. The latter was the first event of the season which counted towards the NGK Series points competition. Thanks to Jim Garrett and Dave Hughes for providing these results and the current points standings. Apologies are in order to those whose names do not appear against the machine numbers in the results. By next issue, I should have a copy of the machine/rider list, and I will remember to ask the race organizers for an entry list.

Thanks also to Jim for his anecdote and the checklist. I am sure we can adapt it to other machines, such as the Sears Eger-1 rotary mower, or even various snowblowers. Question: is it really possible to destroy a Briggs & Stratton?

Please note the letter from John Wittmann and copies of articles from the April 1985 issue of *Motorcycle Enthusiast*, which were forwarded by Steve Blais of Ottawa. Thanks, Steve.

Dave Hughes supplied an article from the *Oakville Beaver*, documenting his efforts in Vintage Road Racing.

This issue also contains the entry form and waiver for the VRRR weekend at Shannonville on August 24/25.

The Mosport event on May 18-20 was quite an experience (my first time on that track). By the second day, I was feeling more comfortable with the speeds required through the corners, and really began to enjoy the track. Unfortunately, the entire second day of the schedule was cancelled: Sunday consisted of practice plus about 6 races carried over from Saturday plus about 4 finals moved up from Monday's schedule. To add to the disappointment, it began to rain Monday afternoon, and our final was run in a downpour and shortened to 5 laps. However, even rainclouds have silver linings: those of us who happened to look east at about 8:00 PM were treated to a magnificent rainbow: the primary extended a full 180 degrees from horizon to horizon, looking like glowing pillars where it rose vertically, and there was also a very visible secondary rainbow. I do not recall ever seeing such a bright display.

Although I was unable to attend the June 1-2 meet at Shannonville, I did make the Ducati Owners Club

cont'd

FROM THE EDITOR (Cont'd)

weekend June 15-16. It was a very enjoyable event, with plenty of track time (up to 30 minutes per hour for those who ventured out in two "classes"). Saturday evening was highlighted by a delicious barbeque of pork and beef, with "fixin's".

As you might have guessed from the cover, I have run out of suitable photos. Contributions are invited.

A SAD TALE

Jim Garrett

Well, after 20 years of riding and repairing motorcycles, I've finally done it, something no self-respecting M/C mechanic would be caught dead at. I completely rebuilt an engine tonight; started and ran it until it seized from an acute lack of oil. To this end, I am submitting for the editor's consideration the check list that Borneo Nicolson (golly, I hope he doesn't hit us for copyright infringement) has in his book **Modern Motorcycle Mechanics**.

Even though a lot of the information on specific makes is useless to most of us, this is still a very good general techniques manual, and in my sixth edition the first 175 pages are worth whatever I paid for it. Actually, I was given the chapter on Harley Davidson, so I guess that part is worthless (wouldn't you agree, Earl?).

So, by now you are all wondering which of my engines I was stupid enough to seize - that Mach 1 which looks as bad as it runs? - my Dosmo 350? - the Velo? - oh my god!, not the Aermacchi?

No, none of those. My Briggs & Stratton lawn mower - it's recoverable, but I'll never be able to use it for racing.

FROM THE COMPETITION COMMITTEE

Dave Hughes

Here are the points standings after the first round at Shannonville, June 1-2. In an effort to simplify the job, the riders number only will be used. The points are awarded for the final only, based on the following scale: 15, 12, 10, 8, 6, 5, 4, 3, 2, 1. A single point will be awarded to all finishers.

250cc	350cc	500cc	Open	S.V.
#68-15	#31-15	#22-15	#40-15	#40-15
29-12	81-12	45-12	7-12	6-12
70-10	5-10	560-10	99-10	34-10
64-8	9-8	41-8	179-8	22-8
22-6	86-6	353-6	38-6	7-6
33-5	199-5		35-5	31-5
78-4	49-4			92-4
36-3				

The vintage race at Steamboat Springs, Colorado is set for Sept 7-8 (the weekend after Loudon). I have sent away for more details on this year's event, and I would like to hear from anybody who might be interested in going. Call me at (416) 842-1843.

We are looking for some assistance with the YRRA weekend cookout, ie setting up the food and drinks. Any volunteers?

RACING RESULTS:

Jim Garrett

Mosport, May 18-20, 1985

The following are the results by class for the combined classes heat race on Sunday May 19:

Supervintage:

1.	34	Norm Sheppard	Yamaha	
2.	31	Gary McCaw	Ducati	
3.	7	Ken Hodge	Norton	
4.	6	Keith Brown	Yamaha	
5.	92	Francis McDermott	Ducati	750
6.	2	Jack Patterson	Yamaha	
7.	14	Charlie Schaff	Yamaha	

Open:

1.	40	Paul Bowyer	Norton	750
2.	99	Richard Desmarais	Norton	750
3.	179			

500 cc:

1.	77			
2.	441	David Makin	BSA	500
3.	72	Paul Heindrichs	Ducati	
4.	333	Eric Tounissen	Honda	450
5.	23			
6.	193			

350 cc:

1.	5	John Ciniglio Sr.	Ducati	350
----	---	-------------------	--------	-----

250 cc:

1.	64	Jim Garrett	Ducati	250
2.	29	Andy Beresford	Ducati	250
3.	70	Stan Nicholson	Graeves	250
4.	33	Bill Mathison	Suzuki	250
5.	16	Tim Lahey	Ducati	250
6.	210	Hans Rasmussen	Kaw	250
7.	41	Mary McCaw	Ducati	250
8.	36			

DNF: 9, 12A, 45

DNS: 11, 4, 89, 22, 129, 74, 161.

Overall Finishing Order:

Pos	#	Fastest Lap	Pos	#	Pos	#
1.	34	1:48.36	11.	29	21.	16
2.	40	1:48.94	12.	70	22.	210
3.	31	1:48.02	13.	441	23.	41
4.	77	1:48.88	14.	33	24.	193
5.	7	1:49.61	15.	14	25.	36
6.	6	1:51.89	16.	179		
7.	99	1:54.40	17.	72		
8.	92	1:58.18	18.	333		
9.	2	1:56.29	19.	5		
10.	64		20.	23		

The following are the results for the combined classes Vintage Final, on Monday May 20, 1985:

Supervintage:

1.	7	Ken Hodge	Norton	750
2.	2	Jack Patterson	Yamaha	
3.	96	Larry Strung	Laverda	750
4.	92	Francis McDermott	Ducati	750

RESULTS (Cont'd)

Open:

1.	40	Paul Bowyer	Norton	750
----	----	-------------	--------	-----

500 cc:

1.	77			
2.	89	W. Cocksedge	Ducati	450
3.	333	Eric Teunissen	Honda	450

350 cc:

1.	5	John Cliniglio Sr.	Ducati	350
----	---	--------------------	--------	-----

250 cc:

1.	64	Jim Garrett	Ducati	250
2.	29			
3.	33	Bill Mathison	Suzuki	250
4.	70	Stan Nicholson	Greeves	250
5.	16	Tim Lehey	Ducati	250

Overall Finishing Order:

Pos	#	Elapsed Time	Fastest Lap
1.	77	11:17.59	2:11.01
2.	7	12:03.33	2:20.65
3.	40	12:08.76	2:18.21
4.	2	12:15.18	2:21.62
5.	64	12:35.86	2:27.77
6.	96	13:04.24	2:31.93
7.	29	13:06.33	2:29.31
8.	33	13:11.69	2:34.66
9.	92	13:25.37	2:36.64
10.	89	13:40.18	2:39.82
11.	70		
12.	16		
13.	5		
14.	333		

DNF: 9, 45, 6, 31, 41.

DNS: 34, 14, 99, 179, 441, 72, 23, 193, 210, 36, 12A, 11, 4, 22, 74, 161, 35.

RACING RESULTS: Shannonville, June 1/2, 1985

The following are the results (by class) of the Vintage Heat races at Shannonville on June 1, 1985.

Supervintage:

1.	40	Paul Bowyer	Norton
2.	7	Ken Hodge	Norton
3.	22	Joe Rogers	
4.	34	Norm Sheppard	
5.	31	Gary McCaw	Ducati
dnf	92	Francis McDermott	
dnf	12	John Kettle	

Open Class:

1.	7	Ken Hodge	Norton
2.	40	Paul Bowyer	Norton
3.	99	Richard Desmarais	Norton
4.	11	Garth Perry	Norton
5.	179	Earl Cox	
6.	38		

500cc Class:

1.	22	Joe Rogers
2.	45	Tom Faulds
3.	560	Tom Saunders
4.	91	Charlie Schaff
5.	333	Eric Teunissen
6.	41	Mary McCaw

The following are the results for the Vintage Finals at Shannonville on June 2, 1985.

Supervintage:

1.	40	Paul Bowyer	Norton
2.	6	Keith Brown	Yamaha
3.	34	Norm Sheppard	Yamaha
4.	22	Joe Rogers	
5.	7	Ken Hodge	Norton
6.	31	Gary McCaw	Ducati
7.	92	Francis McDermott	
8.	12A	John Kettle	
dnf	33	Bill Mathison	

Open:

1.	40	Paul Bowyer	Norton
2.	7	Ken Hodge	Norton
3.	99	Richard Desmarais	Norton
4.	179	Earl Cox	
5.	38		
6.	35	Dave Sproule	

500 cc:

1.	22	Joe Rogers
2.	45	Tom Faulds
3.	560	Tom Saunders
4.	41	Mary McCaw
5.	333	Eric Teunissen
dnf	91	Charlie Schaff
dnf	89	

350 cc:

1.	31	Gary McCaw	Ducati
2.	81	Jim Wood	Ducati
3.	5	John Cliniglio Sr.	Ducati
4.	9		
5.	86	Steve Blais	Ducati
6.	199		
7.	49		

250 cc:

1.	68	Rick Soles	Yamaha
2.	29	Andy Beresford	Yamaha
3.	70	Stan Nicholson	
4.	64	Jim Garrett	Ducati
5.	22	Joe Rogers	
6.	33	Bill Mathison	Suzuki
7.	78	Bob English	Ducati
8.	36		

LETTER

Steve Blais

Dear Tim,

I photocopied the attached articles and letter from John Wittmann in England. I have done business with him for a number of years and have got excellent service (i.e. received orders in about 3 weeks from time of writing). Please note his comments re: en bloc shipping. His business is called **Mitty Ducati**, and he has virtually everything for singles and 750's at very good prices, especially since the pound is cheap.

I will not be racing this summer because I'm going to China to work for the U.N. for a couple of years.

Steve Blais

(The following is a slightly edited version of the letter sent to Steve by Mr Wittmann. I am uncertain about the last two letters in the postal code. See elsewhere in the newsletter for the articles referred to. Tim)

107, Manor Road
Caddington
Near Luton, Beds LU14EP
Tel (0582) 419769

22/4/85

Dear Steve,

Presume you have rec'd your last order from me OK (August '84), and that you are now racing a lot more competitively.

Enclosed please find a m/c mag containing a racer test of my 440 and USS 350 racers. Hope you like.

You will probably see what my works pattern fiberglass ware are like from the photos and advert, that I did not send on request because of the hassle involved. I'm no photographer, and one has to accept that the stuff is of the highest quality.

As there are so many of you Ducatisti around where you live in Canada (as opposed to the whole of Canada - a pretty vast territory), judging by the correspondence and orders I receive, might it be an idea to get together and place an en-bloc order with me and thus reduce your individual shipping charges. Thus, if bulky (and fragile) stuff like fiberglass is wanted, it is so much easier to pack (several) rather than one tairing and one tank. Also consider the distinct advantages of "deferred" air freight services: i.e., collected from me, delivered within a week - weekend duration as per transit to New Zealand - to you when you pay shipping charges to the carriers.

Also, if one of you may be over here for any reason, don't hesitate to drop in and see me. Can put you up for the visit. Must admit, the Kiwis seem to be doing this more than anyone, but maybe they have good reason(s). Don't forget, I also "do" spares, etc for the V-twins, which are becoming more of my bread and butter.

John Wittmann

BUY / SELL / SWAP:

* PLEASE NOTE *

Advertisements will be appear for one insertion only, unless the editor is advised otherwise at the time of placement of the original ad, or prior to the deadline for submissions for the next issue.

FREE!!!

The Technical Committee invites suggestions for changes for 1986. These must be received in writing by the Technical Committee Chairman by August 31, 1985.

For Sale:

Complete 750 Norton Road Racer in a disassembled condition. ^D All parts are available for viewing. There are enough extra parts to keep the bike running for several seasons with no additional outlay. \$750 FIRM.

750 Rickman Honda, suitable for Vintage Superbike. Rickman rolling chassis with single disc brake front and back, spoke wheels, '71 750 Honda engine low mileage since rebuild. Bike is complete including all street running gear, and is 95% assembled. \$2,100 FIRM.

SR 500 Yamaha, 1979 vintage - approx 7,200 km. Excellent condition, Dunlop Sport tires. This is the bike for the nostalgia buff. \$1,000 FIRM.

Direct Inquiries to:

Ken Morgan
81-7080 Copenhagen Road
Mississauga, Ontario
L5N 2C9

Phone: 416-826-4015 (work)
416-821-2482 (home).

For Sale:

67 and 69 441 BSA. Asking \$1400 each. Good condition.

Sam Bell. 653-6139.

For Sale:

1969 Ducati 450 single. Fully raced prepared, twin leading shoe front brake, fibreglass tank, seat and fender, 35 mm Dell'Orto 551 carb, ported and polished head, brand new race compound tires, fresh piston.

Sandy Cocksedge. (613) 826-2589 after 6.

It's always a vintage year for Hughes

By HANS JANZEN
Most people like to leave their job behind them when they're finished at the end of the day. Not Oakville's cycle dealership in Dave Hughes' By Toronto. By night, he's the and most weekends, he's busy building, restoring and racing vintage motorcycles.

When he's not putting a wrench to a log, a competition motorcycle, or gripping a throttle, he spends much of his spare time organizing a world-wide registry of vintage Yamaha parts and motorcycles.



Dave Hughes puts his 1965 Yamaha TD 1C through the paces at Mosport Park. While he no longer takes part in racing action on the track, Hughes is active in the pits building and restoring vintage high-performance motorcycles.

"I originally got involved in motorcycle road racing back home in England when I was about 16 years old," Hughes confessed. "I was involved in club racing for about three years, often finishing in the top six places, before moving to Canada."

Hughes took a brief hiatus from racing until returning to England in 1974. That's when he found one of his old bikes in a garage, shipped it to Canada, had it restored and returned to racing for two more years.

But it wasn't so easy this time around.

"I realized that after having been off motorcycles for so long it was hard to get back in the racing groove," he said.

Believing he had lost the razor sharp edge and quickness of response required to manoeuvre a racing bike around the track at breakneck speeds, Hughes decided to concentrate on building bikes instead.

"I started putting other riders on the bike in 1973," Hughes outlined, adding that it was a move fraught with both success and failure.

— until he met up

with Jack Paterson. Like Hughes, Paterson had decided to pack it in following a racing accident at Mosport Park in 1965. He was ed never to race again, but upon establishing a friendship with Hughes the local duo decided to give it one more try.

The partnership resulted in their team winning the Canadian championship for 250 CC vintage class motorcycles in 1965. Their winning machine was a 1966 Yamaha TD 1C which falls to the period 1 classification.

Motorcycles are classified for both racing bikes for the money. Prizes usually amount to a trophy, and sponsor's cheque plus a year's supply of motor oil.

"The pressure isn't the same as it is racing modern bikes, no sponsors to keep up," Hughes admits. "It's strictly a social activity which most of us enjoy very much."

But Hughes takes the sport a little more seriously than most. He's concerned about the future of vintage racing and

Anyone wishing more information about the Yamaha registry may contact Hughes at 942-1830.

PUTTING A NEW MODEL INTO SERVICE

125

Motorcycle Assembly and Final Check Card	Checked on Assembly	Checked After Road Test
LUBRICATION		
Engine Oil Fwd. Grade No. _____	■■■■	■■■■
Engine Oil Pressure and Quantity _____		■■■■
Chaincase Oil Level, Grade No. _____		■■■■
Front Fork Oil Level, Grade No. _____		■■■■
Rear Chain Oil Adjustment _____		■■■■
Grease Gun Nipples _____		■■■■
Oil Control Gaskets and Lever Events _____		
Control Stand and Brake Bolts Tight _____		
Light Bulbs _____		
Timing Case Screws _____		
Upper Clearance, Motor Cold _____		
Spark Plug Gaps, Checked and Tight _____		
Ignition Point Gap and Timing _____		
Carburetor Bank and Float Valve _____		
Carburetor Jet Cover Nut _____		
Gas Tap and Gas Line _____		
TRANSMISSION		
Clutch Free, Control Slack, No Slip _____		
Chain Adjusted: Front _____		
(Tighten, Spot) Rear _____		
Generator, Magneto and Generator Tight _____		
GENERAL CHECKOVER		
Front Wheel Axle Nuts _____		
Rear Wheel Axle Nuts _____		
Brake Anchor Bolts _____		
Head Guard and Stand Bolts _____		
Footrest Tight and Positional _____		
Exhaust Pipes and Mufflers Tight _____		
Front Fork Nuts _____		
Steering Head Bearing Adjusted _____		
Head Pinch Bolt Tight _____		
Handlebars Tight _____		
Control Pivot and Clamp Screws _____		
Clutch Gapped, Clear Fork Shims _____		
Front Brake Adjustment _____		
Rear Brake Adjustment _____		
Clutch Control Slack Correct _____		
Throttle Control Adjusted _____		
Carburetor Jetting _____		
Carburetor Jets and Accelerators _____		
Factory Tightened _____		
Terminal Tight and Lubricated _____		
Generator Charging _____		
Light Bulbs _____		
Headlight Beam O.K. and Bolts Tight _____		
Head _____		
All Accessory Nuts and Bolts Tight _____		
The Pressure, Specify: Front _____		
Rear _____		
Wheel Alignment Checked _____		
Steering O.K. _____		
General Performance O.K. _____		
Motorcycle Cleaned and Lubed _____		
Tools, Checked and Packed _____		
Oil-Tight, _____		

The Dukes of Wittmann

CONNECTION: DUKES OF HAZZARD? (OAT.V.)

A pair of special singles

by Stuart Noon

Single cylinder racing — what do those three words conjure up to you? If you happen to be a member of the younger brigade, brought up on 2 strokes of two cylinders or 4 strokes of four cylinders of the Japanese variety. If your early memories of racing are around the time when Bazza was socking it to all and sundry and winning two world championships for Britain. When a young and precocious, or so it seemed to us, American, name of Roberts was telling the world what was wrong with European racing and how he was planning a single-handed assault to show us how it should be done. Then single cylinder racing probably means to you a load of old men in black leathers and grey whiskers pottering about at walking pace on slow, noisy and oily machinery. On the other hand, if your heroes of the past include Derek Minter, Mike the Bike, Phil Read, Paddy Driver, Joe Dunphy and the rest of the gang, in the days when they were all mounted on British and Italian iron. When a full grid at Brands for the junior or senior races would only consist of about 30 cylinders, instead of about 120 as per the present, then the machinery in question here may well be more your cup of tea.

Ever since I was old enough to spectate, which was a good few years ago now, the sight and sound of single cylinder racing bikes curdled the blood in my veins as no other machines, except perhaps the BSA and Triumph triples in open race trim. Anyone who was at the Inaugural Transatlantic Trophy Meetings will know exactly what I mean. So when Mr. Editor requested my presence at Mallory Park to meet John Wittmann, acknowledged to be one of the top men in the UK when it comes to single cylinder Dukes, and for me to ride two of his racers I did not need a second bidding.

Mallory Park greeted us with a fine sunny morning and it seemed there could be



John Wittmann at speed 250 MK.I. WITH OLDANI 2LS F/SPACE-1781

nothing better than belting a couple of the best racing Dukes in the country around the tricky but fast Mallory circuit. John arrived shortly afterwards and the day's fun was soon under way.

Helping John unload these little gems from the van brought home one of the first attributes of the racing Ducati — they seemed to weigh nothing. To one who is used to a self-induced hernia everytime my own machine is loaded this alone made things worthwhile. The bikes in question were John's own 440cc senior class machine and a very special 350 with an ultra short stroke engine, featuring a 250 crank with a Cosworth piston, however more on this machine later.

Standing next to the 440 as John warmed it up for the statutory 5 minutes, with that long tapered megaphone that Duke fans know so well blaring in our ears, one was transported back to the time when

machines of this type ruled the roost. "Keep it below 8,000", John bawled in my ear as he handed me this super little bike. Now, I have ridden a fair few bikes in my time but never have I sat on a machine that felt so compact, narrow, low and yet provided a riding position that was roomy enough to allow an uncramped stance.

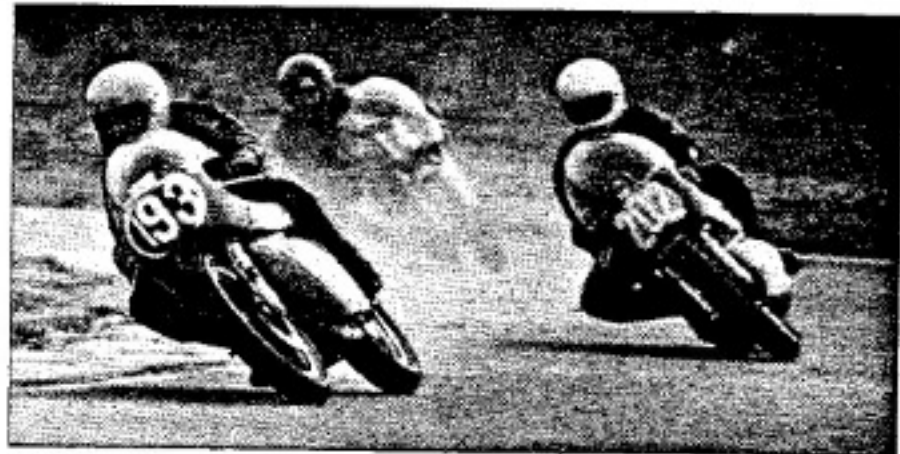
Trickling down to the track entrance showed up the tractability of this big single and nosing out onto the track, where several other people were already hard at work or play depending on whether they were destroying other peoples bikes or carefully setting up their own, I gently pulled the trigger and was awarded with a very satisfying surge from almost nil revs. Into second and again smooth liquid power, third gear and as Gerrards' never ending right hander approaches easing carefully over the bump on the way in, with never so much as a twitch, then gently feeding in the power, the revs rising very satisfactorily, with no real step in the power band. Exiting Gerrards provides an excellent opportunity to open her up and pour the power on (not too early as this was the first lap! I was rewarded with the feeling that all single cylinder nuts love — individual exhaust beats out of that lovely mega and a real push in the back — as I was propelled with indecent haste towards the Esses. So deceptive was the gait that I arrived much too quickly for comfort, grabbed for the single Lockheed disc and held my breath wondering how to explain a first lap crash. Instantly and with no dramatics, speed was lost and going embarrassingly slowly I realised that braking could have been left much later and been accomplished in complete safety. What a super handling bike.

On subsequent laps, the speed increased and I was able to really appreciate the benefits of the weight and



Photography by Paul Maxtons

USS 350 (ultra short stroke) something really special - AUG '83.



The USS 350 is completely different to the 440 Cosworth piston has to run responsive engine. Around the hairpin without use of the clutch and the revs rise rapidly and cleanly to 8,000rpm, with just a suspicion of a flat spot at around 4,000. The handling was such that even when attacking the very tricky downhill left hander at Devils Elbow only the merest of twitches at the front occurred, even while held flat against the stop. This pattern was to be repeated at Gerrards bend where the smooth power and excellent handling made it possible to put the power on very early and almost steer the machine by balancing the throttle against the rear wheel slide. Braking, from the Lockheed single caliper and disc arrangement, was beyond reproach with safe sure stopping every time at the hairpin (a severe test indeed). It was possible to outbreak anybody on the track that day, including a couple of much more modern machines with twin discs, etc., this was purely down to the light weight and feedback from the lever.

The engine revved freely to 8,000rpm maximum but it seemed to me that 7,000/7,500 gave much the same result. Such was the spacing of the gears and the basic driveability of the motor that the drop in revs when changing up from say 7,500rpm to around 6,000rpm caused no problems at all. Indeed it would be preferable in a long race or in the wet, due to the less frantic ride you would get. The measure of the performance available from this very snappy single was its ability to maintain station behind a pretty rapid G50 Matchless on the short Mallory straight and in fact, accelerate from the hairpin more quickly, due to the lack of clutch slipping required. The G50 pilot having to keep revs up because of the engine going off the megge, the lucky Ducati man just opening up and going. As the start and finish line at Mallory Park is a mere 250/300 yards from the hairpin, enough said.

Swapping from the 440 to John's USS 350 (ultra short stroke) I might have still been on the same machine, as one would expect with two chassis almost identical, how wrong can you be? This little bike is really something special, a clue came in the sound of the exhaust. Unlike any Duke single I have heard before, a sort of aggressive high pitched bark, instead of the thunder of the bigger machine. Using the same size piston as the 440 (a Cosworth item) mated to a 250 crankshaft to give a very short stroke engine. This unit is intended to rev and rev it does. This particular engine had not been run in

LEADING (AND WIN!) 2X AT THE CHASIS AUG '83. So BURNING anger before and the chassis was also new so all the settings, etc. were educated guesses on John's part. Yes folks MCE scoops the rest - first track test of a development prototype placed in the hands of yours truly.

The chassis, being very similar to John's other Duke, really felt much the same as the 440 but the engine - rarely could two motors so similar ever have felt so different. With instructions to keep revs below 8,000 for a few laps and above 6,000, because it would suffer severe meggaphonitis, out we went. Here we have a bike that responds to rider input in a much more positive way. The first difference is the smoothness of the unit right up to maximum rpm. The 440 was strong, torquey and flexible but easy to ride slowly if necessary, whereas the 350 feels more like a contemporary 4 cylinder machine. Little power at low revs, although

it would round the hairpin without using the clutch, slipping was necessary for a really fast exit. Get the revs over 6,000 and what a gem, the unit smooths out, power floods in and you get thrown at the horizon in a much more positive fashion than on the biggy. Now you feel as if you are on a racer and respond in kind as the aggression so necessary to win races (those were the days) begins to flow.

Lap times quickly dropped below those on the 440 as the pure enjoyment of riding a machine and motor so obviously right take over. Rarely could a different engine change the character of a chassis so drastically. The 440 was a good steady easy ride, the 350 superb, the characteristics of the motor drawing on the skill of the rider just enough to give real satisfaction and improve riding. Into Gerrards at maximum rpm in top, rounding the hairpin at almost nil miles an hour, the left handed Devils Elbow with everything on the limit, the flick right and left at the Esses all made no difference, keep this one on the boil and you have a real fun ride and win races as well. It's a real tribute to John's preparation that his guess work settings were so nearly right from the word go. Performance I would guess to be very similar to the 440 so its potential in its own class, the 350, must be good. A new power valve 350 LC Yamaha was circulating at the same time as me and much to my surprise the USS 350 was able to keep up on performance and do considerably better when it came to handling and braking.

The thanks must go to John for entrusting us with his bikes, particularly the 350 as it was so new. It is easy to see why the reputation of the Witty Ducatis has spread wherever single cylinder Dukes are raced.

	SPECIFICATIONS	
	440cc	350cc SCR
Chassis:	Standard M&3 Ducati Frame	Standard M&3 Ducati Frame
Wheels:	Front WM2 alloy rim 18" Rear WM3 alloy rim 18"	Front WM2 alloy rim 18" Rear WM3 alloy rim 18"
Tyres:	Front Dunlop KR96A 300/325 x 18 wet compound 534 Rear Dunlop KR96 350 x 160 ^{DRV} compound 534 ⁴⁸⁴	Front Dunlop KR96A 300/325 x 18 wet compound 534 Rear Dunlop KR96 350 x 180 ^{DRV} compound 534 ⁴⁸⁴
Forks:	Ceriani lightweight Aermacchi type,	Ceriani lightweight Ducati single cylinder type
Brakes:	Front Pagehlin disc, Rickman hub, Lockheed hydraulics Rear Standard single cylinder Ducati	Front Brembo disc, Ducati hub, Brembo hydraulics Rear Standard single cylinder Ducati
Glassfibre:	Works pattern tank, seat, fairing	Works pattern tank, seat, fairing
Engine:	Bore 87mm Stroke 75mm Capacity 440cc	Bore 87mm Stroke 75mm ^{57.8mm} Capacity 440cc ³⁴⁶
Piston:	CR Cosworth 12:1	Cosworth 10.67:1
Carburettor:	Dell'Orto 40mm pumper	Amal 38mm Concentric M&2
Timing:	28/30° advance	31/33° advance
Gears:	Up rated 1st and 2nd, rest standard	Standard box
Cam:	} DESMO	Full race factory cam giving 135° overlap
Head:		Standard with gas flowing converted to twin plug ignition
Primary Gears:	Straight cut factory gears	Straight cut Witty Ducatis works replica gears
Ignition:	Battery and coil, life 3 hours	Battery and coil, life 3 hours
Exhaust:	Standard pipe works pattern megaphone	Standard pipe works pattern megaphone
WEIGHT	225 LB	230 LB
8HP	45 @ 8,000 RPM	40 @ 9,000 RPM



Bultaco TSS racers

Part two by Barry Hickmott

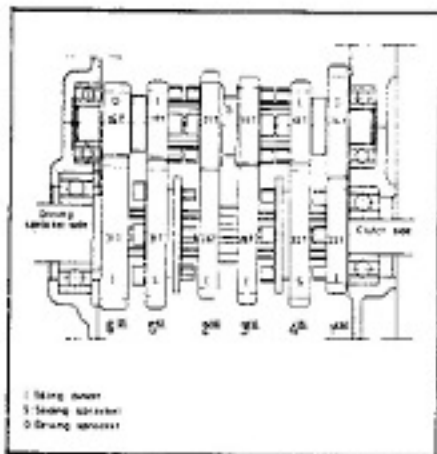
The Barcelona factory for 1968 introduced updated production versions of their successful TSS 125-250 racers. Although still equipped with the basically unchanged watercooled six speed engine unit, the new TSS sported a totally revised rolling chassis. In place of the earlier "plumbers nightmare" frames, stood a superbly proportioned twin duplex frame looking very much like a scaled down Manx Norton assembly. The new TSS racers were now equipped with sleek looking glassibre tank and seat units, but continued to be supplied without rev counter or racing tyres as the Bultaco factory were still restricted to using all Spanish materials. On the surface the improvement in frame design was dramatic, however the material from which it was constructed was the same old thick walled, seamed tube which could be traced back to the first TSS racers. Had the new TSS machines really advanced? It was just as heavy as the previous models and was certainly no faster. This fact was proven when, in 1969, Chas Mortimer won the 125 British Championship on a 1966 old style machine, while a young Barry Sheene finished second on the newer 1968 version. To quote Chas Mortimer "They were either very quick or very slow". In fact he sold his new 1968 machines in order to purchase the much quicker ex John Ringwood 1966 TSS.

With the increasing power and reliability of the Yamaha TD1C, the Bultaco TSS 250 was gradually being ousted from its position as the machine to beat. Barry Sheene in his earlier days campaigned the

Bultaco racers at International level with great effect. Sheene, along with Ginger Malloy and Salvador Canellas, kept the flag flying for the Spanish factory, although the machines were gradually being outclassed. However Salvador Canellas, spurred on by racing in front of his home crowd, claimed a brilliant victory in the 1968 125 Spanish Grand Prix. Handicapped by his Bultaco's lack of pace, Canellas finished the 1968 season with a creditable fifth in the 125 World Championship. Ginger Malloy, the New Zealander who also rode the factory machines, coaxed his uncompetitive 250 single to fifth place in the 1968 world championship. With the introduction of the Yamaha TD2 and ASI racers in 1969 the Bultaco single cylinder racers became obsolete overnight, although, even as late as 1971, Barry Sheene and others did produce the occasional win.

125 and 250 TSS

The 1968 72 x 60mm 250 and 51.5 x 60mm 125 were structurally similar to the earlier liquid cooled motors, but now claimed an optimistic 38.8bhp and 29bhp respectively. The high revving two-strokes, red lined at 9,500rpm for the 250 and 11,500rpm for the 125, were again fitted with Dykes ringed West German Mahle pistons. These pistons were known to crack and given the slightest opportunity, were prone to seizing. Their habit of cold seizing, induced by putting the motor under load before its temperature reached the operational minimum of 70°C, caught out many a new



Six speed gearbox, used on the 125/250

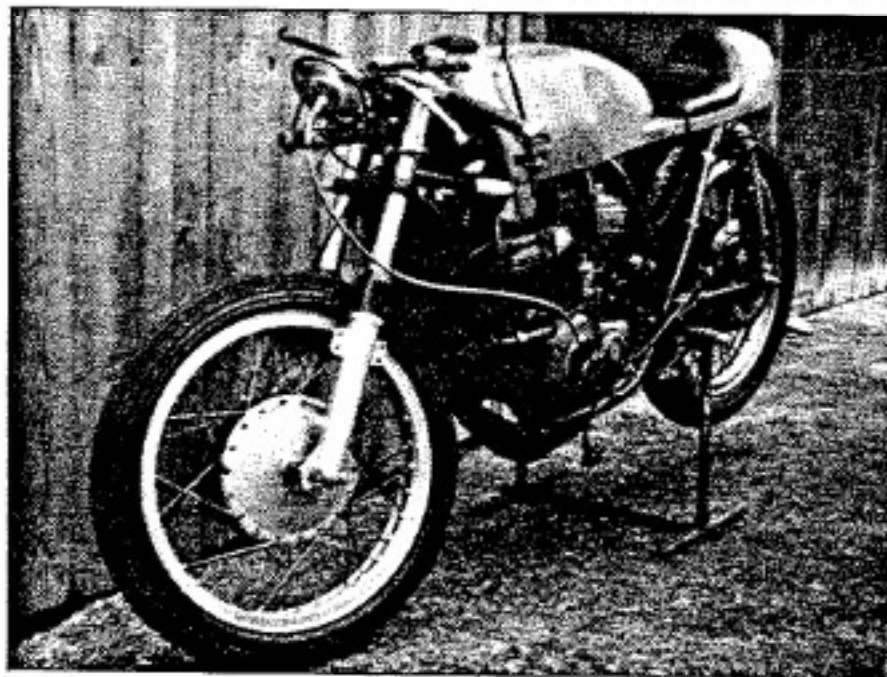
owner, who invariably found himself skidding down the tarmac on his first lap. Well it happened to me!

The small full circle un-padded crankshaft required an outside flywheel to maintain its speed during gear changes. This was probably the consequential effect of Bultaco's efforts to reduce primary compression. With hindsight the motor, which was not the easiest to keep on the boil, could have been made more manageable with a larger flywheel assembly, this would have decreased the crankcase compression and widened the power band without much loss in top end performance.

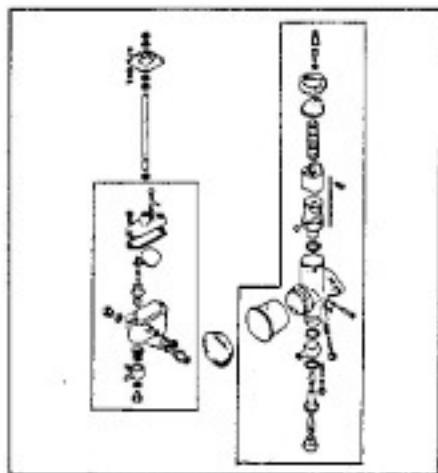
By 1968 the "J" sectioned Bultaco conrod had been fitted with a caged needle roller small end. The previous crowded roller assembly was reliable enough, but trying to push a gudgeon pin through a hot piston and then through a circle of grease held needle rollers was enough to make even a grown man cry. Most owners devised their own methods of overcoming this nerve racking task, the most common was to manufacture a short stepped gudgeon pin sized bar, which was a couple of thou' smaller at one end and this was used to hold the loose needles prior to assembly. The action of fitting the gudgeon pin would push the bar through the small end and out of the gudgeon pin hole in the piston.

The Bultaco's sand cast cylinder, although water cooled, was heavily finned. This extremely rigid casting had a short bottom spigot and was dowled to the vertically split alloy crankcases. The finless cylinder head was held down by four through studs, with four additional smaller studs securing it to the cylinder. The shallow double sphere offset combustion chamber was obviously ahead of its time, as it is now a standard feature on all later type Yamaha TZ race wares.

The porting of these two new machines followed the traditional Bultaco layout. They boasted a large flat topped bridged



1968 250 TSS with chain primary drive, once owned and raced by Martin Sharpe



A Spanish B32GP Amal carburettor assembly was fitted to the 125 and 250 TSS

exhaust port, which was flanked by two rearward facing transfer ports. The inlet looked as if someone had used a 32mm drill to form its shape and being low set in the bore and inclined at about 15°, produced a total inlet period in excess of 200°. This arrangement hardly promoted a wide spread of power and the 125, in particular, proved difficult to ride.

The ignition, like its predecessors, was taken care of by a Femsa CDI magneto, which, as it turned out, was one of the more reliable aspects on the TSS racers. However, if it did fail the complete system had to be changed, because the stator and coils were resin encapsulated making repair nigh on impossible. Many Bultaco TSS machines seen today are fitted with the more readily available and cheaper Motoplant system that was originally developed for the go-kart lads.

Up to 1969 the primary drive to the all metal clutch was handled by unpredictable chain that had been with the TSS since its conception back in 1959. However one of the last modifications to be made was the introduction of gear primary drive. Not the accepted normal pair of counter rotating

gears, but an adaption which retained the existing indirect gearbox and crankcase assembly. To maintain the clockwise clutch rotation, Bultaco added an idler gear between the clutch and crankshaft. However the support bearings suffered as many problems as the chain it replaced and only a few machines performed as they were intended, Sheene's 125 and 250 being the only ones that readily spring to mind.

Circulation of the TSS's coolant was achieved by means of simple thermosyphon. The water heated by the engine rises to the radiator, where on cooling it becomes more dense and falls to the bottom, it then passes through the hose to the base of the cylinder only to start its cycle over again. Not being equipped with a thermostat, the only way temperature could be controlled was for the rider to blank off the radiator. Optimum performance was said to be achieved at 85°C but I have spoken to a number of TSS owners all of whom have their own ideas, ranging from 75° - 90°C. This suggests one of two things, either the temperature gauges are wildly inaccurate or that optimum running temperature varies from engine to engine. The latter is more believable and was a typical problem encountered by most TSS owners - no two machines performed alike.

Listed as a B32 GP Amal, the carburettor was in fact more like a floatless Monobloc than a GP. Both 125 and 250 ran the same 32mm diameter Spanish made instrument, which due to indifferent performance was often replaced by a flat slide Gardener or an Amal Concentric.

Apart from the obvious bore dimensions the 125 and 250 differed only in primary drive ratio, outside flywheel mass and a few other minor details. The cycle parts were also common to both and included 35mm diameter forks and 160mm diameter brakes. This produced a large, heavy 125 but a lightweight under braked 250, however what they lacked in speed they more than gained on handling.

The problems encountered with the later TSS's were many, piston cracking,



Conical rear brake hub, 1966 250 TSS

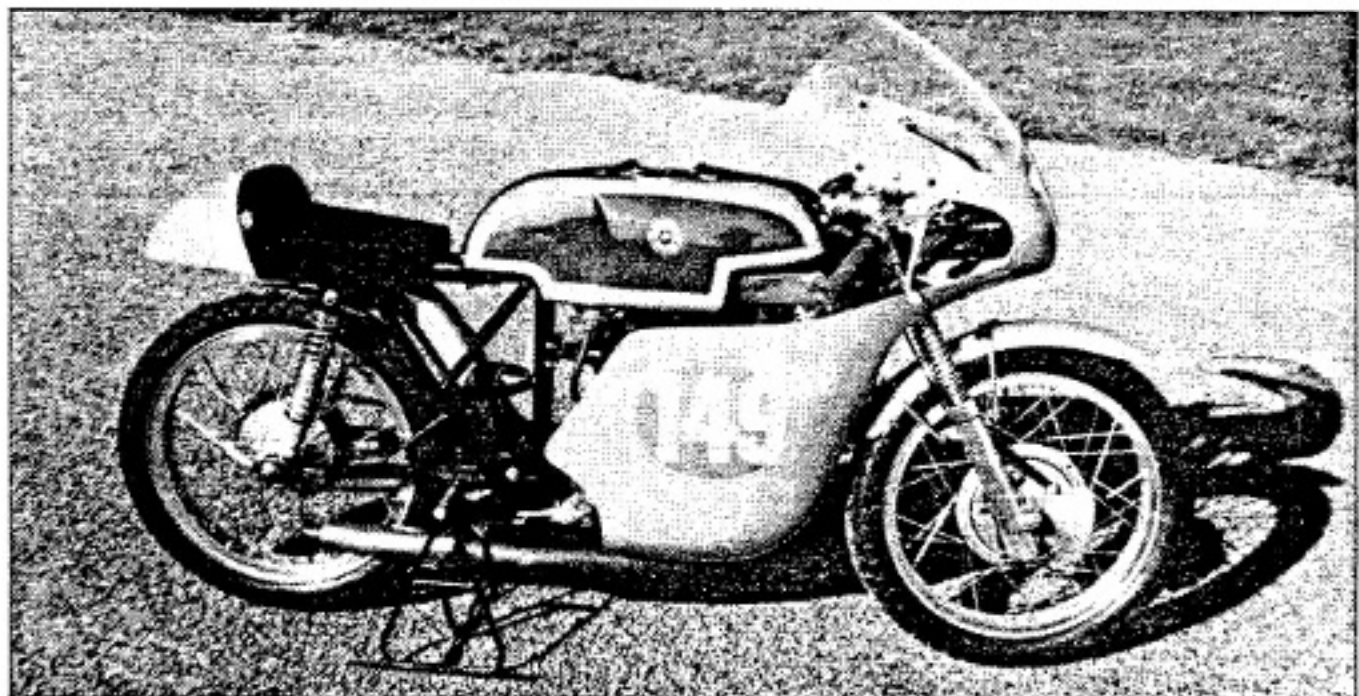
snapping primary chains, rapid oil seal wear, self destroying clutches, cracking exhausts, the list goes on, but the TSS did fill an important gap at a time when little other raceware was available. They were never cheap, but they were being imported in sufficient numbers to satisfy the ever growing need for new machinery.

As a classic 250 racer, the watercooled Bultaco looks good, but I am afraid to say there are only a couple of bikes that are capable of winning and these have only been made competitive by extensive modification and the adoption of multi port cylinders.

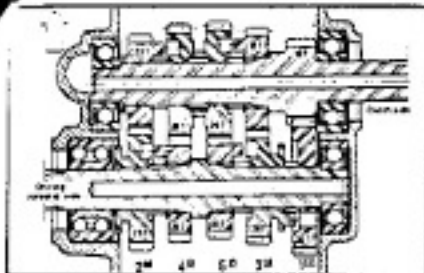
350 TSS

Based on their successful motocross engine, in 1967 Bultaco developed the 83.2mm x 64mm 5 speed 350 TSS racer. This machine, claiming 47.5bhp at 8,000rpm, was similar in appearance to the updated 125 and 250 TSS models. By sharing forks, wheels and suspension with its smaller stablemates the 235lb 350TSS was an attractive alternative to the expensive to maintain 4 stroke 350 Aermacchis, which were ruling the roost at the time.

The all alloy 350 engine had porting that resembled the 250-125 and even its basic structural layout was similar. However, the new 350 engine was equipped with gear primary drive with a forward rotating crank shaft. This more conventional construction meant that Bultaco adopted



1965 250 watercooled TSS, owned by Colin Grant



350 TSS five speed gearbox

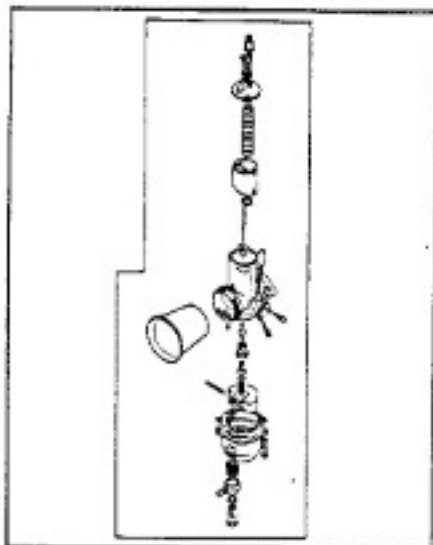
the direct crossover Japanese type gearbox arrangement which should have resolved the primary drive problems once and for all. Unfortunately it didn't, as the crank end nut, retaining the primary pinion, had a habit of working loose and breaking its split pin in the process, it would finally bore a neat hole right through the expensive outer primary drive case.

Bultaco, recognising the problems that the B32 GP type carburettor had been causing on the smaller machines, played safe and fitted the far more reliable 38mm Amal Concentric to the 350. Another deviation from the 250 - 125 was its oval twin plug combustion chamber. The information sheet from the factory shows the Femsa ignition firing both plugs at once, and Bultaco actually list a Lodge

RL51 for the front and a RL49 for the rear plug. In practice only one plug was used with many owners following Frank Sheene's example by employing a single plug conversion. Frank, unhappy with the standard combustion chamber shape, filled the existing oval with alloy weld. He then remachined the head, which ended up looking identical to the 250 - 124, and finally re-tapped the plug hole vertically and central to the rear offset combustion chamber.

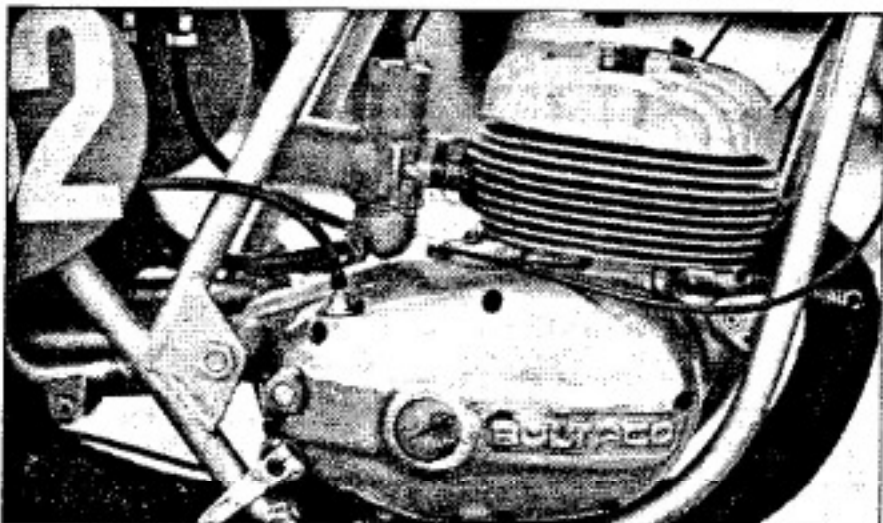
The frame while looking similar to the 250 - 125 was in fact completely different, as was the glass-fibre petrol tank. However Bultaco still produced a superb, stable handling machine, although it could have performed even better with a larger front brake.

The new 350 did not enjoy the success of its smaller brothers, but riders such as Barry Sheene and Ginger Molloy explored its potential fully extracting some remarkable performance from this simple machine. The final straw, as with the 250 - 125, was the introduction of the vastly superior Yamaha production machinery. The Yamaha TR2, also air cooled, developed 20% more power, had better brakes and accelerated like the wind. The 350 Bultaco just couldn't live with competition such as this and so was quietly dropped from production in late 1969.



350 TSS 38mm Amal concentric carburettor assembly

In their day the TSS racers were as good as the best, however with little development it was obvious that they were destined to fall to rapidly advancing Japanese technology. But without Franco Bulto and his fire engine red racers, the motorcycle world would certainly have been a poorer place.



Air cooled 350 motor, five speeds and Spanish Amal concentric carburettor

SPECIFICATIONS

BULTACO TSS 250 and 125

Engine: Single cylinder liquid cooled two stroke

Bore: 72mm (51.5mm)

Stroke: 60mm (60mm)

Capacity: 244.29 (124.98)

Compression: 11.75 to 1 (12.5 to 1)

Power output: 38.8bhp (29 bhp)

Ignition: Femsa 3.25 BTDC (2.8 BTDC)

Gear box: Six speed

Clutch: Wet multi plate

Carburettor: B32 GP Amal min jet 400 (350)

Petrol tank: 13 litre (2.86 imp gal)

Petrol oil mix: 20:1 Castrol R20

Radiator capacity: 1.8 litre (4 imp pint)

Wheel base: 1320mm (52")

Saddle height: 700mm (27.5")

Ground clearance: 210mm (8.2")

Brakes: Front - 160mm TLS

Rear - 160mm SLS

Wheels: Front - 18 inch

Rear - 18 inch

Weight: 211 lbs (205lbs)

BULTACO TSS 350

Engine: Single cylinder air cooled two stroke

Bore: 83.2mm

Stroke: 64mm

Capacity: 349.95cc

Compression: 10 to 1

Power output: 47.5 at 8500 rpm

Ignition: Femsa 2.3 - 2.5 BTDC

Gearbox: 5 speed

Clutch: Wet multi plate

Carburettor: 38mm dia Amal concentric

Petrol tank: 13 litre (2.86 imp gal)

Petrol oil mix: 20:1 Castrol R

Wheel base: 1320mm (52")

Saddle height: 700mm (27.5")

Ground clearance: 210mm (8.2")

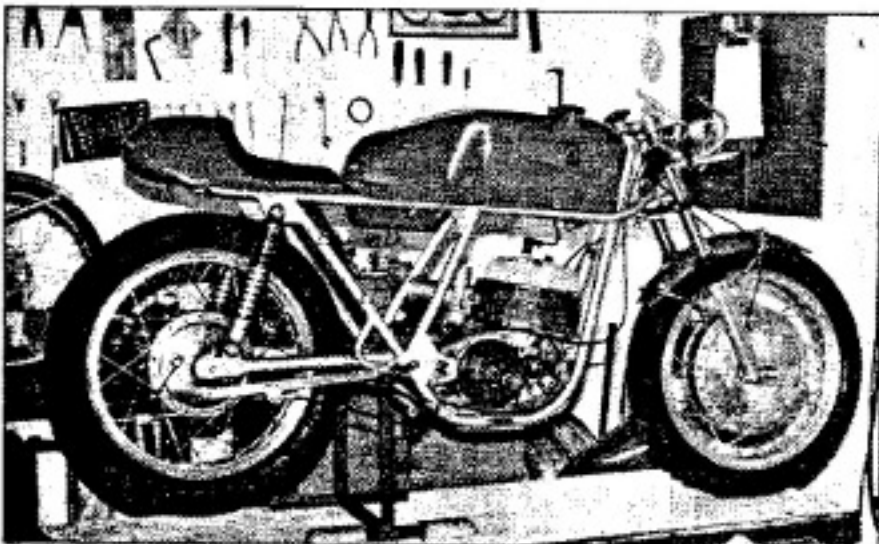
Brakes: Front - 160mm TLS

Rear - 160mm SLS

Wheels: Front - 18 inch

Rear - 18 inch

Weight: 107 kg (235 lbs)



1969 350 TSS with Yamaha TD2 front brake

VRRRA VINTAGE MOTORCYCLE ROAD RACING ASSOCIATION INC.
1985 ANNUAL RACE MEETING

SUPPLEMENTARY REGULATIONS

A race meeting for vintage motorcycles will be held at Shannonville Motorsport Park near Belleville, Ontario, on the weekend of August 24/25 1985. The meeting will be organized by the VRRRA Vintage Motorcycle Road Racing Association Inc.

ELIGIBILITY

1. Motorcycles:

Only machines that meet the machine and eligibility requirements of the current VRRRA Rules and Regulations. Basically this allows all machines of a **model year not later than 1967** in Period 1 Classic Vintage plus listed exceptions. In addition, events will be held for full race Period 2 Vintage Superbikes (1968 - 1972). Riders must read these rules thoroughly and apply, in writing, in advance of the event, for any exceptions.

2. Riders:

Only members of the VRRRA and the invited clubs may enter.

ENTRIES

Entries open on the publication of these regulations and close **Thurs, August 15, 1985**. Late entries will be accepted after this date and at the track but will be subject to an additional \$10 late entry fee. Entrants are also encouraged to pre-enter so as to have their names and machine details printed in the souvenir programme.

CLASSES

See VRRRA rules and regulations.

INVITED CLUBS

For this event, the VRRRA is inviting the Ducati Owners Club of Canada and The Norton Owners Club, to compete. Classic machines that are ridden by members of these clubs that are not eligible for vintage events will have their own event to compete in.

EVENTS

1. High-Speed Reliability Trials: (Street legal machines only) To be confirmed at the track. A high-speed reliability trial is not a race. A competitor rides the course for a fixed time duration and may qualify for a class of award based on the number of laps completed.

Trial time 20 minutes plus one lap: minimums for class awards-

	<u>1ST class award</u>	<u>2ND class award</u>
Motorcycles under 500cc	17 laps/1:10 avg. lap time	15 laps/ 1:20 avg. lap
Motorcycles over 500cc	17 laps/1:10 avg. lap time	16 laps/ 1.15 avg. lap

2. Races:

Awards will be given for 1ST, 2ND, and 3RD finishers in each class. Depending on entries, these races will be broken down into qualifying heats and finals. At the discretion of the event organizers, any classes with insufficient entries will be combined with another class so as not to waste valuable track time. Classes combined in this way may, however, be scored separately.

3. Concourse d'Elegance:

On the Sunday morning of the event, machines may be displayed along pit lane for concourse judging. General appearance and standard of preparation will be the main criteria for judging. Three awards will be given in each of street-legal and competition categories. Entrant's or spectator's machines are eligible for this event.

METHOD of STARTING

High-Speed Reliability Trials: LeMans, assistance after safe time interval has elapsed

250, 350, and 500 GP : Run and Bump with dead engine, assistance after safe time interval.

All other events : Clutch start with engine running.

Page 2
SUPPLEMENTARY REGULATIONS

REGISTRATION & SCRUTINEERING

All competitors must sign in upon arrival at the track and collect a receipt from the clerk for presentation with the machine(s) to the scrutineers. The scrutineers will first verify the eligibility of the machines. Then, the machines will be examined for race worthiness. Finally, the rider's equipment will be examined. When all of these items have passed scrutineering, an identifying sticker will be affixed to the machine(s). No machine will be allowed to practice or participate in any events without having obtained a scrutineering sticker. The scrutineering standards for eligibility, machine preparation, and riding equipment are detailed in the VRRRA Rules and Regulations. It is the entrant's responsibility to read and meet these requirements.

NUMBER PLATES

1. Riding numbers will be allocated strictly on a rotation basis. As an entry is received, it will be assigned the next available number. Where possible, we will comply with a request for a specific number. These will be given on a first-come-first-served basis. Notification of a rider's number will be mailed with confirmation that the entry has been received. If a rider wishes to enter more than one machine, the one number can and should be used for all machines.
2. Each motorcycle must be fitted with three number plates: one to show forward and one to show on either side. The side plates must be completely in view, behind the rider seated in the normal riding position. (We recommend regulation size 11" x 9" ovals). Numbers must be at least 6" in height and of 1" thickness. All number plates must be black numbers on white background for Period 1, and black on yellow for Period 2. Untidy number plates reflect poorly on the sport of Vintage Racing. Failure to apply these guidelines is a cause for rejection of a machine at scrutineering. It could also lead to the tower failing to score a rider.

ENTRY FEES

Each entrant must pay an entry of \$ 55, irrespective of the number of machines to be ridden. This entitles the entrant to, at least, two competitive event rides, plus as much practice time as is available. The entry fee covers one named rider only. Pre-entrants may change both rider and machine provided that they inform the clerk when they sign in. Entries made at the track or after August 15 will be subject to an additional \$10 late entry fee. An entrant must be a member in good standing of the VRRRA or one of the invited clubs. Application can be made for either at the track. For riders of street machines entering time trials only, the entry fee is \$ 25.

CAMPING & SPECTATING

Shannonville Motorsport Park, as standard policy, charge all people entering the grounds an admission. This includes competitors, family, crew, and spectators. Children under 12 are admitted free. This admission entitles the purchaser to use the facilities of the park for camping over the weekend. The park will be open on Friday evening, August 2 .

CONDUCT

All participants are expected to conduct themselves in a manner consistent with the family and social nature of the event. Beyond this, entrants have additional responsibilities. Specifically, riders must insure that neither they nor their crews consume alcohol or other intoxicants while the racing programme is in progress. Any rider or crew member who is, in the opinion of the referee, either intoxicated or who is found consuming intoxicants will cause that entrant to be barred from further participation in the event.

INFORMATION

Registration: Manzi Warwick, 1870 Spruce Hill Dr., Pickering, M1S 1X4, phone (416)291-2720
Event Coord: Dave Hughes, 1345 Roylen Rd., Oakville, Ontario L6H 1V5 (416) 842-1843
VRRRA Pres.: Tom Faulds, Box 104, Claremont, Ont., L0H 1E0, phone (416)649-2928