Norton Notice

THE NEWSLETTER OF THE NORTHERN CALIFORNIA BRANCH NORTON OWNERS CLUB

NO. 115

NOV., 1987





Norton Notice

is published by the Northern California Branch of the Norton Owners Club. Its purpose is to inform and entertain members regarding all aspects of the Norton motorcycle, including history, technical advice, and preservation of the marque.

NORTON NOTICE is a reflection of its readership, who are encouraged to submit any article, technical tip, photograph (original or otherwise) as long as it is in good taste, so that other Norton enthusiasts may enjoy it. For Branch members who cannot attend club meetings or club rides, the NORTON NOTICE affords an opportunity to share experiences and information with the membership of the Branch, and to bring the Branch members closer together.

The deadline for items to be submitted for publication is the 15th of each month.

Membership in the Northern California Branch of the Norton Owners Club is available for \$30.00 per year.

Membership dues are payable to the Branch Secretary/Treasurer.

Renewal dues are payable at the end of the individual's membership year, that month being designated by the last number of the individual's membership number as located on the mailing label of the NORTON NOTICE or the membership card. For example, 745/2 denotes member 745 with dues expiring on the 1st of February.

All changes of address should go to the Branch Secretary/Treasurer, not the NOTICE Editor.

Subscription to the NORTON NOTICE only is available for \$18.00 per year. This does not include membership in the Northern California Branch of the Norton Owners Club, nor does it afford any of the rights or privileges of membership in the NOC.

Membership in the Northern California Branch of the Norton Owners Club entitles a member to monthly issues of the NORTON NOTICE and bi-monthly issues of ROADHOLDER magazine, which is sent directly from England, keeping members informed of Norton owners' activities worldwide. Membership provides voting privileges at all NOC and Branch meetings, and allows one to purchase Norton spares directly from England, at significant savings, through the NOC Spares Program.

ON THE COVER: Thanks to Corey Levenson and MCN we have a photo and article about Norton's reentry into the world of racing.

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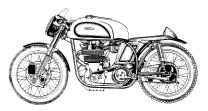
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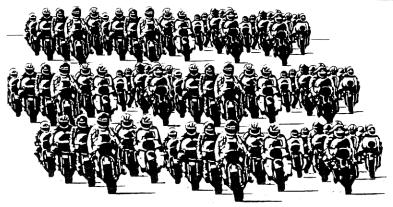
NORTON OWNERS CLUB

Important!

(Please take note of the following fine print.)

The object of the Northern California Branch of the Norton Owners Club is to promote, encourage and develop all motor-cycling activities. The Club's members are owners of Norton motorcycles, and they often submit for publication in the Norton Notice technical tips pertaining to motorcycles of the Norton marque. Technical tips so published have been reviewed for technical content and are believed to be both acceptable and workable, but no guarantee is made or implied that they will work correctly, nor is any liability assumed by either the Norton Owners Club or the authors for any problems resulting from use of these technical tips. The Club also assumes no responsibility for the acts or omissions of its members in connection with Club activities. Norton Notice articles or other material express the authors' views only and not necessarily the official policy of the Norton Owners Club or its Northern California Branch. The editor reserves the right to accept, reject or alter all editorial and advertising material submitted for publication. Advertising published does not imply endorsement of products, goods or services. Now you know.





UPCOMING EVENTS



NOTICE: IN THE EVENT OF RAIN ON THE DAY OF A CLUB RIDE, THE RIDE IS AUTO-MATICALLY POSTPONED ONE WEEK. ALSO, RIDERS SHOULD HAVE PLENTY OF OIL AND CASOLINE BY THE SCHEDULED DEPARTURE TIME AND ALL PERSONAL PROBLEMS TAKEN OF. IN OTHER WORDS . . FULL TANKS AND EMPTY BLADDERS!



	DATTE	may	EARALL
P	. Nov. 8	Sun.	All British (Euro too) Swapmeet, 7870 Deering Ave., Canoga Park, 8A.M2P.M. Info: (818)346-6979. Sponsored by the BSAOC.
(1)	*Nov. 12	Thurs.	*Branch meeting at the Prince of Wales Pub, 106 E. 25 St., San Mateo, 7:30PM. Racer's Night. Bring your questions and ask the pros.
B	*Nov. 22	Sun.	*Branch Ride. Marick Payton leads a merry band from Alice's to the coast. Meet at 10:00A.M.
Œ	*Dec. 11	Fri.	*Annual Christmas Party, Class Reunion, 2700 El Camino Real, Palo Alto, 7:30 P.M. Come join us for the festivities!
(1)	*Jan. 14	Thurs.	*Branch meeting. Zuka's, 1 Gilbert St., S.F. (across Bryant St. from the Hall of Justice at 7th and Bryant), 7:30 P.M.
R	*Jan 24	Sun.	*Branch ride. Mt. Hamilton Freeze Ride. THE Classic winter event. Lead by Louis Mendelowitz Details in next issue.

NORTON OWNERS CLUB



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TWISTERIP TWADDLE

Well gang, this is it. I missed my column last month as I was all wrapped up with moving house (you'll note the new address and phone number on page 2), so you will be reading this about the first or second week of November and this is my last real chance to make the pitch for audience participation in the running of the Branch before election time at the Annual General Meeting and Holiday Party (which, incidentally, will be on Friday, December 11th at the Class Reunion in Palo Alto). Wave the flag, blow the horn. Spin the

grogger. Spin the bottle?

We have had a pretty good year. Turnout for monthly Branch meetings has been surprisingly good most of the time, we had some good rides on some fresh roads, and the Rally was well attended at an excellent site. And yet the autumn of my year as president of the Branch finds me with a feeling of uneasiness. Sure, we've modified a few things and not all of them flew; that's to be expected. I'd still like to find someone who would really grab the "Technical Coordinator" ball and run with it; maybe next year. And I think our relations with the UK Club have been sorted out as well as could be in the circumstances—for now, given that inflation seems to be our bedmate forever more, and there's not much doubt as to who is the fuckee in that tango.

The real problem is the chronic imbalance of majority anathy and minority burnout. The minority are the Branch officers, who stumble in and stand rudder watch for a year or two and then go off--sometimes without a ready replacement. Now that I've done my twelve-month turn at the wheel, I am quite sympathetic to the need an officer has to go off duty after a period of time. Scot had done two years when he shanghaied me last December; then and now, I thank him very much for his work as president. Now, in a couple months, Lou will be turning over his typewriter. He's done an outstanding job as N.N. editor, and it doesn't bother me one bit that he's ready to call it a wrap. Alan as Secretary-Treasurer and Margie as V-P/Rides Coordinator have also made invaluable contributions to the welfare of the Branch, and I am glad that both of them seem willing to hang on a bit longer, though some assistance may be

But what does bug me, just a bit, is that our effort to make the Branch government more representative has not borne fruit: At every meeting since August, I have invited members to consider the coming AGM and elections and to nominate candidates for offices (or volunteer themselves). My words seem to have fallen on deaf ears. No once has manifested any interest. Can it be surprising that, when I contemplate the health and future of the Branch, I feel slightly uneasy? Come January we may have no Norton Notice, so I'd better say it now. Or perhaps it's just the way of it that no one ever steps forward before the election; then the horn blows, the cavalry rides to the rescue,

and a volunteer is found. Last year, it was I who found himself exposed when everyone else took a step backwards. OK, guys, fun's fun and I'm game for another year. But we could use a little competition here, and it would be even more fun to have, just once this decade, a contest for the office. Anyone man (or woman) enough among you to challenge me?

Ultimately, as Paul Hogan would say, "No worry, Mate"--this Branch exists to service the interest of its members, and if that interest flags, we can always ride our Nortons by ourselves and still meet at Alice's on Sundays. Don't know about you, but I have a good-size pile of N.N.s on my bookshelf, plus 2500 shares in the company (yes, the certificate did finally come), so I believe I'll survive any drought; but, frankly, it's a heck of a lot more fun with youse guys around for yucks. Be that as it may, please be advised that I agree with Scot M. that, for the sake of the health of the Branch, two years is the upper limit on how leng any one person should stay on as president, so in December '88 I'm turning over the hat, even if I have to hang it on the peg; unless some member reading this thinks he or she can wrest it from me sooner. Have a go.

November's meeting will be at the Prince of Wales in San Mateo and, if things go to plan, it will be Racer's Night, so do come along, drink some British suds and listen to some good bench racing. Oh, yeah, we'll be taking nominations for Branch offices, too.

To the rear, march!





well, it wash t an obsolete model when I joined the queue.





Hi folks.

Art's been at it again. Sending you guys some useful tidbits, that is. He writes, "I would also like to comment about the last installment of "Tech Talk" [Oct. issue] where Phil mentioned that he thought the John Player Norton was the most beautiful motorcycle ever made. I agree with him 100%. Of course, Mike is also correct when he says that the Fastback is a much prettier bike. I also agree with Harvey that the Production Racer was the finest British motorcycle ever made. So I think the only sensible solution is to give in entirely to temptation and acquire all of them!" He also passes on a tip about Boyers which you can find under "Tech Tips". Thanks for keeping up the flow of information, Art.

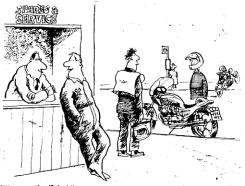
Also corresponding this month is Carl Mazel who is more than willing to answer your questions about Nortons. He is currently trying to get started on a Manx racing project. Questions can be sent to the NOTICE or directly to Carl at 10606 Jordan Ave., Chatsworth, CA 91311.

*****The Dick Mann Rally attracted a bunch of people on a warm (and somewhat dusty) day outside of Brentwood. Vintage dirtbikes were everywhere and included a MKIII-engined Nort which reportedly ran strong. It sure looked like a handful. Tom Dabel snatched second in his race aboard a Husky (his first racel), Gus Varetakis tried his luck on a B50, and at last sighting Don Danmeier was walking the trials course with other riders prior to tackling it on his Triumph Cub. Like last year, there was a large turnout of older road machines. The location of the event makes it a great Sunday ride.

*****In response to the Prez' message in this issue I can tell you that I'm noticing in many of the club bulletins I read a similar apathy among members. I can name at least five bike organizations which have made urgent pleas for participation through their newsletters, and this is nothing new, and can point to our own NOC in England as having recently undergone a major shakeup (Editor and Secretary leaving). It may be that clubs such as ours are simply too ambitious. Our schedule typically calls for two club functions per month. Add in several more general motorcycling gatherings during the busy summer months and you can live motorcycles nonstop for

much of the year round. Perhaps the novelty wears off under such a rigorous schedule, especially if some of these events last for several days at a time. Many of us belong to several groups (non-motorcyling ones count, I think) and simply run out of free time. Under those conditions attendance at meetings or rides becomes less than an ideal way to spend an evening/weekend.

I have been encouraged by attendance at meetings and think that the idea of rotating them around the Bay Area has proven successful. I enjoy seing new faces and hope more give the meetings a try. I missed the last two rides (Egads, and the Rally



"Have you noticed? As bikes get more complicated the riders seem to get more

tool) due to raceday conflicts and am eager to get back on the circuit again. But I sensed that the ride participation was down during the spring, even though I thoroughly enjoyed the days with the people who did come. Perhaps we need to reaffirm the rationale of the club rides—that their purpose be to enjoy the countryside and people who come to ride. That we abandon any notion of riding hard and instead come to relax on man's most marvelous mode of transportation. Maybe this will encourage greater participation; maybe we can fill the restaurant instead of just occupying a few tables.

Sorry, Phil, but I'm taking over last place.







PARAPHERNAL IA

1. "My success is due to my unapproachable Norton" T-shirt, Large only. 2. NOC classic "N" T-shirt, dark blue with white print. Larg 3. " " " , black with white print. Large of the with white print. Large of the with black print. Medium 5. Northern California Branch logo T-shirt, white with blue 5. Northern California Branch logo baseball jersey, white w X-large only.	d, Large	\$8.00 /0.50 8.00 8.00 8.00 8.00
NOTE: All T-shirts are \$1.50 postage. 7. Commando Service Notes, 45 pages compiled and printed in 8. 3"x 3" NOC machine badge. 9. 4 1/2" red NOC sticker 10. 2" " "" 11. 2 1/2" x 3 1/2" red, white, and blue NOC sticker 12. 2" red, silver, and black NOC sticker 13. 4" red and white embroidered cloth NOC patch 14. 2" " " " " " " " " " " " " " " " " " "	Send orders to: Suran Meissner 5300 Tie Gulch Rd. Santa Cruz, CA 95065 (408)426-6526 -Ner IN STOCK	5.00 6.00 1.00 .50 .75 .75 2.50 1.50 1.50 1.50 1.75

NORTHERN CALIFORNIA BRANCH TOOL LOAN-OUT PROGRAM

Get in touch with Harry Bunting if you need one or more of the following tools for working on your Commando. A refundable deposit equal to the replacement cost of the tool is required at the time you pick it up.

TOOL	DEPOS	ΙT
exhaust lock ring tool	\$1	10
timing cover oil seal guide		5
clutch spring compressor		12
clutch locking tool	1	18
valve spring compressor		
rocker spindle puller	2	25
crankshaft sprocket puller		12
timing pinion puller		20
gearbox layshaft bearing extract	tor	15

Harry Bunting (415) 968-2020 1401 Gilmore St. Mountain View, CA 94040



Genuine Orlon

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ADVERTISING RATES

	1/4 pg	1/2 pg	Full pg
6 mos	\$35	\$70	\$140
1 yr	\$60	\$120	\$240

Send ad copy and check to the Editor

means

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NORTONORTONORTONORT

s WART ADS



ALL ADS WILL RUN FOR TWO MONTHS UNLESS YOU RESUBMIT THEM IN WRITING TO THE EDITOR.

FOR SALE

1974 JPN as seen on the cover of the Feb. '86 issue of the NOTICE (second from left) and in CITY BIKE. Low miles. New valves and porting. \$3,500.

John (408)476-3663 or Wayne (408)458-9069

FOR SALE

Dunstall kit in P.R. yellow. This includes tank, fairing, dualseat, and rearsets. Will also throw in rebuildable 2 into 1 into 2 headers. This kit has never been on a bike — honest! \$450 or best offer.

Mike (415)887-2720 after 5 P.M.

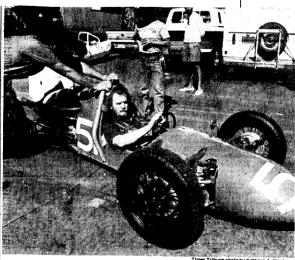
FOR SALE

JPN fairing kit complete with mounting brackets. N.O.S. \$375.

Gene Ross (Visalia) (209)734-1951 days or (209)732-3748 eves/wknds



Model 500T in 1954 version



Get me on the road

John Streets of Redwood City gets a push from his crew before testing his Norton motorcycle engine Friday during the Monterey Historic Automobile Races at Laguna Seca. Streets' car, a 1953 Staride F3, will race in the 1949-1963 Formula Cars event.

Thanks, Art













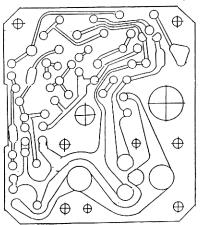
RITA REVEALED- PART TWO

WHAT'S IN THE RITA AMPLIFIER

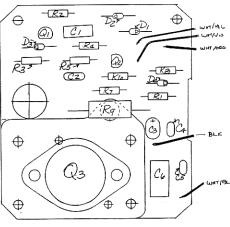
Mistral lists two types of amplifier modules--AB5, for use with an external ballast, and type AB11, for use without ballast. The only universal variety and type AB11 amplifiers.

which are the units supplied for Nortons, Triumphs, and most Jap bikes. These modules contain a single printed circuit board, and are not potted, so repair is easy, if you easy, it you can figure out the parts they use. The third figure is a drawing the bottom side of the printed circuit board. The fourth figure is a top view of the same board, showing the arbitrarily assigned, for clarity. We took a care in tracing this information, but aren't ABSOLUTELY

aren't ABSOLUTELY aure that the achematic is completely flawless. If you spend enough time looking at these two figures, you can trace out the achematic, which is schematic, which is shown in Fig. 5. shown in Fig. 5.
And once you look at
the schematic, if
you're familiar with
electronics, it is
fairly easy to see
what is going on.
The entire
contraption arounts contraption amounts to an expensive one-shot. PNP ransistor Q2, and NPN transistor (are off between iring pulses. Q3
is normally on,
because of the 150
ohm resistor between
collector and base
(R9), causing energy flow through the

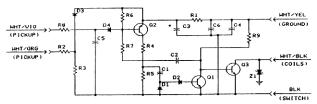


BOTTOM VIEW OF BOARD



TOP VIEW OF COMPONENTS

FIG. 5 LUCAS RITA SCHEMATIC



When a pulse is induced into the pickup coils, Q2 begins to turn on, which, through C1, inducing base current into Q1, beginning to turn on Q1. Since the C2-R7 network is also connected to the base of Q2, the switching is regenerative, and very quickly Q2 and Q1 are fully saturated.

When Q1 saturates, it diverts the base current from Q3, and Q3 turns off. This interrupts primary current flow to the coils, and the coils fire the plugs. S0 sicroseconds or so later, Q1 stops receiving base current as C1 charges up through R4, Q3 is turned on again, and things head back to the normal condition.

A press-fit bodied anubber Z1 is connected to the output transistor collector, to limit the maximum voltage stream experienced by Q3. It's pressed into the case of the sodule, and connected to the board with a jumper wire. This performs a similar function to the condensers in a conventional ignition system. This anubber is bipolar-that is, it limits transients of either positive or negative voltages equally well. The anubber is the only part of the sodule connected to the case. This trick allows Lucas to use the same sodule for both positive and negative grounded systems, simply by changing the external wiring. This part of the design is somewhat clever. The rest of it could be replaced with a S55 timer and a power MOSFET.

Unusual parts:

1. Note that the Lucas output translator—the one we called O3—has a strange third pin in addition to the ordinary T0-3 pinout, but examination of the PCB layout shows that it's just another collector connection, and not necessary. So any good T0-3 switching translator will fit.

2. The anubber is even weirder. Functionally, it's like the General Instrument "Transorb" or a GE MOV, which are probably superior to the Lucas unit, but neither offer a press-fit mounting package. The only replacement device that comes in a press-fit package is made by ST-Semicon, of Bloomington, IN., part number SOZP110BC. Since ST-Semicon just started selling these devices in the press-mount package this year, they may be hard to find. ST-Semicon also sells the same device, and in a D0-5 package (stud-mounted diode), as part number SOCZP110B. Installation of the DO-5 package unit requires that you cut out the ol Lucas part, and drill a 1/4" hole in the module wall, mounting the new

Alternative is to install a big MOV on the outside of the module, between the bike frame and the White/Black lead. Leas tidy installation but it would work. Leas tidy installation,

Replacement components:

Ordinary switching diodes, 1N4148 or equivalent Capacitors: C1 . .1 uF, film cap--polypropylene, mylar, or polyester

СЗ

.1 uf dipped ceramic, 50 WVDC or more 3.3 uF tantalum, 50 WVDC .001 uf dipped ceramic, 50 WVDC or more

uF, film cap--polypropylene, myler, or polyester, 50 WVDC

Resistors:

3.3 K, 5%, 1/4 watt carbon composition
1.2 K, 5%, 1/4 watt carbon composition
1.8 K, 5%, 1/4 watt carbon composition
680 ohm, 5%, 1/4 watt carbon composition
33 K, 5%, 1/4 watt carbon composition
10 K, 5%, 1/4 watt carbon composition
150 ohm, 10%, 5 watt wirewound R2,R8 R3 R6.R7

Transistors:

Q1 Any general purpose NPN amplifier -- 2N2222A, 2N3904, or

Q2 Any general purpose PNP amplifier--2N2907A, 2N3906, or

aз A power NPN Darlington translator with Hfe around 100. BVceo of 300 VDC minimum, and ft of 2 MHz . There are a lot devices that will work. The Motorola unita MJ10000, MJ up through MJ10009, or the equivalent, are all excellen replacements, and are reasonably priced.

TROUBLESHOOTING THE UNITS

Intermittent failures with electronic modules are usually NOT within the module, but from wiring harness problems. It is a good idea to both crimp AND solder all connectors and splices--your Isolastics keep YOU away crimp and solder all connectors and splices--your isolastics Keep YOU and from the vibration, but the engine shakes just the same! So look for the simple wiring problems first--bad splices, lousy ground connections, poor covering of splices. Guality workmanship can make all the difference between a machine that is a pleasure to own, and a dog. Occasionally, an ignition problem is caused by corrosion in the ignition switch or cutout button. So cheek those took button. so check those, too.

It should be fairly obvious that any problems that appear only of cylinder cannot be the fault of either the module or the pickup; these caused by a failed coil, tired spark plug wiring, a bad plug, or carb

You can test a RITA on a workbench before you put on the bike. if you You can test a RITA on a workbench before you put on the bike, if you want to, by rigging up a bettery, coil, and apark plug, connected to a common ground, and waving a screwdriver rapidly past the pickup coil. This will trigger the unit, and you should see a spark. This is a good exercise for units acquired at swap meets and the like.

CAUTION: NEVER RUN A RITA (OR ANY OTHER ELECTRONIC IGNITION) WITHOUT

exercise for units acquired at awep meets and the line.

CAUTION: NEVER RUN A RITA (OR ANY OTHER ELECTRONIC IGNITION) WITHOUT SPARK PLUGS CONNECTED:

For troubleshooting units already installed, this is the procedure:

Pull out a spark plug, lay it on the cylinder head, and switch the ignition off and on (or punch the cutout button). This should produce a spark; no spark seens trouble. A spark seens a good module with about 90% confidence. It you don't get a spark, try the other plug. No spark seens a bad sodule ONLY if the wiring, coils, etc. are checked out.

If you pass this test, disconnect the wires going to the pickup (White-Violet and White-Orange). Leave the ignition on, with the plug on the cylinder head, and somentarily connect the White-Violet wire to the hot wire from the battery. This will trigger the module, and a spark should appear. No spark, bad module. Spark seens a good module for sure, and that your problems are instead with the pickup.

Pickups don't fail too often, but are easily checked with an ohmmeter. Look for continuity through the pickup coil--the wires connected to the White-Violet and White-Orange wires. Pickupa used in Nortons measure between 200 and 450 ohas; much outside this range means a bad pickup. The resistance is too high to be checked with a test light; you'll have to use a mater. Also check from either wire to the frame: a

short is a no-no. Again, make aure the interconnecting wiring between the module and the pickup is all top quality. If you're certain that all the components external to the amplifier module are OK, you may as well go into the module itself, and look some

REPAIRING THE MODULES

First of all, these units are seeled with a thin coat of silicon seeler on the edge of the alusinus housing. If you have occasion to pull your amplifier module apart, be sure to reseal it when you're done. Everything comes apart with a 7/32" nutdriver and a soldering iron. Keep track of the fasteners--they're metric! Four M3.5x7mm screws hold the cover on; six M3xlOmm acrews hold the board in place. And a 7/32" nutdriver fits them all.

Second, de-soldering electronic acress the second of the

cover on; six M3x10mm acraws hold the board in place. And a 7/32" nutdriver fits them all.

Second, de-soldering electronic components from a printed circuit board, and installing replacements is a skill-intensive art. If you've successfully assembled Heathkit projects, or done something like that, you're probably OK. But if your soldering skills are limited to soldering guns and sweeting copper pipe, you need either practice or assistance. A good soldering iron, a solder sucker, and an ohmmeter are necessary.

Once you have the module open, look for obvious signs of burned components or scorched traces on the printed circuit board. Anything scorched must be replaced, and you can fix burned traces with bere wire, if the damage inn't severa. The odds are practly high that this kind of damage was caused by incorrect wiring of the module. Also high are the odds that the owner will feign ignorence of the incident.

In normal use, the most likely component to feil is the output transistor—it experiences the most aevere stresses. Take an ohmseter, and measure the resistance between the White-Black wire and the Black wire, with the coils and battery disconnected. A short meana Q3 has gone south. If you can measure a short between the White-Black wire and the aluminum case, 21 is no longer slive. If the output devices (Q3 and 21) are fine, and the pickup is QK, then you will have to check for less likely component failures. In order of decreasing probability are diodes D3 and D4, transistor Q2, transistor Q1, and then diodes D1 and D2. These can be checked on the board with an ohmseter, checking each junction both ways, and replaced as required. If all the semiconductors are OK, try electrolytic Q3. After this, you're left with the remaining peasive components, none of which are especially fault-prone, and the printed circuit board itself. Good luck! Remember to reseal the module!

ACKNOWLEDGEMENT

This project has been the kind that would be difficult without assistance from several of our club members. Especially appreciated are the contributions of JOE BLOCK, TOM JOHNSON, and JIM STEINHAUER.

Send renewals to Alan NORTON OWNERS CLUB





TAKING THE PLUNGE

PART TWO

THE RACE:

The AFM has evolved an efficient procedure on race days. Practice laps are sorted according to lap times. Everyone, for example, who runs 2:10-2:13 practices together so that no rider is vastly slower than the others. Riders are allowed a total of 8-10 practice laps (split into 2 sessions). Prior to each race riders take a warmup lap. Each race is 7-8 laps.

Within any class riders may be experienced or novice. In some recent races new riders have lead the pack but this of course is rare. Once the race starts riders spread out and each person begins testing his and the machine's limits. And that's where the fun really begins.

Racing on a track is vastly different from riding hard on the street. While this may seem obvious-- no traffic, no road debris, no cops-- it really needs some explaining. First of all, you have no option to slow down and enjoy the scenery. Once committed to a race you GO. This has been especially true in my case because I am not fast yet and don't wish to become an obstacle on the track for the quicker bikes. So the first turn becomes part of an all-out effort to push the bike and your senses to the limits for the next 15 or so miles. You can relax but because Sears is such a difficult track you're always alert to what's ahead, several turns ahead. If you've read any of the books dealing with mental states during periods of high performance (Inner Tennis, Zen and the Art of Iyou fill in the blank] you'll have an idea of what is required.

Typically there are about 60 riders on the track in any given race. They are started in waves, depending on the race class of the bikes. Because modern machinery is popular, class sizes for those bikes are large. As a beginner you'll start at the back, then gradually move to the front line as you accumulate points in your class. In my case this was easy to do as the Vintage class is small and I was finishing third. When everyone shows up, however, as they did on the Nov. 8 race, being first presents its problems. I revved it up, felt the clutch bite hard, and watched out of the corners of my eyes as they all passed me up in a sort of slow motion, dreamlike ballet.

Once the race is underway riders spread out and you begin either real or imagined passes of the riders ahead of you. In my case a 35 or so hp output makes passing an art. I can't just goose it and zip on

by-- there's almost nothing to goose. But I accept that as part of the challenge; it's like taking pictures with an Instamatic. More power to you if you get good prints! I remember cheering Dave Neal on when he ran his Production Racer at Sears just before Laguna this year. He was clearly outpowered by several other machines but rode aggressively and kept passing riders. Now THAT makes racing fun.

Second, the sense of speed is far greater. While my little Triumph isn't a track scorcher it has enough punch to hit 90 in a relatively short distance and at Sears that means entering a turn at a speed far greater than is usual in hard riding on the street. All handling quirks surface and wiggles which might have gone unnoticed at lower speeds play a major role in determining how hard you can ride. The process of sorting these bugs out begins even before the first practice and, especially in the case of older bikes, continues throughout the racing season. Just as with road bikes, there is a great feeling of satisfaction when you make an adjustment which improves speed or handling. And, with a few more races, I may just have a totally oil-tight Triumph. All things are



possible

Third, there are lots of people around. Racing takes on the feeling of a family outing. You are involved in a group activity even though it's just you and the track once you've left the starting line. There are hundreds of other people facing the same challenges you experience and, even though you may not know many of them, there is a strong sense of shared problems and triumphs. It's similar to belonging to any club except that in this case the stakes are somewhat different-- you're at risk with life and limb and that's something that all are aware of at some level. But, then, we all choose our dangers. For some, riding the streets satisfies the need. For others, and these people are truly crazy, white water rafting in kayaks does it.

And finally it's vastly satisfying to finish a race and, I suppose, to finish with good times. Progress is measurable, improvements to your bike noticeable. In street riding part of the satisfaction that comes from hard riding comes from not get

(Cont. p. 11)

START-ING

LINE



caught doing it; on the track no such distorted sense of accomplishment figures into the pleasure of having ridden hard successfully. In short, it's pure unadulterated fun with all of the guilt stripped away.

Hope to see you at the track.

WHAT YOU WILL NEED

- 1. A race prepped bike
- 2. Time to work on it
- 3. Racing leathers, etc.
- 4. A way to get equipment to the track
- 5. Friends and a nearby dealer
- A road near you where minor testing can be carried out
- 7. Money
- 8. New Riders School (\$60)
- 9. Medical (and Disability) insurance
- 10. More money

TYPICAL COSTS

- 1. Leather suit, helmet, etc.: \$400+
- 2. Race entry: \$45 + \$10 at the gate for each adult
- 3 Race gas: \$3.25/gal.
- 4. AFM membership: \$20/yr (?)

FOR MORE INFO

AFM 1134 Crane St. **₹**F6 Menlo Park, CA 94025 (415)327-0908

CYRG 6398 Dougherty Rd. #34 Dublin, CA 94568 (415)829-6091

ANSWER TO PUZZILE OF THE MONTH?

Oct. 4, 1987

Dear Lou.

Regarding Mr. Serino's puzzle of the month; high speed wobble. I must admit that I've never ridden the Nortons I've owned hard enough to wobble, but I have heard of the problem on other bikes, particularly with sterling reputations on handling. A friend of mine with a GS1000 Suzuki "tried

everything", then put his FRONT axle spindle on v-blocks, checking run-out with a dial indicator. I don't remember how far out it was, but he took the spindle and inspection gear to the dealer. Only one of the spindles the dealer had was "true". Promptly installed, the wobble disappeared.

Anyway, it's not hard to check and spindles aren't too expensive. I would guess, also, that the more aggressive tires would indeed make the problem worse by overloading an already marginal component—wherever the problem is. Good luck.

Mark Wilcoxen

[Mark is returning to the Bay Area after a four year stay in Virginia. Welcome back!]

ANSWER TO PUZZILE OF THE MONTH?

In the Oct. issue of the NOTICE member Pete Serrino asked for suggestions to solve his high speed wobble. In response Kelly Moss writes the following:

Hello.

Just one of the requested opinions:

- -- With smaller front tire (110) the larger rear (120) makes the rear of the motorcycle higher while in turn, therefore, quicker steering and greater wobble possible.
- -- Steering head loose.
- --Swingarm pivot loose.
- -- Wheels out of true (misaligned).
- -- Tires out of round (improper mount).
- -- Rear wheel not adjusted straight with front wheel.
- -- Improper offset (dish) on front and/or rear wheels (spoke adjustment).

Good luck and forked end down.

______Kelly Moss

Dear Lou,

I've been intending to write to say how much I liked the ongoing series of technical information on the Norton coming from a group of guys who work on their bikes. I work on my bikes too, and I could read stuff like that all day long. Much better than what you get from some magazine journalist who, the week before, wrote a story for GOOD HOUSEKEEPING.

(Continued p. 12)



Having said all that, I'd like to throw something out for those guys to chew on.

I just finished a total rebuild on a '66 Atlas. I did some upgrading of the oiling system by changing to the later double-speed oil pump worm drive, and I drilled the squirt holes in the rods. The thing I didn't do was change from return oiling to pressure oiling to the rockers because I worry about that.

Most everyone knows how a Norton crankshaft, getting its oil from the main bearing centerline, will act like a centrifugal pump with more capacity than the oil pump at high rpm's. When this occurs, the oil pressure will read zero (unless you have the gauge screwed into the connecting rod) because the oil is being pulled away from the pump right at where it's being delivered at the little rubber grommet to the timing cover. Normally this would be no big deal because there is plenty of oil flow, although there is no oil pressure in the engine.

So here's what worries me: if the rocker feed is taken at the oil gallery in the timing cover, then

while I'm ripping along on I-5 with my 19-tooth gearbox sprocket, my rockers and valve guides, it seems to me, will be running bone dry. What's worse, I really think the crankshaft could suck air through the rocker line and I'll have bubbles passing through between the journal and the rod bearings. That's why I didn't change it. With return oil, although admittedly a little hotter, as the rpm's go up so does the oil flow to the head and I think a lot of hot oil would cool and lubricate better than no cool oil. I don't know at what rpm this happens but on page 77 of the Sept., '87 CLASSIC BIKE a guy says oil pressure goes away on his 1950 Model 7 and I wouldn't expect him to rev that up much.

But I'm in a quandary. Norton saw fit to make the change and, let's face it, they weren't the change makin'est company around, so there must be something I don't know.

Sincerely,

Mike Rose 38652 Spetti Ct. Fremont, CA 94536



Unidentified Norton Club member tries his luck ice racing at Oakland Coliseum. Next year get your tickets early-- Sunday evening was a sellout!





TECH TIPS

Dear Lou.

A lot of Norton owners are fitting electronic ignitions, and many of these units are made by Boyer Bransden. The instructions that come with the ignitions kits only apply to Commandos made after the points were moved to the end of the camshaft in the timing cover. So, I thought that perhaps these supplementary instructions for fitting the Boyer to 1968–1969 Commandos might be useful as a Tech Tip in the NN.

SUPPLEMENTAL INSTRUCTIONS FOR BOYER BRANSDEN ELECTRONIC IGNITION TYPE 3 FOR NORTON COMMANDO (1968–1969)

by

ART SIROTA (Feb., 1983)

- 1. If you have a '68 or '69 Commando with the points located in a cannister behind the barrels, pay no attention to step #6 in the Boyer instructions. Instead, set the engine at 31 degrees BTDC and install the rotor loosely in position with the stator plate over it. Line up the magnet on one side of the rotor with the hole marked "Clockwise timing" or "C.W. timing" on the back of the stator plate. Note the position of the rotor and tighten it down.
- 2. Pay no attention to step #9 in the Boyer instructions.
- 3. If you have a '68 or '69 Commando with the points located in a cannister behind the barrels, install the transistor box with the two short wires on the right side of the bike towards the rear.
- 4. If, after installing the new Boyer correctly, your machine kicks back and/or backfires, pull off the

stator plate and inspect the lumps of solder on the back. If any of the lumps look freshly nicked, they are probably making contact with the rotor as it rotates. Remove enough solder until nothing comes in contact with these soldered connections.

Note: On '68 and '69 Commandos the magnetic rotor rotates clockwise, therefore you would:

- a. rotate the plate clockwise to retard ignition
- b. rotate the plate anti-clockwise to advance ignition
- c. rotate the rotor clockwise to advance ignition
- $\mbox{d.}$ rotate the rotor anti-clockwise to retard ignition

On '70 and later machines, the rotor spins anti-clockwise so the reverse of everything above concerning rotation is true.

THE NORTON <u>NEVER</u> BREAKS VALVES.

TECH TIP: PLUGGING UP HOLES DRILLED IN FENDERS

(The following appeared in the Jan., 1969 issue of CYCLE GUIDE.)

A rider will often find that when he is renovating his machine that he has some hole that have been drilled in the fenders that he would like to have filled before he gets the fender painted. These holes may be a result of installing the taillight somewhere else, or changing seats or any such problem, but the rider would like to have them filled and is rather reductant to have them brazed shut for fear of warping the fender.

A very simple method that the rider can do himself is to clean the area around the hole with sandpaper and remove all traces of rust and paint and then take a large ball bearing and by fitting it into the hole and setting it over a block of wood with a corresponding hole a little larger drilled in it and striking it with a hammer to dimple the hole a little bit, he can then take a sofering gun and with some rosin core solder, tin the outer edge of the hole both top and bottom.

After the hole has been thoroughly tinned, take some steel wool and fill the hole with it and again take the soldering gun and solder the hole by saturating the steel wool with solder thus making a good solid plug. After the solder cools, the excess can be filed and sanded and painted and will not separate from the metal.

The important things to remember are to use rosin core solder and to throughly saturate the steel wool so that you do not run into any air pockets when you are sanding it down.

Mike Capalite



ways <u>you</u> can help the club

It's my impression that many in the club are willing to help but for various reasons never get around to offering. In an attempt to ease the burden on the officers and generate more member participation I've brainstormed below (and our Prez has helped by adding his ideas) a variety of ways that YOU can contribute. Read them through, add your own, change some so that they become possible for YOU, and then act. There is a lot that gets done behind the scenes to make club functions more enjoyable for everyone—become part of that effort and make less work for those of us who are trying to keep the Norton name alive.

CLUB MEETINGS:

- 0. Attendi
- 1. Plan a demonstration of some point of Norton lore (e.g., maintenance or repair).
- 2. Bring something to show people; new hat, book, video, tools, bent crankshaft, engine, trailer, van, mobile home.
- 3. Invite a speaker.
- 4. Scout new restaurants for meetings.
- 5. Bring dancing girls.
- Recommend shops or services which you have had good luck with (and spread the word about problems).
- Clip from your newspaper items that are of interest to motorcyclists; bring them to club meetings for information and discussion.
- 8. Ask questions at meetings to stimulate the sharing of knowledge about Nortons and how to ride them.
- 9. Tell Branch officers what's on your mind.

CLUB RIDES:

- 1. Organize one.
- 2. Lead one.
- 3. Make maps for one.
- 4. Suggest routes and/or destinations or rendezvous (starting) places for breakfast.
- 5. Come along on one!
- Take responsibility for ensuring the ride is a safe one for all concerned.

CLUB PICNIC OR RALLY:

- 1. Suggest a suitable location.
- 2. Offer to help with the food.
- 3. Offer to make the reservation.
- 4. Make the map to get there.
- 5. Plan some field events, contests, etc.
- 6. Call the organizer (usually the Ride Coordinator) to see if there is anything you can do. Volunteer!

- 7. Cook at the event.
- 8. Help clean up.
- 9. Thank the people who worked to put the event on.
- 10. Bring something to raffle off.
- 11. Tell friends and potential members about it and invite their participation.
 - 12. <u>Don't</u> think you won't be missed or your assistance unappreciated.

NEWSLETTER:

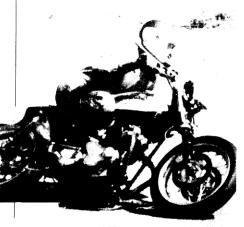
- Send in tech tips, ride reports, opinions, humor, new discoveries, drawings, caricatures.
- 2. Round up unwanted parts and advertise them.
- Take photos and send copies.
- 4. Write or call contributors and respond to what they wrote.
- 5. Tell the Editor about any potential advertisers.
- 6. Write a letter to ${\color{red}Roadholder}$ (UK), as letters seem
- to be their main source of material. (Make our presence felt.)

IN GENERAL:

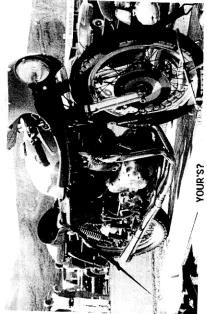
- Send renewals on time with forms completed.
- 2. Tell dealers you saw their ad in the NOTICE or ask them why they aren't advertising there.
- Spread the word about the club.
- Write to national publications about Nortons asking why they haven't written anything lately about them.
- 5. Consider inviting people over to work on bikes.
- Think of what we could do better than we're doing and then run for a Branch office and prove it.

In short, make your presence felt by offering to help.

Lou



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