

Shocking Activities

Bill Stevens, President



Helping you keep your R90s where it belongs, On the Road!

The spring calendar is all but used up. Summer is just around the corner. Spring has been a long time coming here in the Northwest. We still have snow on the mountain above the house, and just 2 days ago, we had frost. Yesterday, I made a sweep of my favorite 2 lane blacktop, Mosquito Lake Road. At last the sand and gravel has been washed away by recent rains.

There is no worse feeling than having the front end slide going hard into your favorite corner the result of 4 wheel traction control applied to roads over the winter months. If they are going to spread sand, at least they should sweep it off the road come spring.

The calendar is quickly filling up for the summer months. I am headed to Big Sky Country the weekend of May 17th. My mom had a knee replacement; so my bro's and sis are lending a hand until she gets back on her feet. I'll spend a week, provided the opportunity to carve a few canyons while there.

As of yesterday, it was snowing in Bozeman, MT. It's forecast to be in the 80's by the weekend; welcome to the Rockies, wait a minute and the weather will no doubt change.

Our local vintage club is holding a weekend rally in Twisp, WA the weekend of June 21st. We're planning a ride over

the North Cascades Highway #20 and Washington Pass on old iron.

If you've not had the opportunity to ride the pass, put it on your must do list. It's a spectacular 2 lane highway through magnificent terrain. We have an 80-90 mile ride planned for Saturday starting along the Methow River to the mighty Columbia. The return route is over Loup-Loup Pass-a 2 lane twister amidst the pines to Twisp and cold beverages at the local brew pub-Yahoo!

It's a long ass ride to Gillette, WY from just about anywhere, especially in July. A word of advice-ride your ride early and avoid potential late afternoon thunder storms and hot afternoon temperatures. I plan to meet my brother in Bozeman, MT then ride over the Beartooth Highway to Cody, WY. We'll arrive at the MOA rally on Friday the 18th, spend the night, attend the rally on Saturday morning and then head back to Cody in the afternoon. The highway beckons, as does the Buffalo Bill Museum in Cody. It would be great to meet up with R90S club members on Friday afternoon/evening. Send me an email if you plan to attend and

(Continued on page 2)

Special points of interest:

- *Swingarm Boots*
- *Tech Tips*
- *Membership Update with John Yee*
- *Fun at Daytona*



Happiness is: Preparing for Track Day. R. Griffith at Grattan Racetrack in Michigan, May 2008

Shocking Activities cont.

(Continued from page 1)

we'll arrange a rendezvous: wcstevens@lfsinc.com

The annual Mt. Baker ride is a WVM (Washington Vintage Motorcyclist's) member only event schedule for Sunday August 10th. Club members meet at my place in the morning for an old iron ride up the Mt. Baker Highway to Artist Point, overlooking Mt. Shuksan. (The most photographed site in WA State) We have a BBQ in the afternoon following the return ride down the mountain. If you are planning to be in the area, contact me in advance, we have plenty of camping space for those interested in making a weekend of it.

I plan to attend the Beartooth Rally in Red Lodge, MT the weekend of August 22nd (Friday) and 23rd (Saturday). Following the rally, I'll ride home to Washington State via hi-line route #2, or possibly via Canada. Those pesky Canadians dislike personal protection devices-as a result I may be forced to stay within the USA border-better safe than sorry.

Recently, club member Klaus Huenecke of EPM Performance Imports in NJ sent me 5 sets of YSS rear shocks for product testing on my /5, /6 and /7 BMW twins. The shocks range from basic hydraulic units with step spring pre-load to twin emulsion shocks with adjustable pre-load, rebound adjustable and length adjustable. I'll provide our newsletter editor Rick Griffith with a tech review of the shocks performance characteristics for our July newsletter. Klaus has offered to provide R90S club members with a group purchase discount on future shock purchases. For more information you can contact Klaus directly via email at: Klaus@ysssusa.com

Suggested retail prices range from \$169.00 for basic twin hydraulic shocks to \$849.00 for piggy-back reservoir shocks with threaded Pre-Load-Rebound, Compression & Length Adjustable. Considering how good the units look in the box, I know they will perform even better on the street!

Who is going to step forward to sponsor the fall R90S club rally in September??? I have missed the last 2 rallies due to work scheduling. I would love to join members somewhere this fall for the 8th and Last-or is it the 9th??? See you on the road!

Cheers!

Bill Stevens



"BEEMERS AT PLAY"

Having fun since before you were born.

San Jose Fork Braces Still Available

President Bill Stevens reports that he has a few extra braces available from the last order he placed. Cost is \$127.48 plus \$10.00 shipping/handling. A savings of 25% to members.

Bill Stevens

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Deming, WA 98244
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Swing-arm Boot Replacement by Phil McCardle

It was time for Tony's service so I had a careful look to see what might be needed in addition to the oil and filter change and I discovered the swing-arm boot was just about ready to perish. Better to do it before it happens and I have further difficulties with the drive shaft so I purchased the boot from my local BM Garage and set to work.

I haven't performed this task since the restoration in August 1998 so I was just a little bit rusty on the procedure. I went through the operation and all went well so I reckoned a review of the procedure might help another R90S owner when the times comes, and believe me it will.

To begin with, some special tools are needed, and I list them as follows:

- ◆ A short strip (about 6 to 8 inches of $\frac{3}{4}$ or 1" plumbers tape. Cover one end with about 2 inches of electrical tape and bend the taped area in half to form a hook. A short length of wire.
- ◆ A 27mm socket with about a $\frac{1}{2}$ inch of the socket wall turned down to about $1 \frac{5}{16}$ to remove swing-arm pivot nut.
- ◆ A 12 point 10mm Ring Spanner (Box wrench) with the ring ground down to about 0.65. This is to remove the special bolts on the drive shaft, Most wrenches are too thick to allow turning the bolt although possibly there are some up market units that will work. Of course if you have an excess of funds you could purchase the special tool from BMW. My spanner cost me about two bucks.
- ◆ A length of pipe that will fit over the ring spanner to act as a "Torque Amplifier" (a bloke name Archimedes taught me that one.)
- ◆ I have a little wheeled seat about 12 inches high that puts me at the right working height for this operation. I gave my electric stand away as it took up too much room in the shed.
- ◆ 150 ml of gear case oil.

Procedure:

- ◆ Place the bike on the centerstand and drain the oil from the swing-arm.
 - ◆ Remove the battery. (Remember, disconnect the earth first unless you enjoy that warming feeling of the wrench as it strikes earth (ground))
 - ◆ Remove the mufflers (and panniers if mounted)
 - ◆ Remove the lower mounting bolts from the shocks and the brake link from the rear brake.
 - ◆ Remove the rubber cover from the Swing-arm pivot.
 - ◆ Remove the two clamps from the boot.
 - ◆ Loosen the nut with the special socket and remove the Swing-arm pivots I counted the number of turns for each side to facilitate alignment on re-assembly. Shift the wheel assembly back about $\frac{1}{2}$ inch or so.
 - ◆ Hook the plumbers tape hook on the boot and retract it back sufficiently to access bolt and secure with wire to frame of pannier rack.
 - ◆ Locate the first bolt on the drive shaft at about 2:00 o'clock and shift into first gear. Loosen and remove bolt.
 - ◆ Repeat the procedure of shifting to neutral and rotating to next bolt and then shifting to first gear.
 - ◆ When all bolts have been removed slide the wheel and swing-arm assembly back about a half inch and remove old boot. Then replace with new boot.
- Now the fun part! My 1975 Daytona has a circularmounting on the gear box and a circular mount on the swing-arm. If you have the same configuration on your model and the boot is circular on **BOTH** ends all is well. My expert in the BM Garage supplied me with a round/square boot. It fit all right so I am not worried. It would have been a lot easier if both ends were circular, I think, but am not absolutely sure. Fitting the bloody thing is a nightmare. I aligned the boot with the writing up

(Continued on page 4)

Swingarm Boot Replacement (cont.)

Some Fun in the Sun by Paul Bates

(Continued from page 3)

and readable.

- ◆ Install the clamp on the swing-arm
- ◆ Hook the tape on the new boot and reverse the procedure. I used a hemostat, or surgical clamp, to align the bolt in the flange and the hole with a screwdriver to hold the bolt in place whilst turning the bolt into the threaded section on the gear box.
- ◆ Proceed with the other three bolts into the flange. Then retrace your steps and tighten the bolts in order with the Torque Amplifier. If you can fit a socket onto the bolt and use a torque wrench the torque is 16 to 17 foot pounds. My book recommends that the bolts be replaced with each removal but my experts say you have at least one removal and possibly two to be safe. Mine were replaced initially so I used them again

You are almost done!

- ◆ Now fit the boot to the gearbox and install the clamp. This is why you removed the battery. You absolutely cannot get the boot onto the inner section of the mounting ring without reaching down from above. I used the SS wire with a 90° bend that I use to remove the oil filter to guide the edge of the boot around the gear box boot clamping section.

I did not disassemble the swing-arm for service as I did not feel that it has had that much service. I did inspect the final drive as I had rebuilt it earlier. If it draws blood when you caress the spline you now need to consider a rebuild. I have done this successfully and there is an inexpensive way to rebuild this section. I did not have to remove the rear wheel this time so did not inspect.

- ◆ Install the pivot pins in the swing-arm, having first coated with grease and torque the pins to 15 Ft/lbs. Tighten the lock nut and then pump grease into the pivot pin. Replace rubber (plastic) cover

Replace the brake link into the rear brake and adjust.

It's Miller Time. (I drink Cascade from Tassie!)

Long time R90s Club member Paul Bates has been doing pretty well in the Vintage racing scene with his R65. Here he recounts an episode at Daytona this past spring. Ed.

I had a pretty good trip to Daytona, but spoiled by “what might have been”. On the first day of racing I got 5th out of 11 in my class.

Jetting for the carbs was a bit off. 80 degrees there compared to 20 degrees at home but running wide open on the Daytona banking was awesome.

Pulling around 7,000 rpm in 5th would be around 120mph.

The second day was a little cooler but we only had one practice because storm were said to be moving into the area in late afternoon so we tried to complete the events before it came. I had re-jetted again and during practice I thought it was running better than ever.

At the start of the 6 lap race I got off in third and after about 2 laps I got passed by one guy but stayed right with that guy and closely observed how he was taking some of the infield corners and I saw that I could at least match him on the banking. I followed him closely until the white flag lap and closed up on him to make my move.

There is a close 90 degree right and then a left. He always went too far outside of the left hand corner on and I dove under him there. I only had a few more turns until we got to the back straight and through the chicane to the banking for the last time. I had planned to take the low and shorter line around the banking and to tuck in with my left had on the fork tubes to get more area and to get real flat on the tank for the final run to the flag. But before I got there I went just off the paint on one of the corners before the chicane and fell down with a thud. I don't know why I couldn't have leaned over a bit further – I was just committed to a line that didn't work out – a little slower and little more lean and I could have held him off. Damm!

Membership Update *by John Yee Treasurer/Membership Chairman*

As of this printing, we have 102 club members in good standing with one new member:

BELL, ANDREW: (Wales, UK) '74 Orange with 48,000 miles, GPS, intercom, phone, IPOD, twin plugged Boyer ignition, later drive shaft, Koni shocks. Other bikes owned: R60/7, R75/7, R100CS Special & Suzuki GT250A.

Donations: Thanks to **JOHN ARCHER:** (Hartland, WI), **BILL BALLON:** (Pittsburg, PA), **ROBERT DeMARCO** (East Chester, NY), **PETER HERBERT:** (Tasmania, Australia), **LAURA KEATING:** (Paradise, TX), **MAC KIRKPATRICK:** (Glenmore, PA) and **DENNIS SHIRK:** (Texarkana, TX) for their donations to the club along with their 2008 membership renewal.

Special thanks to **NORM DELEZENNE:** (Rochester, MI) and **WAYNE KOSAKA:** (Santa Barbara) for their very generous donation to the club along with their 2008 membership renewals.

Comments from renewing members:

ADAMS, MIKE: (Mechanicsville, VA). I own a 2006 BMW 1200RT – my only bike at the present time. I sold my R90S to Brad Turner.

BLACK, TONY: (Colorado Springs, CO). Approx 10,000 miles. Lots of modifications – Udo Gietl built racing engine, former Reg Pridmore race bike.

After a lapse of his membership for the last few years, we welcome back **BILL POTTER**, who finally came to his senses and renewed with the club. Thanks Bill!

A big thanks to all that renewed for 2008. This year, R90S lapel pins were sent out to everyone that renewed. If by chance you didn't get yours, please send me an email (ducjyee@yahoo.com) or note and let me know and I'll get it out to you right away. Thanks again for your support!

Post Script: For a while, some of the club officers were concerned that there was going to be a loss of interest in this national club because at the time of the last newsletter, we only had 63 renewing enthusiasts. Now we are pleasantly back up to a little over 100 which is good, but a far cry from the 184 we used to have. We all welcome your thoughts, ideas, and input on what you would like us to do to keep interest in this fabulous bike and to keep the club going. We also welcome any members that haven't sent in an article, story, rebuilding effort, etc. to our club editor, Rick Griffith so that others can share in your love of the

R90S. I know that the same old people doing the writing and articles can get boring sometime. We'd like to hear from some of you with other perspectives and writing styles.

TECH TIPS

Ignition Advance Maintenance

By Rick Griffith, Editor

It's the things we can't see that we often take for granted. We rarely give a second thought about a pair of pistons moving back at incredible speeds. Or stop to think of lifters and pushrods and valves doing their thing, mile after mile, year after year.

We do know however that even the simplest items require maintenance. As expertly engineered as an R90S is, either father time or tens of thousands of miles will eventually take their toll. This month we'll take a look at the Ignition advance unit.

It's job is simple, advance the timing as rpm increases and retard it as engine speed drops. If you have an engine that wants to idle higher than normal, and you've looked at all other possibilities, then it might be the advance mech that's sticking and keeping the ignition advanced beyond normal.



(Continued on page 6)

Tech Tips cont.

(Continued from page 5)

To properly clean and lubricate it we need to first remove it from the engine. After you've disconnected the negative battery cable. (Don't want to short out a



diode board remember?), remove the front alternator cover, revealing the advance mechanism.

The 10mm nut is removed with the washer and the advance unit is slipped off the camshaft and placed on a workbench for servicing. Remove the two small springs (it's a good idea to replace these every few years). I replace mine every other tune-up, when the points are changed. Weak springs will contribute to a mal-functioning advance unit and a intermittent high idle.



Turn the unit over and carefully remove the small **Jesus** clips, so named for the phrase you utter when they go flying across the room!

The next step is to disassemble the unit. (remember how it all comes apart) for cleaning and lubrication.

It should look something like this:



Clean all parts thoroughly.

I picked up a digital scale over the winter so thought it might be a good idea to see if the flyweights were of equal mass. Much as a set of pistons should weigh the same, you want the same thing here.



Perfect!, just as I would expect on a BMW. Both weights are exactly the same. If they didn't match I would have taken a bit of metal off the heavier one with a file to balance it with the lighter one.

The next step is to reassemble the unit. After every-

(Continued on page 7)

Tech Tips cont.

thing is in place including the Jesus clips, I apply a few drops of 3 in 1 oil to the weight pivot points. Many different oils and greases have been recommended over the years yet I've found good old 3 in 1 to be more than sufficient. In my experience, even thin greases eventually prevent the weights from returning completely at lower rpm's resulting in intermittent idle speeds.



Another nice tool I added to my ever-growing collection is a dial indicator, used to measure run-out on shafts. I have my good friend and R90s member Rick Huemmerich to thank for it as we often trade favors and tools. I've been wanting one of these for years to measure various things and while we have access to the camshaft, I figured why not see if the tip is true.

The advance mech attaches to the front of the cam and through years and years of use and service, it's possible for the tip end to be out of true.

I've attached the dial indicator to the end of the camshaft. This indicator reads in .001" increments.

You first align the needle with zero, then rotate the engine by (hand of course) and observe how far the

needle swings in each direction.

With 125k on my R90s, I was amazed that there was less than .001" deflection.



The last step is to assemble the complete unit on the front of the camshaft. I usually apply some light grease on the advance cam lobe to allow minimal wear on the points block and tighten the 10mm nut just enough. No need to over-tighten here.

Good luck and let me know if you have any questions.

Rick Griffith



Who runs this little organization anyway?

Well, basically our members do, but these folks graciously give their time and energies to make the club what it is:

President: Bill Stevens

European Chapter President: Kirk Ratzel

Australian Chapter President: Philip McCardle

Vice President: Ken Claus

Treasurer: John Yee

Secretary: Norm Delezenne

Newsletter Editor: Rick Griffith

Road Captain: Dale Wright

Safety Chairman: Howard Cobb

Historian: Mac Kirkpatrick

Please use your Membership List for full e-mails, etc.



An R90s belongs on the road. Discover the joy in putting it through it's paces as it rewards you with the satisfaction of knowing you own a supremely engineered machine

