

Post55



2011 #2
Fall



Post55

The newsletter of *The Silver Cloud and Bentley "S" Society*

2011 #2 Sumer

Cover:

Spencer Silverbach's B408LBS.
See page 10.

Reader submissions are encouraged, but note that high resolution and lots of background above the car are a must. Look for an interesting background for cover variety since the cars we feature are generally similar.

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From the Editor

by Tom Wright

I want to thank everyone who has contributed to Post55 since I became editor. A society newsletter is only as good as the contributions from its membership. Our society winning the McFarland Trophy is an award shared by all the contributors. Special thanks to Larry Durocher, who has contributed more to Post55 than anyone, Clem Barrere, my co-editor on the precedence-setting Post55 CD issue, and Daniel Walker, who completed what must be the most extensive single trip ever in a Silver Cloud or Bentley S and wrote it up in an eight part Post55 series. Howard Krimko provided much appreciated greasing of the skids at headquarters with the CD, and item that was certainly critical to our winning the award. (Side note: IMHO by far the best deal ever offered by the RROC is a copy of the Post55 CD for \$5 postpaid. Order an extra copy to keep in your car, and should you ever pass your PMC on to another custodian the CD will be both an asset the helps increase the value of your car as it contains all the manuals and service bulletins, and will help

advertise society membership to potential new members.)

I have a confession to make: I'm tap dancing on the slippery slope of modernization with LSMH223. The car was amazingly dependable for over 20 years, but the last year was a real trial. I have a perfectly functional volt regulator I can't seem to adjust properly, so I have a solid state substitute unit hidden under the Bakelite cover. After the 50+ year old coil failed and almost immediately the stock replacement coil failed, I have a Bosh coil in the car. And after rebuilding and adjusting my fuel pumps a number of times, I have installed a low pressure contemporary unit. On the other hand, I proudly replaced my factory A/C compressor with a piston unit rather than a more efficient unit that looked like it belonged on Battle Star Galactica rather than a car from the 1950s. After five FTPs requiring towing in one year, I'm slowly regaining confidence in the car.

As a final note, in San Diego we have a British Car Club Council and have a couple of meets a year with many clubs.

Consider doing that in your area.



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Rebuilding the Track Rod Steering Ball Joints for late model SC1 and S1 cars

by Scott Hulse

Preface: The following is not the opinions of a skilled mechanic. It is more the ramblings of a “have to do it to keep the car on the road” , reluctant mechanic. Heather, (LSHF51), and I live in Anchorage, Alaska and drive to many places that might bring pause to some PMC owners. As there isn’t an experienced mechanic readily available most of the time, I reluctantly take on the tasks myself. Heather has been in our family for 10 years now, and with the help and advice from the Curzon family, (Ralph, Tony and Simon), along with support from Albers Rolls,(Zionville Bentley), she is still a pleasure to drive.

Should any real experts find errors in my methods, feel free to point them out to others so no harm comes to anyone’s PMC. With the disclaimer covered, here are the notes from a recent repair. If I can do it, anyone can.

If the last time you changed the front tires you noticed some side to side movement, you should inspect the steering ball joints for wear. Good ball joints have very little movement. With the wheel off the ground, grab the front and rear of the tire and try to move the wheel like it was turning left and right. If there is any loose play movement, look just behind the tire while moving to see if the ball joint is the source of the movement. On mine there was about an inch of play. Inspecting the joint, I found the rubber boot had

come out of its’ groove and there was a lot of play. The front suspension on this car had been rebuilt several years ago, so the rest of the steering and wheel components were in good shape.



Figure 1 Old Ball Joint, grease coming out under the boot

A call to Tony Curzon recommended replacing all the parts as they were usually worn out. This was certainly true in my case, as you will see later.



Figure 2 New parts to rebuild the Ball Joint

Once the parts were received I laid everything out, reviewed the procedure in the manual, (section N4), and prepared to take the unit apart. I envisioned needing a pickle fork and prying the unit apart. The manual shows a special puller to separate the Steering Lever from the Ball Joint. As always LSHF51 surprised me with how easily everything comes apart. A 1 3/8” and 9/16 inch wrenches are required. I used a clamp to compress the joint so the 9/6” castle nut could be removed. The seal and spring basically fell off once the nut was removed.



Figure 3 Using clamp to compress fitting, permitting removal of the castle nut.



Figure 4 Ball Joint removed from the Side Steering Lever

Removing the large brass nut on the bottom let the rest of the parts fall out of the main casting. It unit is much easier to rebuild off the car. Count the number of exposed threads, then loosen the clamp bolt and unscrew the main housing from the tie rod. Make sure you write down the number of threads so you can reinstall in the same place. This will save needing an alignment if the steering was already aligned. I also counted the number of turns as I unscrewed the housing off the tie rod.



Figure 5 Adjustable Socket ready

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for removal from the Track Rod



Figure 6 Old Parts and the new Ball Pin.

The hardest part of the job was removing the pressed insert from the housing. There is a very small exposed area of the insert. I was told if you can find a dowel or socket just the right size, you can press the insert out with press. I have a press, but had no luck. I ended up using a stout chisel and worked on the exposed area until the insert cracked and could be removed. You can see in the photo that the plating had worn and was rough on the old Ball pin in figure 6.



Figure 7 Small area of Ball Seat in red available to press out the old seat.



Figure 8 Old Ball Seat being re-

moved with chisel



Figure 9 Old and New Ball Seat

Pressing the new insert had to be very carefully done to make sure it went in evenly without binding. This was tricky. You may want to have a machine shop remove and reinstall the insert if you are not comfortable with this task. Clean everything, including the grease fitting passage. Reassembly is the reverse of the taking it apart. Make sure the small ball bearing is installed in the Ball Joint Spring Seat. A small amount of grease can be used to hold it in place as you put everything together. A small blunt pick was helpful in getting the new boot/seal installed. Use a clamp to compress the joint together for assembly as shown. I pre-lubed the unit on the bench before installing on the car.



Figure 10 Parts cleaned and ready for Assembly



Figure 11 Compressing with a clamp during assembly

Reinstalling on the car is easy, just remember to count the number of turns as you reinstall the assembly on the tie rod and match the number of turns you documented when removing from the track rod. Remember to install the cotter pin in the castle nut and to tighten the locking clamp to the tie rod.



Figure 12 This blunt hook helped with installing the new seal / boot.



Figure 13 Rebuilt Ball Joint installed and ready for lubrication and service

Overall this is a fairly simple job that most back yard mechanics can take on. A local machine shop can be hired to remove and install the insert in the housing.

*The author apologizes for not giving the views of a professional mechanic, but there is no need. A pro could assume knowledge we mere mortals may not have. Post55 **wants** articles written by and for non-professionals. If you repair something on your car, write it up for Post55. Ed.*

Silver Cloud Brake Seminar Conducted by Palma Auto- motive; June 4 & 5, 2011

By Richard Jones and
Jim Facinelli

Photos by Richard Jones

On Saturday, June 4th, five members of the Silver Cloud Society and two Friends of the Foundation gathered at Headquarters to explore the inner workings and hidden mechanisms of the Silver Cloud braking system. John Palma brought his technical staff from Audubon, NJ to educate and enlighten the assembled group of Cloud owners and maintainers, digging into the first modern braking system installed in Rolls-Royce and Bentley motorcars. John also brought a whole table of training aids as well as his trusty laptop and projector so attendees could see and touch the components of the system. In addition, the Foundation has a board-mounted working model of the Cloud brake system (which John had to correct before we could use it).

As John presented his material, his staff (brother Joe, Tom Brancato and John La Flam) tore into the brake system of the Foundation's James Young Phantom V (5BX38) so that we could observe the correct techniques for overhauling the system.

One of Palma's Tech's John LeFlam installing the right front brake cylinders



Gordon Borkat, John Palma both watch as Peter Shay and Simon white assemble and adjust the bpakes.

The wheel cylinders and hoses had been removed at the last Friends workday and the cylinders had been refurbished by White Post Restorations in Virginia.

The Cloud system is not too complex, but it offers many opportunities for inexperienced mechanics to reassemble it incorrectly which can lead to big problems. It combines a mechanical system (rear only) with a hydraulic system for all four wheels. The hydraulic system is assisted by a transmission driven mechanical servo connected to the master cylinders. Setting up the mechanical system is the key to overhauling the brakes and the hydraulic system is dependent on the mechanical system being correctly installed and adjusted.

Once the car is off the ground (preferably on a lift) the wheels and brake drums must be removed and the shoes inspected. Silver Cloud brake shoes are not symmetrical- one end projects farther than the other. This "long" end must face into the rotation of the drum. If the shoes are within wear limits, then check all of the connectors and adjusters for

signs of wear. After replacing any worn or damaged parts, the shoes are ready to be adjusted.

Using the exhibition display board we have at the Foundation, Palma was able to do a hands on disassembly and reassembly, so all participants could learn the correct way to do the task. He first had to assemble it properly as the display was not mechanically correct. With parts from John and the Foundation, we were able to find enough original items to complete the job. The display was originally assembled by the CA region and it is a working model so people can actually see the drums turning and the brakes operating properly.

Once the car was reassembled with all new brake hoses and re-sleeved cylinders, we discovered that the two master cylinders we rebuilt on site a year ago were in bad shape and needed to come off to be redone. The entire assembly of arms and shafts was also assembled incorrectly. Luckily, we had this seminar on the P-V, as it has been driven thousands

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of miles in this condition. It proves that even under adverse conditions, the brakes still work. It will be a fantastic driver once its all assembled and adjusted correctly. The P-V has been our show work horse for several years now and it will be a pleasure to drive it with the brakes working as originally intended.

Attendees:

Gordon Borkat, Columbus, GA
Den Dilger, Carlisle, PA
Jim Facinelli, Elizabethville, PA
Lloyd Hart, Westminster, MD
Dick Jones, Chambersburg, PA
Peter Shay, Canastota, NY and
Simon White, Orlando, FL.

FRONT END SEMINAR

The Cloud front end seminar will be held one weekend during the first quarter of 2012 at the Hunter Engineering Campus. The address is 4475 Schuette Drive Bridgeton MO 63044. The seminar instructor will be Ralph Curzon. The seminar will run all day on Saturday and half a day on Sunday. The exact dates will be specified in an e-mail to all members sometime in January. If you are not on the technical e-mail list, call me (203-263-3720) for the details.

The cost of the seminar is \$100/person for Silver Cloud Society members and \$125/person for non-members. All attendees must be members of the RROC. The seminar fee includes lunch on Saturday and dinner (cash bar) on Saturday night. There will be a pre-seminar dinner (each person pays for their own) for attendees that arrive on Friday and would like to get together. Details on the dinners will be provided to registrants as we get closer to the event.

You can register for the event by sending a check (made out to the Silver Cloud Society) to Larry Durocher, 398 Old Sherman Hill Road, Woodbury, CT 06798. Please provide a mailing address, mobile and/or home phone number, and e-mail address so that we can correspond with you. If you have any questions, you can contact me at 203 263-3720 or by e-mail, laduroch@earthlink.net.

All checks must be received by one month before the seminar. If the seminar is over-subscribed, registration will be on a first come, first served basis so I would hope that people will register ASAP.

If you would like, Hunter Engineering can book your hotel room and get the Hunter rate, if you call Ruth Reichardt at 314 716 0279 or email her at rreichardt@hunter.com. If you prefer to book your own hotel, there is a Crown Plaza, an Embassy Suite, and a Marriott close by. A brief overview of the seminar is given below:

The front suspension seminar will cover the removal of the front road springs, checking for wear in the front suspension components, removal of the A arms, checking the front shock absorbers, replacement of the fulcrum pins, set up of the bearing blocks, the removal and the replacement of the king pins and the anti roll bar rubbers, checking the tie rod ends and adjusting the steering box. As part of the seminar we will also have an opportunity to tour the Hunter Collection.

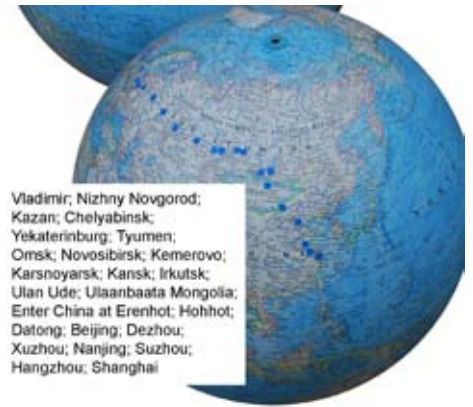
This seminar is not offered very frequently so if you have an interest, I encourage you to register ASAP.

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Cloud 'Round the World

by Daniel Walker

Part 7 - Lake Baikal Siberia To China



It was after 3 AM when we reached the hotel in Baikal after a horrible dark drive over twisting mountain roads. We found we would have to make our own beds in the hotel before we could get some sleep.



We spent four days in Baikalsk, driving to remote lakes with Viktor, getting out on the lake in a commercial fishing boat and swimming in the freezing water of the lake. That took a lot of vodka, but I was determined not to be shown up by the Russians! The hotel we were in was a small, basic wood structure. Viktor's wife, Darijan, took over the hotel kitchen, insisting she cook all our meals so Viktor and I went to the fishermen to purchase fish straight from the lake.

Lake Baikal is the world's deepest lake - up to 1,637 meters (5,370 ft) deep. It is 636 km (395 miles) long and contains almost 20% of the unfrozen fresh water on earth, more than in all five of North America's Great Lakes combined.

Upon leaving Baikalsk we entered



the Buryatiya Region, where we hit the brakes after passing a sign in English saying, "Welcome to Buryatiya Around the World Tour". When we backed up we found the RAS regional president Alexander and a TV crew were on hand to greet us - our last Russian media performance. The cameraman rode with us for a couple of kilometers as Alexander led us into Ulan Ude, the 380,000 person capital of Buryatiya, with flags flying.

President Alexander hosted a good dinner at a Mongolian style restaurant where we ate in a big yurt (called a ger in Mongolia). The food and company were great, and once again there were several bottles of vodka demolished. Alexander laid on a driver, who was neither eating nor drinking. When the dinner and drinking were over we said goodnight to Alexander and taxied to a Georgian restaurant that Viktor knew, along with Darejon, Mary and Andrei. The party was in real Georgian style with lots of food, drink and dancing, a fitting last night with our Russian friends

Leaving Russia was on some good and some bad road, what the Russian's call normal, through beautiful pine forests. We were stopped at a police check, but Viktor pulled in behind us and after a few sharp words from him we were waved on our way. We gassed up in Kyakhta, a border town of 18,500 people with a very large military presence. Kyakhta used to be the home of many tea route millionaires who brought in tea by caravan and exported furs. The Trans Siberian railway redirected the trade and the Kyakhta economy collapsed. Gas prices in Russia varied from 65 to 84 cents per litre.

After a sad and tearful goodbye to our Russian friends, who now face the long drive back to Kemerovo, we quickly proceeded through the border thanks to Alexander's contacts.

Once in Mongolia, Alicia, the guide from Juulchin Travel met us. We had to wait while border people had lunch before we could finish the formalities. Once cleared by the friendly Mongolian officials we followed the travel company 4 X 4 to a small town about 25 km (16 miles) from the border where we had a good lunch. Having not eaten yet today we were more than ready!



The road in Mongolia was much better than we experienced in Russia. Road hazards are camels, horses, cattle, goats, sheep and families of quail leisurely crossing. We followed Alicia through Ulaanbaatar, a city of almost one million, in heavy traffic to reach the excellent Sunjin Grand Hotel. What a difference - check in was 30 seconds instead of the 30 minutes in Russia- all forms were prepared, the key was waiting in an envelope, no passport copying was required and employees had our luggage in the room instantly. I drove the Rolls to the travel company's guarded compound, where it rested for two weeks in a covered building while we ex-



plore some of Mongolia by four wheel drive.

We saw a lot of country, varying from flat desert to high mountains. We slept in gers (yurts) where wood stoves helped ward off the 8-10C (46-50F) nightly temperatures. The Gobi Desert is almost 2,000 km (1,243 mi) from east to west and 1,000 km (621 mi) from north to south. Most travel was in the Mercedes 4 X 4, but we did one trip of about 15 miles (24 km) into the desert by camel. We had ridden camels before in Egypt and India, but this was the first time we were on our own. It took over three hours, and my backside was so sore I could hardly sit. Our schedule was to cover 30 km (19 miles) by camel tomorrow but we declined - I'd have had to eat standing up! Small but sturdy Mongolian horses were our transport in the high mountains, but that was better as we are used to riding and they were much easier on the backside.

We were very impressed with the four wheeling abilities of our driver, so arranged with him to lead us across the Gobi Desert with the Rolls. She was a bit reluctant to start, likely because of the cold or perhaps because she knew what was coming! We fuelled up and followed our guide to the highway south, where we took the lead so I could drive at my own speed. The road for the first 144 miles (232 km) was excellent; we maintained a speed of around 70 mph. (113 kph)

Half an hour out a huge herd of white tailed gazelle crossed the road in front of us. As we approached, half the herd turned back and ran along parallel to the road. When we slowed to let them get ahead they crossed, giving Marilynn some great photos.



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There would have been over 200 animals in the herd.

At the town of Cyoir the road ended. This is not desert like we were going through on our tour - there were no nomads, very few animals, but lots of sand, gravel and talcum powder fine dust. It took a bit over an hour to travel the first 144 miles on pavement, but another 8 ½ hours to cover the remaining 142 miles (229 km). We were thankful for the skid plate under the car - it took quite a pounding in deep sand and where tracks had worn deeply into the desert leaving a high rocky centre. We came close to getting stuck in sand a couple of times, but each time the old girl pulled herself through without assistance. The dust was penetrating - it was sunny, so the windows were lowered, but soon everything in the car including us was covered in dust. Dust was coming through the floorboards, so about every 5 minutes my sunglasses were coated, eliminating vision. Marilynn had a full time job cleaning them.



The hotel had packed a great lunch that we paused to eat after zig zagging up a high rocky hill. The view over dry hills, sand dunes and the gravel desert between was awesome. While there a police patrol drove up in a Russian jeep - the expression on their faces upon seeing the Rolls was pretty funny! They gave us advice on conditions ahead and told us they were looking for poachers hunting gazelle. I think they were in the wrong area - we saw no animals in this parched wilderness.

We passed through three mining villages, stopping to fill up in the only one with gas. Each village looked like a collection of buildings plopped down at random in the desert - driving anywhere between them is OK - there is no vegetation. Our hotel tonight is the Saynshand Plaza. Saynshand, population 30,000, has rough paved streets. It is the largest city in the Mongolian Gobi, and is the last stop for gas or anything else before the Chinese border. We are told that tomorrow we will face the test of really bad "road".



Poor car!

Having cleared some of the dust out of our noses and ears, we were back into desert again two blocks from the hotel. The warning was right - the going was a lot rougher, from areas of sharp rocks, to plains strewn with boulders, to sand and areas that are almost impassable because of the ruts made when it was muddy. At times we could not get over 5 mph (8 kmh). It took 7 hours to cover 136 miles (219 km).

The half ger, half permanent building town on the Mongolian side of the border certainly looked good as we bounced and shuddered over the desert tracks. It seemed to take forever to reach it once we could see it on the horizon, as we were moving so slowly, but finally we hit the concrete paved main street. Near the border our guide pulled over and we transferred the luggage, which was dust free in the Mercedes 4 X 4.



The biggest problem at the Mongolian Border was to find the correct official to do the documents required to leave the country. It took about an hour before we headed for the Chinese border. This was the milestone of the trip - the end of bad roads, and the 11th and last country the Rolls will drive through on this run.



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Each manifold is secured to the head via a stud, washer, nut system; there are 8 head studs and 8 washers and nuts securing the exhaust manifold of each bank.

Most exhaust manifolds are very rusty. After removing surface rust (bead blasting if manifold has been removed) and cleaning with a paint prep solution, the manifold appearance can be greatly improved by applying some type of coating. The quickest but least durable coating is Calyx Manifold Dressing (available from Eastwood and other suppliers) which is applied with a cloth and/or a toothbrush. It produces a

nice looking finish but will need to be touched up occasionally. I prefer to use Eastwood's Factory Gray High Temperature paint. It is easy to apply and lasts for years. The nuts are a unique shape; see Figure 3. The thread size is 5/16-



24 UNF. On Cloud II/S2 cars, all the nuts are the same. During the Cloud III series, a protective shield was introduced between the "A" bank exhaust manifold and the brake fluid reservoir jars; see Figures 4A and B. To secure the shield to the exhaust manifold, special nuts (two different lengths) are used for the upper studs at the front



and rear of the exhaust manifold. The finish on all of the exhaust nuts is a natural finish (no coatings).



The exhaust pipe is attached to the exhaust manifold by three

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Announcing: The Featured Region Program

To have your region featured in a future issue of Post55 here all you need to do:

1. Take a cover photo. Use a landmark in your region for the background.
2. Take a centerfold photo of a different car from #1. Use regional scenery.
3. Submit one article about a recent regional meet where at least one Cloud/S participated. This can be an article that has appeared recently or will appear soon in the region's newsletter.
4. (Optional) Submit more articles on restorations, tours or repairs done by members of the region.

Cover photos should have plenty of scenery above the car. It wouldn't hurt if the scenery were some famous spot in your region.

The centerfold should have the car nicely posed in an interesting setting. Originality is encouraged. Past centerfolds have included a wedding kiss, a front view of a black Cloud III with perfect paint, and a Rolls-Royce in a totally normal neighborhood rather than some spectacular spot.

Remember, 10 copies of the centerfold and of the cover are sent to the submitter unfolded suitable for framing.

Silver Cloud & Bentley S Society Wins McFarland Trophy for Post55 By Howard Krimko

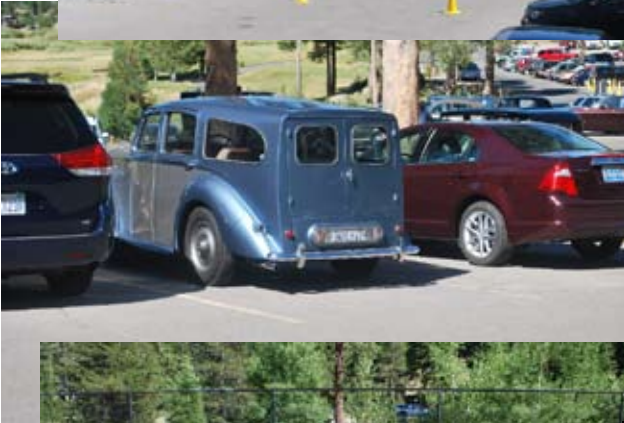
Each year, at the Annual Meet, the McFarlane Award is presented for the best Regional or Society Newsletter. This year the award was given to "Post 55", the newsletter of the Silver Cloud/Bentley S Society, and accepted by its Editor, Tom Wright. I feel that this recognition was especially well deserved since the newsletter broke new ground by including a CD which contained a compilation of articles and technical information about Silver Cloud and S series cars. A great deal of work went into the production of this disc and it should be of great value to anyone owning one of these motor cars. The bar has been raised for all societies, and it is my hope that other societies will follow and produce similar discs. It is extremely important for us, as conservators of these cars, to have easy access to information which will help us restore, preserve, and drive our cars. As Chairman of Regions & Societies at the time that this CD was produced, I was happy to assist with its production.



Trans-Rockies Fun Run by Spencer Silverbach

Having never visited the British Columbia and Alberta Canadian Rockies Vicki and I set sail in B408LBS, Thursday afternoon, 2 June 2011 for an exceptional adventure. Initially we made it all the way from Sacramento to Woodland, California (15 miles) when electrical bugs reared up, forcing us to return to British Car Service where the problem was corrected, after which we sailed on beautifully. That evening we made it to Redding, California viewing the snow capped Trinity Alps. Friday the 15 show continued and we slept on Puget Sound in Olympia, Washington. Saturday by noon we crossed the Canadian frontier, passports in hand, at Sumas, Washington, continuing into Abbotsford, BC then on about 180 more miles to Kamloops, Accent Inn, meeting up with the rest of the intrepids. After a great supper provided in their home the Stegemanns hosted us to John Webb's solo bagpipe sendoff tune. Sunday morning saw 11 RR and B cars heading north towards Jasper National Park, in western Alberta. The pic of B408LBS is in front of Mt Robson on the way to Jasper.

The Canadian Rockies are just awesome, and when I think he has seen the most amazing mountain view, around a bend another even more spectacular scene unfolds. We saw 2 grizzlies, 3 black bears, 4 elk, dozens of white tail deer, mountain sheep(big horn), mountain goats and friendly PMC drivers. Numerous glaciers, huge imposing snow fields, and at Lake Louise an ice floe! Then we ate at the Fairmont Hotel in Jasper. The next morning we drove the Icefiled Parkway towards Ice House and out into the Alberta prairie arriving in Lebec for 2 nites and the viewing of Howard Lengert's collection and tour of the Reynolds museum - Stan Reynolds, 87, owned a car dealership and would take anything in trade - and he kept many of the things. The museum is amazing but the surplus warehouse 100,000 sq ft, is even more amazing. After that we drove to Banff, continued to be awed. The final banquet had to be skipped due to my 91 y o mom being taken ill. All in all the 3600 miles covered was a huge success!



Centerfold (pages 12 & 13): LSZD223 belonging to Grant Kehres of Boca Raton Florida; story in a future issue..







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studs, washers and nuts; see Figure 5. The thread size is 5/16-24



UNF. The nuts used at this location were originally brass but, over the years, many cars have had steel nuts substituted. Remember the nuts at the exhaust manifold/exhaust pipe interface are brass so don't apply too much torque or they will strip. However, it might be better to strip a brass nut then to end up with a seized steel nut that when trying to loosen breaks an exhaust manifold stud (usually requires one to remove the exhaust manifold to remove broken stud and replace it).

The original gaskets (and current Crewe replacements) at the exhaust pipe/exhaust manifold joint are very thin, embossed steel. Some replacement exhaust system suppliers (e.g. Borla) furnish a thicker, composite gasket with their systems. Both types are shown in Figures 6A and B. Re-



gardless of which type of gasket is employed, I usually use an exhaust sealant at that junction such as acoustic/seal which is sold by NAPA as NAPA 35959.



Many exhaust leaks occur because the nuts at the exhaust manifold/head or exhaust manifold/exhaust pipe interface loosen. Before I put my car on the road each spring, I check the exhaust system supports and check all the nuts at these joints and all the other joints in the exhaust system. To do the job properly, I need to remove the front wheels and the engine access plates to get good access to all the nuts. This is also a good time to just look around for other potential problems (leaks, frayed wiring, loose nuts, clamps, etc).

From the downpipe (first exhaust pipe) to the rear tailpipe, there are a number of other junctions where pipes meet and interfaces with the front and rear silencers. For Cloud II/S2 and some Cloud III/S3 cars, flat gaskets similar to those shown in Figures 6A and B were used; the gasket size is not the same at all interfaces.

For most of the Cloud III/S3 series, the lower joints seals consisted of sealing rings (donuts) and split clamps secured by two bolts, washers, and nuts. A typical joint is shown in Figure 7 and the cor-

responding sealing ring and clamps (no bolts, washers, nuts shown) are shown in Figures 8A and 8B. Unless mounting points become loose, these clamps don't seem to loosen up as often as those in the engine compartment. It is important to have the clamps nice and clean (no built-up exhaust deposits) to get a good seal. I also use exhaust sealant at these junctions.



Larry Durocher has been producing technical emails for the society for over ten years. If you have a topic you would like covered, email him at laduroch@earthlink.net.

●

2011 Desert Classic Concours d' Elegance

by Paul Christy

Society members are strongly encouraged to get their cars out to more events. In my 34 years in the RROC, I've seen a shift to our cars representing the older cars that manage to get to meets in some numbers. It's our responsibility to get out and show what great cars we have – and write it up for Post55 too! Ed.

Despite repeated threats of showers, the only Clouds that showed up for the 2011 Desert Classic in La Quinta, CA were II's and III's (and one of their beautiful big brothers: a Phantom V Sedan de Ville).

Topping off three days of classic car celebrations (road rallies, public displays and lots of parties) over 1,000 people attended the final Concours d'Elegance on Sunday, February 27 with over 150 of the finest collector cars from Southern California (actually, from all over the world) under brilliant blue skies on the fairways of the famous



La Quinta Resort.

Cloud Society members Bill Grandey and Kathy Morby brought their beautifully restored 1965 Cloud III in two shades of grey, and Jerry Phillips and myself brought our original 30,000 mile 1961 Cloud II in Maroon over Caramel.

"It really is a delight to bring these cars out to local concours' and meets" said Bill. "People's eyes light up when they see these cars, and you can't believe how many people have a "Cloud story" they want to talk about."

We all had a delightful day and saw many old friends and met many new. Our advice to all of you Society members is to get your Clouds out to these regional and local meets and have as great of a day as we did.

(Photo caption: Jerry Phillips, Bill Grandey, Kathy Morby and Paul Christy)



A Minor Engine Rebuild for LSMH223

by Tom Wright

My definition of a "minor" rebuild is that the valve train and rings are renewed but not bearings. When the bearings and pistons are also renewed, I call it a "major" rebuild and typically removing the engine is involved.

In this case the rebuild was undertaken because the head had to be replaced. It had cracked between the number two spark plug hole and the intake valve seat. I understand many Cloud/S heads have such cracks without them leaking, but mine leaked. Judging by the cleanliness of the number two piston, I think this had been leaking a tiny bit for a while and suddenly became worse. A replacement head was obtained from Hyphen Repairs who supplied good value and excellent service. The guides were resleeved and the exhaust valves replaced. The cylinders were honed and new rings were fitted. The bearing surfaced looked brand new!

All this work was undertaken at Eli's in San Diego.

Installing the exhaust valve keepers and setting the exhaust valves is unusually difficult. You need a tool like a tiny open end wrench to keep the lifter from turning. Then you need a wrench on the locking nut, another wrench on the adjusting nut and a feeler gauge in between the valve and lifter. Strangely, this all seems to work

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much better if your hands are upside down. I placed a plastic box used to deliver water open side down (placed to avoid the intake valves) and stretched out over the right fender and the engine. What a pain!

While things were apart we removed the radiator and had it rodded. Because of the factory boot air removing and installing the radiator were unusually difficult. It seems the condenser was installed before the fenders. One trick that helped was pushing a bolt or nut into a socket with a piece of paper in between. Trim off the excess paper and the faster is held in the socket until it is attached to its mate.

I decided to paint many of the black parts under the hood. Frank Hamad was kind enough to let me use his new sand blasting cabinet. NAPA makes a semi-gloss black that is a very good match for the Rolls-Royce

Lessons Learned

Most lessons we learn often seem completely obvious in retrospect, and that is especially true of my first one:

1. When replacing the head on a Cloud/S, check the heater and de-mister plumbing connections to the head. I know some cars were delivered with one connection near cylinder number five, while others came with two connections near two and three. Overlooking this until the head was installed caused me a good deal of extra work and mess.
2. You need to closely monitor the coolant level in these cars. The pressure relief valve involves a spring that can weaken with age. This allow coolant to slowly escape from the system. Nothing will appear wrong until just before the engine overheats.
3. Painting the under-hood black parts is easily done during this process, but carefully fitting the SU piston housings and float bowls and repeatedly testing the pistons' movement while tightening the mounting screws is a must. Don't fit the pipe to the choke until you are certain each piston moves freely throughout its range.
4. A cheap dome tent works well for painting engine parts.

original. Parts should not be over prepared. I found myself sanding away some casting flaws and realized I was starting to overdo it. These parts shouldn't be too shiny or too perfect. I didn't want to bother getting access to a full-fledged paint booth, but I didn't want a lot of paint dust in the garage. Outdoors here at the beach is

too breezy to spray paint. I hit upon an idea and bought a 5' x 4' x 3' dome tent for \$20 and a \$5 lazy Susan. Putting my arm in the tent to paint a part worked well. Use some wire mesh to make a little stand for small parts. Otherwise it's hard to paint the 1/4" near a solid surface where a part rests. After cleaning the tent I gave it to my four year old grandson as his "bat cave". After painting the carburetor float bowls and piston housings it is necessary to carefully verify that the pistons can move freely throughout their range before fitting the pipe to the choke. Initially I didn't give this sufficient attention and it caused me no end of difficulties.

I'm trying an experiment, sacrificing my windshield washer bottle to give me the room for a coolant recovery system. This will allow me to keep closer watch on the coolant.

I have a bit more to do but expect to drive LSMH223 to the Annual Meet in Lake Tahoe.



Technical Emails

By Larry Durocher

Getting Ready For Spring 3/2011

For those of us that place our cars in hibernation for the winter, it is almost time to give the cars a wakeup call. This note reviews the procedure that I use before placing my cars in spring service.

The first thing I do in the spring is just take a hard look at the car. Look at the paint, trim, chrome, interior, underside, and see if anything needs to be refinished, touched-up, etc. Catching rust before it makes any significant in-roads is very important. Any paint bubbles appearing anywhere on the body?

Take a look under the hood to make sure no animals have made a home in the engine compartment. Take a look at the battery compartment, check the fluid level (hopefully, you have a maintenance free battery), check the cable connections and take a look at the purchase date. Has it really been four years since you replaced the battery?

If you don't use a battery minder, give the battery a good charge. If you didn't remember to use the battery disconnect (you do have one of course?), you probably have no choice but to charge the battery.

The next inspection is a brief look under the car. We are looking for brake fluid, automatic transmission fluid, engine oil, antifreeze, etc. Of course, the small oil deposits from the RR automatic anti-rust system are to be expected but have any of these tiny puddles become a pond?

Obviously, if we have ponds then we can expect that, in addition to finding and fixing the leak(s), some fluid levels are low. We can check all the fluid levels, except the automatic transmission, without starting the car. Engine oil, power steering oil, carburetor dashpot oil, radiator fluid, brake fluid reservoir oil, and windshield washer

fluid levels should be checked. We also need to check the fluid level in the rear differential. If you haven't done it lately; remove the breather at the top of the rear differential and clean it with a solvent.

With the battery charged and connected, it is time to listen for the fuel pumps. Turn on the ignition key and listen for the click-click-click indicating the pumps are filling the lines and float bowls with fuel. Look inside the engine compartment and on the garage floor for fuel leaks.

With the primary checks done, it is time to start the car. Of course, it starts instantaneously and we immediately look at the oil pressure and ammeter gauges to ensure that we have oil pressure and the charging system is working. I just let it sit there (outside) and run for about 30 minutes. I want to see if any coolant, oil, or fuel leaks develop as the car is running.

Cloud Toolkits 5/2011

The late John de Campi wrote a great article on RR and Bentley toolkits. It was published in the Flying Lady (2003 – 5th issue). Since many current members do not have the back issues of the FL and have not purchased all the issues in electronic format, I have decided to put some of

the Cloud toolkit information in this e-mail.

When John was alive, we exchanged e-mails and talked about the Cloud/S-series toolkits on several occasions. John told me that the Cloud toolkits were items that were farmed out to local "cottage" industries rather than being produced by the factory. In the beginning of the Cloud production, most of the tools were produced by Garrington. During the Cloud III production, Garrington got out of the business and the last of the Cloud III series only had Britool tools and a King Dick adjustable wrench.

Figure 1 shows a picture of the Cloud/S-series toolkits; this is the same photo used in the FL article. It shows (starting at top left and moving clockwise) a Cloud/S1 toolkit, a Cloud II/S2 toolkit, another variation of the Cloud II/S2 toolkit, and finally (bottom left) a Cloud III/S3 toolkit.

Note that the Cloud III toolkit has one less tool than the Cloud II since the Delco ignition wrench was no longer supplied since Cloud III uses a Lucas distributor. In addition, the Cloud III has one less bulb since the headlamp bulb cavity is filled with a rubber plug.

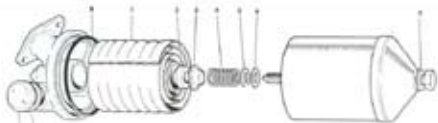
Oil Filters For Cloud V8s 7/2011



From time to time, I get questions from members regarding changing the oil filter on the Cloud V8 or about some of the alternate filter kits that are sold.

Changing the oil and oil filter (see the owner's manual) is a very straight-forward task. The only annoying aspect of the job is the minimal clearance provided to remove the oil filter after it has been released from its mounting. On a LHD car, you need to turn the wheels to the full left-hand-lock to remove the filter; this will also aid in the removal for RHD cars.

Occasionally, I get an e-mail because someone was changing an oil filter and then dropped the canister and is trying to figure out the part sequence. While the owner's manual does not illustrate the proper order for parts assembly, the parts books do, for example, see page A6 of the Cloud II or Cloud III parts book (see below).



Of course, the large circular rubber seal (8) is inserted first in the upper groove before placing the filter assembly in position. Don't forget to remove the old one first.

The sequence for reassembly is as follows, starting from the bottom:

- . bolt (goes through the center of all pieces)
- . metal washer(7) with rubber facing (Dowty seal)
- . large metal bowl/canister that holds the assembly
- . rubber washer(6)
- . metal washer(5)
- . spring(4)
- . metal cup (small diameter sits in spring)(3)
- . cork seal (tapered edge upward)(2)
- . filter(1)

Figure 1 shows the Crewe oil filter kit (RH10003) parts. The dimensions are shown just for comparison

purposes to the alternate filters. Note, an aluminum crush washer is supplied for the oil pan drain plug. The wide rubber seal is not used on the Cloud engines; it is used for the Shadow V8s.



At the moment, I have seen at least four different kits (oil filter and some other parts) being sold for Cloud V8s. The same kits are probably applicable to the 6-cylinder Cloud as well but I have not verified the configuration since I have never owned a 6-cylinder model. As I recall, Replacement Parts is a fifth source of an oil filter kit (that is complete) that is a good quality kit but I don't have any pictures of that kit.

The kits that I have seen are as follows:

1. Crewe supplied kit, RH10003
2. Crosland 345 kit
3. POST55PARTS kit, see http://www.post55parts.com/Oil-Filters-for-Silver-Clouds-Bentley-Ss-Silver-Shadows-Chassis-01001-26700_p_47.html
4. Filter kit seen very commonly on EBAY, Classic Gold RH10003

The Crewe kit is certainly the most expensive and, visually, appears to be the best quality. The Crosland filter seems to be of comparable quality to the Crewe kit but the kit is missing a few pieces. The Crosland filters are probably (I haven't checked the Crewe price in the last couple

of years) roughly comparable in price (\$35) to the Crewe filter kits. The Crosland filters are available from Motorcars Ltd, see http://www.motorcarsltd.com/_search.php?page=1&q=crosland+345



Note that several parts are not included, namely the crush washer, the cork seal, and the rubber bolt seal (for inside the canister). Crush washers can be purchased directly from any Crewe dealer at a reasonable price. I expect it would be easy to find or make a rubber bolt seal. The missing cork seal is a problem if the old cork seal is damaged.

The other two filters seem (visually) to be of a lesser quality (but a much more reasonable price) but this judgment is certainly subjective and I would expect the quality is more than adequate. These filter kits look very similar and might be produced by the same company. They usually sell for about \$15-16. The kits look similar and the Classic

Gold kit is shown in Figure 3. The earlier link will show you a picture of the POST55PARTS filter.



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Comparing the RR kit and the EBAY kit, I noted the following:

- . EBAY - overall quality appears to be poorer, stampings, paper, etc seems of poorer quality . hole sizes and patterns in external paper are different on all three filters (Crewe, Crossland, EBAY); total hole area might be similar.
- . the extreme top of the neck of the EBAY filter is a hexagon rather than the smooth cylindrical shape of the RR and Crosland filters. Not sure why this was done, I would think that the cylindrical shape would be cheaper to manufacture.
- . conical gasket used at the bottom of the filter is cork on the RR kit; the EBAY kit gasket is rubber and does not have exactly the same dimensions. The Crosland filter kit does not include one at all. . the actual filter material appears to be thicker and more closed spaced (circumferentially) in the EBAY filter.

The RR filter has the stamping: British Filter Ltd. Pt.No. 2047 Note of the characteristics of the EBAY or POST55PARTS filters are really objectionable. I have used them in my Cloud III and they appear to work fine; I have just noted the visual differences.

Please do not take this comment as a personal endorsement since I am not in a position to do any type of rigorous testing of any of these filters.

Some Comments on V8 Exhaust Systems

9/2011

The purpose of this short note is to make some comments on the Cloud II/S2 and Cloud III/S3 exhaust systems. The main issue with these systems is leaks and I thought I might make some sug-

gestions that might help avoid new leaks or help find/fix existing leaks as well as show a few pictures that illustrate some of the pieces.

Since I have received a few e-mails about identifying engine banks and cylinders, let's start with some terminology used in the Rolls-Royce Workshop and Parts Manuals. The V8 engine is obviously composed of two banks, each of which has four cylinders. If we stand at the front of the car and look at the engine compartment, the "A" bank is the left bank of cylinders and the "B" bank is the right bank. The four cylinders of the "A" bank are numbered 1 through 4; number 1 is closest to the front of the car and number 4 is closest to the bulkhead/firewall. The "B" is also numbered front to back.

In general, when looking for leaks, try to check for leaks with the engine and exhaust system cold; some leaks will tend to seal as the parts heat up and you are also less likely to burn yourself. A quick and dirty approach to finding out whether there is a leak, and the general location, is to start the car, fold a few shop towels to create a very thick cloth, and have someone hold it tightly against the tailpipe opening (choking off the exhaust) while you listen for leaks. Sometimes the leak is obvious; otherwise you may find a leak by listening at the connections using an engine stethoscope or by just using a piece of plastic tubing.

One of the best ways to precisely locate any and all leaks is to use an exhaust "smoker". With these systems, you start with a cold car and don't run the engine at all. The exhaust smoker blows smoke through the entire exhaust system by sealing the rear tailpipe and forcing smoke forward. Smoke will

be visible wherever the system is not airtight, such as leaking joints and holes in components. An exhaust "smoker" is fairly expensive to buy for personal use but many garages have such systems. Since I wanted to use my four post lift rather than the garage's two post lift, I recently paid for a mechanic to bring the equipment to my house (you need a compressed air supply) and smoke my Cloud III exhaust; the cost was around \$75 but saved me many hours by quickly locating the leak.

Let's review some of the components and sealing surfaces. Starting from each head, we have an exhaust manifold (see Figures 1A



and 1B) that directs the exhaust



gas from each cylinder in the bank to a common, single outlet. The exhaust manifold for each bank is different. The exhaust manifold is cast iron and the four ports on the exhaust manifold mate with corresponding exhaust ports on the head. The gaskets that provide the seal between the head and the exhaust manifold are rather thick and are shown in Figure 2.

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