

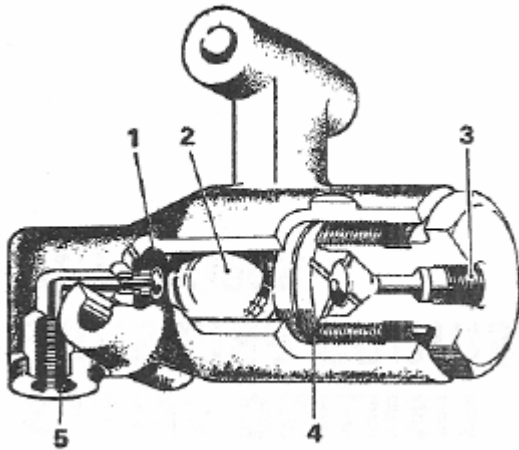
Repeat the process for the number two system. Starting with the accumulator then the bleed nipple on the back of the deceleration valve, then the nipples on the rear callipers on the front wheels and finally the callipers on the rear wheels if they are connected to the system (See Note).

Again allow the system to fully charge the accumulators keeping an eye on the reservoir levels.

High Pressure Bleeding

It remains to bleed the rear rams. Allow the accumulators to fully charge and then overfill the rear compartment of the reservoir.

To get flow through the rams, the height control valves need to be opened. Depending on your facilities the easiest way to do this is to stand the car on its wheels at the rear on top of blocks or ramps. Take great care to keep the whole thing stable and safe. Remember that the handbrake only holds the rear wheels as does the parking pawl.



The deceleration conscious valve at the back of the 'rat trap'. Fig. 2 is a large ball that rolls onto the rubber seal (fig 1) to cut off pressure to the rear wheels and minimise skidding. The rubber seal deteriorates with age and has been known to fall off and be forced down the supply pipes to the rear brakes which results in no oil getting to them. Although not shown this unit has a bleed nipple.

Loosen the clamping nut on the height control valve link at the lower end. You should be able to slide the attaching bolt up and down the adjusting slot. Find the ram bleed screw and put a spanner and tube on it. Note that it is lightly mounted on a bracket. Hold the bracket while undoing the bleed screw. Don't break the bracket.

Start the engine and let the accumulator fully charge. You will know this when the pump stops clicking. Open the bleed screw and be prepared for a hefty squirt from the tube end. It may be advisable to clip the tube to the side of the container if it can get out thus avoiding a shot in the eye of hot brake fluid.

Push the actuating link up on the height control valve and fluid should flow. When the valve is about to open considerable resistance will be felt. If this is not felt disconnect the control arm from the adjusting bracket and push further but not too far lest you disconnect the internals.

Repeat the process for the other side.

Adjust the height control valve by moving the link up the adjusting slot until you can feel the valve resistance. Lock it at that point.



SELF HELP DAY AT KAMBAH

On Saturday 7 August 2004 we will be having a get together with the ACT Branch members at our place 61 Learmonth Drive KAMBAH starting a 0900 hrs. Breakfast and if needed a light lunch will be provided. George will be demonstrating flushing the RR363 hydraulic systems which we suggest is well within the capabilities of most owners. We also hope to have some

bits from George's Silver Spirit which will be of interest. As always all owners are welcome and if there are other queries we will be there to help and advise or tell you where to go for help.

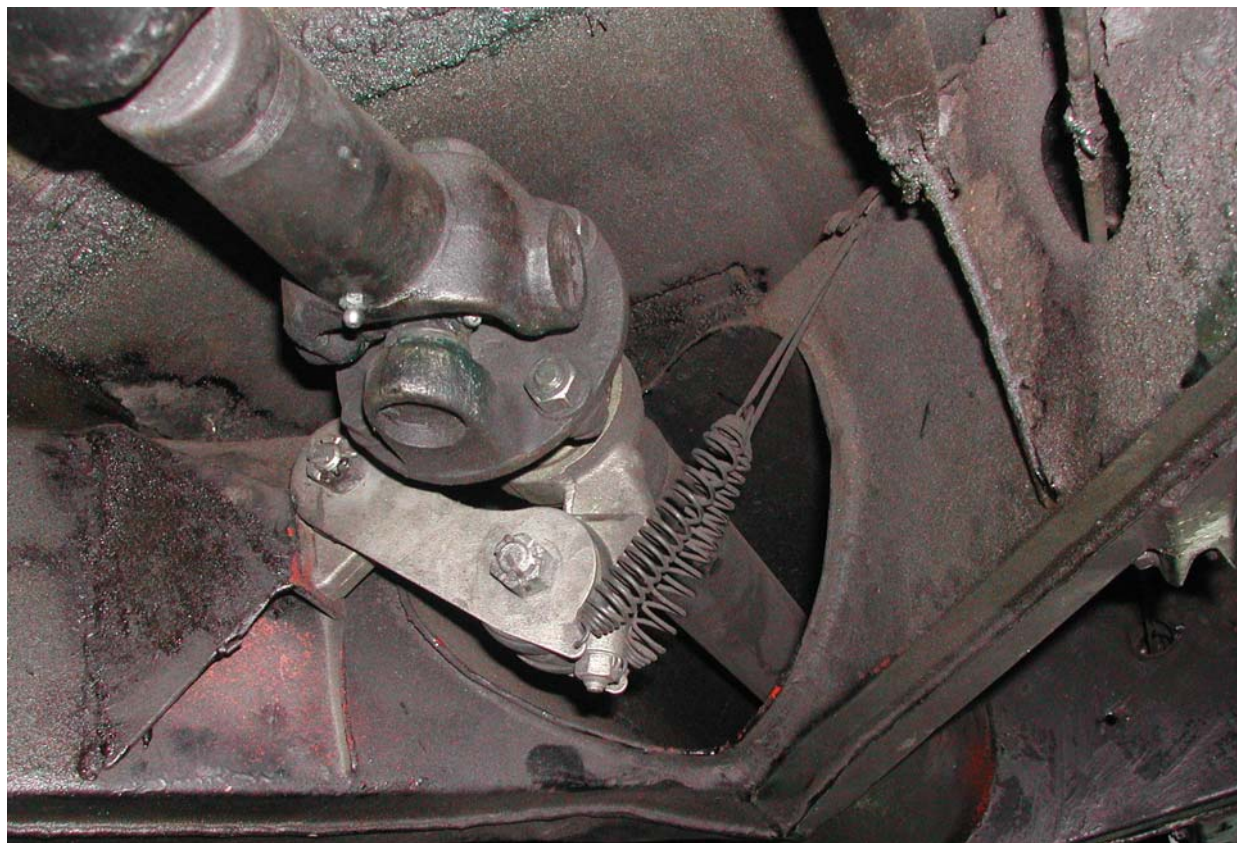
The flushing scheme is very important to all Silver Shadows to preserve the delicate seals and fittings in the system hopefully to minimise the very high labour charges that can be incurred in the event of a major failure of part or all of the system. I am hopeful of prevailing on Warwick Grigg to loosen the two spare spheres I have to demonstrate their overhaul and reassembly.

Please let me know (02 62965893) if you wish to attend so that we know how many pigs to kill for the bacon!



IS YOUR TAIL SHAFT FLOPPY?

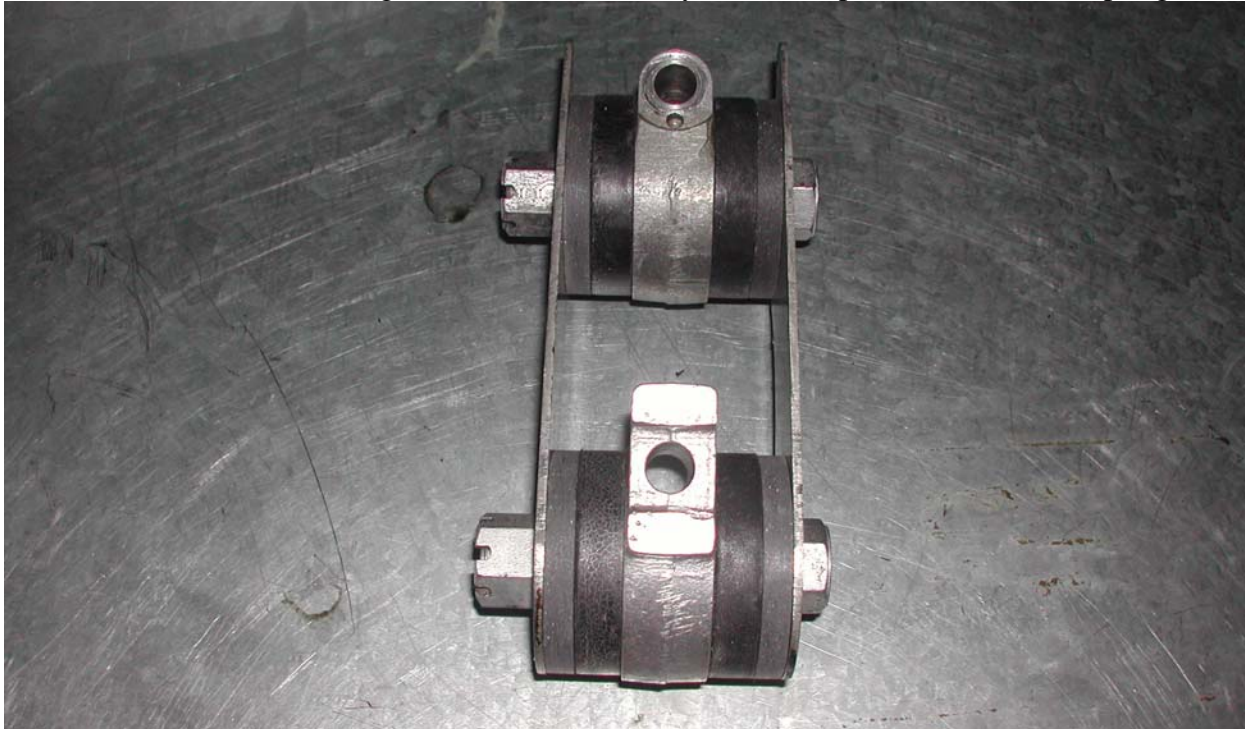
Owners of pre-Shadow cars had the problem of getting the output of the gearbox down to the rear axle so that the car moved. The necessary tail shaft or propeller shaft however had to



A very sagged centre mount in this case on a Phantom VI. Note the overstretched supporting springs.

negotiate the cross bracing of the inherent chassis frame. This involved running a shaft to an intermediate bearing beyond the bracing and then bolting another shaft on to carry the revs to the back axle. The idea is very common and evident on modern day trucks. Where the two shafts are joined there has to be some system of holding them otherwise the two would under certain circumstances make like a skipping rope.

In the trucks I referred to, the join is mounted in simple rubber holding devices but Rolls-Royce decided that a more flexible system would minimise vibration which can occur. The 'join' involves running the first shaft through a ball race in a housing. This in turn is mounted on an arm bolted to the chassis frame. The arm is free to move vertically controlled mainly by friction washers mounted in the linkage. The whole assembly is then suspended on two coil springs.



The centre support overhauled. The bolts actually pass through silent bloc bushes with the rubber discs, the inner ones slipping over their extensions followed by the friction washers. The above assembly has not been tightened which is not done until the whole tail shaft assembly is in position.



With age the friction washer wear and the springs sag so that the whole shaft alignment drops to a dangerous level. If not corrected the shaft under certain driving conditions will indeed emulate a skipping rope. This occurred some years back in a Cloud III and given that the two shafts together are about all a man can carry, the resultant damage included chopping the centre cruciform clean out of the chassis. In short the car was destroyed. The wear and sagging is of course worse on extended cars such as the Phantoms and long wheel base cars. Note the length of shaft on the above car! But even the standard steel models need to be checked.



The finished product. If the universal joints or the CV joint at the front of the assembly need to be replaced, take the whole lot to a professional propeller balancing place and have it balanced. Check that they accept your universal joints. It has been known that the joints as bought from an aftermarket shop may not meet the standard of your balancer. If this is the case best leave it to him to do the job. As with all balancing situations mark the correlation of all components.



WHERE ARE WE?

Actually I am not sure who 'we' are! For the late arrivals these notes, the Tee One Topics, were compiled to provide some record of experiences of owners who came together to fiddle with or fix their cars. The idea is not new. As long as I can remember there have been screams for lists of preferred suppliers, cross-references to after-market parts to avoid the Factory monopoly of selling genuine parts, recommendations for tradespeople and others who have performed splendid services and public castigation for those who haven't. Again these requests and ideals are not unique to Rolls-Royce Owners – all clubs chase them. But they don't work. The lawyers feed on such lists. Recommend a particular brake pad and the car goes through a clutch of kindergarten children on a pedestrian crossing through failed brakes and you may as well kill yourself if you are the recommender.



For those of you not familiar with the site this is the end of a cylinder head off a Silver Cloud. The protuberance sitting to the lower left of the two studs is the end of an inlet valve. The furry white thing on it is a seal. All cars have these but not all cars have ones that work. Rolls-Royce cars fall into the latter category. The idea is that oil swishing around the head before dribbling back to the bottom of the engine, loves to slip down the side if the valve stem through the guide that the valve runs in and get caught up in the maelstrom of the air/fuel mixture being sucked into the combustion chamber. This provides marvellous upper cylinder lubrication for the piston but nearly chokes the spark plugs with soot and invariably provides in varying degrees an on-tap smoke screen that can be laid from the exhaust pipe simply by slamming your accelerator foot to the floor! The diagnosis for this problem is to let the engine idle hot for a while then rev it. A cloud of smoke indicates worn seals or worse worn valve guides. One often sees this at traffic lights when after waiting seemingly eons for the lights to change, the innocent nicely washed Corolla in front driven by the little old lady complete with twin set and pearls, moves off with a great roar of the engine and you miss the lights waiting for the area in front of your car to clear so you can drive. The genuine seals are now avoided by those in the know and American after market items are used in stead . These are excellent last much longer and seal much better. They can be changed without taking the cylinder head off!!!

But if you are the owner of one of 'our' cars and you need the oil changed but can't get the sump plug out, do you spend a couple of hundred dollars to get the job done by someone who knows how to remove the plug, or enquire from someone who knows precisely what is involved,

what tools are needed and how do you go about the job. If you fall into the latter category 'we' are interested in you since 'we' think that you are doing something to preserve the finite number of Rolls-Royce and Bentley vehicles. 'We' have now produced over 500 pages of notes, diagrams and references which it is hoped will help the hapless owner understand his car and hopefully maintain it. Through the various Club web sites many owners have contributed to this mine of information and here in Australia 'we' have managed to acquire and store almost every Factory technical writing on all post-war cars. These are available to anyone who asks. Recently, I was startled to see a correspondent on a web site effectively tell another who was in need of information on his car, that if he was a member of ***** Club he could get the following help. In other words if the owner was not a member of a Club he may as well take his car to the local wrecker. I have the rather strange view that the clubs are here to preserve the cars not to preserve themselves! But as one of our overseas visitors observed to me at the Federal Rally this year, 'it seems from my vantage point that the club has two distinct factions - those who like the cars and those who like what their cars say about them'.

If your Club considers itself as a bunch of enthusiasts, visit their library and see what technical books are available on Rolls-Royce and Bentley vehicles. And I am not talking about beautiful coffee table publications, these do nothing to help the owner of a car that simply won't go! Talk to the technical officer and get his advice. With the demise of the old Company the supply of spares, despite the best of assurances is somewhat parlous – what is your Club doing about that?



REAR WINDOW BLUES



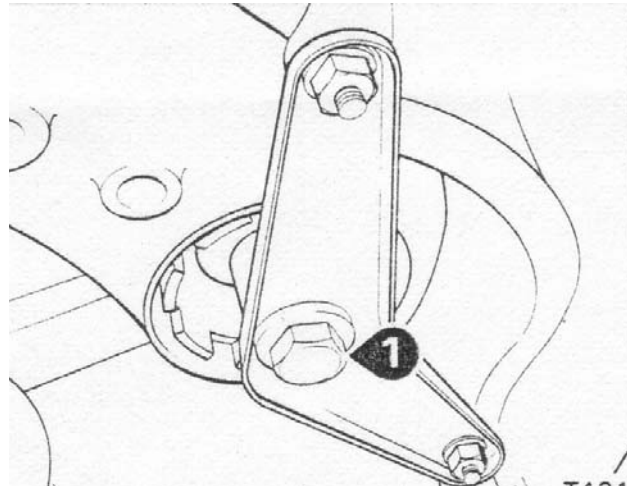
Does the view out of your back window on a frosty morning bear improvement? The reason for the fogging is usually oxidation of the element sandwiched in the glass. This can usually be

burnt off by running 24 volts of DC current (try hooking two car batteries together in series) through the element. The glass will noticeably warm up in spots and hopefully the whole glass will be evenly heated. It is not necessary to remove the glass, simply locate the terminals and bare the wires. Be very careful with the wires since the replacement glass is dearer than the car!



CURING THE GRAUNCH

John Elmes wrote about this little RR quirk that appeared on his magnificent Turbo R. The effect is variable but in the case of the Blue beast there was a very distinct grinding click under the front floor. Remembering the cure I climbed under the car and was horrified to see the boomerang brackets seen in this Factory scrunched up, no doubt from the efforts of a lazy tyre changing gentleman. This is not a jacking point. With the aid of a few improvised straightened and I was able to get a numbered one in the picture. This is one of four that effectively hold the whole front sub

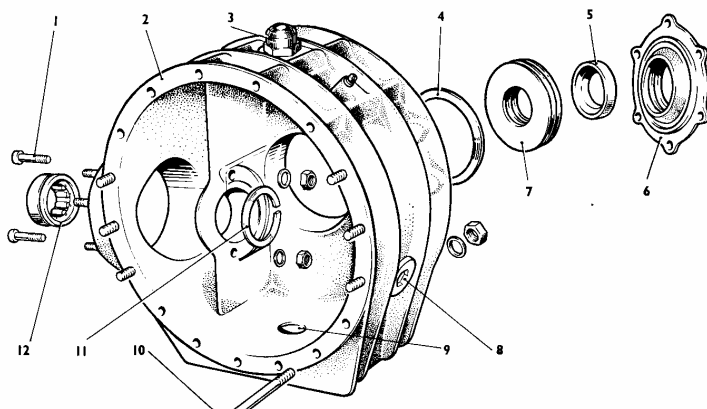


the car via a flexible mount. They tend to loosen with age and the body moves ever so slightly on the sub frame. A good quality socket and a strong break bar will tighten the joint and the underfloor graunch will disappear. If the boomerang bracket is really pretzelled they can be replaced at a reasonable cost.



ASTHMATIC DIFFERENTIALS

Phil Sproston tells me he is finding breathers on both Clouds and Shadow differentials blocked with road gunge. These are essential for muck free running as they allow air and vapours to move in and out of the casings. Block them off, have a fast hot run and it is not unlikely you will blow out an oil seal or a gasket.



The Cloud is easy to get at the Shadow a bit more awkward. The drawing is of a Cloud differential and item 3 on top of the casing is the breather or as Rolls-Royce so quaintly term them 'the ventilator'!. The Shadow fitting is similar but more difficult to get at since the Cloud axle drops down when the body is lifted the Shadow differential does not. This is a good job for one

weekend all it needs is a socket and some kerosene!



WEB SITES YOU SHOULD HAVE ON YOUR COMPUTER

<http://www.rroc.org.au/>

Rolls-Royce Owners' Club of Australia

<http://web.rroc.org/>

Rolls-Royce Owners' Club of America

<http://www.swammelstein.nl/rolls.htm>

A Dutch private web site with an excellent forum

All the above sites have free forums where you are welcome to share your knowledge and ask your questions. Or write to me - Bill Coburn Post Office Box 827 FYSHWICK ACT 2609 Australia or tuppercharles@bigpond.com.

If undeliverable please return to Post Office Box 827 FYSHWICK 2609 ACT AUSTRALIA
