

**OTTAWA  
VALLEY  
LAND  
ROVERS**



15 November 1999

[www.ovlr.org](http://www.ovlr.org)

Volume XVI, Number 11





PO Box 36055, 1318 Wellington Street,  
Ottawa, Ontario, CANADA K1Y 4V3

## General Information

**Ottawa Valley Land Rovers** is the oldest and largest Land Rover club in Canada. Membership is open to all Land Rover enthusiasts. Executive meetings are held on the first Monday of every month. Social meetings are held on the third Monday of every month, generally at the Prescott Hotel on Preston Street.

**OVL**R offers a monthly newsletter and a variety of activities throughout the year, from mechanical seminars and off-road rallies to social events and family oriented outings. Members receive discounts on parts from a number of North American suppliers. Off-road activities come in several categories. The light version, which is usually entertainment during a rally or at one of our family summer events, consists of a little "mud bogging" or tours along country lanes. The heavy stuff, which is usually several days across public lands navigating by compass, topographical maps and aerial photos, involves bridge building, river barging, and driving conditions ranging from cedar swamp to rocky hill winching.

**Membership:** Those joining throughout the year pay a flat \$25 per year, membership expires one year from the last dues submission.

## The Ottawa Valley Land Rovers Newsletter

ISSN 1203-8237

is published twelve times per year for club members. The editor welcomes submissions of text and photographs for publication.

**Submissions:** Articles may be submitted to the Editor, Dixon Kenner ([dkenner@fourfold.org](mailto:dkenner@fourfold.org)) or via post, to the club address. Photographs should be sent directly to Spencer Norcross at 1631 N. Barton Street, Arlington, VA 22201, USA. Please include captions and a return address with photographs.

**Deadlines:** Submissions to the OVL R Newsletter must be received by the first of every month for inclusion in that month's newsletter. All items submitted for publication should be legible and signed. Names maybe withheld at the request of the writer. This is your newsletter. If you wish to write anything, we welcome your input of any kind.

**Editorial Policy:** The Editor of the OVL R newsletter reserves the right to edit any submitted material for space and content considerations. Articles, statements, and opinions appearing in the OVL R newsletter do not necessarily reflect the position of the officers, board of directors, members of the OVL R, or its sponsors or advertisers. Where specific data regarding operation, safety, repairs, or legislation are concerned you are advised to obtain independent verification. The Club, officers, and contributors can accept no responsibility for the result of errors or omissions given in this newsletter or by any other means.

**Copyright:** Pursuant to the Berne Convention, no portion of the OVL R Newsletter may be reprinted without written permission of the editor. Copyright is held by the author of the article and the balance held by OVL R. Where permission is granted, citation must include month and year of the OVL R issue.

Standard OVL R Radio  
Frequencies:

CB Radio: Channel 1

FRS Channel 1 sub 5

Shortwave: 14.160Mhz

# The OVL R Newsletter

## EDITOR:

Dixon Kenner  
([dkenner@fourfold.org](mailto:dkenner@fourfold.org))  
(h) 613-722-1336

## PRODUCTION EDITOR:

Spencer Norcross  
([spenny@fourfold.org](mailto:spenny@fourfold.org))  
(h) 703-516-9899 (w) 703-243-3733

## CONTRIBUTORS:

Russ Wilson, Mike Rooth,  
Jeremy Bartlett, DJ Joltes, Dixon Kenner

## OTHER HELP:

Fred Joyce, Murray Jackson, Andrew Finlayson,  
Bruce Ricker

## The OVL R Executive:

### President

Andrew Finlayson  
(613-798-9211) or [president@ovlr.org](mailto:president@ovlr.org)

### Secretary-Treasurer

Dave Meadows  
(613-599-8746) or [secretary@ovlr.org](mailto:secretary@ovlr.org)

### Events Co-ordinator

Christine Rose  
(613-823-3150) or [events@ovlr.org](mailto:events@ovlr.org)

### Off-road Co-ordinator

Kevin Willey  
(613-825-0603) or [off-road@ovlr.org](mailto:off-road@ovlr.org)

### Exec member at-large

Christian Szpilfogel  
(613-828-1961) or [at-large@ovlr.org](mailto:at-large@ovlr.org)

### Merchandising Co-ordinator

Christine Rose

### Club equipment officer

Bruce Ricker

### Returning Officer

Murray Jackson

### Auditor

Fred Joyce

### Marshal

Murray Jackson

More details regarding Land Rover events can be found at:  
<http://www.ovlr.org/Events.other.html>

Land-Rover FAQ:

[http://www.fourfold.org/LR\\_FAQ/](http://www.fourfold.org/LR_FAQ/)

OVL R/Land Rover HAM:

14.160Mhz @ 01:00GMT Tuesdays

“It’s not that I mind it [my diesel] smoking per se. It’s just that I like to know I’m actually *burning* all the fuel I’ve damned well paid for.”

– Mike Rooth


## Greetings;

It was a cold and blustery night...no sorry wrong story that was a Halloween story, Let’s see, yes well it was cold and blustery with a hint of rain all around us, after all it was October 23rd and an early morning start at Kanata Collision on Hazedean Rd near Stittsville was the place to be. Things went very smoothly Roy Bailie and Jerry Dowell were there early to open up. Bruce Ricker had arrived with the Club trailer and Fred Joyce was there with the spraying equipment ready to go (with his latest addition to his fleet in tow) Next the two sets of ramps went into place and then the coffee and donuts were tested to make certain that they were acceptable and we were in business!

Saturday, October 23, the day before my birthday, and since last year, it was ON my birthday, from now on the annual Oiler will be named the Happy Oiler Birthday, at least, in my books. I have to confess, I wasn’t there at the crack of dawn but I did arrive before 9:00. This is unlike those lay-a-beds, to wit, the aptly-named Big Green Beastie (BGB) and a few others who nameless shall be. Those who did not arrive on time missed the doughnuts and coffee portion of the day. So be it. More tasty morsels for we up-with-the-chickens crowd.

The oiler, as last year, was held at Roy Bailie’s Kanata Collision location, in, well not Kanata, but Stittsville. Very accommodating spot. The chuck wagon was already set up by the time I arrived and I suspect that Andrew, Bruce, Jason, Fred and Roy had something to do with this. David Meadows, who is usually on hand to do his exceptional culinary thing (“bean stuff” he calls it), was sadly not available so his wife, Joyce, took up the bean ladle in exemplary fashion.

**News flash:** Dave’s LR made its debut that day and the oiler elves got ‘er done in his absence.


 Notice how, above, I focus on the comestibles? When it comes right down to it, one is spewing oil about for only half an hour, max, although we all hung around Roy’s for four or five hours. Now just what do you think is the main draw? It can’t be lying around in the mud and oil. Why, what else but food and friendship? I noted several people came, even brought their trucks, but since they don’t use them in the winter, did not oil them. Why do you suppose that these people were there? Why, the food and friendship. What else?

You know, I’ve been doing this automotive thing for a donkey’s age and belong to most automotive clubs in the area, whether I own the “right” vehicle or not. What I find is after engines are admired, tires kicked, interiors examined, for, oh about five minutes, then it’s people talking to people that remains. The vehicles are a pretext to get together. If you belong to a club and you haven’t figured this out yet, wake up and smell the coffee and eat the doughnuts.

And please, wipe the oil from your hands before you make a grab for that cruller!

Submitted by Andrew Finlayson and Shannon Lee Manion. Thanks go to Joyce Meadows who arrived with a large pot of her famous baked chili which was enjoyed by everyone! As well we had home made brownies from Shannon Lee Manion again this year that disappeared very quickly.

All in all it was a good day with 9 vehicles getting oiled and about 15 people enjoying a great lunch. Many thanks to Roy and Jerry for the use of the shop and to Fred, Bruce Joyce and Shannon Lee for their help. Unfortunately due to a bit of a mix up some members were not notified about the Oiler and I do apologize for any inconvenience. Other members missed because of outdated telephone or email addresses. Please make sure we have your most up to date information.

 A Reminder to all members: The time has come again to reflect upon the past year and decide what worthies you know for a variety of annual awards. We require nominations for the following awards:

**TOWBALL AWARD:** Bestowed upon the person who tows perfectly functional Land Rovers around for fun (Christain Szpilfogel), or all the wrong reasons (Eric “ZippyTow” Zipkin), have forgotten where they towed it to (Andy Graham) or for various other amusing reasons. Send a nomination to David Meadows (secretary@ovlr.org)

**GASKET UNDER GLASS:** Given to the person who best demonstrates the indestructible nature of Land Rovers, though probably not in the manner that Land Rover itself would approve of. This award uses “I can’t believe it actually ran” as one of its guiding principles. Using a head gasket with a spectacular burn through (“The worst I have ever seen as a mechanic” - Ted Rose), this award goes to the individual who: exempli-

# Upcoming Events

*in the next month or so...*

- November 15      **Social at the Prescott**, Preston Street, Ottawa, 7 PM
- December 6      **Executive Meeting**, Phone Andrew for time and location
- December 11     **The Christmas Party**  
Details in the right hand column

## *future events:*

*(Dates & times subject to change)*


- December 20     **Social at the Prescott**, Preston Street, Ottawa, 7 PM
- January          **Annual General Meeting** on the coldest and darkest night of the year. A tradition not to be missed...
- January 3        **Executive Meeting**, Phone Andrew for time and location
- January 17      **Social at the Prescott**, Preston Street, Ottawa, 7 PM

fied too much maintenance, the lack thereof, or simple wonder. Send nominations to David Meadows (secretary@ovlr.org)

**THE LUGNUT:** While currently on Walkabout in the United States, no doubt visiting all sorts of potential recipients and spreading woe like Nigel, this internationally famous award is one of the most fought over. Generally fought over by those scrambling over each other to avoid its baleful glance singling them out for

doing something extra this year that earns them something so justly deserved (or that makes a really good story!) Past recipients read like a who-who of Land Rover Owners. Because of the prestige this award generates, members are noticeably shy about coming forward and claiming the award, preferring to defer to someone better. Our members are just so polite! However, this intolerable situation can be remedied by you rattling on a friend! Yes! Turn them in before it is too late! Send your nominations to David Meadows (secretary@ovlr.org) [to view Walkabout progress, go to <http://www.fortunecity.com.silverstone/oil/333/>]

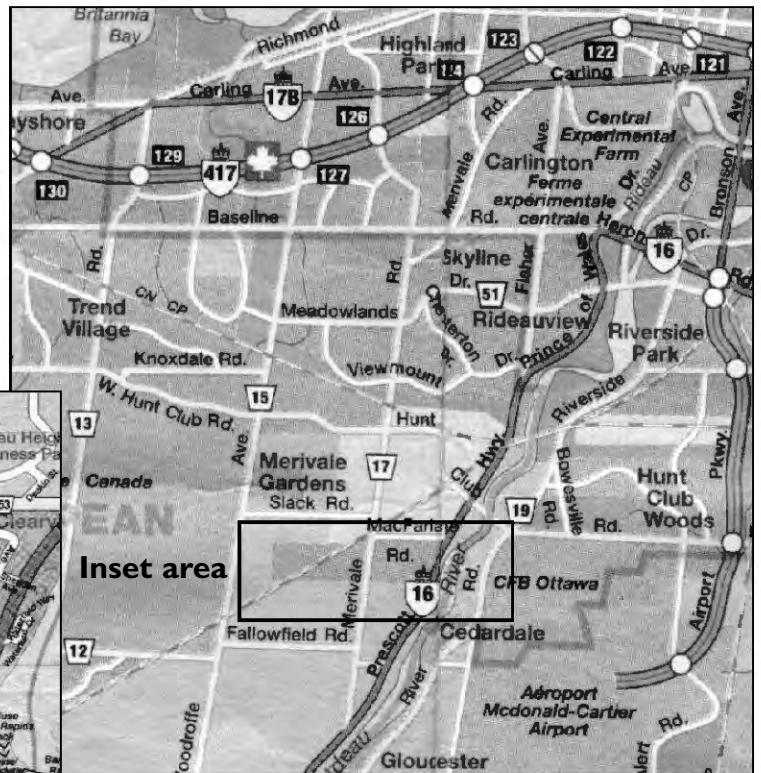
If anyone has any other new awards that someone deserves, please send along the suggestion. OVLRL is always looking to recognise someone!

 **Christmas Party info:** The Christmas Party will be held on Saturday, December 11th at the Hungarian Community Centre, (225-8754), 43 Capital Drive, Nepean [near Merivale and Slack Road]

Please RSVP with Christine Rose at 823-3150 or by email at [tcrose@magma.ca](mailto:tcrose@magma.ca). The cost is \$20 per adult.

Dinner will be a fine home cooked turkey dinner with all of the fixings, cake and cheap beverages. Awards will be given to members who have out done themselves this past year in some fashion that deserves recognition.

Festivities will begin at 6 PM



# Other News, Rebuilds/Projects, Lies, Rumours, Trivia

From the Editor: Last months newsletter was ably assisted by the usual crew of dedicated worthies who gathered in the Prescott Hotel to collate and send this missive on its way. Next month, if we can get any nice photos, we may have a Christmas colour cover. Send your submission to Spencer!

News from Keith Elliot. It seems one Land Rovers isn't enough: "Well I guess it's official, I just bought a Series I. It is either an 86" or a 107" pick-up. I have the serial number off the bulkhead 57231382. I'm going to check it out on the OVL R web site to see if I can figure out a year for it. I think that I will be breaking it for parts which some will be going on my Sister's 80". It isn't running right now so I think that I will see what I can do about getting it to run first before I set about dismantling it. Of course I will have to take some pictures of it first. Oh yeah the main reason that I couldn't figure out the wheel base of it is because it doesn't have a rear tub on it. One thing that's funny is that the rear tub was completely separate from the front half, e.g. The striker plate for the front doors is not on the rear tub like an 88" so maybe it is a 107". It used to be owned by Shell oil and still has the decals on the doors (somewhat). Kinda cool."

A Note from Derrick Hammond: Just a few notes to keep the OVL R gang updated on my goings on... I purchased and have restored an ex-military Late SIIA 109" FFR RHD pickup. It is now 12 volt as all the FFR wiring and generator system was gone when I got it. I've just saftied it and am bombing around the streets of Bracebridge with it. I still have my 88". You will be interested to know that the 2nd Regiment VanDooos are using Land Rovers in East Timor. Go to [www.8wing.trenton.dnd.ca/toucan/gallery](http://www.8wing.trenton.dnd.ca/toucan/gallery) and in the 8th photo gallery you see a couple of our fine aluminum skinned friends in the back of a Herc.

Mike Loiodice had a recent opportunity to drive a Freelander. Here are his impressions:

Made it back from Assateague with the Freelander in one piece. I hate to admit it, but it was a blast to drive. Had absolutely no problems with the beach. it just bounced along merrily across the sand. Kept up fine with the Discoveries and Defenders. Took in a lot of sand. courtesy of two children mostly. but it also pickup up sand on the top side of what passes for a skid plate under the engine.

Overall impressions. probably a great car for trips to the market, commuting to work and such like that. We had 2 adults and two children (12 yr old size), sleeping bags, tents, cooler and other camping equipment

crammed inside. drove out to Assateague with the sleeping bags on the roof and a fair amount of firewood in the back. The cooler had to go on the back seat. It would be interesting to see how it would work in some off-road conditions. It doesn't really have much ground clearance - even with the 16 inch wheels.

I fit fine in the car, and thought it was very comfortable. Someone taller would not like it as much. Quintin felt the seat could use more adjustment, as in up and down. All of the controls are easy to find, unless you are used to a Discovery or Range Rover. The electric window controls are on the dashboard, below the radio (unlike the Disco and Rangie controls). Heater has three knobs and an assortment of push buttons. The four cylinder with five speed tranny was sufficient for everything we did. We cruised at around 65 to 70 all the way out to Assateague. No problem.

The rear door has an electric window that goes up and down. Opening the door is a bit funky. The door latches are electrically operated and the window has to go down an inch for the door to open. When you operate the latch, the window moves down an inch and the door then unlatches. Funky. probably will not last too many years.

The rear seat is split 2/3 and folds forward like a Disco seat. There are handy elastic cargo nets in the back for stowing things. Also has big door pockets and cupholders built in to the front doors. They worked very well. Front seat belts have a height adjustment at the shoulder attachment point. Rear seat has shoulder/lap belts for the outside seats and a lap belt in the middle. Interior lights are not great, even though the front light assembly is just like the current one in a Range Rover. The lights could be brighter.



An Airport Fuel Supply Freelander at Schipol Airport Amsterdam.  
Photo: Ron Burkill



An Airport Fuel Supply Freelander at Schipol Airport Amsterdam.  
Photos: Ron Burkill

This car was not US spec, so some of the “features” are not likely to be seen here. Things like the four position headlamps. Yup. There’s a wee switch on the dashboard that makes the headlamp aiming move up and down. There is also a rear foglamp switch. The foglamps are at the level of the rear window. the regular rear lights are down low at bumper level.

The roof rack could stand some improvement. It’s basically a rail on each side. You can lash something to it, but that’s about it. A basket-type roof rack that clamps to the rails would be very useful. With any luck I’ll get some better pictures to post on Monday. including the engine compartment. Spenny and Dave bailed out on this trip to Assateague. Oh well. We did have a good time and you were missed.

🚗 News from Ben Smith on his 101 rebuild project: “Despite Lucas rearing ‘is ugly little head at the last minute major 101 progress today. I got new plugs and wires on. I got oil in it. I packed the oil pump with petroleum jelly (BTW you get great stares when you go to the grocery store at 3 am on a Saturday night in LA and just buy a container of Petroleum jelly—if I had been thinking I would also have bought a pack of condoms just to see their faces...). With ether I got it to fire on a few cylinders. Then since I don’t have a fuel pump, I siphoned some gas out of the tank and set up the fuel line with a tub and funnel so that I could get gas to the carbs. Then Lucas struck. Turn the key, nothing. bugger. Spend an hour trying to track down the ground short. The heater fan. Isolate that and try again. I needed ether to start it, but she’d catch and run for 5 to 10 seconds. The throttle pedal didn’t seem to do much so the carbs could be shot. Nice sound with the manifolds not hooked to the exhaust pipes. The oil pressure light is out so I don’t know if the pump

primed or not—that’s one of the next things on the list. But the engine ran for the first time in about 15 years. Now I can start hooking up the peripherals like alternator, fan, clutch slave and prop shafts. Next after that is looking at the bearings and brakes.

🚗 An Update from Alan Richer on Lucy the Range Rover: “Y’know, it’s easier than it looks....

Sewing, that is... I had the Rangie’s front seats out of the shed for a cleanup before I was installing them, as the previous owner of the car was a heavy smoker and a slob. Once I got a good look at them in the sunshine I knew, if you’ll pardon the colloquialism, that they hosed.

To wit, the seat bases were so tattered that there was no way they’d hold together. **Damn.**

So, I go off to the auto store to see if I can locate some seat covers. In a word, zip - the Rangie has an odd seat-belt mounting that won’t work with a seat cover.

**Damn. Damn. Damn!**

OK, now we are desperate. After my dear life-partner informs me that there’s no way she’s attempting this I get desperate and decide to go for it. WhattheHell, if I can make something that will hold for a few months then I can fake it with a set of replacement seat covers from the UK.

Off to the fabric store - where I find a velour that matches the original almost identically. I have a piece of vinyl I can use for the sides...good. Thread, and off we go.

I take off one of the seat bases and peel the cover off it, then spend 2 hours with a seam ripper taking it apart. I might add I am cringing the entire time, as this thing is coming

apart and dripping cigarette ash and God knows what onto the table. Ewwwwww....

I take the pieces and iron them flat, then use these as patterns to cut new ones. After getting it half-assembled and then discovering I did it wrong, I finally manage to get the first assembled. I turned it right-side-out and realized that I had done a good job - nay I'd done a damn nice job.

Frankly, If I had enough of the vinyl (I don't, and can't get more) I'd redo the seats entirely. My stuff may be a bit rougher on the inside than the original jobs, but on the outside they look great.

I'm quite proud of myself - and of the fact that I've actually managed to master a new skill. it's amazing what you can do with an old flea-market sewing machine, an upholsterer's manual from Audels and a lot a trial and error.

5 things about sewing for guys:

1. This ain't rocket science - follow the way the original was and it will fit.
2. You aren't building a piano - the pieces do not have to be identical to .001
3. Don't be afraid to ask for help - or look it up.
4. Things that go together three-dimensionally suck to put together - but you can do it.
5. Remember - the good sides go together in most cases.
- 5a. Piping is for wimps...

Funny thing is - once I had the basics down the second cover (for the passenger's seat) went together from uncut material in 1 hour 15 minutes....a lot quicker than the first, which was essentially an afternoon of cursing, stab wounds and general unhappiness punctuated by trips upstairs to ask "how-to" questions.

🚗 A note from David Place: "Well after just about selling my Land Rover it seems it didn't want to go east. It began to run rough and I thought it was the bad carburetor giving me problems but after changing it I found that it still didn't work correctly. I checked the compression and low and behold, it was only about 130-60-80-80. I finally pulled the head and found the head gasket had let go. Something that makes me wonder after only 8,000 on the rebuild, but I seem to remember a bad batch of head gaskets about the time I did my engine job. Anyway I have pulled the head and ordered a new gasket and will put the whole thing back together. While it is off I have sent the radiator in to get it overhauled and a thermal switch installed so I can go to an electrical fan like the

Kenlow. Finally, I sent the starter in even though it hasn't been giving me problems just because with the manifold off it was so much easier to get at it. I am starting to think about a wiring harness now like my son bought for his hot rod. It has every wire marked all along its length with the what it is for and is a very high quality wire. It comes with a modern flat fuse holder system that is very nice. I think this might be just the thing to get the vehicle into the 21st Century and give another 30 years of service. I have put so much into this vehicle now what is another \$1,000. I guess I will have to keep it now because nobody is going to want to spend the kind of money I need to sell it. I guess it will get a snow plow for Christmas to finish it off.

🚗 Andy Grafton, out new South African Correspondent writes: What is it with hand brakes? It's all Nora's Fault! It is, 'yknow. I removed the rear propshaft and halfshafts to prevent further diff damage before driving home on Sunday and foolishly imagined the the 2 philips screws securing rangie's handbrake drum to the rear gearbox output flange would hold it in place for the journey home. Not so. I know it was there before I got on the freeway (handbrake worked...). It wasn't there when I got home. I hope it didn't damage anything too badly.

🚗 A Project 109 update from Dave Bobeck: I took a rear shock off the 109 last night. A pile of new shock bushes in hand to replace all the worn out ones that are allowing the bottom end of the shock to remain loose in its mounting. Once off it became apparent that it isn't even a 109 shock. Looks more like something off the Volvo. Too small, wrong bushings, etc.

Now this of course begs the question of why replace shocks with new without replacing the splayed, worn out springs while you're at it. And since you are planning on doing parabolics eventually, there's not much point in buying regular



Andrew Finlayson addresses the masses. 16th Birthday Party, June 1999

Photo: Bruce Ricker



*Is that Dixon working? Loading the off-road-beer cooler with cold. June 1999  
Photo: Lori Sickley*



*Pre-Birthday party Snowball fight—Dave Bobeck about to get one upside the head.  
Photo: Lori Sickley*

shocks. May as well buy the good ones that go with the parabolics. But then I'll have to do the fronts too. And the new bushings were good money thrown after bad. And of course the lower door seals had to come off, and I've decided to paint the sill channels to keep em from rusting so much., But should I galvanize them? Of course I really should..and the rest of the beast truck including the seats and the glass.

Wiring is coming along nicely. Seven different circuits to go into the junction box... and six terminals. Bloody 'ell.

Also I seem to have lost the rod that connects the steering box to the relay. It's around just wandered off for a smoke I presume.

Every job has to be postponed until I do some other job that requires one wee little part that isn't worth shipping. Waiting for a quote to come back from Dingocroft. Meanwhile the list keeps growing.

Bugger Bugger Bugger. This *is* fun.

🚗 Dean Meyer sends us this little note guaranteed to make sure we **don't** offer him a beer the next time we see him:

I went to a cool auction today in Waynesville, North Carolina. Harrell Motor Sales, a Land Rover dealer for the last 35 years auctioned off all their bits. It was all Series stuff. It all went **really** cheap. I got a Series II breakfast in mint shape, two Series II rads and some wiper fluid bottles and pumps for \$25. They had a Forward Control that went for \$650. It had 7,000 original miles and was supposed to have been from Bermuda. It had no tranny, but the cab was in great shape, the frame was a bit rusty. They also had a Series I that was pretty original and not too beat up. It went for \$850. There was piles of diffs, gears, gaskets, transys, body panels, two or three good 88" tubs, bumpers, you name it. If I hadn't taken the Woody I would have bought more stuff. I'll have to find out where all this stuff ends up, I have joined the Atlanta club and it looks like some of it will pop up there. Some guys got way more stuff than they'll ever use.

I took some pictures, so I'll send them up to you when they are developed and you can stick 'em in the newsletter.

Baking in the southern sun (does it ever get cold down here?)

🚗 Another Ollie update from Fred Dushin: A few more things this week. I cut up the old frame into pieces I could fit in the trunk of my BMW. Many thanks to Al Richer for lending me Mr. Sawzall. Friday, I split open the section around the steering relay with the angle grinder and a bunch of sweat. A bit of blood, for good measure, helps, too. I've yet to prep it and its cavity for installation.

The weekend was devoted to prepping, painting, and more of the same. Went over the rad panel with the wire cup, and then by hand with sandpaper and steel wool. The front got two coats of that plastikote "turn rust into primer" crap. Stinks like rotten socks. And I wasn't too pleased with the coat of primer that went over it. Plastikote must not have dried all that well (gave it a few hours), and the primer ended up cracking. So I had to sand it down again this morning and recoat. Not sure if I'd do it again. Backside got more rustoleum red, as did the rad cowling bits, rear axle housing, replacement bulkhead braces, and oil bath/battery holder. They'll all get rustoleum flat black out of a spray can, 'cept the axle housing. Since this ain't no friggin concours restoration, I'll settle for an acceptable grey for the front of the breakfast.

I also took to the bulkhead. I really only removed the pedal towers and kodiak, but I figured I'd rip out the riveted footwells while I was at it. Do it Earl. Not only did I discover that it had 2 layers of riveted sheet metal (the previous Schibe shop didn't bother to remove the seriously corroded first one), but the top layer (3 including the original footwell) on both sides was made from, you guessed it, fuel station price tags. One says "8", the other "9". So, who want to guess 89.9, and who wants to guess 98.9? I figure the job had to have been done somewhere around 1979.

🚗 And a 101 update from Ben Smith: Despite Lucas rear-




Spenny Norcross's SIIA, Dave Bobeck's SIII and John & Lori Sickley's SIIA  
 Photo: Lori Sickley

ing 'is ugly little head at the last minute, major 101 progress today. I got new plugs and wires on. I got oil in it. I packed the oil pump with petroleum jelly (By the way, you get great stares when you go to the grocery store at 3 am on a Saturday night in LA and just buy a container of Petroleum jelly—if I had been thinking I would also have bought a pack of condoms just to see


their faces...). With ether I got it to fire on a few cylinders. Then since I don't have a fuel pump, I siphoned some gas out of the tank and set up the fuel line with a tub and funnel so that I could get gas to the carbs. Then Lucas struck. Turn the key, nothing. bugger. Spend an hour trying to track down the ground short. The heater fan. Isolate that and try again. I needed ether to start it, but she'd catch and run for 5 to 10 seconds. The throttle pedal didn't seem to do much so the carbs could be shot. Nice sound with the manifolds not hooked to the exhaust pipes. The oil pressure light is out so I don't know if the pump primed or not—that's one of the next things on the list. But the engine ran for the first time in about 15 years. Now I can start hooking up the peripherals like alternator, fan, clutch slave and prop shafts.

Next is looking at the bearings and brakes.

## Some Non-OVLR News & Rumours

 Newsletters Received this month: The Review, (Land Rover Owners Club of Victoria, Oz, September 99)

 Looking for UK style license plates? Matthew Clement, whose name you might recognise from the internet LRO list has started a business supplying vintage and modern UK-style license plates to car enthusiasts. The plates are made-to-order, and Matthew ships world wide. See either his web page: <http://www.home-mac.demon.co.uk/ukplates/> or email him direct: [ukplates@home-mac.demon.co.uk](mailto:ukplates@home-mac.demon.co.uk)

 KALININGRAD, Russia, Reuters [WN] via NewsEdge Corporation : Sleek BMW limousines and rugged Land Rovers began rolling off an assembly line at the weekend in Russia's Kaliningrad region as a local producer made a \$150 million second try to produce foreign cars at home.

Russian Avtotor and Germany's BMW Group

Baltic Sea enclave with historic ties to Germany will overcome the economic difficulties that have caused similar partnerships to falter or fail. "The BMW Group believes in the Russian market...even though the country is currently going through difficult times," Heinrich Heitman, a member of BMW's management, told reporters. Both sides are relying on Kaliningrad's status as a

special economic zone which allows the import of auto parts and related equipment with no customs duties. Kaliningrad, Russia's westernmost territory, was once known as Koenigsberg, part of Germany's East Prussia province, seized by Soviet troops at the end of World War Two and its German inhabitants largely expelled. Sandwiched between Poland and the Baltic state of Lithuania, it boasts European Russia's only year-round port. Avtotor, based in Kaliningrad, is aware of the risks, having seen its assembly of South Korean Kia automobiles grind to a near-halt after successive financial crises in Asia and Russia.

The plant is housed in a converted factory complex at the Yantar, or Amber shipyards—named for the yellow fossilised tree resin mined in the region and used for jewellery.


Production is to start off modestly, with next year's output set at just 3,500 vehicles. Avtotor is hoping to reach maximum output of 10,000 cars annually within three to four years. Both sides believe they can sell luxury cars in a largely impoverished country by securing contracts from state organisations—Avtotor says the administration of President Boris Yeltsin has already promised to buy 250 BMWs. They are also hoping that buyers at the top end of the automobile market have been less affected by financial crisis.




*Fred Dushin shows us the latest thing: removable front horns!*


Duty-free status means BMWs and Land Rovers assembled from kits in Kaliningrad will be exempt from an import duty of about 60 percent, which BMW says translates into sticker prices 15-20 percent below imports that are already constructed. BMW is limiting its involvement to supplying kits and monitoring production quality while Avtotor plans to invest \$150 million over five years. Avtotor Chairman Vladimir Shcherbakov saw nothing wrong with the arrangement. "It's my country and so I should be the first to suffer any risk," he told journalists.

The BMW venture is one of just a few to get off to a successful start. The crisis forced delays in Russia plans by other major automakers including U.S. Ford <F.N>, French Renault <RENA.PA> and Italian Fiat <FIA.MI >. ((Moscow Newsroom, +7095 241-0101 moscow.newsroom@reuters.com))  
REUTERS

 An alternate part from David Place: For what it is worth, I have found an excellent fit master cylinder for my 1969 SIIA. This one has the power brake unit common in the Series III. The M/C is out of a 79 Horizon. The nice part about this unit is the ports are on the left and this allows you to hide the pipes nicely in the fender. I always cut the fender and put a hinge on it so this gives good access as well. I will report later this week just how well it works. Another nice feature of the Land Rover power assist unit going to this cylinder is that the push rod can fit nicely into the depression in the end to stabilise the rod and you only have to add a nut to the already treaded rod to keep the rod from going down the hole in the plunger. If you were alone as I was, just cut a piece of wood long enough to jam the brake pedal against the seat box and the rod will extend out the back of the power assist unit enough to grab the rod with pliers so you can adjust its length and add the nut. The only body modification I found I needed was to take a metal hole punch and cut a 2" hole just where the tip of the cylinder touches the fender

liner. I could have left this step out but I thought that it might just touch and cause some noise on rough roads. I also drilled the mounting holes a bit bigger. The unit is aluminum so it drilled very easily. It has dual chambers so for you who want to go to a dual system this unit will work nicely. Just put a "T" on the passenger side frame rail beside the oil bath and do the front wheels from there and the other pipe can go to the rear. One question I have is which port is typically used for the front brakes on vehicles. I suspect the one closest to the firewall so it comes on first. Otherwise everything fits just fine. I replaced the lines while I was at it with NAPA lines. I saved the treaded connectors off the original lines and put them on the NAPA ones so I didn't have to search out some metric or otherwise tough stuff to find. Looks great and doesn't interfere with the hood.

 Non-LR sighting from Niall Forbes in Nova Scotia: "Well, the Simpson's, one of the greatest shows ever made, has risen to even greater heights. Today they had a Range Rover on the show. You didn't actually get to see it but it was there. Homer ends up helping Mel Gibson rewrite his latest movie by adding lots of violence. The studio execs are horrified when they see their classy movie has been destroyed and vow that the new version will never be seen. In order to get the tape back Mel says "Hey look, a Range Rover's being towed!" as he looks out the window. All the execs rush to the window allowing Homer and Mel to make their escape. Unfortunately they didn't use a Land Rover to get away, opting instead for a golf cart. Oh well. Still great TV."

 The Big 3 (Rover magazines) Round-up:

**LRW:** A very interesting article on Series Is used in India as taxis to mountainous tourist sites. The author shares a ride with 14 others in a 107" (I think). 4 on the front seat. 4 on the back. And 6 behind that. Hopefully the smell of gear oil was very strong.

OVLR gets a mention in the World Scene section with a blurb on the Birthday Party, Jeff Meyer's 109 rebuild, and the old LR ads we print from time to time (all excerpted from our newsletter).

Editor John Carrol covers a military show in the UK with some nice shots of vehicles from Desert Storm, Northern Ireland, and military police vehicles, two particularly nice examples were 101 Forward Controls. Conditions varied from right out of MOD to really nicely restored. The author did seem deeply offended by the participants who were wearing German uniforms. Given the alternative between a Kubelwagen full of tie-dyed rastafarats from Loughborough or Kernel Klink and Sgt Schultz in Heinie headgear, I'd take the Wermacht wannabees anyday (it was a MILITARY show, by the way).

A Solihull Society article covers this year's rally in Colorado. Gorgeous country and very rocky terrain. It includes this interesting bit of information:

“Thin on the ground, though are the Series III-era machines, as Land Rovers and Range Rovers were not officially imported for this period. There have been personal imports of collectable Land Rovers recently, but these are generally more than 25 years old because of customs regulations.”

Wow! I never knew Series III vehicles weren't officially imported! I guess Ted & Ben & Dave and all the other long-time SIII owning OVLRL members are very naughty boys!

Jeff Myer's excellent photography and writing skills showcase the continuing saga of his 109 rebuild. I can't imagine having to do a frameover in someone else's garage in a tight timeframe, much less the generosity of the Haighs offering the garage and Jan Hillborn offering a place to stay, even with Jeff splitting cords of wood for her in preparation for next winter's VT snows. He's got it pretty much together and is almost ready for paint.

**LRO:** Cover shot of the new Defender SVX concept vehicle. Shiny silver grille, rollbar and sills. Could they have meant Defender SUX?

**LRM:** From our own Al Richer comes a letter expounding the virtues of sharing the knowledge we've learned with other Land Rover owners. Seems someone on the main LRO internet list wasn't taught the act of sharing by mom & pop and didn't like the idea of LR folks sharing with each other. Heck, most of us couldn't afford to own our Rovers if it weren't for the kind words and efforts of our fellow club members sharing their skills. Very well said, Al. Al won an LRM wheel cover for his efforts.

Bob Morrison has an article on the US Rangers SOV Defenders with some interesting photos. I wonder what happens to them once they're retired.

Jim Allen discusses coiler diff locks, spring loadings, and speedy sleeves for diff pinion seals.

There's a nice article by a Brit who in rebuilding his head found the block had much more wear than he expected (in a series Rover? No way!). He details excess piston wear and a broken distributor drive piece that was left in the block and could have caused big problems had it shifted around a bit. You'd have thought the previous owner would have made an attempt to get it out of there before buttoning it up again. It was pretty scary.

John Hong describes a "Land Rover" short takeoff and landing aircraft currently being trialed (I suppose LR thinks the coilers will buy anything... but then again, maybe they will) and a phone booth

in the Mojave desert that seems to get calls from all over the globe. He follows with a trip to an Indian reservation where one of the Range Rovers rolls over, with good photo coverage of the vehicle on it's side. It suffered "minor body damage" and an electrical fault in the fuel system once righted on all fours. Shoulda bought a Series.

Our own George Bull and Joanna Cameron write about their trip to Montana and back to Massachusetts, complete with flats and starter problems. Some good shots of the 88" along the way. But next time guys, if you're going to shoot one of you hanging out of a sleeping bag, make it Joanna. Some swimsuit shots would be very nice too.

 A new USA based Rover magazine? This recently appeared in our mailbox:

What is American Rovers Magazine? We are an on-line magazine for American Land Rover enthusiasts. Hosted by Blake Smith at Encompass One, an on-line adventure travel magazine, our stories will be those provided to us by the various clubs, and owners as they drive, repair, or rebuild these legendary vehicles. Will the story submissions be accepted only from American enthusiasts? Absolutely not; however, that is our primary focus. Are there any story or article restrictions? Of course there would be some. Currently, we are only accepting electronic submissions. Also, let's try and keep it simple, no more than six photos with a story. For now, we are asking that text amounts be limited to 500 words. Will there be editing? Yes, both text content and picture might be edited for any number of reasons, ranging from structure to accuracy. But, the goal is to print them as they come so that we can limit the turn-around between submission and viewing. There may be some artistic license taken with the pictures, as we will try to present them in the most appealing manner possible. In the near future, we will be adding other sections such as Technical, Readers Rovers, and Letters, etc. Again, this will be a work in progress; we are an impatient mob! How do you find the magazine, and how do you submit stories and photos, and how can you contact us? There




*The OVLRL encampment at the British Invasion  
Photo: Fred Dushin*



*Did you know a SWB frame will fit in a 109 2 door? most of us weren't sure but Al Richer had the plan. Fred Dushin, Al Richer, Spencer Norcross, Dave Bobeck and Dixon Kenner load Fred's new frame into the back of Al's 109 while Bill Caloccia, Quintin Aspin and Jeff Meyer supervise.  
Photos: Margot Kiepper*

are two ways to find the magazine. First, you can simply choose the American Rovers link on the Encompass One web site. That link is found at [www.encompassone.com](http://www.encompassone.com). Second, you can use [www.encompassone.com/American-Rovers/](http://www.encompassone.com/American-Rovers/). How do you submit stories? E-mail your stories and pictures to [stories@encompass1.com](mailto:stories@encompass1.com). How can you contact us with questions or comments? Please feel free to email me at [dan@encompass1.com](mailto:dan@encompass1.com). What is in it for us? Well, secretly we hope that you will find the product selections and databases associated with Encompass One useful and buy stuff. Publicly, we are only doing this because we love Land Rovers. Our plan here at American Rovers, is to build this as we go. As you will find out, we are learning as we go, and the format and structure will change as we learn. Think of us as the Lucas of on-line magazines. You know, you hope that if you have enough patience, it will work, and if you believe in it really hard, it won't leave you stranded on some dark road.

 Alan Richer sends us this bit about fitting a mechanical oil-pressure gauge on an Range Rover

I fitted up my Rangie last night with a mechanical oil-pressure gauge - the nasty bit was fitting it to the pump in place of the original electrical sender.

The Series III sender is almost identical to the Rangie one except in terms of range - the Series sender is a 0/100 range, and the Rangie 0-60 PSI. Seems to me with a gauge swap from a compliant wreck, you can really reduce your parts costs.

On to the gauge, though. The only bit I couldn't come up with was an adapter from the 1/8 NPT adapter on the tube to the 1/4 BSP thread on the gauge port. To rectify this, I took a dead Series III sender I had (witness the information above) and sliced it off just above the nut on the base. I then ground off the rest of the case, and drilled and tapped the remaining bit 1/8" NPT to match. For me, a 10-minute job (tapping threads in the lathe is a breeze!) but I'd farm it out if you can't find an adapter.

You are a lot more likely to be able to find a BSP adapter, but the rest of the fitting was straightforward. Nylon tube up to the dashboard and pop the gauge in place of the old Lucas one.

Incidentally, the Lucas oil-pressure sender is a real marvel of technology (not!). An abomination is more like it - I cut the pressure head open on this one to see how it ticked.

Ever open up one of the 10-volt regulators? It has a cousin in the Lucas pressure sender.

The sender electrical element is nearly identical to the Rover regulator - a bimetal strip wrapped with a heating element and connected in series between ground and the gauge connection. Current flow through the gauge heats the strip, causing a make-and-break action, making the slow-reacting gauge respond per the duty cycle.

Simple, really.

The real weasel in the woodpile is how the duty cycle is affected by the oil pressure. A diaphragm with oil pressure on one side has a small post riding on its centre - this moves the other contact of the make-and-break switch, thus varying the duty cycle (the make-and-break open time) as it moves the contact closer or further apart.

What an abomination - this is easily the stupidest thing it has ever been my displeasure to see. Moving parts in a pressure transducer is abominable.

one Blank  
Page for  
the final  
Crossword  
Puzzle!

# General Servicing: Repairs, Humour, Tales & Trivia

## The Portland All-British Field Meet, an Event Report

Russ Wilson

Well Ben Smith and I have returned from our great adventure to the wet and wild northwest corner of the country. We jointly came up with the brilliant idea to leave LA at midnight on Thursday after Ben returned from Texas on business. At this point Ben had been awake for 18 hours so naturally I made him take the first driving shift. The drive north was blissfully uneventful with no traffic jams, break downs or diarrhetic explosions between rest stops where we would perform the time honored ritual of the stretch, pee, stretch some more and get back on the road. We made fairly good time getting out of California and enjoyed the change of scenery as we crossed over into the only state in the U.S. with worse taxes than California.

Heading northward once again we took off and a slight detour just to pick up a college friend of mine who has no interest what so ever in Land Rovers but is always up for any adventure that involves beer and even a slim chance of seeing an older woman in a sundress without underwear. Some of you may remember my friend Mike from the '97 Birthday Party which he attended after calling me with the question "Do you know of any good places to go camping?" When I answered the phone I was in the middle of packing my bags. I told him that I was leaving in 3 hours to go camping in Ottawa for 4 days at a Land Rover event. Without a second's hesitation he asked if we had room for one more. With that, we were off to the Birthday Party.

The trip to the PABFM was a bit of deja vu in that regard. Mike was a last minute addition to the group but a very welcomed addition. After a few beers and getting Mike's gear we were off on the last 60 mile leg of the journey to the Portland International Raceway. We made it into the race track and began to set up the tents and get a start on the primary task of drinking all of the beer we hauled all the way from La La Land. Mission accomplished.

Those of you who have "tipped a pint" with Ben in the great outdoors know that he likes to collect the empties in the bonnet of his trusted steed, Dora. Well since we flogged the Black Watch (Ben's Disco) on this trip and were without a bonnet mounted spare to collect the dead Rolling Rocks we just piled them on the BW's bonnet. The lawn show on Saturday was good as far as lawn events go with 120 or so LRs in attendance. Ben took a count at noon and I think that was the number he came up with. As an owner of a completely disassembled Dormobile I was happy to see 5 Dormobiles all in one spot at one time. I shot a bunch of photos to help me out when it comes time to put Gambrinus back together.

As the sun set and the crowd thinned Ben and I decided to take a little unauthorized tour of the racetrack portion of The



Top: a collection of Dormobiles; Bottom photos: Rovers on the show field

Portland International Raceway in the BW. Nice track. The BW handled its F1 role very well, even in the S-curves. You just haven't lived until you've driven flat out on a professional racetrack no matter what you are driving. Later that night saw much more drinking around the campsite until the unthinkable happened.

We were **out of beer!!!** There was only one thing to do in our severely drunken but still very thirsty state: take a stroll to one of Portland's finer drinking establishments across the street from the track. "The Dancin Bare" was just what we were looking for and certainly at least as interesting as any Land Rover I've ever seen. Oregon is a weird state with crushing taxes but you have to love anyplace that will let it's strippers take it **all** off for the love of the mighty green dollar.

Sunday morning came way, way too early as I crawled out of my tent very broke and hung over. After a quick "dingo's breakfast" to steal a term from our Aussie friends, Ben and I headed across the track to the swap meet. This was interesting to say the least. The hillbillies came out of the weeds for this one folks. People of varying levels of sanity and sanitation were trying to sell every piece of junk and scabble that they could drag from the far corners of the family barn. The only mildly interesting thing that I saw was a completely dis-

assembled series III 88 that someone had brought to the meet all nicely packed in boxes in the back of a trailer. The guy strolled around and posted his prices on a big board outside the trailer.

The mob jumped on this overpriced junk like a school of piranha on crystal meth. I wandered around a bit and picked up a cheap shirt and a slight sunburn before deciding with Ben that it was time to head back south. The trip home was about the same as the trip up except that all the stuff that you saw when you looked out the right window on the way up was now on the left side as you looked out the window. Things went well until Ben, in a slight moment of inattention to our speed, caught the attention of one of Oregon's finest. Yes, we got to spend 20 minutes having a chat with officer "Do you boys know how fast 'yall was going?"

Once back on the road we made our way back to the border crossing into California. For those of you who have never driven into Kalifornia, there is a "border crossing" much like an international border. The purpose if this is to prevent any contraband produce from entering the state. Whatever. We continued south and made it back to Los Angeles without any problems and I would have to say that overall, it was a great way to spend a weekend.

## **Baby Cops, A Friday Story**

*by Mike Rooth*

Ever seen a cop get lost? Gave us quite a chuckle. This little lad appeared with his office around his waist, looking distinctly harassed. "Is that a copper?" asks Kate. So I looked and said that, no it can't be, must be a truant schoolboy playing cowboys. He went away, and came back driving a car. Start 'em young these days, he only looked about sixteen. After a bit, he knocked at the door. I fielded the little dog (they like kids, just can't eat a whole one).

He flapped a bit of paper and said "Have you made a complaint?" to which we answered no. "Well, it says here you have".

So Kate says "Have you tried Woodhouse Eaves?" which is a village about five miles away which also possesses a Herrick Road, but not the real one.

"Says Loughborough here madam".

By this time the baby cop was getting a bit embarrassed. Doesn't help your invincible image when you knock on someone's door and that someone suggests that you're on the right road but in the wrong town. It certainly doesn't help when the aforementioned citizens are grinning from ear to ear.

"Well, it says here that no. 11 Herrick Road has complained about something at no. 21. Only thing is, I can't find no. 21".

"Aha" says Kate "There isn't one".

"Oh"

"Look, try Woodhouse Eaves. We're always getting mail that

should have gone there. Would you like me to look in the phone book for you?"

"No, no, no, no, don't worry I'll radio back to HQ. It's a funny road this"

"Yep. You've got *no* chance mate. Even the postmen go about in pairs in case one gets lost".

At which point he retreated red around the ears and zoomed off, while we fell about laughing. Doesn't do to mock the afflicted really.

He had a point. I don't know if it varies country to country, but usually a road is numbered odds on one side and evens on the other. Starting at one end and finishing at t'other. Fine, but boring. So, number 1 Herrick Rd isn't facing Herrick road at all, so its not actually *on* the road. The far side goes up to no. 20 (but there aren't twenty houses), then to no. 22 (owing to the fact that no. 22 was only built about thirty years ago), and after that, no. 56. On our side, the house at the bottom hasn't got an address on Herrick Rd at all because it faces the same way as no. 1, which has. You then get nos. 7-15. (Bear in mind no. 1 is now on the wrong side. ) After 15, you get 156. And at the top of the road the numbers start to go *down*. It takes a new postman about three weeks to a month to get used to it. In fact the previous and prospective postmen literally do go about in pairs for a day or two.

Its crazy really, but I hope they never change it. It's much more fun this way.

# LAND ROVER TREK 99

## *From the Inside*

Some of you may have heard of Land Rover North America's (LRNA) TreK competition which is something of a mini-Camel Trophy in style. The 1999 Trek event was held on private land between Bodega and Bodega Bay north of San Francisco and was run over several days in mid May. TreK is basically an internal company event with teams of three members drawn from Land Rover Centre employees. I was fortunate enough to make Land Rover Marin's team and competed in the first day of the preliminary events. I thought I'd pass on my perspective or our team's day.

Eight different teams of three participated each day. Every day another set of eight teams would arrive and compete. The winning team of each day went on to the final event.

The event changed slightly in later days as timing, and events, etc. were refined. It was also altered a bit during our day as conditions changed. We arrived the afternoon before the event and

parked our cars on one side of Salmon Creek and walked over to the other side on a recent constructed bridge. (I think the Camel Trophy folks like log bridges.) Three person tents were set up for each team, and there were a couple of large common "tents" for meetings/meals and the organizers.

The event is run with LRNA vehicles. This year saw the use of specially equipped Discovery II models. They had been painted a pumpkin orange with black trim (reminiscent of camel trophy vehicle paint schemes). They were also saturated with decals from assorted equipment suppliers (Photo 1). What stood out for me after a quick look were the Safari Gard rock sliders and Hi-Lift Jack mounts. Some vehicles had Southdown center armor plates running from the catalytic converters back to the rear of the transfer case. 'nice but probably overdone. All the vehicles had Warn winches mounted on front. The body work was modified slightly; for example the front grill was changed to a mesh and the integral fog lamps had been removed (I saw some of the remnants in the ranch dumpster when helping with some of the garbage). Of course it was also a nice ego boost to see one's name with one's teammate's' on the side of the vehicle.

The TreK competition itself was divided into several off road events that will be familiar to many club members. These activities were mixed with orienteering, mountain biking and canoeing, akin to the more recent Camel Trophy competitions. In fact, TReK was set up by a group largely consisting of ex-US Camel Trophy participants. This group had obviously gone to a lot of work and trouble to set up the courses and event. I'm somewhat jealous that club activities will never be likely to meet such a level.

### Start

During a day's competition, many team activities were staggered. However, all teams crawled out of their team tents at 4:30 in the morning. I think, theoretically there was wakeup call although I'm rather

by **Jeremy Bartlett**



sure that everyone was awake by that time in anticipation. By 5:00 AM we all gathered in that main “carnival” tent to receive our instruction books for the event and take a Land Rover trivia/technical quiz while consuming breakfast. Some chose to cram themselves with food and some to minimize intake in anticipation of early effort; knowing my mediocre physical condition I opted for the latter strategy. At about 5:45 everyone, started a half mile sprint in faint light up one of the nearby hills (*rumor had it there were no downhill sections on the property*) to an area where our vehicles were parked. Once all team members were at their vehicle, the team then drove to an event called the “Service Drive.”

### The Service Drive

This was a timed event which ran roughly as follows: Drive to a start line where the spare tire is retrieved by hand (it took two of us) after following an appropriate compass bearing down the local hill. Secure the spare tire and Hi-Lift. Drive to a start line. Retrieve an air filter from a specified compass bearing written on the old filter and change the air filter. Drive forward again. Break out the recovery equipment and manually Hi-Lift Jack the vehicle forward a specified distance then stow gear. The distance required about three operations of the Hi-Lift. As we all know, brand new Hi-Lift jacks don’t necessarily release easily, and ours was no exception. Then we had to winch forward to a specified point. This was winching with the vehicle winch. Secure all gear. Drive to the finish line. We didn’t have any particular blunders on this and came in somewhere in the middle of the pack. This was to be our pattern for most of the day. Working the Hi-Lift quickly is a team effort since one end really needs to be held down while someone gets their exercise swinging the handle; we traded off as each member tired. No one managed to knock themselves out with the jack.



*Photo Credit: All photos with the exception of the image below were taken without permission from LRNA marketing materials, the image below was taken by the author*



### Land Rover Cross

Following this our team was slotted to run two obstacle courses billed as Land Rover Cross events. These were cone gate courses driven for time. The second course emphasized more side angles. The cone gates were set with a large cone and a small cone; the large was to be passed to the right. Each team member drove each course twice in succession after a practice drive. A ten second time penalty was recorded for each cone hit with twenty seconds for any missed gate. Most of you are probably familiar with this type of course. I think we did fairly well here, coming close to getting the rear loose on occasion and managing to get some use out of steering with the ABS functioning in dirt! By the time of our later laps we worked out a technique where I hung out the passenger window to spot the driver on the passenger side at speed (no team member was allowed outside and safety belts had to be on at all times). The passenger side, especially the rear, was where most cone hits were occurring so we tried to control this more. After our final run we were told we led that event so far.

### Trek Trials

From here we found our way to the next event billed as Trek Trials. This was essentially more of the same game. It consisted of a caned course through a much more technical section in the head of a wooded gully. The section was set up like the typical ARC rally section with caned gates, and of course, the obligatory log bridge or two, the bridges being more or less just as wide as the tires. Did I mention that the Camel Trophy folks seem to like log bridges? There were some nice off camber turns to negotiate as well as some relatively steep sections through slick terrain. As many of you will know, the object was to maneuver the vehicle through the course while not touching the canes. This was to be done three times, once with each team member taking a turn driving. There was a time limit of thirty minutes total. Four minutes were allowed to “walk” the course initially. The event itself was not timed and each team member drove once (driver changes on all courses were included in the time, so we got proficient at that). Again no external spotting was allowed so heads out was the order of the day. Again I think we probably performed near the middle of the pack here. We kept within our time limit and didn’t suffer too many hits, in my opinion.

### TSD

After this came a Time Speed Distance (TSD) event. The sun had now come up fully and it was now about 9:30pm. To me,

the TSD section wasn't difficult compared to what some of us are used to on the Pacific Northwest Team Trophy (and dare I say NCRC rally). Speeds were a bit lower around 6 to 10mph. We did well, apparently being one of only two teams to complete the event. This amazed me since we actually got lost on the last 2 diagrams (fortunately after the final check point!) and the directions otherwise were not cryptic.

### Orienteering

Our final event before lunch was an hour and a half of orienteering. We were given a topographic map of the site in the morning along with our handbook of instructions. Locations of orienteering flags were provided on a map except for three or four where lat./long. coordinates were provided. Personally I found it a bit of no brainer to just pencil in on the map where these were since the axes were labeled on the map. "Lets see ... N 38 20' 45.7" W 123 00' 35."o" ... hmm... that lines up with a building marked on the map... wonder where the flag is?" Other teams were hindered by their GPS, relying on that to enter the coordinates as waypoints to "find" their location, but I could be wrong. I clearly remember seeing one team the evening before frantically reading through the instruction manual of their newly acquired GPS. Anyway, we did quite well in locating the flags but were disqualified from the task because we ended up taking a gravel road that we weren't supposed to go on for part of our travels. I guess we need to listen better in the future.

### Canoe Racing

After lunch came the infamous, at least for the first day's teams, canoe race. This event was billed as a five mile team canoe race down Salmon Creek. To give the organizers their due it was a race and it did involve canoes, but it just didn't involve a lot of paddling. It turned out to be more of a four mile portage race. Water was low enough in the creek that the canoes could only be intermittently paddled probably about a fifth of the total distance. We began inauspiciously by heading down the creek in a mad dash and not realizing for several hundred feet that we actually had the canoe backwards! This didn't make too much difference to our placing because all the teams were routinely capsizing in the process of dodging branches and snags. (We were actually required to wear our bicycle helmets for safety in addition to the lifejackets). Pretty soon the teams spread out and the event became a personal slogging match with the canoe and the creek bed. In the course of the event I think we found just about every possible way to carry, drag, float or otherwise move a canoe without being in it. Of course frequent capsizing was the order of the day. This was fine until we got near the coast where the wind picked up and the chill factor increased. We almost got blown back faster than we could paddle once we reached open water. By the time we approached the finish we had almost figured out how to steer the canoe (, and were get-





ting proficient at getting back into it. We made it to the finish after about two and a half hours to be greeted by the news that the mountain bike return race to base camp was cancelled due to risk of hypothermia and time. I can't say I was disappointed.

### “TreK”

After a drive back to camp, all teams assembled for the final head to head competition. This was a timed event consisting of a series of tasks starting at the base of a hill. The tasks were laid out in a rope corridor along which the teams progressed with their vehicle. Touching the rope was cause for penalty. Driver changes occurred throughout the course. We exceeded the time limit about half way through due to a time penalty and slow winching but I'll describe the whole thing.

The first section was probably 50 feet of ditches that tested the articulation of the vehicle. This was easy going. Following this was a large two feet or so diameter log on the ground hinged at one end to form a “gate”. This had to be winched open, then winched closed after the vehicle passed through. The latter required snatch blocking to the rear of the vehicle. This is where we incurred our time penalty when a team member stepped over a slack cable. Things got worse from there as the marshals got finicky about re-spooling the cable, at least that was my perception.

Had we continued after this we would have driven over 3 or 4 pits big enough to drop the vehicle into. These were spanned using, you guessed it, log bridges. *(have you noticed a common theme through the event?)* The catch was the bridging poles had to be carried down from the farthest pit to the first one before you could proceed with spotting/driving



the vehicle over the pit. Then they had to be carried around to the next one without touching the rope cordons.

After the pits, there was a post gate and my favorite task (even though I didn't get to do it). It was called the extreme side tilt. The organizers had built up a steep, long berm. One side of the Disco II had to be driven up onto the berm thus placing the vehicle at a 60 degree side tilt; needless to say this is sufficient to roll the vehicle. Before this roll point was actually reached, the vehicle had to be secured to prevent roll over. This was done using straps looped through the door pillar. But there was more than this. The straps were shackled to a snatch block which was attached to a wire rope running the length of the berm about 15 feet from the vehicle. The snatch block was attached to the cable in such a manner as serve as a wheel along the cable. This enabled the load of the vehicle to be taken by the cable to prevent rollover while at the same time allowing the vehicle to roll forward. Once this rigging was complete, the vehicle then had to be driven along the approximately 50 feet long berm at 60 degrees lean!

Following this task another log gate was opened, the vehicle was deliberately high centered on a berm and winched over it then driven down to a cattle pond. On the far side of the cattle pond was a derelict 88 which had to be winched across the pond to finish the task. The only catch was the only way to secure the cable was to swim the pond! To insure the 88 got to the other side, someone had to steer it across while it was winched. This required near submersion. Part of me is glad to say we timed out before that one.

All in all participating in the event was a blast though very different from typical club rallies, and I'd love to do it again.

## **You know you're a bit too addicted to British cars when:**

*DJ (Yes, these are original, rainy Sunday afternoons are dangerous.) Joltes*

- 1) You associate the name George Lucas with dim lighting, but not because he makes movies.
- 2) Your first-born son is named Austin Healey.  
*Extra credit:* your other children are named Morris Minor and Morgan.
- 3) While doing the weekly shopping you see "Mini Pads" on the list and end up buying seat cushions at the local car parts store.  
*Extra credit:* that's what your wife actually wanted.
- 4) The local oil recycling company sends you a calendar every year. Yours is special since it's marked with the dates on which they will send a tanker for the next pick-up.  
*Extra credit:* a cheque is enclosed with the calendar.
- 5) You find no humour in the old joke that "the Bentley is in the shop again."
- 6) A waiter in your local restaurant tells you they're now selling Sprite. You ask "what year?"
- 7) You can use the term "gland nut" in a meaningful sentence lacking any sort of erotic content.  
*Extra credit:* ditto for the phrase "thrust washer."
- 8) You're unable to handle a car lacking manual overdrive.
- 9) You know that "Dolomite" is not a type of rock.
- 10) A friend's "Stag party" has nothing to do with an imminent wedding. The most sexually stimulating discussion at the party involves a recent V8 conversion.  
*Extra credit:* to avoid embarrassment you remain seated for ten minutes after this discussion has ended.
- 11) The announcer at an air show says that the next performer will be a Spitfire. Five thousand pairs of eyes stare at the sky; you look at the car park.
- 12) You explain the zebra-stripe paint job on your Series Rover by applying magnetic decals advertising a local wildlife park, and keep a stock of brochures in the glove box so you can hand them out as people ask for directions.  
*Extra credit:* the wildlife park pays you for this service.
- 13) You studied yoga for three years, then quit when you found out that achieving the perfect Lotus position wouldn't make your Elan any more comfortable to sit in.
- 14) You find it frustrating that attempts at ordering replacement parts for your Sunbeam keep resulting in the delivery of items better suited for kitchen appliances.  
*Extra credit:* you've found ways to use these parts in your car.  
*Double credit:* you have used "Tiger Balm" as scratch filler and can't believe it was made for anything else.
- 15) You suspect British Leyland heralded the coming of the Antichrist. BMW have confirmed your suspicion.  
*Extra credit:* you attend prayer meetings devoted to the resurrection of Standard-Triumph.
- 16) Your boss says he's giving you the boot. You thank him and ask if it's for the Jaguar or the MG.  
*Extra credit:* it's for the MG.

## **Cushioning the Shock**

*by Mike Rooth*

The black vinyl seating fitted to S11 and 11A Land Rovers, (The so-called "Standard" seating) is pretty hard wearing and, to my mind, practical, but there comes a time when age and usage tells. In my case both driver and passenger seat cushions were not only a disgrace to the eye, but were depositing muck on whatever was worn when seated, with consequent complaints from the Domestic Authority. Clearly, something Must Be Done. Now, the current price of seat cushions is around 13 pounds each, and having seen one example, I'm not too sure that this isn't plenty to pay. In the event, I got in touch with a friend "in the know", who gave me enough black vinyl, of vastly superior quality, to do the job myself. Whilst the result is obviously not up to professional standards, it looks fine, (I'm told I tend to be over critical of my own work), is certainly comfortable, and due to the quality of the material, will probably outlast the ready made version. Further, its a job you can do in

the dead of winter, indoors, without incurring the wrath of the D.A. Unless of course, you break the sewing machine!

Costing the job is, of course, very much up to you, but I venture to suggest that you could probably afford to buy a better vinyl than you would normally get, the job is out of the normal run of greasy finger maintenance, and its good fun. Plus, you get a virtuous glow through working on your vehicle all nice and cozy when its minus brass monkeys queuing at welding plants outside. We will draw a veil over my attempts to overhaul the old hand driven Singer stored in the garage for years, suffice it to say the thing did work eventually, and I'm convinced sewing machines are inventions of the devil!

You will need a needle suitable for leather, and thread to match. In effect, I threw myself at the mercy of the local sewing machine shop, them what I was doing, and they supplied the

needful. If the cushion needs “bolstering” a bit, you will need some foam, but try and get some hard stuff. Have a look at what’s in there, and get something about the same consistency. I reused the existing stuffing, and added a layer of thin stuff on top.

Remove what’s left of the old covering, by carefully easing out the staples from the seat base. You’ll need them out anyway. Beg, borrow or steal a staple gun. This item is essential. The seat base may look like junky fibreboard, but in practice, its so hard I’m surprised it hasn’t been used as armour for main battle tanks before now! Anyway, you can’t get a nail into it, so don’t bother trying to tack it up. It will have to be stapled.

With the original cover removed, measure up. There are three pieces to each cover, the top, (you sit on that bit), and two sides. Get the length of the top, back to front (don’t forget to allow enough to tack to the base) and the width, plus an inch or so either side. For the sides, make a paper template, one will do, but when cutting out, DON’T forget they are handed. Again, allow an inch or so round the edges. As with most things, the rule is “Measure twice, cut once”.

Take the top piece, and on the reverse side, mark the width of the cushion more or less exactly. Fold the excess you have allowed, up to the lines, and pin it. You will be making the thing inside out. Now, on the two sides, again on the reverse side of the material, mark the exact outline of the sides. This is the shape of the cushion, and will be the line to which you sew. Its a good idea to pin the bits together, and remove the pins as you sew. The pins are a sod to get through the vinyl, but it makes life so much easier, and the pinholes disappear when the pins are removed.

You will be sewing through **three** layers of vinyl. The top, folded, is two, and the side is the other. This is so that there are no cut edges showing on the finished job. Work with the reverse side towards you. Go slowly. Start at the back. When you come to the “corners”, that is where the finished cushion top goes from vertical to horizontal, take a “pinch” of material towards you (from the back, don’t forget), lay the pinch flat on the seam, and carefully machine over it. This gives rise to a “tuck” in the finished job, but it isn’t unsightly. You DO have to be a bit careful, though, because at this point you will be sewing five layers. Now do the other side. It can be a bit of a fiddle to get all the stiff material under a normal domestic sewing machine (That’s why upholsterers have big ones), but it can be done.

When finished, turn the whole caboodle right side out. Take the seat base and filling, and pull the completed “envelope” over the lot. Work on the floor, here. Make sure you have enough overlap all round for staples. Start by stapling the back, or front, doesn’t matter which. Make sure the corners go where they are supposed to, more or less. This is a matter of eye, and common sense, really, its much easier to do than explain. Pull tight, and staple the opposite edge, front or rear, whatever. Pull the sides tight, making sure the seam is more or less straight and even each side. In practice, unless you are very good, or lucky, the seam will wander a bit, mine does, but it really isn’t so noticeable in use. The whole thing should be tight over the stuffing with no creases.

If you have removed the leather locating strap, replace it, and refit the seat. This strap is removed by poking a thinnish screwdriver into the middle of the plastic “snod” that fixes it to the seat base, until the snod centre disappears into the guts of the cushion. The strap can be pulled off, and the little centre retrieved from the other side. Use plenty of staples. Land Rover did.

In fact, my passenger side seat cushion was a complete write off, and I made a new base from half inch ply, with wood battens on the underside to locate it fore and aft. Large air holes were drilled in the base. I used some genuine Dunlopillo (from an old bus seat) for stuffing. The passenger has now gone up in the world by at least two inches! Don’t make my mistake of making the stuffing higher in the middle than at the sides. The effect is quite alarming. You want it level.

I haven’t done the seat backs. They are a different kettle of fish by the looks of them, although I don’t see why it should be possible to recover them, too, given some thought. The problem really is the metal backs to the squabs, and how to fasten the new vinyl into these. One method that springs to mind, is suitably cut bits of hardwood hammered into the channels round the edges. I’ve got enough vinyl left, so I may try that one day. In the meantime, it’s about time that centre seat was done.

## AXLES • DIFFS • GEARS • SUSPENSIONS

[www.greatbasinrovers.com](http://www.greatbasinrovers.com)  
801-486-5049 • Utah, USA



- **HEAVY DUTY AXLES - UP TO 31 SPLINE**  
Defender, Discovery, Range Rover, Series II & III
- **TRACTION DIFFS** - ARB, GBR, Detroit Lockers/Truetracs
- **4.1 GEARS** - Defender, Discovery, Range Rover
- **BILSTEIN SHOCKS** - Best Prices In The USA
- **GENUINE SANTANA PARABOLIC SPRINGS** - Series I-II-III
- **LT230RC LOW RANGE KITS** - Defender, Disco, Range Rover
- **MEAN GREEN STARTERS** - Best Prices In The USA

### \*\* NEW PRODUCTS \*\*

- **GBR POLYBUSHES** - Series I-II-III
- **GBR GREASABLE POLYBUSHES** - Series I-II-III
- **GBR SOFT POLYBUSHES** - Defender, Discovery, Range Rover

### \*\* SPECIAL PACKAGE DEALS \*\*

- **ARB OR DETROIT LOCKERS & 4.1 GEARS** - Defender, Disco, RR
- **PARABOLIC LEAF SPRUNG SUSPENSION** - Santana Springs, Bilstein Shocks & GBR Polybushes
- **COIL SPRUNG SUSPENSION** - OME Springs/Bilstein Shocks



**detroit locker**



**detroit truetrac**



## Series IIA Numbering Suffixes

Reprinted from the Ottawa Valley Land Rovers Newsletter, September, 1995.

This is an attempt to date Series IIA models by changes in suffix letters relative to each other. The dates are the issue dates of the Service Newsletter announcing the change. Changes where a date is unknown are appended at the bottom on the list.

Suffixes C=Chassis, E=Engine, G=Gearbox, A=Axle

Date	C	E	G	A	Item(s) Changed
Oct 1961	A	A	A	A	Introduction of Series IIA
Feb 1962	A	A	A	A	Intro of 7/16" studs steering levers
May 1962	A	A	A	A	Steady strip fan cowl [Petrol 4 cyl]
Jul 1962	A	A	A	A	Clamp bars without spot facing. Starting with Engine 27102760A [Diesel]
Jul 1962	A	B			Distributor drive shaft 1 piece bush starting with Engine 25119953B [Petrol 4 cyl]
Sep 1962	A		B	A	Large intermed shaft, Hydrostatic clutch, No top fill Gearox
Nov 1962	A	C	B	A	Wax type thermostat [Diesel], Stronger Clutch [All]
Mar 1963	A	C	B	A	First use of capital letters in NOS
Mar 1963	B	D	B	A	Short oil filter [4cyl], Cup plug inlet manifold [Diesel], Shape exhaust manifold [Diesel], Thermostat [Petrol], Large U-joint, 9/16 Shackle pins, Linkage clip accelerator, Lamps no bezel etc, 3/8 Steering box fitting, Top steering box bracket
Sep 1963	B	D	C	A	Gearbox Ratios
Dec 1963	B	D	C	A	25D4 Distributor starting with Engine 25159746 [Petrol 4 cyl]
Jan 1964	B	D	C	A	Cast iron rear bearing housing [all], Light switch key switch, Ballast resistor 2BA [Diesel], Locker lid turnbuckle Semi-circular; Apron panel curved
Jan 1964	B	D			Engine foot reinforced. Engine 25152571, 27110202 [4 Cyl]
Feb 1964	B	D	B	A	?? Strengthened tie rod bracket bell housing starting with Gearbox 25170529B
Mar 1964	B	D	C	B	Strengthened axles, Steering relay filler deleted
Sep 1964	B	D	C	B	25I Series of Gearbox Numbers used up, start with 2520001C
Feb 1965	B	F	C	B	One piece oil level rod. 25I Series Engine Numbers used up. Start with 25200001F. Welded bonnet striker
Jun 1965	B	G	C	B	Blade type distributor drive shaft [Petrol 4 cyl]
Apr 1966	C	G			?? Front cover no studs water pump [Diesel]
Apr 1966	C	H			?? Front Engine cover no studs water pump [Petrol 4 cyl]
Apr 1966	C		D		?? Strengthened layshaft
Apr 1966	C				?? Centre horn push, Steering wheel all
Apr 1967	D	J	E		Negative earth, Rocker brackets, Zenith Carb, Single grommet bell housing, Cranked handbrake [Petrol 4 cyl]
May 1967	D	H	E		Negative earth. Single grommet bell housing. Cranked handbrake. Control panel dash [Diesel]
May 1967	D	A	E		New 6 cylinder model [Petrol 6 cyl]
Jun 1967		B			?? Zenith Strom carb?? [Petrol 6 cyl]
Dec 1967	D	J			9 1/2" Clutch standard [Diesel]
Feb 1968	D				CV Master cylinder 88: wheelbase
Mar 1968	E	K			Lip oil seals, Timing pointer on front [Petrol], Dust proof breather [Diesel], Flanged injectors [Diesel], Starter motor [Diesel], oil catcher gearbox, Grease packed hubs
Apr 1968	E				Square solenoid [Petrol 4 cyl], Door locks
May 1968	E				Pushon advance distributor [Petrol 6 cyl]
Oct 1968	E				Black interior trim
Nov 1968	E				Road wheel small offset FV607510 109" Wheelbase
Dec 1968	E		E		Breather on rear of inlet manifold [Diesel], No peg rr mainshaft starting with Gearbox Number 25378396E, Narrow sills
Mar 1969	F				New fuel filter [Petrol 6 cyl]
Apr 1969	F				Brake switch, Vertical Hand control [Diesel], Round wiper motor; CV Master Cylinder [109" Petrol 4 cyl]
Apr 1969	G				Headlamp in guard, 8:1 Compression [Petrol 4 cyl], Suffix A, 8fl flasher; Servo on brake pedal [Petrol 6 cyl]
Jun 1969	G				Large wheel nuts 9/16 studs, Heat shield seat base [Diesel & Petrol 6] [Serial Numbers in F given]
Oct 1969	G				Heat shield distributor [Petrol 6 cyl], Spire nut door hinges
Jan 1970					Plastic fan cowl [Petrol 4 Cyl]
Apr 1970	G				Thick road wheel [all 109"]
Jun 1970	G				7/16 Handbrake relay
Nov 1970			F		?? Sealed clutch withdraw ?
Nov 1970	H				?? 16mm road wheel studs, Flat bottom diff
Oct 1971	A	A	A	A	Introduction of Series III
			B		Gearbox Housing Reverse ratio changed
			B		Clutch bleed pipe deleted all alternator
		B			Facet fuel pump [Petrol 6 cyl], Exhaust pipe 3 bolt [88" Diesel], Delete heat shield [88" Diesel],
		C			Rear fuel tank [109" Petrol 4 cyl], Lock ring fuel sender [all 109"], Exhaust pipe [109" Diesel], Delete heat shield [109" Diesel],
					Inboard expi [4 cyl Petrol], Exhaust silencer straight [4 cyl Petrol], Sealed breather [Petrol 4 cyl], Viscous fan [Petrol 6 Cyl], Clip top rocker HIF carb Air pump distributor alt mounts [Petrol 6 cyl], 3 bolt exhaust manifold [Diesel 4 cyl], 90654451C [Diesel 4 cyl], Sound proofing Eng viscous fan [Diesel 4Cyl].
	D				3 bolt exhaust manifold [109" Diesel], Delete LWR breather shield Ducellier? Distributer [Petrol 4 cyl]
	E				Shield oil filler New top rocker with oil filler blank side plate [Petrol 4 cyl]
			B		Circlip Rover differential
			D		1/2 inch U bolts?
			E		Long thread ball joints?

## Gearbox woes, phase one, changing to a SIII box. Lessons learned thus far...

by Dixon Kenner

**Task:** Gearbox Removal

**Time:** Approx 3.5 hours

**Tools:** 2 x 7/16" spanners, 2 x 1/2" spanners, 2 x 9/16" spanners, 11/16" spanner, 1/8" whit spanner, needle nose vise-grips, screwdriver (flathead)

1. Remove floors (1/2" nuts and bolts all round)
2. Remove 2w/4w drive knob & spring
3. Remove gearbox cover and bulkhead cowling (screws)
4. Remove gearshift lever (2 x 5/8" nuts, 2 x 7/16" bolts)
5. Remove lots of nuts and bolts holding down the seatbox (19 x 7/16")
6. Remove seatbox and toss in back of BGB
7. Remove rear driveshaft, undo front driveshaft from transferbox (8 x 9/16" nuts and bolts, 4 x 9/16" nuts)
8. Disconnect handbrake from expander rod, remove handbrake assembly (4 x 9/16" nuts and bolts)
8. Remove handbrake relay lever (2 x 9/16" nuts and bolts)
9. Undo all the nuts around the bellhousing (lots of 9/16")
10. Undo the two nuts & bolts holding down the clutch slave (1/2")
11. Get large ratchet straps, hook to roof gutters, one in front, one in the back by the handbrake drum. Pull tight and lift gearbox
12. Remove gearbox mounts (11/16" nuts, 4 x 1/2" nuts & bolts)
13. Wrestle with gearbox until it swings back & away from engine.
14. Check on availability of Dale to help get gearbox out...
15. Find a SIII clutch plate & slave, no SIII clutch cover or throw out bearing though. Prognosis is still to do the SIIA/III mating...

OK. The III slave uses a 1/4" fitting, and observation shows a 1/4" line on the SIII. Now, where do you find 1/4" line with the correct fittings? Oh 80" where are you... 80" uses 1/4" line all around, though I nearly took the clutch line off Ted's NADA last night... Ted found a front right brake pipe off an 80" with

1/4" male and 1/4" female fittings. Bring home.

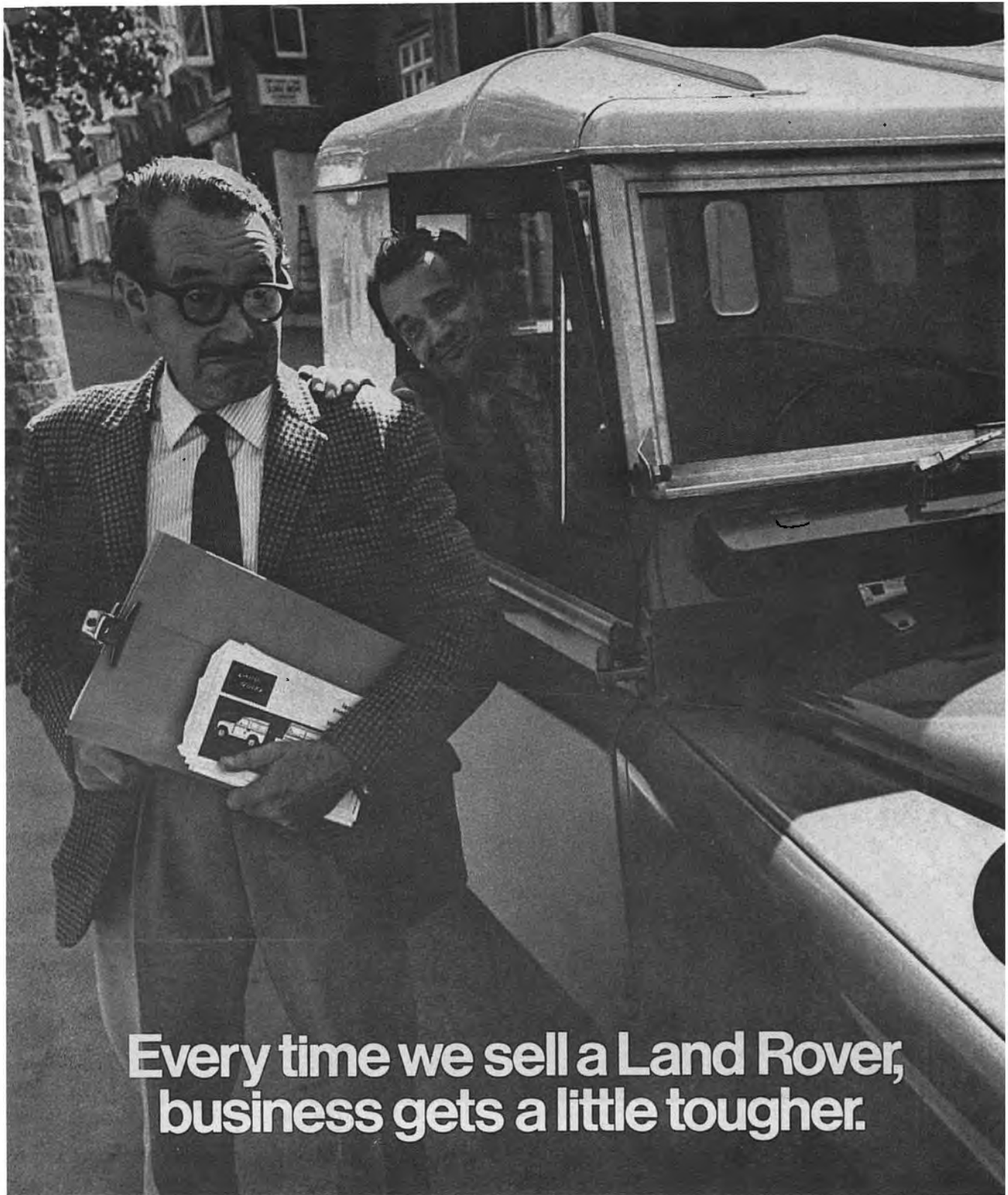
16. Install said slave. Fit 1/4" 80" brake line. Move around bell housing and try and fit flex line into 1/4" female fitting. Won't go. IIA slave uses 3/16" fitting. \*&^% is said. Sit and think. Look at my 80" at the other end of the driveway. It is a mixture of 3/16" fittings and 1/4" fittings. Take off a brake line, (master to three way, master is 1/4", rest of the lines are 3/16" now. Don't ask...), bend so it will go from the steel clutch line (after removing flex line) to the 1/4" female fitting.
  17. While trying to mate the two together, try and avoid having the steel lines touch the starter selenoid on the hot side. Clutch pipe gets real hot, real fast...
  18. Get it all together finally.
  19. Goto bleed.
  20. Remove slave cylinder and reinstall 180 degrees around so bleed screw is on the top and not the bottom...
  21. Bleed the system.
  22. Hook up front prop shaft.
  23. Install gear lever.
  24. Start engine.
  25. Move back and forth a bit to see that it works.
  26. Make mental note, there is not oil in the gearbox (yeah we're sure to remember this)
  27. Don't let the bonnet slam shut, with tire on it after unhooking the prop rod. If said rod ends up outside the breakfast, opening the bonnet again is, er, difficult. Pry bar on the other side and force helps...
- Need a Swazall? Doing this swap is the best excuse going to get one. In the time it takes to drive to Home Despot, but you, fire it up, are slice the offending IIA bracketting off the main crossmember is less that fiddling with a hack-saw, breaking a blade or two...
- Ted leaves message that adapter plate should be changed to. You may crack the IIA or the bellhousing if tightened down.
28. Too late...

## New Members

2 new members this month

**Robert Morris** of Cambridge Massachusetts with a 73 SIII 88

**Alain Cadoret** of Quebec City, Quebec with a 74 SIII



## Every time we sell a Land Rover, business gets a little tougher.

Sometimes, we think we're on the wrong side of the motor industry. If we built nice shiny trucks and vans, built them neatly and efficiently, we'd have lots of satisfied customers.

Customers who'd come back every four years for our latest model.

But we don't. For customers with really tough jobs to do we build Land-Rovers.

Tough vehicles, built for anything from trailing the boat, caravan or horse-box and all the family, operating as a crop sprayer, fire engine, or even mobile dispensary.

And they last. And last.

So someone who buys one now will probably be using it in ten years' time.

And spending the money he's saving on something else.



The Rover Company Limited, Solihull, Warwickshire.

