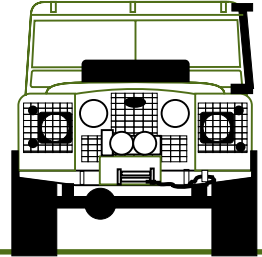


OTTAWA
VALLEY
LAND
ROVERS



February 2012

www.ovlr.org

Volume XXVIX, Number 2

16 Years in the Making



Renaissance Man — My Land Rovers and me (article and more photos on pages 13-23)

ARTICLE AND PHOTOS BY JEAN-JACQUES HECHLER



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CARP, ONTARIO CANADA K0A 1L0

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: Canadians joining throughout the year pay \$45 CDN per year, Americans and others pay \$45 US per year (discounts available if you receive newsletter by email). Membership is valid for one year.

Radio Frequencies

VHF 146.520

CB channel 1

FRS channel 1 sub 5

SW 14.160 MHz

OVL R/Land Rover HAM:

14.160Mhz @ 01:00GMT Tuesdays

Online

<http://www.ovlr.org>

Any ideas for the web site please contact Dixon Kenner

Land Rover FAQ: <http://www.lrfaq.org>

OVL R Forums

Please see:

<http://www.ovlr.ca/phpBB2/index.php>

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OVL R Newsletter

ISSN 1203-8237

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

Submissions: Articles and photographs may be submitted to the Editors, Terry King (terrycking@rogers.com) or Dixon Denner (dkenner@fourfold.org) or via post to the club address. Please include photographer's name, captions, identifications of people and vehicles, and a return address if you want the photos back. For the best reproduction of photos, use the highest resolution possible. Do not include photos in the text files.

Advertising Information: \$35 CDN for 1/4 page ad, must run for minimum of three months. Free ad space is provided to members.

Deadlines: Submissions to the OVL R Newsletter must be received by the 15th of every month for inclusion in the next month's newsletter. All items submitted for publication should be legible and signed. Names may be 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.

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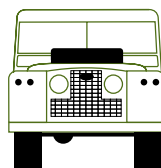
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Beneath the Bonnet

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Hey man, what's going on?

Calendar of Events

Socials:

February 20th: Monthly OVL R Social and Meeting at the Prescott Hotel on Preston Street (Little Italy), Ottawa – at 7:00 pm

March 19th: Monthly OVL R Social and Meeting at the Prescott Hotel on Preston Street (Little Italy), Ottawa – at 7:00 pm

Executive Meeting:

OVL R Executive meetings are held on the first Monday of the month. Please contact Bruce Ricker for location – email: b.p.ricker@rogers.com

Notices:

Late March, Early April – 29th Annual OVL R Maple Syrup Rally, Shawville, Quebec. More information to come.

April 4th – OVL R Annual General Meeting – Royal Oak Pub, 329 March Road, Kanata, 7:00 pm

May – OVL R Tune-up & Trailer clean-out, date to be determined closer to event.

Late May – Oxford Mills Antique Car Show

June 22-24 – Annual OVL R Birthday Party

Mid July – All British Car Day, Britannia Park, Ottawa

February Executive Meeting

The February Executive meeting was held at Monkey Joe's at the corner of Merivale & Carling.

In attendance were - Andrew Finlayson, Bruce Ricker, Sue Rawson, Frank Ashcroft, Peter McGough, Peter Gaby and Deborah Seigny. Unfortunately Terry King & DAVE PELL (his email was all in CAPS, speculation anticipated!). The meeting was relatively brief.

Initial pre-meeting discussions centred on the Smithers brothers designs for an articulated Land-Rover as well as Peter informing us about the goings on with Roverlanders in British Columbia as well as trying to sell a 109 to Frank after Frank confused Clifford (the big red Range Rover) with Sedgewick (the big red 109 pick-up)

Item 1

Finances. Limited discussion given the absence of the esteemed Mr. Pell. We assume all the accounts are paid. There was some discussion on the spreadsheet circulated last month of the finances and the term deposit. The club keeps on hand monies to act as seed for events like the Birthday Party, and to cover future obligations.

Item 2

The annual Maple Syrup Rally: Peter Gaby has spoken



with Vern in the last two or three weeks. All fine out there. Apparently has a current fascination with large wood planners. For alumni Maple Syrup Rally goers, Vern still has "the boat", but it is in Kingston now. Peter will be confirming details. Note, the Rally date is generally not known until about three weeks before, so members should watch their email and the web site.

Item 3

Pewter mugs: Traditionally the past President has always received an engraved pewter mug. It was noted that our current past President, Peter, has not been presented with one.

Item 4

The Web forum: There was some discussion of some recent posts on the web forum, one in particular that had generated some questions to the Executive. Recently a former member posted a message offering to create and maintain some mailing lists. The Executive all have a desire to increase the size of the club as well as encourage existing members to become more involved. There are numerous avenues, included serving on the Executive (Note call for nominations elsewhere in this issue) and the web forum. It was noted that the forum is potentially a powerful tool for members

... continued on page 5



February Executive Meeting *(continued from page 5)*

and potential members assuming they find the forum to begin with and they re-visit often. Given the need to keep logging on, the idea was floated about the possibility of setting up for the ability to offer an “RSS” subscription. This would entice far more forum traffic from those who log on only occasionally- (perhaps only once every couple of weeks) to check out the latest goings on. If possible, this would be an opt-in option.

As for mailing lists, the club executive discussed emphasizing that the club membership database including the e-mail address list has always been and will remain totally confidential. The club executive polled members a number of years ago as to their wishes regarding a public list. The response was overwhelmingly negative. As a result, no public list exists. The Executive noted that if forum members choose to add themselves to externally hosted lists they must do so knowing that these lists are not sanctioned by the club as it has no visibility, nor control over them. Bruce will be writing the former member to insist that he makes this clear to your potential subscribers.

The Executive discussed that new initiatives are needed. However, they believe that the club will benefit most when members are face to face at events. Support for these events happens when we offer our people something that they want, and enjoy participating in. We ask what they want and we get the list... Maple Syrup Rallye, Birthday Party, Christmas party... the old favorites. Bruce noted that the club has supported and enabled individual members to invite others on impromptu outings. Some have been quite successful.



The Executive welcomes suggestions and volunteers to make any new event run smoothly and successfully. Proposals will be readily received any time, any where. Bruce is available to listen!

Item 5

Donations for the Birthday Party. Some discussion on who would be soliciting some of the suppliers for donations to help support the Birthday Party. Frank made some noises.

The next meeting is expected to be on March 5th, in the west end, Bruce to sent out a meeting invitation. The next Social is the 20th of February, the March Social on March 19th. The next Land Rover event, for the hardy, will be the annual Winter Romp in Maine from February 17th through to the 19th.

The meeting was over in an hour and three minutes. Idle chatter followed.

Expeditions Planned

1. A 4-5 truck group from Ottawa and Toronto is planning to hit Moab for the National Land Rover Rally now moved to October 2012. It is expected there will be upward of 200 trucks from across the continent at this event. Additional trucks welcomed in the convoy. (Slower trucks leave earlier). It's a long road drive, trucks have to be up for it... Unbelievable desert scenery – like in a John Wayne movie!

2. We're looking for people wanting to do the Canol trail (Yukon/NWT) this August. There is currently interest from two trucks, 4 required as a minimum for this trip, 6 maximum. Allow 3 weeks if driven all the way, 2 weeks if truck shipped to and from Edmonton.

Trucks need to be in great mechanical condition,

... continued on page 8

An evening or two under the DormieDome, Part Three

ARTICLE AND PHOTOS BY D. KENNER

When we last left off, the original head had become slightly problematical and had been put aside in favour of a, not new, but different head. So, first order of business is to note that the Bavaria this week came with some cute blue Bavaria tuques. Timely given the weather. In attendance were, as usual, Allen MacKinnon, Alastair Sinclair, Justin Lafontaine, with JL Morin making a brief appearance one evening to briefly see how progress was coming along and to pick up some VW parts that had made their way north via the underground Rover parts railroad.

As heat has been mentioned at the Social, I must remark that the dual heaters at low suffice rather well down to about -10c. Below that, and they move to the medium setting and they work rather well. They have never been on the high setting while we have been working. I would also add that the snow load makes for a good insulator, though needs to be regularly cleared off, lest it damage the portable shelter. Alastair has managed to get too close twice. Minor damage to his fleece jacket the first time, the second time to warm up did some minor restyling of his hair. Donald Trump is was not.

The first order of business was replacing the head. A fairly straight forward task, well documented in the Haynes and Factory manual if you have one of those around. Very useful if you have never done this before, sadly I must admit that I am somewhat practiced having gone down this road before (Squirrel! or... Oh look, is that Kevin with Gasket Under Glass! What did he do to deserve it?). I must note that Alastair is also practiced, though to a lesser extent.

So, with a minimum of fuss, the head is on and torqued down to spec.

Cleanliness is sometimes an admirable trait, especially when you end up dealing with some pretty sketchy looking assemblies. So, some quality time was also spent wire brushing parts. From the head assembly, the thermostat housing was removed, disassembled, cleaned up of forty years



Drilling manifold out



Drilling the front pipe out

of accumulated rust and deposits wire brushed off. The manifolds were all cleaned up. The valve cover cleaned up. Productive, but just very time consuming.

Once cleaned, it was time to reattach the original manifolds. Reconditioned, wire brushed studs and bolts were prepared, the assembly offered up, and... It wouldn't go on. Well, it would if you did not have a stud in the top, centre spot, which we removed, affixed the manifold, then tried to put the stud in after the manifold was in place. Did not work either.

... continued on page 7

DormieDome (continued from page 6)



Dixon fixing the exhaust system.

Which explains why the original head and manifold combination did not have a stud there either. Looking at the manifold it was pretty clear that the middle hole was not in line with the two outer holes. It was just slightly lower. So, what to do. A quick call to our esteemed President, and I had a very solid drill that would



JL inspecting progress with Alastair.



Lenin by day.



The offending manifold. Note different sized holes for the exhaust manifold..

take half inch bits was available to drill out the hole in the manifold and make it slightly larger. So, the next duly designated work evening the offending hole was drilled out the exhaust manifold and got it installed but for a nut and a bolt.

Time to fit the front pipe. However, the studs that Actek installed previously (GM, course thread, rather

... continued on page 8

DormieDome (continued from page 7)

than LR fine thread, with very large brass nuts, rather than the much smaller Land-Rover nuts) are not lined up properly and the collar for the pipe would not go on. So, following the theme with this vehicle, we had to take off the front pipe. Happily, everything is new, so it came apart, but while down on the ground, either I knocked all of the delicately piled lumber for the kitchen on top of me. Ouch. Pipe was resented to the ever so useful front bumper, clamped in in place and we drilled out the holes in the flange, and after a couple of rounds it eventually went on. So, front exhaust done. Just need to readjust the rest of the system now, which was duly done on an evening were the temperatures were dropping towards -20c and the heater really did not reach.

Back to the head. We remembered to get the oil line to the head connected. A bit finicky, but new copper crush washers found and used. Despite its small size, this line supplies a lot of oil if forgotten to be reattached, or reattached properly. Very messy. The valves were adjusted to .010, three times to try and approximate accuracy. The Weber was reattached, throttle linkage reattached as well as the petrol feed. The heater hoses



Ready for the manifolds

were reattached & we need to find the radiator hose. The valve cover back on with a new gasket.

The valve cover and valve cover gasket adjusted, holes in cover enlarged as it was almost impossible to put on for some reason. Valve train is pegged, so, why? A drill provided a little more clearance and it went together quite well!

An observation: As we are now in the depths of Winter, the heat from the Princess Auto infra-red heater was adequate for evenings that are averaging -10c/14f. Well, when you are fairly close to it. Trying to heat the entire enclosed area can be a challenge.



Expeditions Planned (continued from page 5)

some spare parts required to be carried, two spare tires needed, fuel to be carried, snorkel, serious tires, winch, etc for each truck. This is a tough wilderness expedition, not for the light hearted. We do plan to come back from this trip, so we won't be doing anything too crazy...there will be up to 3 river crossings-indescribable rugged northern mountain landscape.

For More Information on either of these contact Ted Matthews (matthewsted@aol.com), indicating your truck type and equipment. There is no fee for either of these trips, just your own costs...

Elections, Elections, Elections!

ARTICLE BY D. KENNER

Tis the time again as the weather grows colder that the writ of our valued Executive begins to come to an end after a successful year of activities. Unlike many other clubs, OVLR was established as a chapter of ALROC, which itself was primarily Ottawa based. When ALROC embarked on encouraging local clubs to be created, it laid down guidelines which clubs should follow. Some of the fundamental ones were the creation of an elected Executive, fixed Annual General Meetings of the local membership, full financial disclosure to the membership, a regular newsletter and regular elections of the Executive. The example of ALROC led to a sense of duty where members were encouraged to run for office, serve their turn, and rotate the Executive members to prevent burnout, and keep new ideas flowing. After twenty eight years, OVLR is the second oldest Land-Rover club in the Americas, as well as continuously running two events longer than any other Land-Rover club in the hemisphere.

The following elected executive positions are open for nomination:

President: Responsible for the overall operation of the club. He's the man, or as Truman wrote "The Buck Stops Here"

Events co-ordinator: Responsible for the major events hosted by the club on an annual basis, such as the Maple Syrup Rally, Birthday Party and other events. A daunting sounding position, but also one made quite easy by meticulous record keeping and established tradition making this a lot easier than you might otherwise think.

Off-road co-ordinator: Responsible for organising and delegating for the off-road portions of club events, such as green laning, the RTV, and other more rigorous undertakings.

Executive Member at large: A position for those who are interested in helping out and participating on an on-going basis to the success of the club.

If you're thinking you wanted to help the club and was thinking about getting onto the executive all is not lost. This is your opportunity to help with the future direction of the club. If you have a couple of free hours a month, and want to help run the club, contact the executive and let your intentions be known. (As Returning officer and a former Secretary I have to say that you'll get great return on the time you put in. I've been able to meet many good people and make some long time friendships in exchange for a couple of hours of work.)

If you are interested in running, or would like to nominate someone for a position on the executive, either pass me a note at the Social, or drop and email to dkenner@gmail.com

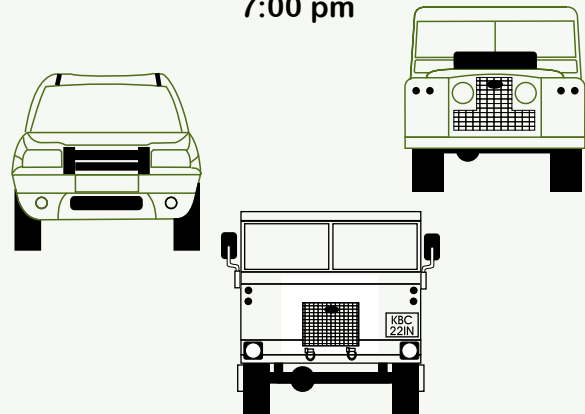
NOTICE

Ottawa Valley Land Rovers Annual General Meeting

April 4th, 2012

Royal Oak Pub
329 March Road, Kanata

7:00 pm



Annual OVL R Maple Syrup Rallye

That time of year is nearly upon us, when the snow begins to recede up here and the landscape begins to resemble something other than tundra, or taiga, depending on where you might be sitting. For the past twenty-two years, members of OVL R have been celebrating the coming of Spring with a gathering at Vern Fairhead's sugarbush in Shawville, Quebec during the maple sap run. The event offers people an excuse to get their Land Rover out from under a snow bank and blow the cobwebs out. For the hardy, it is an opportunity for some early Spring camping. This is the first major event of the season for Land Rover owners around eastern Ontario and western Quebec. Food, tradition and some white laneing.

The Maple Syrup Rally is traditionally held at the end of March, beginning of April at the height of the sap run. The sugar maples love freezing nights and warm days. A variation in this pattern can disrupt the sap run and cause last minute changes in the schedule outlined. As this is very weather dependent, an estimate is printed, the actual date not being known until just a few weeks ahead. Look to the next newsletter or website for a date towards the middle of March for when the tentative and rain dates for the rally are. Remember, Mother Nature determines the date, not us!

Activities?

Well there is the traditional brunch of french toast, sausage, and baked beans, all potentially smothered in fresh maple syrup. Depending upon the weather and the sap run, as well as to make you appreciate your breakfast, attendees are encouraged to take a visit down to the sugar bush, and help in the production process to make part of the brunch, namely the maple syrup. A little sap gathering, some stoking of the fires under the evaporator... Finally, there will be a little white, or if conditions have turned that way, brown/mud laning around on some abandoned rail beds, around the sugar bush, and such.

As always, there will be lots of fresh maple syrup for sale. Prices are expected to be similar to last year. Prices in the March newsletter! Bring your cheque book! (Note, this is the real stuff not that nasty chemically filled artificial stuff usually found in the supermarket.) Be alert, it can sell out before you know it!



The organisers need to know how many people can be expected to be attending so the proper amount of food can be purchased. If you are planning on coming, please RSVP to Peter Gaby by April first via email at petertgaby@rogers.com. The cost of the rally is \$5 dollars per person, a price unchanged since the rally started. Children under three are free. To drive on the off-road you need to be a member of OVL R and have a valid drivers licence.

Some other aspects for you to consider? Well, in the past, as the event takes place on a Sunday, various members of the club have come up early and done a little Winter camping in the sugar bush. If you are interested in some Winter camping, give Vern an email at antiquebikeguy@yahoo.ca. There is plenty of wood about, and Vern probably won't mind you using some of the wood by the sugar shack, so long as you help stoke the fire in there a little bit during the day. So, warmth in the evening is available!

Getting there:

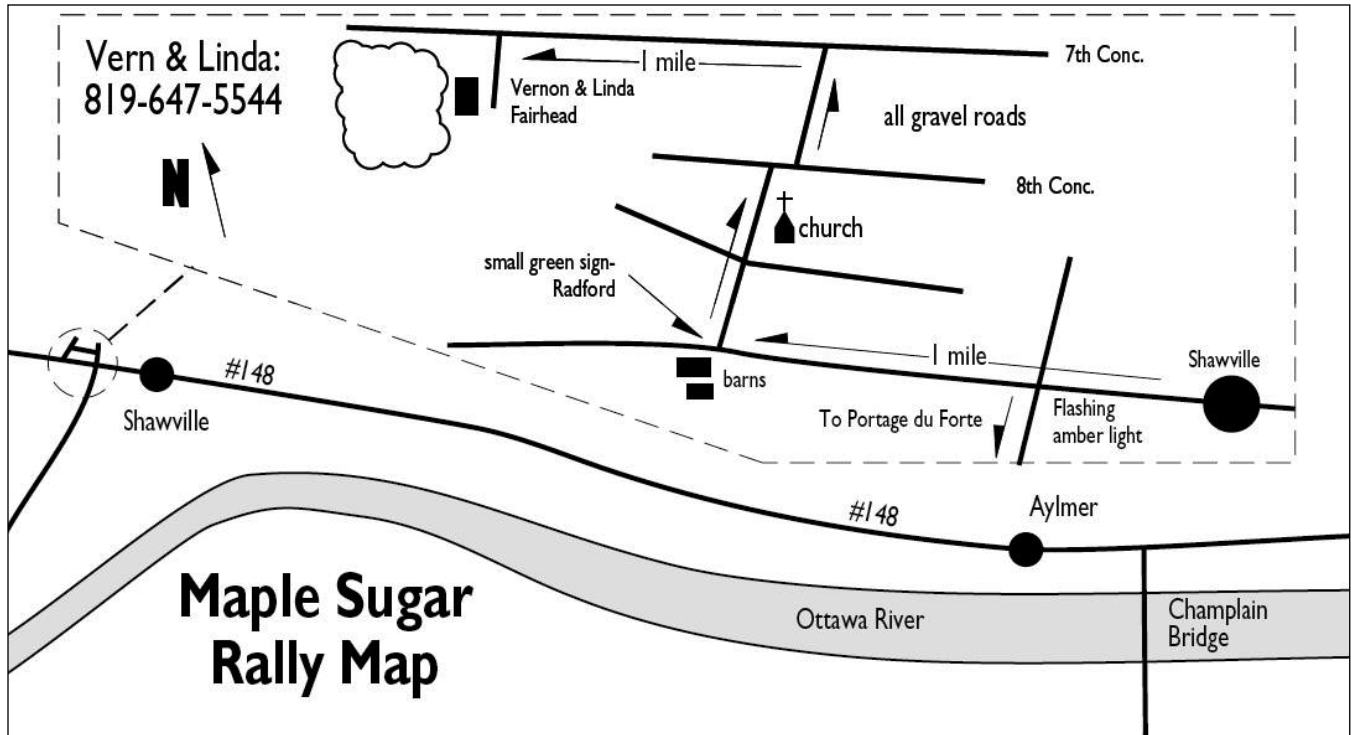
If you are unsure about directions, there will be a convoy of vehicles leaving from the Westgate shopping centre at 8:30am. (Corner of Carling Avenue and Merivale). If you know your way and are coming up on the Saturday, we are looking for a convoy leader. Contact Terry or Peter Gaby.

The following directions assume that you can find the Champlain Bridge at the north end of Island Park Drive in Ottawa.

Crossing the Champlain Bridge over the Ottawa River, you will go straight to the second set of lights where the road ends at a "T". Go west (left).

... continued on page 11

Annual OVL R Maple Syrup Rally (continued from page 10)



Follow the upper road (highway #148) through to Aylmer, past the Canadian Tire, to a set of lights at the park (there is a war memorial in the centre of the park to your right. The town library is across the street on your left) in the centre of town. Highway 148 does a right turn here at these lights.

Follow Highway 148 out of Aylmer and proceed to Shawville (you will pass by the villages of Luskville, Quyon etc.).

Drive through/past Shawville.

About one mile past Shawville, you will look for a side road on the right. The side road is marked with a small green sign that says "Radford" (there are a pair of barns across the road on the left hand side of #148). Turn right onto Radford.

Go straight, past the church, until the road ends. Turn right, then take the first left.

You will take the first left at the next concession road. One mile from this turn, you will find Vern's farm on the left.

Note: The Quyon Ferry: We do not know when it is opening this year. Those members in the west end of Ottawa wishing to avoid the long trek into Ottawa

just to turn around and drive west again can take the ferry across the Ottawa River and chop dozens of miles off the trek. Telephone ahead to see if it is running.

Maps:

Shawville (and Vern's spread for that matter) appear on the very leftmost portion of the Canadian Topographical Map 31-F/9. For some of the trail driving, you may wish to also pick up the map sheet 31-F/10. These maps, and other larger scale derivatives, can be purchased from World of Maps at the corner of Holland and Wellington near Tunney's Pasture.

Accommodation:

In the past, as the event takes place on a Sunday, various members of the club have come up early and done a little winter camping in the sugar bush. If you are interested in some winter camping, give Vern a ring at (819) 647-5544. There is plenty of wood about, and Vern probably won't mind you using some of the wood by the Sugar shack, so long as you help stoke the fire in there a little bit during the day! So, warmth for the evening is available! Members are

... continued on page 12

Annual OVL R Maple Syrup Rally *(continued from page 11)*



also welcome to come up on Saturday and help Vern with some sap gathering and maple syrup production.

Members are also welcome to come up on Saturday and help Vern with some sap gathering and maple syrup production.

Other seasonal information:

Storage - The three main enemies of maple syrup are air, time, and temperature. Therefore, the following storage practices are recommended:

- Immediately store your maple syrup after purchase in the refrigerator even if the container has not been opened. If this is not possible, consider freezing the syrup. Personally, all of mine goes into the freezer.
- Maple syrup packaged in tin or glass can be stored for up to one year in the refrigerator in its original container. However, some people who buy in large quantities often repackage and freeze the syrup and take it out of the freezer when needed.
- Because plastic “breathes,” repackage syrup originally packed in plastic if you plan to store it for more than three months.
- If excess water is present or if containers are not clean when filled, bacteria, yeast, or mould may grow during storage. Do not simply remove the mould and reheat the product. Some micro-organisms produce toxins as they grow, and these toxins could make you sick. Some web sites advise that the syrup should be discarded.

Maple syrup is packaged in tin, plastic, or glass. Each has advantages and disadvantages as to maintaining the quality of the syrup in storage.

- Glass maintains the flavour of the maple syrup indefinitely. It may darken slightly, especially if the syrup is not kept in the dark. Glass also allows you to inspect the syrup for cloudiness

or sugar crystals. Glass containers are usually reserved for packaging small amounts—1/2 pints, pints, and quarts. It is a costly way to package and is often seen in gift packs.

- Tin maintains syrup quality for 11 to 12 months. Tin cans rust, so care must be taken as to where the container is stored. A tin flavour can be picked up if stored for long periods.
- Plastic is a popular packaging material. It is lightweight and easy to use. Syrup stored in plastic will usually maintain quality for three to six months. Plastic breathes, so a colour and flavour change can be the result in long-term storage in plastic containers. However, new plastic containers have been developed to extend shelf life. The disadvantage to these, so far, is that the cost is more than the regular plastic jugs.

Trivia note: The Maple Syrup Rally is one of the longest running, annual rallies in the North American Land Rover community. The oldest in North American is the OVL R Birthday Party.



Renaissance Man — My Land Rovers and me

ARTICLE AND PHOTOS BY JEAN-JACQUES HECHLER

My involvement with Land Rovers goes back to 1974. At that time my wife and I were living and working in France. We spent most of our leisure time backpacking in the Vosges, the Massif Central and the Alps. We even tackled some mountaineering techniques, with ropes, chocks, crampons, etc... as members of the local chapter of the Club Alpin Français. This local chapter was well known for organizing every two years an 'expedition' to mountains and peaks with interesting climbing routes. In 1974, it was East Africa, the main aim being the ascent of Mount Kenya, 5199 meters, which has a few interesting routes to its summits. As a prelude, and to get some exposure to high altitudes and atmosphere with low concentrations of oxygen, it was decided to climb Mount Kilimandjaro, 5995 meters, an easy 3-day walk up to its eternal snows.

So, on January 4th 1974, 21 of us landed at Nairobi Airport, quickly rented 3 mini-buses, loaded our 1.5 tons of material and food, passed through the border to Tanzania and arrived at the entrance of the Kilimandjaro National Park. After 2 days, the time to get all authorizations and hire the guides, we went up to the Uhuru crater (the summit) where we arrived early on a clear morning to witness an extraordinary and unforgettable (I really mean it) sunrise over the Indian Ocean in the east and the Great Lakes on the west. It was then back to the Kenyan border, through the Serengeti National Park and the Ngorongoro Crater Conservation Area. In this old and dead crater, about 600 meters deep with a diameter of 22 kilometers, you can find nearly all types of beasts and vegetation present in East Africa, with lakes, marshes, forests, high grass, leopards, lions, elephants, rhinos, flamingos, etc... There were only a couple of very rough trails down the 600 meters and our mini-buses were, of course, useless. So we had to rent, you guessed it, ... Land Rovers. Judging from my photos, these were Series II or IIa. I was so astonished to see these little trucks speeding down these dangerous trails, wading through marshes and high grass, that I decided to get one someday. I took the same decision 13 years earlier, in 1961, when I saw one of the very first E-type Jaguar! Anyhow, the rest of the trip was

also fantastic, full of surprises, with several others memorable encounters with Land Rovers... and rhinos! But this is another story.

In 1979, I got an offer to join the NRCC in a newly created Institute near Montréal, so we returned to Canada. Around 1984, I spotted an E-type, so a lot of Jaguar and Land Rover memories resurfaced. After a few months of search, I found a 1974 Series 3 OTS E-type with a good monocoque but which needed some mechanical and electrical work. I had the engine redone and did myself some minor mechanical repairs, improvements and the electrical work. This was my first attempt at repairing vintage cars. I managed to get it in perfect condition. 25 years later, it still is, since I am still able to do 130 mph top down in it on straight deserted highways early on Saturday mornings... It was only a decade later after having taken a very early retirement that I started looking for some Land Rovers. I went to see many of them, all having had a very hard life and having been seriously abused and neglected. It became rapidly obvious that in order to have a good drivable one I would have to rebuild one completely, which would need some serious thinking before being attempted.

As a boy my father showed me how to work with many materials, including concrete, wood, metals and how to use the corresponding tools and I loved it. But

having become an engineer and a scientist I never had to work with my own hands on extensive projects and I have always missed not being able to use them more. So this was, at last, the opportunity to see what they can do! This is why in November 1995 I finally decided to buy a 1963 SWB Series IIa Station Wagon (rebrushed in orange...) which was for sale by a garage owner about 100 km north of Montréal, mainly because he had redone the engine recently, because I was able to drive it around without too much elbow



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grease like the other ones and, most of all, because the seller offered me a non drivable but almost complete 1964 SWB Series IIa Hardtop for free (repainted in an awful yellow ...)! I had noticed that the Station Wagon's frame was far from being good, but I thought it would still have some life in it. Unfortunately, while driving back to Montréal on some bumpy roads, I noticed that the asphalt came nearer and nearer : the frame, no longer straight, had now the shape of a nice V! In order to reach Montreal, I had to load it behind the Hardtop on the platform of the towing truck which was following me.

I was then the not so proud owner of two dead Land Rovers sitting in the small garden in the back of my house, with the obvious task of setting up a detailed program on how to get one back on the road. Essentially I would need: time, space, funds and supervision by a good car mechanic. Time was no problem, I was retired! Space: my 2-car garage already occupied by an E-type was too small, the garden was also too small for any additional construction. So the only possibility was to construct a garage close to the cottage on the property we own up in the Laurentians and do the restoration there. Funds: A member of the Jaguar Club of Montreal, also a fan of Land Rover, suggested I would need around 10K if I did all the work including the body work. Within my possibilities! Supervision: there is certainly a retired mechanic somewhere at the village where we have our cottage. We shall see.

Things not looking too bad, I started with the new garage. I was more or less decided on a standard 2 by 4 planks construction when I came across a classified ad for a 25 by 27 feet log house, originally build around 1880, dismantled with all logs well identified and ready to be rebuilt anywhere! Our cottage being a cedar log home, this was the way to go! So without hesitation we bought a huge heap of logs, cleared an acre of forest, had a slab of concrete poured on the ground, assembled the four walls and roof, used our own trees for the missing or rotten parts, insulated everything, finished the interior and... after three years of intermittent work I had a perfect workshop usable all year round with a splendid view of the nearby lake! Soon after completion, there was another heap of logs for sale: another log house



from the 19th century 26 by 28 feet ! We bought it rapidly, erected it 20 feet away from the first one and constructed a common roof over the 2 houses. Between the two houses, I had thus a 20 by 26 feet space closed on two sides covered and protected from the sun, the rain and, to some extent, from the wind. This space became very handy later on. In the process we cut another 80 trees for the missing parts, the planks for the ceilings and the roof structure between the two houses and spent most of our free time on it again for the next three years.

During these years, many other things happened. First, I finished dismantling my 2 Land Rovers and brought all parts to the cottage on my trailer. One day in July 96, one of my neighbor I had not yet met came to see me, being very preoccupied by all the dirty things that he saw passing by his property. I reassured him that I did not intend to open a junk yard in his vicinity. Speaking of Land Rovers, he mentioned that he knew someone who, he thought, had such «jeeps» and that he would be glad to take me to visit him. This is how I came across 3 other SWB Land Rovers which had been sitting in a

forest for years and whose only use was to serve as targets for the local hunters. For \$50 a piece I became the owner of a blue 1959 Series II Station Wagon, a blue 1964 Series IIa Station Wagon and a blue Series IIa (or b?) 1971 Hardtop (with the headlamps in the wings), all in bad shape, especially the body panels, but with a lot of good parts. The owner was the previous Lachute Land Rover dealer! Another day, in November 96 when returning by car from the cottage to Montréal, my wife suddenly ordered me



to stop: "Quick! Look over there!". 300 meters from the road sitting in the middle of a prairie... a Land Rover cab! The body style I did not yet have! It took me about 3 weeks to get in touch with the owner who was glad to sell it to me for \$50 again. It was a blue SWB Series II 1959 cab which the owner had used up to a few weeks before to haul trees for the construction of a porchery, although

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it no longer had any brakes, with a crack in the engine which needed a constant refill with water, and a non disengageable clutch. He used standing trees as brakes (all four corners of the truck were looking like a Dali sculpture) and forced in first gear and reverse with a lot of decibels until finally the gearbox exploded. My luck was that he left the truck at the very place where the gearbox died which allowed me to get a very nice bulkhead, the only good one in my entire collection!

In my search for help, I do not remember how I came across the OVL R club. Early in 1996, I became a member and then got in touch with 2 other members in the Montreal area, Mike (whose last name I do not remember) and Andrew Taylor who was rebuilding his SWB Series III. I am very grateful to them, seeing what and how they did things was very helpful later on. With 6 Landies now I had a fair idea of what parts I would have to buy. I made a first list with Mike and Andrew and this order was included in an OVL R group order. Of course I got some parts not ordered (remember, Dixon?). And 10 years later, when I started assembling the suspension

I discovered that I also got two wrong springs.... With a constant presence now at the cottage I also met my nearest neighbour Laurent Major (5 km away... we are in the backwoods) with whom I soon got along very well, for good reason: for more than 25 years he owned the garage of the village and was willing to oversee my work and help me any time since he was now also retired! I could not

have hoped for a better help: as a country mechanic far from everything, he has a home made solution ready for any kind of mechanical problem.

I had now almost everything needed for a successful restoration. There was still something unresolved. All my Landies had bad body panels, rusted door frames, etc... which needed a lot of repair, especially through welding. As a young engineer my first job had been to oversee the final stages of the construction of a 1000 tons/day nitric acid plant, start it and then be

its first plant manager. I remember spending quite some time watching the welders assembling huge stainless structures and making welds which, in my opinion, were as beautiful as the seams on the haute couture dresses made by my mother. I wondered then if I would also be able to do such welds. So why not find out some 30 years later ? I sent an application to the nearest professional school of the Ministère de l'Éducation du Québec for a "diplôme d'études professionnelles (DEP) en soudage-montage" a 15 months and 1860 hours course! This is a free course but costs the government around 20K per student, so there is a very strict selection among the applicants, and a 58-year old engineer with a PhD does not have many chances to be accepted, so I had to be very careful not to reveal too much about my education. When a secretary sent for me to complete the application I had to justify that I had at least succeeded four years of secondary schooling. Having done all my schooling in France she did not accept my french secondary diploma, so very reluctantly I took out my only Canadian diploma, my PhD diploma from the Université de Montréal.

She made a photocopy, completed my application and sent my file to the Ministère for acceptance. My hopes for acceptance were certainly gone and I started to look elsewhere to learn how to weld. Two months later, she called me ordering me to be present the next day at the start of the course with 30 \$ and security shoes ! I was accepted ! The funny thing here is that this is the only time I showed

my PhD diploma to someone in my whole career, just mentioning my PhD was good enough for all my previous applications! A piece of paper with PhD on it can therefore be of some help sometimes... This course was absolutely fantastic. I was part of a group of 15 very motivated young boys and girls between 18 and 22 years old and this social experience was highly enjoyable. After 15 months in school and a 3-week practical training in a welding shop (\$6.59

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Renaissance Man *(continued from page 15)*

an hour!) I got my diploma and knew how to weld steel, aluminium, stainless steel with all commonly used techniques. I even made a wood stove to heat my newly constructed log house and passed successfully some of the Canadian Welding Bureau tests to get their certification card! The diploma hangs now beside my other diplomas in the garage and I am almost prouder to have that welding degree than my PhD!

All this happened between 1996 and 2006. During that time I finished dismantling two other Landies and kept the 59 Station Wagon and the 1963 Hardtop for reference during the rebuilding. Having these proved to be extremely helpful: no lost time to search where parts are exactly located, how to mount them correctly or simply to identify unknown parts! In my opinion, for a few additional dollars, it is a «must have» for any restoration.

During the summer of 2006 we decided to rent our house in Montreal and live year round at our cottage.



Rebuilding then started at last! During the whole process, I tried to stick to the following general guidelines:

- stay as close as possible to the specs of a 1963 Series IIa, unless it would need some extra expenses or if it brings some practical and esthetical improvements,
- use only parts from my trucks whenever possible, even if it involves extensive work on them,
- select only the best parts, dismantle them to the last bolt and screw (including all riveted parts), replace the worn parts (with rebuilt kits, if available), clean and paint them as needed, replace all gaskets, oil seals, etc...
- do everything yourself, learn all you can (to keep my old neurons connected) even if it takes lots of extra time.

The rebuild sequence was obvious: start at the bottom, finish with the top and... have the 'green bible' always open at the right page!

- Get all books and publications available (Repair Operation Manual, restoration guides, service guide, parts catalog, etc...),
- Paint the frame,
- Assemble rear and front axle, put on wheels,
- Spring and axles onto frame with all steering links,
- All hydraulic brakes lines on the frame and connection to cylinders,
- Engine and gearbox onto frame,
- Exhaust system on the frame and engine,
- Handbrake assembly onto frame and gearbox,
- Radiator with its support panel onto frame and connection to engine,
- First starting of the engine, check timing and leakages,
- Painted bulkhead on frame, equipped with all instruments, pedals, brake and clutch master cylinders, hydraulic lines, electric wires, heating system, trim, etc, etc...
- Connection of the clutch and brakes lines,
- Complete steering system, steering wheel, steering relay, all links,
- Painted rear body onto frame ,
- Painted front wings, bonnet and windshield onto body,
- electrical connections to all lamps and accessories,
- Support of the seat onto frame, gearbox cover and floor panels into place,
- Side panels with sliding windows onto rear body,
- Rear and side doors with trim into place,
- Complete top with trim and safari top into place,
- Install seats, spare tire , etc ...
- First drive to locate leaks and make needed adjustments,
- Assemble all pertinent docs, notes, electrical diagrams fur future use.

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It would be tedious to relate all aspects of the restoration, so here are only a few highlights:

1. Frame and Springs

All my frames were beyond repair so I started with a new frame from Craddock Ltd. Having received this frame around 1998, it stayed outside about 7 years in its protective paper. Unfortunately with rain, snow and sun the paper adhered to the galvanized coating and started to corrode the coating leaving many stains which were hardly beautiful. Painting galvanized steel is tricky, but I had to do it if I wanted a nice frame. After cleaning thoroughly all surfaces, I put 2 coats of special primers on it and over them a black anti-chipping paint. I then put on the springs. As already mentioned, I did not have all four correct springs, fortunately it was possible at a nearby shop to modify the wrong ones by taking off or replacing some leafs and by bending the springs to specification. Assembling the front and rear axles created no problems and rapidly I had a rolling chassis.

2. Engine

I took the one from the orange 1963 Station Wagon I had driven over a few kilometers.

During that short drive in 1995, the engine turned smoothly. Since according to the seller it had been redone this was the obvious choice. With Laurent, we opened and checked everything possible on the engine: bearings, timing chain, oil pump, water pump, tappets, compression, main shaft, clearances, etc... with no bad surprises. I cleaned it thoroughly (dirty business of taking away 50 years of dirt...), and painted it with a light green engine enamel. Maybe not the correct color but very nice to my eyes. The only modification I did was the one suggested in 'Land Rover Restoration, Tips and Techniques' (LRO Publications Ltd, Brooklands Books, 1992) on p. 78.: replace the rivets with bolts on the mudshield which protects the front oil seal on the crankshaft. Being able to remove the mudshield allows an easy replacement of the oil seal. Without it, you have to remove the timing cover. Of course I replaced all gaskets and oil seals.



3. Gearbox and transfer box

I also took the ones from the orange Station Wagon. During the drive in 1995 I could shift easily from first to top, the synchromeshes on third and fourth working nicely but shifting to second or first made some noises: my double declutching was hardly perfect at that time ! We opened everything we could to check the inside. Again everything looked fine as far as we could see, so we decided to leave it as is. I replaced all gaskets and oil seals and cleaned it thoroughly.

4. Solex carburetor

I had three Solexes and 2 Zeniths. The Zeniths were completely corroded or damaged beyond repair. Looking at the Solexes I found out that I would have enough good

parts to make a good one. Not knowing anything about carbs, they looked all identical to me and I started dismantling them, putting all similar parts together. When cleaning them I soon discovered I had 3 different main, starter and economy jets and that the identification numbers on the upper part of the carbs were also different... I then searched



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the Internet for all available documents on the Solexes. I found quite a few which allowed me to fully understand the functioning of the Solexes I had. Using this info, I rebuilt one with new gaskets, with the correct set of jets, making sure all passages were free with compressed air and checking for leaks. Unfortunately the best spindle left some leakage at its passage through the best body. Later on, when the car was running, this prevented having a steady idle. After some searching on how to correct this without having to buy a new carb, I added a tight neoprene washer on the spindle on both sides directly in contact with the exterior of the body. Tightening this washer against the body with the nuts on the spindle stopped the leaks but restricted somewhat the rotation of the spindle and the butterfly inside, but thanks to the strong return springs on the linkage to the gas pedal, this was of no consequence and I had a steady idle. I experienced another problem: my rebuilt Solex had the additional «economy» circuit with a second gas injection tube on its top (this additional injection of gas happens at high aperture of the butterfly to boost the power at higher speed). This injection happened much too early when raising the speed and therefore flooded the carb, although I had the correct jet on this circuit. I simply replaced the upper body of the carb with the similar part coming from another Solex but which did not have the second injection tube, this part blocking the economy circuit. Once on the road, I managed 60 + miles an hour so I did not try to put the economy circuit back into service! Also once on the road, I tried the different jets I had and left on those who gave the best idle and the best response to the throttle.

5. Welding

Shortly after my welding course I bought a nice Miller GMAW (MIG in the older non official terminology) machine and the gun needed for welding aluminium. Welding the steel parts (such as door frames, gas tank, foot wells, etc..) was easy (pic.9). Welding new plates of aluminium is a little tricky, thin plates a little more tricky and old plates of Birmabright much much more tricky ! These are covered with a heavier aluminium oxide layer which has to be brushed off much harder than the layer on new surfaces. So it took some extra brushing, cleaning and some extra practicing to find out the best procedures to weld these old Birmabright

plates. (By the way, Birmabright is an aluminium alloy with around 2 % of magnesium and smaller concentrations of other metals, close to the current AISI 5251 aluminium alloy; when welding it to itself it is recommended to use 5356 filler wires with a somewhat higher content of magnesium). I had some good door skins which needed only few repairs. The biggest work was on the rear body and the front wings which had quite a few holes and cracks and which were more than once bumped into, even the best ones I had ! For the wings the only ones which could be rescued were those of the 1971 hardtop with headlamps in them. If I used these I would have four headlamps. Not very original for a 1963 Landie, so I hesitated, on the other hand the wings without the headlamps are no longer available and the used ones, if you find them, are very expensive. Until I saw on TV, on the same day, in two old documentaries shot in Kenya, two Landies with 4 headlamps. My hesitation was over and I started stripping, removing the bumps and welding the 1971 wings.

6. Electricity

I bought a new complete harness from Craddock. After studying the electrical circuits, I was astonished to find only 2 fuses! Not very easy to locate a problem when you have one, not counting that a short circuit might easily burn all the wires in your harness! So I decided to add as many fuses as practically possible. I finally added 11 other fuses. A had a second fuse holder which I put under the original one on the bulkhead under the bonnet, 7 fuses inside on the right side of the instrument panel and 2 inline fuses. To cover the 7 fuses I added a cover panel with a clock and the switches for the second set of headlamps and the fan. On the left side of the instrument panel, I added another cover panel with the water temperature and oil pressure gauges, a tachometer (to help me perfect my double declutching!) and a voltmeter. Since the new harness had the wires for the reverse lamps, I added the reverse contact on the gearbox and the lamps on the rear body, all parts coming from the 1971 Hardtop. Not original for a 1963 Landie, but useful to have. And, I almost forgot to mention it, I rebuilt it as a negative earth system with a Delco alternator and the corresponding voltage regulator. I have two generators but both rotors are kaputt. No need to say that I documented fully all changes made.

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NB. Speaking about oil pressure and water temperature, I was lucky to find a working original water temperature system, the capillary one on one Landie and a working mechanical oil pressure system on another. I carefully assembled them together in the same cylindrical box! Both work perfectly!

7. Galvanized parts

I had a total of 68 galvanized parts ranging from small strips to the large windshield frame. I had them all regalvanized at the Montréal GALVAN plant. Not cheap, but really worth it.

8. Rivets

I bought a small pneumatic hammer, the correct automotive aluminium rivets and the tools needed to drive them. After a few hours of practice on plates of aluminium from the Landies, I was able to get some excellent results. However, when it came to drive the rivets onto a nicely and painstakingly painted part, I missed my first rivet and seriously damaged the paint. Fearing the worst, I switched to pop rivets! After about 1200 kms on the road, they seem to be strong enough, not one having yet popped out.

9. Paint

I have always intended to have the painting done by somebody else, judging it was beyond my capabilities and patience. But when I went to the nearby body shops, no one accepted to paint the parts separately, they all wanted me to bring the car fully assembled! A stupid thing to do. I then got in touch with a young guy from the village who was recommended to me. He came to see my parts and offered to paint them for 5 K, preparation not included! I figured out that a good used 5 HP compressor, a good painting gun and all paints would cost me 2 K at the most. As for a paint booth, I could always use the covered space between my two log houses which is nicely ventilated, and could block the side of the prevailing wind with a sheet of vinyl. Painting needs a temperature of about 20-25 degrees and relative humidity lower than 60 % and NO bugs! I would therefore have to be patient and wait for the right sunny days in summer and autumn. Although it might take weeks to paint my 60 parts or so, I decided reluctantly to do the painting myself. I came across a small shop in Montréal which imports high end automotive paints, guns and everything it takes

for a good painting. The owner told me that his paints are made in Italy, that Ferrari uses his paint and that he was willing to help me, so I decided to buy everything from him. I wanted a light color that clearly shows the lines of the Landie, so I settled for a beige for the lower parts and pure white for the top and side panels. Not exactly original but close, and a combination that pleased me and... my wife. He gave me 2 types of primers, a thin one to get a good adherence and a thicker one to compensate for some very small defects on the surface. For the final paint he gave me an acrylic paint which he told me was easy to apply. I finished the stripping, the repair and the final cleaning of all parts towards the middle of August 2009 and was finally ready to start the painting when... suddenly my wife took my sledge hammer and started to rip off completely the kitchen, being frustrated to do the cooking in a 60 year-old environment. This, of course, postponed my painting for one year to the summer of 2010,



feeling that I had to give her a hand to build a new kitchen! Having a new kitchen by July 2010, I started my painting: the primers were easy to apply, but problems started with the final paint: after a few liters of paint and many days of practice on all the metal surfaces I could gather in the vicinity, the results were catastrophic! Happily (!!!!) my wife then had an accident with our Jeep, which after mechanical repair needed repainting. I took my gun, my paint and a painted panel to the body shop and asked the painter what was wrong. I showed him my technique and he laughed: I painted much, much, much too slowly! It takes the largest possible flow of paint through the gun and a very fast movement right to left and top to bottom. After that everything went fine, but still fearing some flowing off of the

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paint when I painted vertical surfaces, I decided to paint all surfaces in an horizontal position. For tridimensional parts, I painted one surface, waited about an hour for the paint to polymerize and then turned the part to get the second surface horizontal and so on for the third surface. Some OVL R members would consider this to be an excellent schedule since it allows enough free time to empty a few beer cans without losing time! I must say that I am very happy with the results. Everything is not perfect, but I found out that my paint is much better than many paints I have seen on new cars!

10. Sound deadening

The only sound deadening material I found in my six Landies was a thin felt glued on the interior roof. I tried to improve on it. There are quite a few commercial sound deadening materials available which are described as being very efficient, they are expensive and being rather thin compared to what can be found in modern cars, I very much doubt that they do a good job. I thought that most of the noise is created by the vibration of the panels and that should be addressed. From my previous industrial jobs, I remember how some noisy equipment was silenced: on the interior side of the covering panels they had a sheet of rubber itself covered partially with a sheet of metal. So I bought a few square meters of rubber 1/8 thick and glued it over almost every panel, then over about half of the rubber surface I glued a thin sheet of coil coated aluminium (the type used for siding on houses which can be bought in every hardware store). The improvement was evident when shutting a door equipped with such a sandwich and without. Not knowing how noisy an original Landie was, I cannot tell how much I silenced my Landie; compared to a modern car, on the road it is still a little bit noisy...



11. Trim

The trim for all door and interior panels is still being made by a few companies in the UK, but is only available in black and is of course not cheap. Having found a good trim for all three doors on my Landies I decided to use them as a model to make new ones. I only had to buy a sheet of masonite 1/8 thick, cut it to the required sizes and glue over it a nice textured light brown vinyl sheet (which goes well with the beige of the body) and add the padded armrest as on the original trim. Easy to make, not expensive and they are quite nice!

The 2-part vinyl sheet under the roof with the 4 ventilators was a little more complicated to reproduce since it is a 3-dimensional structure in the front. I had 2 complete assemblies of this sheet; so I was able to cut the new vinyl sections (a light off white color) using the old ones as a model. I had to make some assumptions

about the dimensions since the old vinyl, having been stretched for 50 years, no longer had its original dimensions! It seems that I made good assumptions: after having all sections sewed together by my wife and mounted on their steel structure, the vinyl was well stretched everywhere. Once attached to the roof it looks splendid!

Well, I spent most of the winter 2010-2011 assembling everything together, and as soon as the snow disappeared, not quite finished, I took the Landie out (pic. 10). What a thrill it was to cover the kilometer of our forest road from the cottage to the public road with some 15 % upwards slope. I kept laughing and shouting all the way: after almost 16 years here I am driving MY Landie. After a few other kilometers on the public road it looked like everything was working fine, except for one or two leaks. And at

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the end of June, I had her completed with everything working fine. On July 17th, 2011 I took her to an inspection station, she was accepted as road worthy without problems, I even got congratulations from the mechanics, and I licensed her at once! Back home, we had a royal dinner and with a bottle of champagne we baptized her Sandy.

Looking at all my written notes, it turns out that I spent around 2500 hours restoring her over a period of 5 years (let's say four with the kitchen incident!) plus previously about 500 hours dismantling the 4 Landies. The total expenditure for buying the cars, the parts and all materials was 13K. For insurance purposes, a professional evaluator evaluated her at 25K. (Decarie Motors, the main Jaguar and Land Rover dealer in Montréal, recently had an original SWB Hardtop Series III in acceptable condition for 37 K!).

As of today, I have driven and enjoyed her for about 1200 kms without problems. First, I was surprised by the suspension, I was afraid that she would be a horrible 'tape-cul' (backbreaker), but the ride with new seats from Exmoor is rather smooth. She is somewhat noisy by contemporary standards, but the noise level is acceptable. With the correct jets on the Solex, the engine has a steady idle and on a flat road, on a straight line with no wind she is able to do a little more than 60 mph. The only small annoyance is a little noisy first and reverse gears, maybe a little defect on a pinion. After a little practice, I can now engage smoothly first and second at any speed by double declutching. Third and top engage easily with good synchromeshes. Once I had tightened all nuts on the steering system and with the correct toe-in on the front wheels, all vibrations ceased, no play can be felt at the steering wheel and she stays really steady up to her maximum speed. She burns about 10-12 liters per 100 kms. Oil pressure



left steering level on the swivel pin housing when these became loose, causing a huge vibration on the front of the truck. The cause: I forgot to put on the 2-holed small plates which prevent them from unscrewing !

goes up to around 40 psi as soon as the engine reaches 1500 rpm and the coolant temperature is finely regulated at 70°C by a 50-year old original thermostat. With their new pads, the brakes are excellent, no need of hard stamping on the pedal to stop. Up to now I experienced only one serious problem: on the second ride out I lost two of the 4 bolts holding the

Currently I am about to take out the gearbox and see what causes the noisy first and reverse gears. Before working on it, I intend to put in its place the 1971 gearbox which seems excellent. If it does a good job, I will leave it there and repair the 1963 box when I feel like doing

it. I have started to work on the 1959 cab roof to change my Sandy into a cab from time to time... I shall paint that roof cherry red, just to give her a little fancy touch! And I still have to dismantle the 1959 Station Wagon and the 1964 Hardtop in order to rescue a lot of good spare parts!

Restoring Sandy was quite an undertaking, and I really enjoyed it, as did Paluche, my faithful helper (pic.16). I learned a lot of things, building log houses not being the least! But I do not think I will attempt another restoration, it turns you into a slave doing not much else for quite some time!

PS... did I hear anybody say that there is a 1962 Series I E-type to be restored for sale somewhere?



Bensfold Backlog

ARTICLE AND PHOTOS BY BEN SMITH

When we left off a friend was promising to bring over a newly purchased Series IIA or III 88 to my place to get it running. This is a truck that had sat for 10 years and had a questionable frame and shot hydraulics. The owner was keen to sell and let it go for a good price—\$1000. But the title was jointly held by the man and his daughter. When she found out the price she got upset and killed the sale. It seems that she thinks the 88 is worth a lot of money.

We'll see if it ever sells. Now my friend Dan is looking at a '57 Series I 88". We'll see if that shows up.

January and February proved to be quiet months on the Rover front. I did purchase and install Exmoor Trim hi-back seats. The installation is trivial. Just remove the seat bases, remove the old backs, attach



the new backs and install the seat bases. And now Dora looks much, much better. Gone are the ratty seats that I've used for the last 20 years.

Prepping for the Winter Romp I installed that plate that covers the bottom half of the flywheel and clutch. For around town it doesn't matter as much. But you all know that if you go off-roading like that either mud a stick or something will get in there and break your truck.

Just as Dixon shows up to take a photo and submit your name for the lug nut. It is fixed now. So no worries on that front.

Dixon's 80" frames are happily sitting on saw horses waiting for his next visit to move that project forward. Perhaps in the warmer months..

Grounding Discos

ARTICLE BY BEN SMITH

Series Land Rovers have a simple wiring diagram. Grounds are few and well understood. Discos come with a 1.5" book of wiring diagram that is a choose-your-own-adventure as you follow wires from page to page. Invariably they end with something like "E102 (see ground distribution)". Then you go to section Y5 and find that there are 40 pages of ground diagrams. First you decode them, then you need to find where they are located. Typically items are grounded near where the component is located.

Land Rover does have a system in the numbering. Grounds start with E, connectors with C and Splices with S. The numbering is:

- 100s: Engine Compartment
- 200s: Firewall back to front edge of front doors
- 300s: Main body from front door line to top of rear tire arch
- 400s: Main body from top of rear tire arch to rear end of vehicle
- 500s: Left hand front door
- 600s: Right hand front door
- 700s: Left hand rear door
- 800s: Right hand rear door

Armed with this knowledge I wrote down which items are connected to which ground and the list of connectors and splices that they go through from the component to the ground. The aim is to put together a simple test to check your grounds. Poor grounds lead to flaky electronics. Poor grounds mean dim lights.

The checks are as follows:

- Turn on the head lamps.
- If the left head lamp is bright, then E101 is ok
- If the right head lamp is bright then if 1996 E100 and E109 are ok, if 1997 then E102 is ok
- Turn on left and right blinkers
- If both front and side lights are bright, then E200 (right side) and E201 (left side) are ok
- If both rear side lights are ok, then E400 (left

and E401 (right) are ok.

- Turn on front wipers, if ok then E110 is ok.
- Try moving an electric seat, if it moves then E301 is ok
- Try moving a front electric window up and down, if they move then E303 is ok.

Those checks the main items, the rest will have to be tested based on the circuits.

The data listed below is for a 4.0 engine Disco 1. And since Land Rover was now firmly under BMW's control, there are differences between 1996 from 1997 model years. If they differ, they are noted. Descriptions of locations are included. "views" are the photo number in the Electrical Troubleshooting manual of the component.

E100 RH front of engine compartment behind battery [view 50]

- Connect to E109
- P104 Battery
- B130 Right Headlamp, C103 ['97]

E101 LH front of engine compartment on fender well [view 29]

- B116 Left Headlamp
- M102 ABS Hydraulic Pump

E102 RH side of engine compartment on fender well [view 77]

- B130 Right Headlamp, C103 ['96]
- B109 Heated Front Screen, C122
- Z132 ECM, S140, C1033
- K107 Compressor Clutch, C145, S141
- X320 Fuel Pressure Sensor, C484, C407, C2082, C1036, S141
- Z193 Left Heated Oxygen Sensor Shield, S143
- Z194 Right Heated Oxygen Sensor Shield, S143
- Z202 Crankshaft Position Sensor Shield, S143
- Z264 Left Knock Sensor Shield, S143
- Z265 Right Knock Sensor Shield, S143
- Z266 Left Heated Oxygen Sensor (Post Catalyst) Shield, S143
- Z267 Right Heated Oxygen Sensor (Post Catalyst) Shield, S143

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Grounding Discos *(continued from page 23)*

- E103 LH rear corner of engine below valve cover [view 7] ('97)
RH side of engine compartment on fenderwall [view 77] ('96)
ECM, S104
K107 Clutch Compressor, C145, S141
- E104 Lower LH rear of engine compartment on frame rail [no view]
– to E108 (braided strap)
- E105 LH front of engine compartment on Ignition Coil [view 36]
– to E106 (braided strap)
- E106 lower LH side of engine [view 22]
1 to E105 (braided strap)
- E108 near Starter [no view]
– to E104 (braided strap)
- E109 Lower RH side of engine compartment on frame rail [view 45]
- E110 LH side of bulkhead [view 1] (braided strap)
– M107 Front Wiper Motor
- E200 behind RH foot well trim panel [view 203]
– Z162 Sunroof Control Unit, C383, S307, C2085, C2028
– M144 Rear Sunroof Motor, C388, S307, C2085, C2028
– X261 Front Sunroof Switch, C384, S308, S307, C2085, C2028
– X262 Rear Sunroof Switch, C385, S308, S307, C2085, C2028
– M143 Front Sunroof Motor, C387, S308, S307, C2085, C2028
– X263 Rear Sunroof Lockout Switch, C386, S308, S307, C2085, C2028
– X247 Front Fan Switch, C2022, C2027, C2066, S266, C298, S2050, C2028
– K192 Front Blower Motor Relay, C20268, S266, C298, S2050, C2028
– Z214 Front Blower Resistor Unit, C2070, S266, C298, S2050, C2028
– M121 Right Condenser Fan Motor, C182, S122, C2028
– M113 Left Condenser Fan Motor, C183, S122, C2028
– Z147 Window Lift ECU, C288, S2050, C2028
- K137 Starter Solenoid Relay, C2006, Z158 (Starter Relay Diode), S2005, C105, C274, S204, C2028
– Z163 Theft Alarm Unit, C274, S204, C2028
– X167 Park/Neutral position Switch (Auto only), C323, C105, C274, S204, C2028
– B133 Right Mirror Demister, C612, C603, S601, C2104, S204, C2028
– X318, Data Link Connector (OBDII), C2083, S204, C2028
– B183, Right Fog Lamp, C1025, S204, C2028
– Z164 Speed Trip Module (Manual Transmission), C2021, C218, S204, C2028
– B106, Fascia Cigar Lighter, C353, S204, C2028
– Z126 Service Reminder Unit, C2106, S238, C2028
– K187 Power Amplification Relay, C2053, S238, C2028
– Z110 Transmission Range Selector Switch, c344, S238, C2028
– K104 Transmission Range Selector Illumination Relay, C2044, S238, C2028
– M110 Headlamp Wash Pump, C173, S238, C2028
– M119 Rear Screen Wash Pump, C120, S238, C2028
– B102 Automatic Gear Selector Illumination, C346, S2025, S238, C2028
– B161 Left Front Side Marker Lamp, c1013, S2025, S238, C2028
– B162 Right Front Side Marker Lamp, C1014, S2025, S238, C2028
– K232, Fog Lamps Relay, C2089, S2025, S238, C2028
– Z122 Daytime Running Lamps Control Unit, C2047, S2025, S238, C2028
– K191 Ignition Key Lock Solenoid, C2014, S2025, S238, C2028
– M105 Front Screen Wash Pump, C170, S2025, S238, C2028
– B140 Ventilation Control Panel Illumination, C2023, S244, C2067, C2073, S2016, S2015, C2028
– B102 Auto gearbox select illumination
– X180 Air Supply Selector Switch, C2026, S244, C2067, C2073, S2016, S2015, C2028
– X225 Front A/C Switch, C2025, S244, C2067, C2073, S2016, S2015, C2028
– X239 Main Rear A/C Switch, C2024, S244, C2067, C2073, S2016, S2015, C2028
– B167 Right Front Side Lamp, C110, S2016, S2015, C2028
– B154 Right Front Indicator Lamp, C1010, S2016,

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- S2015, C2028
- B137, Right Repeater Lamp, C123, S2016, S2015, C2028
- M107, Front Wiper Motor, C224, S2016, S2015, C2028
- K134 Right Horn, C169, S2016, S2015, C2028
- Z114 CD Changer, C381, S2015, C2028
- K127, Ignition Load Relay, C2007, S2015, C2028
- X120 Driver Seat Buckle Switch, C378, S2015, C2028
- Z121 Cruise Control ECU, C284, S2015, C2028
- E201 behind LH foot well trim panel [view 120]
- X233 Radio Tune Switch, C2056, S217, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X234 Radio Waveband Switch, C2057, S217, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X235 Radio Volume Up Switch, C2058, S277, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X236 Radio Volume Down Switch, C2059, S277, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- Z117 Clock, C270, S216, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X220 Hazard Switch, C267, S216, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X132 Heated Rear Screen Switch, C264, S216, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X270 Front Fog Lamps Switch, C2098, S216, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X154 Rear Fog Guard Lamps Switch, C263, S216, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- B152 Glove Box Lamp, C272, S216, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X131 Heated Front Screen Switch, X265, S216, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X221 Rear Screen Wipe Switch, C250, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X115 Cruise Control Switch, C262, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X142 Instrument Cluster, C221, S253, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X130 Headlamp Level Switch, C259, S53, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- Z142 Instrument Cluster, C255, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- Z151 Air Bag Diagnostic Control module, C354, C252, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X146a Mirror Adjustment Switch, C228, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- Z143 Instrument Illumination Rheostat, C214, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- X222, Rear Screen Wash Switch, C249, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- Z111 Radio (Mid Line), C2060, S255, C208, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- Z148 Multi Function Unit, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- Z128 Flasher Unit, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- K122 Heated Rear Screen Relay, P126 (Fascia Fuse Box), C206, S288, S2023, C2029
- Z132 ECM, C1017, C1027, Z273 (Neutral Sense Diode), C105, K166 (Neutral Sense Resistor), S343, C105, S288, S2023, C2029
- X174 Transfer Box Oil Temperature Switch, C371, S343, C105, S288, S2023, C2029
- K183 Rear Wiper Relay, C281, S2044, S288, S2023, C2029
- B184 Left Front Fog Lamp, C1024, S2044, S288, S2023, C2029
- K174 Accessory Relay, C282, S288, S2023, C2029
- K128 Left Horn, C168, S288, S2023, C2029
- B166 Left Front Side Lamp, C109, S288, S2023, C2029
- X111 Brake Fluid Switch, C127, S288, S2023, C2029
- M114 Left Front Door Actuator, C507, S501, C2101, S2023, C2029
- B119 Left Mirror Demister, C512, C503, S501, c2101, S2023, C2029
- X201 Left Front Door Key Switch, C504, S501, C2101, S2023, C2029
- X108 Automatic Transmission Oil Temperature Switch, C166, S2023, C2029

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- B122 Left Repeater Lamp, C124, S2023, C2029
- X212 Alarm Bonnet Switch, C178, S2023, C2029 [not '96]
- B153 Left Front Indicator Lamp, C1009, S2023, C2029
- B108 Heated Front Screen, C121, C2029
- X318 Data Link Connector (OBDII), C2083, C2029
- X124 Front Wipe/Wash Switch, C2011, C2029
- Z111 Radio (C320, S272, C2055, C2029
- Z111 Radio (C268, S272, C2055, C2029
- Z226 Radio Amplifier Shield, S272, C2055, C2029 [not '86]

E203 behind LR side of fascia [view 129]

- Z108 ABS System ECU, C2084

E204 behind LH foot well trim panel [view 120]

- Z108 ABS System ECU, C2084, S132
- Z103 ABS Booster Unix C129 (x4), S132
- K102 ABS Pump Relay, C2094, S2051, S132
- K101 ABS Load Relay, C2093, S2051, S132
- K103 ABS Warning Relay, C2092 (x2), S2051, S132

E205 behind RH foot well trim panel [view 203]

- Z176 Sub-woofer Amplifier, C412, Z199 Sub-woofer Amplifier Shield (C437, C212), S2024
- Z175 Radio Amplifier, C2054, S2024
- Z226 Radio Amplifier Shield S2024

E301 beneath LH front seat [view 225]

- K131 Right Seat Power Relay, C358 (x2), S320 (x2), S3011
- X152 Left Front Seat Control Switch, C320, C3011
- K129 Left Front Seat Heat Relay, C349, C3011
- K135 Left Front Seat Heat Relay, C357, C3011
- B143 Left Seat Back, C309, C3011
- B144 Right Seat Back, C307, C3011

E303 beneath center console [view 168]

- X122 Left Front Window Switch, C337, C3003 [not '96]
- X151 Right Front Window Switch, C338, C3003
- X141 Left Rear Console Switch, C339, C3003
- X162 Right Rear Console Switch, C340, C3003
- X187 Rear Window Isolation Switch, C343, C3003
- X143 Left Seat Heat Switch, C341, C3003
- X164 Right Seat Heat Switch, C342, C3003

E400 LH rear of luggage compartment [view 241]

- Z134 Fuel Pump Module, C434 (x2), S415, C407, S401
- B121 Left Rear Lamp Assembly, C403, S401,
- B155 Left Tail Lamp, C441, S401
- B163 Left Rear Indicator Lamp, C442, S401
- B124 Rear Interior Roof Lamp, C300, S401
- K193 Rear Blower Motor Relay, C457, S426, C447, S417
- Z216 Rear A/C Switch Amplifier, C467, S426, C447, S417
- Z215 Rear Blower Resistor Unit, C458, S426, C447, S417
- K194 Rear A/C Control Relay, C463, S426, C447, S417
- X240 Passenger's Rear A/C Switch, C392, S417
- X246 Passenger's Rear Fan Speed Switch, C391, S417
- B158 Passenger's Rear A/C Switch Illumination, C394, S417

E401 RH rear of luggage compartment [view 243]

- Z134 Fuel Pump Module [not '96]
- X213 Alarm Sensor, C335, S332, C487
- B110 Electro-chromatic Rear View Mirror, C334, S332, C487
- B107 Front Interior Lamp, C3010, S332, C487
- B186 Left Vanity Mirror Lamp, C351, S332, C487
- B187 Left Vanity Mirror Lamp, C352, S332, C487
- B141 Rear Screen, C435, C453, C438, C487
- B160 Right Rear Side Marker Lamp, C446, C487
- B159 Left Rear Side Marker Lamp, C443, C487
- M120 Rear Wiper Motor, C489, C415, S438, C487
- Z176 Sub-woofer Amplifier, C412, S418, C415, S438, C487
- B103 Center Mounted Stop Lamp (w/ Sub-woofer), C484, C456, S418, C415, S438, C487
- B123 Number Plate Lamps (w/ sub-woofer), C404, S418, C415, S438, C487
- B123 Number Plate Lamps (w/o sub-woofer), C404, S418, C415, S438, C487
- B136 Right Rear Lamp Assembly, C406, S438, C487
- B156 Right Tail Lamp, C444, S402, C487
- B165 Right Rear Indicator Lamp, C445, S402, C487
- X172 Trailer Auxiliary Socket, C400, S402, C487

E404 Beneath RH rear of vehicle near fuel filler pipe [275]

- Z134 Fuel Pump Module

Classifieds

LAND ROVER 101 AMBULANCE LHD

This vehicle has not been jury rigged or messed about in any way. In "as released" condition. All faults declared. You won't find a more genuine ex military 101 ambulance this side of the pond. There are no more of these machines to EVER come out of service. Road registered and runs and drives. Always dry stored, no tall grass storage horror. OFFERS ACCEPTED.
Contact: Robin 1-613-484-6602 or rcraig@sakto.com

Apr2011

LAND ROVER 101

Land Rover 101 FC LHD 24volt soft top. Runs + drives and is road registered in Ontario. All known faults declared. No dreamers, be prepared to view and buy. Offers.

Contact: Robin 1 613 484 6602 or rcraig@sakto.com

Apr2011

2004 DISCOVERY 2 SE7

For sale – Epon Green, Fully Equipped with leather, 7 seats, 140,000 km, dealer maintained with documentation. 4 winter tires mounted on rims, tow package. \$8,900.



Contact: Chris Glauninger 613-632-2879 or cjglauninger@sympatico.ca

Aug2011

2001 DISCOVERY II

Moving to Botswana at the end of September and selling our 2001 Discovery II – purchased from Vern in 2008. Very well maintained (all the receipts for work done) and in great shape. 179,000 km, beige, asking \$6000.00. Can send photos to anyone who is interested.
Contact: Geoff 613-521-5355

Aug2011

EX-MoD SERIES III – FRONT GRILL AND DOOR SILLS

I had an ex-MoD Series III that was subsequently sold, however I still have the plastic front grill and door sills. Rather than have them end up in a land fill, is anybody interested in them?

Contact: Len – lnp00@live.ca

Dec2010

DISCOVERY II ORIGINAL PARTS

Steering Guard \$400 (ovno) brand new still in original packaging - never used. LRN51135P - plate; LRN51135 - kit; LRN51135B - bracket; LRN51135F - fittings
Fuel Tank Guard \$400 (ovno) brand new still in original packaging - never used. LRN51175
Axle Guard \$400 (ovno) brand new still in original packaging - never used. LRN5115P - plate; LRN5115B - bracket; LRN5115F - fittings
Protection Bar - \$100 (ovno) brand new still in original packaging - never used. STC50260

Contact: Kevin Le Messurier-Girling

Daytime: 905-436-7813 Evening: 905-728-0822

May2011

2000 Disco

Reason for selling: too small. \$2400. obo

ENGINE AND R380 TRANSMISSION

From my 1995 Range Rover Classic; 15,000km on it since rebuild... \$1,500

Contact: Olia Tryfonova – oliaian@yahoo.ca

Nov2011

1989 HARD TOP

Checker plate wing tops; 300 tdi with r380 gearbox; new ebrake shoes and seal; split doors; new rear door; lockable side storage box; heated seats; mud td5 dash; new springs; new shocks; poly bushes; new steering box; new injection pump; bfg all terrains.

This is a solid Land Rover. \$15,500

Contact: Matt 613-222-5121

Mar2010



BROKEN DISCOVERY I

Lots of parts available, electrics, seats, doors, panels etc.

Contact: Kevin Le Messurier-Girling

Daytime: 905-436-7813 Evening: 905-728-0822

May2011

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Classifieds (continued from page 27)

1989 DEFENDER 110 COUNTY

Turbo diesel engine; right hand drive; 12 seats; steering and transmission protection bars; factory Land Rover folding steps
Mileage 168,000, excellent condition for year, white exterior with blue fabric interior, original paint with the odd touch up. Imported late 09 and Ontario registered. \$15,500
Contact: Matt 613-222-5121
englishman99@hotmail.com

Mar2010



1983 MERCEDES G WAGON 280

SWB model, right hand drive. Black with techno cloth interior. 6 cyl 2.8 inline Mercedes petrol engine with 4 speed auto trans. Excellent condition. Chassis is very clean. Front and rear diff locks. Asking \$18,000
Contact: Matt Macpherson 613-692-3684 or
mrgrey9@gmail.com

May2011

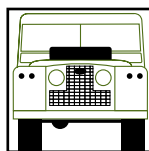
LAND ROVER DISCOVERY II, 2002

191,000 km; Automatic transmission to be changed; Otherwise in very good condition; Equipped with an ARP bull bar
Asking \$3,000
Contact: Jean François Bonin 613-941-4172 or
jean-francois.bonin@justice.gc.ca

Nov2010

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Dixon caps it off with a new gasket