

Volume XII, Number 11

1016 Normandy Crescent, Ottawa, Ontario, CANADA K2C 0L4President:Ted RoseVice-President:Dale DespreyConterpresident:Dale Desprey<

10 November, 1995

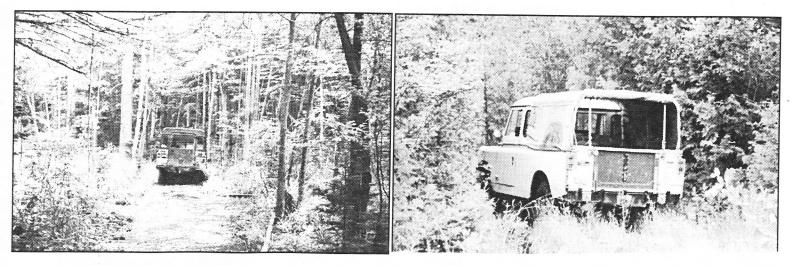
Greetings;

The major event of the month was the annual frame oiler. This year, eight Land Rovers appeared along with a number of other vehicles, some of which we won't bother to name in these pages. This year was the best organised showing ever. Roy Bailie, the event organiser, outdid himself in organising an easy and memorable occassion. To whit, Roy managed to arrange for the delivery of a large display ramp, used to show off cars in front of car dealerships, for us to drive our Land Rovers upon to make that job of spraying the frames far easier than in past years. To aid in the process, the wide angle spray guns have been discarded and new guns, owned by the Club, have been purchased. The new equipment was so efficient that we went through less oil and had almost no dripping oil onto the grass. Shannon Lee Manion found this particularly useful as she crawled around underneath her MGB, giving it its' yearly oil bath.

To feed the hungry masses, the Club trailer was brought down for the day. Al Pilgrim, reprising his role as master chef, served up a huge spaghetti storm with the help of the facilities built into the trailer. The new tarp proved its worth when the heavens opened up later in the afternoon.

Many thanks to the Hart's for hosting the Club yet again in what has become an annual event that many mambers take advantage of. The difference the oiling makes to an unprotected frame will ensure that some vehicles will not need the amount of work some of the derelict Land Rovers require that scatter the valley.

The October Social saw discussions on electrics, how you should approach them and how you shouldn't < snicker > as well as discussions on some of the more interesting Land Rovers hiding about in the Valley. An average turnout with twelve members showing up. Nominations for executive positions closed at the November Executive meeting. While there were a fair number of people nominated for various positions, most people declined to stand for office this year. The net result is one candidate for each position. Since a vote is not required, the next Executive will be announced at the Christmas Party. They will take office at the Annual General Meeting in January.



#### OTTAWA VALLEY LAND ROVERS 1016 Normandy Crescent Ottawa, Ontario, Canada K2C 0L4

#### **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.

OVLR 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.

<u>Membership</u>: Those joining throughout the year pay a flat \$20 per year, their membership expiring one year from the last dues submission.

The Ottawa Valley Land Rovers Newsletter

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

<u>Deadlines</u>: Submissions to the OVLR 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, in any format.

Editorial Policy: The Editor of the OVLR newsletter reserves the right to edit any submitted material for space and content considerations. Articles, statements, and opinions appearing in the OVLR newsletter do not necessarily reflect the position of the officers, board of directors, members of the OVLR, 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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Advertising Rates: Available upon request.

Upcoming Events (in the next month or so...)

### November 20th Social Gathering at the Prescott.

The monthly social gathering at the Prescott where we can discuss what sucker, er noble person is in line for the Christmas Party awards.

# December 2nd Annual Christmas Party.

Location:	Upstairs at the Prescott.
Time:	6:00pm Arrival
	7:30pm Dinner is served
	8:30pm Awards, presentations
	9:00pm Auction(?), foolishness, etc
	after
Food:	Turkey Dinner with all the fixings
Cost:	\$15.00 a head. (Same as the past couple
	of years)
Events:	Slide shows, awards, the feelie meelie and
	what ever else can be though up as well as
	voting for the next executive.
Other:	Christine will have a selection of the latest
	OVLR fashions.

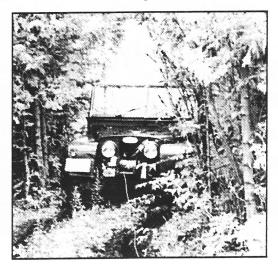
Anyone intending to go to the Christmas Party who has not been contacted by Murry by the third week in November, please call him at 591-0672. We need to have numbers for the Prescott so the proper number of meals are prepared.

**December 4th** Executive Meeting

December 18th Social Gathering at the Prescott.

January \_\_\_\_\_ Annual General Meeting (new Executive take office at the AGM.)

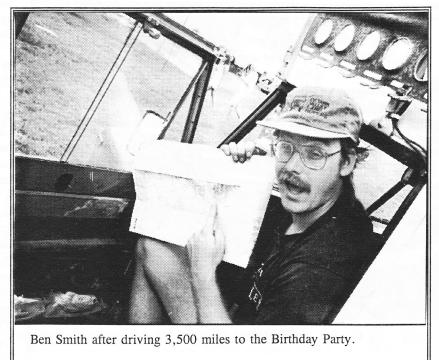
January 15th Social Gathering at the Prescott



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**Christmas Party Awards Candidates:** This has been a poor year for candidates for many of our traditional awards.

The Lugnut Award: People are either getting better, or more likely, they are not getting caught as often. While I am sure that other candidates will surface at the Christmas Party, here is a partial list of LugNut candidates: Dale Desprey: Just because. Dale has just managed to accomplish much this year. His accomplishments extensive. Russell Dushin: For saving for years to buy a brand new galvanised frame, buying said article and storing it in his mothers barn just before having season. The frame sits under hundreds of tons of hay. Pam Haigh for getting a fully expedition equiped Range Rover stuck on a different, more messy portion of the light off-road. We may see it again in the Spring. Bill Maloney for being the first person to get stuck on a light offroad course. Ted Rose for forgetting the basics, like how tall his Land Rover is



versus the garage door. Honourable mention to **Roy Bailie** for finally equalling **Yves Fortin** in breaking halfshafts, **Tom Tollefson** for his prehistoric mating rituals on the Birthday Party heavy off-road when he ran into Dave Lowe, and **myself** for finally changing my oil filter after 22 years of loyal service. (Dale and Bob Wood described the contents of the filter as being halfway between oil and coal), pulling an Exxon Valdez in the driveway (duplicating Dale's efforts last year) and general neglect of my Land Rover. Members are encouraged to telephone members of the Executive and rat on a friend.

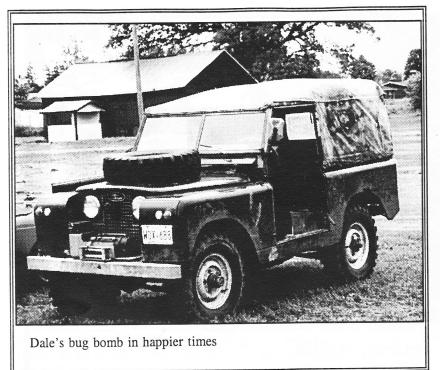
<u>Towball Award</u>: An award to the person who has added up the greatest number of miles towing Land Rovers around, for whatever reason. The Executive seeks further candidates in addition to the several they already have in mind.

The Executive is also seeking candidate for another, yet unnamed, type of award. This award falls into the cleverest, or silliest, modification, repair, or patch job on a Land Rover. More of a "*It Got me Through the Night*" Award than a Rube Goldberg type of award. In past years, had the award existed, George Kearney and Harry Bligh would have been neck and neck contenders. Examples include **Desperate Desprey** who in order to get to the Birthday Party on time used an orange extension cord, found in the middle of the road as a starter switch. He twisted the ends together to complete the circuit and start his diesel. Jerry Dowell for his use of a tow strap to hold his gearbox up when the crossmember decided to go south; and **Ben Smith** for using bits and pieces to patch his fuel pump on the road trip across the continent to the Birthday Party )(note: the patch is still working...

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• The October newsletter benefitted from the helping hands of many volunteers, though I must in partiucular recognise the patience of Murray, Fred, Bruce, and Bob on the designated collation night when certain copying facilities experienced some trouble and made for a late start. We won't discuss the computer problems that preceded this effort. Assuming the gods look favourably upon the Great Paper Monster, otherwise known as the government bureaucracy, my

	November, 1995
Editor:	Dixon Kenner
	(h) 820-1024 (w) 943-0589
Graphics:	Spencer Norcross
Contributors:	Myles Murphy, Robin Craig,
	Bill Leacock, Trevor Easton
Photos:	Jan Hilborne, Spenser Norcross,
	Bill Maloney, Ben Smith.
Other help:	Bob Wood, Desperate Diesel Dale,
	Murray Jackson, Fred Joyce, Bruce
	Ricker



daytime phone number may change yet again. More next month assuming it all comes through.

Desperate continues to mutter "it Runs!, it Runs!" Dale sent in this note on his recent adventures: "It is great to know so many people with a common interest in Land Rovers, through the club and the internet. The saga of my diesel engine begins with pulling it last Fall with the intention of reducing the amount the smoke it belches out. I didn't actually get to it until this Spring. The head went to a machine shop for valve guides and seat work, I put new rings and bearings in the block. On reassembly, I discovered it still smoked and started to get worse. On the way to Stowe, the engine developd a terrible knock. At the junction of highway 17 and the Quebec border, I decided to turn back. Land Rovers always get you home! Forensic investigation revealed the hotpoints (injection precups) in the head had somehow

moved, scoring large holes in the head, and making indentations in the block. One lunched engine.

Dixon Kenner sourced a used diesel for sale by OVLR member Alan Richer near Boston through the Internet. On the way back from the Virginia rally, Dixon suggested we pick it up, despite the extra milage. The replacement engine was careully put in the Saab for the remaining journey. It also volunteered to help with the swap between the dead engine and replacement. It only took a few hours this time, not eleven, as was the first time when it just didn't to mate with the transmission. I also bought some used injectors from another OVLR member David Place in Manitoba.

I now have a running Land Rover again. Special thanks to the many people who assisted me with my project, especially Alan Richer, David Place, and Dixon Kenner." Dale is now looking for Series III wiper arms and a battery box and both Alan and David have more diesel parts available for sale.

• Brave Sir Robin continues to find interesting diversions for the membership. His latest event was to arrange for interested club members to go on a tour of the Diefenbunker, otherwise known as Canadian Forces Base Carp. The nickname was applied becuase the bunker was built while Diefenbaker was Prime Minister). It is the nuclear bunker built in 1959-61 to protect the Canadian government for 30 days after a nuclear war. Unfortunately, in a short-sighted move the bunker has been cleared of furniture and equipment, but it was an interesting view on the 1950's and 60's mindset. By the time you read this, the entrances of the bunker will be covered in concrete and it will be in the hands of Heritage Canada, possibly to be reopened in the next 50 to 100 years. The OVLR logo stickers should confuse future historians...

• Al Pilgrim organised an OVLR Referendum watching session at the Prescott. Quite a few members showed up to watch the voting horserace on the CBC. The betting pool was won by the club, which took the closest odds.

• Never have enough Land Rovers? Peter Whitworth has recently acquired some more. A 109 pick-up and an 88 have been added to his collection. Following close behind, Jerry Dowell has just added a 1967 NADA station wagon (converted to a 4 cylinder) to his collection.

• OVLR makes it into the pages of *Land Rover Owner* this month (November issue) under the byline "Food Trailer Absent". *LRO* intrepretes the September edition of this newsletter as: "The Ottawa Valley Land Rovers report a slow month, but editor Dixon Kenner still finds enough news, rumour and trivia to fill the magazine, along with event reports and other items of interest to club members. But news that the club's now internationally-renowned food trailer will not be attending the forthcoming Silver Lake site must nave come as a snock. I thought the smell of Bates' cooking drifting across campsites was compulsory at all OVLR events. One day I will make it over to one of your events if only to enjoy one of

Bates' cook-house trailer meals. Mike Rooth reveals to OVLR readers in his article Misery on tap... or the MoT test, the farce that is the UK's MoT test. First problem he faced was that the 'assistant tester' who was faced with switches labeled in real English words, with no pictures to look at, had difficulty in getting lights and wipers to work. It seems the engine-stop switch on the diesel SIIA caused most of the problems. Mike's thoughts on the rest of the UK's MoT test follow similar lines and I feel now he has little confidence in our system! But worse was to come. After the torture test was over the MoT tester presented Mike with a nice certificate with the word "fail" in big letters, plus a bill for £26. Now you guys know what we have to face every year."

• Congratulations to Andy Graham. Andy has recently hit that magic number, 50. Robin organised a



surprise Birthday Party for Andy. Mike McDermott gave a speech for Andy while and eight other members were in attendence. Party attendees were treated to a slide show where some of us saw Andy's 109 for the first time and discovered that in a past life Andy was an officer in the RCAF, playing at air traffic control.

• **Russell Wilson** has decided that his Land Rover needs a nice coat of paint. Finding the articles printed earlier on these pages to be inadequate (using a brush or spray gun) Russ has decided to go the bucket and mop route.

**John Hong,** our lonely member out in the middle of the Pacific writes: "I've been stuck in Hawaii for about 3 weeks while me landy sits under a tarp in San Francisco. I think I'll be able to arrange to have it shipped over to Honolulu in about a month. I can just picture it - roaring around Oahu (me exhaust pipe is loose at the header) sans roof, big s-eating grin on my face - cause driving your rover is what it is all about - drips, leaks and #@%&6!!! - included."

• A note from **Roy Caldwell**: "Been busy with the '62 and still gathering notes for idiot procedures. Got the frame painted and am working on the firewall. Hoping to get to that this weekend and next week. Still looking for a job and trying to sort out the new computer and get organized. I have been substitute teaching a great deal. I wrote a short story about why we love Rovers but haven't sent it because I haven't had time to get it on a disk in ASCII for you. Will try to do that soon. I also have a homebrew pressure bleed hook-up for the brakes and clutch and will try to write that up for you also. I have been getting the newsletter fine and really envious of all the goings on that I have to miss because of all sorts of things that are not really good reasons for a real Rover freak. Maybe I should just go really unemployed and get all this stuff sorted out."

• Ottawa Valley Land Rovers has an Internet presence now. OVLR has set up a rather large World Wide Web site. The Land Rover Frequently Asked Questions (FAQ) resides on the site, as well other general information about Land Rovers, OVLR, and its members. OVLR joins the Blue Ridge Land Rover CLub, Solihull Society and LROA as clubs with an Internet presence. The URL (address) for the new site is: http://www.ridgecrest.ca.us/OVLR/ The textual contents of the site were mostly written by OVLR members. The actual construction of the site was carried out by Ben Smith.

• OVLR associate and Island Rovers President **Ron Lowe** in Sooke British Columbia sends along this note: "At 8:30 am there were over fifty 4x4s waiting at Twin Bridges on the Old Boneyard road. Among them were 2 Landrovers... one a straight series one ..."...been in our family since new" says the driver. The other is a well known Series Two, altered some years ago to haul a great sail boat out of the salt chuck... has, shudder, a GM 350... with seriously altered axles and diff sidegears to accommodate the extra torque... wink wink nudge nudge... really goes too. Other 4x4s represent all the

varieties, except the new Subaru Outback. We set out, it was a great day, no rain, but some early morning mist...not a hot day. First breakdown was a rear driveshaft yoke on 3/4 ton Ford P/U... I took he and his 2 passengers back to the start to go to town and get another. Catch up to the others who by now are trying to overcome the first obsticle... a washed out bridge. After some are towed, others are winched and some drive thru unaided, we repair a 3/4 ton GMC whos clutch ram has come adrift from the frame. Also use a come-a-long to keep the steering box attached to the other steering gear. Looks hoky but works...another 4x4 arrives with a tale of woe. This 3/4 ton Ford has already gone thru 3 power steering boxes on the way to the run... he has to stop every 5 to 6 minutes to allow the oil to cool.. We travel to the next station and arrive in time to watch some drivers do the "white-knuckle-polka" over the hill... seems like stright down. The reports at the end include loss of 4x4, broken axles, broken drive-shafts, u-joints adrift, electrical systems down, some body damage, some broken glass, several tire incidents, punctures, slashes, and beads seperated. No vehicles are left in the bush overnite this time. Today one of the most sought after trophies is the dash plaque. Hope to see some of you here in the future we will run again in April. We will have a full scale "Mud-Run" on the Victoria Day...May holiday. Make plans now. Yours off-road from Sooke BC ... Ron"

### SOME NEW OVLR MEMBERS

Five new members joined this month. We will print a complete membership list with city, province, and phone number in the January newsletter.

Russell Burns of Howell Michigan, has a winch equipped Range Rover as well as a Defender 90. Russell impressed many at the ROAV rally by returning from one journey down a fire road with the entire front end and engine bay of the D90 coated in a fine mud.

Rod Brown of Sudbury Ontario has three Land Rovers (gotta keep the club average up!), all IIA's, though one is an elusive NADA.

Bruno Jobin of St. Jean Quebec brings along a 1959 Series II 88.

Jimmy Fatrick of California joins. Jimmy has recently taken over as editor of the Aluminium Workhorse, the quarterly newsletter of the Land Rover Owners Association in the United States.

Frank Twarog of Burlington Vermont joins. Frank has both a Series IIA 88 hardtop outfitted with lots of goodies, but also a Defender 90 soft-top too.

# SOME NON-OVLR NEWS AND RUMOURS ...

The InterNet RoverWeb, one of the central World Wide Web site for Land Rovers on the Internet has been moved. The http://www.ridgecrest.ca.us/RoverWeb/ new address is: [note capitalisation in RoverWeb. This is important. OVLR members have supplied much of the material found on this site.]

Since opening on November 1st, and to November 10th, the OVLR web site has had 3,003 requests for information. The RoverWeb has had 4,872 requests. People have looked at the pictures on both sites 9,860 times. The pair of sites have transferred 269 megabytes of information out to people. 1,559 "addresses" have connected with both sets of web pages (since it is possible that more than one person shares a site address, this means that a minimum of 1,559 people have visited the web sites).

More internet addresses keep appearing. British Pacific, a parts supplier in California, now is on the Net. They can be reached at britpac@aol.com. Atlantic British is known to be getting ready to make the plunge too

1. Unusual beer ad - a Bud-Light commercial. It had an SIIA Safari 88 with a man and woman inside dressed in Safari atire. Their L/R was stopped on a grassy plain. A lot of supplies tied on the roof including an ice chest. All of a sudden, several monkeys came up on them, jumped on the L/R, and eventually stole all of the Bud-Light in the ice chest. The riders looked most upset! The last scene showed the monkeys partying and drinking their Bud-Light in some house. 2. Another ad seen a couple of times the last few months is where a couple of beautiful people drive a Land Rover into the jungle searching for a Mayan/Aztec type city to find super tropical fruit-flavoured candy (StarBurst? Something else?). You see the LR climbing steep stairs to enter a temple filled with fruit flavoured candy. 3. If anyone has a wife or girlfriend that reads Town & Country Magazine, turn to page 147 in the November 95 issue. There is a great picture of David Viscount Linley (the son of Princess Margaret) in his blue Series 3 on a cliff above the blue Caribbean water. The caption reads "Lord Linley's preferred transport, a Land Rover."

• You read about double clutching, but some keep asking what it is exactly. Mike Loiodice supplies the answer: "Double-clutching is a method to get the transmission speed syncronized with the engine speed as you change gears. The procedure basically is:

## 1 - Push in the clutch

- 2 Put the tranny in neutral
- 3 Let out the clutch
- 4 play with the throttle \*
- 5 push in the clutch
- 6 change to the next gear
- 7 let out the clutch

Step 4 requires a bit of thought. If you are upshifting, the engine speed will be decreasing for the same wheel speed, so you want to let off on the throttle. If you are downshifting, the engine will be speeding up, so you need to "blip" the throttle. The time between steps 3 and 5 allow the transmission to slow down or speed up so that when you do step 6, the gears engage smoothly.

• Seeing it is getting cold outside again, those interested in adding block heaters can hit their favourite Canadian Tire. Here is the necessary information:

Engine	misc.	temro #	Diameter
8 cylinger	'87-95	220-2794	1.5"
6 cylinder	NADA	220-0015	1"
4 cylinder	1958 -	220-3103	1 15/16"

• How fast do you have to drive your Land Rover before you break the police radar gun? A Scottish police force recently suffered damage to one of their radar guns when a constable pointed it at a low flying Harrier. The gun has been suck at 300MPH ever since. The MoD later said that they were lucky there was so little damage to the gun as the plane had registered a radar lock and the normal course of action in this circumstance is to fire an air-to-surface missile. Fortunately the Harrier was unarmed.

• The American magazine Popular Science (Sept 95) has a listing of various manufacturer/model changes upcoming. For Discovery, there is a redesign for 1998 which includes standard 3rd row seats. For Defender 90, there is a CB40, small new hardtop which joins the lineup, 2.5L V6. Good news for the Defender 90, it sounds like they may be keeping it around. However news is, that it sounds more like a BMW - small, and 2.5L V6.

• A letter from Trevor Easton, editor of the Toronto Area Rover Club: "The company (Land Rover/BMW) attitude to the use of the name seems to be hardening. Aftermarket suppliers ( I presume all, but know for certain of one) have been advised by solicitor's letter to remove all reference to Land Rover from their literature and advertising. This means in North America that unless one has previous knowledge where to get them, parts for earlier Rovers will be difficult to find.

This seems a very short sighted attitude, after all, how many companies advertise parts for Jeeps, Broncos, Blazers etc without being harassed by Chrysler, Ford or GM. I suggest that we series owners start a campaign to protect our suppliers. A good start would be to visit the local franchised dealer when looking for spares ensuring that our most well used and classic Land Rover is parked prominently and leaking its best while attempting to locate the parts that we know they no longer supply then complain to the dealer manager about lack of availability . Write to Land Rover and let them know you care, though they probably don't.

These suppliers have been providing a valuable service keeping Land Rovers alive, especially during the years when Rover had no interest in North America. A campaign to eliminate the supply of inferior aftermarket parts would be one thing, but perhaps a futile idea it just being a case of 'caveat emptor' just like for all other vehicles. The elimination of all reference to Land Rover under pain of legal action seems just ridiculous. Maybe they just want to kill off all the Series vehicles and have us buy Range Rover 4.6 HSE at \$91,000 Can.

Just a thought that occurred to me as I write this. Moss Motors sell lots of parts for MG, Triumph and Jaguar. Now BMW own the MG name will they be going after these people as well?

[Editors note: Land Rover Canada was phoned regarding this letter. They confirmed that this is happening, but that LRCanada is <u>not</u> involved. This is being carried out by Land Rover (UK).]

• From Scott Fulgate (via the InterNet): "My brother, the tread-head Army Captain, reports to me a sighting of the Ranger Battalion's Land Rovers at Fort Benning, GA. He conveys that they are being run topless and without windshields, the driver and passengers wearing helmet and goggles. They are equipped with a roll cage that also serves as a weapons mount for a .50 caliber machine gun or the Mk 19 fully automatic 40 mm grenade launcher. He also thinks there is a version that sports some type of "tank killer" weaponry such as the TOW or DRAGON, or recoilless rifle or something. That's the cool part, but get this - The Rangers call these vehicles "gun Jeeps". Ughhhh!"

• Those illusive 110's that keep popping up? One chap phoned Alaska and had this to say: "I called that Alaska number to get some details about the 100 mil spec '92 110's for sale and I spoke with Jake. Jake says that after 8 months of dancing around with the EPA, that they have given up selling any of these vehicles into the US. He did say that they were working on fulfilling an order from someone in the US Virgin Islands though, so there is a chance that you rovers outside the US can still cop the deal. He did take my name and number 'just in case'. I will let the digest know if I hear from Jake, but don't hold your collective breath....." Land Rover Series IIB, Forward Control 110 (Concluding the Forward Control story from OVLR Volume XII, # 7)

Redesign of the Series IIA 109 Forward Control Land Rover began a year or so after its 1962 launch. What designers ended up with was a 109 <sup>3</sup>/<sub>4</sub>" vehicle with several features to help distinguish it from its immediate predecessor. Load restrictions on the original FC were taken care of by beefing up the suspension. The high centre of gravity was cured by widening the track by 4". ENV axles replaced the weak Rover units. The rear axle was relocated below the road springs. An anti-roll bar was fitted to the front axle but unlike the rear axle it remained above the springs. Low ratio gears were made even lower, gear changing made smoother (changing gears in the 109 FC is an art form in itself). Several other features familiar to later normal control IIA Land Rovers were also incorporated.

As the 109 FC's had earned a bad reputation for themselves, the new Forward Control was named the IIB and the wheelbase figure was rounded up to 110 inches. IIB's were available with a 4 cylinder 2.25l petrol and diesel engine and the 6 cylinder 2.6l petrol engine. Of the over 2,300 built, most were exported. An unknown number of CKD's (<u>Completely Knocked</u> <u>Down kits</u>) were also exported. A few 110's exist in North America. In the future we'll look at the FC 101, Llama, Santana 1300 and 2000 and the "World's last Land Rovers" 101" taxicabs.

### Know Your Rovers: Land Rover Series II, April 1958 - September 1961 by Myles Murphy

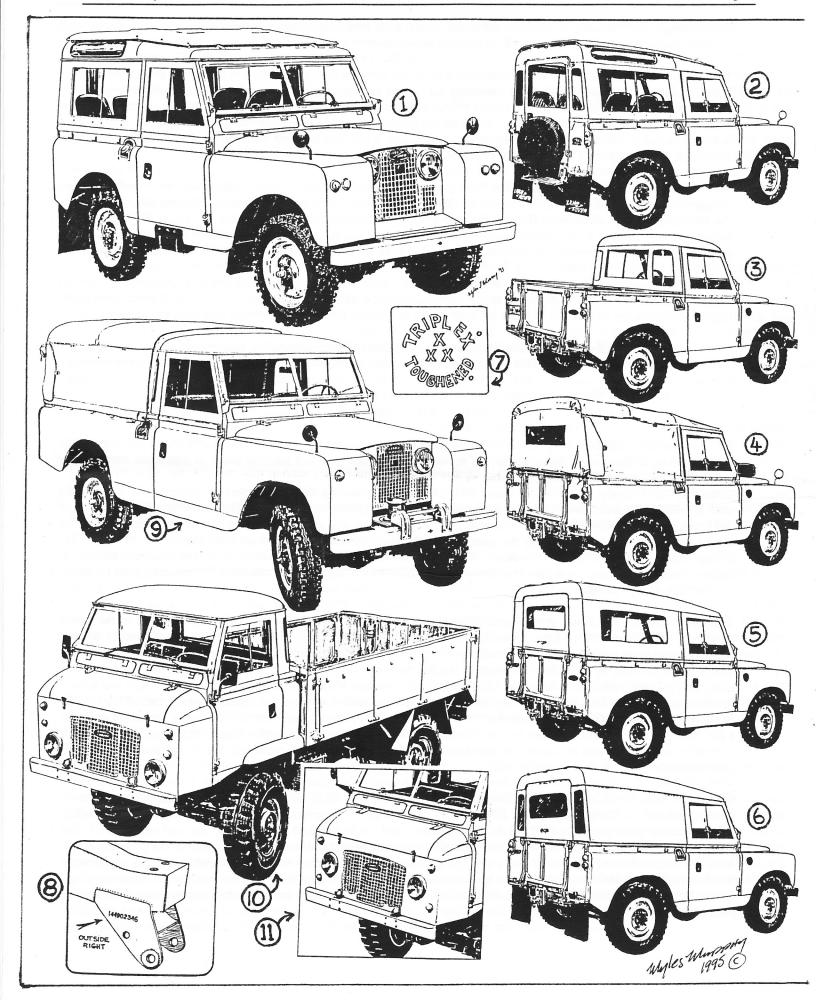
First on the market was the short wheelbase model. Petrol and diesel powered versions replaced the Series One 88". The 2.251 petrol variant was significantly more powerful than its predecessor (note: after the first few months of Series II production, the 2 litre petrol was fitted), but the diesel engine, carried over from the Series One would not change until late 1961 with the arrival of the Series IIA. The Series II 109" Station Wagon was another six months off. To fill the gap, the 107" Station Wagon remained in production. (Note: the 86" and 107" pick-up became 88" and 109" in late 1956. This chassis extension, 2" ahead of the bulkhead, to accomodate a larger diesel engine introduced in 1957. The 107 Station Wagon did not get the chassis extension).

As the 10 year reign of the Series One was drawing to a close and plans for new models were in hand, Rovers newly created Styling Department were called in to help tidy up what was a very angular utilitarian - you can see everything hanging out underneath - design. Under the direction of David Bache - head of the styling department, they came up with the curves that we're all in love with. Come to think of it, they got rid of the straight sided masculine looking Series One's and gave the Series II's feminine hips, Hmmmm..... So that's why I am attracted to Land Rovers.

Once you became familiar with the various features unique to the Series II, it's not too difficult to distinguish them from the almost visually identical, late 1961 to early 1968 models (all that will be revealed next time). 'course, no matter how clever you think you are, it is easy to be fooled. The first Series II's on the scene are easy enough. The rear chassis crossmember was the same as that on the last of the Series Ones. The front wings sported a single side lamp. On the rear, a single

### Drawings Key:

- 1. Typical Series II Station Wagon
- 2. Rear view station wagon. Roof referred to as "tropical" or "Safari" top.
- 3. Truck cab (also available with ¼ canvas for rear load bed)
- 4. Full canvass top. (also available with side clear panels)
- 5. Hardtop, with top and tailgate.
- 6. Hardtop without side windows. Hardtops were available with tropical roofs and/or alpine windows and/or rear doors. Sometimes without windows, other times with everything.
- 7. Triplex logo. Located in corner of each window. This one reads last ¼ 1958 (see text for full explanation)
- 8. Chassis vehicle serial # location (outside front right)
- 9. Series II 109 pickup (note single side lights on wings) The 109" was also available with the suitably enlarged roofs and doors of drawings 4, 5, and 6.
- 10. Series IIB 110" Forward Control (see page <u>8</u> for final installment on the early FC's) Note headlamp configuration, inset 11, shows headlamps on earlier Series IIA 109 FC.



side/stop light on either side. Indicators, trafficators, directionals, otherwise known as "winkie-dinkies" were optional. Both of these unique features were short lived. About the only time they are encountered today are in photos or brochures.

When trying to figure out what's what, there are six ways that work for me. One method is foolproof, another will put you within months of manufacturer date, the remaining put you on the right track. Among the clues available to help date the vehicle are the scuttle panel vent hinges and the bonnet hinges. If the vent hinges are secured by bolts (regular screw driver head on the outside) you are getting warm. If the bonnet hinge is secured by four bolts you're getting warmer. If the wheel hubs are castleated you are in Series II territory. The clincher is the "apron" panel between the wings, below the radiator wire mesh grille. It should be flat. If all four items tally, chances are its a Series II.

Now, trouble with Land Rovers is this. The factory never threw anything away. While stocks lasted, those items continued to appear on new models. The first Series II's had bits of Series Ones, likewise Series II its ended up on Series IIA's. You can be staring at a genuine Series IIA sporting one or all of the features common to Series II. To be 100% sure of the vehicle identity check out the chassis number (see drawing 8 for location) Should the number be unreadable - due to excessive paint, severe corrosion or replaced, then you will wind the numbers on the bulkhead just in front of the gearstick.

With 40 years of life under its hood, the manufacturers I.D. plate may be missing. There is also the possibility that the vehicle is a recent import with false plates (this is common with Series III Land Rovers, especially in the United States where imports are restricted to vehicles 25 years or older - not pre-January 1968, as some people still seem to believe)

Series II Ch	nassis	numbers are	as follo	ows. 88"	models,	Petrol	engine,	first four	digits.
1958	-	1418	1428	1438	1448	1458			
1959	-	1419	1429	1439	1449	1459			
1960	-	1410	1420	1430	1440	1450			
1961	-	1411	1421	1431	1441	1451			

As many vehicles have been chopped and changed and the paperwork long since lost, there is one little trick that can put you very close to the year of manufacturer. In the corners of all the windows you will find - in dull white lettering- the words TRIPLEX and TOUGHENED. Simply divide TRIPLEX into 4: TR - IP - LE - X. Then divide TOUGHENED into 9, with "T" as 1 through to "D" as 9. Above TRIPLEX now representing the four quarters of the year, you will notice a dot. It will be engraved above whatever quarter the glass was originally manufactured. Then look for a dot below one of the letters in TOUGHENED. Whatever number relates to the letter will give you the year of manufacturer. You can be almost sure that whatever Land Rover the glass is fitted to was built between one and not more than six month later. The average time would have been 6 - 8 weeks. When using this method it is worth remembering that doortops, rear doors, roofs and windscreens may have been interchanged. So take your readings from all windows. Windscreen glass is usually the least effected by change.

This identification method was used to good effect when I recently came across two 88's that had been kept in the woods only three miles from where I live. I usually stay well clear of derelicts, but as these vehicles were so close to home it couldn't hurt to take a look. I had just recently spent close to US\$4,000 importing a Series One 107" pickup that had been totally misrepresented by the seller, a member of the British Series One Club. The 107's engine, gearbox, front and rear axles and fuel tank were from a Series IIA. Despite having a one year MoT from the time I had purchased it, it was several thousand dollars away from being remotely roadworthy. Having secured a substantial refund from the bastard who sold it to me, I was kind of in the market for another vehicle anyway. (PS I plan to cannibalize the 107", stick the drivetrain under a IIA 109" pickup that I also acquired locally. Most of the 107's body panels are in poor shape, all patches and bondo, not to mention serious bulkhead corrosion - but the chassis - suprisingly is in excellent condition. So, if you need a 107" chassis plus some other odds 'n ends, get in touch).

One of the 88's, Serial number 144902346 was a basic hardtop with fixed side windows and top and tailgate, same as drawing number 5. The second vehicle, S/N 144902937 was a 99.9% complete, original, Station Wagon. Unique to this Rover were one piece doors, in other words, the doortops could not be removed. The Owner, who had recently died, had owned the vehicle since new. The last known document was recorded in 1974, the Rovers last time on the public highway. A quick examination inside and out and a polite interrogation of the owner's son revealed that a rigorous maintenance schedule had been followed and the chassis had been painted with oil annually from the very beginning. Needless to say, I was "tickled pink". All this thing needed was an oil change, shock bushings and engine and gearbox mounts, a coat of paint and Bobs yer uncle.

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The 1974 document listed the Station Wagon as a 1960, but being Irish and ever skeptical, I decided to check. I had already pegged both vehicles as Series II's by looking at the features previously mentioned. Chassis numbers were easy enough to read, both frames being in excellent condition. Both manufacturers plates were still in place and the numbers were the same. Not having a good head for figures (sums that is) I could only check the numbers out when I was at home. In the meantime I used the tried and trusted Triplex trick.

There were only 591 vehicles separating the two. That in itself is a rare find. Anyway, the oldest, the hardtops window date read the last ¼ of 1958. The Station Wagons, the first ¼ of 1959. That info put both vehicles rolling off the production line sometime in the first half of 1959. Further enquiries revealed that the Station Wagon was built for cold weather operations and probably ended up with a dealer in Canada in mid to late 1959. Perhaps to cater to demand, it and several similarly spec'd out 88's - with one piece doors, additional heaters and blowers, amongst other things, ended up in Maine. Hence the U.S. paperwork reading 1960. (another identical vehicle came to light a few weeks later - same spec., same date, 7 vehicles younger than my Station Wagon.) The package being disposed of included a 1960's vintage snow plough, the two Rovers, misc. tools, 60's vintage folding ramps, four or five hornets nests, a hive of honey bees, countless insects, deceased and otherwise, along with any additional documentation and accessories that may be unearthed as the previous owners possessions were being sorted out. The price US\$500.00. There is a God afterall.

Final note: TRIPLEX dating works for Series I's, II's, IIA's and Series III's up to 1978, that's when Rover switched to a new glass manufacturer. The decade itself is not identified, so you must have some idea what Series you are looking at. About the only time there is confusion is mixing up an early 1958 with an early 1968, but then, if you "Know your Rovers" you'll have no worries. Also serial numbers on LUCAS parts are an aid to dating. The last three (3) digits on the serial number (part number) will be the date of manufacture, e.g. 358 equals the third month, 1958. 'Course, finding an early Rover with any original LUCAS parts would be something to get excited about. As always, take your reading from as many parts as you can find. Only waste time with this method when all windows are broken.

Next time: IIA's early and late, 88's and 109's. After that: Series III's then military II's, IIA's and III's.

### **GENERAL SERVICE** by Robin Craig

I would like to take this opportunity to wish a good friend of mine a very Happy Birthday. Andy Graham recently turned 50. He, in case you didn't know was one of the figures behind ALROC all those years ago, he has served OVLR as well in much the same functions. He has been the printer of the newsletter and held the executive post of treasurer. Andy was given a surprise Birthday party at the CHIMO Hotel and on behalf of OVLR Mike McDermott said a number of words. A big thank you to Mike for doing that job.

I have commented before on the Matchbox series one fire engine and trailer that came out a few months ago. I had promised to find a telephone number for ordering. Here it is: 800-858-0102. The cost of this die cast toy is a cool \$37.50 plus shipping and taxes. It is well worth it and wold make an excellent Christmas present for a Land Rover lover.

Talking of toys, Galoob's Micro Machines are now available here in Canada in the Trail Tracker series, #37, which features a series 3 109 soft top. Mattel's hot wheels Range Rover has some new packaging. Majorette are keeping us going with the release of their 90 hard top towing a lion cage trailer, which is in fact listed on their boxes as a Toyota! I was surprised to find out that their are in fact at least five different versions of the Corgi Toys red 109 tow truck, or breakdown truck asthe Brits call it. Check the ones you have carefully, they might not all be the same.

One used to be able to buy a range of plastic snap together toys under the brand name Heller Cliclac. For about three years they have not been available. About a year ago I was given a Monti System toy from Eastern Europe. Now they are available here in Canada. The current version is called a Komando Land Rover. It is about 1/32 scale and comes with decals and all. I have some of these, which are hard to find. They are \$12 each.

I am happy to report that an important Series One has been rescued and hopefully will be restored. It is ironic that I had been told of this vehicle a number of years ago and that I had since forgotten all about it, damn it! Until next month have a good one. Robin [rc@fourfold.ocunix.on.ca (613) 738-7880]

## GENERAL SERVICING, Humour, Tall Tales, Humour, Trivia, & general rambling

The promised 24 volt to 12 volt conversion article finally made it through. Part one of two parts is presented below. The second article of the month is a rather ingenes set-up that Trever Easton has come up with to prevent the ingress of water into his axles, gearbox et cetera by using the positive pressure coming from the crankcase to keep water out. Next month, we will conclude the article on 24v to 12v conversion as well as have an article on rebuilding those dead single wiper motors.

### Conversion of 24 Volt Land Rovers to 12 Volts (part one of two) by William Leacock

The MOD (PE) have for a number of years, purchased a large variety of long and short wheel base Land Rovers from the Rover Company, later British Leyland, now Land Rover Limited.

Besides having many other features in common, they are fitted with either a 12 volt DC electrical system, or a 24 volt DC electrical system. The 12 volt DC system is principally the same as fitted to the majority of today's saloon cars and indeed utilises many of the same components used on many current British Cars, particularly those using Lucas components. This system is used for general purpose (GP) vehicles and Heavy Utilities (HU)

The 24 volt DC system is used on vehicles which are intended to be used for, or capable as, radio vehicles. These vehicles designated F.F.R. (Fitted For Radio) use an alternator to provide an AC supply which is subsequently rectified to give a 28.5 volt DC supply. The alternator output is 90 amperes or 2.5kW which is used to charge the vehicle batteries and the radio batteries. In order to drive the alternator whose full output converts to two horse power, approximately  $2\frac{1}{2}$  horse power is required, this represents about  $3\frac{1}{2}$ % of engine output (a 12 volt alternator uses about one fifth of this).

In addition to the 24 volt system, these vehicles are also fitted with a lot of radio interference (RI) suppression equipment and because they are often used whilst stationary, solely for battery charging, an oil cooler and 8 bladed fan is fitted.

The increased number of components, weight, operating load and replacement cost of components add up to increased vehicle operating costs for a private owner who has no need of the generating or welding capacity of the 24 volt system.

There are several solutions to this delimma:

- 1. Do not buy a 24 volt equipped vehicle
- 2. Grin and bear it
- 3. Convert the system to 12 volt
- 4. Sell or exchange the vehicle

Because of the aforementioned problems, prices of 24 volt vehicles tend to be marginally lower than for equivalent 12 volt vehicles.

Having painted a black picture and disillusioned 24 volt Land Rover owners, there are some pluses to the 24 volt system, namely for superior starting performance, all things being equal, when required an abundance of electrical power for welding, floodlighting et cetera.

To convert a 24 volt system to a 12 volt system, the following components are required, and the information on each will be provided.

- 1. Starter motor 12 volt
- 2. Alternator or Dynamo 12 volt
- 3. Windscreen wiper motor 12 volt
- 4. Heater motor 12 volt (optional)
- 5. Complete set of light bulbs 12 volt
- 6. Fuel level gauge
- 7. Fuel level tank transmitters

- 8. relays various 12 volt
- 9. Starter selenoid 12 volt or manual
- 10. Ammeter optional
- 11. Small quantity of wire, connectors, and clips
- 12. Horn
- 13. Optional: Coil, distributor, leads and spark plugs
- 14. Flasher can

### 1. <u>Starter Motor</u>

The majority of 12 volt Land Rovers are fitted with Lucas M418G (4.18" o/d motor) but I believe this model is obsolete. Starter motors from 2 olt fixong series I models, all series II, IIA's and III's in addition to motors from the complete P4 saloon range and 6 cylinder Land Rovers may be used. In addition, somme models of Lucas M45G (4.5" o/d motor) can be used. Those fitted to the Rover 2000 up to the early 70's (2 bolt fixing types only) may be used and also those fitted to some BL 3 litre engines. The M45G is a better motor since it develops a higher output torque, which when supplied by an adequate battery gives better engine turnover than the M418G. I have plenty of part numvers from scrap yards in the event of difficulties. Starter motors can be purchased from scrap yards at various prices, perhaps up to £10 each.

### 2. <u>Alternators & Dynamos</u>

<u>Alternator</u> - two types of alternator are available, one which utilises an external rectification box, i.e. Lucas AC15, 16, 17, or 18 and 4TR regulator and the other which has internal rectification, thus giving a DC output i.e. Lucas 15, 16, 17, 18 ACR. The external regulator types are fitted to older vehicles. If the given choice the ACR types are simpler to fit. These can be obtained from the majority of then-current British Leyland cars and light vans, and also some Ford and Chrysler models. Vauxhall's use A.C. Delco which can be used on Land Rovers, but fitting is more difficult.

Alternators can be fitted to Series II, IIA, and III models by many methods. The simplest is to buy the alternator mounting bracket for a Series III model which will fit in place of the jockey pully bracket on a 24 volt system engine or in place of the dynamo mounting bracket on a 12 volt dynamo fitted engine. Alternatives are to manufacturer a bracket to mount the alternator in place of the 24 volt alternator or to modify the jockey pulley mounting plate to suit. The Series III alternator mounting bracket is approximately £10 from a Rover parts dealer and alternators can be purchased from scrap yards.

(b) <u>Lucas Dynamos</u> - Types C40 and C42 from most older British Leyland vehicles can be used, easily fitted using Series II and IIA petrol or diesel dynamo brackets. If a dynamo is used, a control box types RB310 or 340 is also required. Scrap yard prices of dynamos vary but start at about £5 each.

The output from an alternator is higher than for a dynamo, maximum dynamo output is around 22 amps. Dependent upon the model alternator output varies from 35 amps to 65 amps. If you have lots of electrical extras fitted to your motor i.e. rows of spotlights, rear lights, heated screens, etc. an alternator is essential.

### 3. Windscreen Wipers

For models 1967 and earlier fitted with single wiper motors, the Land Rover 12 volt motors or Austin Gypsy motors are required. The 24 volt motors will run on 12 volt, but they run very slowly.

For 1968 and later models there are two types of Lucas wiper motors used, the earlier ones with a square motor frame type DR3 and the later ones with a round motor frame type 14W. Two alternatives exist for modification ... the angle of wipe for a Land Rover is  $120^{\circ}$ . Motors fitted to the Minor 1000 and Austin Morris 1100/1300 ranges have the same angle of wipe. The complete motor can be changed. A word of warning, the park position os  $180^{\circ}$  different to the Land Rover. To change the park position it is necessary to dismantle the wiper mechanism and remove the switch complete and refix to the drive gear after moving  $180^{\circ}$ . Holes are provided for this. The alternative is to swap the motor frame and armature only, which requires the removal of 2 screws in the frame end. Care should be taken when re-assembling to ensure that the brushes are corrrectly fitted. Average scrap yard prices of wiper motors are aprox. £3.

N.B. The circular and square motor frames are not interchangeable. For those who require the added luxury of 2 speed wipers, this can be achieved by swapping the frame and armature from a car fitted with two speed wipers. In this case it will be necessary to change the wiper switch and to add some wiring.

### 4. <u>Heater Motor (Optional)</u>

The LUCAS 24 volt heater motor will run on 12 volts, slower, but nevertheless adequate. However for the purist most Smith's heaters are fitted with LUCAS motors and these are all interchangable. Some have double shaft extensions but one can be removed with a hacksaw. Direction of rotation should be checked, since both direction of rotation are available. If necessary, a change of rotation can be achieved by changing over the brush leads.

### 5. Light Bulbs:

12 volt equivalents of all light bulbs are required. The 24 volt bulbs will work in a 12 supply but will give a reduced light output, causing potential legal problems.

### 6. Fuel Level Gauge:

Two systems of instrumentation are used, the present system using a 10 volt supply to give a damped indicator movement has been in use since about 1968. Earlier models use a 12 volt undamped system. Either system can be used but tank units to match must be used.

Most quadrant type gauges made by Smith's are interchangable, these can be readily picked up in scrap yards. In order to maintain a match of the lettering styles and to keep the same quadrant position on the instrument cluster, the gauge panels can be exchanged. If using the 10 volt system then a 10 volt regulator must be fitted in series with the instrument. These are often located on the speedometer fixing screws on many British cars.

### 7. Fuel Tank Level Transmitter

As for the indicator, there are two types, the late type which has a flat top and the early type which has a box cast on the mounting plate. These are available from Land Rovers only, either second hand or new. I am told that the potentiometer in the 24 volt transmitter can be changed for one from a 12 volt car. The difficulty is in finding which car has an equivalent potentiometer to the 12 volt Land Rover. I have examined dozens and not yet found one that is suitable. When you find out, will you let me know please.

### 8. Relays

Changing the electrical relays to 12 volt is simply a matter of obtaining suitable alternatives from the scrap yard or your local LUCAS agent. The type 6RA relays are used for a variety of functions i.e. headlamp flashers and on the early type external regulated alternators. A word of caution, the relays look the same, some have double connectors to one terminal, but there are two types of switching, normally opened (N.O.) and normally closed (N.C.). A N.O. switch will close when energised, a N.C. switch will open when energised. So when changing the relays, check the switch action. One of the relays used in the infra red lighting circuit on some vehicles is a normally closed type, when energised by the infra red switch it opens and inhibits use of the standard vehicle lighting system.

### 9. <u>Starter Selenoid</u>

Readily available from scrap cars, which do not have pre-engages type starters. Use can be made of electrically operated types or as on the early type Land Rover a manually operated type. Early 24 volt vehicles fitted with manually operated switches need not be changed.

### 10. Ammeter

The F.F.R. vehicles have two ammeters, one showing vehicle charge/discharge rate and the other showing auxuliary battery charge/discharge rate. Whilst these are graduated up to 100 amp, the instrument is only a milliammeter.

Use is made of an electrical shunt which is fitted in a box located behind the seat bulkhead. If it is desired to use one of these instruments then the appropriate shunt must be wired into the charging circuit and the milliammeter wired in parallel with the shunt. The use of an ammeter is entirely optional, indeed it is just something to confuse the wife.

#### 11. <u>Wire</u>

Use can be made of wire and accessories removed from the vehicle.

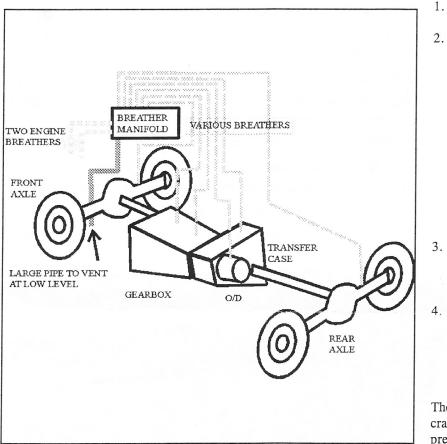
### 12. <u>Horn</u>

12 volt horns from any car, or any one of the many aftermarket types of noise makers can be used. [end part one of 24 volt to 12 volt conversion]

### Land Rover Breathers by Trevor Easton (Toronto Area Rover Club)

Those of us who like to wade with our babies are often plagued with the problem that water is a poor lubricant. One of the things that should be done almost as a matter of course is to route the axle breathers remotely to a high point. This solves the water in the axle problem. Unfortunately it doesn't help the gearbox or transfer case which have lots of places where water can ingress.

As an attempt to prevent this I developed the following set up. As shown in the accompanying diagram.

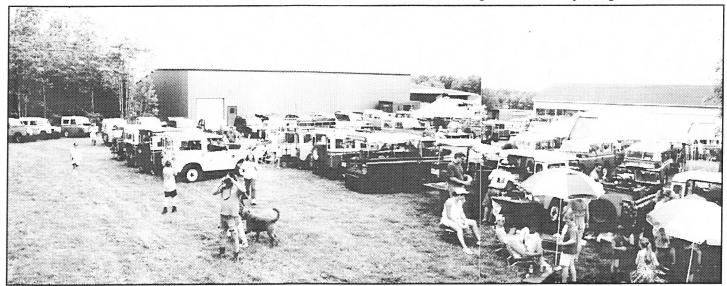


Fit axle breathers as above.

- Fit compression type tube connectors to the breather holes in the gearbox and transfer case cover plates. Also the overdrive if fitted. (Note, there are places for two breathers on the IIA gearbox. Assuming that they are there for a reason, both are used in this set-up. Whether you use two or not is up to the installer. These two tubes can obviously be combinded before going to the junction box.)
- Route tubing from each breather to a common manifold to which is also connected the engine breather.
- Use a large bore (1/2 inch or more) tube to vent this manifold to some low point. Mine hangs down in front of the front right hand leaf spring.

The object of this exercise is to use the crankcase pressure to provide a positive pressure to the various breathers. As you enter water and the end of the big vent tube

is submerged the pressure in the breather manifold will rise to whatever depth the tube is below the water level. This pressure will help to prevent water ingestion by any part that is connected to the manifold. It isn't totally effective by any means but does reduce the water intake somewhat. I would still recommend checking the fluids after prolonged submersion.



the Downeast Rally, July 4th weekend 1995 at Owl's Head Maine.

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McCahill & Friends Tom McCahill is a gentlemanly giant with a deep affection for things four-wheeled and four-legged. His understanding of the former has made him one of the world's foremost automotive test drivers and reporters. Happily, his highly trenchant observations on the virtues and foibles of some four hundred automobile makes and models, published in national magazines, have enabled him to spend an enviable amount of time (twelve months or so a year, say) with such delightful companions as Nodak's Boji Boy, Dinah, Moose, Pinney and the 4-wheel drive Land-Rover. This ten passenger station wagon was purchased by Tom shortly after completing a Land-Rover test for Mechanix Illustrated, in which he concluded: "The Land-Rover is a class vehicle from one end to the other, made by one of the most respected companies in the entire industry. In a few words, this car is capable, gutty, and as rugged as a cement casket." After acquiring his Land-Rover, Tom rephrased his own personal interest as follows: "I bought the big station wagon for field trial work and hunting. It's a great vehicle!" In addition to its many private uses, Land-Rovers are employed in an almost endless variety of occupations the world over-in farming and industry, in the armed services of twenty-three countries and the police forces of thirty-one. The versatility and value engineered into this remarkable vehicle will amaze you. Why not test drive a Land-Rover today?



Land-Rover gives you: the world's best four-wheel drive • a total of eight forward speeds, two reverse in high and low ratio • Rust-proof corrosion-proof aluminum alloy body; all steel body fittings heavily galvanized • Choice of two chassis lengths, seven basic body styles including seven and ten passenger station wagons, hard and canvas tops, and enclosed cab pick-ups • Three power take-off points • Choice of gasoline or diesel engine.

**THE ROVER MOTOR COMPANY OF NORTH AMERICA LIMITED** 36-12 37th St., Long Island City 1, N. Y. 373 Shaw Road, South San Francisco, Cal. • Mobile Drive, Toronto, Ont. • 156 West Second Ave., Vancouver, B.C.