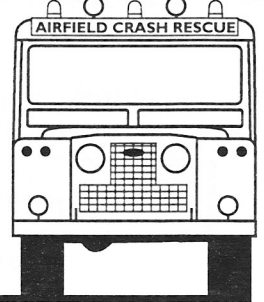


OTTAWA VALLEY LAND ROVERS



"Either it's really cool, or it's proof that Dale has finally lost it. We're not yet sure which it is"
(Bob Wood describing Dale's new raised air intake at the Maple Syrup Rally)

Volume XIII, Number 4

1016 Normandy Crescent, Ottawa, Ontario, CANADA K2C 0L4

President: Jason Dowell (819 595-4593)
Vice-President: Roy Bailie (613 523-5740)

Secretary: Dixon Kenner (613 820-1024)
Treasurer: Janet Dowell (819 827-2932)

10 April, 1996

Greetings;

The event of the month was the tenth annual Maple Syrup Rally up at Vern Fairhead's sugar bush in Shawville Quebec. Eleven Series Land Rovers and a Defender 90 braved the threatening weather for what turned out to be a beautiful day. In all there were about sixty people in attendance, the long distance awards going to Charlie and Pam Haigh from Rovers North and Andrew Taylor and Mike Hamilton who came up from Montreal. Christian Spizfogel showed with his new acquisition, the right hand drive Series III he recently purchased after his wife decided that he was not to bring the Disco off-road.

Brunch was served up, cooked by Al Pilgrim and Jerry Dowell on the club trailer. With Linda Wegner serving, the traditional french toast, hour old maple syrup was served. With a side of home made sausages cooked by Lyne and Harry on a proper smoker and home made baked beans rounded out the breakfast. Christine organised a bit of a treasure hunt for the children in attendance as well as giving them an opportunity to gather up syrup and help Vern in making some syrup.

Following brunch the afternoon endeavour was a light off-road tour about the countryside. The light off-road course, of an expected two hour duration, turned into the traditional much longer trip. Most of the Land Rovers, lead by Bill Kessels, with Vern Fairhead as navigator, in his D90 went for an enjoyable jaunt around the backwoods roads, abandoned rail line until the convoy reached more of a logging road. Steep inclines with wet corn snow served to slow down most of the vehicles. Those with nice wide tires had little problem, those fitted for mudplugging had a more difficult time. The afternoon sun had been working away, melting the snow enough to make it difficult to push through.

Two vehicles didn't make it up the last incline, a half mile uphill climb in deep snow. Dale's 15" tires and rims couldn't get the traction or clearance, while lack of clearance defeated Harry shortly afterwards. As Bill Kessels observed after some trouble getting up "I proved to myself that what they say about mud tires in snow is true--they suck! I got through everything O.K. but I think it would have been easier with a tall, thinner tire with a snow or all terrain tread and off roading in the snow sure is a lot cleaner than off roading in the mud." All in all, the off-road was enjoyed by all, despite two winches failing operational tests. (Harry will have more on this next month, we're sure...)

As with many OVLV events, the events continue to get better and larger. Credit for a successful day go to Al Pilgrim, Jerry Dowell, Linda Wegner, Harry & Lyne Bligh, and especially Vern and Lynda Fairhead for allowing use to use their farm again this year.

The next event on the calender is the Engine Tune-up at the MiniMan. It will run from 9am to 2pm on May 11th. Anyone interesting in helping out at the Birthday Party in June are encouraged to give Janet Dowell a ring. She is looking for volunteers to help out. Pre-Registration will be required for the Birthday Party.

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.

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

Membership: Those joining throughout the year pay a flat \$20 per year, membership expires one year from the last dues submission.

OVLRL Web site: <http://www.ridgecrest.ca.us/OVLR/>

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.

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

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

Advertising Rates: Competitive with other North American Land Rover clubs. Available upon request.

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

- May 6th** **Executive Meeting @ Coffee Lodge** (Lancaster Road nr. Museum of Science & Technology)
- May 11th** **Engine Tune-up at the MiniMan**, (9am - 2pm). Have a professional mechanic take a look at your Land Rover. Phone Ted Rose for more details (256-1598). MiniMan is on Walgreen Road. Take the Queensway west to the Carp exit. Turn left, and take your first right past the Petro-Canada station (Westbrooke) Walgreen is your first left. If lost, phone the MiniMan at 836-4283
- May 20th** **Social Gathering at the Prescott**
- Long Term Events:
- May 18-20** An excursion to Lac Sam (60 miles north of Ottawa) at Rob Ferguson's cottage. Hundreds of miles of logging roads to explore. Note: This is the Victoria Day weekend. Phone Rob at 831-3849 for more details.
- June 22-23** The 13th Birthday Party at Silver Lake. Pre-registration will be required.
- July 5-8** 8th Annual Downeast Rally at Owl's Head Maine. This is the largest Land Rover gathering in North America.
- Friday Jeff Aronson will be your guide for Vinalhaven Island tour.
- Sat. Off-road day
- Sunday Owl's Head Transportation Museum. Well over 100 Rovers, clubs, companies, LRNA, Rovers North, Airshow etc.
- Mon. Sheep dog trials - or something like that.
- Details Myles Murphy, RR 2, Box 23, Lincolnville, Maine, 04849 (207) 789-5303.
- Fees BBQ at off-road day \$5 (Canadian \$5 will do the trick) per person. Saturday evening dinner - lobster or steak or fowl will cost around \$15-20 per person - it'll be a feast.
- July Calabogie - Flower Station light-medium off-road journey.

OTHER NEWS, REBUILDS/PROJECTS, LIES, RUMOURS, TRIVIA...

● A slight delay in getting this newsletter out this month. Seems that government cutbacks caught up with me towards the end of March. Combine this with a relocation of the Canadian Forest Service and you can imagine that the newsletter managed to slip a bit in the order of things. However, being somewhat used to the current environment within government, I am still gainfully employed. Well, at least for now. More on that front next month. As usual, things are confusing in the government.

● A note from **Bill Kessels** on the Maple Syrup Rally: On the way back from Vern's, I came up behind Dale and decided to pass, lest I get smoked out. I may have even made some type of gesture as I flew by at about 140 KPH..... I had forgotten that I had my radiator muff closed up half way, and a combination of the mild temperature and my over zealous passing caused me to run hot. I decided to pull over at a gas station, pick up some gas and open up the radiator muff--while every one I had passed, including Dale, drove by. A couple of miles up the road I see the familiar silhouette of Dale's snorkel parked at the side of the road, with Dale standing looking at it in a dejected fashion. When I pulled up, he said "I think I (expletive deleted) broke it". We decided that I would follow him home to make sure he was able to limp home O.K. I ended up driving behind an even smokier than before diesel the rest of the way, about 40 minutes. I think this was some sort of punishment for passing in the first place. The one advantage was that the fumes drowned out any evidence of the other fumes floating about, which could be traced back to those delicious beans we had for lunch!

● A note from **Dave Bobeck**, who is thinking of going Defender shopping... "Ok, here's a neat one. I went to the hardware store last night (to buy hardware, of course), and as usual couldn't manage to just get what I needed without searching for some kind of goodies. I'm like a kid in a candy store, ok. I found some nylon flat washers that look like they would be really nice for fitting between steel bolts and aluminum panels. I remember somebody on this list talking about cutting up milk jugs to make their own. They should be in the plumbing section of any hardware store worth their "salt". (Yikes, I hate salt). So anyway, here's the fun part. Just "for kicks", I asked the guy working the key stand if he could copy the key to my Rover. After looking for about ten seconds he decided that while he didn't have the exact blank, he could probably find one that would fit. I'm thinking, ok, I can find a standard, common, hardware store blank that everyone can get without tracking down a Brit car place or one of the Rover places. So we find a couple that look possible, and take them out to the truck (Rover). The second one fits! It unlocks the door!! It locks the door!!! It starts the car!!!!. It HAS NOT been cut. After having a good ten-minute-chuckle with the hardware store guys, I bought the key blank (\$1) and drove home with it. It makes the ignition switch a little tight, but this prevents the heater from going on and off from the key moving. These are all new lock cylinders recently purchased from Rovers North. I called them and they told me that it was a DEFENDER KEY (!). So all you D90 owners watch out, I may be borrowing your ride for a day... Dave "Good evening, Officer" B. SIII SWB, Pastel Green on top, Rust orange on bottom (not for long)

● **Ted Rose** has found a new item to make a centre-piece for an OVLAR Award. Named by **Bob Wood** as "Gasket Under Glass", this little gem is a head gasket off of a particular 2.25l petrol engine. When one sees this gasket, conservatively described by Ted "As the worse burn through that I've seen in 15 years as a professional mechanic", one begins to wonder how the engine functioned for years with a compression ratio of 110, 0, 5, 120. Not only did the engine haul a particular Land Rover around Ottawa, back and forth from Stowe Vermont a couple times, but has been running with both a cracked head, and a cracked block. While the block remains the same, a new gasket, a replacement head makes for yet another temporary patch to keep this distinct Land Rover on the road. Ideas relating to a category to award this for are welcome, so long as the first recipient is not the donor of this particular gasket.

● **Spencer Norcross** is the latest member to embark of a frame over. With much guidance and help from **Alan Richer**, Spencer now has a nice new galvanised frame under his Rover. Details next month

Ottawa Valley Land Rovers Newsletter April, 1996

Editor:	Dixon Kenner (h) 820-1024 (w) 613-947-9018
Graphics:	Spencer Norcross
Contributors:	Myles Murphy, Alan Richer Bill Maloney, Robin Craig
Photos:	Dixon Kenner, Spenser Norcross, Ben Smith.
Other help:	Bob Wood, Desperate Diesel Dale, Murray Jackson, Fred Joyce, Bruce Ricker, Andrew Finlayson

SOME NON-OVLR NEWS AND RUMOURS...

- Some items received in the mail that can be borrowed: The February issue of the *Land Rover Register of South Australia*; the January issue of the *Toronto Area Rover Club* newsletter, March issue of *The Fairlead*, newsletter for R.O.V.E.R.S (Penn., USA); March/April edition of the *Solihull Society* newsletter; the April *Land Rover Owner*, and April *Land Rover World* magazines.
- Some media sightings from Roger Sinasohn (California) So I was watching Comedy Central whilst mucking with computer bits. First, there was "Kickin' Aspen", a not too funny comedy show from Aspen Colorado, wherein the host made a joke about seeing a bumper sticker saying something like "My folks went to Aspen and all I got was this stupid Land Rover". (I assume he means a plushmobile?) I must admit I wasn't paying too much attention before I heard the words "Land Rover". Then they cut to commercial, and it was the Fosters commercial with the back end of a 109" yanking on a rope as the definition of "Dentist". Then, the next commercial was the Amex one with Abercrombie & Kent(?), the adventure travel company, featuring a couple of D110's(?). Was the best part of the show, fer sure.
- The latest copy of "Car Mechanics" magazine is out. They have a section called "Electronic Diagnostics". This month the feature is the Lucas ECU engine management system for the Range Rover. (Is this the system used for Discos as well?) This is a very good magazine for the serious DIY'er. It has pictures of all the parts locations, technical specs, and a schematic diagram of the system. They talk about troubleshooting, maintenance, common faults, etc.
- Tired of using a punch and hammer versus the wrench specified to remove/refit the front and rear hubs? Larry Smith (Virginia) sent along another source for hub sockets: "For what its worth, I just got a copy of the JC Whitless Tool Catalog. On page 22 is listed a 2 1/16 hub wrench specifically listed for "British Landrover". Significantly cheaper than "other sources" at \$9.99. Whitless part number is 75HF3337T. Phone number is 312-431-6102. Now this is almost as cheap as a hammer and punch and does significantly less damage."
- Roverheads take note! In addition to the hub wrench brought to your attention by Col. Smith, JC Whitney lists one other part for "LANDROVER '59-'81 ALL 4WD", the ADD-A-LEAF 2" LIFT KIT. Recommended for "sagging front end, snow plow, or overall 2" to 3" lift." *Harry, take note...*
- Another source for hard to find tools: For a place that has a wider selection of steel and aluminum rivet-nuts than J.C. Whitney you may have a lot of luck finding hardware exotica and just about anything else in materials, metals, fasteners etc., etc. from
 McMaster-Carr Supply
 P.O. Box 440
 New Brunswick, NJ 08903-0440
 (908) 329-3200
 They aren't the cheapest place to get things, but they have a 2700 page catalog which will give you great ideas just browsing, and they offer next day service, at least in my part of the world. e.g. They list three full pages of rivet-nuts and setting tools.
- DEFENDER 90 AUTOMATIC DEBUTS AT 1996 NEW YORK AUTO SHOW NEW YORK, April 3 /PRNewswire/ -- Land Rover North America, Inc. today announced Defender 90 will return to North America and, for the first time, be equipped with an automatic transmission. The vehicle will return as a 1997 model with a larger, 182 hp, 4.0 litre V-8 engine and air conditioning as standard. Company officials told reporters at the New York Auto Show that the Defender 90 automatic will have permanent four-wheel drive, four-wheel disc brakes and a newly designed center console that includes integrated cupholders and a lockable cubby box. A soft top version of the automatic Defender 90 will be available in the spring of 1997. Final pricing has not been set, but the station wagon will be priced at approximately \$34,000. "The Defender 90 will return to the United States for the 1997 model year in response to dealer and consumer demands," said Roger J. Ball, vice president, Product Marketing, Land Rover North America, Inc. "When Defender 90 production ended at the completion of the 1995 model year, we hoped we could find a way to bring it back since it symbolizes so much that is Land Rover. We were gratified by the requests we had to continue it." The production of Defender 90 for North America was suspended for the 1996 model year pending certification of the new engine/transmission combination.
 The company has also announced a limited edition Discovery called the XD. Painted in eye-catching AA yellow, the special Discovery will be equipped for heavy duty off-road use including skid plates, BF Goodrich All-Terrain 225 tires, and a wrap around brush bar with Land Rover driving lights.
 Ball also announced a new Camel Trophy-style competition for U.S. Land Rover dealers called "Trek '96." Using the specially outfitted Discovery XDs, participants will have the opportunity to test their off-road driving skills against one another, as well as their personal stamina and resourcefulness. An additional 250 of these vehicles will be available in early 1997 with a target price of \$36,000.
- From LRNA's own web site: <http://www.landrover.com> in the vehicle specs for the Camel Trophy this interesting description was found: ENGINE *Intercooled*, turbocharged direct-injection diesel engine with four cylinders in-line

Know Your Rovers: Metalurgica De Santa Ana Land Rovers by Myles Murphy
(Production ran from 1958 through to 1991)

Don't know a great deal about these Land Rovers. I went for a jaunt around Casablanca in a Series II 88 once upon a time. For all intents and purposes it was identical to a British built Land Rover. In the mid to late 1970's whilst preparing to fly a batch of ex-Spanish air force fighters, bombers and transports to museums around Europe and the U.S.A., myself and Canadian buddy - Ottawa born and raised Lynn Garrison - were loaned a 4 cylinder 109" "Militar"

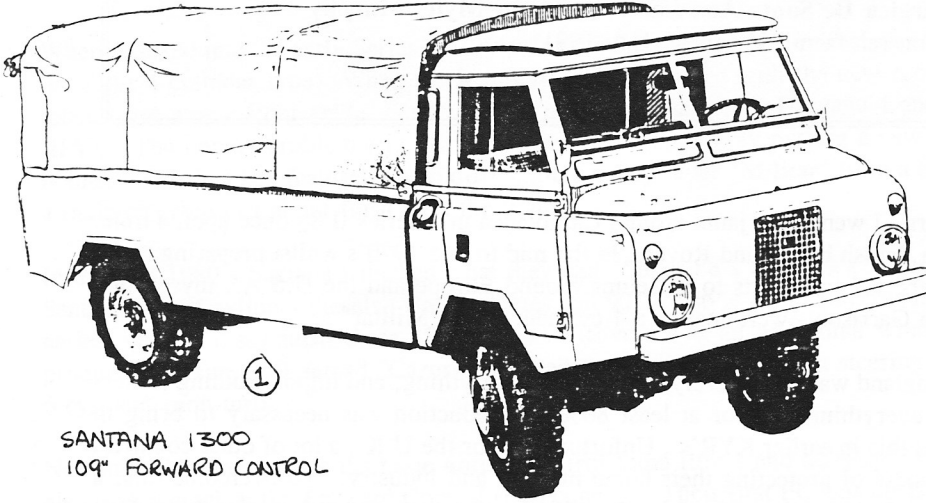
After World War Two, government policy in England was ration everything, export everything, and import nothing (unless it was vital to the export drive). The export everything bit - or at least 80% of production was necessary to bring in desperately needed hard currency. We discussed this in earlier KYR's. Unfortunately for the U.K., a lot of other countries had the same idea. They were also in the business of protecting their home markets and industry. To overcome this, a particular government would demand that vehicles (among other things) be assembled - with as much local content as possible - in their own country. In Land Rovers case, the Belgian company "Minerva" built 80" Land Rovers using partial kits (C.K.D.'s) from England and their own locally designed bodies built using steel. "Tempo", a German concern, built 86" Series Ones, again from partial CKD's and their own unique steel body.

In South Africa, Turkey or Australia, similar practices were followed. Where Land Rovers were not assembled, tariffs - raising the price up to five times what the same vehicle would cost in England - was standard protectionist procedure. This practice still goes on today. Buy a Disco or Defender in Australia and prepare thyself for a heart attack. I had to pay double the British price when I bought a new diesel 109" pick-up from an Irish Land Rover dealer back in 1978, and double again for a 110" in 1984. Spain got in on Land Rover assembly with the Series II in 1958. The Spaniards took to the Land Rover in a big way. Had Land Rover (UK) gone out of business in the late 1960's or early 70's (almost happened), Santana would have been in a position to keep the line going. Just think, instead of LRNA it would be Santana NA.

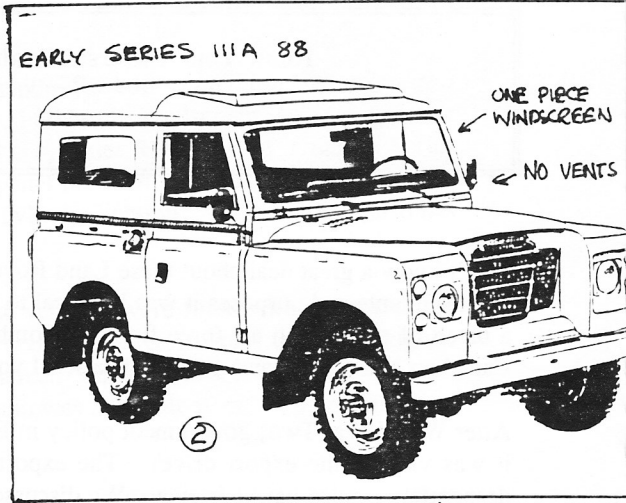
From the very beginning Santana began to follow its own path in design and development. At first changes were subtle, in time, the traditional Land Rover would almost become a new vehicle. One of the first major changes was the rear door, which resulted in changing the roof (see drawing 9). The rear door top was removable. Major body panels were also locally produced. The wheel arch cut-outs were slightly smaller than Solihull examples and the shape was different. When Santana got into Series III production it wasn't long before things really began to change. Land Rover (UK) stuck with the old Series II design (not that there is anything wrong with that). Most of the Series III refinements were just that - refinements. Cosmetic upgrades of no great significance. Apart from a revised dashboard, most Series III "refinements" had been introduced on the last of the Series IIA's.

Santana Series III's - apart from established changes - followed the Solihull pattern. Then - probably in the early 1980's, the Series III underwent a major redesign. At this stage just about every component going into Santana's was of local origin. In an attempt to break its link with Solihull, or it's dependence on certain items from outside sources, Santana redesigned the bulkhead. The upper bulkhead was eliminated above the bonnet and top door hinges. Gone were the traditional vents and split windscreen. A new larger one piece windscreen was fitted. The roof line remained the same as before, but the new glass plunged down to fill the void left by the removal of the scuttle vents, affording driver and passengers a much better view of the bonnet. Along with the new bulkhead and windscreen, a new roof with different contours was introduced. Instead of aluminium it was G.R.P. The new bulkhead also called for a rethinking of instrument layout, wiper motor location, and fresh air intake among other things.

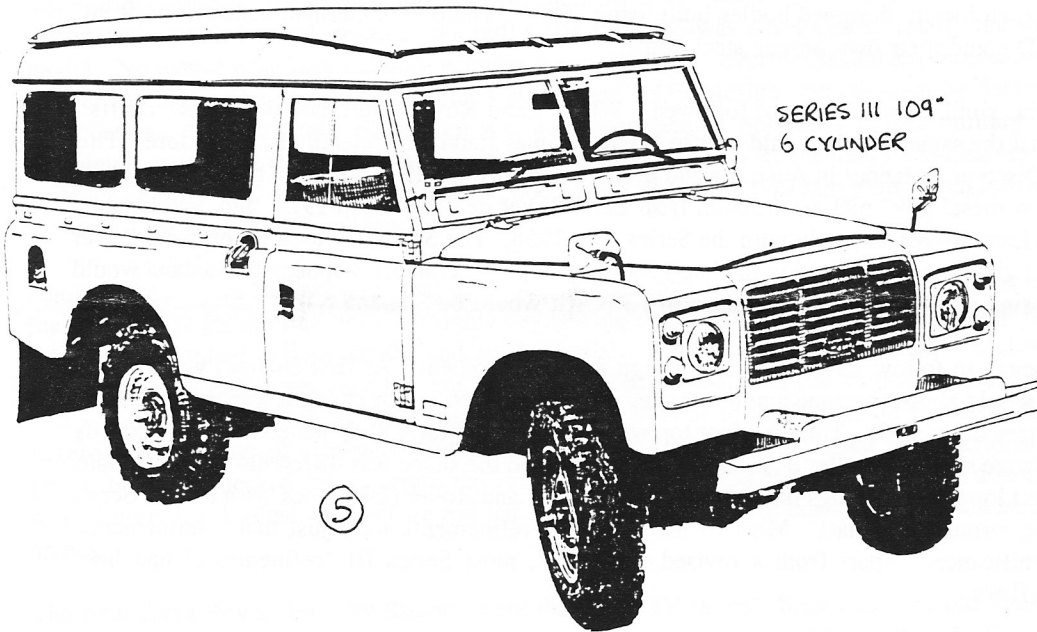
At this stage Santana were building their own engines and gearboxes. They were no longer dependant on Solihull, in fact they began to supply the U.K. factory with many parts - including gearboxes. Santana developed their own 6 cylinder petrol and diesel engines. This was achieved by simply mating half a 2.251 on to the rear of another complete 2.251. Long wheel base Santana pick-ups, station wagons, and armed forces "Militars" were fitted with the 6 cylinder engines.



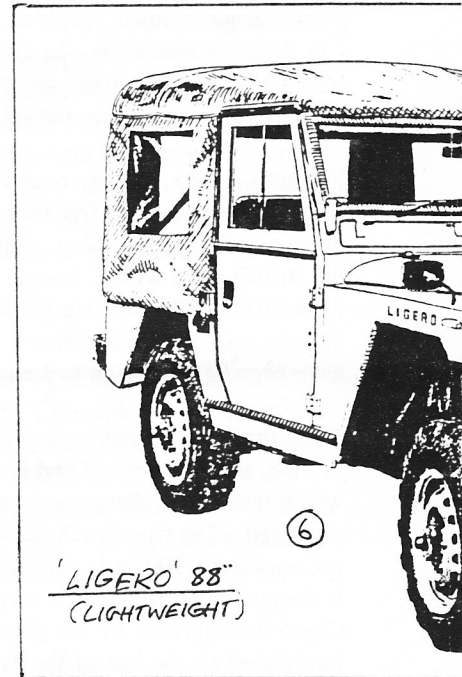
①
SANTANA 1300
109" FORWARD CONTROL



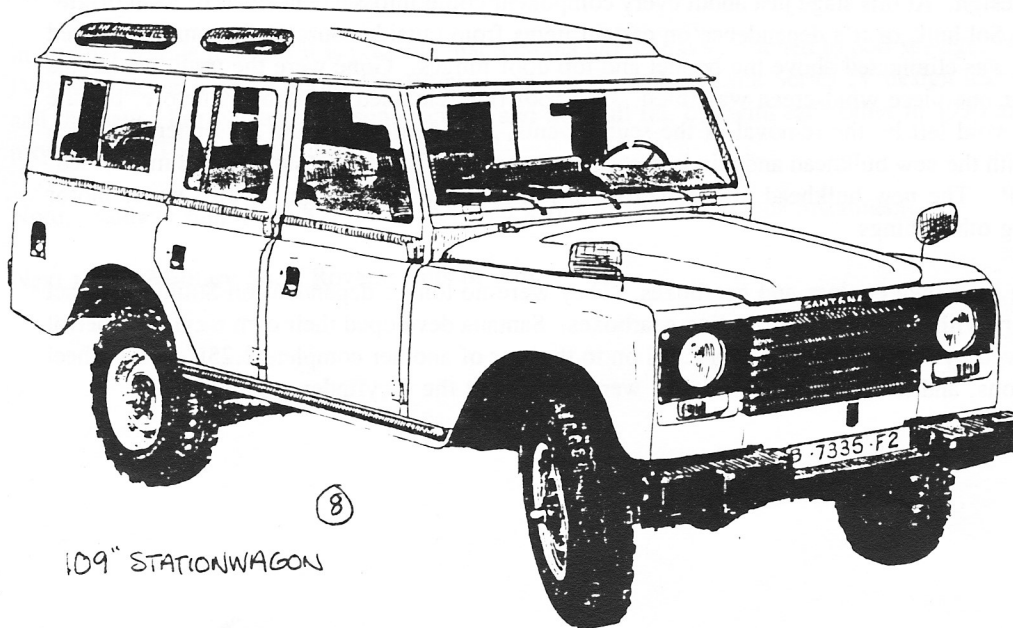
②
SANTANA LANDROVER



⑤
SERIES III 109"
6 CYLINDER

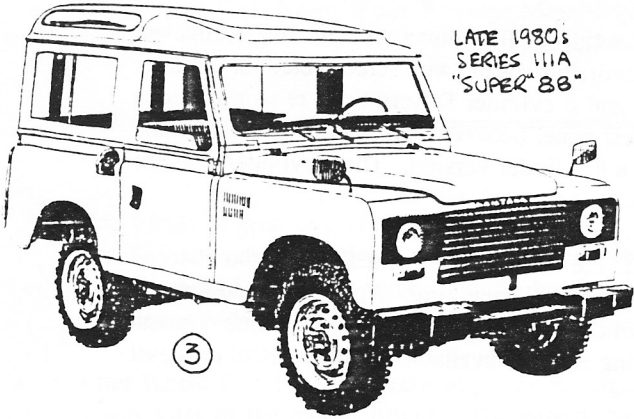


⑥
'LIGERO' 88"
(LIGHTWEIGHT)



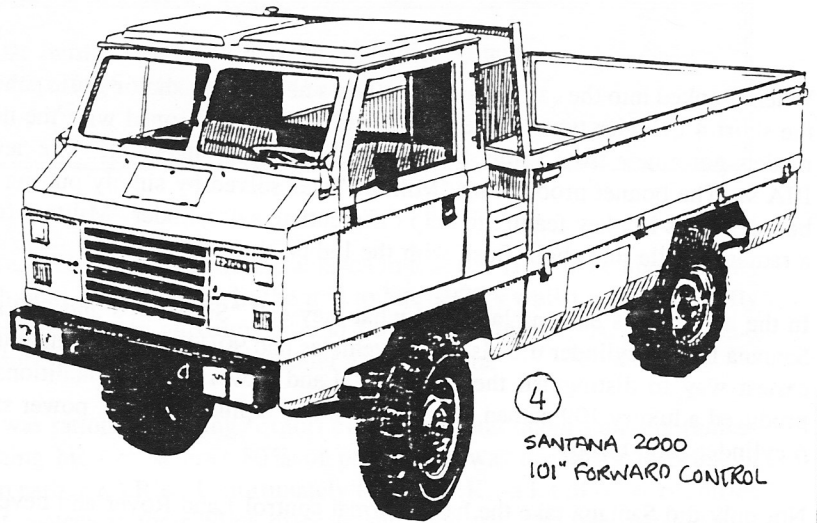
⑧
109" STATIONWAGON





LATE 1980s
SERIES IIIA
"SUPER 88"

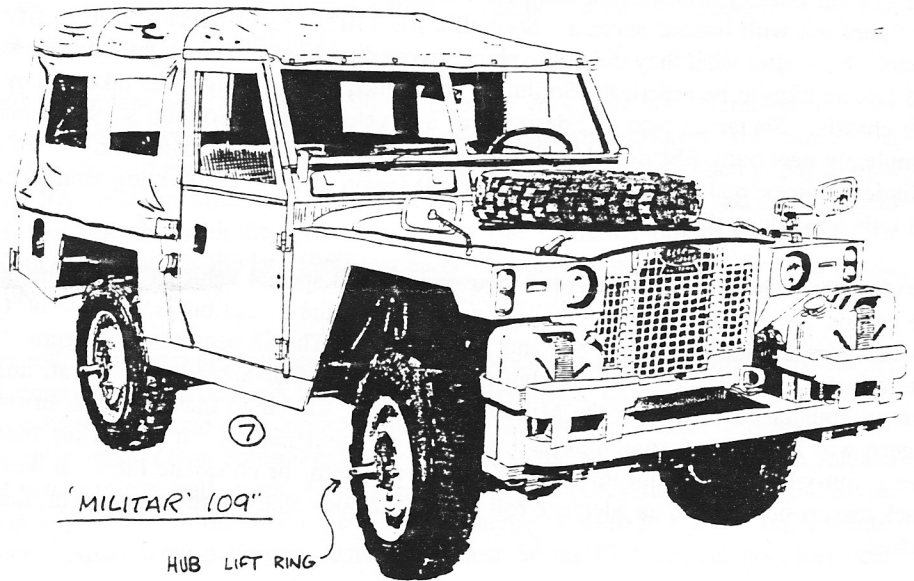
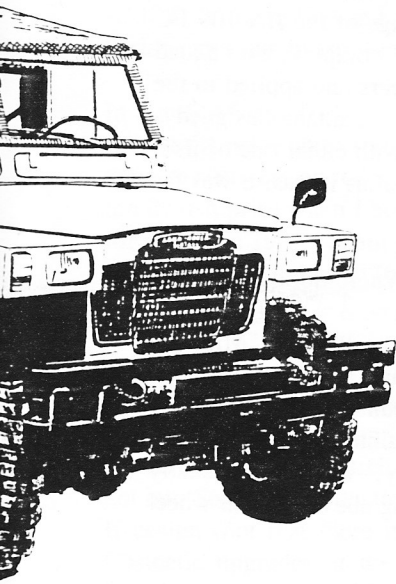
3



4

SANTANA 2000
101" FORWARD CONTROL

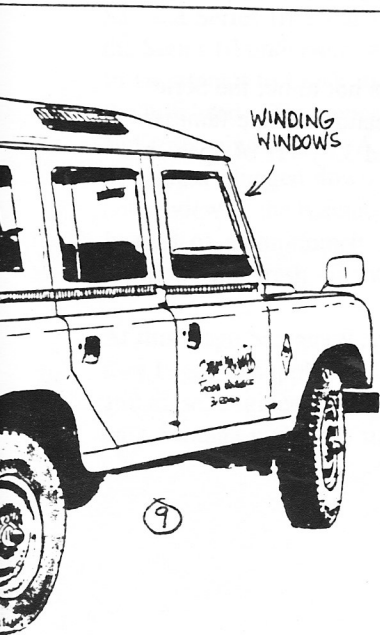
PS 1958-1991



7

'MILITAR' 109"

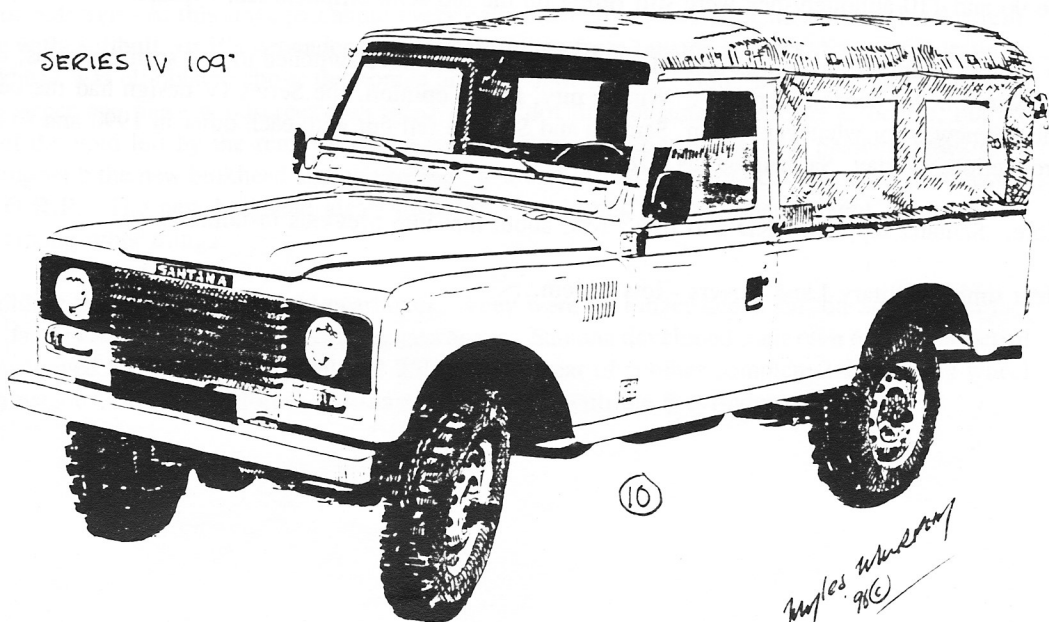
HUB LIFT RING



WINDING
WINDOWS

9

SERIES IV 109"



10

Wyles Wulstrop
96(C)

When plonked into the early Series III 109's a new front radiator grille panel was fitted. The bonnet on these 109's remained the short 4 cylinder type. When the Series III was developed with the new roof, bulkhead, windscreen, etc. six cylinder models got a new front grille, bonnet and lighting arrangement. The new 4 and 6 cylinder Rovers were re-named Series IIIA's. The bonnet problem on "Militars" was solved by simply putting a new panel between bulkhead and the old short bonnet. This is a key feature to help differentiate a 4 cylinder "Militar" from a 6 cylinder version. The 6 cylinder also has a radiator grille just about flush with the lights.

In the mid 1980's Santana launched what they call "Super 88's and 109's" These vehicles were fitted with turbo charged Santana built 4 cylinder diesels. Both vehicles had 90/110 style fronts plus the new bulkheads etc. Apart from badging the easiest way to distinguish these "Super" Land Rovers was an additional windscreen wiper. Also at this time Santana produced a luxury 109 named "Cazorla". It had a plush interior, power steering and was available in either petrol or diesel 6 cylinder (non-turbo)

Not only did Santana take the basic normal control Land Rover and develop it way beyond Solihull's meagre efforts; they also took a crack at the Forward Control (FC) concept. Their first FC was the Santana 1300, so called as the number refers to its carrying capacity of 1,300 killogrammes. Land Rover (UK) dropped their plans to build FC 88's when it was realised that normal control 109's could out-perform them in every way. Land Rover UK instead developed the 109 into FC configuration with limited success. Solihull's IIB 110" FC was developed to rectify the shortcomings of the IIA 109 FC model. No matter what they did both vehicles were dinosaurs - overweight, underpowered, top heavy, complex, with a load bed far too high to be practical. Solihull's abandoned 88 FC design was taken up by Santana engineers and applied to the 109 chassis. Santana's next FC design was a development of Solihull's 1970's military 101" FC. Santana designed a completely new body (the door handle being about the only Land Rover item recognisable) fitted it with either one of its 6 cylinder engines and called it the Santana 2000 (again after its 2,000 kilogramme payload). Practical as it was, it was far too ugly, and thus, didn't sell well.

Another area where Santana designed their own line of special vehicles was in the military field. Where Solihull adapted the 88 and 109 for the military - the lightweight being the exception, Santana went a step further. The British lightweight concept was applied to both the 88" and 109" chassis'. The 88 became the "Ligero" (Lightweight", the 109, the "Militar". The 88 concept didn't get very far, but the 109 entered wide-spread use with all military services and police. There was also an ambulance version of the Militar with a body similar to that found on British military ambulances. In 1980, the Ligero was re-designed somewhat and aimed at the civil market. It passed for functional when painted in military drab green, but when decked out in bright red, yellow, green, or chocolate brown it was downright ugly. Beneath its usually black canvas hood it had an adequate roll bar. Rear body sides were non-existent, there being nothing above the rear wheel arches.

The final Land Rovers built by Santana were the Series IV range. Back came the old familiar bulkhead, scuttle vents and all. It was the late 1980's and Land Rover UK was doing very well with the 90 and 110. The Series IV's looked just like the 90 and 110 although they were still riding on the old semi elliptical leaf springs.

In another couple of years it is possible that Santana would have switched to coil springs. Alas, it was not to be, the Series IV would never become Series V. What a pity, in my opinion, the Series IV design had the best features of the familiar and the new. For whatever reason, Santana and Solihull fell out with each other in 1990 and so ended 33 years of Spanish production. Today, Santana builds Suzukis'

Note: Santana supplied CKD's to Iran - read about that in a previous instalment.

Next time: Military Land Rovers - lots of 'em...

GENERAL SERVICE by Robin Craig

The big news this month for those of you who are not internet connected has to be the announcement that Land Rover will be selling an automatic Defender 90 in the US. It will be the only transmission available for the vehicle.

If you are lucky enough to go to the UK and call the factory for one of their famous tours of the Lode Land establishment be aware that the line stops running on Fridays at approximately noon. If you plan on going in the near future you should be aware that areas of the factory will be closed to you as the production of the CB40 will be taking place. This is the small Land Rover product that is set to take the place of the lower end Discovery. Bearing that last statement in mind it should come as no surprise to know that there are moves afoot to increase the overall size of the Discovery as it moves upmarket to fill some of the niche that was taken by the Range Rover. The revised Discovery that has been seen is about 2 1/2 to 3 inches longer after the wheel arch. Under the hood is a 5 cylinder Tdi engine. This engine has been around for a while and has been hotly denied by the factory. A colleague of mine once chased a Defender 90 that was out on road trials and even in his sporty car could not keep up to the 90 that was full of extra get up and go. Discreet questioning revealed that a modified power plant was indeed installed but no pictures today thank you!

A welcome addition to the Ottawa traffic will be a five speed Discovery recently purchased by the new British High Commissioner. The sale was made by our local dealership who are doing a roaring trade at the moment, the current sales are nearly at a vehicle a week. The showroom has recently been redecorated and a booth has been added to house a line of Land Rover Gear, a clothing line with the Land Rover logo on it. This is expected to arrive shortly. It will be interesting to compare the prices in the shop for the Land Rover Gear with that advertised in the UK Land Rover magazines.

New on our shores and long overdue is the arrival of Land Rover Owner magazines shop here in North America. Based in Oshawa Ontario the British based magazine has set up a toll free order number at 1-800-LRO-SHOP or 1-888-576-7467 for those of you who have trouble working this out! They, like all of us who are hip with technology also have an email address which is lroshop@direct.com kind of appropriate. There will not be any direct shipping of items from a North American base. The items you order will still come from the UK. I think it is a real shame they they have not capitalised on the fact that there are some really good companies already established in North America who are already in tune with the Land Rover community who could have done a great job in being the North American agents for the LRO shop. The one that come to my mind, and has had the most professional service and the best name in my book is Rovers North.

If you own a Warn winch or want to get information on the Warn product line then by calling 1-800-543-WARN you will be connected to a very efficient and courteous customer service system. Bill Kessels has recently bought a Warn winch second hand and wanted an owners manual for the winch, and a couple of safety decals that had been removed. The folks at Warn are sending him an owners manual and the decals in the mail at no charge. That's what I call service, especially as those of us who know Bill would understand that he would have paid for such items!!

If you happen to be in the North Carolina area in the beginning of May you might get to see a lot more of Land Rovers than you usually do. The reason for all the activity is Exercise Purple Star, and Anglo American military training exercise with the involvement of the British 3 Commando Brigade who will carry out amphibious landings at camp Lejeune with the US Marines and 5 Airborne Brigade who's Paras will be dropping in, so to speak, on Fort Bragg. I understand that light vehicles such as Land Rovers, and some of the new Wolf variants will be included in the line up.

I have a number of nice black and white line drawings of the 101 Forward Control military Land Rovers kicking around here at home. They are free for the asking if you want a set, just send me 5 US\$ if you live in the states or 5 CDN bucks for Canada. This just covers my postage costs. I can be reached at 1-613-738-7880 or at 2821H Baycrest Drive, Ottawa, Ontario K1V 7P6 or by email at rc@fourfold.ocunix.on.ca.

See ya all next month Robin

GENERAL SERVICING, Humour, Tall Tales, Humour, Trivia, & general rambling**Warmest greetings from St. Lucia where ants steal Land Rovers by Allan Smith**

The other morning I parked in an empty lot near my lab, and went to work. At lunch time, anticipating a relaxing hour on my verandah on the beach, I returned to the lot to find my vehicle 50 yards away, on the other side of the lot, with its nose smashed into the galvanised-iron sheeting fence around someone's yard.

The vehicle was still locked, the ground was flat, it was in 2nd gear, and the battery was so dead that it probably won't be revived. I have had problems with the ignition switch for the past 2 weeks and have been expecting a replacement contact unit from the UK any day. So the first thought was that the defective contacts had activated the starter, which had driven the car through the brush to crash into the wall. So, rip out the dash and steering column covers, extract the ignition contact unit (and if you have ever tried to remove both of the screws that hold it in, while the ignition/steering lock unit is in situ, you know what a pain it is). Then prise open the contact unit and find ants! Hundreds of the buggers, live, squashed or electrocuted, all had contributed to weeks of problems, culminating in a hot-wired joy-ride into an unresisting wall. After evicting the Hymenopteran joy-riders, and replacing the battery, everything worked, much to my surprise. I had expected a melt-down of the starter and other wiring.

When I had the 90 custom-made last year, one of the many options was an under-body screen to prevent small animals from climbing into a warm engine bay at night and then getting the cuisinart treatment from the fan in the morning. They didn't tell me that 2mm long ants could totally disable one of Solihull's finest! One last thing, with reference to today's postings of crumple zones, I only had to wipe some rust dust off my front bars; the iron fence is remodelled with a fold >. That makes 3 times that the bar has saved the front end - contact with loose cows and horses (a problem here and the reason I had the unit fitted) and now this.

I know what you're thinking - Richer's lost it this time. Why would you want to put windshield squirters on a LAND-ROVER, for Heaven's sake?

Actually, there's a lot of reasons to invest the 25 bucks and an hour or so of work. Keeping the windshield clean can be damn near impossible in northern climes because of the salt spray and crud thrown up by other cars, and that translates to less-than-safe visibility. Mud from other vehicles when off-roading has the same effect, so it's not just the citified types who have this problem. Also, if you do it with the part I recommend, you buy yourself a radiator pressure tank too, and can convert your system to catch and return coolant and cut down on the environmental mess your Rover makes, little as it may be. But, on to the task...

First things first, make a junkyard run. The prize we want is the windshield washer tank and radiator overflow bottle from a mid-80s Toyota. The tank I used was out of an 85 Celica, and came complete with the pump built in. From what I could see, that same tank was used in all models of the Toyota line for at least 10 years and probably more. You also want to scavenge the washer nozzles and the rubber tubing from the donor vehicle, and get the power connector to the pump so you can do a tidy job of the installation. I paid \$20 for the tank I got, but I think that was high. Negotiate - you can probably do better.

On the way home from the junkyard, stop off at the auto-parts store and buy a suitable pushutton for the dashboard - should be about \$5. Also pick up about 3 feet of tubing of the same size as the overflow tube on your Rover. We'll use this to replace the overflow tube from your radiator, plumbing it to the tank. Don't just reuse the original from your car - if it's like the one I had, it'll break when you take it out of the clips down the side of the radiator. Once you get it home, clean it up before you install it. I had to brush 10 years of old coolant crud out of the overflow tank and its tubing, so it's worth it to wash it before you install it.

Now come the fun bits. To install it and the nozzle (I used only one - second one will go in when the temperature warms up this summer), first bolt the tank to the driver's side inside wing next to the radiator. By a happy coincidence, my Rover had holes already available that fit the tank mounts perfectly - no drilling. I believe these holes are already there on most older IIA vehicles - check and see.. Run two wires up to the dashboard area - one for ground and one for +12 volts. Bring

these into the panel area, and tap the wiper power connections for power for the unit, putting the pushbutton in line to control it. I would recommend using green for the +12 and black for the ground to observe the Rover colour code for the wipers.

Mark the schematics for your car (and you really should have them) with the changes you've made.

NOTE: If you use the part I did, the pump is polarity sensitive. This means that if you confuse the + and - lines, the pump will spin quickly and will not spray. If this happens, reverse the leads at the pump connector.

The nozzle goes into a notched cutout in the bonnet. I placed mine an inch back from the steel brace on the underside of the bonnet at the back edge and centred on the driver's window. The opening was not a simple hole, so you'll need to waste the metal out with a drill then file to shape. It sounds worse than it was - it only took me about 10 minutes to do so.

TIP: Bring a piece of paper with you to the scrap yard. Trace the outline of the hole you remove the nozzle from, and then transfer the shape to the bonnet of your vehicle where you want it with a piece of carbon paper, machinist's bluing or whatever you find handy. Saves a lot of work figuring out what goes where.....

Once this is done, hook up the hose from the pump to the nozzle and fasten it down using wire ties. Leave the loop at the bonnet long so it doesn't foul when the bonnet is put straight up.

The overflow tank hookup is straightforward. Remove the old tube from the radiator overflow and replace it with the new tubing, routing it behind the tank and around to the inlet stub on the tank's cap. Fill the bottle about 2/3 full with coolant, and top it up after the Rover fills its lines.

It's a quick and simple task, and well worth the few dollars it takes to do. Enjoy! -ajr

Filling Your Stock Oil Filter Assembly by Bill Maloney

When firing up a newly rebuilt engine you want to do all you can to make sure the oil galleries are full before actually firing it up. In addition to cranking over the engine with the plugs out and the coil grounded to bring the oil pressure up, you can fill the oil filter housing before you bolt it to the block.

Ideally, you are working with the engine on a stand. After assembling the housing/filter, make sure your gasket mating surfaces are clean. Use a good quality silicone gasket sealer (I like Permatex Hi-Temp, the red stuff) to fix the gasket to the block, then coat the outside of the gasket as well. Turn the block on its side so the filter side is down. Fill up the filter assembly with oil (it takes a bit over a quart) - install the oil pressure sender first or you'll be in for a surprise. Carefully (not to spill the oil) mate up the assembly to the block and bolt it into place.

You now have reduced the amount of oil the pump has to deal with before the oil reaches the bearings by over a quart. If you normally crank your engine over after an oil change with the coil disconnected in order to avoid a dry start you'll know how long it takes to build the pressure up. The result will be much kinder to your new bearings than starting the system dry and should help them live a bit longer.

If the engine is already in place, you can get about 3/4 of a quart in the housing before it will spill out when held at its normal angle. Or you can do as Dale Desprey, Russ Wilson, and Steve Denis have all done and lay your Rover on its side to avoid spilling the oil when installing the filter assembly.

OVLRL New Age Tips - Painting Parts 5 & 6 by Al "Bates" Pilgrim

Well, here we are, back again, to fill in another missing piece of the puzzle. As for the cards and letters... until they start coming, I'm going to assume you're enjoying this informational series as much as you should. If this series has encouraged you to consider commenting on the clean, crisp, snappy, flow of this article... Don't bother!

Here we go. If you paid attention to the last issue of my article, you'd know without asking, what comes next! It's paint time.

One of the most frequent disasters in any painting programme can be the cleanliness part. We can not stress too strongly, clean is as clean does.

To start, let's fire up the BBQ. I only use wood charcoal myself. Briquets leave me cold. Small maple kindling faggots for starters, eh?

Did I mention the Walkman last issue? If not, easily corrected. Wanna get caught up with your Latin? Vinny Teddy Coli Berici? Music maybe? Beatles, Maggots, Lefty and the Nosepickers, Prince of Darkness Choral. You're only limited by your ears, your years and your fears. So enjoy.

Let's uncoil the hose, get the kinks out, couple up the pistol grip. Wow.

Rubbers anyone????? Knee highs???? Arch??? Heel to the back?? Safety toe?

Establish the proper angle of runoff and lets get moist. I favour a side to side motion, with the pistol grip covering an area, in front of you, no more than three feet wide at a time. Keep the broom, rake, dust pan and garbage can, handy, as you accumulate twigs, dirt, cigarette butts, leaves, dog faeces and flyers, in front of you, this is not a "Force Twelve" fire hose system we're using, so pick up the crud as it accumulates. Also, don't underestimate the benefits of the mindlessness of hosing down the driveway. Try to get the sun at your back. Go with the flow. Undulate slightly. Bob. Weave. More shoulder. Move the hips. Free up. There...

Let's check the BBQ, probably glowing by now, time to add our favourite brunch item. Consider Italian sausage. Just make a spiral cut, with a sharp knife, the length of the sausage. This will speed up cooking and surprise you with it's added BBQ flavour. Condiments anyone? For me, a rasher of crisp precooked bacon, slice of cheese cut into strips, chopped raw red Spanish onion, English chutney and toast the long bun on both sides. Don't forget the lemonade!

If you're going to have a short cigar, before going back to our paint job, consider "Reats". This is a Cuban panatela, green leaf, picked young and cured long (just like Catholics) silver package and individually foil wrapped. Lick it first. You need to moisten that green tobacco. Don't be afraid to spit. Spit. Spit. Wood matches only, please. Coffee on. Heat up one and a half ounces of Grand Marnier in a brandy snifter, in the microwave, for 20 seconds. Sit in the sun. I'll find you here next issue with "Applications and Tones".

NEW MEMBERS

Another nine members this month, from local people to farther away. Without further ado:

- **G. Warren Smith** of Hammond Louisiana joins. Warren has a 1965 Dormobile as well as a 1970 Rover 3500S
- **Aron Gabor** of Gatineau Quebec
- **David Smithers** of Carleton Place, Ontario. A former ALROC member, David brings four Land Rovers to keep the club average up, a 1957 Series I 107; a '66 IIA 88 station wagon, a '66 109 3 door, and a late IIA station wagon.
- **Alistair Commins** of Toronto, Ontario who is on the look-out for a IIA 109 station wagon.
- **Lee Zelter** of Tuscon Arizona who joins because "I'm doing this so that I can read a newsletter edited by Dixon"... Lee has a pair of the post 1974 variety, namely a '94 Disco and a '95 Defender 90.
- **Eli Tannis** of Gloucester Ontario joins with a 1995 Discovery
- **Brian Wilson** of Sault-Ste Marie Ontario. Brian has a 1964 88" station wagon.
- **Bill Caloccia** of Boston Massachussets joins. Bill not only has a 1963 88" station wagon and a 1990 Range Rover, but is the founder and operator of the land-rover-owner mailing list on the internet.
- **Robert Boivin** of Saint Saveur Quebec with a 1995 Discovery.