

# TRANSFER BOX

Published By The Association Of Land Rover Owners Canada In The Interests Of The Proper Care And Feeding And The Celebrating Of British Leyland's Unique & Ubiquitous Land Rover, An Early Four-Wheel-Drive Vehicle Which Has Become A Legend In Its Own Time. Land Rover Owners Wherever They May Be Are Invited To Make Application For Membership In The Association.





---

TRANSFER BOX is publication of the

Association of Land Rover Owners of Canada

mailing address: c/o Apartment 1  
95 Fourth Avenue  
Ottawa Ontario Canada K1S 2L1

telephone: (613) 232 6204

editor: Harold C. Huggins

cover design (standing) R.S. Huggins

cover illustration this issue  
courtesy of Jaguar Rover Triumph Int.  
Burlington Ontario

---



To Meet Increasing Work-Load In The Production Of

TRANSFER BOX

WANTED

VOLUNTEER TYPIST

DUTIES: To be responsible for typing stencils only, under direction of the Editor. (Editing, design, lay-out, etc will not be expected of the typist).

To produce clean, accurate copy working at his/her own speed. It is preferred that the work be carried out at the address of Transfer Box to facilitate direct/close co-ordination of the work-in-hand, between Editor & volunteer. The typewriter available is a manual model in ideal operating condition. Consideration will be given however, if volunteer elects to perform the task at another location.

Frequency is scheduled for not more than once each 3 month period. The volunteer will be proficient, punctual and capable of taking direction.

If interested, please call the Founder-Editor at 232 6204 in Ottawa.

\$ 200.00

REWARD

\$ 200.00

FOR THE RETURN OR INFORMATION LEADING TO THE RETURN OF  
A SNOW-PLOW OPERATING PUMP ASSEMBLY.

THE ASSEMBLY WAS REMOVED BY A PERSON OR PERSONS UNKNOWN FROM A 1952 LAND ROVER STATIONED ON THIS PROPERTY SOME-TIME WITHIN THE PAST TWO MONTHS. IT IS BELIEVED PROBABLE LAND ROVER OWNERS MAY BE APPROACHED WITH A VIEW TO PURCHASE.

ALL INFORMATION WILL BE APPRECIATED  
AND HELD STRICTLY CONFIDENTIAL

Please contact R. Redshaw, Redshaw Auto Care, 25 Hawthorne Avenue, Ottawa Ontario (613) 235 8342



With apologies to James Russell Lowell

And what is so rare as a day in June?  
Then, if ever, come perfect days,  
After Transfer Box is in the mails!

We fell short of our plan to produce a bumper Second Anniversary Number of Transfer Box for April, for the simple reason we hadn't enough original copy to warrant cost and effort. Then while dredging the files and beating the bushes in general, the situation changed dramatically with phone calls to hold the press and a stream of mail which clearly proved that we were not forgotten after all. Though we are, like the cow's tail, behind with the thing, we feel moderately satisfied with this number after all and can only hope it does not fall too far short of our readers' expectations.

However, the hiatus makes it plain as an advanced pregnancy that this publication must depend on its reader-members for its essential substance. Any dummy with time on his hands who knows the way to the post-office, can launch a number like this one, but even good, big dummies can't assure it a sustained future. As we all know, the mortality rate of one-man-with-a-duplicating-machine-in-the-basement publishers comes high because the number of people out there in 'vacuum-land' with fire in their bellies is too few to keep things going.

Occupying this slot can be an uncomfortable position at times, because of the moral obligation devolving on those at the centre. After all, we make promises and commitments and at this point in time, have accepted funds from some 200 persons who evidently put some faith and trust in us. ALROC and its publication is no lark and though the risk is high that it could at any time become an entry in the McGuiness Book of Winning Losers, this need not ultimately happen if members (individually) assume some responsibility for filling the white space of these pages. A couple of hundred words once a year from the majority out there and our survival and growth would be certain forever and a day! One simply can't own a Land Rover without having something worthwhile to write about.

## THE LONG NARROW ROOM

Maybe it was the shape of the room. Long, narrow rooms in our experience tend to work against the sought-for harmony and the flow of even brick-by-brick development of reasoned thought in the group. Whatever the cause, the night of February 20, last in the Ottawa 'Citizen' building turned out to be a classic example of just what strange if not bizarre things can happen within the dynamics of the group when those most responsible come to the meeting without having done their homework. In this the person most at fault was the member who called the meeting -- the writer of these words.

It's a long story and as there was no official scribe appointed it would be risky to attempt to report proceedings now, four months after the occasion. Suffice to say, the meeting was called to try and hammer out a structure and base for ALROC to stand on to meet all necessary requirements of the democratic system and to delegate authority and responsibility in the usual orthodox way of such organizations in Canada.

After three hours and more of sounds of Babel, ideas & concepts & opinion like corks on choppy seas, it was discovered that the ALROC piece of business had received no attention whatever, and that while ALROC sat forgotten in the station, a new flying express went wildly roaring past marked 'Ottawa Club'. We have no quarrel with the concept of local, autonomous LR Owners groups, but the February 20 meeting was not arranged with that objective in mind. The Editor/Founder apologizes for this misfire.





## Jaguar Rover Triumph Ltd

# LAND-ROVER V8 STATION WAGON

### V8 POWER FOR EXPORT LAND ROVERS

A new range of Land Rovers, using the powerful,  $3\frac{1}{2}$  litre V8 engine of the Range Rover, was launched by Land Rover Limited, 27 February, 1979. The V8 model has permanent four-wheel-drive and many features, previously available as optional equipment, are made standard.

The V8 is latest in a world-famous model line first introduced in 1948 and now made by Land Rover Limited, Jaguar Rover Triumph's manufacturer of cross-country vehicles.

The Land Rover V8 will be an export vehicle only. Deliveries to Europe now will be followed up by sales in Middle East and other overseas markets later this year.

The new vehicles are an addition to the current four- and six-cylinder engined range of long wheelbase (109" and short wheelbase (88") Land Rovers. The V8 will be produced in long wheelbase form, either as station wagons or pick-ups, the latter available with hard/soft top or truck cab options.

The total market for four-wheel-drive vehicles has increased considerably over the last few years and with improving road conditions in many developing countries the need for improved on/off performance is paramount. The new Land Rover V8 is the Company's latest response to these changing demands.

more . . .

BETTER PERFORMANCE

The Range Rover's well proved 3½ litre engine has been modified to give maximum torque for the Land Rover V8 at a lower engine speed. Maximum 166 lbs/ft at 2000 rpm compares with the Range Rover figure of 186lbs/ft at 2500 rpm and the 122 lbs/ft at 2000 rpm produced by the six-cylinder engined Land Rover, which gives the new vehicles considerably improved off-road performance.

The new model has permanent four-wheel-drive, with high and low ratio gears and a differential lock, as on the Range Rover.

Modification of the bodywork in the engine compartment provides plenty of room for the larger engine and allows easy access for servicing.

The bonnett -- fitted with a broad, metal radiator grille -- extends to fit flush with the wings and this results in an aggressive, 'beefier' look to the traditional LR shape.

Mike Hodgkinson, managing director of Land Rover Limited, said:

"The Land Rover V8 is an exciting project intended to boost our already high level of overseas sales. It has been particularly designed to sell in Middle East markets where cross-country reliability and high performance on good road surfaces are mutual requirements. The new vehicles represent a significant step forward in the growth of Land Rover Limited and are an indication of our intention to continue to produce vehicles which meet changing market demand."

Re-printed from 'News Service', Jaguar Rover Triumph Ltd., Coventry, England via Brian Merrett, ALROC member in Montreal, P.Q.

(Ed. note: in the 8 pages of information which Brian Merrett turned over to us vis-a-vis the LR V8, no direct reference is made to North America as a market in the Company's plans. Is this the still-illusory Land Rover we've been hearing of to be expected 'soon', 'next year' or, say, 'September 9, next'? Personally, we've heard so many runours from so many people for so long, we've resigned ourselves to 'seeing is believing').

STRIKE A MEDAL! . . . comes this day 15 June in the mails from Regina, Saskatchewan a letter from Alice LaLonde, which begins

"We are a Land Rover family. I would like you to sign-up the following three members in your Association." on our lists

So now we have/ Paul & Mike LaLonde of 14 Newton Crescent, Regina, and Joe LaLonde of 731 Retallack Street, Regina added to the ALROC community -- in triple-pack! . . . Mrs LaLonde goes on to say her husband, Mr Paul L. has FOR SALE "numerous Land Rover parts if anyone is interested." Would Mrs LaLonde send TRANSFER BOX a list of the parts in question, perhaps? Meanwhile readers, feel free to make enquiries direct to Regina.

GOES WITH OUR COVER . . . " . . . I come from Uganda, East Africa where I was the honorary Game Warden with the Uganda National Parks and had my own Hunting and Photographic outfit. Therefore I used Land Rovers exclusively in that country and know how to use them under the most gruelling conditions." This from Iqbal Ahmad, 612 Village Green Avenue, London, Ontario N6K 1G5.

CORRECTION . . . our sketch of the device vis-avis Delco conversion (see page 9, Transfer Box, December, 1978) shows the bracket as fabricated from square stock. Brian Dyer kindly brings to our attention the bracket is in fact turned from round stock 1" diameter. We live. We learn!

WE ALSO LEARN . . . that the overdrive unit mentioned by John Mon-sieurs in his interesting narrative Halifax to Victoria last issue, was supplied by Brian Dyer who apparently always has a selection of LR in ready-to-go shape. In recent months one left Brian's shop for Central America, and work is proceeding in renovating "several old LR's mostly 5ls, one of which is driveable and ready-to-go." Brian also tells TRANSFER BOX he is negotiating to acquire a 1949 RHD model in his locality. (All success to you Brian, in your endeavours; keep us posted and send us a well-taken picture of it, if you acquire it. One for the record surely.)

IF YOU ARE INTERESTED IN RESTORATION of early LR's, comparing notes and exchanging parts and the like, Brian Dyer wants to hear from you. The mailing address is: B. Dyer, P.O. Box 64, Bedford, Nova Scotia.

OVERHEARING our ill-tempered babbling over the hht-one-miss-two kiddyland excuse for a stapler in the TRANSFER BOX shop, a loyal ALROC member was so upset apparently that he was constrained to replace it with a proper machine. A Bates 550, no less. Gratis. For the love of Land Rover. The member wishes to be un-named. He has our eternal gratitude.

WE'RE WOEFULLY WEAK IN THE WEST . . . it is a constant source of irritation to TRANSFER BOX that we have not as yet been successful at attracting an anchor-man in the West by which we mean specifically Vancouver and its environs, and Victoria, British Columbia. Whilst in the Eastern wings of the country we have such dependables as Brian Dyer, Peter Hirst and Richard Huber, the lines are dead from the Pacific Rim in this respect. We often feel like the Man of Galilee -- despised and rejected. In the early 70s it was routine for the Founder to leave his 109 with a first-rate LR specialist shop whenever he travelled south out of Yellowknife to the Land of the Lotus Eaters and not once had any complaint over the work or attitude of those in the shop in question. When we launched TRANSFER BOX this shop was one of the few known addresses we had to work from and which we felt sure would ultimately prove rewarding. Ever since, we've sent copies to them but nary a word of acknowledgement let alone recognition. Come to think of it, we once talked to them by 'phone from Ottawa about some mechanical problem and took the opportunity at the time to blend-in TRANSFER BOX and ALROC. The 'Ottawa Syndrome' perhaps? Copies of the publication we still send them are not returned, so it is assumed they are still in business. We need a pivotal point of the kind in that area which, as Allan McPhee of the CBC uses the word, is still vacuum-land in the ALROC scenario. Readers of these pages in B.C. would confer a favour by sending us names & addresses of shops they would personally recommend for Land Rover service, parts or sales. Believe it -- ALROC generates business.

GRATEFUL THANKS to: Brian Merrett, Montreal for letting us see the News Service kit of Jaguar Rover Triumph Ltd which he brought back on a recent visit to the UK. The kit includes four photos, one of which we publish elsewhere in these pages. . . . to Jaguar Rover Triumph Inc., formerly British Leyland (Canada) Ltd. for permission to copy the 'scrotumtightening' (one of Joyce's choicest) safari-rig on this issue's cover, and further thanks for their cooperation in sending the 16 mm film Land Rover Ability for an ALROC meeting about a month ago. . . . to 'Scotty' Flynn (Laurier



GRATEFUL THANKS, cont'd

Motors, Ottawa) for his cooperation in extending time for storage of parts in his shop. . . . to Pat Huggins and Dave Nethercott of Ottawa, for their contributions of artwork for the ALROC programme . . . to Tony Davis, Ottawa, for sending along a copy of a Land Rover article from the pages of Autocar (Great Britain) . . . to Atlantic British Parts who, we assume, judging from recent mails & phone calls, mentioned Transfer Box in some recent mailing from Hemmingford, P.Q.

CALLING

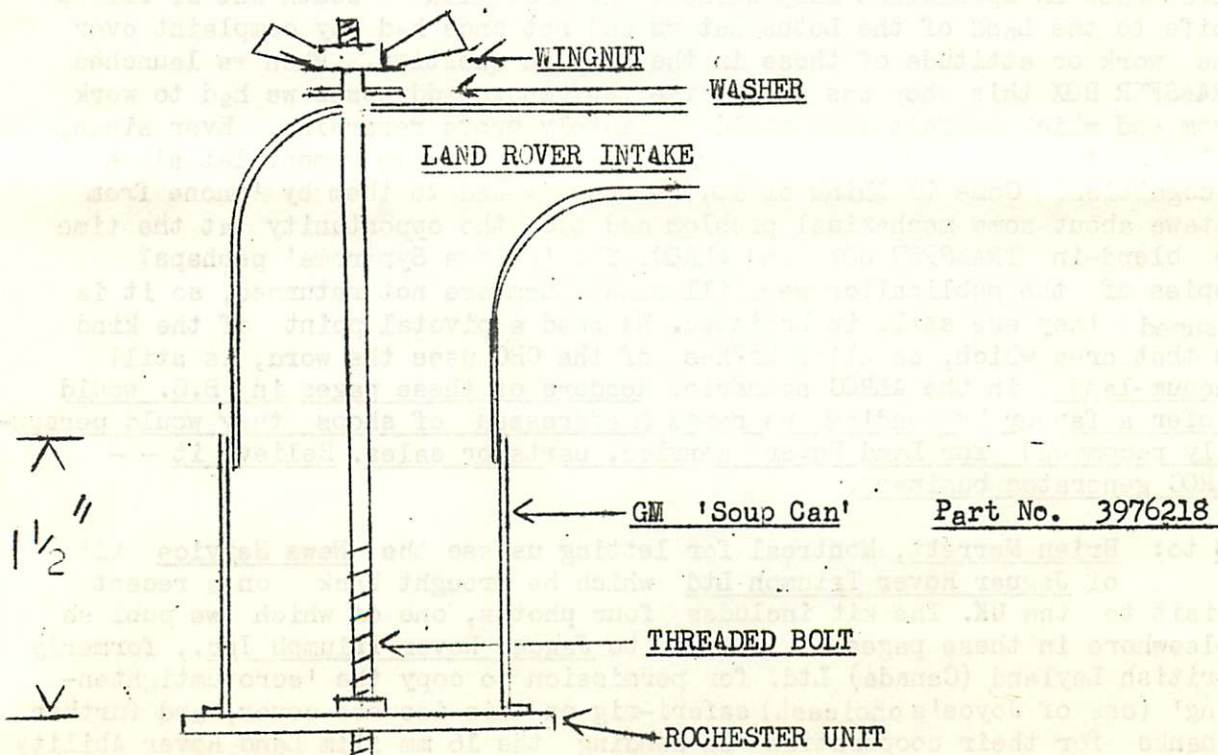
PAUL SOCHOLOTIUK, Toronto . . . the following person is interested in Land Rover activities in your area. Because of the increasingly heavy load of detail at this end we've not had time to respond; your prompt attention will be deeply appreciated. Please contact:

Phone:

(416) 291 6020 Mr George Pennell 48 King Louis Crescent Agincourt Ont M1T 2W8 (Has extensive experience with LR, is member of Ontario Jaguar Owners Association and writes a good letter.)

FROM Richard MacLachlan, 1686 Edward Street, Halifax, Nova Scotia, B3H 3J3 comes this noteworthy practical tip: In converting to Rochester carburettor from Zenith on his Series III, 88" Richard says he was "less than pleased" with air-leaks which were encountered from the LR in-take (air) to the Rochester unit, using LR rubber coupling. "A friend recalled," says Richard, "the old Chev milk trucks had a 'soup-can' affair that sat on top of the carb. I tracked one down, cut it off at 1 1/2" which corrects the differences in the diameters."

With apologies to both Richard, & Leonardo da Vinci, we offer the sketch below.





MORE ON ROCHESTER CONVERSIONcontributed by Jim Cleveland

Ed. note: this excellent article, sad to relate, got shunted on to the side-track because of an exchange of correspondence between Brian Merrett and this desk. The article should have appeared in our last issue. Our apologies.)

The single-barrel Rochester carburettor in question was bought from Brian Dyer. The base of the unit is exactly the same as the original Solex carb . . . theoretically, that is. When I removed the Solex and tried to fit the Rochester, I found the manifold bolts did not line up exactly. By filing the bolts slightly on the outside the base slid down and fit snugly. A gasket was cut out of CTC gasket material and some non-hardening gasket sealant was applied. The linkage to the carb remained virtually the same. I utilized the adjustable double socket end to hook to the Rochester carb throttle arm by placing the end of the latter into the upper socket and wiring it in with the intention of replacing it with something more permanent, later. This I have not had to do, as the initial arrangement functions perfectly. The metal end of the air-cleaner hose required a hole drilled down through the centre to allow a short piece of threaded bar (I believe one quarter inch diameter) to pass through it and also screw into a convenient bar with the same thread-size at the mouth of the new carb. The rubber end of the air-cleaner hose will fit over the mouth of the carb and the threaded bar up through it. All that is required is a nut and a washer to hold it down and keep airtight. The cold-start heating element is not present on the Rochester so this wiring was removed. Also, the choke cable was attached with a CTC (Ed. Canadian Tire Co., we presume) gear-type hose clamp to the base of the carb with the help of a small piece of wood to keep the clamp from compressing the choke cable. The choke wire was bent into a hook and inserted into the hole that regulated the Rochester choke. The choke now works backward, but it does work . . . that is, if you push it in for choke and pull out to open the butterfly. At the time of installation, I disconnected the accelerator pump in order to save fuel, but this tends to leave a rather obvious flat spot during acceleration so I have recently re-connected it. I tended to overcompensate by giving the engine more gas and I probably burned more rather than less fuel in doing so. My advice is to leave the accelerator pump as is. Remember to adjust the carburettor once installed as the air-fuel mixture is never right. Hey, presto! the engine started immediately upon the first try! After warming up the engine, I adjusted the new carb, took to the road and everything proved 'right on'.

Why did I make the change? I thought doing so would give me a) more power and b) burn less petrol. It does give more power but I find petrol consumption about the same. Perhaps there is another reason: the bolts in the choke of the Solex kept falling out. I even used non-hardening gasket sealant but they still shook loose. I finally gave up and did the conversion. Thanks are due to Brian Dyer for technical advice and encouragement.

"Does Your Land Rover Gas Tank Leak?" - - - "Leaky Frontwheel Swivel-Pin Housings" and "An annoying Electrical Problem" are the titles of other material submitted by Jim Cleveland, to be published in future issues of Transfer Box.

MORE ON THE ROCHESTER CONVERSIONcontributed by Derm English, P.O. Box 365  
Truro, N.S. B2N 5C5

By reversing the bell-crank, and using parts off the Solex carb, plus a few serrated and plain washers and a small bolt, a linkage operating in the reverse direction can be devised. I've put 10,000 miles in so far with no problems. The choke cable is a CTC variety, shortened, and affixed to the incoming fuel line with a hose-clamp - - at the carb end.

ALSO FROM DERM: faced with a rear differential re-build, I elected <sup>to</sup> put my re-built rear differential on the front, and installed the original (and perfect) front unit on the rear axle. If this isn't cricket, I'd like to hear about it - - but soon!  
(Ed. Any comments, Readers?)



YET ANOTHER FROM DERM

GM makes a neat stud-nut combination - - - the only nut I've unearthed that will fill the depression in a Land Rover road wheel. After removing the damaged threaded stud, a rat-tail file and hammer are required to put in the new piece. I think a wee bit must be filed off the stud shoulder as well (I've tried so many different ones I can't recall precisely). The GM parts numbers are: 334387 and 334388. I paid \$ 1.50 the set.

PLEASANT WORDS FROM DENIS BALDWIN, 250 River Road, Sault Ste Marie, Ont. P6A 6C7

"I've been a Land Rover owner for some 18 years. I owned a 1956 86" hardtop model in England for some 6 years prior to coming to Canada, in 1967. I was a member of the former Land Rover Owners Club (Northern) of England. I can look back on many an eventful LR week-end in the North and West Ridings of Yorkshire in the early 60s. . . . My present LR is now almost 11 years old, and has done over 170,000 miles. Much of the mileage has been done in and around here, but it has also seen service as far afield as Quebec City, P.Q., Victoria, B.C. and as far south as Gary, Indiana, U.S.A."

FOURTH ANNUAL ATLANTIC BRITISH PARTS LAND ROVER RALLY 1979

The RALLY dates are August 5 through 8. The location is in the vicinity of LEWISTON, California; this is northern California, relatively near to the Oregon border, close to Interstate 5 Highway, ie forty miles, approx.

National Forest lands and mountains surround the site of the gathering spot and the local environment provides hundreds of miles of backroads ideally fitting the event.

Camping Facilities Available. For REGISTRATION details, apply to:

Atlantic British Parts, Ltd  
P.O. Box 322 Lewiston, California 96052  
Telephone (916) 778 3922

HELP NEEDED

Says Mr Graeme Shelford:

I would be interested to know if anyone has a solution to the problem of gear-box oil migrating into the clutch. This only happens at highway speeds in warm/hot weather. The gear-box has been out twice for this reason and no fault found in the seals, gaskets or whatever, also the gear-box breather is free. Could it be type of oil? (I use Canadian Tire SAE 90 all purpose EP gear lubricant.) Or could it be clutch throwout bearing dragging, spinning the throwout sleeve on the wind-back seal? Any ideas?"

Now, as ALROC's credo insists on the theme of mutual self-help, we make this strong urgent appeal to those members who may have information that would help Graeme to correct his problem, to write him direct and soon. In turn we would ask, kindly, that Graeme report back to Transfer Box any significant development. REPLIES TO: Mr Graeme Shilford, Blvd Don Quichotte (well now, that's surely an apt address for a Land Rover!) R.R. 2, Pointe du Moulin, Ile Perrot, Province Quebec, J7V 5V6. Graeme's phone is (514) 453 1937.

"JEEP IS FAMOUS, BUT LAND ROVER IS LEGENDARY"  
(Reported seen, by Brian Merrett, Montreal)





contributed by Jim Ford 315 Soudan Avenue  
Toronto, Ont. M4S 1W6  
(916) 486 0805

I read with care the article on half-shaft breakage by Peter Hirst in the last issue of Transfer Box. After all, I had broken and replaced both rear shafts 3 years ago and I keep my screeching stops by hand-brake to a minimum. One break occurred on a legitimate 30° incline, but the other broke on a Christmas morning on flat, dry pavement, while turning left.

So I figured, wrongly, that I had at least six years of driving without being 'shafted' again. One cold, extremely so, morning in January last, I pulled out of a level parking space and was left revving the engine in the middle of the street. (For those of you to whom this happens for the first time, let me say it is possible to become immediately mobile by switching to four-wheel drive thereby becoming an instant 'front-wheel' drive unit. It is not recommended to travel long distances in this arrangement as the broken spline stub from the end of the axle-shaft is still in the grip of the differential with probably numerous small hard & sharp pieces of mangled metal which will do serious damage to the differential gears when caught up in them. The solution to this if running must be continued, is to remove the rear drive-shaft and both axles shafts (one will be missing its spline). This will immobilize the differential and should prevent further damage. I add that driving in front-wheel power only can be embarrassing. That previously easily-scaled icy slope can be impossible to climb. I could almost hear the small child calling to his mother to look at the silly 'safari car' trying to make it the little hill! I went around another way.

With the job finished in New New Liskeard, I arrived back in Toronto where Rick and Joan Copple (ALROC Members) at Longrun Imports had two shafts from ABP. Then we did some serious fun stuff. My Father is employed by Douglas Aircraft as a Liaison engineer. He is well-qualified as such and has years of experience. With co-operation of all concerned a piece of my half-shaft was sent to the laboratory and cut into a cross-section. The piece was photographed at 10 times magnification and then 125 times magnification. From the photos the metal mixture was considered to be fairly smooth. The piece of metal was tested for hardness and was determined to be R C 37; (Rockwell hardness is a standard measurement used for metal testing. If I recall correctly, R C 37 is about 150,000 lbs per sq. in. which is quite acceptably hard.) The experts stated it would be necessary to know how the wheels were aligned, how the shaft meshed with the gears, etc. before a cause of breakage could be accurately determined. However, on examination of the new shafts, the expert opinion was that they were poorly machined and this was obvious to the trained naked-eye, i.e. the splines were roughly machined such that the edges and inside corners were sharp and not 'radiused' ('radiusing' is a process in machining of slightly rounding out sharp angles in the metal as stress cracks usually start at sharp corners. The 'radiusing' treatment relieves the stress at these angles to a significant degree.)

Now there are several methods to improve the strength of the shafts. Proper machining would have been the most obvious. Another method is a process called 'shot peening'. Imagine hitting a piece of metal with a ball-peen hammer, then imagine that the hammer is reduced in size by thousands of times and then multiplied in number. These tiny 'hammers' or shot, are fired at the metal under controlled conditions which has the effect of compressing the outer layer of metal and rounding out sharp corners, thereby reducing stress. There are many invaluable applications for the process of 'Shot peening' for example for springs, connecting rods, landing gear, and inf. in these areas of parts. Having had the half-shafts of my Land Rover shot peened, it will prove interesting to observe their future behaviour with that of earlier experience.



I am indebted to Metal Improvement Company in Rexdale, Ontario and Mr Don Harper, Manager for supplying further information on shot peening. I cautioned Mr Harper that he may receive calls from fellow-members of ALROC.

(Ed. note: as it is implied by Jim Ford that the Company would not be averse to receiving enquiries re shot-peening service we append below the address of Metal Improvement Company a subsidiary of Curtiss Wright Corporation.

Manager: Albion and 4th Line Roads  
Mr Don Harper 170 Claireville Road  
Rexdale, Ontario, Canada M9V 2B3  
(416) 675 7411

# HELP NEEDED

PROBLEM: rear windows collect road dirt: "The LR is equipped with rear rear mud flaps, but presumably the natural turbulence sucks up up muck-laden spray and drives it against the rear windows."

We know this to a universal problem and would appreciate hearing from those LR owners who have succeeded in overcoming it.

Next problem (same source): a puzzling high oil consumption:  
" The LR is burning a quart of 5 - 30 W oil in every 120 miles. There is no obvious or evident leak and no evidence of the usual indications of oil-burning, ie no unusual exhaust fumes or discharge; the cylinders and spark plugs are running clean and the engine, beautifully".  
Our records indicate the LR is Series II 1970 88".  
The owner Gordon Erskine, would appreciate suggestions and recommendations as to how to correct the problem or to identify the cause of this unacceptable rate of the 'vital fluid'. Please write to him at c/o John Abbott College, P.O. Box 2000, Ste Anne de Bellevue, Province Quebec H9X 3L9, mark the envelope 'Chemistry Department'.

The problem: repair of older-style Lucas water temperature guages. Precisely what fluid or kind of fluid is contained in the tubing of these guages which gives the indicated reading? Can the sensitive fluid be replenished? If so, how? How may leaks in the tubing be repaired? Do you, Dear Reader, have such a model that you are prepared to sell?

PLEASE WRITE TO: William O. Pruitt, jr. 220 Wildwood Park, Winnipeg, Manitoba R3T 0E3 (phone number not given)

## SPECIAL APPEAL

BY THE TIME YOU'VE READ THIS FAR YOU WILL HAVE NOTICED ONE OR MORE PAGES WHERE THE INK

RUNS LIGHTER/CERTAIN AREAS OF THE PAGE. THIS IS CLEAR INDICATION THAT THE INKING ROLLERS OF THE GESTETNER ARE WORN AND ARE FAILING TO EFFECT AN EVEN DISTRIBUTION OF THE INK AND SHALL SOON HAVE TO BE REPLACED. THE ROLLERS ARE COSTLY. IT STRIKES THE EDITOR THAT BEFORE ASKING ALROC TO SHARE IN THIS COST IN RETURN FOR THE SERVICE RENDERED, IT COULD BE THAT SOMEONE OUT THERE IN VACUUM-LAND JUST MIGHT HAVE A PAIR OF NEWER ROLLERS THAN THESE OR WHERE THEY MAY BE FOUND AND IF NOT IN USE COULD BE OBTAINED AS A GIFT ON BEHALF OF ALROC OR PURCHASED AT A SAVING. Readers who can turn something up in this regard, please write the Editor.

EXHAUST HEADERS IN EXCHANGE  
OF NORMAL EXHAUST MANIFOLDS



Contributed by Ron Williams, Ottawa

Installing Clifford Research exhaust headers on a 1974 Land Rover, sold by Atlantic British Parts Ltd: these headers were installed in November, 1977 culminating in about 20 months usage on the headers.

The job began with removal from the engine the existing old intake and exhaust manifold. The engine was run briefly minus the manifolds. The exhaust pipe was next unbolted from the exhaust manifold and loosened at the intermediate pipe. The new headers were installed as a trial system. All appeared to fit well. The exhaust pipe was cut at the fifth bend from the manifold and the new flange to header-pipe was tack-welded to the exhaust pipe. All appeared to lineup fairly well. The new header system was now snugged up to a fairly tight degree only. Next the flange to exhaust pipe was completely welded around. With the final tightening of exhaust pipe to header pipe, the pipes were found to bumping the frame. A hot torch flame was applied and at the right moment some prising was applied on the exhaust pipe which shaped the bend enough to clear the cross member of the frame.

Next came the re-bolting of the intake manifold. This should have been the easier step of the work, however since ABP were at that time unable to supply a manifold heater of the kind essential in this part of the world, it was now a case of having to devise a make-do. This took the form of a plate cut and fitted over the original heater portion of the intake manifold. Two brass fittings were brazed into the plate as far from each other as possible. Into these fittings tubing was brazed to re-route the hot water (from the heater) to the intake manifold and back to the water pump. A gasket was formed and placed between the newly-made water heater and intake manifold. The hoses were hooked-up and checked carefully for leaks. None was found after an adequate test-run of the vehicle and in fact in this instance everything about the job met with satisfaction.

Here are some personal conclusions in the matter of installing these headers:

- 1) Cost of headers or new cast manifold about equal
- 2) Work of installing headers: in general the work is fairly straight forward required: minor welding-brazing work
- 3) fabricating warming plate for the intake manifold: straight-forward enough but may be time-consuming
- 4) it is reasonable to expect an increase in horse-power as a result; to demonstrate this the vehicle should, of course, receive a dynamotor reading.
- 5) the intake manifold definitely seems to maintain a more constant temperature; this is indisputably a plus-factor.
- 6) in winter slower warmup of manifold, therefore greater & longer use of choke; one unfavourable end-product of this is the possibility of cylinder wash-down with petrol. Contrariwise in non-winter times since the water temperature valve is closed, the water does not flow through the intake manifold. In operation this means the manifold runs cooler, some power increase may be expected and fuel boiling in the carburettor on shutdown may be little or none at all, making for quicker starts in warm/summer weather.
- 7) required: special exhaust piping is shaping-forming. Experience proves that most commercial muffler shops are prepared to provide this need. Consideration might be given at the time to employ heavier gauge pipe for longer life against rust.
- 8) engine compartment temperatures will usually be found to be much lower particularly around the engine block itself, in winter and in hotter weather much less heat will be present to cook the driver's feet.

QUESTION: is the installation of exhaust headers in exchange of normal exhaust manifolds? You be the judge. On the plus side: on balance, a better running engine



producing slightly more power bearing in mind the increase in power must exact its toll, as nothing is for free -- in this instance your engine will burn more fuel. For the negative: risk of slightly increased carburettor icing particularly on short runs. A slower warming engine therefore greater chance of petrol-wash in the cylinders. The latter may result in faster wearing away of cylinder bores. With this change your Land Rover is no longer 'stock' so it may be harder to service or sell.

"THE SERIES III BLUES"  
(and how to cure them)

Contributed by Philip Castleton.

I purchased my '74 Series III about a year ago for a princely sum. It had only 13,000 miles clocked up and the overall condition was immaculate.

Me thinks . . . "Surely this wonderful machine (obviously having never done a day's work in its life) must just rip along the turnpike." But alas, my high expectations were cruelly shattered. 50 mph could only be reached by heading down a steep incline pushed by a stiff tail-wind -- and pulled by the slip stream of a 40' tractor-trailer. (The '62, 88" I had in the 'Old Country' would have outperformed it!)

Something clearly had to be done to match performance with the appearance of this handsome motor-car.

If you own a '73 -- '74 (or thereabouts) Land Rover and have the 'choked-up feeling' -- here's how you might be able to cure (and how I cured) the Series III Blues.

A The Emission Control Purge . . . What should go?

To quote B. Dyer (Transfer Box #4), what we have to do is 'throw out all that anti-pollution crap'. The series III engine compartment is a confusing mass of tubes, vacuum lines, diaphragms and mostly superfluous gadgetry. However, one has to decide on what is necessary and not necessary; this is the question. Incidentally I changed the Zenith for a Rochester carburettor which simplified matters immediately, but more about that later.

REMOVE 1) The Exhaust Gas Re-Circulation System . . . this can cause a lot of trouble, in fact I was prompted to do something about the emission controls after the re-circulated exhaust gases warped the throttle butterfly in the Zenith. Plug up the stainless steel tube. When it comes time to renew the front exhaust this tube will go anyway.

2) The Carburettor Throttle Prop. System . . . this system is designed to improve combustion by reducing high manifold depression when the engine overruns with rapid throttle closure. The throttle is 'propped' open with the aid of a vacuum line . . . to quote Richard Huber (Atlantic British Parts Ltd), "this could be dangerous". Anyway we can do without it! Plug up outlet at the inlet manifold.

3) The Throttle-Controlled Vacuum Switch . . . a throttle-operated cam governs a switch which opens and closes the vacuum line from the inlet manifold to the distributor capsule. Totally superfluous really. Again plug up outlet at inlet manifold.

4) Solenoid-Operated Fuel Cut-Off Valve . . . this isn't really an emission control but it will go if the Zenith is replaced.

1) Crankcase Emission Controls . . . one hose vents from the breather on the valve to the air cleaner elbow. Another hose vents the oil filter tube through a non-return valve to the carburettor adaptor. I'm sure any detrimental effects of these controls are negligible . . . and anyway this 'sealed' vent system keeps the engine compartment nice and clean. There is a vacuum in the hose from the oil filler tube & for this reason I believe the addition of small hose clips (screw-up type) to all connections is a good idea to help prevent air leaks.

2) Fuel Tank Evaporative Control System . . . a charcoal-filled absorption container is situated in the engine compartment to absorb evaporative emission from the fuel tank. A pipe leads from this container through a flame trap, to the air cleaner elbow. Again, I don't believe that this control really affects performance, so I decided to keep it intact.

THE ROCHESTER CONVERSION

contributed by Philip Castleton

Since I replaced my Zenith carburettor for a Rochester, performance and petrol consumption of my Series III has greatly improved. Earlier I wondered about how the existing linkage, etc would fit on the North American carb., since there has been so much said about various adaptations which are necessary in order to successfully complete the conversion.

However, owners of the '74 Series III at least, need not fret excessively. The throttle linkage and the choke connection fit right on with no adjustments necessary. If you the Rochester model from Atlantic British Parts (which I strongly recommend since then you can be sure it is the correct model) the manifold stud holes are already reamed out for your convenience. Also ABP provide a short stud to replace the stud existing on the driver's side, which is too long to accommodate the Rochester. In addition, in my case at least, ABP enclosed in the package a set of 'fool proof' instructions which served me well indeed. ABP point out for example, that one must check for hood clearance after installing the replacement carburettor. Apparently if you do not have a dished hood/bonnet you are in the clear - - - but if your vehicle's bonnet is dished, then it is required to cut as much as one can off the edge of the air-elbow which faces the carburettor. I found that even this was not sufficient. Filing down the weld seam helped, but light contact was still made, with the bonnet.

If one is leaving the original vacuum retarded distributor intact, the vacuum line is left connected to the intake manifold and the plug which is supplied in the ABP kit is placed in the threaded hole of the Rochester. However, if one is going the whole way and splurging on a vacuum advance distributor, as I did, the vacuum line must be connected to the hole in the side of the Rochester unit. My timing is set at about 4 degrees B.T.D.C. at time of writing - - my experience indicates performance seems to be optimum at around this setting.

After some experimenting en route Cape Breton to Toronto, I found performance was optimized with the mixture screw opened about  $2\frac{1}{2}$  turns - - - although I'm sure the setting will vary from one LR to another. I averaged 18 mpg cruising at 50/55 mph from Montreal to Toronto.

SUMMARY . . . if you own a Series III Land Rover, and are not happy with performance, start ripping out some of those emission controls as described above . . . and do the Rochester carburettor conversion while you are about it. Particularly if you have a recalcitrant Zenith on your engine at present.

#

ALROC . . . WORKING TO HELP YOU GET OPTIMUM PERFORMANCE FROM YOUR LAND ROVER



. . . Include an inspection of the Transmission and Engine Supports when designing your regular maintenance schedule. I speak from experience having recently discovered one of the transmission supports of my LR split in half - - - if left undetected severe damage to the vital machinery must result.

. . . improve performance of heater on Series III ( ? and perhaps other models) by installing an air scoop at the fan air-intake on the side of the front wing. Remove present grill and install a plastic fitting designed to go on the outlet hot-air pipe designed to fit the outlet hot-air pipe of an electric clothes dryer, which may be purchased at most hardware shops. The fitted flap on the fitting bought should be removed obviously. Complete the job by drilling 4 holes in the fitting, secure with self-tapping screws, paint a nice glossy black . . . and voila!

time  
. . . when it comes/to buy a new set of tires get them as large as your LR can accommodate - - - 7.50/15 or 7.50/16 depending on which rims you have. Apart from enhancing the appearance of your LR, cruising speed will be upped, and you will have greater clearance between the running surface and the underpinnings of your vehicle, which helps considerably when off the roads.

GENUINE  
LAND/ROVER  
PARTS

WE CAN SUPPLY EITHER FROM OUR STOCK OR ON OUR EXPRESS TELEX-COURRIER  
SERVICE DIRECT FROM JAGUAR ROVER TRIUMPH CANADA INC. FAST AS IN FLASH.

A L S O

We Service Land Rovers

Our Mechanics Are Lovingly Familiar With The Breed

Anything From An Oil Change To A Ring Job

WE STOCK

Manuals And Other Books Useful To Land Rover Owners

manotick motors ltd

HIGHWAY 16 MANOTICK ONTARIO KOA 2N0

692 3506



PRESERVATION

OR WHAT GOOD IS AN OK TOP WHEN YOUR BOTTOM IS ROTTEN?

contributed by Jim Ford

Last year, while the engind was being re-built on my LR 88, I decided to sandblast the engine compartment. Like all affairs of the kind, one thing led to another and I ended up sand-blasting the entire chassis. A messy job indeed yet which is soon forgotten in the glow of satisfaction knowing you've done the right, good thing. After much re-search, if one is going to go as far as blasting to base metal and repairing holes in the frame, one of the best recommendations I got was to use zinc chromate vinyl wash on the base metal, then 2 coats of epoxy resin paint, followed by 2 coats of Alumigrip (aircraft) paint(which comes in many bright and startling colours). My choice was for bright yellow. I used the same colour for tire rims so I'm quite visible from a distance which could carry its own safety value. As I sayl it is well worth all the labour and messiness. Now that I've treated my rotting bottom, I have to mork on my corroding aluminium top!

AN EARLY BIRD IN THE WINNIPEG AREA . . . Series I

This piece of information skipped our notice because we missed the word 'over' on our member's application form. This should have appeared in our December, 1978 issue. We apologise to Mr Place for this oversight on our part.

"I just returned from a tour of England & wales and I found Land Rover parts both expensive and scarce. One breaker (wrecker) I bought a speedometer from told me Land Rover had priced itself out of the market. He had fifteen wrecks in when I was there! I wish I could find just one such! A used IIA speedometer cost me about \$20 Canadian.

If anyone near Winnipeg wants a Series I 88" body frame or any drive train I have many used parts. Body and frame free, the rest at about half the listed price in Atlantic British Parts (Canada) catalogue. Also available is a good transmission and a usable-but-only-fair Series I engine."

If interested contact: Mr Dabid J. Place, 219 Colcleugh Avenue, Selkirk, Manitoba, R1A 0A4 (204) 482 7461

*in the maritimes . . .*

THINK LAND ROVER  
& THE WORD IS "BRIAN DYER"

Land Rover Parts -- Sales -- Service -- New & Re-Conditioned

No frills - No Catalogues - Just Good Stocks At Good Prices

BRIAN DYER BEDFORD HIGHWAY BEDFORD NOVA SCOTIA

Mail Enquiries: P.O. Box 64, Bedford, N.S. . . . (902) 835 8955

(24 hour answer service)

THE ALROC MARKET-PLACE

This Space Is Your Space - - - Feel Free To Use It

Please deal direct with the person advertizing

Members are respectfully requested to keep TRANSFER BOX informed of results accruing from Market-Place advertizing. Our dream for ALROC includes commercial advertizers from all over. Written proof that these pages get results will be invaluable to us when we make appeal to commercial interests. Tell us on a postcard.

- SHOWCASE 24 FOR SALE rear gasoline tank 15 gallons capacity \$ 60.00
- propellor shaft rear for LR 109" \$ 25.00
- 2½ litre petrol engine, needs bearings the engine is complete \$500.00
- 2 swivel hub assembly with driveshaft & 11" drums per pair \$100.00
- wheels with tires 15" five of each \$ 10.00
- half-shaft rear Series I \$ 50.00
- gear-box parts and casings Series I & IIA offers etc etc etc

ENQUIRIES Rick Copple 1275 Castlefield Ave Toronto (416) 783 9904

SHOWCASE 25 WANTED Land Rover 88" or 109" in running order  
talk to: Michael Dand 310 Briarhill Road London Ontario  
(519) 455 8668

SHOWCASE 26 FOR SALE Canvas top for 88" Land Rover all fittings complete  
condition 'excellent' ALSO tail-gate (blue)

REPLIES TO: Richard MachLachlan 1686 Edward Street Halifax N.S. B3H 3J3

SHOWCASE 27 FOR SALE Wiring harness BL Part # 560754  
this is the main harness for a 6-cylinder  
REPLIES TO: Transfer Box Land Rover unit offers

FOR SALE Land Rover 109" tropical roof spare on bonnet 2½ Litre engine  
SHOWCASE 28 (petrol) Rochester carburettor flip-down rear seat jack  
box of extra parts price negotiable asking \$ 2500.00

REPLIES TO: Jim Cleveland ~~P.O. Box 99 Greenwood Heights~~  
~~R.R. #1 ARMDALE Nova Scotia B3L 4J1~~  
902 876 2970

CORRECTION CORRECTION: Change of Address: Lahr Senior School  
CFPO 5000 Belleville Ontario

(In light of Jim's special circumstances vis-a-vis overseas posting we veer from strictly LR interests & say two motorcycles and a boat are to be sol too, if readers are interested.). All best wishes, Jim!

FOR SALE bench seat, fold-up fits any LR vehicle virtually new \$ 20.00  
SHOWCASE 29 REPLIES TO: Peter Parsons 1966 Queensdale Rd Ottawa 613 521 5010



SHOWCASE 30

WANTED Rover Part Number 219577 this is a rope guide bracket for Land Rover capstan winch.

Replies to: Denis Baldwin 250 River Road Sault Ste Marie Ont P6A 6C7  
705-253-0814

SHOWCASE 31 (due to time-lag this information may not still be viable Ed.)

FOR SALE Land Rover 1960 109" Series II Station Waggon 3 litre/6 cylinder 'excellent' body 'good frame re-built fuel tank also for sale - - 6 cylinder engine

Replies to: Mr Jack Hughes 661 Pimlico Place Kingston Ont K7M 5T7  
(613) 389 341

SHOWCASE 32

WANTED to buy Land Rover 109" "I am finding it difficult to locate any LRs which are for sale . . . "

Replies to: Mr Dave Davey R.R. #5 Campbellford, Ontario KoL 1L0

SHOWCASE 33

WANTED "I am contemplating the purchase of a Land Rover this summer". Presumably, this member would not disapprove of hearing from those with vehicles they wish to sell.

Replies to: Mr Bruce A. McMinn 19 Elmbridge Acres Road Thornhill Ont L3T 1W2  
(416) 889 8976

SHOWCASE 34

FOR SALE 'Quite a few' Series III gear-box and transfer box parts springs front axle & rear axle parts differentials two 2 1/2 litre motors (petrol)

Replies to: Mr John Donald 2225 Mt. Albert Road Mount Albert Ont LOG 1M0  
(416) 473 2266

Special note: because of erratic swing-shift work schedule, please call Mr Donald week-ends only.

SHOWCASE 35

FOR SALE Land Rover Series III 88" )  
Land Rover Series I around 1957 - 58. ) combined item

Replies to: Mr Peter Hirst Muskoka Land Rover Centre Port Cunnington  
R.R. #1 Dwight Ont POA 1H0 (705) 635 2968

MEMBERS ARE INVITED . . . to request advance registration of one copy of ALROC's own catalogue of parts, used and new now in first stage of production. The goods listed will be those which through one reason or other have sort of 'gravitated' naturally to ALROC out of generous feelings to help the Association turn some cash, etc. It would be pointless to try and describe the items here except to say perhaps, there are Series I and II included. The majority is small stuff but there are front panels (Series I) wings for same, rear axle housings, and what appears to be a PTO shaft, and swivel-ball cups which may be Series I. Proceeds after handling/shipping, etc will go towards Association of Land Rover Owners Canada. It will be several weeks before the cataloguing, pricing and production will be completed.

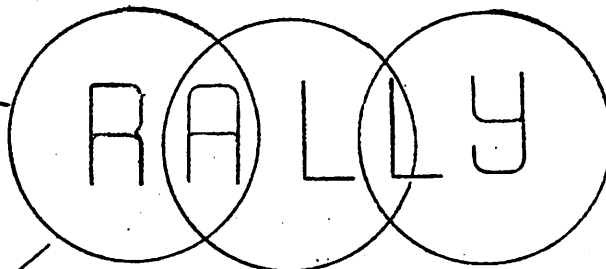
FIRST LOCAL LAND ROVER CLUB FORMED

early  
Allowing for Brian Merrett's attempts to herd together Land Rover owners in the Montreal area which regretably somehow didn't crystallize, the first local, autonomous Land Rover Owners Club in Canada was formed in Ottawa, Ontario in the 'Citizen' Building, February 20, 1979. Attendance was 30 plus, men and women drawn from the members of ALROC in the area. Unfortunately no scribe was appointed to cover the proceedings and Transfer Box has not seen the Minutes so we are not able to complete proceedings. Mr Ivor Symons, Ottawa business man was elected Interim President; Mr John Blaksy, Interim Vice-President, and Mrs Audrey Cole, Secretary and, if we are correct, Mr Andy Graham to the office of Treasurer.

The newly-formed group held its first meeting in May in the Jack Purcell Community Centre, Ottawa where some 15 members gathered and broad outlines of the Club plans were outlined and discussed. Mr Ron Williams reported for the Technical Committee, and Mr Andrew Finlayson for Outdoor Events Committee. The film Land Rover Ability, courtesy of Jaguar Triump Rover Inc., Burlington, Ontario was screened.

Transfer Box extends Greetings to the Ottawa Club and every success.

toronto  
MONTREAL  
OTTAWA  
hull  
BELLEVILLE



GOOD FRIEND & KEEN ALROC MEMBER PAUL SOCHOLOTIUC PHONES TO SAY A TORONTO GROUP IS IN MIDST OF PLANNING A WEEK-END RALLY IN VICINITY OF TWEED, Ontario which WE UNDERSTAND TO BE IN THE GENERAL AREA OF BELLEVILLE. FINAL PLANS HAVE NOT BEEN SETTLED ON BUT WE CAN SAY THE EVENT IS SCHEDULED FOR A DATE IN MID-JULY and PAUL WANTS EVERYONE

IN THE AREA TO KNOW ABOUT IT. IT WILL BE A WEEKEND RALLY, OVERNIGHT SLEEPING AND FULL CAMP-OUT STYLE WITH EVERYONE TAKING CARE OF THEMSELVES AS BEST THEY SEE FIT. WE ARE TOLD THE SITE IS 'PERFECT' FOR THE

OCCASION, OFFERING LOTS OF OPEN SPACE IN QUIET SURROUNDINGS. IN THE ABSENCE OF FULL INFORMATION TRANSFER BOX WOULD LIKE TO SUGGEST THAT ALL PERSONS INTERESTED PHONE PAUL DIRECT. PAUL'S NUMBERS ARE: (day) 1 416 366 3633 (other) 1 416 284 7103. TOO, WHY NOT CHAT THIS UP WITH YOUR LAND ROVER FRIENDS AND MAKE UP A PARTY? OTTAWA SHOULD BE ABLE TO MAKE QUITE AN EVENT OUT OF THIS WHAT WITH THE NEW CLUB AND ALL! SHOULD BE LOTS TO LEARN.

/ &  
WAYPOINTS

AN IMPORTANT DOCUMENT . . . several months ago now Audrey Cole volunteered to bring in a draft constitution to serve ALROC's needs. For the best of reasons Audrey was not able to produce the work then. More recently in co-operation with Andy Graham a draft was completed. This being for all ALROC members we are taking the liberty of including it attached, to save money on postage. You are asked to study the document and return with emendations marked. Silence will read 'consent'.



Association Of Land Rover Owners Canada

DRAFT CONSTITUTION

- 1: The name of the Association shall be the "Association Of Land Rover Owners of Canada"
- 2: The Objects of the Association shall be
  - a) to promote, support and protect the interests of Land Rover vehicle owners and operators and their vehicles
  - b) to raise, receive and hold contributions of money and property to support the objects of the Association
  - c) to do all such other things as are incidental or conducive to the attainment of these objects subject only to the laws of Canada and its provinces and territories
  - d) to function without purpose of gain for its membership and to use all profits or other accretions to the Association for the promotion of its objects
- 3: The membership of the Association shall consist of owners and operators of Land Rovers and persons sympathetic to the objects of the Association who shall have paid all dues as determined by the Association
- 4:
  - a) The Officers of the Association shall be a President, a Vice-President, a Past President when applicable, a Secretary and a Treasurer who shall serve without remuneration or profit from such positions
  - b) Officers shall be elected annually by and from the membership of the Association
- 5) Meetings of the Association
  - a) the Association shall meet annually for the presentation of Reports of the President; Secretary; Treasurer; and Standing Committees when applicable; Amendments to the Constitution and By-Laws; consideration of Resolutions; installation of Officers; and any other business pertinent to the welfare of the Association
- 6) Amendment of the Constitution and By-Laws

The Constitution may be amended or repealed only by a two-thirds majority vote of eligible members voting by mail. Notice of Special Resolution to amend shall include details of amendment and shall be distributed to all members in good standing not less than thirty (30) days prior to the date of the Annual General Meeting.

#

NOTE: The Constitution Committee will welcome suggestions and emendations from paid-up members of the Association. The closing date for receiving back such material September 15, 1979.

All correspondence to: Association Land Rover Owners Canada  
c/o Apartment 1  
June 20, 1979. 95 Fourth Avenue Ottawa Ontario K1S 2L1 Canada