



the
**ALUMINUM
WORKHORSE**

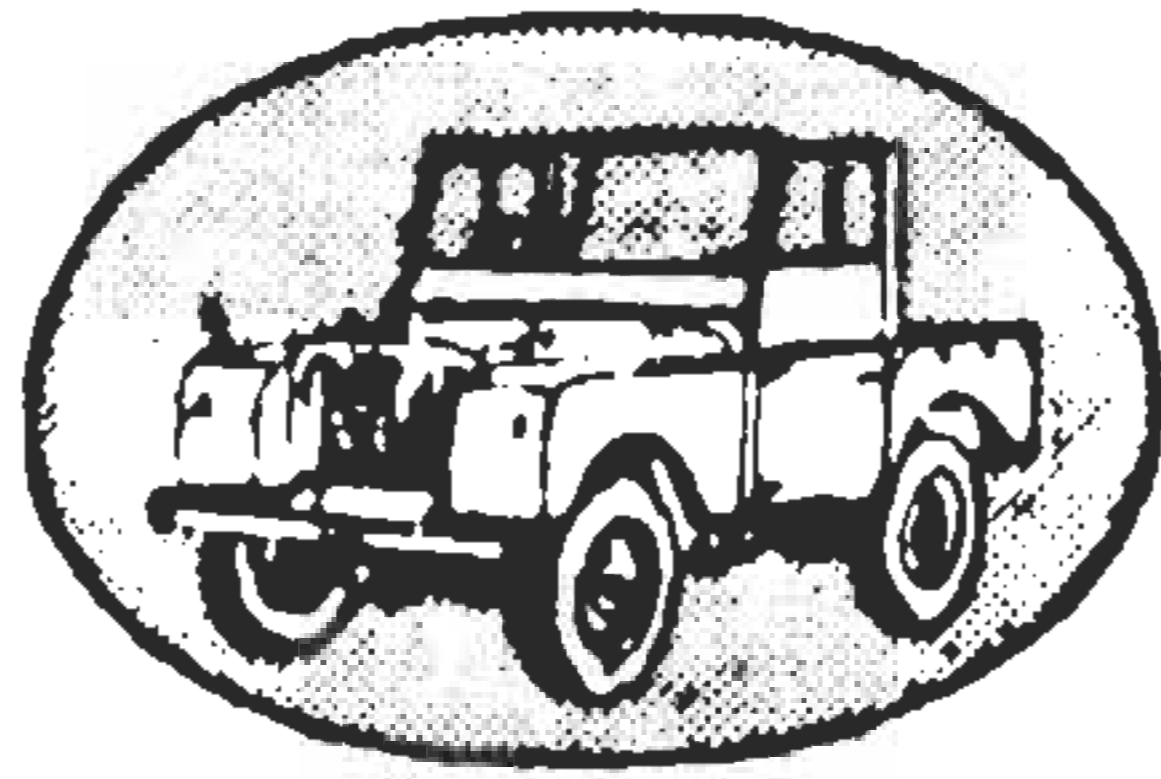


THE OFFICIAL PUBLICATION OF THE LAND ROVER OWNERS ASSOCIATION

VOLUME III, NUMBER 1, WINTER 1986 - COPYRIGHT 1986 - ALL RIGHTS RESERVED



LROA



NEWS

WINTER 1986 - LROA, BOX 162201, SACRAMENTO, CA 95816

WITH APOLOGIES

Due to a word processor breakdown, this newsletter is much later than intended. Sincere apologies to all members and advertisers. As you can see, the old Kaypro is back on line and running "hot, straight and normal" once again!

DATA SHEET RETURNS

So far, the return of the Data Sheets has been disappointing; about 8 percent of them were returned. We were asking for a bit of your time and 22 cents of your hard earned cash for a good cause. The 175 or so members of the LROA represent a large number of the Land Rovers being operated here in the United States. Your wants and needs as Rover owners have been largely ignored by the rest of the 4-wheeling population for the last 12 years and we hope to change that. The information on the last Data Sheet will help the LROA anticipate some of your needs and help us communicate these needs to the people or organizations that can meet them. To those of you who returned your sheets, thanks, they were facinating reading. To those out there that haven't (and that's most of you), c'mon, help us out!

ORIGINAL OWNERS CLUB MEMBERS

Here are the first pair of original owners to step forward. These lucky folks had the rare opportunity to own a brand, spanking new Land Rover and they may hang their certificates with pride. Other original owners may simply send in some evidence that they bought their Land Rover new and become members of this elite club within a club. Send your information marked "Original Owners Club" to the LROA address.

ORIGINAL OWNERS CLUB

STEVE HILL (#1)

Bought his '73 88" from British Motors of Sacramento (now defunct) and it was one of the last four on the lot.

HERMAN KARL (#38)

Herman sold a '67 Jaguar XKE to purchase his '69 88" while in graduate school. It was purchased on 11/11/69.

LROA NEWS (continued)

ROLLOVER CLUB MEMBERS

Here are the first two unfortunates who have come forward to tell their harrowing tales. If there are any others who have had the misfortune of rolling a Rover, write now to become members of this new Land Rover fraternity and receive a certificate in the bargain. Write to "Rollover Club" at the LROA address.

PEDRO GONZALEZ (#65)

Pedro rolled his Land Rover backwards down a 20 foot embankment recently but was able to right it and drive away (see "Teaching Your Land Rover to Roll Over", this issue).

DAVE BRAMER (#18)

Dave did a complete 360, his Rover landing back on its wheels with the engine still running. When an out-of-control car slid towards him, Dave maneuvered his Rover off the pavement into a ditch. Dave said, "Fortunately, I was going very slow. I cut hard to the right and as soon as I got on the incline, I knew I was going over. I ducked under the steering wheel like a rat in a hole!" Incidentally, Dave was running topless that day. He has since installed a roll bar (see picture in Rover Revue).

PARTS SUPPLIER UPDATE

Two new parts catalogs are now available from a couple of firms that have been around awhile. Charles Kellogg, proprietor of The Great American Land Rover Company tells me that he has a new 28 page catalog coming out this month. The catalog is priced at \$5 a copy but contains a coupon for the same amount that can be used towards the purchase of any parts. Rumor has it that Charles is also planning a name change for his growing business.

Campart Distributors has also just come out with a new catalog for sale a \$3 a copy. Located in Calgary, Canada, Camparts has been in business since 1967. With the American dollar running strong against the Canadian dollar, now is a good time to give Phillip and Mike a call for your parts needs.

It looks as if the Mark and Andrea at Rovers North have taken the bull by the horns and sent everyone on the membership roster their latest catalog. Everyone here in Sacramento has them.

Here's a little tidbit for people looking for Land Rover engine parts. Many of your local import parts stores may carry or be able to obtain the A.E. brand of engine parts. They carry most items necessary for engine overhauls at very reasonable prices. Here are the addresses of the two A.E. warehouses in the United States:

A.E. Engine Parts, Inc.
9000 Mendenhall Court
Columbia, MD 21045
(301) 922-9444

LROA NEWS (continued)

A.E. Engine Parts, Inc.
1679 C Enterprise Blvd.
West Sacramento, CA 95691
(916) 372-7300

The Editor invites all Land Rover parts and service establishments to write in and share their latest goings on. The information given will be used as a service to the LROA membership and the Editor reserves the right to use the information as he sees fit.

NOTES AND QUOTES

March 12 will mark the beginning of the Camel Trophy, the world toughest off road driving event. Representatives of 14 countries will compete in this grueling two-week trek thru the worst natural and manmade obstacles imaginable. This year, the Camel Trophy will be held in Australia and the vehicle of choice is, of course, Land Rover. The two-man team for the U.S. was chosen from over 500 applicants. Frank Smith, a Marysville, California farmer, and Carl Guffey, a Tennessee car salesman, were chosen for their off road skills after testing at the Land Rover proving grounds at Eastnor Castle. Lets root for these guys when the Seventh Annual Camel Trophy starts on March 12.

The Land Rovers will be the new "90" series fitted with 67 horsepower diesel engines. In addition to standard equipment, the Rovers will carry an additional 50 litres of fuel in a special roof rack, sand ladders, roll bars and push bumper, electric winch and a specially design roof mounted air cleaner that will allow deep fording.

Pay special attention to the "Rovers in the News" section of this newsletter. As you may have heard, Land Rover Ltd. is facing a buyout and two Corporations are vying for the chance. General Motors seems to be the stronger, though Lonrho (a distributor of Austin-Rover) is the British favorite. As you will read, there is great national sentiment to keep Land Rover British, though the question is whether this sentiment will be enough to hold back GMs big money. It is the Editor's opinion that Land Rover would benefit from being a GM subsidiary. LR marketing has almost always been the pits and GM could be of great help there. There might even be a better chance of seeing Land Rovers imported over here. Whichever way you feel, just hope that Land Rover can hang in there either way it goes.

FROM THE EDITOR

There are a few changes upcoming in the Aluminum Workhorse. The first is that there will no longer be a charge for non-members to advertise vehicles or parts in the classified section. Up to now, there have been many who wanted to advertise but none who wanted to pay. I now consider printing these ads a service to you, fellow members, and will print them when space permits. Needless to say, member's ads will have unconditional

LROA NEWS (continued)

priority for ad space.

* * *

THE LROA WANTS YOU!

This publication has grown past the point where one man can handle the whole job of getting you well done, enjoyable newsletters. I now need to ask for help. I would like to announce the following job openings on the Aluminum Workhorse staff.

TECHNICAL EDITOR

JOB DESCRIPTION: Write useful and entertaining articles on home repair of Land Rovers. Keep the "Tech Tips" column well supplied with usable tidbits of information. Keep abreast of new products and new techniques for keep Land Rovers in good shape.

REQUIREMENTS: Must be willing to commit him or herself for a year in this position (that's 4 issues). Must be able to write concisely and intelligently. Must have a good working knowledge of Land Rovers and mechanics in general. Must be willing to spend the time to get the job done right (figure about about 12 hours work or so per quarterly published issue).

PAYMENT: The personal satisfaction of having helped a worthwhile organization in a worthwhile task. Expenses for supplies needed for the job (subject to some guidelines) will be reimbursed by the LROA.

CLUB LIASON OFFICER

JOB DESCRIPTION: Establish and maintain regular correspondance with other Land Rover clubs worldwide. Establish a newsletter exchange wherever possible. Keep Workhorse Editor informed of the various clubs and their goings-on.

JOB REQUIREMENTS: Good letter writing ability and a diplomatic manner. Willingness to commit him or herself to a year in the position. Willingness to spend the time to do the job right (figure about an hour a week).

PAYMENT: Again, the satisfaction of helping the LROA. Expenses, according to guidelines, will be reimbursed by the LROA.

* * *

To apply for either of these positions, send a resume detailing your qualifications for the job and mark it "Editor" and send it to the club address. I still can use articles on just about everything, but particularly on installing accessories such as overdrives, winches, etc. Be sure to take pictures.

TOLL FREE CLUB HOTLINE

You may now call toll free from anywhere in the U.S. and leave messages for the LROA. One use of this system might be to leave classified ads or trek ads. Regional Coordinators will find this system useful as well.

We owe the use of this service to Richard Brengeman, #43, and to his employer, Voice Mail. Richard arranged this service for us on a no-charge basis. Special thanks to Richard and his bosses at Voice Mail for this very useful gift.

You must have a push button phone for this system to work for you. The duration of the message is thirty seconds. Research has shown that this is adequate time for an average message. If you wish, you may leave more than one message or continue a message by dialing again. Here's how to leave a message:

DIAL 1 800 262-4245
or
1 800 421-5744

You will be ask for a code number. Enter the following numbers on your phone:

2620000

Then you may leave your message. Simple, huh. The messages will be retrieved daily.

EXTRA DECALS

Extra LROA decals may be purchased at \$3 each, shipping included. Buy extras! Paper your living room with them. Wear them on your forehead! Write to: DECALS
Box 162201
Sacramento, CA 95816

OTHER REGALIA

LROA belt buckles and grille badges are available on a custom made basis. Prices run in the \$45 range. They can be personalized with your member number, or whatever. For more information, contact: BUCKLES
Marvin Mattson
Box 9802
Reno, NV 89507

CALENDER OF EVENTS

CENTRAL CALIFORNIA REGION

MAY 17 & 18 - Trek to Stumpy Meadows in the Sierra Nevada Mountains.

TREKMASTER: Steve Hill
Box 162201
Sacramento, CA 95816
(916) 393-3767

SEPTEMBER 14 - All British Car Meet at El Camino Park in Palo Alto California.

INFORMATION: Steve Hill
Box 162201
Sacramento, CA 95816
(916) 393-3767

OREGON REGION

AUGUST 29 & 30 - All British Car Meet in Portland, Oregon.

INFORMATION: Steve Zedekar
Rte 1 Box 281-E
La Center WA 98629
(206) 263-4397

NORTHEAST REGION

JUNE 20, 21 & 22 - Tentative dates. Trek in Northeastern Maine with fishing, camping & 4-wheeling fun.

TREKMASTERS: John Hawkins, Margaret Nagle
Box 46
Orono, ME 04473
(207) 942-4024
PRE-REGISTRATION: Ron Mowry, RC
Box 1023
W. Lebanon, ME 04027
(207) 658-9064

NATIONAL EVENT

AUGUST 30 - SEPTEMBER 1 - Black Rock Desert Run! Come one, come all.

INFORMATION: Steve Hill
Box 162201
Sacramento, CA 95816

Land Rover—enter Lonrho

by LORANA SULLIVAN

LONRHO, the largest distributor of Austin Rover vehicles in the UK through its Dutton-Forshaw Motor Group subsidiary, has approached the Department of Trade & Industry with an offer to purchase BL's Land Rover operations.

If the Government accepts the offer, Land Rover, which manufactures Land Rover and Range Rover four-wheel-drive vehicles, will remain British and, according to Lonrho's chief executive Tiny Rowland, its production will be increased

through significantly higher sales to the Middle East and the African continent. Lonrho is Africa's largest and most widespread motor distributor.

Lonrho's task is to convince the Government that it is a more attractive purchaser of Land Rover than General Motors of the US, with which the Government has been negotiating to sell Land Rover and the Leyland Truck operations. Last week Mrs Thatcher said that the GM deal was close to conclusion.

'We would be the ideal

owners,' declares Rowland. 'We could double production in no time.' He insists that Lonrho would guarantee the jobs of Land Rover's existing work force and would plan to take on more employees as production increased.

Rowland also says that Lord Stokes of Leyland, who presided over the disastrous Government-instigated merger of Leyland Triumph and British Motor Corporation and is now chairman of Dutton-Forshaw, would act as an adviser if Lonrho's offer is accepted.

Lord Stokes is also a director of Lonrho's Dovercourt Motor Co, retailer of Volkswagen and Audi motor cars, and chairman of Lonrho's Jack Barclay Rolls-Royce and Bentley retailer. Dutton-Forshaw is the largest Land Rover distributor in the UK and one of the largest in the world.

Rowland says that Land Rover distribution in Africa can

be greatly increased through barter deals—for example coffee for Land Rovers. Bartering, he adds, is becoming increasingly significant in world trade, particularly among developing countries.

The Government's negotiations with General Motors comes as Japanese manufacturers of light four-wheel-drive vehicles are grabbing an increasingly large segment of the British market for these workhorses from Land Rover and Range Rover who, until recently, had the field to themselves.

The distribution of Range Rovers and Land Rovers in the US—a move which BL has promised for some time—would almost certainly require a range of new engines. For example, Range Rover does not offer a diesel option, nor would its appallingly high petrol consumption meet fuel economy requirements of the US Environmental Protection Agency.

Land Rover plans return to US market

LONDON (UPI) — Land Rover has confirmed that it plans to re-enter the U.S. market after an absence of 15 years.

Spearheading the export drive, which could land the company with a \$100.8 million-a-year cash windfall, will be a new \$25,920 luxury Range Rover Vogue.

The deal ends months of speculation about the firm's plans for a U.S. drive.

The company will set up a U.S. subsidiary, to be called Range Rover North America, to distribute and market the car.

GM hedges on British parts

GENERAL MOTORS would 'try to maintain' at least 95 per cent British content in Land-Rover if it acquired the business, a senior executive for GM has said, writes *Steve Vines*.

Before leaving London at the end of a series of meetings paving the way for a GM takeover of both BL's truck and Land-Rover divisions, Mr Bob Price, executive vice-president of General Motors Overseas, said any offer of content levels below 80 per cent would be 'impolite' to the British Government.

Mr Price said he 'could not imagine' that the Government would fail to press GM for undertakings about the level of British content during the takeover negotiations.

There were no plans to alter drastically the present Land-Rover suppliers, but Mr Price added: 'You can never say never when you have to meet a competitive situation.'

Levels of British content are a particularly sensitive matter for GM because last year it ran into a storm of criticism about the high

import content in its British-assembled Vauxhall cars. Mr Price, a former Vauxhall chief, is very aware of the feelings this issue generates.

GM has been negotiating to buy Leyland Vehicles for the past year. Talks were near completion when the Government was forced to reveal that they were taking place. A number of other buyers for Land-Rover have since emerged but Mr Price declares he is unperturbed by this last-minute hitch. 'That's life,' he says philosophically.

Mr Price says the opposition to GM's takeover is not 'anti-Americanism' but a reflection of strong national feelings.

However, GM's Bedford truck division is lagging behind its competitors and Mr Price says that a failure to acquire Leyland Vehicles 'would mean we'd have to do another type of job on Bedford. Money would have to be spent upgrading the line.'

He is pained by the public response to the GM bid, pointing out that the company has been in Britain for more than 60 years and invested heavily here.



Rowland: GM's rival.

In 1984 Jaguar, which is firmly entrenched in the US luxury market, was fined \$7.5 million under EPA Corporate Average Fuel Economy (CAFE) regulations and another \$7.4 million in gas guzzler taxes were levied on individual cars. Rolls Royce, which as a manufacturer is too small to come under the CAFE regulations, was charged \$2,850 in gas guzzler taxes on each car sold.

Rowland stresses that his key target would be the developing countries, especially those where Lonrho is already a major vehicle distributor.

THE OBSERVER, SUNDAY 23 FEBRUARY 1986

Land-Rover row puts brake on Tory power

SOLIHULL—home of the Land-Rover—is the sort of constituency beloved of Mrs Thatcher: where upwardly-mobile, working-class generations have achieved their two-car dream of affluence.

Today, however, with the shadow of American ownership over the town, the Prime Minister is no longer the pin-up lady of old. Even John Taylor, the local Conservative MP, recognises the fact.

Although he has one of the largest majorities in the country—17,394—bets being wagered in the pubs and clubs today say that next time the Alliance may see him off.

Talking last week to locals—many of them ex-Brummies with almost a family feeling for the car industry—there was bewilderment and anger that a company making acknowledged quality products in the Range Rover and Land-Rover range could be up for grabs as the tasty bait for a General Motors take-over.

A constant theme was 'Land-Rover must stay British'. At the factory with its 8,500 workforce, where every manufacturing operation is now on the one site, the Union Jack flew alongside the company's house flag for the first time in many people's memories.

In the town centre petitions calling for British control to continue received wide support. Throughout the area, posters nailed to trees emphasised the same point. It was as if a Militant Tendency of the Right had suddenly come to town, so sustained was the invective.

People directed their anger towards Mrs Thatcher.

ARTHUR OSMAN
reports from the
unhappy home of
Britain's most
distinctive vehicle

'Insensitive' and 'bone-headed' were two of the more polite terms describing her apparent determination to be rid of Solihull's biggest industrial asset.



Campaign poster

At the exclusive Copt Heath golf club, Jim Bailhe, a retired GKN executive, said an American take-over was almost certain. 'You have to have the money that is behind them. We are either not making the vehicles cheaply enough, or there is something wrong with the marketing. I do think GM will improve that. A slimming of the workforce would probably mean a loss of two thousand or so jobs.'

'Nevertheless, I'm very anti-Thatcher, having supported her in the past. In the last six or seven years she has not

changed her policies. Despite having done some good things, her policies are beginning to wane and she is running out of steam. She is closing down our engineering industry completely. She needs to change her attitudes and start supporting it. She has nothing else to say but "be competitive or close".'

In up-market Tilehouse Green Lane Mrs Valerie Pre-witt said: 'The great concern must be the possible transfer of Range Rover production to Detroit.'

Anything like that would decimate Solihull and could be another nail in the West Midlands economy. Some people may be affluent in this town but the vast majority are struggling with houses and education costs. All I have spoken to do care very much about this serious threat.'

From the business side, John Rake, a shopkeeper near the factory, said: 'Any reduction of the workforce is going to seriously affect everyone's trade, possibly with reductions of between 25 and 30 per cent. It will cripple those with large bank loans and many shopkeepers have them.'

At the Old Colonial pub by the plant's back gate, Ralph Newnes, the landlord, and his wife, Christine, both once worked for Rover.

He now pulls pints for his old colleagues. 'They are very fearful for their jobs. Some have only just got back after being out of work for four years. The future was looking rosy but now it's back in the melting pot. Some think that after two or three years GM will ship production to the States and they genuinely fear a closedown.'

Long live the Land-Rover

Your report of Lonrho's possible interest in acquiring BL's Land-Rover division takes me back to Upper Volta in 1980, when I visited my two daughters in Gorom Gorom. The health visitor one was Saving Children, and the other worked for a very effective French agronomist organisation CIDR.

Both Save the Children and CIDR ran fleets of Land-Rovers which were praised on all hands for their rugged reliability and—very important on the corrugated trails of the Sahel—their comfortable springing. Unfortunately however, as they wore out, they were being replaced by Subaru look-alikes, cheaper, equally reliable, much less comfortable because harder sprung, but immediately available; Land-Rovers had an 11-month delivery date.

I admired the massive three-legged cooking-pots, beautifully cast in aluminium and in universal use for the open-fire cookery of the villagers and tribesmen. 'Melted-down Land-Rover cylinder heads and gear-boxes' I was told. I thought of Invergordon and the plight of our aluminium industry at home.

So, more power to the Tiny elbow!

Dr Mungo Bryson Hay,
New Galloway.

Eddie Hughes, senior shop steward on Land-Rover assembly, was more pointed: 'Just as we are turning the corner, the Americans are coming in to get us on the cheap and many fear jobs will go.'

Mrs Sally Pope, a young housewife out shopping, said: 'What in heaven's name is happening? Why is this woman selling off the best of Britain? It only confirms our family view that we were right to support the Alliance.'

Mr Taylor, a solicitor MP, is fighting hard for Land-Rover. He wants a firm commitment that Solihull will still have what he calls 'flagship' status, even if the Americans take over. He wants all production and research to stay in Britain. But if the Stars and Stripes replaces the Union Jack at the main gate, an election defeat and a swift return to his law practice may be on the cards.

LAND ROVER OWNERS ASSOCIATION
P.O. BOX 162201
Sacramento, CA 95816

Letters



LONESOME IN NEW YORK

California is a long way away! Is there anything in the wind about forming an East Coast chapter? We look forward to the newsletter and many happy miles in our Rover.

Bill Bond, #165
Carthage, NY

BILL, THERE IS A CHAPTER OPERATING ON THE EAST COAST! RON MOWRY, NORTHEAST REGIONAL COORDINATOR, HAS A VERY ACTIVE GROUP AT SOUTHERN END OF MAINE. LOOK AT THE REGIONAL COORDINATOR'S LIST NEAR THE FRONT OF THIS NEWSLETTER FOR HIS ADDRESS. IF YOU CAN ROUND UP A FEW LAND ROVERS IN YOUR AREA, YOU COULD START YOUR OWN CHAPTER! CONTACT STEVE HILL AT THE CLUB ADDRESS IF YOU ARE INTERESTED.

APPRECIATIVE LAND ROVER FOLK

I just wanted to take a moment to drop a note to you and let you know how much I appreciate your publication and the opportunity to hold membership in the Land Rover Owners Association.

A year or so ago, I purchased a 1969 Land Rover which is presently stored away in our barn awaiting its turn as a restoration project. I do hope (possibly this summer) to have time to restore this wonderful machine and put it back on the road. In the meantime, I certainly appreciate your newsletters and look forward to each of them.

Charles Wallace, #29
Mill Valley, CA

AW SHUCKS, CHARLES! WE'VE TRIED HARD TO MAKE THIS A GOOD ORGANIZATION AND IT'S GOOD TO HEAR YOUR POSITIVE INPUT.

MORE ACCOLADES

We are glad to re-up for our favorite Land Rover

LETTERS (continued)

publication! Your superior paper always makes our day upon receipt. Keep up the fine job! Land Rover owners forever!

Steve & Jean Ganley, #48
Alexandria, VA

MANY THANKS FOR THE KIND WORDS. I HEAR YOU TWO ARE ORIGINAL OWNERS. HOW COME YOU HAVEN'T APPLIED FOR YOUR CERTIFICATE?

LETTER OF COMMENDATION

The Black Rock Desert is one of the major desert areas of the world. Bearing this in mind, it's easy to see how modern day pioneers who venture into "man forsaken" regions can be so totally unprepared for a variety of unanticipated events. Early immigrants pushed for miles towards springs or crossings on the basis of hearsay or the ramblings of a self-proclaimed desert "expert" who was frequently dead wrong.

The first time Donna and I went into the Black Rock was over ten years ago. A decade ago there was only the "Information Meet" at Gerlach on July 3rd. On that trip, we met Gary Gamos and Marvin Mattson, both seasoned desert travelers and well versed in all its aspects. On the next few trips we met Lea MaGee, an honest example of an expert in getting the job done - be it extracting an impossibly stuck Land Rover, making quality field repairs, or negotiating the most difficult terrain with superior driving skill.

These three men share a desire to enjoy and explore the desert in a safe and professional manner. In the old days when no pre-safari information was available, and with no organized club, a traveler with Lea, Gary or Marvin was very fortunate. No one has ever been left behind - no truck has ever been ruined.

I applaud all three for their efforts in making the 1985 Labor Day a success. One cannot fully appreciate the vastness and unpredictability of this region where a mile of travel can take one minute or one week, unless he has been there to experience it. I would like to thank all three and also the legendary "Scotty" Howat. Having "Scotty" along was a priceless asset. Donna and I have trusted all of them with our lives and will continue to do so. They are all of the highest caliber!

Jay & Donna Finklestein, #10
San Mateo, CA

HEAR, HEAR! SETTING UP A THREE DAY TRIP FOR 14 LAND ROVERS AND MAKING IT WORK WAS NO EASY TASK. SURE, THERE WERE SOME PROBLEMS BUT THEY WERE SURMOUNTED WITH THE HELP OF EVERYONE INVOLVED IN THE TREK. NEXT YEAR PROMISES TO BE EVEN BETTER, NOW THAT WE GOT OUR FIRST MAJOR LEARNING EXPERIENCE OUT OF THE WAY. THANKS JAY AND DONNA.



NEW MEMBERS



- #149 - Arthur G. Fraser, San Francisco, CA
'69 88"
- #150 - Ted & Sheri Birdseye, Gold Hill, OR
'57 86", '70 & '73 88", '65 & '67 109"
- #151 - Kelly Nice, Walnut Creek, CA
none listed
- #152 - W.M. Fletcher, Three Rivers, CA
none listed
- #153 - William J. Paulus, Seattle, WA
'56 107"
- #154 - Peter S. Wong, Sunnyvale, CA
'62 Doormobile 109"
- #155 - Mac & Julie McIlvine, Reno, NV
'60 88"
- #156 - Frank & Alice Mattson, St. Paul, MN
none listed
- #157 - Mark E. Masse, Manchester, NH
'69 88"
- #158 - John & Joyce Walsh, Hyde Park, MA
? 109"
- #159 - Donald Strachan, Hawthorne, NV
'74 88"
- #160 - Thomas Jackson, Mill Valley, CA
'72 88"
- #161 - James T. Alexander Jr., Manchester, NH
'61 88"
- #162 - O.L. Willoughby, Madras, OR
'63 & '71 88"

- #163 - Bernie Bane, Carmichael, CA
'68 88"
- #164 - John Schaff, Rochester, NH
? 88", ? 109"
- #165 - Bill Bond, Carthage, NY
'72 88"
- #166 - Larry Bingham, Moss Beach, CA
'73 88"
- #167 - James H. Alton, Nashua, NH
'74 88"
- #168 - Douglas P. Rippe, Stinson Beach, CA
'65 109", '69 88"
- #169 - Ronald M. Molohan, Sacramento, CA
'67 88"
- #170 - Garth Adams, S. Windham, ME
'70 88"
- #171 - Mark & Nancy Franklin, Cincinnati, OH
'71 88"
- #172 - Raymond Dunker, Playa del Ray, CA
'61 88"
- #173 - Dante & Flavia Zaro, Concord, CA
'69 88"
- #174 - Robert Blakely, Houston, TX
'72 88"
- #175 - Jerry Cole, Incline Village, CA
'72 88"
- #176 - Mark Balma/Louise Miller, Minniapolis, MN
'62 109"

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Lewiston, CA 96052
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P O Box 1068, Main St
Waterloo, Quebec
Canada, JOE-2N0
(514) 538-2888

RANGE ROVER

6398 DOUGHERTY RD #34 • DUBLIN, CA 94566



WEST COAST BRITISH

MICHAEL GREEN

(415) 829 6091

Land Rover Spares

Here is a list of parts and service establishments to aid your quest for parts. This list is published on a non-partisan basis. If you know of any others, let us know!

ATLANTIC BRITISH PARTS
P.O. BOX 109, S. MAIN STREET
MECHANICSVILLE, NY. 12118
(518) 664-6169 P,UP,R

ATLANTIC BRITISH PARTS
P.O. BOX 322, HENRIETTA ROAD
LEWISTON CA. 96052
(916) 778-3922 P,UP,R

ATLANTIC BRITISH PARTS
P.O. BOX 1068, MAIN STREET
WATERLOO, QUEBEC
CANADA, JOE-2ND
(514) 539-2669 P,UP,R

BRITISH PACIFIC
101 WEST GREEN STREET
PASADENA CA 91101
(213) 681-9783 P,SV,S

D.A.P. ENTERPRISES
36 BEACH STREET
WEST WAREHAM MA 02576
(617) 866-2342 P,UP,R,SV,S

THE GREAT AMERICAN LR CO.
7240 COOPER POINT ROAD N.W.
OLYMPIA WA 98502
(206) 866-1232 P,UP,R,SV,S

NORTH JERSEY
LAND ROVER SUPPLIES
12 WILLS AVENUE R.D. #1
STANHOPE, NJ. 07874
(201) 398-5715 P,SV,S

ROVERS NORTH
BOX 71
WESTFORD , VT 05494
(802) 879-0032 P,UP,F,SV

ROVERS WEST
731 S. VINE AVENUE
TUCSON, AZ 85719
(602) 792-0295 P,UP,R,SV,S

SCOTTY'S LAND ROVER SERVICE
45 RIDGE PARK DRIVE
CONCORD CA 94518
(415) 686-2255 P,UP,R,SV,S

SCOTLAND YARD
3101 E. 52 AVENUE
DENVER, CO 80210
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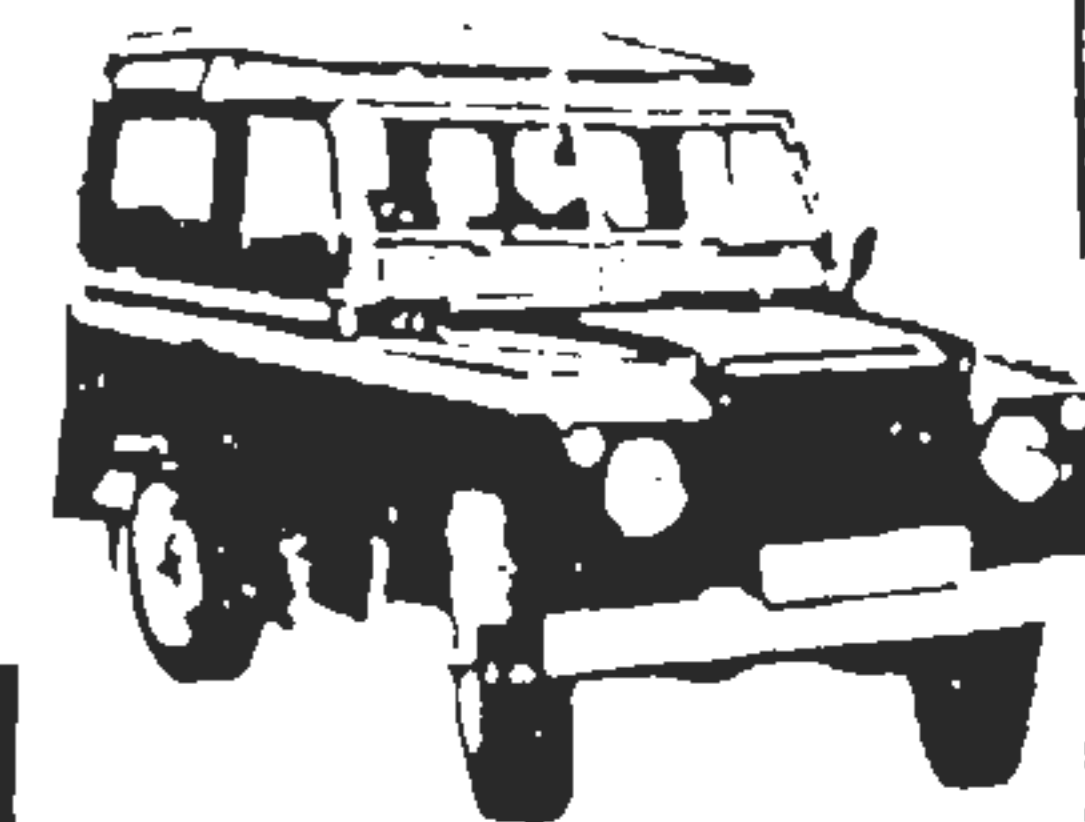
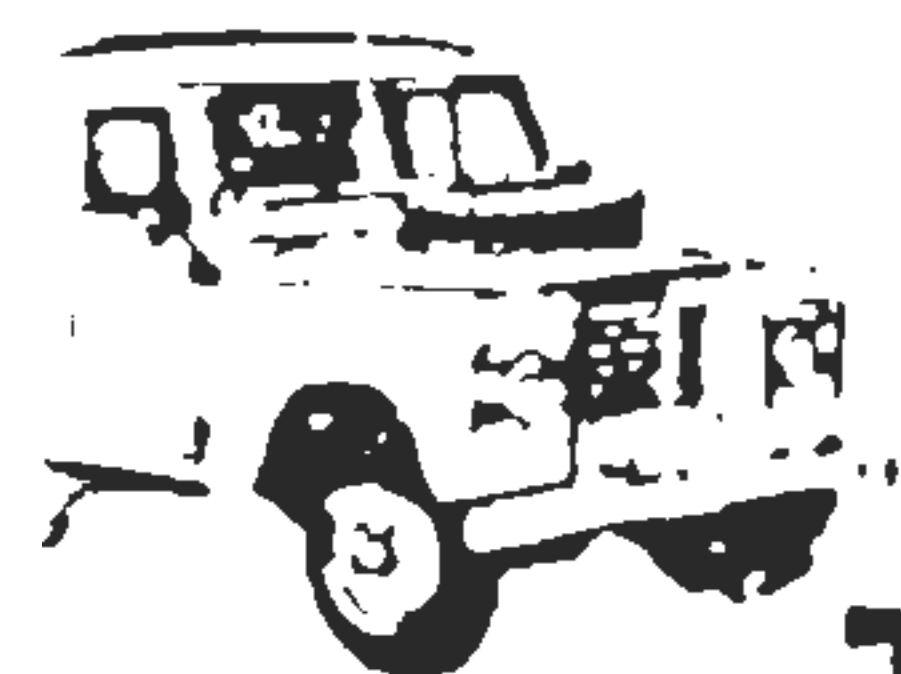
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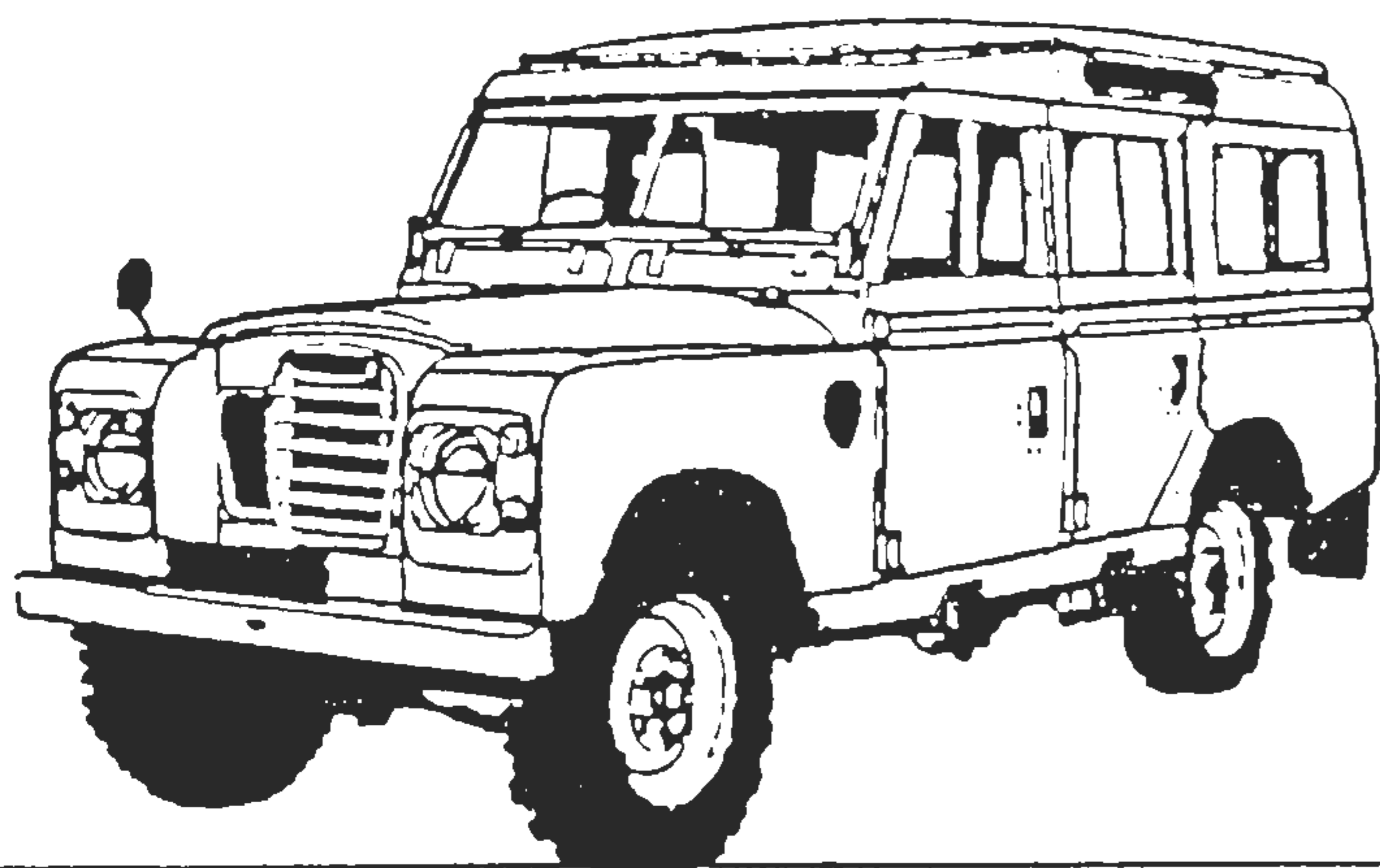
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'71 Land Rover 88 SW, all original 42K miles, d/train strong & smooth, needs frame patching & muffler - \$1900

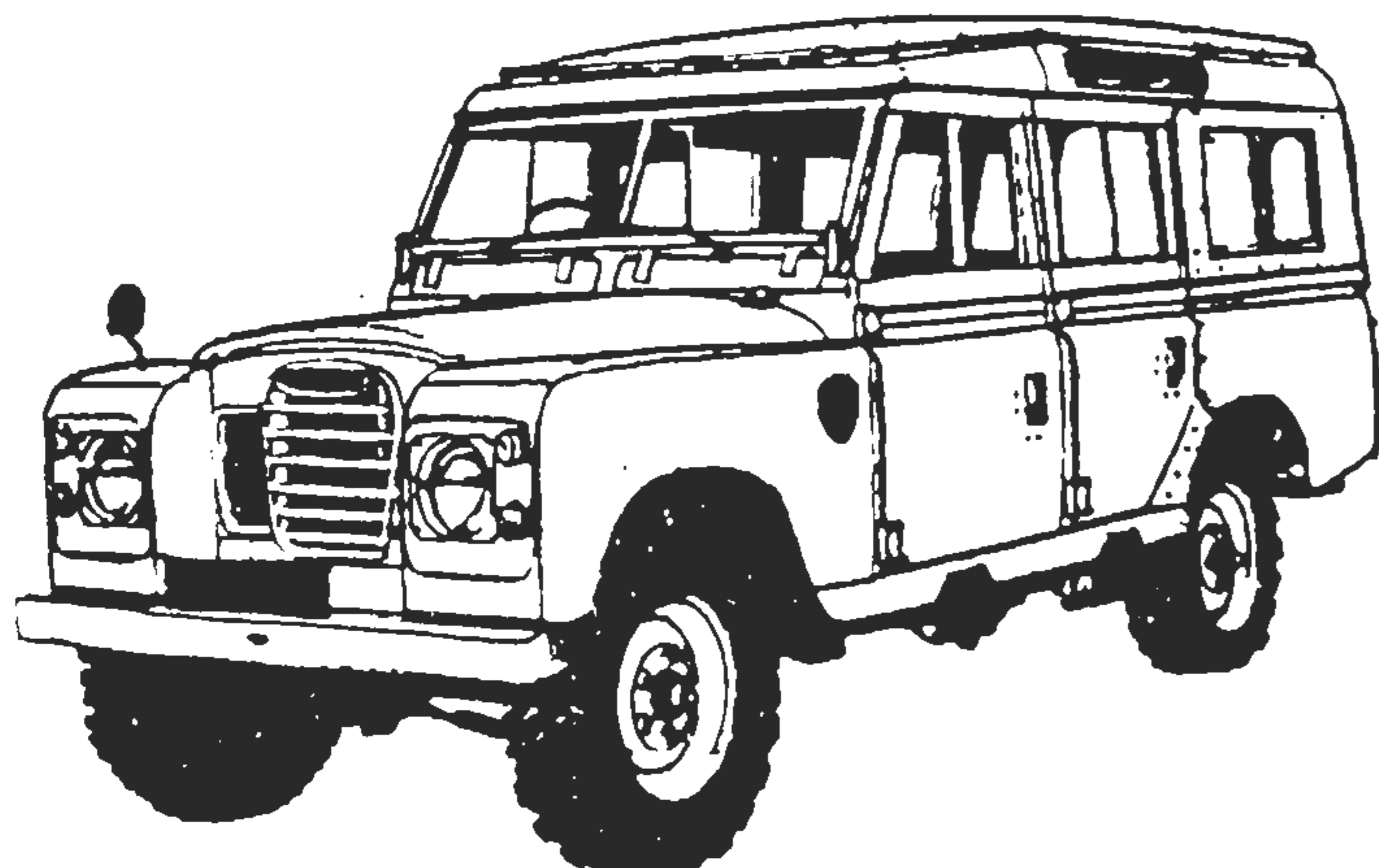
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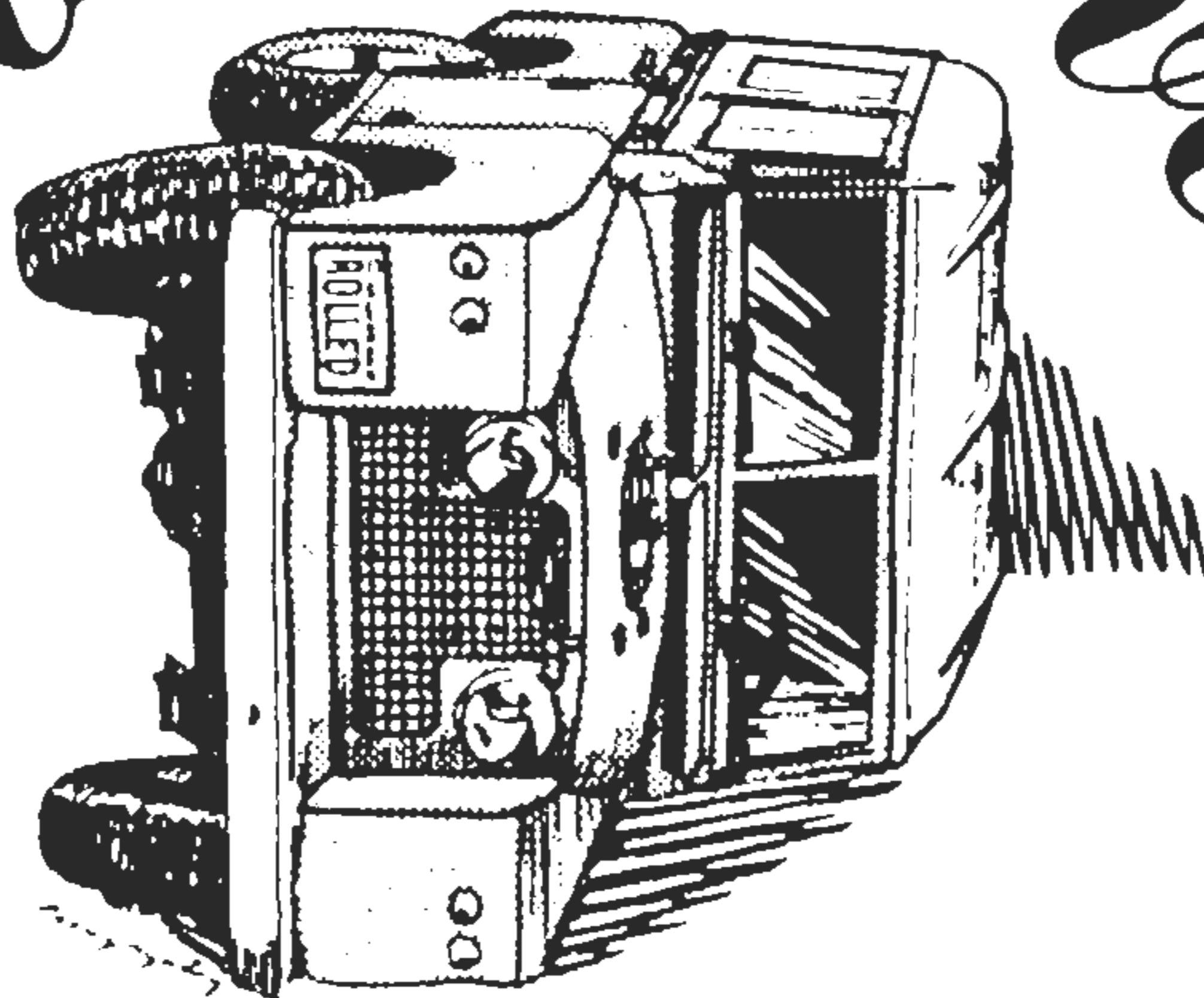
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CHARLES KELLOGG

Rolled Over



LAND-ROVER

HOW TO SMASH UP A LAND ROVER IN ONE EASY LESSON

by Pedro Gonzalez

The act of rolling a Land Rover is a rare and little-known art. Very few owners have the talent for such a feat. Considering that the safe sidehill angle for a Land Rover is thirty degrees (they have been tested to forty-five!), it's no wonder that so few have been able to join such a skilled fraternity. Some owners pass their entire off-roading careers without experiencing the mind-stopping thrill of rolling over. Read on and learn how you can join this exclusive club!

The first step is to install a set of lap and shoulder harnesses - the aircraft type used by race-car drivers. The Rover may be nearly indestructable, but the human body is a frail thing. It is very important that your upper body remain within the confines of the Land Rover.

It is helpful if this is your first time driving off-road. This blessing of inorance will keep you from executing the instinctive, split-second maneuvers that are the bane of the seasoned field veteran. Believe it, Land Rover have the nasty habit of making you a seasoned veteran in a hurry.

Pick a difficult trail or terrain. Go ahead, bite off more than you can chew. How else are you going to get on the edge? You really have to put the beast through some tough maneuvers if you expect pilot error to tip the balance. It is helpful if you allow an experienced driver lead the way. Watch his every move from a respectful distance - never crowd the other drivers. Wait

for the most difficult part of the trail. A good place would be up a steep hill with deep ruts and large rocks to block your wheels, with a convenient dropoff on one side. Be sure to approach that particular section differently than your experienced guide. If you have been doing everything right, you should get yourself stuck. Next, put it in reverse and back down a bit - just enough to put you closer to the edge of the drop-off.

At this time, to increase the drama and to have the attention of all your fellow drivers, stop moving. You must, above all else, have attentive witnesses to your upcoming great achievement. It isn't every day a LR is rolled and it would be declass' to rob your friends of witnessing this momentous event! Be subtle about this, however. You will want the sympathy and help of your friends when it comes to retrieve your Land Rover.

Now, after calling down your guide and asking what to do next, do the complete opposite of his expert advice. One way would be to conveniently forget you're still in reverse gear. So while everyone (including yourself) expects you to go up the hill, the Land Rover knows full well it is headed down the hill. The execution of the event must be precise, so it's best not to know what the heck you're doing and leave to up to the beast. Most likely, this will result in a very dramatic event.



The above cited procedure is recommended for used Land Rovers only. There will be body damage, but the ruggedness of the Rover will ensure that you are likely to be able to drive away from the scene. Do not attempt this feat with any other make of 4X4. For one thing, the cost of body repairs will be prohibitive and chances are they may not survive and end up being stripped on the spot the minute you leave the scene of the accident.

If you've chosen the right spot (a little research to find a place where other vehicles have rolled wouldn't hurt) it will be heavily wooded and littered with rocks. Your Rover may be out of reach of winches and no one may be foolish enough to risk his Land Rover trying to get yours out. A come-along and sufficient cable anchored to a tree will work just fine. To counteract those environmentalists in the crowd who may protest scarring the tree, say something like, "Heck, there's lots of trees around

here but I have only one Land Rover."

This event should only happen once in your career and if lucky, the only one within memory of your buddies. A camera is a must to document the rolled over Land Rover and to record the retrieval procedure which should involve lots of hard work getting the Rover out of its mess. For those adverse to physical work, toting a camera with emphatic shouts of, "I must record this" should keep you out of the sweaty work. If you forget a camera, prevail upon the generosity of someone with a camera to photograph the event for you and mail you the pictures. Even a complete stranger may be willing, especially if he thinks you'll never get your truck out and the only thing you'll have left are pictures of it in its final resting place. With these pictures, you will be able to relive and recount your adventures into the annals of legend. And, you'll be able to prove it to those who doubt - probably they don't own a Land Rover anyway.



(ABOVE) Almost upright.

(RIGHT) On all fours.



(LEFT) The results of my handiwork.

Land - Rolling

THE ART OF STAYING IN ONE PIECE

by Jim Allen

There is no such thing as a good roll over, but if you can walk away from one you might say, "Thank goodness I took the time to prepare." Yes, you can (and should) prepare for the worst. By now some of you are scoffing, saying, "Heck, I bin drivin' off-road fer twinny yers 'n never had a problem." Well, good for you! Maybe you are an exceptional driver or have been lucky (maybe a little of both). The fact is, off-road driving can be a hazardous business and sometimes despite every precaution, accidents occur. Don't forget the human factor either; we all make mistakes. Another myth concerns the strength of the Land Rover top. While it offers good protection from the elements, it can hardly be considered the ultimate safeguard. In relatively mild situations, it will hold up enough to protect the occupants. In a serious multiple roll, it is highly likely to be torn off (there really isn't much holding it to the rest of the LR is there?) Read on and learn more about protecting you and your passengers from injury in rollovers and other accidents.

YOUR FIRST LINE OF DEFENCE

"Okay," you ask, "what can I do?" The answer to that lies partly with your pocketbook and partly with your conscience. When it comes to buying that Weber 2-barrel or a good set of safety belts, what are you going to do? Seat belts should be considered your first line of defense against injury in a roll or any other kind of accident. The bare minimum is a set of lap belts which will keep you within the vehicle, but will not prevent your upper body from thrashing around the interior of the Rover or hanging out that shattered drivers side window. The factory shoulder belts are only a little more protection, as they still allow too much movement side to side. Your best protection lies with a four way racing harness.



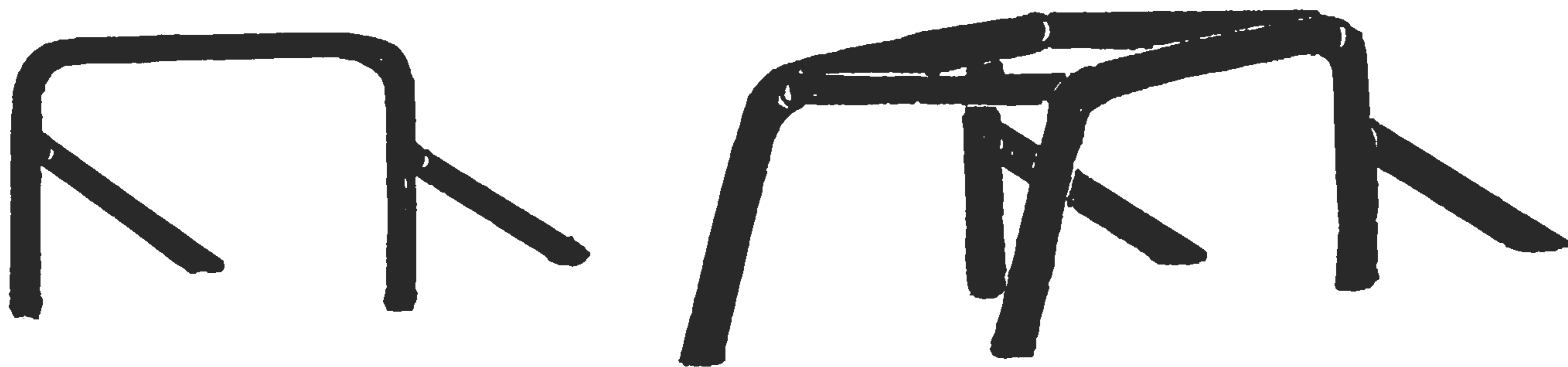
This setup will keep you well secured from all angles. Most manufacturers offer a quick-release feature that will allow for a hasty exit from your rolled Rover if that becomes necessary. Did you know that almost every OEM seat belt will not release with a strain on the latch? Imagine hanging upside down and not being able to release the belt! The illustration shows the PYOTECT racing harness. Another factor to consider is the age of your

LAND ROLLING (continued)

current set of belts, whatever the type. Age, stress and ultraviolet light has taken a toll on these belts. They may be reduced to a mere 50% of their original strength by these effects. Look closely at the way your belts are mounted. A belt looped through a slot in a flat piece of steel may be cut if sufficient force is supplied. Properly mounted belts have plastic buffers between them and their mount. Eye bolts are the best way to mount seatbelts. They allow for movement and retain 100% of the belt strength at any angle.

YOUR SECOND LINE OF DEFENCE

Next to a good set of belts, a good roll bar, better yet a full roll cage is your best bet to survive the unspeakable. They will provide protection from a roll and in some cases from a collision. The most commonly seen roll protection for Land Rovers is the single tube roll bar. This type of roll bar (see illustration below) offers good protection in all but the most severe situations. In conjunction with the factory hardtop, you could consider yourself adequately protected. The weak point is the windshield frame and firewall area. With your top off, the windshield frame loses much of its structural integrity. For hardcore off-roaders who often go "topless", a full cage is the safest bet (see illustration below). The one hitch to



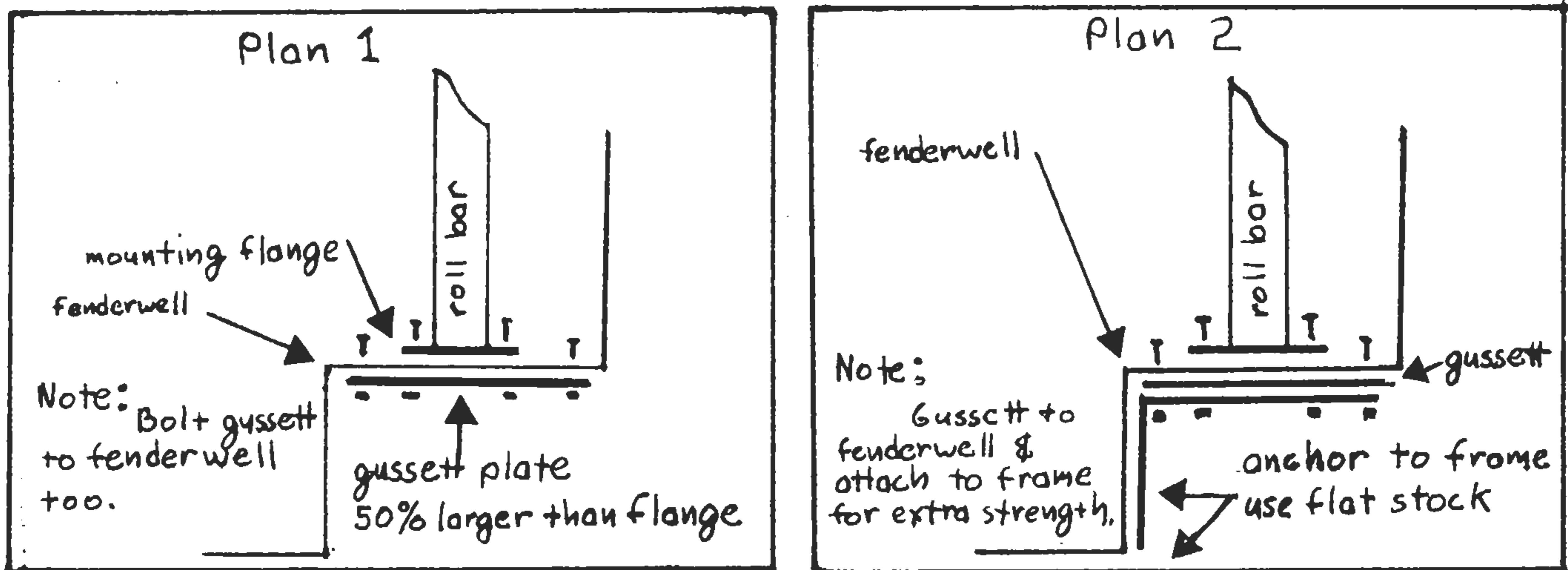
obtaining a roll bar is that there is no one in the U.S. currently producing them other than on a custom built basis. Smittybilt, a large producer of roll bars and off road equipment, built bars for Rovers some years ago. A phone call to them yielded a small hope. They stated that if sufficient interest were generated, they could produce them again. All they would need is a minimum of ten orders and a vehicle to take measurements from. Interested, write to: SMITTYBILT, Inc., 2124 N. Lee, South El Monte, CA 91733 or call them at (818) 442-1788.

Some owners have modified bars from other vehicles to fit Land Rovers. Richard Brengeman, #43, ordered a Toyota Land Cruiser rollbar narrowed by 4 inches. He reports that it fits

LAND ROLLING (continued)

well on a stripped out interior but might need to be narrower if used with a Deluxe Interior. Of course, custom bars can be built by welding specialty shops with heavy pipe bending capability. Beware of "show bars" or "light bars". They are merely exhaust tubing bent to look like roll bars and only good for show. Also, watch out for chrome roll bars: they are not as strong as the painted type due to being made brittle by the chroming process.

When installing a roll bar, always use hardened bolts (grade 8 or better, and be sure to gusset where it is mounted. This prevents it from tearing away from the fenderwell where it is mounted (see the illustration below for some ideas on how to do this). Once your bar is installed, buy a padding kit and pad that sucker. If annoying bumps on the head during everyday use doesn't cause brain damage, slamming your head into it in a serious situation will.



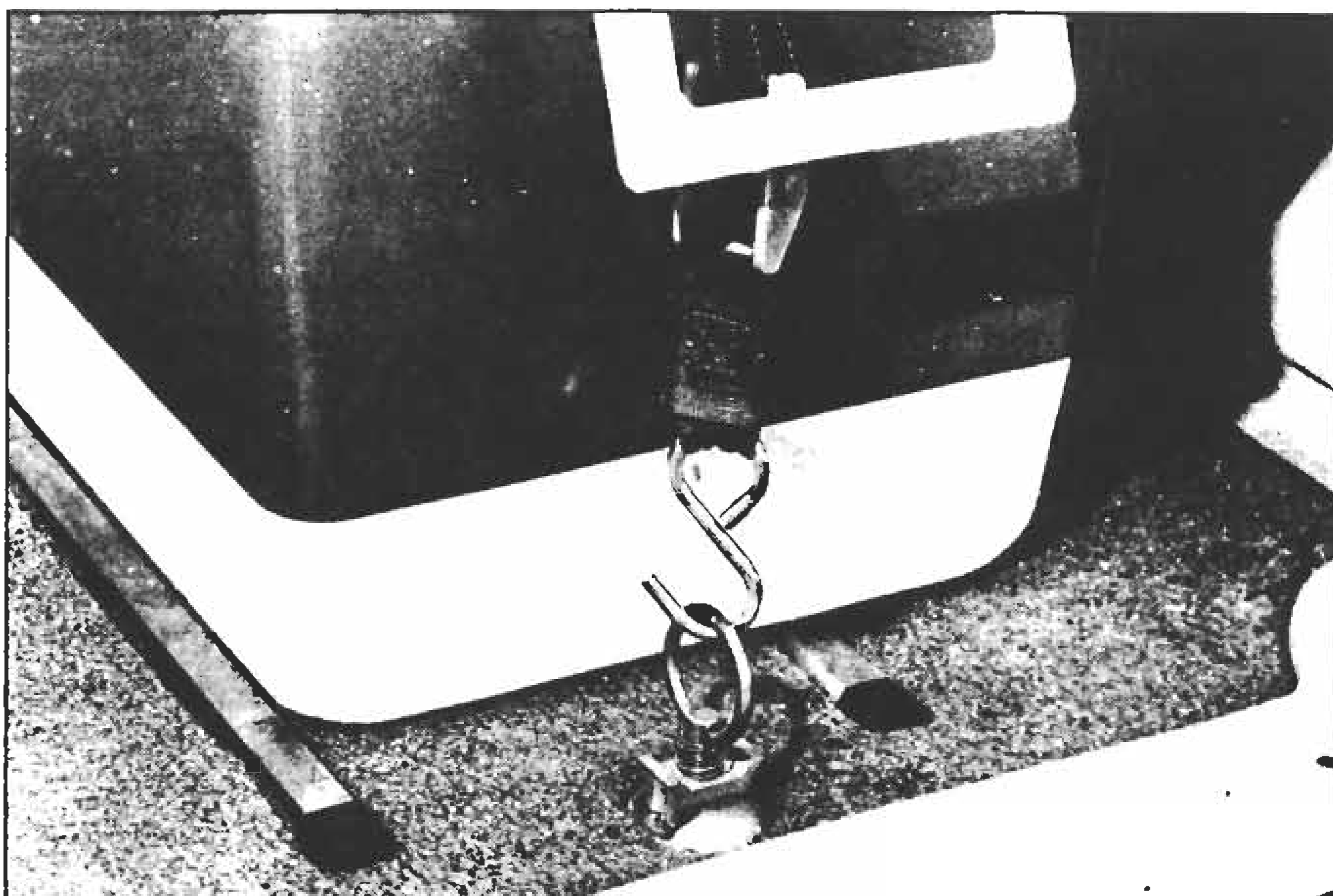
YOUR THIRD LINE OF DEFENSE

Massive head injuries can develop from loose gear careening around the inside of your Rover as it rolls. Secure all your equipment as if you expected your Rover to be parachuted from a C-130. If loose equipment rattling around the back of your rig isn't annoying in itself, the safety aspect alone is reason enough. The picture on the following page shows one rather slick method of securing gear. All loose gear too small to be secured by itself should be put into another container, such as a plastic milk case, and tied down.

SUMMING UP

If you follow the guidelines in this article, you will better your chances of surviving a serious rollover and make a minor one something you'll be able to yarn about sitting round the campfire. Just remember, all the preparation in the world can't protect you from careless driving! Use your head or lose your head!

LAND ROLLING (continued)



Ancra tie-downs and anchors help keep the gear cinched down inside the vehicle while off-roading.

The spring-loaded anchors can be removed from the base, keeping the cargo space open. The aircraft grade hardware is more than tough enough for off-roading.



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Black Rock '85

by David Collings

★ PART II ★



Next morning, it was unanimously decided to head south, returning to the Western Pacific right-of-way for easier access to the Black Rock. Enroute we made a stop at an abandoned ranch with the buildings still intact. The main house was built entirely of railroad ties. Several cars (and parts thereof) lay scattered around the yard, including an English Ford "Consul".

About the time we arrived it began to rain. Heavy at first, then gradually diminishing to a steady drizzle. After leaving the ranch, we made one more stop along the Western Pacific right-of-way at the intersection of the old immigrant trail, usually referred to as the "Lassen/Appelgate," where a historic marker designates the route taken by those early pioneers. Ruts made by



Land Rovers in the rain.

the old wagons were still very much in evidence. The cameras came out and while pictures were being taken, someone walked over to the rail bed and discovered, to everyone's amazement, fossils in the ballast rock. These were of plant ferns and similar growths all fossilized in a sandstone formation. The railroad had obviously dug out an old geologic formation dating back several million years and

hauled the broken deposit for use as ballast material. We all brought home nice specimens.

The ailing members of our party decided that this was a good time to head back to Gerlach. Paul and Opal (with the broken gearbox), Chuck (with a broken gearshift) headed back. I gave them escort back to Gerlach, where Paul and Opal left for Sacramento and Chuck parked his Rover at a safe spot in town and came with me to meet the rest of the party.

The main group was proceeding along the Pioneer Trail out into the Black Rock Desert to find a safe crossing of the Quinn River. This river originates in Eastern Oregon and proceeds southwesterly picking up strength and volume along the way. It ends up emptying into the upper regions of the Black Rock Desert. It is possible to have heavy water flows from storms that are too far away to detect. Also, even during the dry parts of summer, there is always some underground flow beneath the cracked and dry-appearing river bottom. Most times, this dry crust will support the weight of a vehicle, though drivers should beware. A vehicle that breaks through will encounter an almost bottomless quagmire of gooey mud. All Rovers made it across, save one that

BLACK ROCK (continued)

broke through when he got a little too close to another's tracks.



At times, the Quinn must be forded with four feet of water flowing.

Lunch was taken by the main group at Black Rock Springs. This area was an important watering stop for pioneer wagon trains. There is scarce evidence of man's passage except the remains of an old sheepherders wagon. This landmark has somehow managed to evade the vandals' touch for these many years. There could be hope after all!

"Yup! Looks like yer stuck alright!"



Landmark sheepherders wagon at Black Rock Point. Indian arrowheads were found near here plus some WWII .50 cal. bullets.

On the way back from dropping off the ill Land Rovers, we reached the main party on the C.B. and made plans to meet them at the Double Hot Springs. We explored the hot springs while waiting for the main party to arrive and found them fascinating! A group of rock hounds shared the area with us. The water in the two pools was very

hot and varied in hue from medium green to dark blue. We allowed a cupful to cool and discovered a very mild tasting, very drinkable water.

The main group arrived in a cloud of dust and after the new arrivals had the chance to examine the springs, we departed for Hardin City, the ruin of a late 1860's silver town. There is

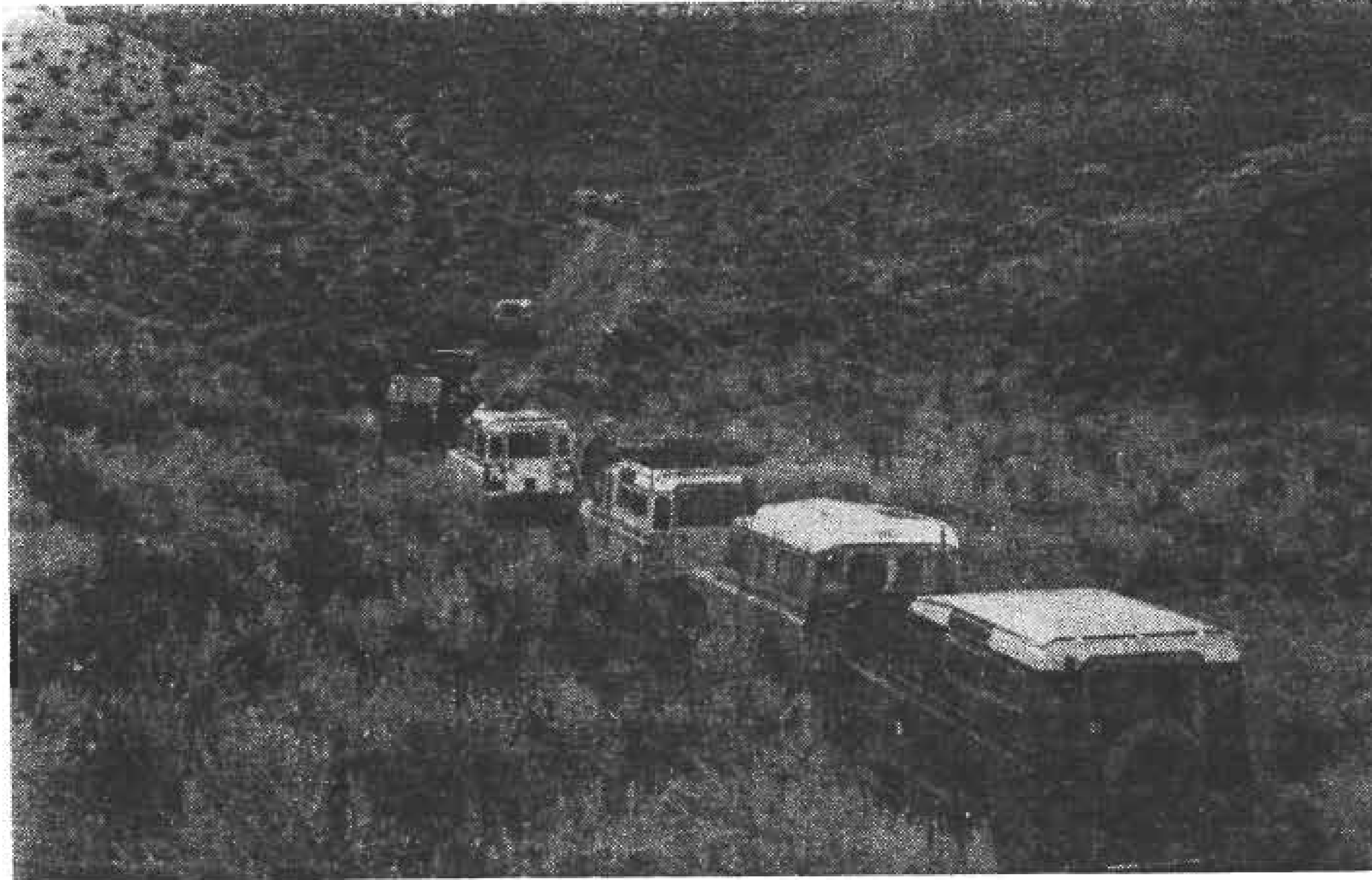
BLACK ROCK (CONTINUED)

little left of Hardin City but the foundations of a few of the more substantial buildings. Still, a few arrowhead, surprisingly enough, were turned up along with items of paleface ancestry.

After Hardin City, we proceeded north once more ending up at a spring nicknamed "The Black Rock Hilton." This is a series of small rock dams forming small pools of warm spring water. The water temperature was just wonderful for relaxing after a day or two of eating alkali dust. The water reached over your shoulders if sitting on the bottom and with little or no movement became crystal clear in minutes. It sure felt good! After about an hour, we began climbing out, drying off and getting ready to continue the trek.

Our next point of interest was Fly Canyon. It seemed strange to climb up a mountainside only to find yourself stopped by a near verticle precipice. Faced with this obstacle, pioneers lowered their wagons with ropes to the canyon floor. We, of course, used the more recent trail along the side of the hill. On closer inspection, we could see marks on the rocks that were used as dead-men to lower the wagons down. The pioneers used manpower to move the boulders that lay in their path. These appear to be 8-10 ton boulders, ranging in diameter from 6 to 8 feet.

After fly canyon we entered a large valley with a smooth bottom, heavy sage and a fair sized lake. Named High Rock Lake, this 200 acre reservoir is deep enough for swimming or whatever. Along the west side of this valley, we could see a dark cleft in the mountains. This is the southeast terminous of High Rock



On the trail to high rock canyon.

canyon towards which our caravan of LRs drove. Along the way, the trail became two deep ruts. The trail was worn into the the canyon bottom about hood high on a Land Rover. With a foot of billowing dust on the trail, we drove single file over the rutted trail until the walls of the canyon closed in. These solid rock walls, more than 200 feet high, reminded me of El Capitan, in Yosemite Valley. Where we finally set up camp, there is a small, well defined cave with the writings of

BLACK ROCK (continued)

pioneers in axle grease on the interior walls. The wind was barreling down the canyon causing much discomfort in the group. We erected wind breaks and in this relative comfort, prepared our evening meals. After supper, we sat around the campfire and swapped hair-raising stories till well into the night.

Sometime after midnite, it started to rain, a drizzle at first, then a heavy downpour. In the wind, even tents were useless. Only those camping inside their vehicles or in very weatherproof tents stayed dry. Several of us, sleeping bags sodden, retired to wait out the night inside our Land Rovers. After this long night, dawn came to a drenched campsite. Anything left outside was soaked. Sleeping bags, full of water, weighed 50 pounds. After a breakfast, prepared between the raindrops, we loaded up and prepared to leave. Two Rovers were reluctant to start due to wet ignitions and mine wouldn't shift due to a hydraulic leak and had to be started in gear. Finally,



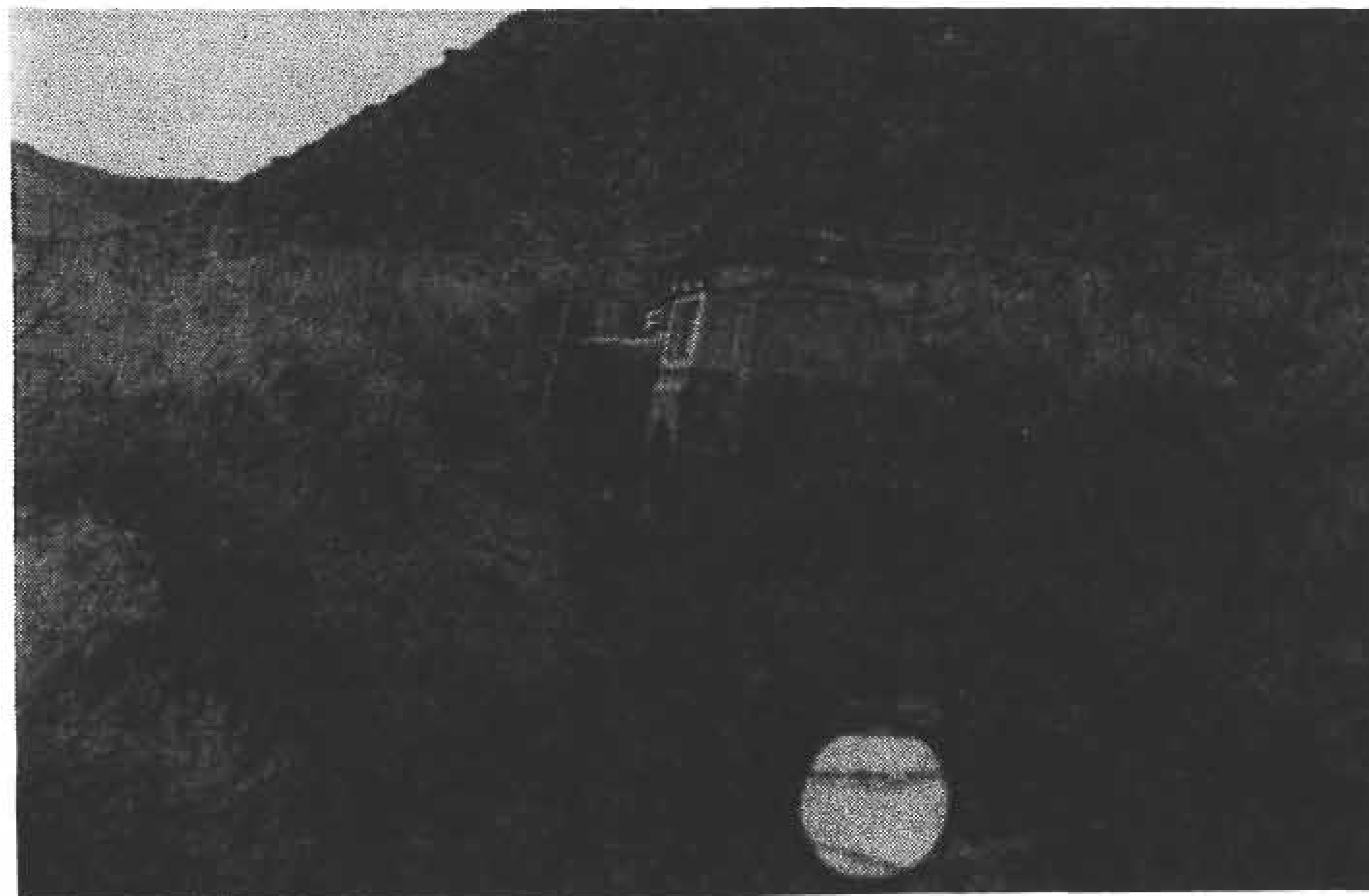
The drowned high rock campsite shortly after dawn.

everybody got running and it was back to High Rock Lake. Now, the day before, we had come in thru sections of dusty, rutted trail. Leaving was a different story. The rain had turned the dry powder into a giant mudhole. Steering was impossible. In the worst stretches, you eased on thru with little control, praying you would miss the boulders at the side of the trail. One at a time we made the plunge and finally emerged, unscathed at High Rock Lake. We decided not to take the most direct route back to Gerlach so as to avoid several sidehills that might have been dangerous in the wet conditions. Instead, we used the Soldier Meadows Road. On the way back we encountered several

BLACK ROCK (continued)

rain swollen creeks. They were no trouble really, just up to the bottoms of the doors on most of our Land Rovers. Finally, we got back onto improved roads and the going was good all the way to Gerlach, with only a few rain squalls along the way to mark the passage.

The going was a little rough at times, but all of us, I'm sure are ready to go next year. See you there!



Just a little muddy here. Very slick conditions and difficult to control the vehicle in places.

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TECH TIPS

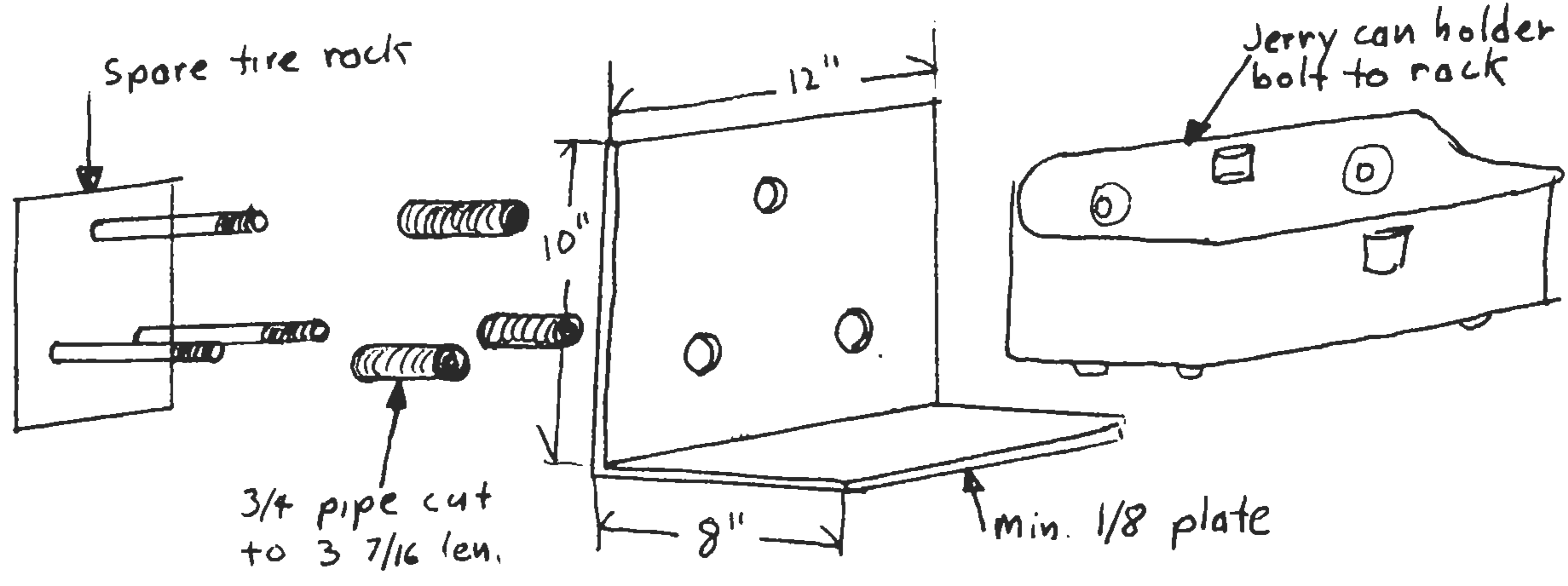
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How grown tips from the members to the members. If you have found a unique solution to a unique problem or just have an easier way to do an everyday task, share it with the rest of us here in TECH TIPS BY THE NUMBERS. To write in, state the problem and your solution as simply as you can. Drawings are OK. The Editor reserves the right to edit the material, as needed, for space considerations and readability.

SIMPLE JERRY CAN RACK

A very simple jerry can rack can be made to bolt on the rear door spare tire carrier. It is not permanent and can be removed easily when not used. Buy a piece of plate steel and have it cut to the dimensions shown below and bent 90 degrees. Minimum thickness for the plate should be 1/8s inch. Once you have the plate done (it cost me \$10), simply drill the three holes to match the three on the carrier, bolt on the can holder and bolt onto the rear door using spacers, as shown. Your part of the job takes about an hour, not including painting.

Note: Ring from tire rack can be used behind rack as a spacer.

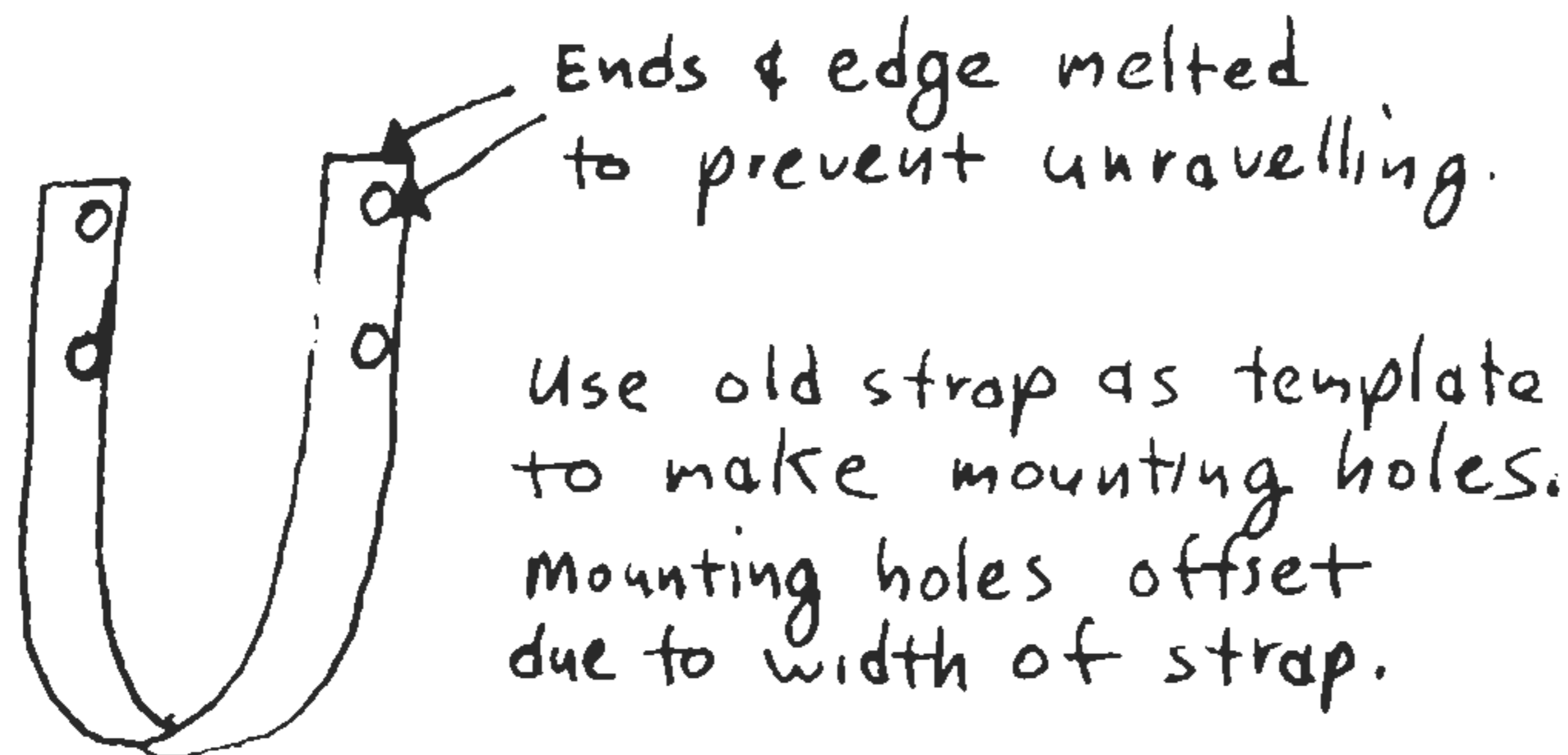


Jim Allen, #2

TECH TIPS (continued)

REPLACEMENT REAR AXLE CHECK STRAPS

When my check straps rotted away, I let them go for a time, but later began worrying about pulling my rear shocks apart when really working the suspension. Walking thru a wrecking yard one day, I spotted a length of nylon tow strap about 1 3/4 inches wide. It was the type you find in auto parts stores for about 6 bucks. I cut two lengths of 33 inches, measured then cut the mounting holes with a gasket cutter, and lastly melted the edges of the holes and ends of the straps over a flame to prevent unraveling (be careful not to overdo this part - too much heat will weaken the nylon). The 1 3/4 straps are a little wider than the originals so the holes must be offset. These new straps are at least three times stronger than the originals, and will never rot.



Jim Allen, #2

OF SLEEVES AND SEALS

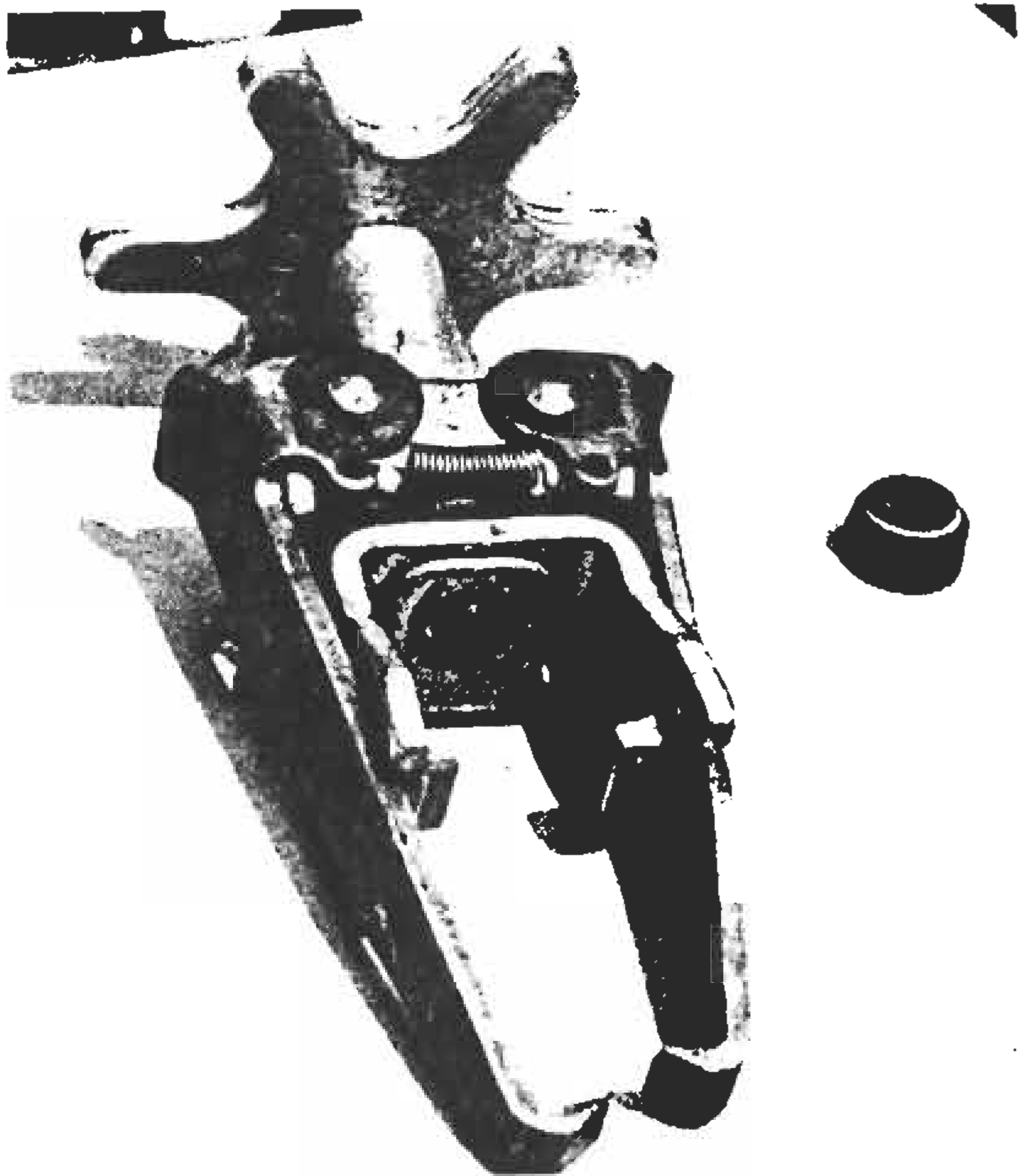
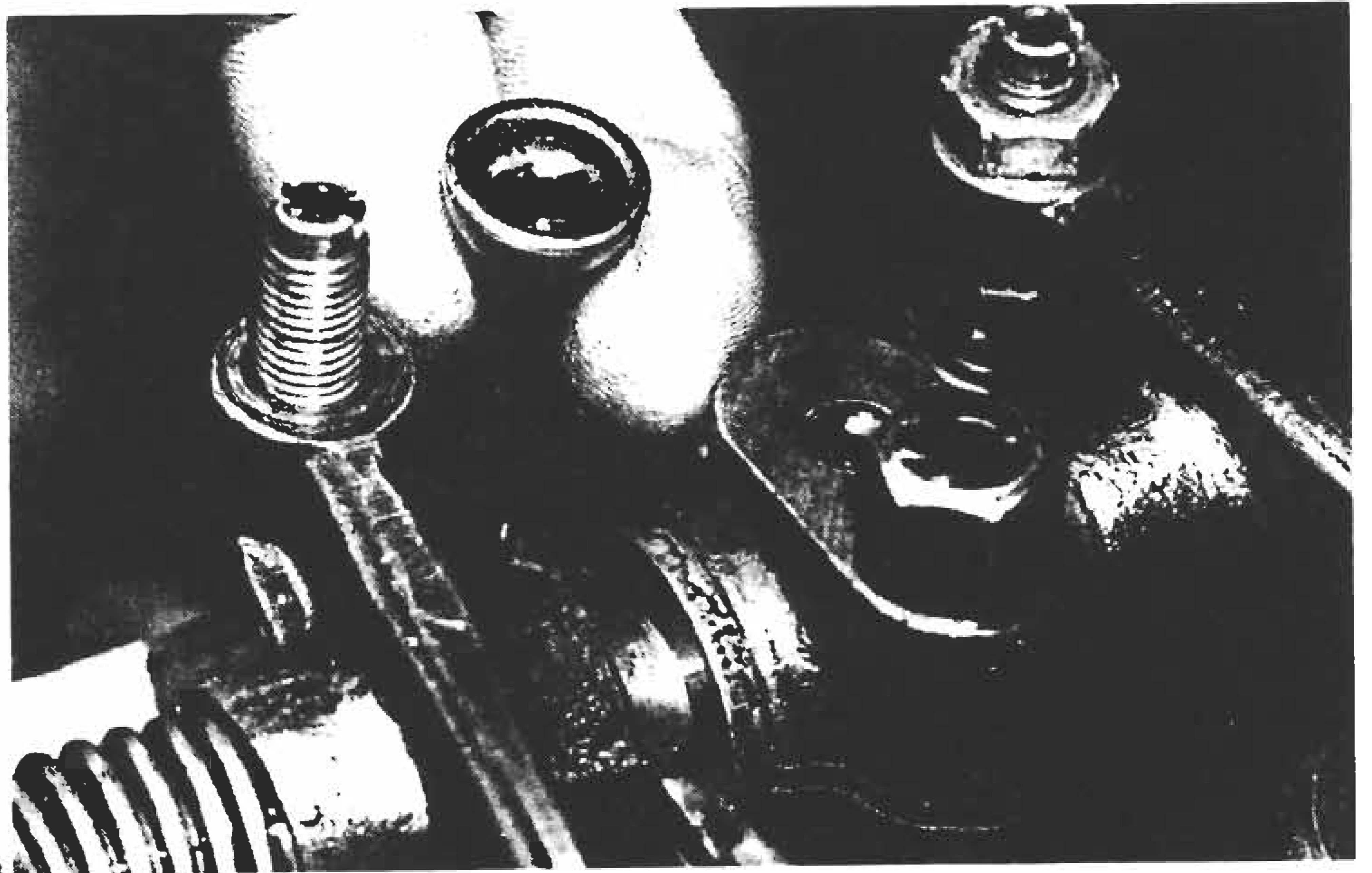
The wheel hub seal rides on a piece call the distance sleeve, a removable collar on the stub axle. This can wear from the constant rubbing of the seal and can cause a leak even if a new seal has been installed. If you rub your fingernail across the sleeve and feel (and usually see) a groove, it's time to replace it. The old sleeve can be removed with a cold chisel, taking care not to nick the stub axle. Sometimes it must be heated and expanded to come off. At home, several applications of boiling water might be enough to do the trick. For easy installation, cut a piece of 2" pipe to a length of 5 1/2 inches, screw a cap on one end and use it as a driver. Also, when installing new seals, always lightly lube the distance sleeve. A dry one will cause abnormal seal wear.

Charles Kellogg, #5

DON'T JUNK IT—FIX IT!

By Gerald T. Ahnert

LAND ROVER PUFFING OIL?



A

Keeping that Land Rover alive is becoming more and more of a problem. British Leyland stopped importing the Rover car in the late '60s, then the 109 Land Rover, and finally the 88 Land Rover in late 1974. Although rumors persist of the Land Rover being imported again, and perhaps even the Range Rover hitting the American market, the trend is still downhill. Some garages have stopped servicing Land Rovers and will only order parts for you. British Leyland in New Jersey is still importing parts for Land Rovers and there is still the ace-in-the-hole Atlantic British Parts.

One way to keep your Land Rover alive is to diagnose problems when they begin.

B

After 100,000 miles, up-and-down and around four continents, into the Sahara desert twice and across it once, zig zagging across the North America and up the Alcan highway to Alaska, my 1969 Land Rover started using a little oil. On starting the engine, a blue cloud of smoke blossomed from the tailpipe and quickly stopped—characteristic of oil running down the valve guides into the cylinders when the engine is shut off. The action of the valve stems in the valve guides prevents very little oil from leaking during engine operation (unless the valve guides are badly worn) so the oil is burned off in the first few seconds of the engine starting.

If this happens to your Land Rover don't panic and think about doing an engine job and shorten your engine's total life, or pulling the head and replacing the valve guides. This may not be the problem. It may be nothing more than worn or damaged valve stem oil seals. If you have a "K" series or newer Land Rover, replacing the seals is easy and inexpensive. You lose nothing if this doesn't solve the problem as you will need new seals anyway if you have to replace the valve guides. Learning to do this simple operation is also a dry run for doing emergency repairs in the boondocks.

The biggest expense is the cost of an

overhead valve spring compressor. With the valve spring compressor you can replace the worn valve stem oil seals without removing the head. This handy tool will also enable you to replace broken or weak valve springs. The Universal Overhead Valve Spring Compressor number 2078 (\$9.85) can be found on the K-D Tool rack in automotive stores.

If your Land Rover uses external valve stem oil seals and you can't get them from your British Leyland dealer, order Lip Seal for Inlet Valve number 5596 and Lip Seal for Exhaust Valve number 5597 (for each cylinder) from Atlantic British Parts, Ltd., Box 109, Mechanicville, New York or Box 756, San Marcos, CA 92069. They cost 25 cents each from Atlantic British Parts and it would be wise to order a few extras as spares.

This same operation can be done on most engines that have overhead valve stem oil seals using the required seals. If you have a suffix "J" Land Rover or older, check to see if the valve guides have been replaced with the newer type that take external valve guide oil seals (as shown in photo B). The older type takes an internal mounted oil seal, called an

A. The two main items for doing this simple job: a valve spring compressor and valve stem oil seals.

B. Removing the push rod so the tappet can be flopped back to facilitate the valve spring compressor.

C. The valve spring compressor in place on a valve spring. Note that this can be done without removing the head.

D. The arrow points to the culprit. This type oil seal is used only on Land Rover valve guides with external grooves for seating the oil seals. Older models have internal seals.

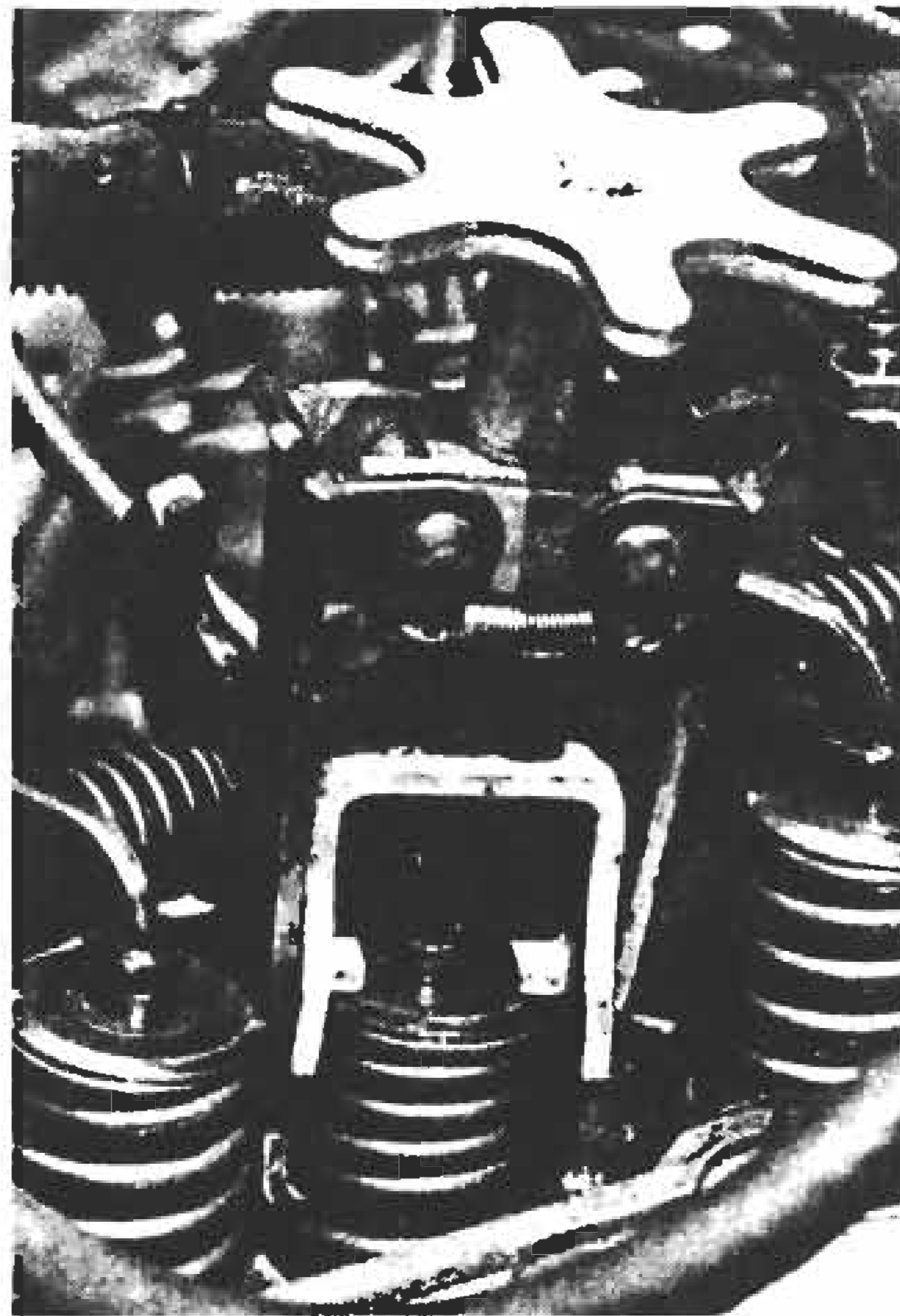
E. The arrow points to the spring that identifies an inlet valve oil seal. The seal on the right without the spring is for the exhaust valve. The external valve guide oil seal is used on Land Rovers suffix "K" and newer, and on suffix "J" and older if the valve guides have been replaced with the newer type.

O-ring, and can't be mounted without first removing the head.

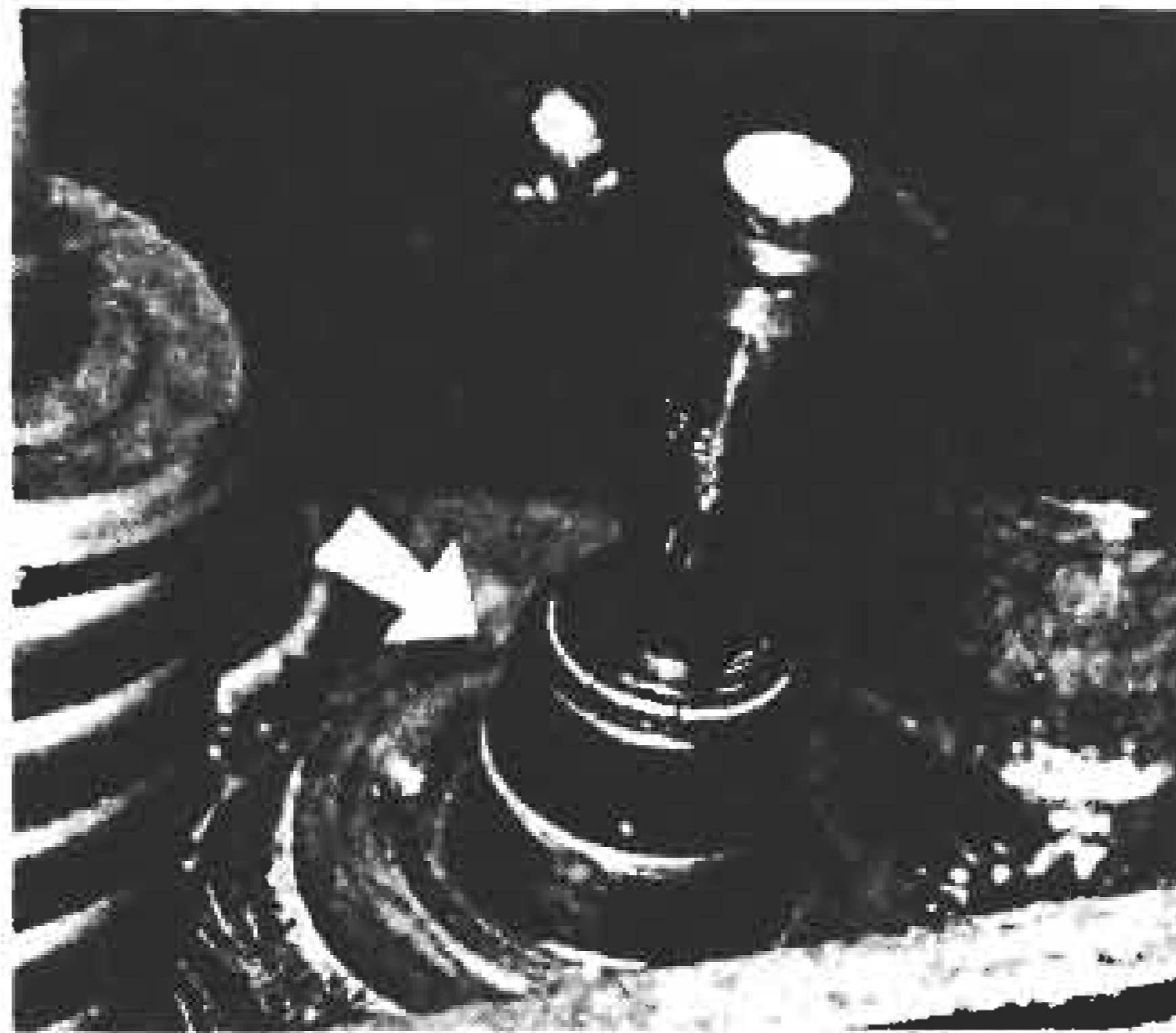
If you break the old valve cover gasket, and have the standard four-cylinder 2 1/4 litre petrol engine, Valve Cover Gasket number 344 is available for 50 cents from Atlantic British Parts if you can't get it from British Leyland.

The total cost of this operation is \$12.35 and you will have the bonus of a very useful tool added to your toolbox.

Another tool needed is one you can make yourself. It is a metal rod about 10 inches long with about 3/4-inch of one end bent at about a 30-degree angle. The diameter of the rod can be from 1/8 to 3/8-inch. Make sure there are no loose



C



D



E

metal filings or chips ready to break or fall off the rod as it will be used inside the combustion chamber.

Now that you have these parts, your toolbox, and put on your wife saver (overalls), you are ready to begin. The design of a Land Rover makes it easy to work on. Remove the hood by taking out the cotter pins from the hood hinges and the pin from the hood prop. The lightweight aluminum hood can be slid off easily—that is if you have removed the spare tire from the hood mount first.

Remove the valve cover by taking off the three nuts. Do this gently and you may be able to save the valve cover gasket. Make sure the piston for the exhaust and intake valve you are working on is at the top of the cylinder. This can be done by removing the spark plug and checking through the spark plug hole with a flashlight or by feeling the piston top with a screwdriver blade. When the valve spring is removed the valve will drop a few inches and rest on the piston

top leaving the valve stem exposed above the cylinder head.

Loosen the valve adjustment screw for the valve you are going to work on. Turn the adjusting screw all the way out so the tappet is loose. Photo B shows how to remove the push rod. Force the tappet to one side against the rocker shaft spring with a screwdriver blade. This will slide the tappet along the rocker shaft enough to remove the push rod with your fingers as shown.

Next flop the tappet out of the way so that the valve spring compressor can be utilized as shown in photo C. When the valve spring is compressed, the valve will have some free play. Slide the homemade rod with the bent end through the spark plug opening. Move the valve up and down with compressor until you can feel the rod against the bottom of the valve. Hold the rod end tightly against the bottom of the valve forcing it to stay up. This may be a little awkward at first, but it is easier and cheaper than removing the head and is also good to learn to do for emergency purposes. Holding the valve up with one hand on the bent rod, place your other hand on top of the valve spring compressor and push down. This should dislodge the split cones so they can be removed and the spring lifted from the valve stem. If you cannot dislodge the split cones this way give the retaining spring cap a few light, but sharp, whacks with a small hammer to dislodge them.

There is a tool that screws into the spark plug opening that hooks onto an air pressure hose to force air pressure into the cylinder to hold up the valves. If this is available it will make the job easier, but this is an added expense and carrying an air compressor in the Sahara or Mojave desert isn't practical.

Photo D shows the valve spring removed from the valve stem. The arrow points to the valve stem oil seal. This style seal is for suffix "K" and newer Land Rovers or for suffix "J" Land Rovers and earlier if they have the new type valve guides. If the valve stem oil seal is worn the valve will fall freely from its own weight. A new seal will hold the valve up and the inner edge of the seal that contacts the valve stem will dimple up and down when you move the valve. If the old valve seal isn't doing its job you will notice oil on the inside surfaces of the oil seal when you remove it. The seal shown in photo D is for an inlet valve. The difference being the little spring (arrow, photo E) in the groove of the inlet valve oil seal and no spring in the groove of the exhaust valve oil seal. Another reason the inlet valve seal may not be doing its job is if the little spring is damaged or missing. Exhaust and inlet valve oil seals are shown in photo E.

Continued on page 76

PUFFING OIL?

When you pry off the old oil seal you can let the valve rest against the piston. Slide a new seal down over the valve stem and make sure it is seated in the groove on the valve guide. Again, make sure the correct seal is used for the correct valve. Hold the valve up with the homemade bent rod tool and place the valve spring in position compressed with the valve spring compressor tool. Put the split cones in place and make sure they are seated by giving the top of the valve stem a few whacks with a hide or hard rubber hammer. Next flop the tappet back in place and install the push rod back in place by using the same method in photo B. Do one complete valve at a time to insure that the same push rod and other parts are used for the same valve they were removed from.

After the valve stem seals are renewed and the tappets in place, the tappet clearances must be set. The manual recommends all valves, hot or cold, be set at .010 (0.25mm). Of course, there is a tolerance change as the engine heats up and it isn't good if this gap goes below .010. A loose "magnetic" fit instead of a tight "magnetic" fit will make up for this difference in tolerance change when the engine heats up. The order of setting valve clearances with number one tappet being at the front of the engine is:

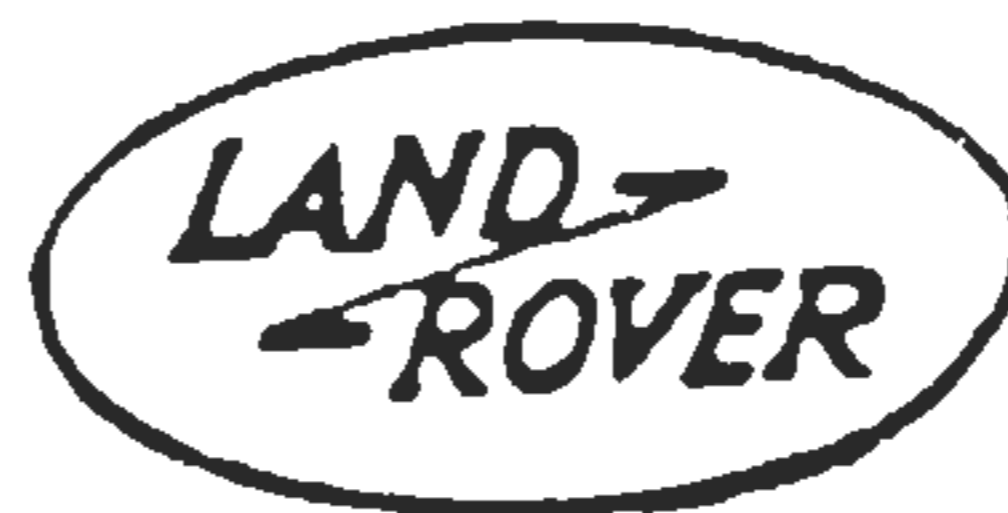
Set #1 tappet with #8 valve fully open.
Set #3 tappet with #6 valve fully open.
Set #5 tappet with #4 valve fully open.
Set #2 tappet with #7 valve fully open.
Set #8 tappet with #1 valve fully open.
Set #6 tappet with #3 valve fully open.
Set #4 tappet with #5 valve fully open.
Set #7 tappet with #2 valve fully open.

Make sure all locknuts are tight. An emergency setting of tappet clearances can be made without a feeler gauge and is good to practice during this operation. The Land Rover valve adjustment screws have 24 threads per inch. This means that one complete turn of the screw will change the clearance by .0416 inch. Turning the adjustment screw by 1/4-turn will give 1/4 of .0416 inch or .0104 inch. Make this setting by first turning the adjustment screw until it just contacts the valve stem and then back off by 1/4-turn. The slotted top of the adjustment screw makes eyeballing a quarter-turn easy. Of course, this will give you only *approximately* .010-inch clearance and should be checked as soon as possible with a feeler gauge.

After the valves are set replace the valve cover and you're ready to go. The Land Rover this operation was done on has no noticeable oil burning after 5000 miles of operation. As was mentioned before, this may not be an absolute cure for your oil burning problem, but, for a few dollars and a few hours work it's worth the try.



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ODE TO LAND ROVERS

With roaring, crashing thunder,
As we throw the rocks asunder,
And climb the hill from under,
Our Rover makes the top.

We shift down into compound low,
And know there's nowhere we can't go.
We always seem to have to show
The others how it's done.

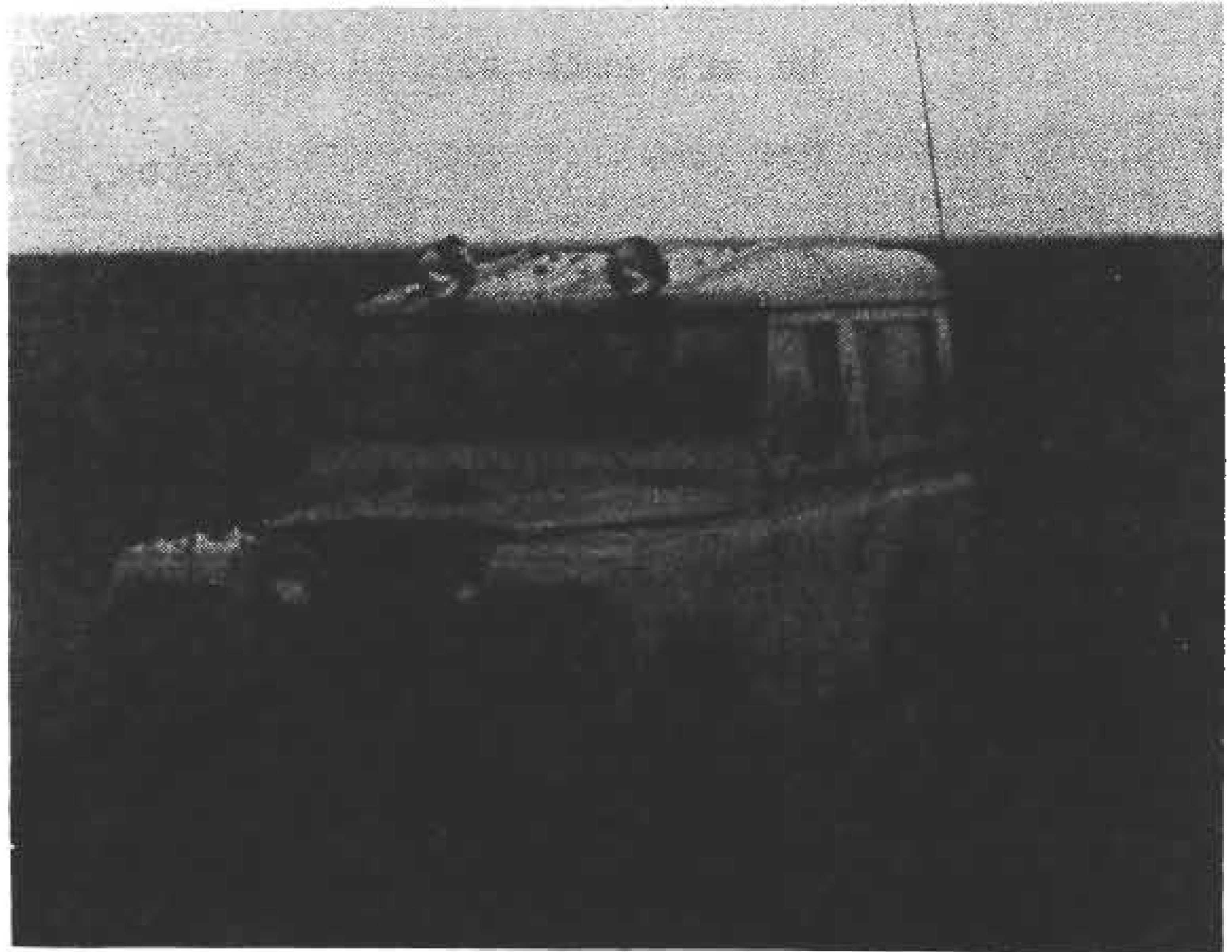
Who the hell needs big vee-eights,
Our four bangers can negotiate
The worst terrain you can locate,
This side of Hades' gates.

It's said old Rovers never die,
And though it's true they cannot fly,
They'll climb the snowy clouds on high,
To the bushlands in the sky.

J.A.

(With apologies to CMDR Ellsberg)

ROVER REVUE



(TOP LEFT) According to Bob Bernard (#54), this is a rare Series 1 Camper (prototype). It's getting deep, Bob!

(TOP RIGHT) This is Peter Wong's (#154) '62 Doormobile parked in front of his Sunnyvale, CA home.

(MIDDLE LEFT) Marvin Mattson (#9) and his '67 Doormobile not stuck in the Black Rock Desert, January 1986.

(MIDDLE RIGHT) Jim Allen's (#2) '69 88" stuck in the Black Rock, January 1986.



(BOTTOM) Dave Bramer (#18) of Gainsville, MO, shows off his previously-rolled-but-now-repaired Land Rover.



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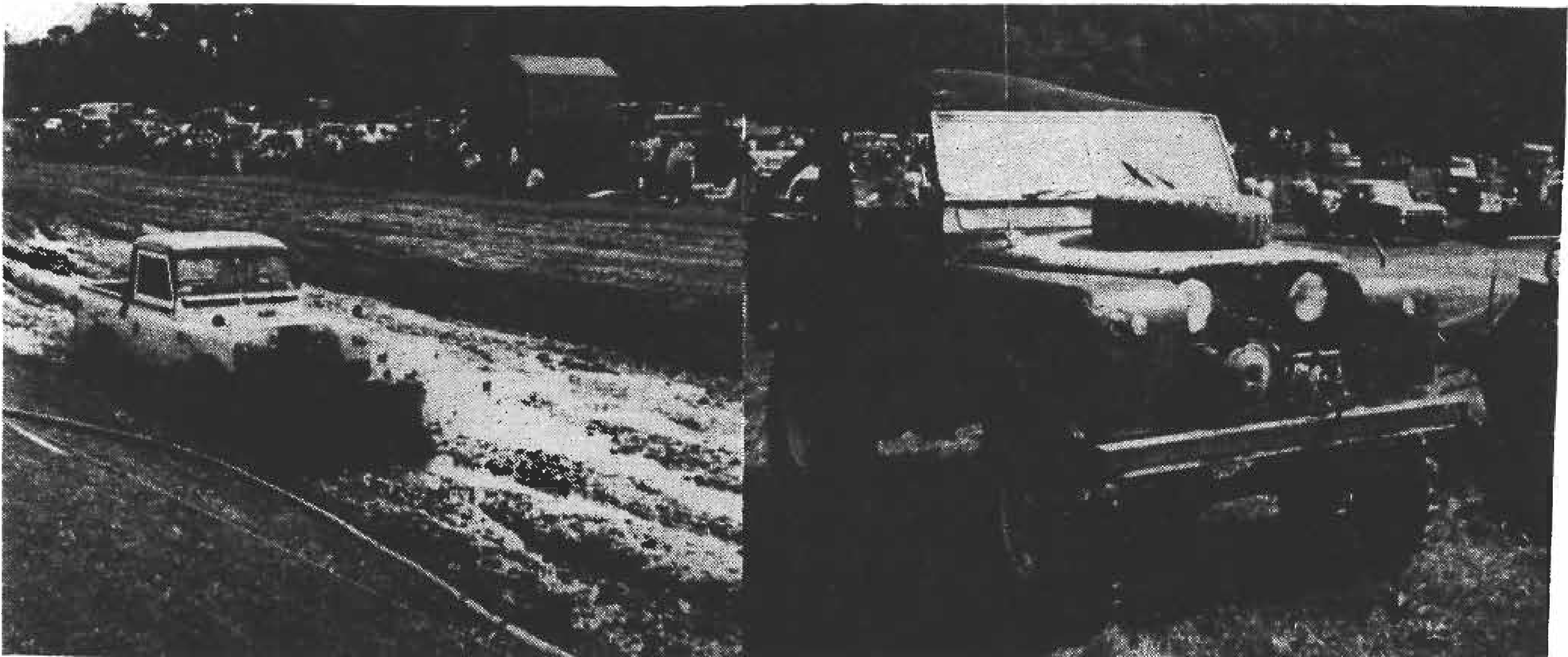
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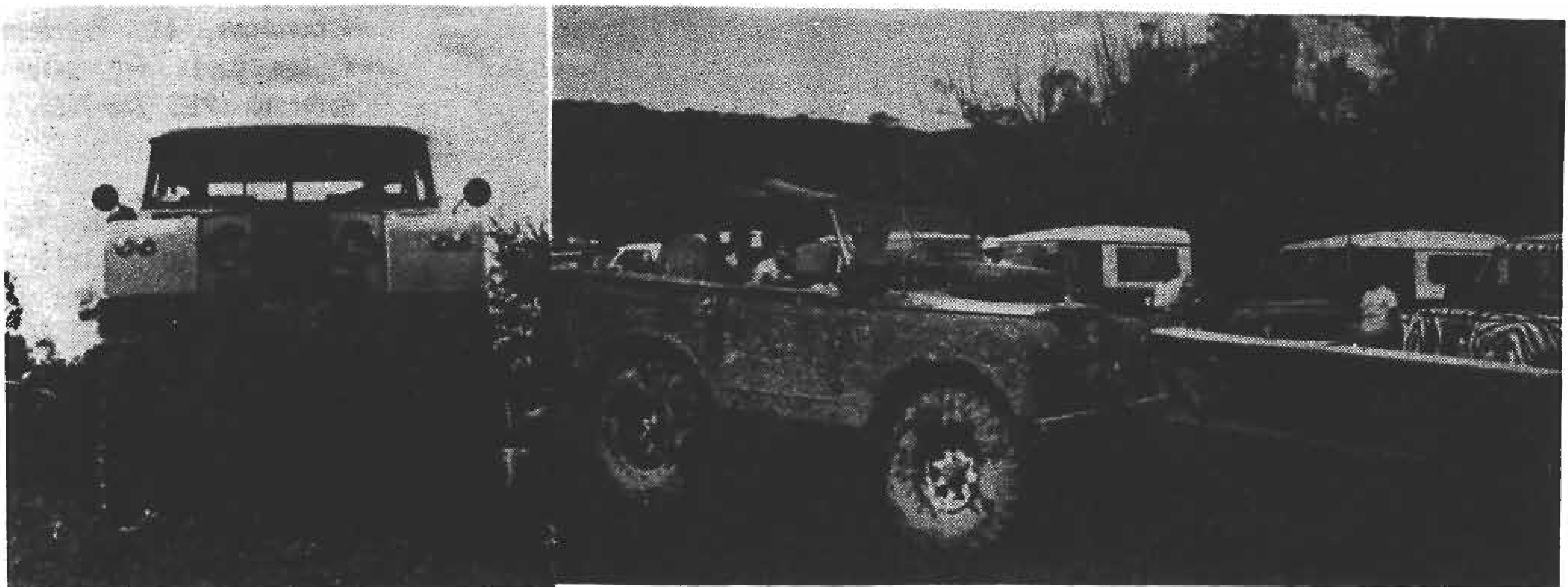


MUD RUN MADNESS

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PHOTOS BY RON & BERNIE MOWRY



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shocks, FM cassette. M

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cosmetics, driven daily-\$1,800
Ron Mowry, (702) 658-9064

'67 LAND ROVER 109", 6cyl.,
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fuel tank, 2500 miles since
major o/haul, many extras &
new parts, Cal Taylor # 41
(618) 235-2247 after 5

'61 LAND ROVER 88", Trop.
roof, 78K, 8K lb. Warn PTO,
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battery, manifold, axles & shocks
FM cassette. Mike Irwin
(916) 444-8597

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registration. Best offer
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