

# News, Clues and Rumors

Any correspondence should be addressed to:

Northern California Rover Club
P.O. Box 14961
Berkeley, CA, 94712-5961

Members are strongly encourage to submit articles, notes or letters for publication.

#### Club Decals

Additional club decals are currently available for \$4 each. The decals are approximately 2 inches by 4 inches and bear the club logo as it appears on the newsletter cover. To obtain additional decals please forward a letter with a mailing address, number of decals desired and a check for the appropriate sum to the club address.

#### **Newsletter Back Issues**

Newsletter back issues may be obtained on an as available basis for \$2 each. The \$2 includes postage.

#### **Membership Application**

A membership application form is located on the rear page of each newsletter. Please feel free to copy this form for anyone you may know who is interested in joining the Northern California Rover Club. Application for membership need not be made using the application form. Membership application should include: Name, Mailing Address (inc. zip code), Telephone Number, Type of Rover owned

#### **NEXT NCRC MEETING**

Club meetings are usually the 3rd Friday of alternating months (even months).

Location will rotate occasionally.

Until locations are formalized Contact Bruce 415-468-5000 x3009 or Jeremy 510-233-3167 for meeting locations and details.

#### Elections

Well, you ve probably been wondering about the last club elections. Turn out was fairly good by national standards with about 35% making the end of month deadline. Not surprisingly most members voted the partly line. There were, however, some encouraging write in candidates to add some spice to the line up. Hopefully they will consider running for office as declared candidates next time. The totals vary somewhat because not all people voted for each position. The official results are:

President: Bruce Bonar (46)

Vice President: Rick Larson (44); Jeff Rogers (1);

Eric Cope (1)

Secretary: Ben Mitchell (44) Treasurer: Jeremy Bartlett (47)

Member at Large: Morgan Hannaford (43); Blair

Peterson (2); Fil Figueroa (1)

With regards to your preferences for club meeting times and days the results are much less clear. The new officers will have to make some decisions on this. The tally reflects some responses that included multiple preferred days. A few members expressed and interest in a Sacramento area meeting or indicated they lived too far away to attend in any case. The results of the survey were:

Thurs (11); Fri (8); Sat (9); Sun (0); Trips (9); Don t Care (15)

Congratulations to the new officers and our sincere thanks to the previously serving officers: Ben Smith at V.P., and Mehdi Saghafi at Secretary. Mehdi put in a lot of work on the newsletter and its reputation is going to put a lot of pressure on Ben Mitchell and Leslie Dow who have stepped forward to help out with the newsletter production. Best of luck to the

New, Clues and Rumors	2
Trail Maintenence	3
Club Calendar	3
Rules for the National Forest	4
Trail Maintenance	5
Book Review	
Zen & the Art of Motorcycle	7
Tecnical Information	
Lucsa Wars	8
Trip Report	
Mendo V	12

#### **Cover Photo:**

Yes, you guessed it, this D90 belongs to one of your fearless editors, testing the load limits of his roof-rack on his way to test the alcohol processing limits of his liver. If you want to see something more interesting on the cover, send us your photos. Otherwise, the next issue's front page will be graced by a photo of Leslie's D90 taking broken drywall to the dump or serving as a jungle gym for the local rugrats.

# News Clues and Rumors...

two of them.

# Trail Maintenance In Mendocino National Forest

By formal agreement, the NCRC has begun assisting the Stonyford Ranger District in Mendocino National Forest with trail maintenance on trail 21 (including Big Sullivan and Little Sullivan ridges). If you re willing to help with trail maintenance, you can start by contacting Jeremy Bartlett at 510-233-3167, by e-mail at bartlett@slip.net, or via the club PO Box: 14961, Berkeley, CA 94712-5961 and letting him know if you are willing to donate some time. You will be placed on an internal club contact list. The Forest Service will contact Jeremy when assistance is needed in clearing the trail; Jeremy will be then pass on any requests and information. Tasks will mostly include clearing windfall or other obstructions of the trail but could evolve into limited erosion control and the like. Also, let him know if you have any professional skills related to watershed management/erosion control that might be useful to offer the forest service on a volunteer basis. In exchange for our labors, we will be helping to keep trails open for off road use. The Forest Service will be posting a sign indicating that the trails are maintained with the assistance of the NCRC, so we will have a public image to uphold!

#### Club Awards

Once again it s time to honor or humiliate club members with the annual awards. Nominees were from the membership. They were, for the Woody: Tom Walsh and Rick Larson; for the Gnarlcissus: Nick Baggarly for his collection, Rick Larson, John Kieckhofer. By vote of the outgoing officers, this year s Woody goes to Tom Walsh and the Gnarlcissus goes to Rick Larson. As soon as last year s recipients return the awards they will be passed on.

#### Treasurer s Brief

The clubs current account stands at approximately \$1671.59

Our non bank account assets are minimal and include petty cash of less than \$20, club decals and a few remaining T-shirts.

We anticipate that over the next year this sum will decrease slightly but not significantly. Membership is almost static at approximately 120 with a few more people joining than leaving.

#### Magazine Information

Land Rover Monthly magazine sent a flyer to the club P.O. Box indicating that North American subscriptions are available at 47.00 pounds sterling for a 12 issue year. If you re interested send credit card and address information to LRM, Priory Cottage, Gedding, Suffolk, IP30 0QE, United Kingdom, or fax at 44 (0) 1449 736977. LRM has provided coverage of a few NCRC activities through club member John Hong.

#### **NCRC Events**

# September 17,18, & 19. The Urban Adventure II. Camping in and touring San Francisco.

A Flyer has been sent to all members. If you didn t receive on contact Daniel Oppenhiem or Roger S Reservations MUST be received in advance to attend this event. All food is provided so we need to know how many will be there. This was an excellent event last year and a neat alternative to the usual off highway adventure.

# October 8 - 11, 1999 3rd Annual Fall Colors Tour.

This year we visit the White Mtns and the Owen's Valley Volcanic Tablelands for bristlecone pines, petroglyphs, dramatic vistas, and, of course, golden aspen. An expedition-style trip, suitable for all Rovers. We will have a base camp at Grandview Campground in the White Mountains.

We will leave Grandview at 10 am Sat Oct 9 for a day trip in and around the the westernmost Great Basin Range. Sunday will be another day trip or visiting the ancient Bristlecones. Anyone interested in convoying on Friday the 8th contact Bruce or the mendo list. In case of bad or questionable weather contact Bruce for an update.

# November 5 - 7, 1999 2nd Annual NCRC Rally. Mendocino National Forest.

A day and a half of special tasks, navigation with tulip

diagrams and rally-style time-speed-distance driving. Intended to be challenging and fun, not brutal. Contact Jeremy for entry information.

#### **NCRC Holiday Party**

Early December.

Pyramid Brewery, Berkeley

A social gathering for the whole family. Eat, drink (moderately of course), and be merry with your Rover friends.

You will need to RSVP so we can make reservations. Watch this space for more information.

Participation in NCRC events is open to all members, their guests, and prospective members. Everyone is required to sign a liability waiver and all vehicles must pass a basic tech inspection.

#### **NON CLUB EVENTS**

# September 4 - 5, 1999 Portland All British Field Meet.

Always an excellent turnout of Rovers (160 in 1998). Free camping on the grounds of the Portland International Raceway. Swap meet on Sunday.

#### September 12, 1999 Palo Alto Field Meet.

This is the largest Bay Area British Car gathering.

Calendar items should be sent to Bruce Bonar at least 2 months before the event. brbonar@wenet.net 415-468-5000 x3009

For more information, or if you want to organize a trip, call Bruce or Jeremy.

# Rules for National Forest by Rob Kerner

Using our Rovers we end up in many different areas, which are governed by many different agency s. Not wanting to be cited by forest ranger or sheriff I decided it was better for me to find out beforehand what the rules and regulations are. Over the next couple issues I will compile information on each of these agency s and give a brief description of applicable laws and regulations. The agency s I am focusing on are: US National Parks(National Monuments if different), US National Forests, Bureau of Land Management, California State Parks, Wilderness areas, and Indian reserves. If there is an agency you already have information on, or one I left out please let me know.

#### **Rules for Developed Areas**

These regulations are published in Title 36 of the Code of Federal Regulations.

- Do Not place a vehicle or other object in such a manner that it is an impediment or hazard to the safety or convenience of any person.
- Do Not leave a campground unattended for more than 24 hours.
- Do Not leave a fire unless completely out. The Forest Service Definition of out is you can put your hands in the ashes.
- Do Not start a fire outside a Forest Service fire ring. (Remember this is in developed areas)
- Any animal must be caged, or on a leash not longer than 6 feet.

No animals in swimming areas.

- No selling or offering for sale of any merchandise unless authorized by Federal Law. ( I wonder how you get authorization?)
- Do Not post any paper notice without permission. (I assume the post it posts automatically give you permission?)
- Do Not discharge any firearm within 150 yards of a residence, building, campsite, developed recreation site, occupied area, or across a road or body of water.
- Quiet hours are between 10:00 p.m. and 6:00 a.m. Please be considerate of others.

Do not carve, chop, cut or damage any live trees. Local rules may also apply.

#### Pick your own camping spot rules

Most land in the National Forest is open to camping free of charge. You can camp practically anywhere camping is not specifically prohibited.

Campfires, stoves, lanterns or barbecues used require a campfire permit. They are free and are available at most Forest Service, BLM, and CDF offices. They are valid from January 1- December 31. Some areas have special limitations regarding campfires, and it is your responsibility to find out those limitations. When fire restrictions are in effect you may only use portable stoves, and may not build fires or barbecues.

With a campfire permit you are welcome to gather any downed wood for use at camp, but may not bring any home. To bring home wood you need a fuelwood permit. They cost \$10 per cord with a 2 cord minimum, and 8 cord maximum, and are valid from April 1-December 31.

Pick your spot at least 100 feet away from streams and lakes, and above high water marks on all bodies of water.

Pets are allowed but must be kept under control at all times.

Pack it in, Pack it out!

# Trail Maintenance and Access

### All Kitted Out and Nowhere to Go?

By Jeremy Bartlett

#### **Threats of Reduced Access**

If you re at all involved in off roading in this country (or elsewhere for that matter) you ve probably already heard the pleas to get involved in maintaining access and fight road closure. Some of you will have read or heard of the latest closures or threats that include favorites such as the Black Rock desert, Mojave and portions of Moab. But do you realize how close to home this really is? Imagine yourself in the Lett's Lake area of Mendocino National Forest driving along one of your favorite trails, perhaps the Big Sullivan ridge on trail 21. You wind your way along the trail, turn right at the end junction and prepare to go down the long steep descent to the valley below as you ve done several times before. One hundred yards into the trees you encounter large metal poles set not much wider than a dirt bike. The poles bar your vehicle's access. Frustrated and incredulous you manage to turnaround and decide the northern trail to Little Sullivan is, at this point, a better option. Surprisingly, the same thing happens a few hundred yards along that trail as soon as it tightens to where you can t get around the poles.

Fantasy you say? The technical reality is that this has already occurred but without the physical barriers. About two years ago the trails in the Stonyford OHV area were reclassified. Prior to that time there were three categories: 4wd, narrower than 50, and motorcycle. Those of you with older editions of the OHV trail maps will see this. Many of the trails we enjoy most came under the narrower than 50 category. Following the reclassification, the narrower than 50 category disappeared. Apparently most of these trails have now been recategorized as motorcycle trails. Both exits from trail 21 along the Big Sullivan ridge are now technically motorcycle only. Most of the trail markers (but not all) have been replaced to reflect this.

I m not sure yet of the reasons for this reclassification, since the trails remain, for the most part, wide enough, and there is no apparent environmental reason for the reclassification. If there were motorcycles would probably also be banned. For the time being we ve been using the former <50 trails with no problems or complaints (including ranger approval for rally routes), so I doubt it s a major concern at this point. I suspect that the reclassification reflects, in part, that the motorcycling groups are simply more active in the area and may have managed to maintain these open for their use or perhaps there were mixed use concerns.



So what can we do to help keep trails open? Of course, on the personal front make sure your approach to off roading is appropriate. We re probably all guilty of pushing the tread lightly principle at times, but follow the approach as reasonably as possible (whatever you think of the actual organization). Haul more trash out than you bring in for example. Don t provide any more ammunition for the closure groups. Unless you ve got personal resources and the desire to start a legal test case against some of the more questionable trail closures, direct action tactics as employed by groups such as Earth First are probably not going to be appropriate. Unfortunately, for a number of reasons, political and popular opinion is not yet biased toward the off road access cause, so attempts at stirring up publicity will probably cause more harm than good.

Sadly, individual behavior on the trail isn t going to be enough. Simply to maintain access to the remaining trails is going to take more active participation. There are plenty of political and opposing pressures driving trail closure; you are needed to counteract

# Trail Maintenance and Access

# All Kitted Out and Nowhere to Go?

that. Get active in the areas you use personally. If there s no group currently active in the area, contact the managing agencies and find out how you can help them maintain the trails. Returning to our initial example, most of us at some time or another visit the Mendocino National Forest, so that would be a good place for NCRC members to start. This is exactly what the NCRC is now doing.

#### **NCRC Trail Maintenance**

By formal agreement, the NCRC has begun assisting the Stonyford Ranger District with trail maintenance on trail 21 (including Big Sullivan ridge). You can start helping by contacting me (at 510-233-3167, by e-mail at bartlett@slip.net, or via the club PO Box: 14961, Berkeley, CA 94712-5961) and letting me know if you are willing to be placed on a contact list. When the call comes from the ranger s we II need to be able to find people willing to head up and perform trail maintenance. Tasks will mostly include clearing windfall or other obstructions of the trail but could evolve into limited erosion control and the like. Also, let me know if you have any professional skills that might be useful for us to offer the forest service on a volunteer basis. For example, I ve got some expertise is erosion assessment and I ve let them know that I m willing to provide it if they have the need. The goal here is to build up a mutually helpful relationship with the forest service that we can build on to retain the existing trail network.

In California there is the California Off Road Vehicle Association (CORVA) (http://www.corva.org/) is very politically active in promoting the positive aspects of vehicular access on public lands and protecting that right. They employ for a full-time lobbyist in Sacramento. They also provide land managers (BLM, USFS) with input on Green Sticker grants and environmental documents. The group is composed of owners of almost all forms of off road vehicles. Their main purpose is to work with the land managers for responsible off-highway vehicular access and recreation opportunities. To join send a check for \$20 to CORVA, PMB #352, 1500 West El Camino Ave., #13, Sacramento, CA 95833-1945.

Also in California is the California Association of Four Wheel Drive Clubs (CA4WDC) (<a href="https://www.cal4wheel.com/welcome.html">https://www.cal4wheel.com/welcome.html</a>). While not a specific off road access organization they do have personnel in Northern and Southern California paying attention to access issues. They also maintain an office in Sacramento and try to provide input to legislators and land use managers. Their newsletter keeps members informed of trail access issues in the state. To join send \$40 to CA4WDC, INC., 8120 36th Avenue, Sacramento, CA 95824-2304. You can reach them by telephone at 1-800-4X4-FUNN.

Remember that if you want to continue to enjoy taking your vehicle off the asphalt you really should get involved in making sure trails stay open.

#### Join Access Organizations

In the bigger picture you should support, through membership or donations, at least one of the organizations directly involved in the political lobbying effort. Talk to other club members and find out what they re doing and what organizations they might belong to. There are several around including the following:

The **Blue Ribbon Coalition** (http://sharetrails.org) is a nationwide organization. Their motto is Preserving the natural resources FOR the public instead of FROM the public! To join visit the web site or send a check for \$20 made payable to Blue Ribbon Coalition. The address is 1540 N. Arthur, Pocatello, ID, 83204-2507. Or you can call at 1-800-Blue-Rib. They are probably one of the more active and effective organizations for nationwide access issues.



Eric Cope finds the desert wetter than expected...North of Summit Lake

#### **Book Review**

#### Robert M. Pirsig s

# Zen and the Art of Motorcycle Maintenance, An Inquiry into Values by John Hess



Although Zen and the Art is not a new book, I think a review is appropriate because the discussions seem to be a good fit with the attitudes of Land Rover owners.

Zen was first published in 1974; I think I first read it during the mid 1980s. Since then, I know I have mentioned it to countless people and run into many people who have

read it themselves. The first time I read the book I was much more interested in the travel/personal story than the philosphy. I read Zen again this year while stuck on an airplane, going to my annual eyeball convention. This time, I didn't skip any of the philosophy and in fact, was struck by some of the descriptions and parallels with Land Rover owners/ownership and the broad abstract questions. Hence, I submit the following review.

Zen and the Art is a book divided into two discourses. The first is the one that initially attracted me to the book: the story of a man and his son riding a motorcycle cross country. The second is the one that requires more thought and caused me to reflect on parellels with Land Rover ownership. The concrete. travel discussions center on a main character who has a somewhat older, basic Japanese motorcycle. Although he never embarked on a course of study to learn the workings of the machine he has become familiar with it. On the contrary, he tried to have a motorcycle shop rebuild the engine after overheating the engine and seizing a piston. However, his experience with the shop and subsequent engine problems forced him to consider why the engine seized 2 more times. This allows him to consider the inner mechanisms involved in oil distribution and ultimately to solve the problem; the all too common 2 cent part that causes engine failure. From this experience, he becomes familiar with the motorcycle and would rather work on it himself than have anyone else do so.

A second character, with a different viewpoint (and not wrong) put his trust in German engineering. He bought a new BMW motorcycle and wanted only trained mechanics to work on it, trusting that such thoroughly trained mechanics would guarrentee perfection. Both

characters had strong feelings and each had at times, tried to convince the other that his strategy is better. During the trip, these discussions were minimal; however, there is a nice description of shims and a beer can.

These are the discussions that would seem to pertain to Land Rover owners. The discussion of how things work, how to make them better or simpler, things that have characteristics that Land Rover owners are familiar with. Also along this line of reasoning is one concerning practicality. The discussion centers on an old pair of leather riding gloves that have been worn long enough to perfectly mold to the hands; they have been repaired numerous times and in fact the author states "have been repaired so many times it is getting impossible to repair them yet I take a lot of time and pains to do it anyway because I can't imagine any new pair taking their place. That is impractical, but practicality isn't the whole thing with gloves or with anything else." These types of discussions seem to immediately call out to Land Rover owners.

Is it practical to drive a 30 year old truck that is noisy, hot/cold and gets poor fuel mileage? Is it practical to carry the spare parts and tools we all carry? Obviously, Land Rover owners think the answer is yes. I have friends who think the answer is no. And yet, neither viewpoint is necessarily wrong. Quality. The second dialogue of the book while abstract, is however perhaps more pertinent to Land Rover owners as it examines the notion of quality. The goal of the discusions is to determine if quality is an ideal recognized by all or if it depends on the individual making the assessment. However, the discussions are not as easily related to Land Rovers. While I can see the relationship, I admit that as soon as I relate the abstract idea of quality to a Land Rover, the connection gets fuzzy.

The idea of quality and what is good and bad and how anyone recognizes any of it is the topic of the "Chautauqua" that occurs during the book. It is during this portion of the book, that we see some of the background of the main character and ultimately gain the insight as to his past. However, I don't think the question of quality is not really ever answered, not that there is any ONE answer. Is a series Land Rover a

quality car? Under what criteria and to whom? Is a new Range Rover 4.6 HSE a quality car? If yes, or no, is it for the same reasons as the answers for a series truck?

I don't mean to be obtuse about these things. I liked Zen and the Art and I think that people who have Land Rovers will also enjoy it. I found my second read of the book more enjoyable than the first. I remembered the book and actually read the quality/philosophy discussions instead of skimming them. Now I have to reread Robert Persig's second book Lila.

In the meantime, I hope that other Land Rover owners look up "Zen and the Art of Motrocycle Maintenance" in their local bookstore and enjoy it.

# Technical Information Lucas Wars

By Scott Dickinson

#### Part 1

Well, I thought I had slain Joe Lucas with the paper clip to extinguish the ABS light. But he has since sprung back to life in my Rangie. Lo, he has moved from the ABS idiot light to the check engine idiot light... and made starting a chore. What s more, after a thorough investigation and a Saturday in my garage, a trip to the dealer (more on that in a follow-up), and a rebuilt starter (more on that below), I have cornered Joe Lucas into the starter relay element. Not just any starter

element, mind you, but a Seimens green box relay that is not an easy item to find or get a replacement for.

Upon tracing Mr. Lucas I have come up with several ideas and tips for getting out of tight spots and a possible workaround for doing without the starter relay altogether. Or swapping the starter relay for the

voltage relay next to it (in the 90/91 Rangies anyway) to get by if that one fails. This also covers replacing the starter, and some other stuff. Joe Lucas is not an easy character to track down.

Anyway, my Range Rover failed to start about 2 weeks ago. Clickity- click click-click-click click click. <scrunched face up wondering what the... ???> Tried again, turning key, click-click-click-click-click. Damn! Again... click-click-click-click-click. Hmmmm, checked battery by turning on lights. Battery looked OK. Odd... Tried starting again....click-click-click-click-click, and again... click-click-click-click-click-lick-click (the sound of Joe Lucas chattering, but what the Hell is he saying?). Maybe if... click-

click-click-click-click-click-click-click-click... no good.

OK, time to open the hood. It was not raining yet anyway. Looked around. Nothing bad. Maybe the battery terminals had built up some residue, or it had blown a cell? OK, pulled out the jumper cables and flagged a fellow worker down to get a jump. Hooked up cables, turn key, gnr-gnr-gnr...varoom! Back in business. At least I could get home, eh? So I drove home and in the garage I tried a re-start; click-click-click gnr-gnr-gnr...click-click-click gnr-gnr-gnr...

gnr... varoom! Hmmm, not so good. Turned off engine, pulled battery terminal leads. Gold colored film, but not bad. Cleaned terminals. Tested start again... click-click-gnr-gnr-gnr... varoom! Well, was that better, or not? Hmmm. OK, so I put the charger on the battery overnight to see what happened in the morning. Drank a few glasses of

wine and mulled over the aspects of another Lucasduel. These things are never easy. The battery should be OK. Only 2 years old. This happened suddenly, no lead-up or slow failure. No idiot battery light on when running, and the alternator was rebuilt a year ago. OK, isolated to the battery, the starter relay, or the starter (solenoid was suspect), or wiring. Sleep.... Next morning I disconnected the battery charger, connected the battery and turned the key... gnrgnr...varoom! Hmmm, odd, must have been the battery then. The charge did it. Off to work, thinking about maybe buying that Optima deep-cycle battery jobbie. Hundred and fifty clams. After work, back in the rangie, click-click gnr-gnr, click- gnr-gnr, click...gnr-gnrgnr-gnr varoom! OK, was the battery losing juice? Shit... Well, I had a spare battery at home in my Z. I would try that.





# Technical Information



So I get home and pop the hood, pull the battery from my Z that I know is good, and hook it up. click-clickclick-click-click-click-click-click-click-click-clickclick-click-click. Double shit. Hmmmm... so I cable up both batteries with the jumpers and click gnr-gnr-gnr...varoom! Seems like a solenoid, or the starter is drawing too much current. Or the relay is shot. Time to review the scriptures again. \*sigh\* And time for more wine too. I pop a bottle of Ravenswood Merlot for some serious Lucas therapy. Reading the gibberish in both the Haynes and the Holy Rangie Scriptures in Two Volumes, I review the starter circuits and the relays. Man, there are a million relays for Joe L. to hide in, and it varies from year to year where the starter relay is. On the firewall, or on the steering column, under the seats, or jeez, where is \*that\* drawing

supposed to be???? More wine... <gulp>. I would call around for a starter and relay tomorrow, and maybe do some fault testing. Its Friday night. What better way to spends time on this earth than trying to debug a fault in a Range Rover??? So I crawl under Evan (my Range Rover's name is Evan, which is short for Evanescent Fortune, which is apt in this story) and look at the starter. It is buried between a heat shield under the exhaust manifold (ouch! It is hot hot!) and another heat shield... attached to the starter itself. Where is the solenoid? Ah-ha! Ouch! Damn thing is too hot. Crawl out from underneath, go inside, enjoy a shower and another glass of wine. Then I had a dream that I was in a new Range Rover HSE stranded on the very top of Mt. Shasta. The damn thing would just not start!

Ah, Saturday morning. A good day for Joe Lucas to die (again). Or so I hoped... I called AutoLectrics in Campbell. They are \*the\* cheapest source for rebuilt Range Rover parts that I have found. \$150 for a rebuilt starter. They had one, a Bosch unit, interchangeable with the Lucas unit that I had. Joy! Replace Joe Lucas any day. Hmmm, now was I to pull and test the starter or just replace it? Well... I did have a handy-dandy momentary switch unit that my brother made from a tranctor-trailer momentary brake switch. Cost about a dollar. Attached one lead to the battery, and the other to the now-cool solenoid post (a better way that I figured out later is to connect it to the brown wire lead coming from the solenoid. That wire has a connector on the firewall that can be popped apart, and the test switch can be connected to the starter side of that wire). I turned the key on and pressed the switch... click, gnr-gnr-gnr-varoom! Sounded better, but there was that click... hmmm. Well,

I could start it with the remote now anyway. Might as well get the starter while I had the time. Might as well pull the core first and save a trip as well.. (core on these puppies is 75 clams).

A SHORT LESSON ON REPLACING A STARTER IN A 91 RANGE ROVER:

- 0) Disconnect the battery. Unless you wanna good jolt that will throw you across the garage.
- 1) Spray the bolts holding the heat shield above the starter to the exhaust manifold with a good rust penetrating oil.
- 2) Pull the bolts on the heat shield; it is in the way. Swear a lot when the bolts twist the heat shield (very thin stuff!). Pull off the heat shield and decide if you want to chuck it or fix it. I recommend twisting it back into shape and reusing it. They put it there for some reason.
- 3) Pull the nuts to the terminals and pull the battery lead and the solenoid switch lead from the starter.
- 4) Use an allen (hex) wrench to unbolt the starter. One bolt is only accessible from under the Rover. It is next to the exhaust manifold. The other is accessible from the top of the Rover, inside the engine bay. [editor s note: with an extension on a socket this second can also be reached from underneath but it s nasty either way]
- 5) Swear at the designers of the Range Rover for leaving so little room to work with and using allen bolts instead of real bolts that you can use a real wrench to get them off with.
- 6) Pull the starter out. The starter is heavy, but a small unit as starters go. Feed it through the exhaust manifold and out.

WARNING! Do not drop the starter unit on your foot. Damage to your foot will occur. Swear a lot if you do.

- 7) Pull the heat shield off the starter (it is clipped onto the solenoid).
- 8) Reverse the process to install the new starter. The Bosch unit has a larger solenoid, and the heat shield does not fit as well, but it fits. Be careful not to hit or disconnect the oxygen sensor next to the starter (they are more expensive that the starter!). Reconnect the battery terminals and position the wires away from

the manifolds or they will melt and fuse and Joe Lucas will win... your Rover will never start again!

9) Do not read the book. It is confusing and they have an engine out of the Range Rover to do display photography on. This type of book is the example that the UK government used in the novel, Farinheight 451. It will lead to insanity, depression, and alcoholism.



# Technical Information



10) Ok, so you read the book. Now go have a beer or three.

OK, down to Lectrix to get the starter. They are amazed at the price of this sucker, even at wholesale. We compared the Lucas to the Bosch. They guaranteed it would fit. I have gotten only one bad alternator from

them over the years, and they replaced it, no questions asked. Anyway, I got back, replaced the starter, tested it: gnir-gnir-varoom! Slightly different sound, but it started fine.

So a week went by and Evan started up just fine. Lucas had been slain again... ta dah! or had he?

#### Part II: Joe Lucas Strikes Back!

Last week, I started Evan after work one night and alas, clickitty-click, clickitty-click-click-click-gnir-gnirgnir-varoom. Damn, not this again! Joe Lucas is the son of a &^%\*&^ and a ^&%\*&%^ and bleeding ^&%\*&^% and ^&%&^% can!!!!!! And on top of that he is a &^%\*&^ too. OK, more troubleshooting. Only this time it was a now and then thing, intermittent clicking and starting, varied with barometric pressure, moon phase, Wall Street closing prices, and possibly the Psychic Network and El Nino. Or is it La Nina now? It always started but sometimes after a few clicks. And after a few days, strange... what was this now? The check engine light was coming one now too? Back in the garage, I tested the momentary switch again (this time I found the brown lead to connect to). No clickitty clicks, only starter gnirs, and no Lucas in the light after starting with the switch. OK, the starter relay or wiring. I trace the wiring. It is OK. No breaks or shorts (tested with an ohmmeter). So I called on the boys at the San Jose Land Rover dealership and asked for a starter relay for a 91 Range Rover.

Uh, well, where is it?

Whadyah mean, where is it? I reply, There is only one starter relay in the wiring diagram and I wanna replace it.

Man, there are a million of this things, and er, I do not have a number on it here. It could be the ignition voltage relay or the starter relay.

You mean that you cannot tell me what the starter relay is for a specific model of Range Rover?

Uh, no, but if you can trace the circuit and find it, then bring it in and we can get the numbers off it. We have most of them in stock here.

Yah, OK. <click>

So, back to the scriptures. Where \*is\* that starter relay buried on a 1991 GDE Range Rover? On the firewall? No... Under the seat? No. Under the other seat?? No. Under the cubby box??? No. Ah-ha! There it is! On the steering column. Steering column? Well, at knee level on the driver s side I guess. So I pop off the panel under the steering wheel and there it is. The starter relay. Right next to its identical

twin, the ignition voltage relay. OK, down to the dealership, pop out the relay, walk in. The guy behind the counter says,

Oh, man, not one a thoooooose Whaddya mean, one of these? \*I\* did not design this thing.

The guy behind the counter wanders off, maybe hoping that I d go away. So I wait, and wait... he finally returns and looks at the relay.

I don t have these in stock, and it will be a week minimum to special order one.

A freak in WEEK!??? Jeez, I can order one from the UK and have it in a week buddy. I called and you said you had them in stock.

Have to special order this one...

He shrugs and wanders off again. I walk out of the place swearing about Range Rover parts and the dealership, etc. There were people in the lobby looking at me, and wondering. So I animated with gestures and yelled louder about the suckiness of trying to get \*GENUINE\* Land Rover parts from a dealer. I tried to get a gas cap there a month back; they had them, in stock over the phone, and alas, all they had when I went in was the newer plastic ones. Man, these are \*supposed\* to be the right metal ones! they said then, showing me a box of wrong-type gas caps. It seemed that the people there are used to this though, they just looked on in a bored glaze. Lucas Cult Members, all of them. The dark Prince had them all under his spell.

So I called around locally for the Siemens relay. Kragen had no cross reference. They said go to the dealer... \*sigh\*. I emailed Kevin Kelly, renowned purveyor of Range Rover knowledge and Joe Lucas Cult secrets. He said he thought the relay was under the seat, at least that was where the relay was in his 89 Range Rover. But he also gave me an email of a buddy that was said to have found a cheap supply of starter relays. I emailed him. I also called longer range and got quotes from several reliable places. Famous4 had them in stock, but the shipping from the UK was ridiculous. Cost with shipping would be about \$24 (£4.24 for the relay and £10 to ship x 1.7 £/\$ exchange). They did inform me that the particular relay I

# Technical Information



needed, the YWB 10031 was now updated/replaced with the YWB 10027L though. I saw that BritPac had this replacement as well on their web page; they list them for \$10.96. I dialed them up and ordered one. I called Atlantic British and they had them in stock too for \$9 + \$3 for priority mail. I ordered another one from them (just in case one or the other is also under Joe's spell). I figured I might as well have a spare too... and one or both of them would be delivered to my doorstep 4 days before Land Rover of San Jose could maybe possibly if they really bothered to, actually special order one. And then get around

to informing me of its arrival, my having to go down to the Prince's lair, and well, never mind.

I also (for grins) swaped out the twin relays and Evan started just fine, but the check-engine light shined brightly saying that Joe was definitely in the original starter relay. A point to remember if stranded with a bad relay on the top of Mt. Shasta with a cold front moving in. I also found the dual 25 Amp fuses for the heated windshield next to these relays under the steering panel. Why they buried them in such an inaccessible place is well, never mind. A cult thing I guess. Oh, and the \*genuine\* unofficial way to clear the check engine light if it does not go out is to pull the battery lead for a few hours to kill off the Joe Lucas faults stored in the engine control unit.

While waiting for the realy to arrive, Joe Lucas was having a ball. One night after work the Rover started pretty slowly and then not only did the check engine light come on, but the ABS light too! \*groan\*... Not the million dollar ABS pump now too!?!? Ah, but this time I was prepared, as I now keep the special Range Rover tool #86 under the seat; the trusty \$0.001 special \*non-genuine\* paper clip ABS testing unit. I slotted it into the plug (short the pink/black lead with the black ground lead) and read the code off the blinking ABS light with the engine off and the ignition key turned on. It read 2-blinks, 8-blinks. OK, #28. Looking in the Haynes book (if you don;t have one get one!), I saw that that was No voltage to ABS soleniod valves. Faulty valve relay or wiring. OK, the low voltage was probably due to the starter relay failure. The starter relay was pretty hot when running; an obvious short. I was running without the steering panel and the guts of Joe Lucas hanging out.

Anyway, 3 days later, at the door waiting for me was the little relay from British Atlantic. Goodie goodie! Joe Lucas bite me! I ripped the box open and was somewhat discouraged to see that the relay was in a \*GENUINE\* Land Rover parts box, with a \*GENUINE\* Land Rover parts number on it. The relay itself was

also different; it was yellow and there was one less leg on the bottom (the middle leg was not there). Oh well, this is the one they said to use, so I popped it into the socket and turned the key... gnir-gnir-gnir-varoom! Yippie! Lucas-ectomy and exorcism now complete. The Schwartz be with me! Since then the Rover is starting just fine, and the idiot light panel has been quiet. In the end I do not know if the relay failed and that was the only problem, or if the starter was drawing too much current and that killed the relay. At 95k miles, the starter was going to probably fail soon enough anyway. The parts were \$164 all tallied. That would be the price for a \*genuine\* Land Rover mechanic just to sniff at the engine compartment. The spare relay has yet to arrive from Atlantic British (Joe has them under his spell!!!). I also now know the starting circuit of my Range Rover well enough to hot wire it with a bobby pin and a chicken bone. An option would also have been just to add a momentary switch on the dash and connect the starter to the battery as an alternate starter switch. I may do that anyway... save on the relay and key wear, and actually be reliable. I may also upgrade to that Optima battery. Mine is a couple of years old now (Rangies like to eat batteries) and the relay problem strained it pretty good. Oh yeah, and somebody out there will get my old Lucas rebuilt core for a starter if not already. Be forewarned. I added the old relay to Evan's dash-board icon collection (with my Mendo Recce badge). The one with Joe Lucas in inside it. Voodoo helps...



One of the Dormies from Nick Baggerly's stable on the 98/99 Mojave Not-a-Run.

# Trip Report

## Mendo V: Little Sullivan and Crackerbox Ridge by Blair Peterson

During April s 5th annual Joe Lucas Mendocino National Forest Not-a-Rallye (aka Mendo V), I had the pleasure of running several trails with some fellow Mendo-ites in an amazing assortment of Solihull products:

2 NAS D110s (the Dow Clan in Guildenstern and me in Trip), a stock Discovery (Mark), a well equipped Discovery (Armando Nieto and friend Cindy in Higgins), a Range Rover GDE (Fil and Gina Figueroa), a Leyland

South Africa-built exmilitary IIA 109 (the Oppenheim/Ten Eyck clan in Savanna), a D90 (Gerry Mugele and Paul Archibald in Peat), a stock Range Rover 4.0 (Spencer Knight and Dad), a Range Rover classic (Granville Pool and friend Don in Ziggy), and last but not least, a very nice SIII 88 (Mehdi Saghafi and Christine de Gruzeman).

We all wanted something fun and challenging but not gonzo or potentially damaging. By looking at the map, considering our

mix of vehicles and the advice of others, the Little Sullivan Ridge 4x4 trail connecting to Crackerbox Ridge via OHV trail #21 seemed to fit the bill. Our convoy left camp about 10:30am and slinkied up the dusty M5 to our turn-off. The trail began descending rapidly out of the pines into chaparral. A small dozer had recently been over the trail so encroaching branches were pushed back and brush striping was nonexistent, which was nice for a change. Luckily, the fun contours of the trail were not touched by the dozer blade. I was having so much fun in fact that I missed one junction and led the convoy to a cul de sac where the 4x4 trail narrowed to a motorcycle trail not that that would or should stop many Mendo-ites but we reversed course anyway and made the turn at trail #21.

The route immediately narrowed and steepened considerably as we descended the south drainage of Little Sullivan Creek. The turns became quite tight. I was just able to grease the long wheel base 110 through several, and was thinking about Daniel trying to do the same in the 109 with a supertanker's turning radius. Traction was good, and engine braking in 1st low-lock tremendous. The last turn before the canvonbottom stream crossing was a true switchback: a right hander hewn out of the steep, rocky hillside. I was actually glad the dozer had done a touch of work here even still, Fil had to spot me through a 3- or 4point turn to get around. Everyone made it around ok (even the 109 after 4 or 5 cuts) except, ironically

> enough, Gerry in the D90.

I learned something

about spotting there: in a tight switchback like that use all the space available no matter what, even if it means backing up several times. As Gerry entered the turn, hugging the outside, I could see that radius-wise he could almost make the turn in one go, so I motioned for him to go to full lock towards the apex rather than cut a wider arc and take 2 or 3 cuts at it. right inside rear wheel

Big mistake. His climbed the dirt berm or pylon at the apex, leaving the D90 cross-axled. By strapping his rear (I mean Peats, not Gerry s) to a tree on the slope above, and his front to Mehdi s 88 positioned after the turn to keep the D90 from sliding towards the trail s edge and certain doom, we were able to maneuver him around with some to-ing and fro-ing, minor wheel spinning, and human pushing/ ballast. Gerry had excellent recovery gear with him, including tow straps with stitched-on leather designer labels no less!

Our next recovery drama was all of 200 yards farther along the trail. After crossing the stream, the trail began climbing the opposite canyon wall at least as steeply as the side we had just come down. The initial climb was guite steep, with a bit of water from a spring keeping the left (downhill) side of the track wet and muddy. Savanna, aptly shod with cross ply gravedigger tires, didn t quite have enough oomph to make it and became stuck part way up with left wheels in mud, right wheels on dirt (and a handsome list to

# Trip Report

port). Luckily, Armando in Higgins (with his hydraulic winch) was just ahead of Savanna and was able to turn around and slowly extract the 109. That recovery entailed strapping the Discovery's rear to a tree, and using a snatch block from trail-side trees (repositioning it twice) to align the cable for the correct angle of pull. This effort took a while, but luckily the creek bottom made a nice lunch spot for everyone not involved in the recovery.

The rest of the climb to Crackerbox Ridge was great fun but uneventful. The dozer had left the track quite loose and soft requiring lots of power, but traction was good. We soon arrived at a spectacular promontory with Goat Mtn to the west, Snow Mtn to the north and Shasta beyond that, Lassen to the northeast, Sutter Buttes to the east, and the Sierras in the haze beyond. The ridge top trail was fun with many short climbs, descents and bypasses, but it brought us back to the M5 closing the loop all too soon. The radio traffic was interesting: there were three separate Mendo convoys on parallel ridges able to check in with each other, and it sounded like everyone was having fun. It was a great day.



The NCRC approaching Onion Valley Resevoir in the Pine Forest Range.

# Northern California Rover Club



## Membership Application Form

The Northern California Rover Club is a new club dedicated to providing communication between owners of Land Rover and Range Rover vehicles. We aim to provide a venue for the enjoyment of the vehicles including off road activities and their maintenance by focussing on providing a means of connecting fellow owners. The Club will be holding meetings on alternating months and aiming at producing a newsletter covering issues of interest and providing a forum for communication.

If you are interested in becoming a member of the Northern California Rover Club send this form and a check for \$20 made out to Northern California Rover Club to the following address:

P.O. Box 14961 Berkeley, CA 94712-5961

The \$20 covers membership dues for one year with all the rights of membership outlined in the club bylaws; members will receive an initial membership card and club decal, all newsletters mailed in that period, and an annual directory of club members.

Please provide the following information and indicate if any of it should not be included in the club directory which will be distributed only to other members. The NCRC will assume that all information provided is to be distributed unless indicated otherwise. Please note that members must be over 18 years of age and have a valid driver s licence.

Name:
Street Address:
City, State and ZIP:
Tel. number (day):
Tel. number (eve):
Types of Land Rover/Range Rover owned:
Rover related interests: