

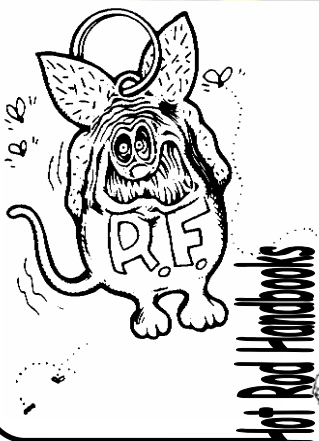
Canberra Rod and Kustom Krooze

2004

"The Book"

Attention Rodders!

- ⇒ Itinerary, pages 6, 7, 9, 11
- ⇒ Coordinator's welcome page 3
- ⇒ Technical article, Page 17
- ⇒ The return of A. Nong!
- ⇒ Major Entrant's Prize, Page 8
- ⇒ Krooze de Kanberra, Page 5
- ⇒ Sponsor's pages
- ⇒ Cartoons, jokes, fun and games
- ⇒ Heaps of stuff!



Inside the CRAKK Book. . .

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17th STREET ROD NATIONALS Easter 2005

The grounds have been secured for the Nationals in 2005. Parklands Show Grounds are at Southport, Gold Coast and set on 116 acres, 10 minutes from Surfers Paradise and 45 minutes south of Brisbane.

For inquiries and/or Sponsorship please contact Susan on (07) 5546 3044 or Mob 0407 149 788. Secretary 2005 Nationals, P O Box 151. Beenleigh. Qld 4207

Entry forms will be available in the Jan/March edition of the ASRF News letter, due to changes required these were delayed. Available online the 1st of January 2004.

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Welcome!

to all participants from the 2004 CRAKK Committee.

It doesn't take long for the CRAKK run to come around, and we have been rather feverishly dotting the I's and crossing the T's for a few weeks now, if you know what I mean. Having the wonderful experience yet again of building a rod, I decided to put my hand up so that the previous coordinator could take a well earned break. It's been a couple of years since I have been so involved, although I have never been completely free of things to do! Well, I have to admit, the event almost runs itself, save for a few adjustments to the itinerary, smooshing sponsors and chasing up recalcitrant tradesmen. We have a heap of volunteers who don't mind the tap on the shoulder so all that's missing is you, the entrant. This year, we (OK, "I") decided to capitalize on the success of the 2003 CRAKK entertainment, and we have secured the services of Pat McGeown, otherwise known as Captain Pat. Some of you may remember a Sydney based tour operator called Pat's Uninteresting Tours. It featured heavily in the current affairs programs and social pages of the eighties and nineties, but since then he has gone on to bigger and better things, including his own TV show, radio announcer, stand up comedian, producer, writer, director and actor on stage and screen both here and overseas. Pat will be working with me during the Saturday Kroozin', and performing between sets on Saturday night. Please make him feel welcome, and don't be too embarrassed if he "picks" on

you.

The past year has seen a few milestones in our hobby, including the National Rego Scheme. Alan Cooper, founding Father of the Meteors and the ACT TAC played no small part in its eventual implementation. We are all going to benefit from his efforts, and I know he would want me to single out Paul Walsh, John Dombrose and Robert Riggs for special mention, although it was, in fact, an ASRF initiative, and many people have played an important role.

We would like to take this opportunity to thank the many sponsors who have supported the CRAKK run again this year. Without these very generous business people, we would not have a CRAKK run as we know it. This book lists all the sponsors on the back page, and their adds are featured throughout the book. Make a note of these businesses and **USE** them in preference to their competitors. It's that simple! For those businesses that are competitors but sponsor our event, use them both. For instance, Graffiti and Cruzin' are both sponsors. Subscribe to *both* of them!

Finally, a quick word on safety and behavior. If you bag them up at the White Ibis or on Bidges Road (which leads to the White Ibis) you will be asked to leave. **DON'T DO IT!** We **WILL** call the Police and they **WILL** impound your car.

Thanks to all participants, and have a great CRAKK run!

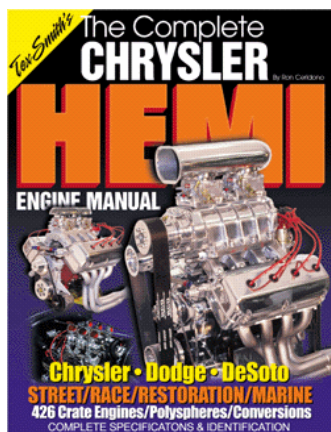
Choco Munday, CRAKK coordinator
Mark Saunders, President Canberra Hot Rod Association inc.

CRAKK 2004 Committee	
Choco Munday	Run Coordinator
Andrew Komnacki	Registration, entries
Terry Falkingham	Sponsorship Coordinator
John Thompson	Committee
Melinda Thompson	Kidz Coordinator
Call Choco on 0412 883 235 or Andrew on 0411 614 839	

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One lucky entrant will win a subscription to ASR magazine thanks to Graffiti, sponsors of the 2003 CRAKK run.



This Tex Smith book by Ron Ceridono has it all: Chrysler - DeSoto - Dodge Hemi are covered in detail for street, race, marine and restoration in blown and naturally aspirated forms. This book is the complete source for Hemi fanatics. It includes in-depth build-ups and covers everything from the best traditional tricks to the latest in fuel injection adaptations. Complete identification and specifications for all models are given. Also included are Polyspheres and the new 426 crate motors. Choco Munday also writes about the Aussie Hemi and the elusive Toyota Hemi.

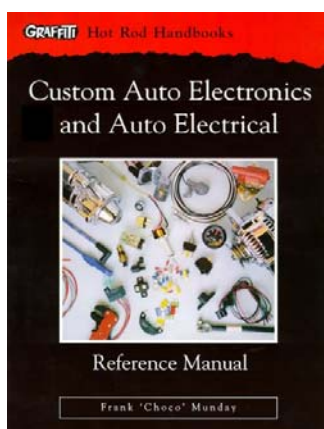


Radical Hot Rods

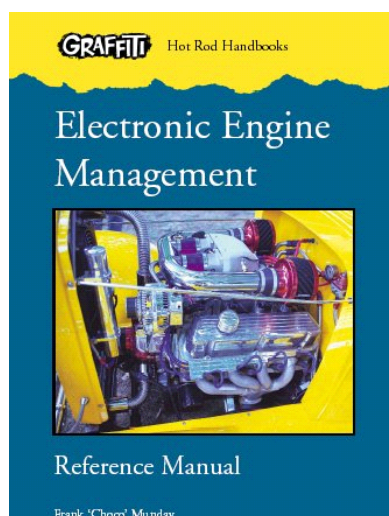
The most outrageous Hot Rods in the world are featured in this book by Larry O'Toole. All the colour and spectacle of the top end of hot rodding comes together in this full colour book.

Monstrous blown

engines, huge wheels and tyres, extreme styling and exotic, advanced engineering are ingredients that combine to become the radical hot rods of today. Impractical, twitchy, but spectacular, Larry's book depicts dozens of full colour examples with mini-features throughout.



The latest manual from Choco Munday. The ever increasing presence of electronics in modern vehicles is starting to trickle through to the hot rod and custom market where enthusiasts are going to have to deal with some of this new technology. Choco Munday shows you how to get your knowledge up to speed in easy to understand layman's terms. This book also includes conventional wiring information and it is extensively cross-referenced to make your electrical and electronics research easy. No hot rodder's library should be without this book.



Due in January:

Discover how you, too, can build an engine management system into your Hot Rod, Kustom or Street Machine project. Described in easy to understand, plain English from start to finish, you'll be amazed at what you can do with Electronic Fuel Injection. Retain the Hot Rod look, and discover a new era of rodding technology.

Visit Graffiti at: <http://www.graffitipub.com.au>

The graphic features the text 'BDL Car Stereo' in a stylized font. 'BDL' is in a bold, blocky font, while 'Car Stereo' is in a cursive script. The background is a collage of car audio components, including CD head units and speakers. The entire graphic is framed by a decorative border of musical notes.

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Bungendore Show

Sunday 25th January—The destination for the Krooze de Canberra

Departure Time—10AM. Turn RIGHT onto the Federal Highway and drive about 2Km to the BUNGENDORE turn-off (Mac's Reef Road). Proceed along Mac's Reef Road until the end (approx. 20Kms). Turn RIGHT along Bungendore Road and proceed approximately 2Km. The Racecourse Showgrounds road is on the LEFT. It is a DIRT ROAD for about 500 metres. You will be directed to the display area allocated for CRAKK entrants.

You are all asked to leave your cars parked until 2PM. You will NOT be able to move your car before then unless urgent, as the horse events must be halted before starting any car. Therefore, we shall all enter and leave at the designated times—11AM and 2PM.

There will be plenty to eat and drink, sideshows to enjoy, country show events to take in, rides to take the kids on and good old fashioned country hospitality!

Day 1
Friday 23rd Jan

Time	Event
12 noon - 5 pm	Krooze to Australian War Memorial
2 pm - 4 pm	Registration (White Ibis Reception area)
6 pm - 8 pm	Registration (White Ibis Reception area)
6 pm - 11 pm	Krooze the White Ibis under lights
8 pm - 10 pm	Welcome BBQ (on us!) Snags, Port, Trailer Tinnies

A young woman was having a physical examination and was embarrassed because of a weight problem. As she removed her last bit of clothing, she blushed. "I'm so ashamed, Doctor," she said, "I guess I let myself go."

The physician was checking hers eyes and ears. "Don't feel ashamed, Miss. You don't look that bad."

"Do you really think so, Doctor?" she asked. The doctor held a tongue depressor in front of her face and said, "Of course. Now just open your mouth and say moo."



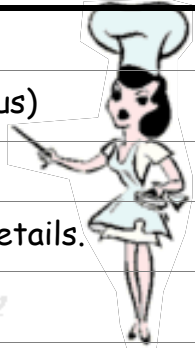
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Day 2
Saturday 24th Jan

Time	Event
7 am - all day	Commence Spark Plug Hunt/Snake Count
7 am - 8.30 am	Breakfast (Eggs, bacon, coffee and tea on us)
7.30 am - 8.50 am	Registration (White Ibis)
9am-12 noon	Mystery Krooze! Watch notice board for details.
12 noon - 1.15 pm	BBQ Lunch (White Ibis) (on us!)
1.15 pm - 11 pm	Krooze the Whit Ibis, or kick back and relax at the pool.
6.30 pm - 7.30 pm	Dinner (Roasts) 3 Course (on you!)
8 pm - Midnight	Entertainment—Captain Pat, Band



Pat McGeown

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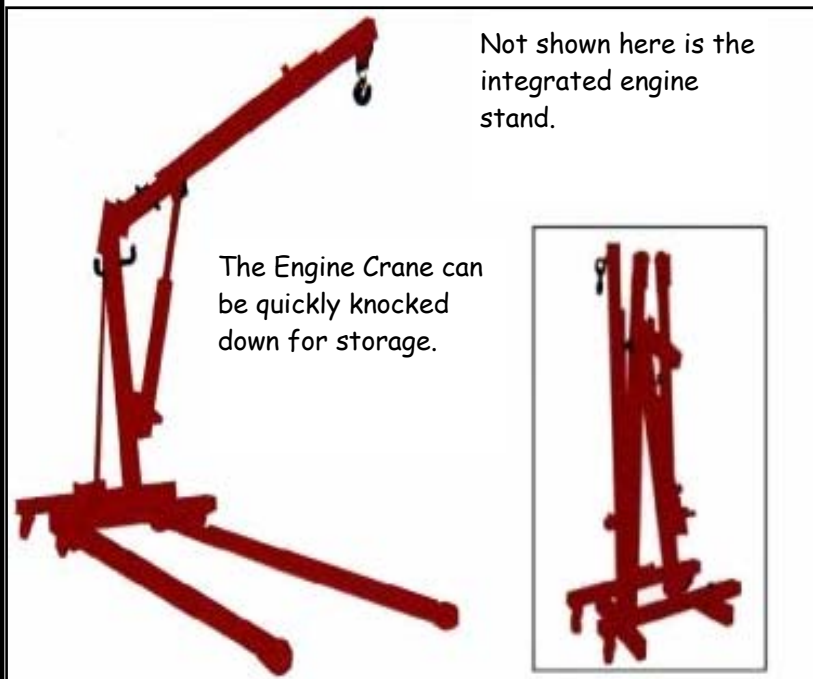
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Major Entrant's Prize

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RED MEAT

perpetually polishing the big zero

from the secret files of
Max Cannon

Say, Ken...I noticed you and Barb loading suitcases into the car earlier. Going on a little summer excursion to someplace fun?



Yeah. This year we decided on Hawaii. Barb's mother is going to watch our cat. How about you...any travel plans?

Nope. The kids have swim camp, then soccer camp, then horseback camp. It doesn't leave us any time...or money.



Well, it's still gotta be nice to spend the summer at home with your kids.

Ted...!! Could you grab the mop bucket and get in here, now? The youngest threw up all over the living room and I have to drop the other two off at swim camp in ten minutes.



Uh, yeah. Like you said, "nice." Kill me now. Please, Ken...don't make me beg.

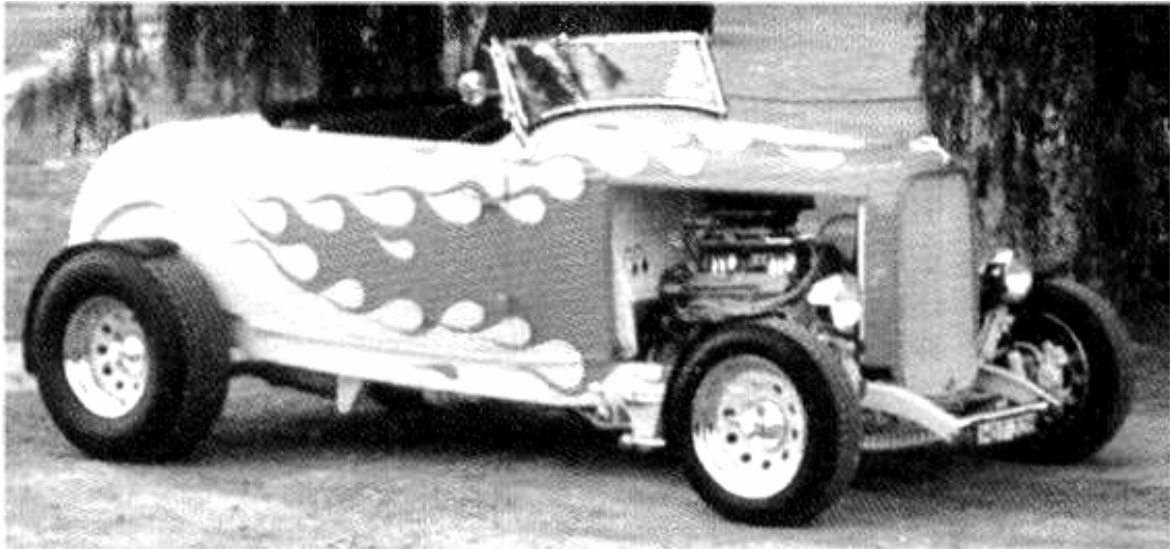
Day 3
Sunday 25th Jan

Time	Event
7 am - all day	Spark Plug Hunt Continues
7 am - 8.30 am	Breakfast (on us!) Pancakes, Maple Syrup, Coffee and Tea
10 am	Depart White Ibis for Bungendore Show
11 am - 2 pm	Show 'n' Shine at the Bungendore Show
1.30 pm	Spark Plug Hunt closes
2 30 pm - 3 pm	Kidz Presentations (White Ibis Camp Kitchen)
3.15 pm - 4.15 pm	Presentations
5 pm—6.30 pm	Light BBQ Dinner
4.15 pm - 6 .30 pm	Krooze the White Ibis or relax
7.45 pm - 10 pm	Krooze Canberra by Night



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RED MEAT

the second prize goes to...

from the secret files of
whohah

You know, Ted...there's nothing better than spending the entire afternoon watching yourself get a giant tattoo.



So...where exactly is the tattoo, Dan?



Did I say "tattoo"? I meant to say "champagne enema."



Day 4
Monday 26th Jan

Time	Event
8 am – 9 am	Breakfast—Bacon, eggs, snags, coffee, tea ON US!
????	Farewells—Drive Safe!

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Our thanks to Mark and Lisa Carn for their
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ACT: **Go Troppo** Fruit Markets, Fyshwick Markets

HOW TO CHANNEL A HOT ROD

Technical article by A. Nong

Hi Rodders!



The trend towards early Hot Rodding techniques is growing stronger, and as I was building hot rods around the early eighties, when the first Australian Hot Rods started to appear on the scene, I thought I would pass on a few tips and tricks that I learnt in those pioneering days. The first of my articles appeared in the last issue of Karman Ghia Monthly, and was sort of a general rod building guide. What I would like to do now, and over the next few CRAKK runs, is examine in detail some of the customising tricks employed during the rod building process. The first of these is channeling.

Channeling is the art of raising the floor of a rod to permit the driver to bend his neck while driving, and enable the steering wheel to rub on the driver's thighs. The easiest way to do this is to install very big bucket seats, but this can sometimes prove too expensive. The best way, which looks really cool, is to remove the floor and weld in some pillars (jam tins work just fine) and then screw the floor back to the pillars (jam tins) with self tappers.

As an example, one of the best hot rods to channel is the Austin Kimberly. Once the interior of the car has been removed, cut the floor out around the outer extremities with a sharp cold chisel and a big hammer. Weld some jam tins around the edges and re-install the floor, carefully lining up the jagged edges for a perfect fit (NEVER use a jig saw, as the edge will be clean, and there is nothing to line the floor up to). The gaps formed around the jam tins and the now raised floor can be covered with carpet. Re-install the interior and the seats and now you should be looking cool.

The channel can be enhanced by a four or five inch top chop, but I will leave that for a future article. In the meantime, have a think about channeling that Austin, or follow the same procedure for any car of your choice. Duece Holdens (72 four door sedans) are a good choice, and for you pre war freaks (Viet Nam) the 66 Wolsely responds well to a deep channel. Remember to use high back bucket seats, otherwise you will be required to install a roll bar.

I hope that these tech tips are of some benefit to you budding rodders. I remember my first custom job was a real pain, and having some sort of guide would have made it a lot easier to channel my first rod, a 120Y with 180B badges. I ended up using Hi Ace van seats and a couple of chep palettes on the floor. It was soooooo cool. I wrote it off at the traffic lights.

See you at the club!

A. Nong

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RED MEAT

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Competition News!

All throughout the CRAKK weekend will be the colouring competition, snake count and a kids Spark Plug Hunt.

Competition forms must be in their boxes by 9am Sunday morning!

For more info, see a CRAKK run committee member (page 3)

ENGINE HOP-UP TIPS AND TRICKS

Technical Article by A. Nong.

Hi there Rodders!

The way to hot rod heaven is paved with melting bitumen, and getting through all that sludge can be a problem. Traditionally, Hot Rods were built to go fast as well as look cool. To get the most out of your engine requires a steady hand, nerves of steel and a big wallet. As a seasoned rodder, I can relate to the problems brought about by trying to extract the maximum amount of horsepower from that tired old small block Tasman or your big block 179 red. Weep no more, fellow tyre smokers, here are some high horsepower tips that I have picked up over the years that will see you burning up the drag strips in under twenty nine seconds!!

The first phase in big time horsepower gains is to decide if your engine can cope with the modifications required to get you down the strip in the times you desire. Let's face it, a 120Y making 300 HP (Hamster Power) is easier to bump up than a Humber straight six. So start with something realistic, and easier to work with. A Datsun big block (200B) is a popular choice, as is the old favourite, the Austin 1800 slippery sump motor. Whichever you choose, I will endeavour to select those modifications and techniques typical of most of these popular hot rod engines.

First of all, the engine must be removed from the car to do the work. Remove the heads, and with an angle grinder, carefully grind the surface of the heads to increase the compression. You have to take the valves off too, as they can be modified by sharpening the lip at the valve head and the springs can be stretched out by heating them up and expanding them by about one inch. Re-assemble the heads and put them aside.

Remove the cam. Take it to a reputable cam grinder to have it modified. There are numerous places where this can be done, anyone with a bench grinder or liner will be happy to help. My best friend with the 48 Anglia ute has a liner. Just ask him to sharpen the lobes for you, and he will be only too happy to help. Once this has been done, we can concentrate on the inlet manifold. Concentrate hard now, and just imagine the fuel going in those little holes and into the engine. The best way to modify these is to dip them into a big pot of paint. This puts a smooth coating on the inside of the runners, and allows the fuel to slip through real good.

The crank shaft should be removed now, and painted. Buy a new set of bearings, and with an angle grinder, remove the surface lead of each bearing so that the harder, more slippery metal is exposed. This allows the crank to turn faster with less friction. At the same time, remove the pistons and braise a piece of 5mm steel to the top of each slug. To change them into forged pistons, heat them up until they are red hot and dip them immediately into a tissing bucket. Make sure the tissing bucket is filled with water, and wait until the tissing stops before removing the piston. You now have a set of forged flat top pistons for your rod.



Re assembly of the engine can now be undertaken. Clean every little thing before you bolt it on, preferably with wet and dry and petrol. That way, you can set it on fire to enable all the little impurities to be burnt away.

After the engine re-assembly, take the carby apart and put it back together using silastic instead of gaskets, ensuring a positive seal. Drill the main jet out to about 5mm for sure fire fuel inflow. Remove the float, as we want as much fuel as possible to get into the engine.

Now we are ready for final re-assembly and installation. The rest is up to you, but remember to hang on! There's a lot of horsepower there to get used to!

If you follow these tips, you will be sure to get a surprise. I know some may disagree in part to certain modifications, but I have tried them myself, and I reckon that they improve any engine. As with any modifications and hop-ups, reliability is sadly decreased, but that is the price we, as rodders, must pay for all that horsepower.

Until next time, street freaks,

See you at the Castlereigh Drags,

A. Nong.

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Mitchell	Unit 5 84 Hoskins Street	02 6242 6055
Phillip	13A Alltree Court	02 6282 3166



RED MEAT		zeitgeist scheiss geyser	from the secret files of Max cannon
Know what, Wally? I've been thinking about trying my hand at some songwriting. I think I might be pretty good at that sort of thing.	Good for you.	Aww...who am I kidding? I don't even play a musical instrument.	You've just got to free your mind, Ted. Take me, for example...I don't even wear diapers, and yet I just fully evacuated in my trousers.
to bncco shack	to bncco shack	to	You're right, Wally. I've just got to relax and "let myself go."

RED MEAT		the tickle of asphalt on the sagging belly of your lowered expectations	from the secret files of Max cannon
Hey, Ted...do you have a half an hour to spare? I really need you to come over to my house and help me move a couple of fancy dressers up into my bedroom.	Sure, Wally. Just let me go grab my back support belt.	You should wear one, too. It's easy to throw your lower back out moving furniture up and down staircases.	I picked up two elderly ladies in a church parking lot. They're dressed pretty fancy, so I don't want to mess up their nice Sunday clothes by carrying them over my shoulder.
to	Oh...I wasn't talking about moving any furniture, Ted.	Nice. But wouldn't it be easier to simply lure them upstairs with an open tin of cat food?	to

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RED MEAT

ribcage xylophone

from the secret files of
Max Cannon

Hey there, Mr. Johnson. I just come over real quick tuh let you know that I'm movin' outta town, so you'll have tuh git another feller tuh do your yard work next week.



Wow, Clyde...this is awfully sudden.

Yep. But you know how it is with a feller like me. I git the wanderin' bug real bad.



I guess a man's got to go where a man's got to go.

Well, yeah...especially when that man's killed everybody's lawns, trees, flowers and shrubs by accidentally fertilizin' 'em all with a military-grade vegetation killer.



Can't argue with that...and judging by the sounds of those shotgun blasts and chain-saws, that lynch mob's getting fairly close.

CRAKK Book Technical Articles

This year's CRAKK run book Technical Articles are all taken from the HotRodders Knowledge Base on the internet at:
<http://hotrodders.com/kb/info.html>

I have tried to acknowledge the authors where possible. The info is applicable to US vehicles, but I have chosen articles that are equally applicable to similar cars in Australia.

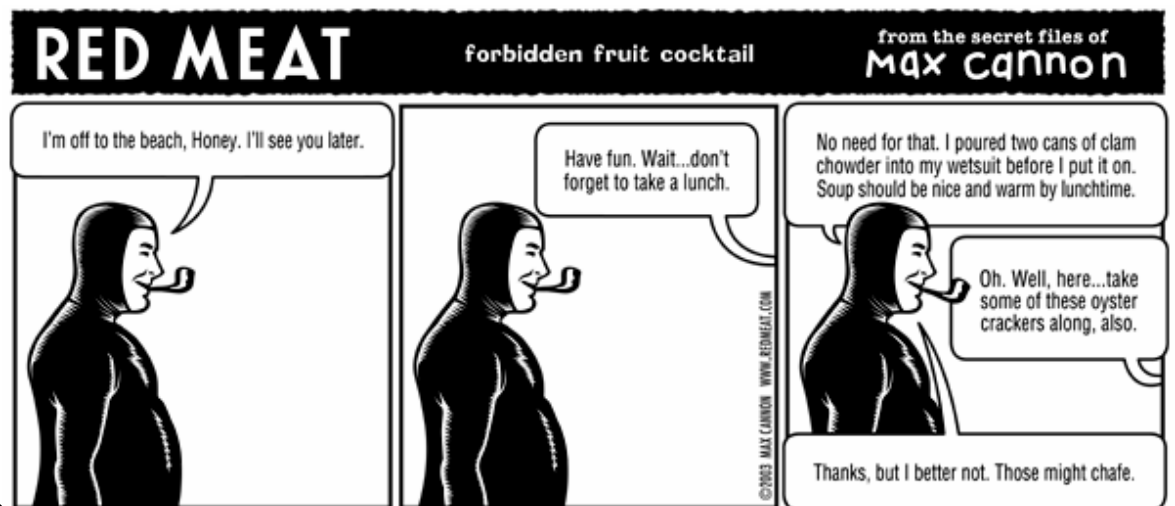
Point-less Endeavors: Upgrade your ignition to HEI

by Dave Hoekenga

In mid-1974 General Motors offered the Delco-Remy High Energy Ignition (HEI) as an option for their passenger vehicles, and in 1975 the HEI became standard equipment. Today, many musclecar enthusiasts have abandoned points and upgraded to some form of electronic ignition, and still many more would like to, and, after all, why not convert? The factory has supplied us (and ultimately, the salvage yards) with a huge number of electronic ignition systems, not to mention what is available commercially.

The factory HEI, which is what will be discussed, offers: low-maintenance, great availability of parts, and tunable and reliable performance that can fire-up a high-horsepower Pontiac for street stomping or race track consistency. Any performance-seeker can order an HEI from a number of aftermarket sources, and it will do the same thing as a properly-prepared factory unit from the salvage yard, except it will eat a hole in the owner's wallet.

(Continued on page 22)



(Continued from page 21)

Step 1

To upgrade from points to an HEI, begin by obtaining a known good HEI, or freshen one up that is in good shape (no cracks, gear not worn out, no slop from shaft). Replace the pickup coil, cap, and rotor as a minimum. The 1974/75 units used the same advance weights, springs and stops as the points-type distributor. HEI's do have a part # stamped on the base, but without a number crunching book it will not directly reveal the year or anything else about the unit.

It is critical to understand that the HEI requires 12 volts AT ALL TIMES to work at its best, and points would burn up with 12 volts at all times, so the factory added either an inline ballast resistor or a resistance wire that reduced the 12 volts from the battery down to around 9.3 volts to the coil. The points-type distributors do use 12 volts when cranking, however, this is accomplished with a 'bypass wire', located between the starter solenoid (R) terminal and the coil (+) terminal, and is 'hot' only in the ignition switch's 'crank' position and "bypasses" the resistor wire to supply the 12 volts. In other words, on some cars, there will be 2 wires for spark juice, one is 'hot' in the ignition switch "crank" position, the other is 'hot' in the ignition switch "run" position. This was common in the pre-1971 cars, which used an inline ballast resistor with an external voltage regulator.

Starting in 1971, GM introduced another engine-compartment clean-up idea, which was the internally regulated alternator. These were nice, and also eliminated the bulky external regulator. This is significant, because these cars usually did not use an inline ballast resistor, but instead used a resistance wire.

Step 2

Now, determine which type of wiring harness is in your car. A car that has the ignition switch in the steering wheel column and/or no inline ballast resistor (usually '69 and later), take note of the bypass wire that goes from the (+) post on the coil to the "R" post on the starter solenoid, this wire will be discarded. Verify this with a test light, one 'hot' wire for the ignition switch's 'crank' and 'run' position should be found. If the car has an inline ballast resistor and/or the ignition switch in the dashboard, it will probably have the 2-wire set up discussed earlier. Verify this with a test light by finding 2 different 'hot' wires for ignition switch 'crank' and 'run' positions.

Step 3

Now that the 'hot' wire(s) have been located, (which is the hard part, by the

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way, and the #1 reason why this swap goes sour for some) disconnect the battery, unhook the wires and tape them off. Remove the coil and ballast resistor (if equipped). Set the engine at #1 top dead center, (verified by finger-blown-off-the-sparkplug-hole method or both valves closed at #1 while balancer mark is at zero degrees). Remove the cap from the distributor being replaced, and note location the rotor is pointing. Remove the old distributor. After lubricating the HEI distributor gear and installing a new gasket, install it so the rotor is pointing in the same position as the old one. If the distributor just won't go in that last 1/4", grab a ratchet and 15/16" socket and turn the engine over with the balancer bolt and distributor should fall into place. Install the cap, making sure all three leads (black ground wire is easy to forget) are in the cap receptacle. Install the wire clip from the base into the cap. The HEI will only accept an electronic tachometer, install the tach wire to the (Tach) terminal indicated on the cap.

Step 4

Now, the HEI needs a connection for 12 volts. Install new 12g wire from the (bat) terminal in the cap through the firewall; and splice into the ignition switch main feed wire, usually pink in color. If this presents a hassle, any ignition-switched source under the dash will do, just don't use a fuse box accessory connection. If there is no inline ballast resistor and/or the ignition switch is in the steering column (1 'hot' wire, as verified earlier), this will

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(Continued from page 23)

complete the hook-up, and the bypass wire between the old coil (+) and the starter solenoid (R) can be deleted. If the harness has an inline ballast resistor, and/or the ignition is in the dashboard, the bypass wire will have to be used to supply the HEI with 12 volts when ignition switch is in crank position. In this case, provided the bypass wire is in good condition and is 12g or larger, splice the bypass wire with the new 12g ignition wire and discard the ballast resistor.

Step 5

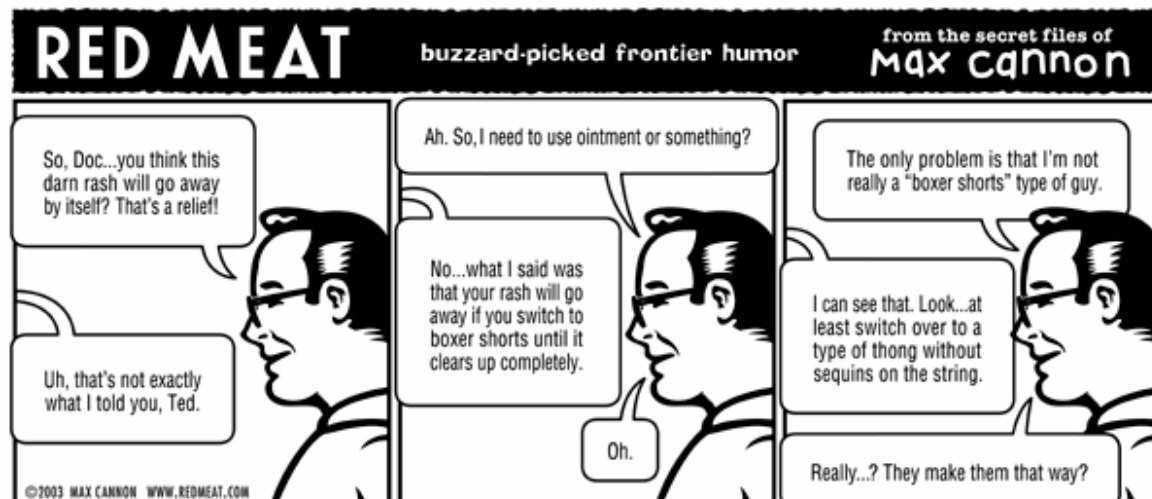
Install new HEI wires, gap the plugs around .040"-.045", hook up the vacuum advance to a ported (no vacuum at idle) source of vacuum on the carburetor. Connect the battery, ensure the engine starts and shuts off, and go for a point-less ride!

Remote Solenoid Installation

By Mike Yrenaya

The installation of a remote solenoid will relieve you of the dreaded heat soak problem of the starter solenoid from engine heat. Due to its location, the solenoid is exposed to extreme temperatures causing a reduction in current and an increase in resistance through the pull-in coil and consequent weakening of the magnetic field. This usually happens after driving around a hot summer day, shutting the engine off and then try to start the car after 20 or so minutes. Allowing the car to cool off will usually do the trick but that means your stuck being with people you really don't want to be with while you wait. This is not only annoying but embarrassing as well. This problem seems to be more apparent on cars with headers, wild cams and hotter ignitions. Headers tend to surround the starter with heat due to the

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(Continued from page 24)

collector being closer.

The parts for a remote solenoid can be bought at most auto parts stores but Summit Racing or M.A.D. Enterprises have kits available at a much lower price and they include everything you need saving the hassle of hunting for the parts. The kits include: solenoid, correct gage wire, fusible links, terminals and shrink tubing. The solenoid is a Ford style unit with S and I terminals. The wire is 14 gage with the correct terminals. Also included is a terminal for changing your battery cable. Not included but needed is a battery cable to go from the battery to the new solenoid. If you do not buy the kit, you will need to make a plate to connect your GM solenoid B+ terminal to the S terminal.

Assuming you have all the required parts, lets get to the installation. First, find a suitable place to mount the solenoid. A good spot is on the passenger side fender well since it is close to the battery and starter. It also provides

(Continued on page 26)

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(Continued from page 25)

a convenient place to connect to the alternator. If you choose a spot that is not grounded then you must run a wire from one of the solenoids mounting ears to a good ground source.

Remove the starter and install the plate which connects the starter's B+ terminal to the the S terminal. If you have a points ignition, leave the R terminal unconnected. The ignition coil wire will be re-located to the remote solenoid. Remove the battery terminal from your orig. cable and replace it with the ring-type terminal. This cable will go from the solenoid s B+ terminal to the remote solenoid, so ensure you have enough length. Install the cable and tighten the solenoid nuts. Re-install the starter.

Take the wires that went to the GM solenoid s B+ terminal and connect them to on of the larger posts on the solenoid. These wires are always hot , ignition circuit and battery cable. The other large post terminal goes to the cable which runs down to the starter. Which terminal you choose does not matter as currnet flows both ways.

Connect the wire which wnet to the S terminal (on the GM solenoid) to the S terminal on the remote unit. This wire is connected to the neutral safety switch and starting circuit. If you have points then the ignition coil + lead should go to the I terminal of the remote unit. If you have HEI or other electronic ignition, leave this terminal unconnected.

The installation is complete. If all went well then the car should start. If you had hard-to-start when hot problems, bring the car up to temp, shut it down and try to start. Hopefully, it should turn over and fire right up, no more cases of no start!

Notes on Hot Rod Wiring from Al at AutoReWire.com

Just a few things to consider when wiring your Hot Rod, Custom, Street Rod or Race Car.

If you are putting your battery in the trunk, running a Huge Stereo or have an alternator putting out over 100 amps use at least a number 8 AWG wire between the Alternator and the Battery.

If you need Brighter Headlights wire them up with a Relay so they get a full 12 - 14 volts from the battery.

If you are using small taillights, such as '39 Fords or Early Chevy, use Ron Francis "Bright Bulbs". They DO make a Big Difference. Loose the Blue

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Dots... They may look Cool, but, they're Dangerous...

Be careful with halogen bulbs they draw much more current, get hot enough to melt plastic housings and lenses and can melt wiring insulation if the wire is sized too small.

Don't run a fuse larger than the amperage that the smallest wire in the circuit can safely carry. Check this chart. Remember the farther you go the heavier the wire.

If you are mounting the Battery in the Trunk., use at least 1/0 battery cable (or better yet a Welding Cable). Steel is a poor electrical conductor. The large size of most automobile frames make it possible to use them for a large bus bar in spite of this fact. Weld ground Studs to the frame, clean off all paint and use internal/external star washers on ALL battery cable connections. Make sure the motor and the body are both properly grounded. If it's a unibody car it's best to run a ground cable back up to the starter.

Most Automotive Electrical Problems are **GROUNDING** Problems. If you're having a problem with something and find there is power to it double-check your grounds (including the battery cables).



RED MEAT
tramp steamer in your soup kitchen
from the secret files of
Max Cannon

Sir, I'd like to request some time off. As you probably know, I haven't taken any of my vacation days in over six years.	But the answer is "no." According to your records, in six years you've called in sick an average of thirty-seven days a year.	So here's an idea...don't show up to work every day whacked on booze and drugs.
Yes, Dan...I'm aware of that.	I can easily explain that. You see, I suffer from a medical condition which makes me highly sensitive to liquor and cold remedies.	Honestly, Sir...and miss out on enjoying my truck rippling and melting under me as the asphalt roils and spews chartreuse magma into a candy-colored sky? I hardly think so.

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Fuel Gauge Problem Diagnosis

This process can be applied to all recent GM cars except those with computerized gauges. The same process applies for other makes, but you'll need to consult a factory wiring diagram to cross-reference the colour codes.

Locate the fuel sender feed wire near the fuel tank. You're looking for a single tan colored wire (GM). With the tan wire disconnected at the fuel tank, the fuel gauge should read past full with the ignition on. Wait a few moments as some fuel gauges take a long time to respond. Touch the tan wire from the body to any convenient ground and the gauge should read empty. If not, you have a wiring problem or a bad gauge.

2) If the gauge responds correctly, the gauge and wiring are OK. Next use a multi-meter to measure resistance to ground of the sender wire connection on the top of the fuel sender or the tan wire from the top of the fuel tank. Measurements should track the fuel in tank.

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Full - 84-88 ohms

Half - 40 ohms, give or take

Empty - 0-2 ohms

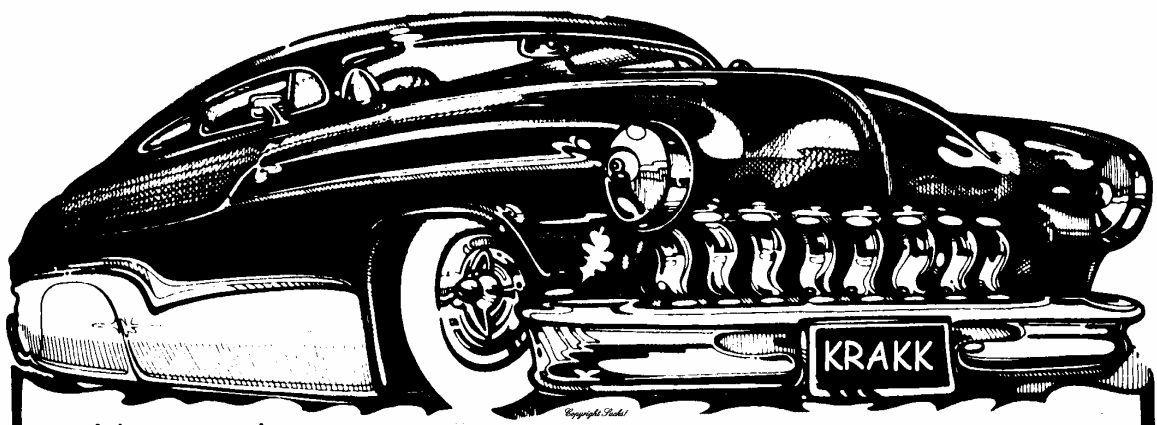
If this doesn't check, then sender or wiring on top of the tank is bad or the sender not adequately grounded. Senders are typically grounded by a black wire which is welded to the sender and attached to the body with a sheet metal screw.

3) If the sender checks OK but gauge and wiring don't, clean the connections, reconnect the sender wiring and separate the Fisher connector (located just outboard of the fuse block under the dash). The gauge should then read past full. Ground the tan wire in the dash side of the Fisher connector and the gauge should read empty. If not, you probably have a bad gauge or possibly a dash wiring problem. Go to Step 5.

4) If the gauge checks OK, then make the same resistance checks to the tan wire in the body side of the Fisher connector. If the readings are different than those at the sender, body wiring has a problem and requires detailed inspection. If they look OK, then the Fisher connector is probably dirty.

5) Clean and reconnect Fisher connector, pull the connector off the back of the gauge and make the same resistance checks to the tan wire. If they

(Continued on page 30)



PAINT CARE PRESCRIPTION...
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(Continued from page 29)

don't check, you have a dash wiring problem. If they check OK, your gauge is bad. Gauges can be bench-checked but this is best left to a specialist

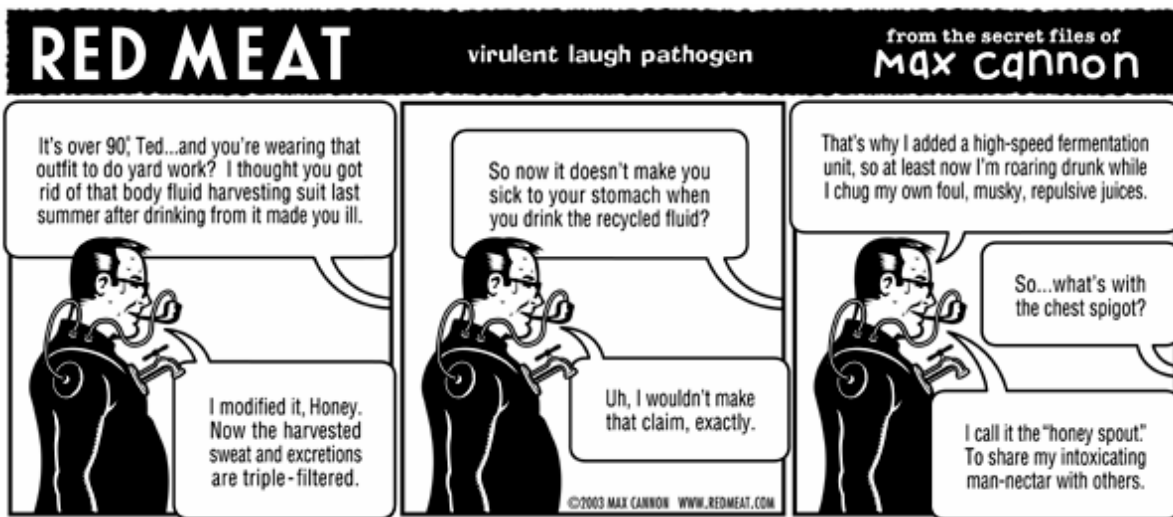
Windscreen Wiper Troubleshooting

The component which seems to fail most often is the latching mechanism in the motor itself. Problems in this device result in two symptoms - failure of the wipers to operate when the switch is turned on or, failure of the wipers to shut off when the switch is turned off. These problems are most pronounced in cars which have been sitting for extended periods.

Understandably, it's not uncommon for folks to mistakenly replace the switch in this situation. There is an easy test to determine where the problem lies. Let's assume that your wipers do nothing when the switch is turned on. To test the system, disconnect the 3-wire plug from the motor. Connect a jumper between the positive battery terminal and the center (brown wire) terminal. connect a second one between the top (white wire) terminal and ground. The motor should operate on low speed. If it doesn't, the problem is in the motor.

If the original problem was that the wipers don't turn off with the switch and the same thing occurs with the above test, this also indicates a motor problem.

(Continued on page 31)



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In both cases, the failure is most likely to be the latching mechanism as mentioned above. To attempt repair, it's necessary to remove the wiper motor from the car (don't walk away, it isn't that tough!). The procedure is covered in your shop manual. Briefly, it consists of removing the wiper arms, wiper grille, escutcheons, motor-to-linkage nut, four motor mounting screws and the motor ground strap. Once the motor is out, remove the four screws attaching the washer pump and remove the pump. This permits access to the

(Continued on page 34)



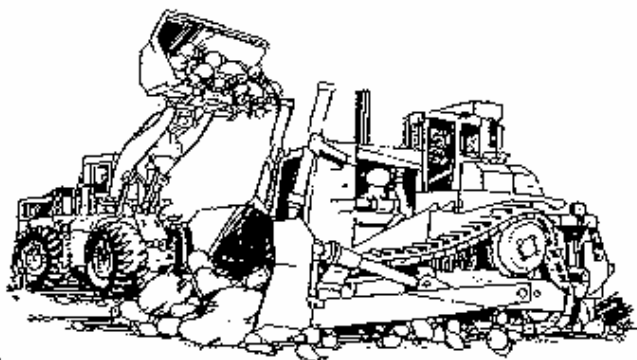
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humor-impaired squared
from the secret files of
Max Cannon

Say, William...I'll give you a brand-new dollar bill if you can tell me how many meters there are in a single, linear mile. Um...a hundred? Sorry, wrong answer.	Too bad. Now you owe me a dollar. Hey, that wasn't part of the deal!	Come on, now. There's always an implicit one-dollar "please don't crush my ribcage with your hydraulic claws" fee when you answer a robot's trivia question incorrectly. Oh. Here's four quarters. Sorry, paper currency only. Loose coins will rattle as I skip away with smug, sadistic glee.
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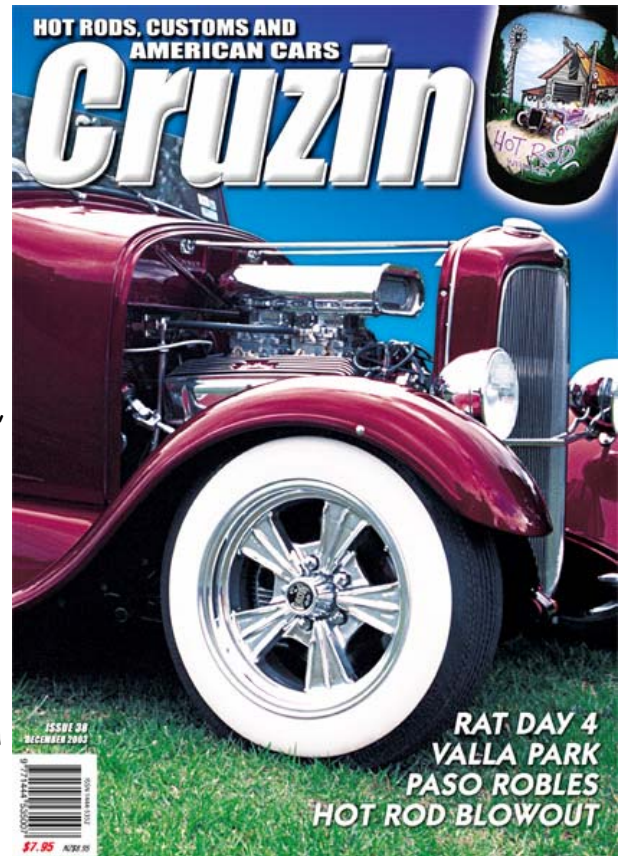
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RED MEAT

the twirling toupée of temerity

from the secret files of
Max Cannon

O Heavenly Father, in the name of your Son, help us to defeat our enemies both foreign and domestic, and lead this great Christian nation to resounding victory.

Interesting request. But as you know, my boy is a very serious rabbi, peace activist, and a fairly radical, liberal, humanitarian reformer. He really doesn't swing that way.

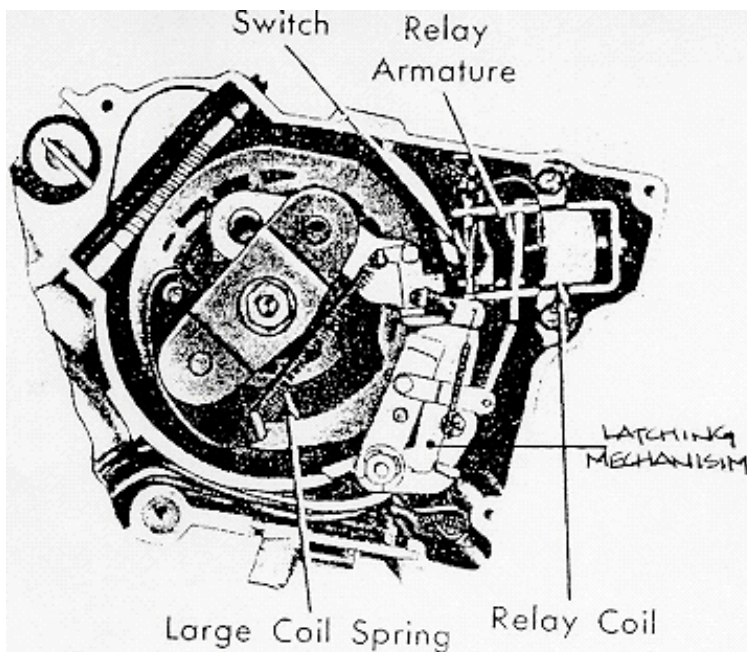
But, hey...I'm taking up your valuable time. Let me go ahead and transfer you over to the God of War's request line.

B-but I thought you were a jealous God, who didn't tolerate other gods before you.

Ha! Ha! Jealous...? Of that clown? Have you seen that ridiculous custom Humvee he drives around in? What a dumb-ass.

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(Continued from page 31)



latching mechanism in the motor. Operate the motor using the procedure outlined above (with the jumper wires). It will also be necessary to connect the motor ground strap to the battery negative terminal. Operating the motor in this manner allows you to see where the latching mechanism is binding.

The most common problem I have found is that the original factory grease be-

comes stiff with age. This is especially true in cold weather or in the presence of dirt. In most cases, the problem can be solved by cleaning the surfaces of the old lubricant and applying a new coat of light weight grease. Once this is accomplished, run the motor through its cycle several times to verify proper operation.

If you are unable to get the motor working properly, don't despair. The good folks at GM used this motor on just about every piece of rolling stock they produced from 1959 to 1962.

RED MEAT

tinkle bell of the unthinkable

from the secret files of
Max Cannon

Listen, um...our friend Gene is sick, so me and the guys were wondering if you'd be willing to come and play shortstop for us.

What...?! You ask the mighty Papa Moai to play a child's game?

Papa Moai...who can hear a lone atom cast off an electron from ten dimensions away!

Papa Moai...who can peer between the onionlike layers that separate infinite potential from that which is and is not!

Well, okay. Your loss, though. Stuart snuck out one of his dad's Penthouse magazines and we've got it in the dugout.

Whoa. Let me go grab my mitt.

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