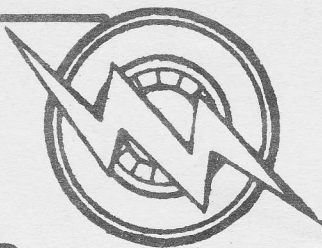


Electric Auto



NEWS

JULY 1985

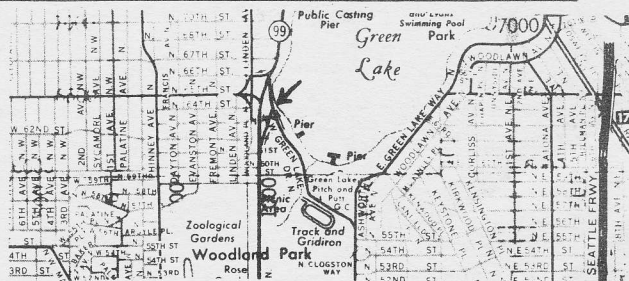
Association

VOL. XVII NO 7

SEATTLE Electric Car

Rally 28

SEE BACK PG.



Australian Electric Vehicle Association
Melbourne Branch,
4th Floor, 126 Russell Street,
Melbourne, Vic. 3000.
Telephone: (03) 63 7263

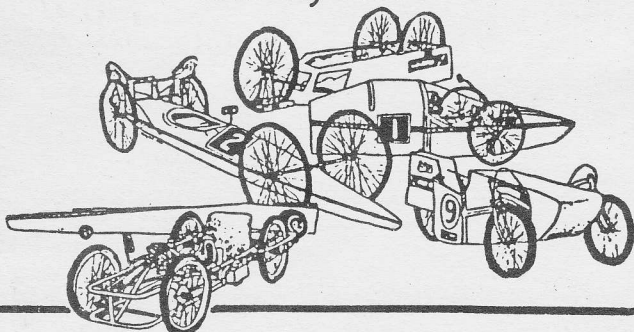
REPORTED BY LYDIA & JOHN NEWELL

The Electrathon 85, a competition among electric vehicles, was scheduled in Melbourne in May. We were able to include this event in our trip. We found it took place adjacent to a huge stadium in Victoria Football League Park on a smooth asphalt race track of 0.6 Km per lap. We expected to find vehicles like our Fiats and Hondas getting ready to compete. We were surprised to see a bustling crowd and activities similar to a Soap Box Derby. Was this the right place?

Yes this was the place. There was the "Silver Streak" a low, trim, unusual, 3 wheeler getting prepared. Nearby was a "Flying Kayak" just the right shape and size for the name but an electric car. Next was "The Dart" that triggered by imagination for a most practical design. Then of all names "The Flying Coffin" stood nearby, almost touching the ground for improved performance. There were many more, all small, all different, all colors, all unique in design and of course all electrics. When one looked closer at the wonderful craftsmanship and unique designs one would find things like printed circuit motors, continuously variable transmissions, a new design for lead acid batteries, and a direct electrical drive in the wheels. They are really demonstrating to the public that there is an alternative to gasoline. By the way, they pay \$2.25 for a gallon (US) of gasoline.

ELECTRATHON

ELECTRIC VEHICLE ENDURANCE COMPETITION
19th May 1985



DUNLOP
BATTERIES

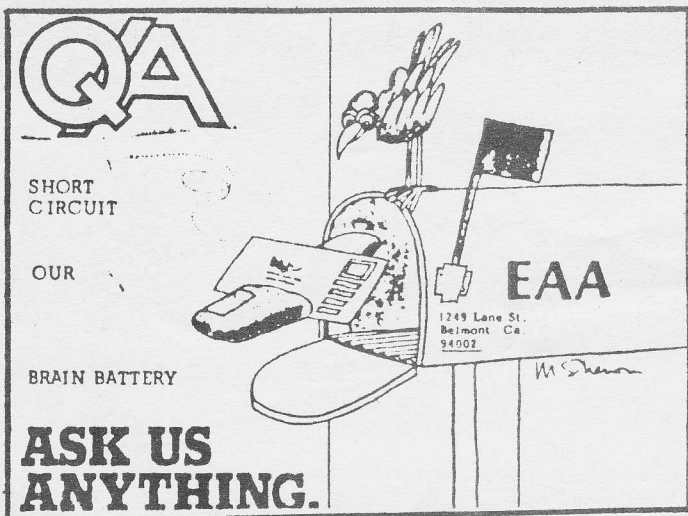
Lucas Service
AUSTRALIA

ALDA
Australian Lead Development Association

LEAD
BHAS
ZINC

We would like to share with you EV fans an unusual experience in Australia. My wife and I decided to take a trip last month to see the "Great Barrier Reef". It is claimed to be one of the "Wonders of the world" and we are now convinced. But that wonder is not what we wish to tell you about now. We witnessed something wonderful about EVs in Australia.

CON'T. PG. 2



Q: Is my accelerator failing if it fails to move the controller the first time I press it, but works the second time?

A: Some controllers have a micro switch that turns on the controller on the first motion of the pedal. Check this switch first. All controllers have a potentiometer (variable resister) with a moving contact controlled by the pedal. This resister may be burned or dirty and sometimes can be repaired by spraying with tuner cleaner, (Radio Shack) or replace. Cost should be about \$5.00.

Q: I would like to change my 120 volt system to lower voltage using 8 or 10 batteries.

A: Don't do it! 120 volts is ideal for a compact car. Your system is designed for 120 volts. Should you go to 60 volts you would have half speed, since motor speed is directly proportional to voltage.

Q: What is the mechanism that limits the life of a battery.

A: Mostly the eating away of the lower end of plates by concentration of acid on discharge cycles. The distortion of internal components by heat caused by over load and or over charging. See Paul Brasch's recirculation artical Feb. '85

Q: I need info. on EVC Inc. controller from Inglewood CA.

A: I believe some EVC people were members of the EVA Fontana CA. Try writing their secretary Vic Schisler, 6841 Jardines Dr. Huntington Beach, CA 92647.

Q: I need info. on digital instrumentation.

A: You should join EAA I have published many digital articals in this newsletter and will have more. Also look up Intersil/GE and write for info.

Q: Can you use a DC to DC converter and eliminate the 12 volt accessory batteries?

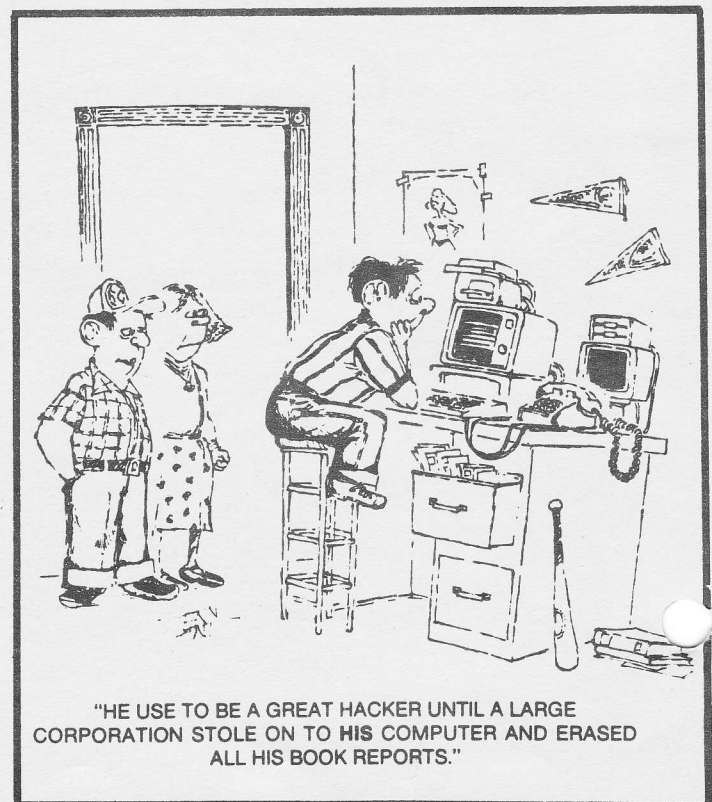
A: Sounds like a very good idea and can work, however, it is not practical. Stan Skokan says your key switch circuit would be complicated and the converter would have to be rated for maximum current of all accessories around 50 amps., which would make it very expensive. A small 30AH battery and a 3 amp converter would be simple, inexpensive, and trouble free.

AUSTRALIA CON'T.

Their competition is different from ours and lots of fun. The energy for propulsion must be supplied by re-chargeable batteries or fuel cells having a total wieght of 25 Kg (55#) or less. The results were interesting to see and we should be able to improve our competition after seeing theirs. We saw a mixture of ages in the attending crowd of spectators, builders, drivers and friends. Older people mingled with teenagers and youngsters about 12 years old were often drivers. After the rally they had a get together barbecue, but unfortunately we had to catch a plane to Sydney and missed that part of a real fun day.

Maybe you saw a brief glimpse of the Electrathon 85 on U.S.A., TV on June 4th Hartman's "Look at the Future"

Lydia and John Newell



Peugeot develops electric car

NEW YORK.—Peugeot has developed an experimental electric-powered car, the 205 Electrique.

The 205 E, based on Peugeot's European 205 subcompact, culminates 16 years of research by the Peugeot Group.

According to Peugeot, the vehicle offers several advancements in electric vehicle propulsion, including a driving range of 86 miles under stop-and-go conditions, a maximum range of 124 miles and a top speed of 62 MPH.

The 205 offers this range and performance with all the comfort, convenience and useful load area found in the production 205 with an internal combustion engine, Peugeot said.

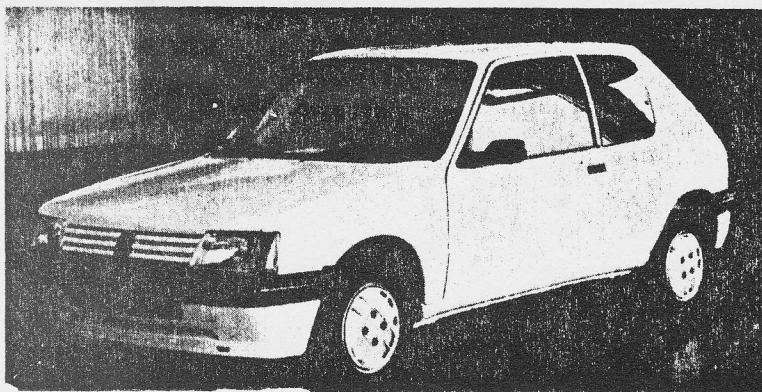
To achieve the 205 E's range and usefulness, Peugeot's Scientific Affairs and Research Division had to develop a battery that would deliver nearly twice the power of conventional lead-acid batteries with no increase in weight or volume.

The breakthrough came with the use of a nickel and iron electrochemical battery. Not only does the nickel/iron battery deliver twice the power output of conventional batteries—at the same weight and volume—battery life is also doubled to an estimated 125,000 miles and 1,500 recharge cycles, according to Peugeot.

Twelve six-volt nickel/iron batteries with a combined weight of 661 pounds are used by the 205 Electrique. They are mounted transversely and are located where a production 205's engine would normally sit (under the hood at the front of the car).

A 17.5-kW electric motor is mounted underneath the battery module and drives the front wheels through a reduction gear unit. No shifting of gears is required, since the 205 E has a built-in electric control unit that makes operation similar to that of an automatic transmission.

Another feature of the electronic control unit is its ability to transform the 205 E's kinetic energy into power that recharges the battery system. In braking, the electric motor is used as a current generator with part of the energy produced recharging the batteries and the rest producing an engine braking effect similar to that of internal combustion engines.



An electric-powered Peugeot

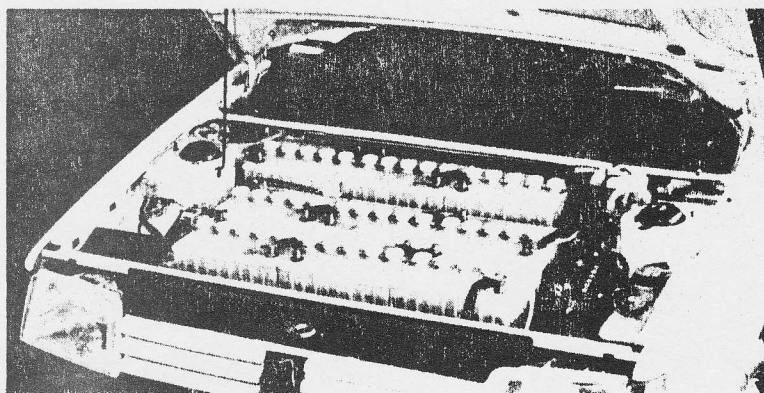
Peugeot's experimental electric-powered car, the 205 Electrique, offers a top speed of 62 MPH and a range of 124 miles per charge. The 205 E is not intended for mass production or sale, but is, rather, a "rolling laboratory," used to study and evaluate systems and concepts to be integrated into future Peugeot automobiles.

Energy can be recovered up to a virtual standstill, thereby adding to the 205 E's driving range, Peugeot said. Recharging time is also held to a maximum of only 10 hours—and that for almost fully depleted batteries.

The 205 E is not intended for mass production or sale, but is, rather, a "rolling laboratory," used to study and evaluate systems and concepts that will be integrated into future Peugeot automobiles.

In this regard, the 205 E is similar to Peugeot's Project VERA (an acronym that translates to applied fuel economy research vehicle). The VERA project has achieved fuel economy of more than 100 MPG, and in September, 1982, the VERA II set an economy record for a five-passenger sedan of 93.1 MPG on a run from Detroit to Knoxville, Tenn.

Where VERA paves the way to the end of the century, realizing low fuel consumption and low pollution levels, the 205 Electrique portends the coming century, according to Peugeot.



Nickel/iron battery

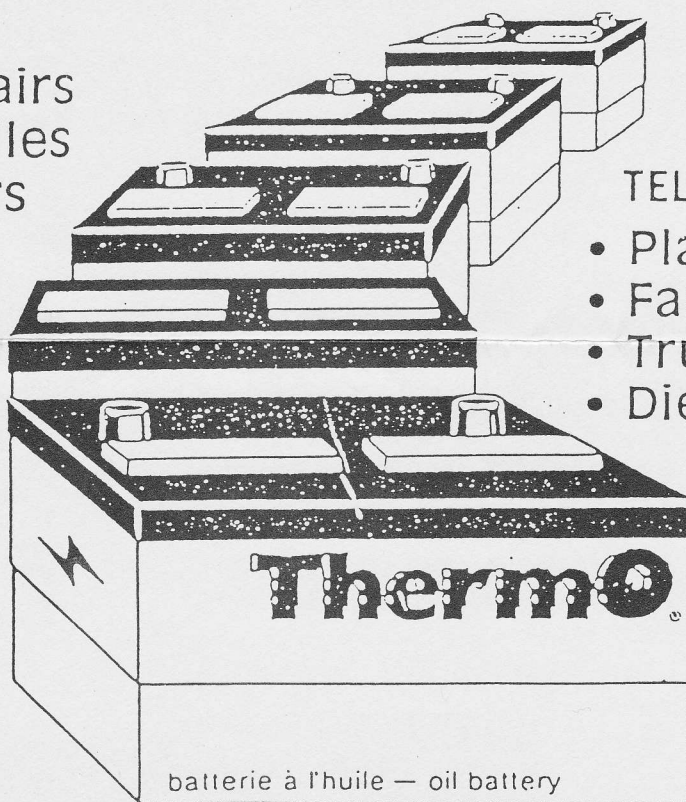
Peugeot's new nickel/iron battery delivers twice the power output and twice the battery life of conventional lead-acid batteries at no increase in weight or volume, according to Peugeot. The 205 Electrique uses 12 six-volt nickel/iron batteries with a combined weight of 661 pounds. They are transversely mounted.

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Electric Auto Association



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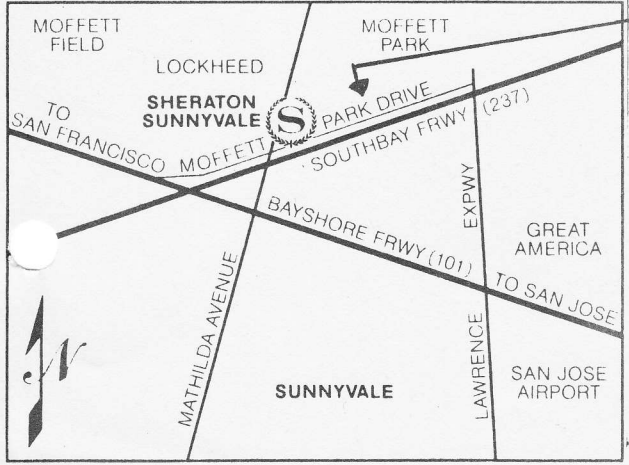
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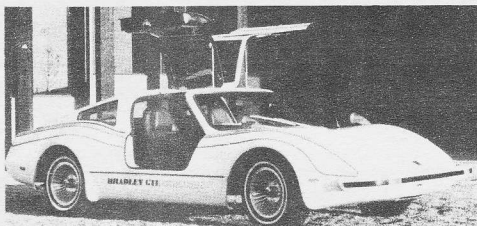
68 FIAT 850 ROADSTER, SKOKAN CONTROLLER, PRESTOLITE MOTOR, 12-EV-106 BATTERIES. \$1500. Al Hardage. (408)734-8385.

STEP-BY-STEP CONVERSION MANUAL _ By Clarence Ellers. Complete instructions on conversion of gas cars to electric. Simple method saves hundreds of dollars. Also information on parts and where to get them. Send for summary to Clarence Ellers, P. O. Box 2781, Santa Clara, Ca 95055

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FOR SALE: 1969 TOYOTA; PMC CONTROLLER, BALDOR MOTOR, On board charger, 16 Trojan Batteries, Built by El. Eng. J. Anderson at a cost of \$5000. Will sell for \$1200 or BEST offer. J. (Ted) Benson, Call (415)992-5453.

BRADLEY GTElectric



The Classic Full Size Gull Wing Doors are automatically operated by high-compression gas pistons. These extra-thick, side opening doors also feature push button door handles, two key door locks and safety double lock latches for rock solid closing.

Bradley GTElectric Hardtop design with steel structure support has tinted windshield, safety glass all around and European-styled vent windows. Removable tinted sunroof panels let the sun shine in.

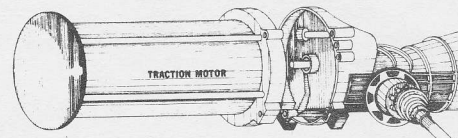
Hatchback window provides easy access to the extra storage area. The tint-tempered window is gas piston powered.

The GTElectric Interior Decor Group includes center console and arm rest, pile carpeting extending to interior sides, full-width padded dash, total interior upholstery and configured twin bucket seats.

"Accepting bids on 1981 Bradley GTElectric Car. Bank repo, fair condition, all bids considered. Respond: Suisun Valley Bank, 1010 Empire Street, Fairfield, CA. 94533, 707-422-8882."

The Built-in Battery Power Recharge Unit accepts standard 110 volt electric house current via a recessed power connection located on the outside of the driver's door. The recharge unit allows quick convenient hook-up for recharging and overrides entire system so the car will not run until the recharge cord has been disconnected. The average time of the recharge is only seven to eight hours.

Sixteen 6-volt Batteries make up the power source that are mounted in a series of six in the front and ten in the rear of the Volkswagen chassis. The battery compartment design allows easy access for maintenance.



The Power Drive System is a heavy duty direct current traction motor. A motor casting that resists water, acid and corrosive fumes. The traction motor is designed to provide maximum power efficiency at a minimum of battery drain. The entire motor that is 19 inches long by 9 inches in diameter bolts directly to a standard Volkswagen four speed transmission and transaxle drive system.

ADS must be received with payment by the 10th. of the month, for the following month's issue. AD rate is min. 1 to 5 lines \$5.00, 1/4 Pg. \$15.00, full Pg. \$50.00, full Pg. 2 sides \$80.00. Wanted, Trade, For Sale, etc. Mail to EAA 1249 Lane St. Belmont, CA. 94002

WHATS HAP'N

PENINSULA - July 6

Call: Mae Bensen (415) 992-5453

PENINSULA CHAPTER'S ANNUAL POTLUCK

WHEN: SATURDAY JULY 6th

WHERE: COYOTE POINT

TIME: ABOUT NOON

For more information contact:

Mae Bensen--(415) 992-5453

SUMMER IS RALLY TIME

SEATTLE - July 28

Call: Steve Lough (206) 325-2600

OAKLAND - Aug 10

Call: Jim Fahey (415) 848-1468

DENVER - Aug 24-25

Call: George Giess (303) 442-6566

INTERNATIONAL

SUNNYVALE - Sept 21-22

Call: Clarence Ellers (408) 248-2588

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Call the contact person for meeting times and places.

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