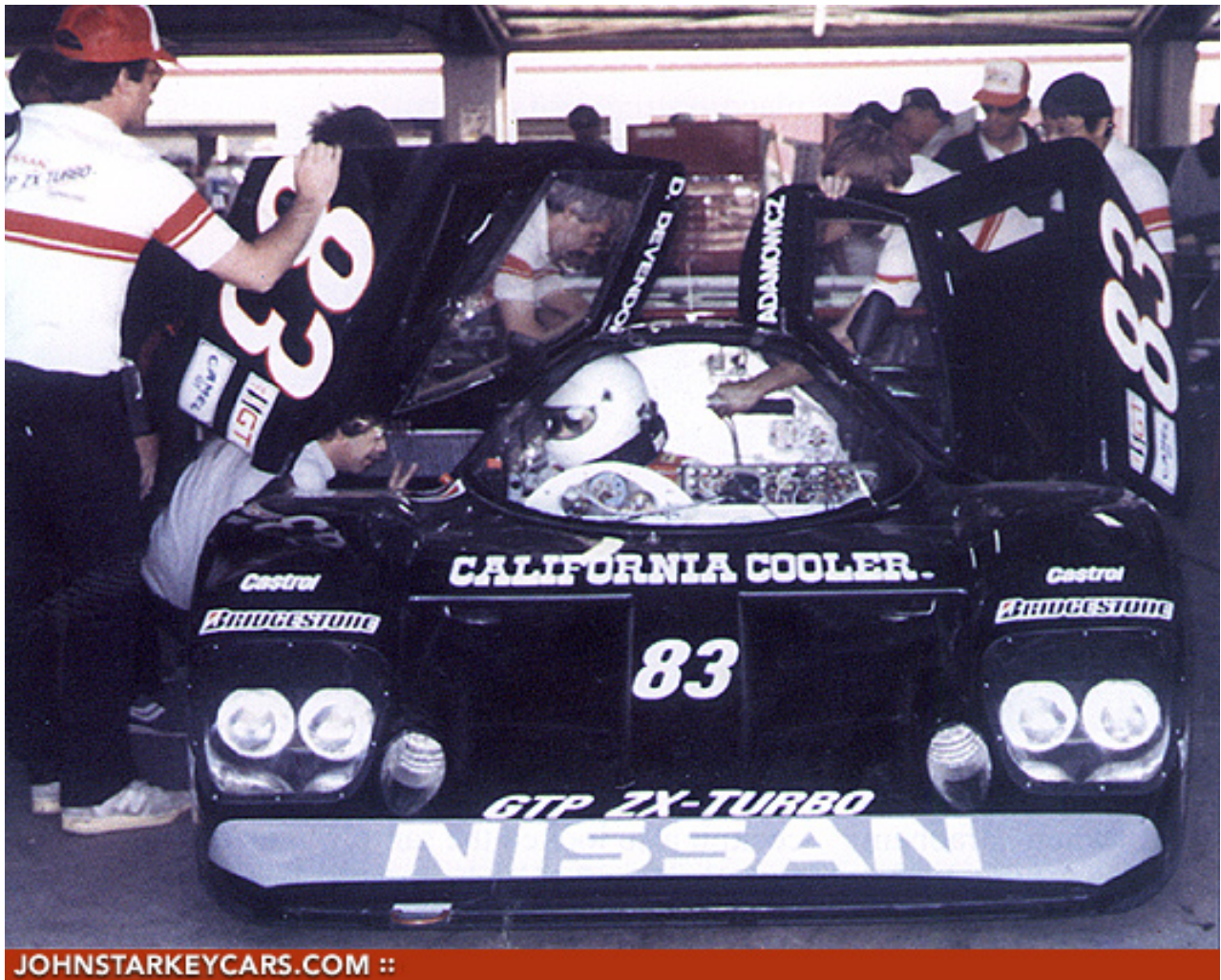


# ELECTRAMOTIVE NISSAN ZX-T

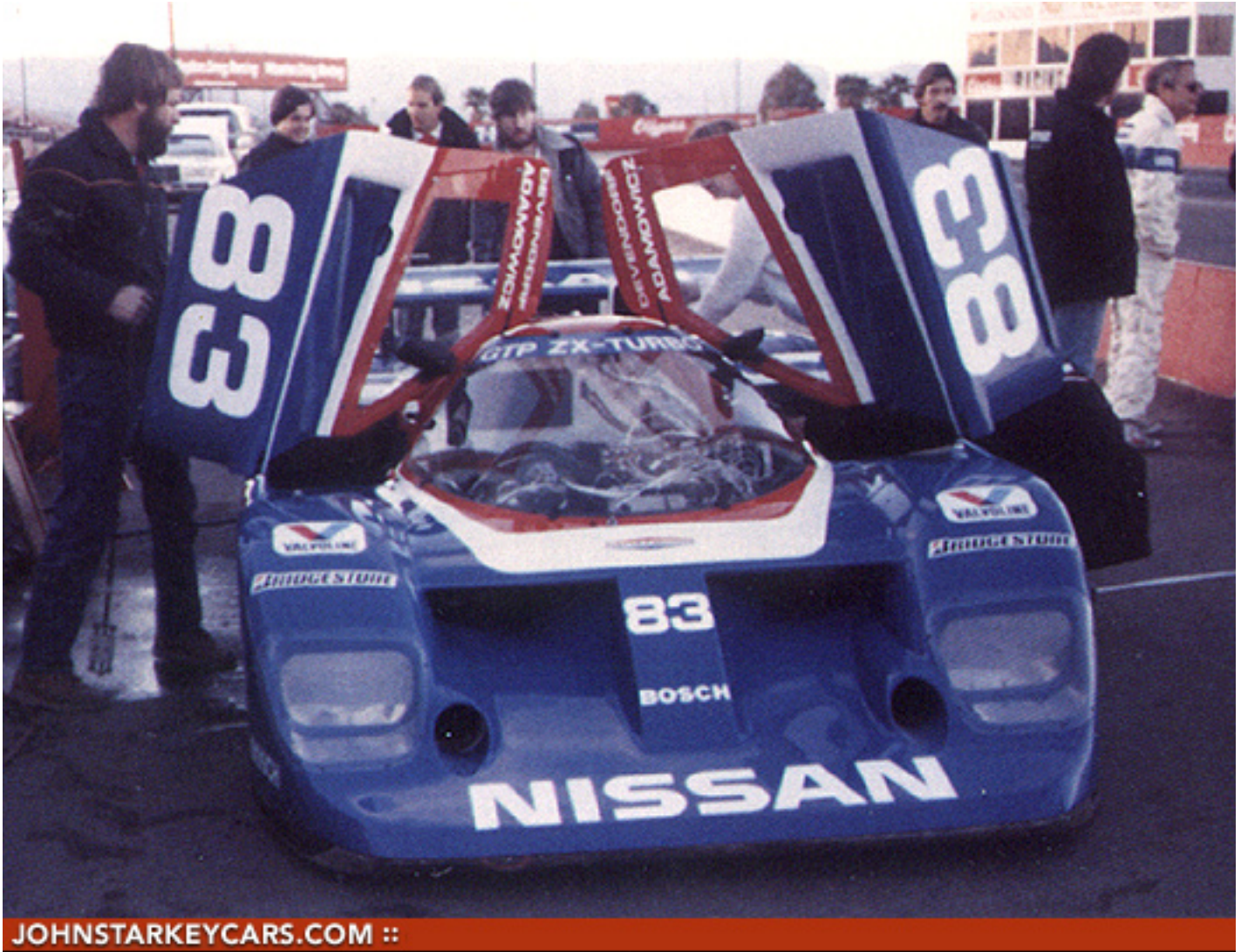


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The Electramotive "Nissan GTP ZX Turbo" made its debut at Riverside in 1985. It practiced, but did not start due to gearbox failure. - Photo courtesy of Ashley Page



## Electramotive Nissan ZX-T



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The Lola-Nissan, now in red, white and blue livery, instead of the previous black. The new, Yoshi Suzuka-designed bodywork is fitted, superseding the original Lola T810 shape. - Photo courtesy of Ashley Page

Electramotive Engineering of California was started by Hughes Aircraft Corporation scientist and motor racing enthusiast Don Devendorf, who had run in IMSA's lower classes with success during the 1970s and early 1980s in modified Datsun/Nissan sportscars. Devendorf's partner in the venture was his friend, John Knepp.



Electramotive became America's leading specialists in the sale and preparation of road and racing Nissans, and when the Japanese company decided to enter the GTP category, they naturally approached Devendorf to run the project. First of all, Devendorf bought a Lola T810 rolling chassis which was really a T710 monocoque, very similar to the tubs built for GM for their 'Corvette GTP' project. The T810 had slight detail modifications to allow for the Nissan engine, cooling and bodywork installations. The two chassis shared the same suspension installation and physical dimensions.



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Road Atlanta 1990 - During Friday's wet practice sessions the Electramotive team never misses a beat. Lap after lap, rain or shine, day or night, the improvement of the GTP-ZX Turbo continued. The new car would come online within the next few races.

The John Knepp-developed turbo V6 engines, based upon the production 'Z' car engine, were built by Nissan and featured the stock iron block and aluminum heads of the original engine, but Knepp designed, developed and reprogrammed the engine's

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sophisticated electronic brain. This engine was named the 3.0-liter VG30 and, in 3.2-liter twin-turbo alloy-block (Electramotive cast) configuration, was also used by Nissan in their March-based Group C cars. The Bodywork of the American GTP car was designed by Yoshi Suzuka.



NPTI 9003 at Mid-Ohio in 1991.

Appearing first of all at Laguna Seca in May 1985, the Nissan ZX-T was not successful in its first year, but in 1986, at Portland, Geoff Brabham won pole. He and Elliot Forbes-Robinson led the race only to run short of fuel with just two laps left. Stopping for a top-up, they finished third.

The effort was in full swing by 1987, more chassis arriving from Lola and development was ongoing: a Hewland gearbox replacing the original Weismann transmission. At Miami in early 1987, the car won at last. Brabham and Forbes-Robinson took pole and beat Rahal and Mass' Porsche 962. Electramotive Nissans took four more pole positions but no more victories that season. The Nissans were fast but unreliable.

In 1988, Jim Chapman's JC Prototypes built a new chassis, designed by Trevor Harris, to take the older car's running gear and bodywork. Goodyear tires replaced the Bridgestones previously used. IMSA had introduced new regulations to restrict the tremendous horsepower which was beginning to be seen from the turbo-engined GTP cars. Restrictor plates had to be fitted to engine intakes, IMSA reasoning that the



horsepower advantage would now go in the favor of the big American V8s. Nothing daunted, John Knepp built an electronically-controlled turbocharger wastegate into the engine management system. This much-copied wastegate was the key to the team's success. In desperation, in mid-season, IMSA made another rule change, which gave the pushrod cars an extra weight advantage but it made little difference.



John and Paul Reisman (father and son) own NPT1 9007 today and race her enthusiastically in the HSR "Thundersports" series. Here is the Car at Daytona in 2002 - Photo courtesy of Paul Reisman.

Nissan dominated IMSA racing in 1988, much to the dismay of the newly-arrived TWR Jaguars. Knowing that their strength lay in the shorter sprint races, Electramotive avoided the early races at Daytona and Sebring. But after that, Geoff Brabham, using the new chassis '8801', won almost every race, taking nine wins (including eight in a row), usually partnered by John Morton. Nissan won the manufacturers' title and Geoff Brabham became the IMSA GTP Drivers' Champion.

1989 was very much a repeat of 1988. A second Chapman chassis '8802' had been built and delivered to Electramotive. The opposition was in disarray, as Porsche were now fading from the scene with the 962, Jaguar were developing their new XJR-10 V6 turbo and Dan Gurney's Eagle Toyotas were still on the learning curve. Nissan and Brabham were champions again.

Devendorf's team, by 1990, had been reorganized and re-titled "Nissan Performance Technology, Inc." (NPTI). The lightweight Eagle Toyotas were now showing themselves as the main threat even though Jaguar were providing slightly better opposition, but the ZX-Ts still dominated. Both Nissan and Brabham kept their championships. Halfway through the year, an all-new NPT90 car, still using the VG30 engine, was debuted and ran concurrently with the older car. Just one month after its first race, it was driven to victory at Mid-Ohio in June, by Derek Daly and Geoff Brabham.

NPTI took delivery of two Lola-built Group C R90CKs with VRH35Z engines in 1990 and took them to Le Mans as part of Nissan's 7-car attack, but both retired.

## **Electramotive Nissan ZX-T (IMSA GTP – 1985)**

|                        |   |
|------------------------|---|
| Constructor:           | Electramotive Engineering Incorporated,<br>El Segundo, California, U.S.A.   |
| Chassis<br>Fabricator: | Lola Cars Ltd.,<br>Glebe Road, St. Peter's Hill,<br>Huntingdon, Cambridgeshire, England.  |
| Chassis:               | Lola T810 aluminum honeycomb monocoque with full-length side pontoons (from pedal-box to behind rear bulkhead), designed by Eric Broadley. Ground effects chassis. 120-liter fuel tankage. Electramotive VG30 GTP 60-degree V6, blown, water-cooled. Single Garrett TO3 turbocharger. 87.0 x 83.0mm / 2958.9cc. Iron block, aluminum heads. Wet iron liners, 4 plain main bearings. |
| Engine:                | Steel crankshaft. Steel con rods. Ross light alloy pistons. Sealed Power rings. SOHC belt driven. 2 valves / cylinder (44.07mm inlet, 35.05mm exhaust), 1 plug. Compression ratio 8.5:1. MSD Ignition. Bosch injection. Electramotive engine management system. Semi-stressed chassis member. Maximum rpm: 9,000.   |
| Body:                  | Carbon fiber and Kevlar, designed by Yoshi Suzuka.  |
| Suspension:            | Inboard pushrod front suspension and outboard wishbone / coil / damper rear. 13-inch ventilated discs. AP 4-pot calipers outboard. BBS rims – 16 x 11-inch front. 16 x 14-inch rear. Bridgestone tires (Goodyear 1986-on).  |
| Gearbox:               | Weismann 5-speed; later Hewland VGC 5-speed.  |
| Dimensions:            | Wheelbase: 2,705mm. Track (f) – 1,600mm / Track (r) – 1,550mm.  |
| Weight:                | 850 kilograms.  |

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