

# TOYOTA

Toyota Motor Corporation is involved in many wide-ranging activities for supporting the healthy development of motor sports, notably by providing engines and parts to strong domestic and foreign teams and motor sports fans.

As part of these activities, this year Toyota is once again backing the TOM'S and DOME teams in participating in the greatest race in the world, the "Le Mans 24 Hour Race".

Last year Toyota backed these two teams and competed in the Le Mans race for the first time, and happily the result was that it achieved a superb showing with the "TOYOTA TOM'S 85C-L" staying the course and finishing 12th overall.

Two cars are being entered this time, the "TOYOTA TOM'S 86C-L" and the "TOYOTA DOME 86C-L". Both are Group C cars manufactured entirely in Japan and fitted with the 4T-GT Toyota racing engine.

These two cars have been improved with detailed modifications in the course of this year, making the most out of the experience TOM'S and DOME gained last year at Le Mans.

With the 2090cc plus single turbo the fitted 4T-GT engine is also somewhat lighter than last year and it boasts excellent mileage and superb durability. On top of that we are very fortunate in having excellent drivers and staff, so we expect to do at least as well as last year against the large-displacement, high-powered rival cars.

We would be very grateful for your support and encouragement.

## TOYOTA MOTOR CORPORATION

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# TOYOTA

This year the TOM'S Team is again to participate in the world's greatest race at Le Mans.

Last year, in this tradition-bound Le Mans 24 Hour Race which is said to be difficult even to complete in, despite the fact that it was the first time that the TOM'S Team had been entered, we achieved the unexpected result of not only staying the course but being placed 12th overall.

In this race we savored the difficulties and delights as we fought through the 24 hours against the veteran teams of the world.

We are very happy to be able to participate in such a superb race once again this year, and we would like to express once our gratitude to all our sponsors, including Toyota Motor Corporation, who have provided us with backing.

The car entered this year is the TOYOTA TOM'S 86C-L, to which together with DOME we have added modifications based on our experience last year.

Moreover, the team organization has been managed to perfection, with drivers Satoru Nakajima and Geoff Lees along with the mechanics and service staff.

Not being satisfied with our fine showing last year, we are determined to do even better this time in challenging the "world".

We would be very grateful for your supports and encouragement.

TOME'S Co., Ltd.

Nobuhide Tachi

## TOM'S and TOM'S Racing Team

TOM'S Co., Ltd. was established in 1974 by former Toyota work's drivers Nobuhide Tachi and Kiyoshi Ohiwa as a tuning shop for Toyota cars. It has continued to grow steadily with the emphasis on tuning up touring cars and developing and selling racing parts, concentrating chiefly on the engine.

At the time it was established the company commenced racing activities with the backing of Toyota Motor Corporation. It has participated in races both in Japan and overseas and has recorded some excellent results. Particularly spectacular have been its successes in the Macao Grand Prix, the Malaysia Grand Prix, and other South East Asian events.

In 1980, as the first joint project with DOME Co., Ltd. it cooperated in the production of the DOME Celica Turbo, and in participating in Group C endurance races entered the Sebring 12 Hour Race and the Riverside 6 Hour Race.

Thereafter, in 1982 a start was made on the development of a Group C racing car fitted with the Toyota racing engine, and in cooperation with DOME a series of machines were built which included the TOYOTA-DOME CELICA C (1982), TOYOTA-TOM'S 83 C (1983), TOYOTA-TOM'S 84 C (1984), TOYOTA-TOM'S 85 C (1985) and TOYOTA-TOM'S 86 C (1986).

Using these Group C cars, TOM'S participated in endurance races mainly in Japan and was a match for the world veterans. At present it stands firm in its position as the leading Japanese in specialist endurance races.

Notably last year, as well as putting up a superb showing at the Le Mans 24 Hour Race (despite the fact that it was competing for the first time) by staying the course and finishing 12th overall, it also took third place at the World Endurance Championship in Japan.



Nobuhide Tachi (Born 1947)

After his racing debut in the Toyota Publica at the age of 18 he became an exclusive Toyota driver from 1970. In 1974 he established TOM'S Co., Ltd. which has been successful in its business of tuning up Toyota cars. At present, as well as remaining active as a driver, he exhibits superb ability as the director of Toyota's endurance racing team.

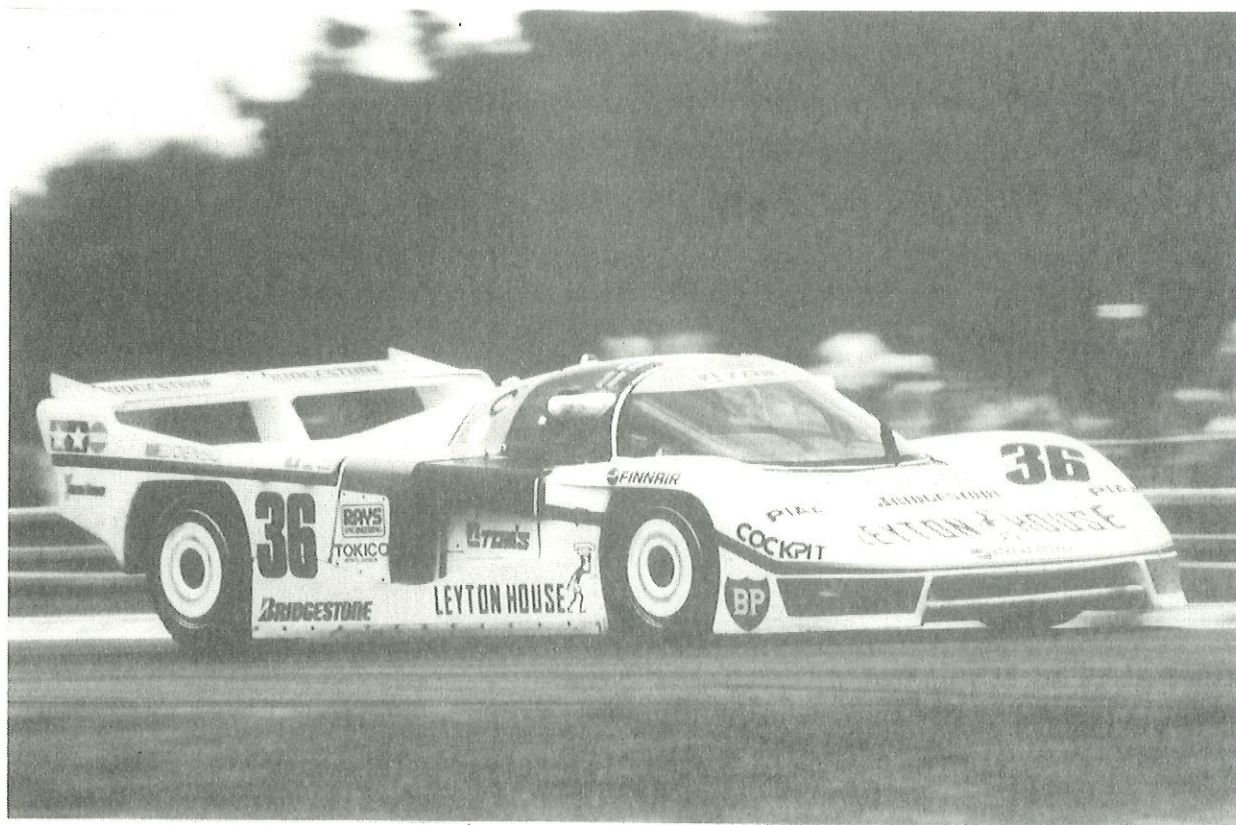
## TOM'S Racing Team Le Mans History

1980 TOM'S did a test run of Le Mans with the Celica jointly developed with DOME but did not enter the actual race.

1985 With its new machine, the TOYOTA TOM'S 85C-L fitted with the 4T-GT Toyota racing engine, which it was using for endurance races in Japan, TOM'S competed in the Le Mans 24 Hour Race for the first time. It put up a good fight against the line-up of veteran teams and achieved the superb result of staying the course and placing 12th overall.

This was the best result ever for an entirely Japanese produced car driven by only Japanese drivers..

1986 In cooperation with DOME, the TOYOTA-TOM'S 85C-L which was entered last year has been modified to become the TOYOTA-TOM'S 86C-L, and will again compete at Le Mans.



TOYOTA TOM'S 85C-L / 24 HEURES DU MANS 1985

## TOM'S Racing Team Participating Staff

Car: TOYOTA-TOM'S 86C-L

Drivers: Satoru Nakajima, Geoff Lees, Masanori Sekiya

Staff: General Director Nobuhide Tachi

Team Manager Susumu Koumi

Chief Engineer Kiyoshi Ohiwa

Chief Mechanic Yutaka Imanishi

## Drivers' Profiles

### Satoru Nakajima

Born 23/2/1953, age 33. Nationality: Japanese.

Having started with racing carts at the age of 16, Nakajima made his car racing debut in 1973 in the Suzuka Silver Cup and promptly carried off the series championship for that year. In 1977 he shone as the perfect champion when he accomplished the great feat of winning all seven races in the All-Japan Formula Junior Championship, coming first in all the qualifying rounds as well as the final race. In that year also he took a step up to compete in the F2 Series.

From 1978 he concentrated on the Japan F2 Series and since his debut he has had a total of 20 wins. In addition, he has succeeded in winning the series championship five times, in 1978, 1981, 1982, 1984 and 1985.

He has had experience racing abroad since 1977. In the following year he participated in an F3 race in England and in 1983 he competed in 6 European Formula 2 races, finishing 2nd at Silverstone.

Having also done F1 test driving for Lotus and Williams he has acquired the European style of driving. From this year he has been competing in the International F3000.

As for endurance racing, this is his third year, having concluded a contract with TOM'S Team in 1984. As well as being entered in the Le Mans 24 Hour Race with the TOYOTA-TOM'S 85C-L for the first time and achieving a brilliant showing in finishing 12th overall, which was the best ever for Japanese drivers in a Japanese car, he has participated in 6 endurance races in Japan.

Geoff Lees

Born 1/5/1951, age 35. Notinallity: British.

In 1971 at the age of 20 he started his carear as a racing driver with Formula Ford. In his fourth season in 1975 he caught attention by piling up a sensational record of 33 wins in 40 races. Having moved up to Formula 3 in 1976, he joined the Chevron Work's Team in the following year and became a teammate of Eje Elgh.

From 1978 he participated in the European F2 Series and also entered the Can-Am Series in the U.S.A. The following year he had his first drive in Formula 1 at the German Grand Prix. Then in 1980 he competed in the World Formula 1 Grand Prix Series as a driver for the Shadow team and for the Theodore team.

Entered once again in the European F2 Series in 1981 with the Ralt Work's Team, he became the European Formula 2 champion for that year.

Returning to the F1 Series in 1982 he competed as a driver for the Theodore and Lotus teams. He also competed for the first time at Le Mans, driving an Aston Martin.

During his stay in Japan in 1983, he won the Japanese Formula 2 Championship Series.

As well as participating in the Japanese F2 Championship Series last year, he signed a contract with the first time with DOME, at the same time entering endurance races in Japan and also competing in the Le Mans 24 Hour Race.

Masanori Sekiya

Born 27/11/1949, age 36. Nationality: Japanese.

He made his debut at the age of 22 in 1971 in the Fuji 500 km Race and he concentrates mainly on touring car races. In 1977 he won the Touring Car Championship of Japan.

In 1979 he drove for the Mazda Factory Team. Two years later he went to England and entered the Formula Atlantic, in which he was rated highly for finishing well up in five of the six races. Having concluded a contract with Team TOM'S in 1983 he has been driving mainly touring cars and Group C cars for the team. Notably in the World Endurance Championship held at Fuji Speedway in Japan in 1984, he managed to finish in 7th place overall, which was the best position for a Japanese car.

Last year, together with Nakajima he entered all the endurance races in Japan and also took part in the Le Mans 24 Hour Race, at which the superb result was achieved whereby Japanese stayed the course for 24 hours and finished 12th overall.

# TOYOTA-TOM'S 86C-L

## Specifications

### \* Engine

#### Type

TOYOTA 4T-GT

watercooling vertical 4-cylinder

DOHC 8-valve plus turbocharger

#### Turbocharger

TOYOTA twin entry single turbocharger

#### Bore & Stroke

89mm x 84mm

#### Capacity

2090cc + Turbo

(Turbo conversion x 1.4 = 2926cc)

#### Fuel Injection System

NIPPON DENSO Electric Fuel Injection

#### Compression Ratio

7:1

#### Max. power

503PS (370Kw)/7600rpm

#### Max. torque

51Kg-m (500Nm)/5200rpm

### \* Body & Chassis

#### Cowl

Carbon Kevlar composite

#### Measurements

##### Height

960mm

##### Length

4650mm

##### Width

1990mm

##### Wheelbase

2600mm

##### Tread (front/rear)

1600mm/1570mm

#### Weight

over 850kg

#### Fuel Tank

ATL Safety Fuel Tank 100

#### Transmission

March GT-P

#### Clutch

AP triple plate

#### Suspension

##### Front

Double wishbone/Outboard coil spring

##### Rear

Double wishbone (locking arm type)/Inboard coil spring

#### Brake

##### Front & Rear

Ventilated disc brake/AP 4 pot single caliper

#### Tyre & Wheel

BRIDGESTONE

##### Front

280/600 x 16 x 11J

##### Rear

350/680 x 16 x 15J



# TOYOTA

After being asked in a half-friendly and half-menacing tone whether I am going to Le Mans once more, the time of year has come for me to write my annual greetings upon entering Le Mans. When I was 19 years old I lost a great racing friend of mine in an accident. In my letter to his mother I mentioned my absurd dream of participating in Le Mans in a racing car I would make myself. 14 years later in 1979 I took part for the first time at Le Mans and this will be the eighth consecutive year in which I have participated. Since I started Mazda Speed and TOM'S have joined in and this year Nissan plans to enter for the first time. No doubt there are many people who understand the fascination with Le Mans, which I continue to share. What with all the famous cars - Ferrari, Porsche, Jaguar, Aston Martin, Benz, Lancia and so on - in the same place at the same time, everyone can enjoy their own drama. However, from last year DOME competed at Le Mans, not simply as a private team constructor as it had done before that, but with a new frame of mind as a professional team benefiting together with TOM'S from the supports of Toyota Motor Corporation. Because it was our first year with this new organization, we tended to err in the direction of safety in the engine setting and so on. However it was thanks to this that Team TOM'S was able to achieve the fine result of staying the course for first time and placing 12th overall. However, this year we really want to face the veterans of the world and battle it out with no holds barred. DOME is proud to share the long historical tradition of Le Mans.

DOME Co., Ltd.

Minoru Hayashi

## DOME and Team DOME

DOME Co., Ltd. was established in 1975 by its current director, Minoru Hayashi, as a small production maker of sports cars. Its first car, the DOME-ZERO which was completed in 1978, made an impressive debut that year at the 48th Geneva Motor Show. In 1979 DOME competed for the first time at Le Mans with two originally designed and manufactured Group C DOME-ZERO RLs. Since then, it has entered for eight consecutive years.

From 1982, in cooperation with TOM'S Co., Ltd. it designed and built the TOM'S-DOME CELICA C fitted with a Toyota engine, and with this cat Team TOM'S has performed spectacularly in domestic endurance races including the World Endurance Championship in Japan.

In 1983 it participated in the Japan Endurance Race Series for the first time, the Group C DOME RC-83 FORD and TOYOTA-TOM'S 83 C were designed and developed, and Team DOME was entered in all six races of the RC-83 Ford Series.

In 1984, the TOYOTA-DOME 84 C incorporating the 4T-GT Toyota racing engine was developed, and this car placed 7th overall in the World Endurance Championship in Japan, the highest position for a Japanese car.

In the first race of the '85 Japanese Endurance Series, the Suzuka 500 km Race, DOME won against two competing Porsches, thereby achieving the first victory for a Japanese Group C car.

DOME enters races as a practical means of researching the know-how generated from the designing and developing of racing cars, which is its main business, and it has now established itself as the leading such builder in Japan.



Minoru Hayashi (Born 1945)

In 1975, with the aim of designing and developing sports cars, he established DOME Co., Ltd.

In 1978 the company's first car, the DOME-ZERO, was exhibited at the 48th Geneva Motor Show where it jumped into the spotlight.

Since 1979 he has competed every year in the Le Mans 24 Hour Race, in cars originally designed and developed by the company.

## Team DOME Le Mans History

1979 After testing two of its originally built DOME-ZEROs at Silverstone and Snetterton in England, DOME entered the Le Mans race, but unfortunately had to retire without completing the race.

1980 Participation this year was with the newly designed DOME RL-80 and DOME-CELICA Turbo (G5), managed by DOME and TOM'S respectively. The DOME RL-80 finished in 25th place overall and 4th in its class, which was the best ever performance by a Japanese team. Team DOME also received the special award for having the best mechanics.

1981 In its third attempt at Le Mans DOME competed with the RL-81, a modified version of the RL-80, but retired due to engine trouble.

1982 In order to upgrade the capacity of the machine and the all-round capability of the team, DOME contracted with the RAM Automobile F1 team of England. The machine parts were sent from Japan and assembled on the spot. However, DOME was again forced to retire due to engine trouble.

From around this time it became common to fit endurance racing cars with special engines developed by the automobile makers themselves, DOME and TOM'S started working on newly developed machines to be powered with the 4T-GT Toyota racing engine. With an eye to the World Endurance Championship scheduled to be held in Japan, the building of the TOM'S-DOME CELICA C was also commenced. This car was entered by Team TOM'S and finished in 5th place overall, the highest position for a Japanese car.

1983 In response to the growing popularity of endurance racing in Japan, the TOYOTA-TOM'S and DOME RC-83, equipped with Toyota and Ford engines respectively, were designed and built. The TOYOTA-TOM'S and DOME RC-83 entered by TOM'S and DOME for all six races in the Japanese endurance series demonstrated speed which revalled the Porsche 956 and placed 2nd overall on three occasions. Meantime, the upgraded DOME RC-08 was sent to Le Mans, but had to retire.

1984 Concentrating on the Le Mans challenge, the team's sixth attempt was made with the DOME RC-83i Ford. Although the 15th position at the qualifying stage was lost when the machine crashed due to engine trouble, its considerable potential was demonstrated when it recorded a speed of 354km/h on the 6 km straight course at "Hunaudieres". In addition, both teams entered the Japanese endurance races with the newly developed TOYOTA 84C. In the WEC Japan, despite losing 15 minutes due to engine

trouble, this Group C car placed 7th overall, the best position for a Japanese car.

1985 In the Suzuka 500km Race, the first in the Japanese endurance series, the TOYOTA-DOME 84C successfully finished as overall victor after a dead heat with a Porsche 962.

## Team DOME Participating Staff

Car: TOYOTA-DOME 86C-L

Drivers: Eje Elgh, Beppe Gabioni, Toshio Suzuki

Staff: General Director Minoru Hayashi

Team Manager Hiroshi Fushida

Team Engineer Hidetoshi Kimura

Chief Mechanic Masayoshi Kishimoto

## Driver's Profiles

### Eje Elgh

Born 15/6/1953, age 31. Natinality: Swedigh.

Having been influenced by his father, a moto-cross driver, he began driving racing carts at the age of 12. Over the following eight years he entered nearly 200 races, winning the Swedish Championship twice and the Scandinavian Championship once.

In 1975 at the age of 22 he went to England and started his racing driver career. From 1975 to 1977 he competed in the European F3 Series as a driver for the Chevron Work's Team. From 1978 he was entered in the European F2 Series, also for the Chevron Work's Team. He moved to the maurer Work's Team in 1980 and subsequently finished in 3rd place in the 1982 European F2 Championship. In 1982 he participated in the Le Mans 24 Hour Race in a March 82G and also competed in the Japanese F2 Championship Series for the first time.

Since 1983 he has been under contract with Team DOME and has concentrated on the endurance and F2 races in Japan, in addition to Le Mans and the Macao Grand Prix. Worthy of note is the 4th place he achieved in the 1984 All-Japan F2 Championship Series.

In 1985 he won the Suzuka 500 km Race in the WACOAL TOYOTA-DOME 84 C and entered the Le Mans 24 Hour Race in the TOYOTA-DOME 86C. He also placed 2nd in the Fuji 500 km Race.

## Beppe Gebbiani

Born 7/1/1957, age 29. Nationality: Italian.

He started with racing carts at the age of 14 and in the four years to 1975 his excellent results, which included winning the Italian Championship twice, the World Junior Championship and the European Team Championship, attracted attention.

He started driving F3 cars in 1977 at the age of 20 and subsequently won the Italian Championship twice, and the European Championship and Silverstone Grand Prix once each. In 1978 he moved up to the F2 class, competing in the European F2 Championship in Chevrolet and Ferrari. He also drove in F1 races.

He competed in the 1979 European F2 Championship as a member of the March BMW Work's Team, and in that year placed 2nd in the Italian Championship, as well as being victorious in the Suzuka Grand Prix. In 1981 he entered the F1 championship in an Ocella Denime and also won the endurance race at Silverstone in a Lancia Martini. During 1983 and 1984 he participated in the European F2 Championship in a March, winning in Italy and at Silverstone and on five other occasions. He also competed in the World Endurance Championship in a Lancia Martini.

He contracted with Team DOME in 1985 and entered the Suzuka 500 km Race in the WACOAL TOYOTA-DOME 85C.

## Toshio Suzuki

Born 10/3/1955, age 31. Nationality: Japanese.

Having started with racing carts when a junior high school student, in 1974 he placed 4th in the Philippine International Cart GP and ranked 2nd in the All-Japan Cart Championship. He then won the All-Japan Cart Championship time consecutively, in 1975 and 1976.

In 1978 he ranked 2nd in the All-Japan FJ1300 Championship and in 1979 attracted attention by becoming the first winner of the All-Japan F3 Championship, which was first held that year. In 1980 he contracted with March of England as an F3 work's driver and competed in the European F3 Championship. From 1982 he competed in F2, FP and GC races in Japan. In the All-Japan F2 Championship in 1984 he succeeded in placing 8th in the series overall, with a best position of 3rd. Also in that year he took part in the Le Mans 24 Hour Race for the first time with Team DOME. In 1985 he concentrated on the Japanese endurance series and the All-Japan Touring Car Championship and also entered the WEC Japan in the TOYOTA TOM'S 85C.

# TOYOTA-DOME 86C-L

## Specifications

### \* Engine

#### Type

TOYOTA 4T-GT

watercooling vertical 4-cylinder

DOHC 8-valve plus turbocharger

#### Turbocharger

TOYOTA twin entry single turbocharger

#### Bore & Stroke

89mm x 84mm

#### Capacity

2090cc + Turbo

(Turbo conversion x 1.4 = 2926cc)

#### Fuel Injection System

NIPPON DENSO Electric Fuel Injection

#### Compression Ratio

7:1

#### Max. power

503PS (370Kw)/7600rpm

#### Max. torque

51Kg-m (500Nm)/5200rpm

### \* Body & Chassis

#### Cowl

Carbon Kevlar composite

#### Measurements

##### Height

960mm

##### Length

4650mm

##### Width

1990mm

##### Wheelbase

2600mm

##### Tread (front/rear)

1600mm/1570mm

#### Weight

over 850kg

#### Fuel Tank

ATL Safety Fuel Tank 100

#### Transmission

March GT-P

#### Clutch

AP triple plate

#### Suspension

##### Front

Double wishbone/Outboard coil spring

##### Rear

Double wishbone (locking arm type)/Inboard coil spring

#### Brake

##### Front & Rear

Ventilated disc brake/AP 4 pot single caliper

#### Tyre & Wheel

DUNLOP (Denlock)

##### Front

325/625 x 16 x 12.5J

##### Rear

350/680 x 16 x 15J