

KREMER PORSCHE 935 TURBO



Developed from the experimental turbocharged 911 Carrera, first raced by the factory team in 1974, the Porsche 935 dominated World Championship long distance racing from the day it first appeared in public, in 1976. That was the year when the sport's governing body, the CSI, decreed that the World Championship for Makes would be restricted to cars based, however vaguely, on mass produced models, and created a special category called Group 5 to cater for the most extensively modified and developed machinery. The Porsche Turbo 935 was designed from the outset to make the most of those very liberal Group 5 regulations.

When it first appeared, at Mugello in March 1976, the original Porsche 935 was powered by a 2.85 litre flat-six engine. With a single KKK turbocharger, that power unit produced around 600 b.h.p. The following year, in 1977, a very different, still more developed, works Porsche 935 appeared, powered by a full 3-litre engine with twin turbochargers, one for each bank of three cylinders. The two turbochargers not only increased the engine's maximum power output to 650 b.h.p., they also made the car more flexible and therefore far easier to drive. It was this twin-turbocharged 3-litre engine that propelled all the 1978 customer versions of the 935, including the cars of the Kremer team. Erwin Kremer had himself been one of Porsche's leading private racing customers in the late sixties and early seventies, competing in the Grand Touring Car category with considerable success. When he retired from racing, he and his brother Manfred began to concentrate on building cars for other drivers at their large Porsche dealership in West Germany. When Group 5 racing was 'invented' in 1976, the Kremers were among the first people to build a car for it, running their own experimental Porsche Turbo against the factory car in the World Championship for Makes of that year. In 1977 the team scored its first victory in this gruelling series, in which all the races have to last at least six hours or 1000 kilometres. Then came 1978, the team's most successful year so far. For 1978, the Kremer brothers availed themselves of four cars, four drivers and five major sponsors. The cars were all Porsche 935s. The drivers were Frenchman Bob Wollek, who had driven for the team since 1975; fellow Frenchman Henri Pescarolo, former Grand Prix driver and three times winner at Le Mans; and German

amateurs, Dieter Schornstein and John Winter. The sponsors included Vaillant, a French tool making firm; Adolph Lafont, another French business that makes workman's clothes; Minolta, the camera manufacturer; Sekurit and Goodyear. In the World Championship for Makes, Wollek and Pescarolo brought the team victories at Dijon, Misano and Vallelunga, as well as a second place at Silverstone, beaten only by the more powerful works Porsche. At the same time, in the prestigious and lucrative German national championship, Wollek won races at Nurburgring, Kassel Calden and Mainz-Finthen, as well as the important non-championship event at Norisring, although even that formidable record was not even to earn him the championship crown.

* * *

Vom Anfang an beherrschte der Porsche 935 Turbo die Marken-Weltmeisterschaft als er 1976 in der Gruppe 5 auftauchte.

Entwickelt wurde dieser Wagen aus dem Experiment des 911 Carrera mit einem Turbolader. Im März 1976 erschien dieser Porsche mit einem 2,85 Liter Motor mit 6 Zylinder in Mugello/Italien. Der eingebaute KKK Turbolader brachte ca 600 PS. 1977 kam dann die wesentlich verbesserte Ausgabe mit 3,0 Liter und Doppelturbolader. Die Leistung von ca. 650 PS machte den Wagen mehr flexible und auch wesentlich leichter zu fahren. Der 3 Liter Turbo-Motor wurde ab 1978 in alle Serienwagen (Porsche-Turbo) wie auch in die Wagen des Kremer Teams eingebaut.

Erwin Kremer war Ende der 60ziger und Anfang der 70ziger Jahre ein privater Rennkunde von

Porsche der in der Grand Touring Klasse beachtliche Erfolge vorweisen konnte.

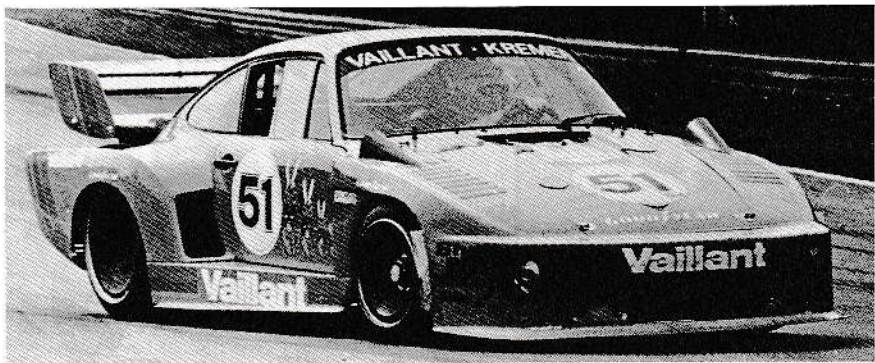
Als er aus dem Rennen stieg, spezialisierte er sich mit seinem Bruder Manfred darauf, für andere Fahrer die richtigen Rennfahrzeuge herzustellen. Als die Gruppe 5 eingeführt wurde, waren die Kremers unter den ersten, die mit Ihren Experimentierwagen gegen das Porsche Werksteam antraten. Die ersten Siege konnten 1977 gefeiert werden in den Rennen, die mindestens 6 Stunden dauerten oder 1000 Kilometer gefahren werden musste.

1978 war das erfolgreichste Jahr: die Kremerbrüder hatten 4 Wagen, 4 Fahrer und 5 Haupt-Sponsoren und alle Wagen waren 935er.

Die Fahrer waren die Franzosen Bob Wollek - seit 1975 bereits im Team - und Henri Pescarolo, früher Grnd Prix Fahrer und Sieger in Le Mans (3 mal) und die Deutschen Amateure Dieter Schornstein und John Winter.

Die Hauptsponsoren waren Minolta - Kamera, Sekurit und Goodyear, Lafont - Werkzeuge/Frankreich und eine franz. Fabrik für Arbeitskleidung. Am bekanntesten jedoch dürfte Vaillant sein, der deutsche Hersteller von Heiz und Warmwassergeräten für Gas, Strom und Ölbetrieb mit dem Hasen als Heizer.

Wollek und Pescarolo brachten die Teamsiege in Dijon, Misano und Vallelunga, in Silverstone den zweiten Platz hinter dem Porsche Werksteam. In der deutschen Nationalmeisterschaft gewann Wollek am Nürburgring in Kassel Calden und in Mainz-Finthen sowie das wichtige Norisring-Rennen (Rennleiter Gernot Leistner vom Autohaus Krauss in Nürnberg).



READ BEFORE ASSEMBLY.

**ERST LESEN
— DANN BAUEN.**

★A motor, UM3 (AA) batteries are required (not supplied).

★Read carefully and fully understand the instructions before commencing assembly.

★When assembling this kit, tools including knives are used. Extra care should be taken to avoid personal injury.

★Read and follow the instructions supplied with paints and /or cement, if used (not included in kit).

★This kit can be assembled into a motorized model with motorization engine or a display engine. One can be converted into the other, even after completion by exchanging the engine.

■ This mark denotes color.

★Ein Motor, 1,5V Mignon Batterien werden benötigt (nicht enthalten).

★Bevor Sie mit dem Zusammenbau beginnen, sollten Sie alle Anweisungen gelesen und verstanden haben.

★Beim Zusammenbau dieses Bausatzes werden Werkzeuge einschließlich Messer verwendet. Zur Vermeidung von Verletzungen ist besondere Vorsicht angebracht.

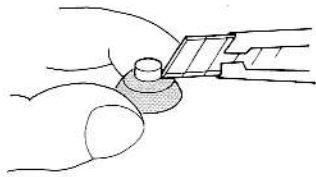
★Wenn Sie Farben und/oder Kleber verwenden (nicht im Bausatz enthalten), beachten und befolgen Sie die dort beiliegenden Anweisungen.

★Dieses Modell kann mit Elektro-Motor zum Fahren oder als Standmodell mit "Schau-Motor" gebaut werden. Beide Motoreinheiten sind auswechselbar.

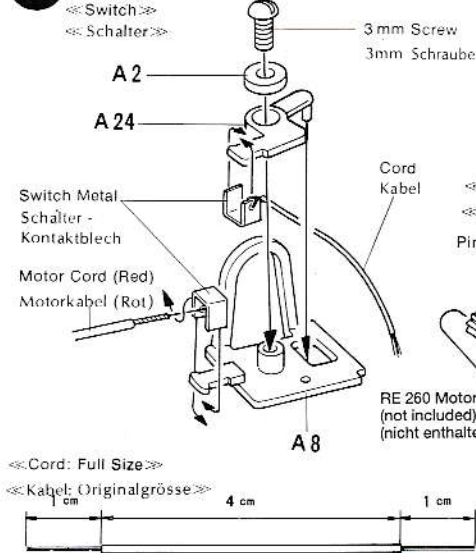
■ Zeichen für Bemalung.

Before cementing plated parts, remove plating with a knife, etc. from the surfaces to which cement is applied.

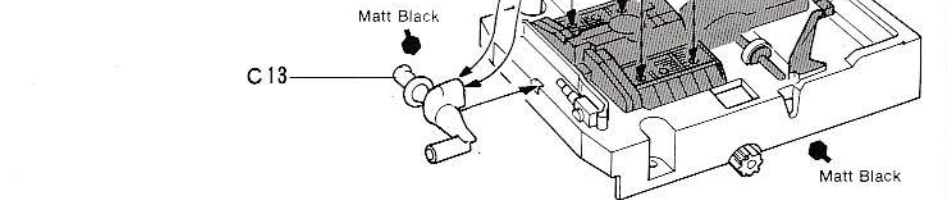
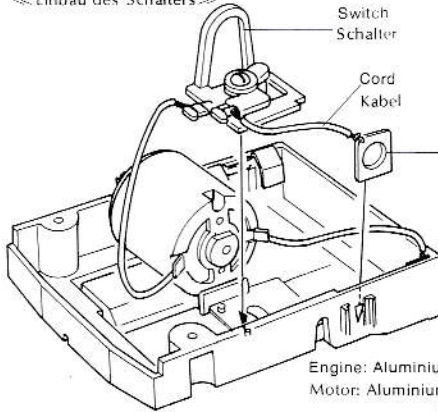
Chromschicht an Klebestellen entfernen.



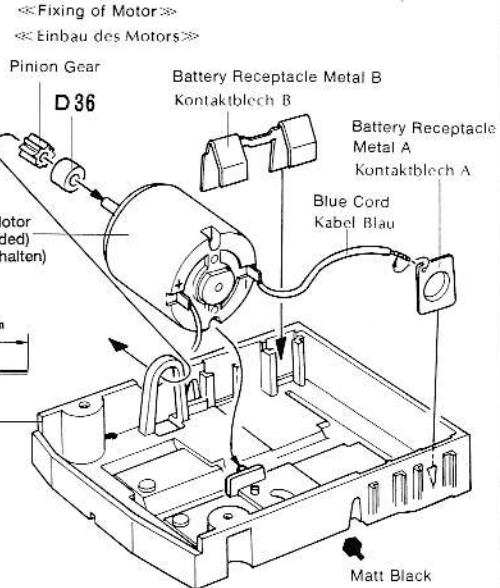
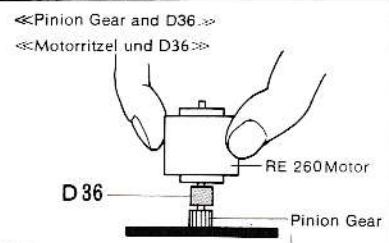
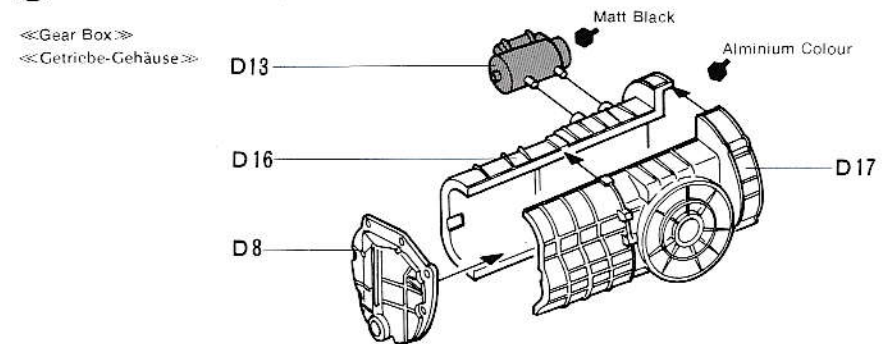
**1 Engine A (Motorized Model)
Motor A (Elektro)**



Fixing of Switch
Einbau des Schalters



**2 Engine B1 (Display Model)
Motor B1 (Standmodell)**

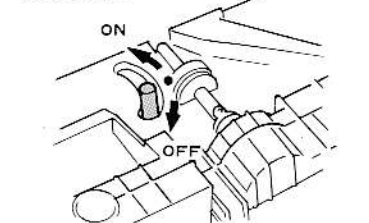


Muffler
Auspuff

**1 Engine A (Motorized Model)
Motor A (Elektro)**

Attach switch metals to parts after connecting cords.

Schalter - Kontaktblech anbringen
Switch
Schalter



«Painting of Engine»

«Bemalung des Motors»

Engine and gear box should be painted in Aluminium Colour. To obtain better finish, tone up Aluminium Colour by adding a little Metallic Grey.

Motor und Getriebe:

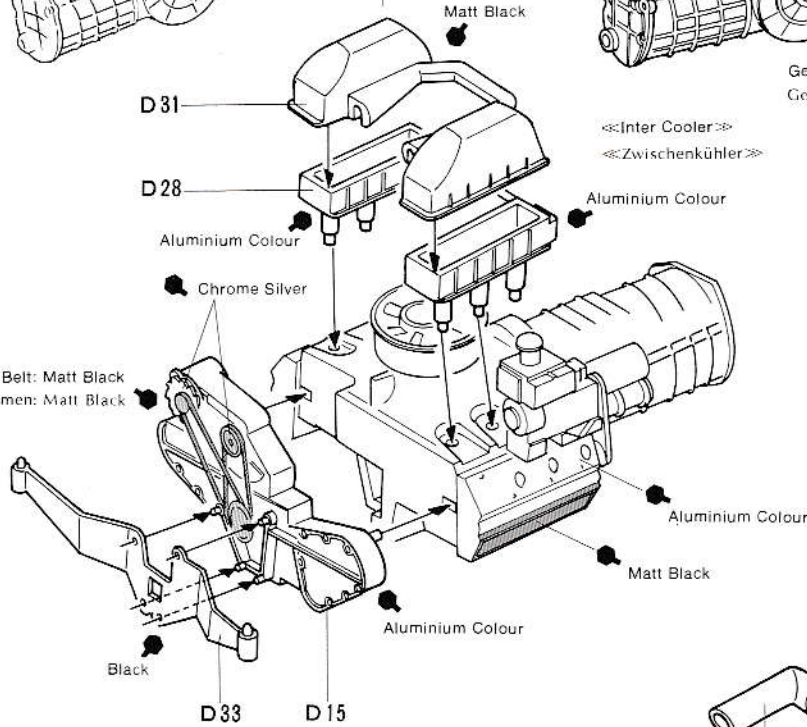
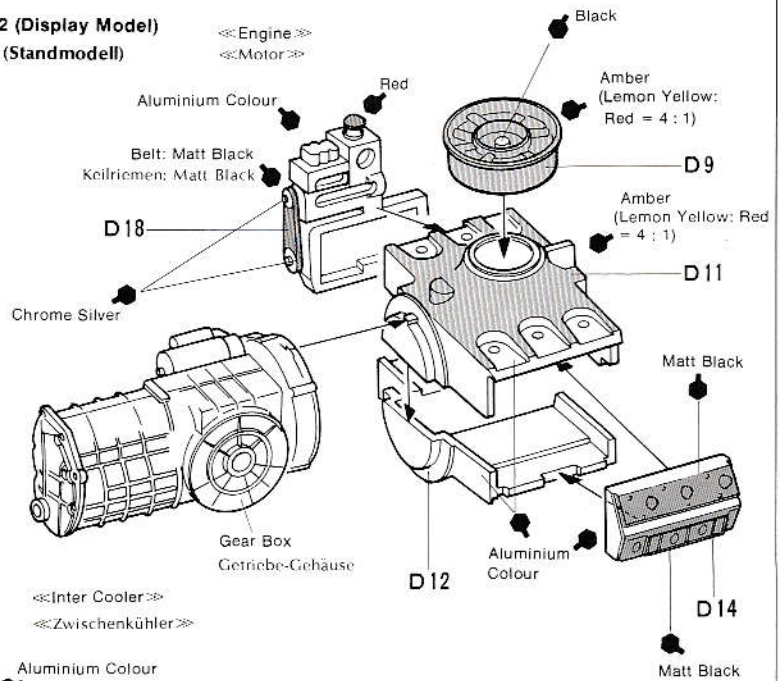
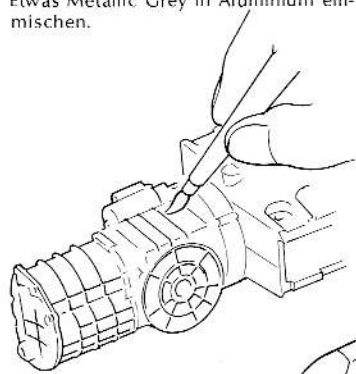
Etwas Metallic Grey in Aluminium einmischen.

3

Engine B2 (Display Model)
Motor B2 (Standmodell)

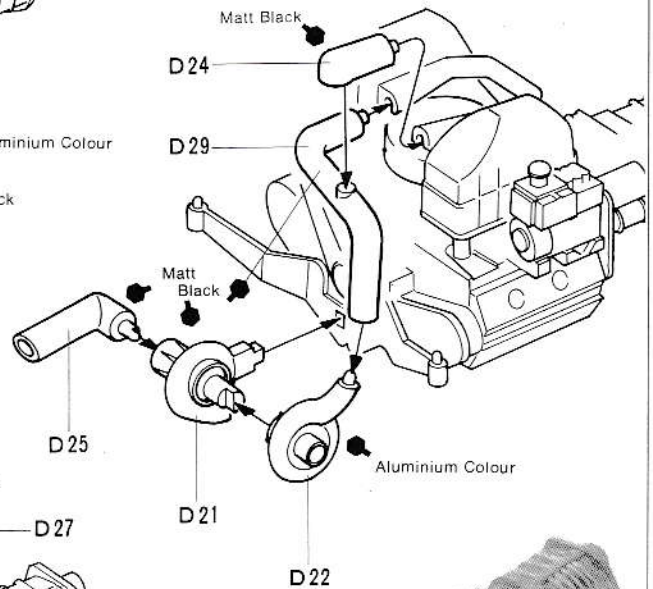
«Engine»

«Motor»



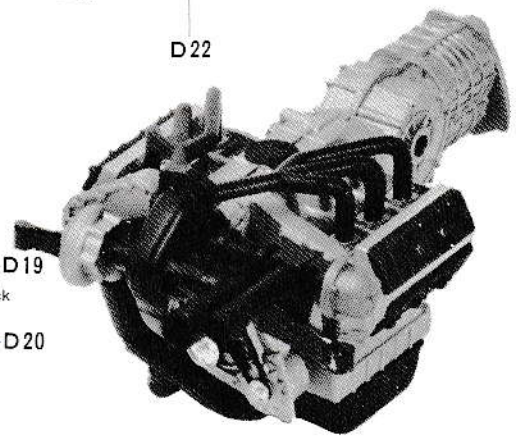
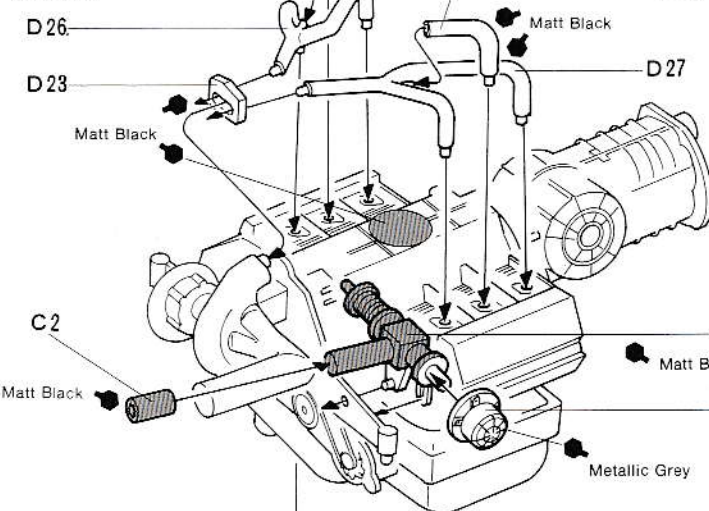
«Turbo Charger»

«Turbolader»



«Muffler»

«Auspuff»



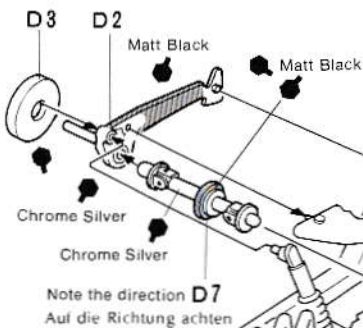
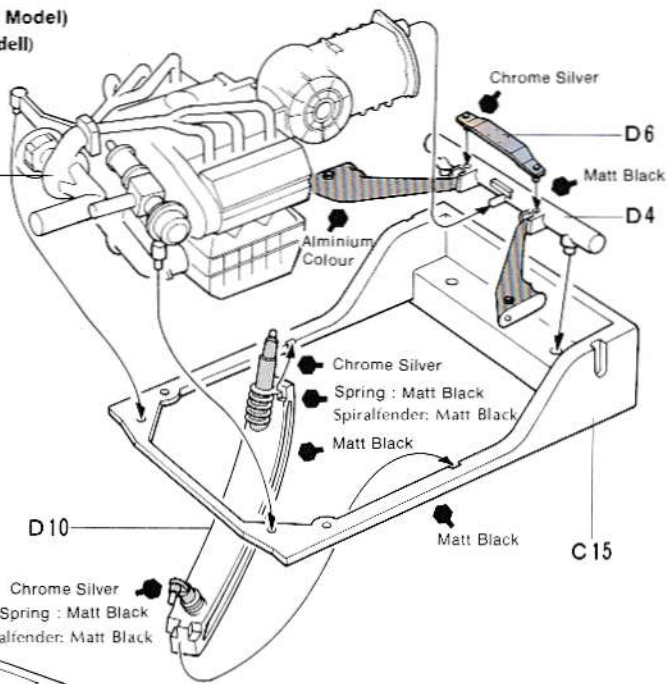
★ Use spray colour for large areas. Small parts should be painted with a brush.
 ★ Grosse Flächen mit Spray-kleine Flächen mit Pinsel bemalen.

4 Engine B3 (Display Model) Motor B3 (Standmodell)

«Fixing of Engine»
 «Einbau des Motors»

Engine Motor

«Fixing of Drive Shaft»
 «Einbau der Antriebswelle»

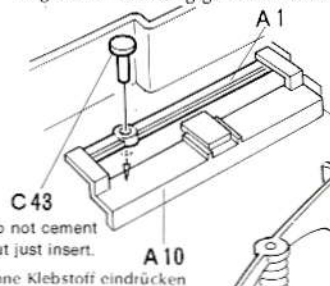


5 «Front Upright» «Vorderes Achs - Lager»

Fit each front damper to chassis without using cement and hold it in place with A10.

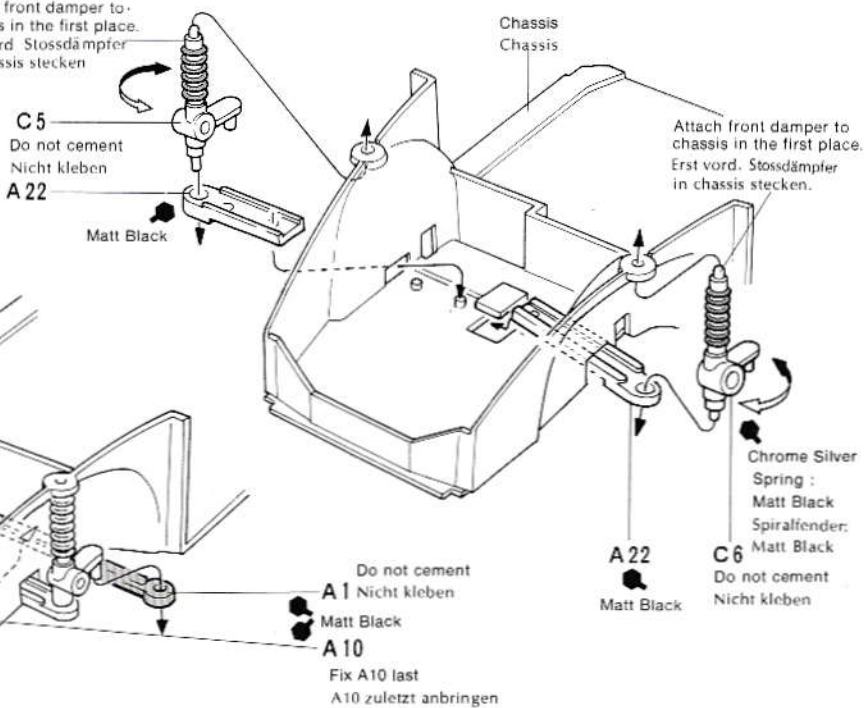
Part C43 is a pin to prevent the front wheel from changing the direction.

Vordere Stossdämpfer nicht kleben werden von A10 gehalten.
 Mit Zapfen C43 können die Vorderräder in gleicher Richtung gehalten werden.



5 Front Upright Vorderes Achs - Lager

Attach front damper to chassis in the first place.
 Erst vord. Stossdämpfer in Chassis stecken



7 Cockpit

«Driver Figure»

«Fahrer»

Fit the driver's arms holding the steering wheel. Paint driver figure before fixing.

Arme des Fahrers entsprechend dem Lenkrad einbauen. Fahrer vor Einbau erst bemalen.

Matt Fresh A 29
A 28
Belt : Matt Black
Reimen: Matt Black
A 26
A 25
Glove :
Matt White
Handschuh:
Matt White
A 27
(Bob Wollek)
Suit : Matt White
Overall: Matt White
(J. Fitzpatrick)
Suit : Matt Blue
Overall: Matt Blau

«Helmet»

«Helm»

(Bob Wollek)

Matt Black

Red

(J. Fitzpatrick)

Matt Black
C 30

«Fixing of D30»

«Einbau D30»

D 30

Chassis

6 Suspension Arm

Vordere Radaufhängung

Matt Black

C 40

2mm Screw (long)
2mm Schraube (lang)

«Front Wheel»
«Vorderrad»

Make 2 sets
2 Satz

Letters :
Lemon Yellow
Buchstaben :
Lemon Yellow

Front Tyre
Vorderreifen

Lettered side GOOD YEAR should be
faced outside.
Buchstaben GOOD YEAR nach aussen

7 Cockpit

«Construction 1»

«Zusammenbau 1»

C 26

Chrome Silver
D 5

Semi Gloss Black

Matt Black
C 12

Cockpit Inside : Matt Black
Innenteil : Matt Black

Dash Board
Armaturenbrett

Matt Black
C 29
Cockpit side : Matt Black
Cockpit Seite : Matt Black

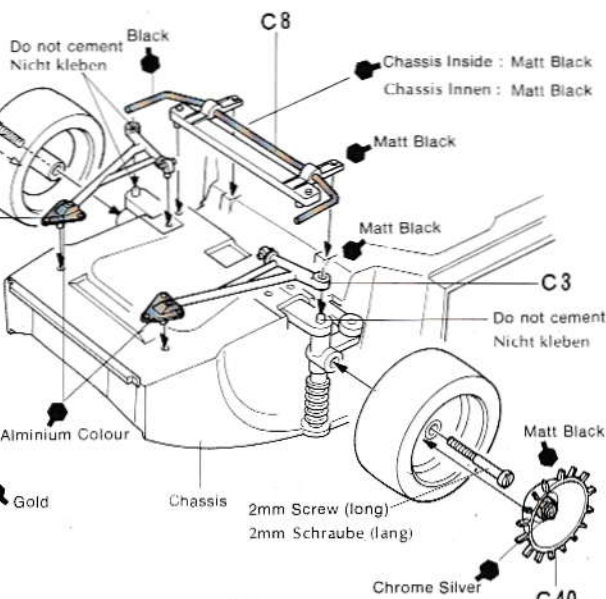
D 30

Fix D30 with refer-
ence to the drawing
on left.

Einbau D30 siehe
Bild links

A 13

Matt Black



«Propeller Shaft Tunnel»
«Schalt und Bremsentunnel»

Chrome Silver

C 23

C 34

C 42

C 31

C 21

C 18

C 22

C 24

Driver Figure
Fahrer

Fit the driver's arms holding the
steering wheel.
Arme des Fahrers entsprechend
dem Lenkrad einbauen.

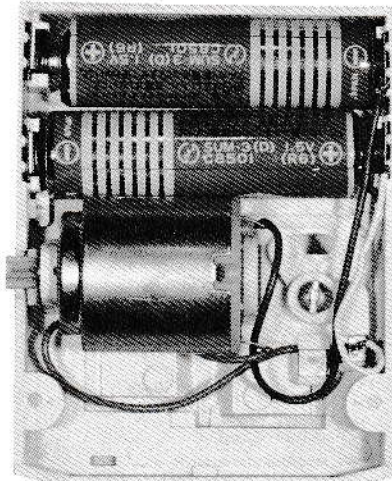
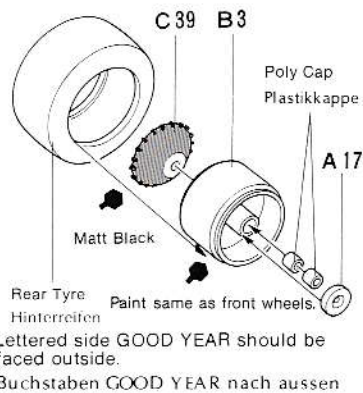
★Fix A12 to the other side
★A12 auf anderer Seite einbauen

8

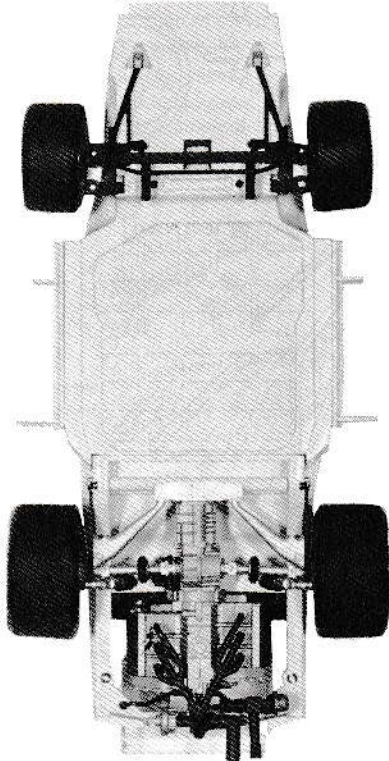
Fixing of Engine

Motor Einbau

- «Rear Wheel» Make 2 sets
«Hinterrad» 2 Satz



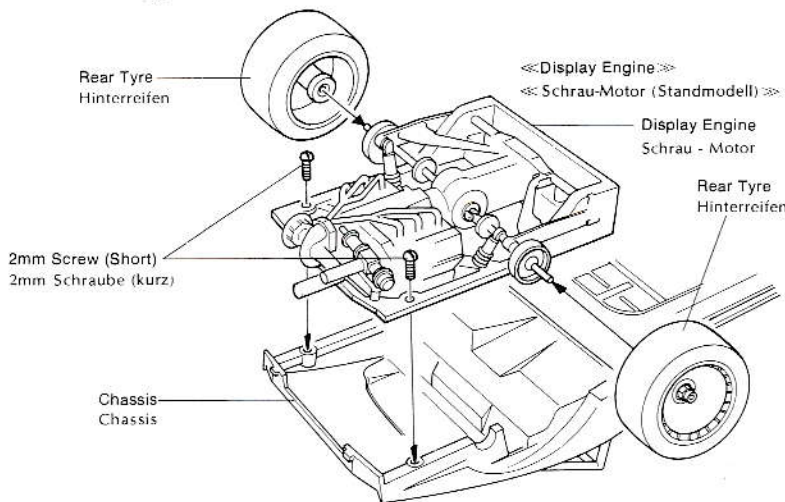
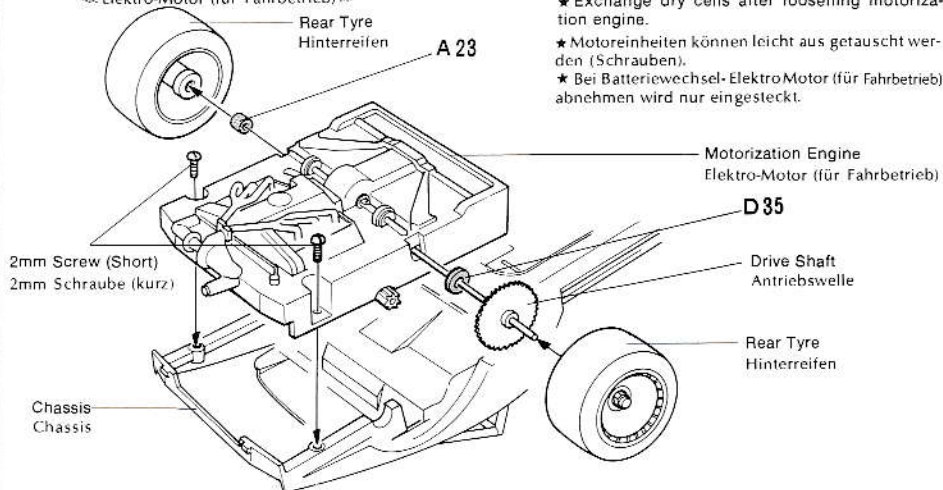
- «Display Model»
«Standmodell»



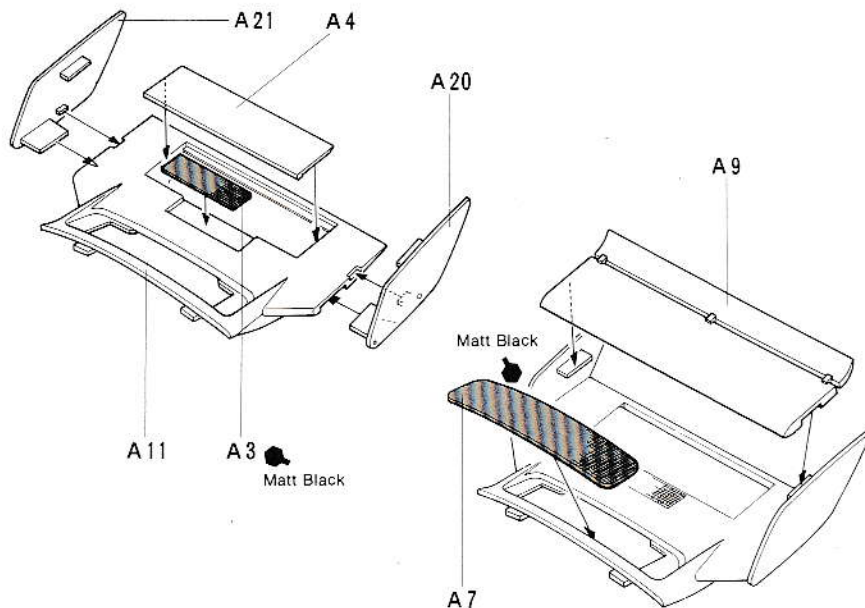
8

Fixing of Engine
Motor Einbau

- «Motorization Engine»
«Elektro-Motor (für Fahrbetrieb)»

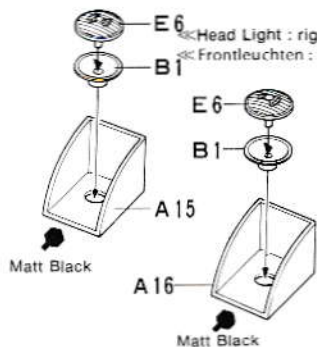


9

Engine Hood
Motorhaube - Heckspoiler

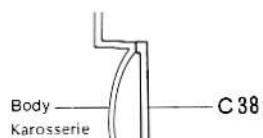
10 <<Body>>
<<Karosserie>>

<<Head Light : left>>
<<Frontleuchten : links>>



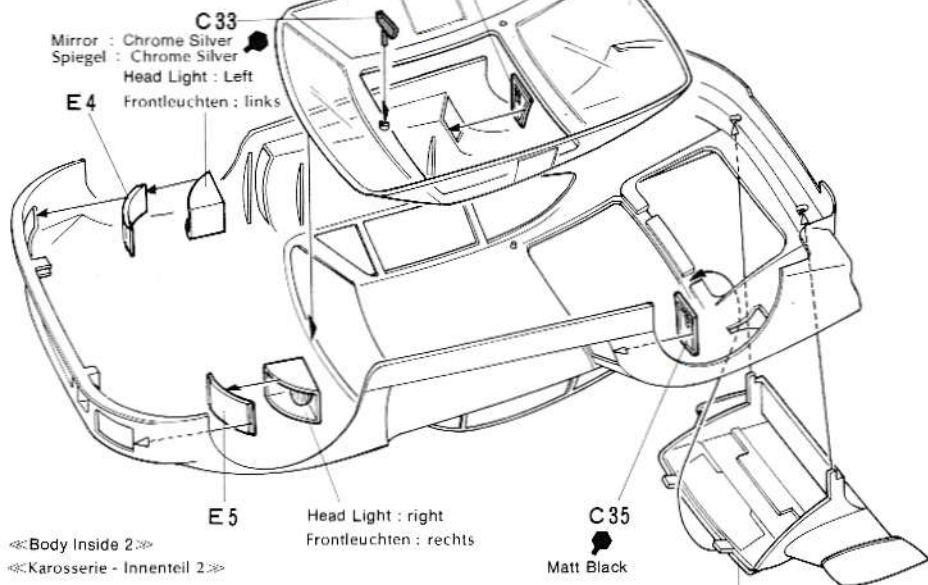
<<Fixing of C38>>
<<Einbau C38>>

★ Fix C37 also to the other side in the same way.
★ auch auf anderer Seite festhalten.

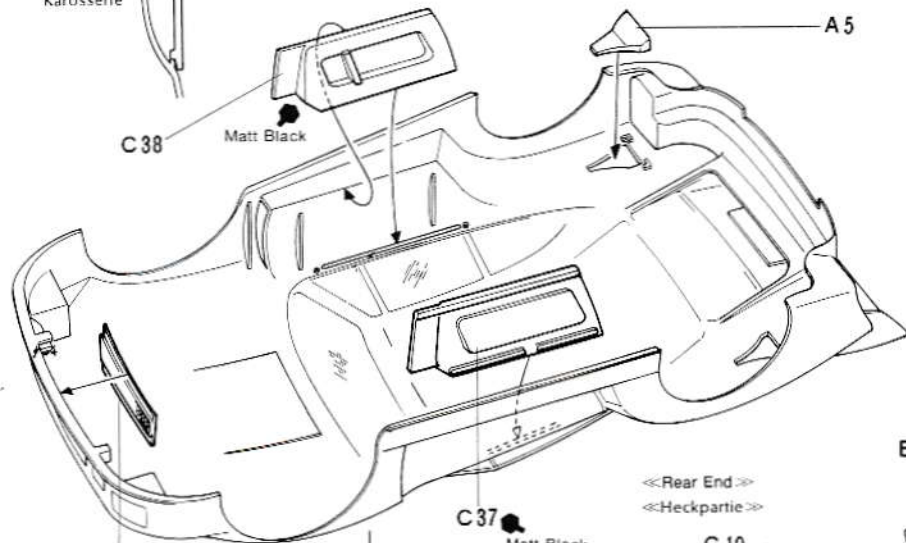


10 Body
Karosserie

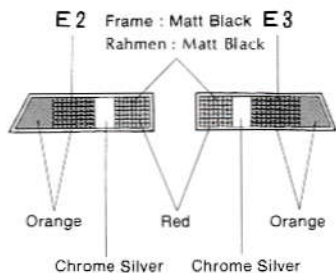
<<Body Inside 1>>
<<Karosserie - Innenteil 1>>



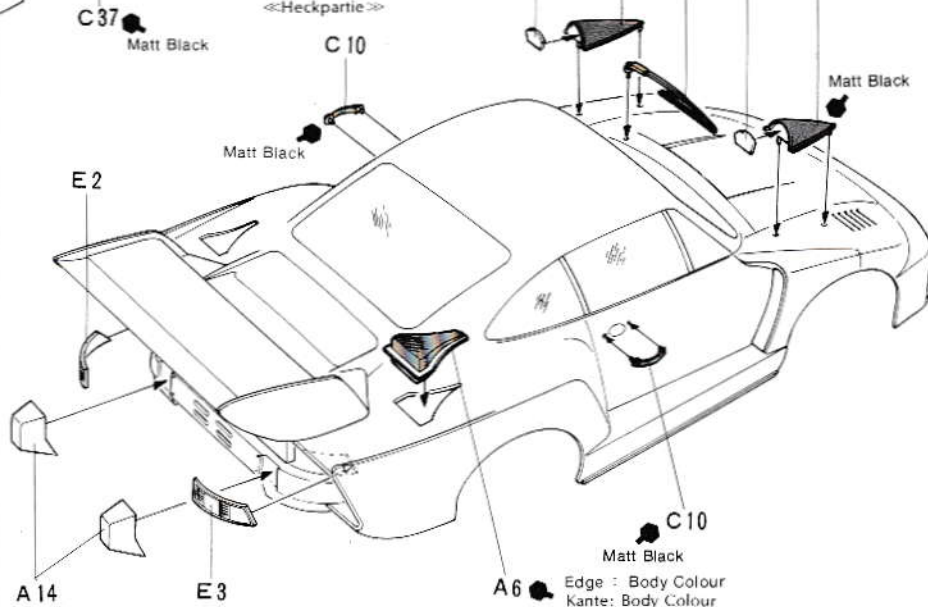
<<Body Inside 2>>
<<Karosserie - Innenteil 2>>

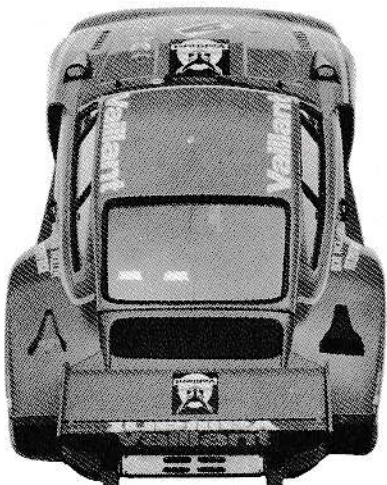
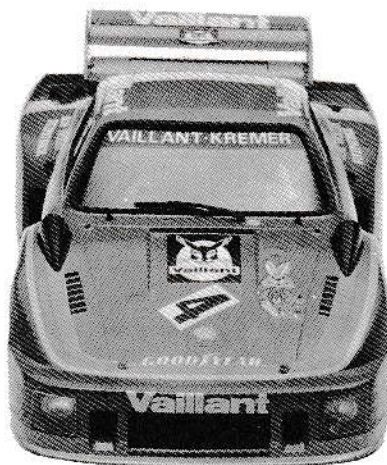


<<Tail Light>>
<<Schlussleuchten>>



<<Rear End>>
<<Heckpartie>>





**BUILD A COLLECTION OF TAMIYA
PRECISION CAR AND
MOTORCYCLE MODELS**

1/24 TOYOTA CELICA LB TURBO



1/20 RENAULT RE-30B TURBO

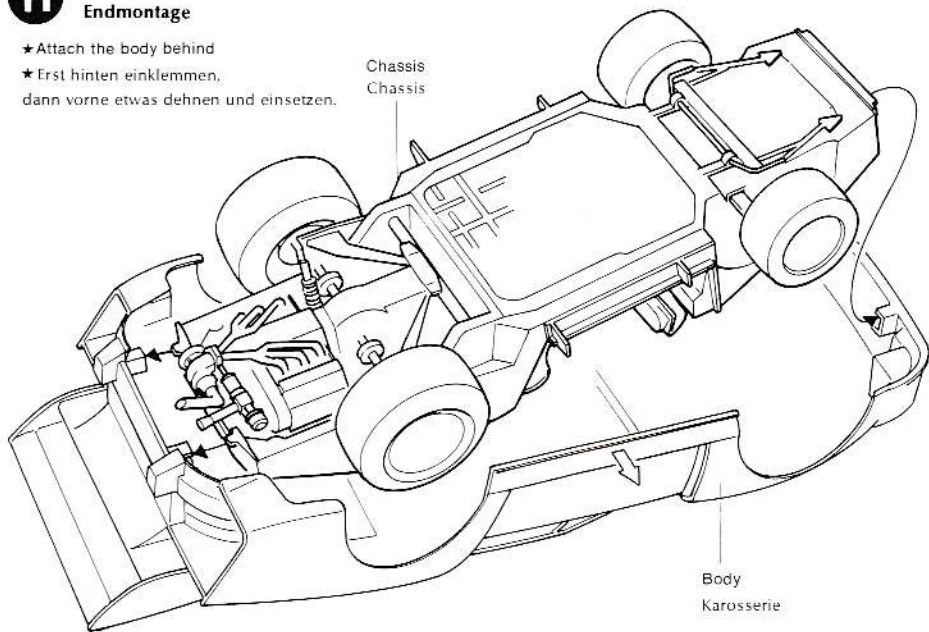


1/6 HONDA CX500 TURBO

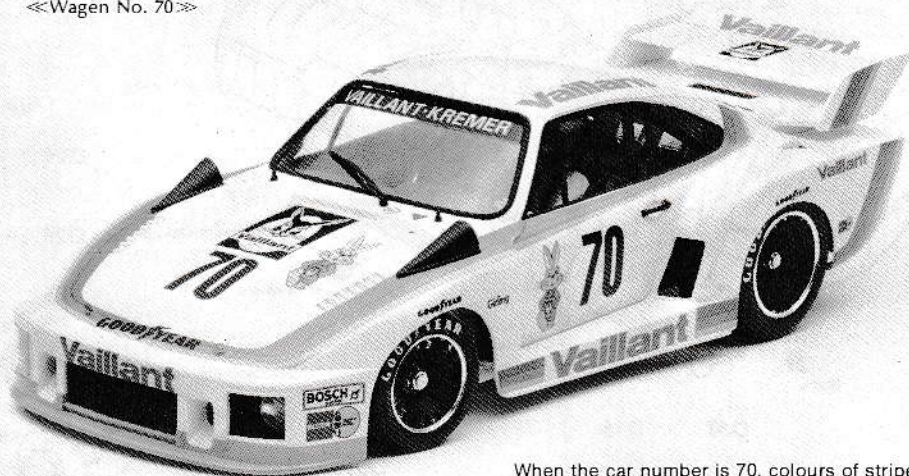


**11 Completion
Endmontage**

- ★ Attach the body behind
- ★ Erst hinten einklemmen,
dann vorne etwas dehnen und einsetzen.



◀◀ Car No. 70 ▶▶
◀◀ Wagen No. 70 ▶▶



When the car number is 70, colours of stripes are different from those of decals.

◀◀ Car No. 51 ▶▶
◀◀ Wagen No. 51 ▶▶



PAINTING

Painting and Marking of Kremer Porsche 935 Turbo

Kremer Team, a private team, has been taking part in races through the help of various sponsors. The team entered two cars of this type in the 1977 season. Their colouring and marking differed according to the sponsors. This kit reproduces the Kremer Porsche that raced under the sponsorships of Vaillant, a German manufacturer of air conditioners, etc. The body colour is green or white. In either case, there are three-colour stripes of red, orange and pink which could be referred to as Vaillant colours. The rabbits painted on the body are the trademark of Vaillant. It was the car numbered 4 with green body that won the first and longed-for victory at the World's Manufacturers' Championship race held in Hockenheim, Germany on 8th October, 1977. The other marks include those for Goodyear (tyre maker), Shell (petroleum maker), Bosch (electric device maker) and Bilstein (shock absorber maker).

As Kremer Team is a private one, it will be also fun to paint your model in your own way assuming yourself a sponsor.

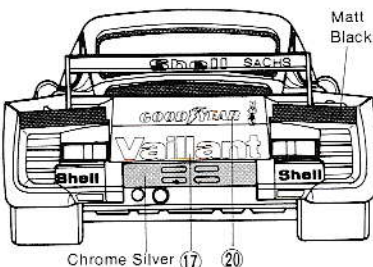
For painting of small parts, see the assembly drawings.

For application of decals, see page 10.

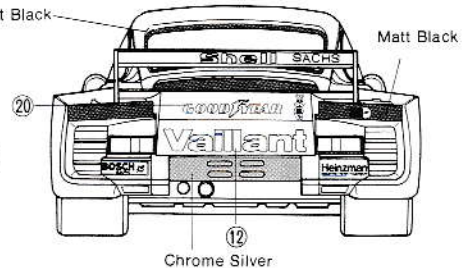
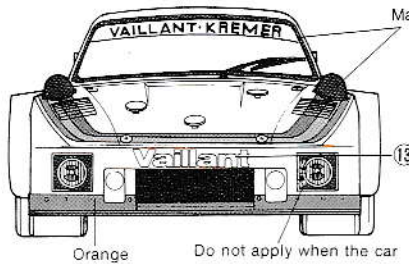
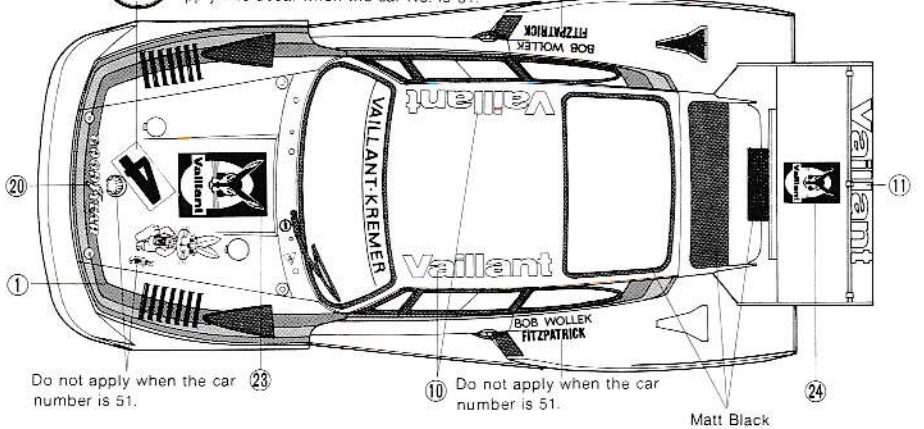
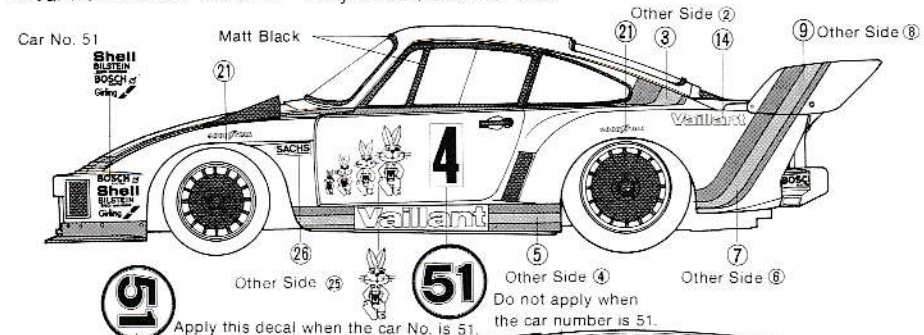
Bemalung des Kremer Porsche 935 Turbo:

Das Kremer Porsche Team setzte im Jahre 1977 zwei Wagen ein. Die Bemalung und die Markierungen sind je nach Sponsor verschieden. Dieser Bausatz ist der Vaillant Wagen, die Farbe weiss oder grün mit den bekannten Vaillant Streifen: rot, orange und rosa. Das Vaillant-Markenzeichen - ein Hase - ist ebenfalls auf der Karosserie angebracht. Vaillant ist der bekannte Hersteller von Heiz- und Warmwassergeräten für Gas, Strom und Ölbetrieb in Deutschland mit dem Hasen als Heizer.

Bei der Markenweltmeisterschaft in Hockenheim am 8. Oktober 1977 fuhr der grüne Wagen mit der No. 4 den ersten Sieg nach Hause. Weitere Sponsormarken sind auf dem Wagen angebracht: Goodyear (Reifen) Shell (Öl) Bosch (Elektro) und Bilstein (Stossdämpfer). Natürlich kann man den Wagen auch je nach Wunsch bemalen. Bemalung kleinerer Teile - siehe Anleitung. Abziehbilder - siehe Seite 10.

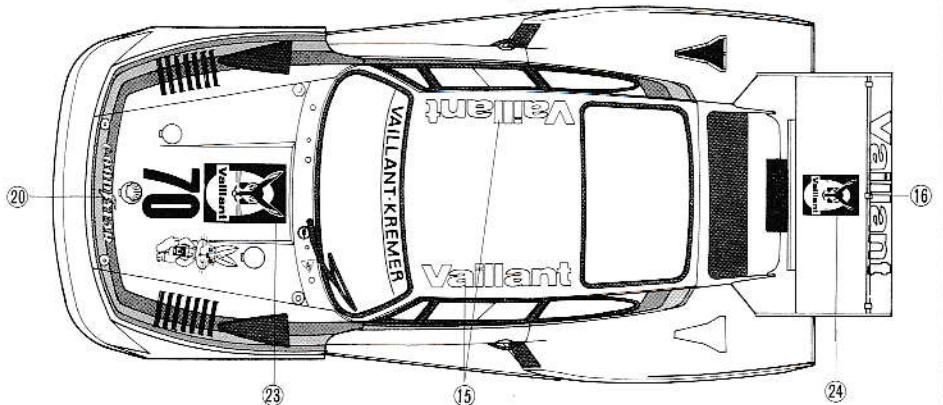
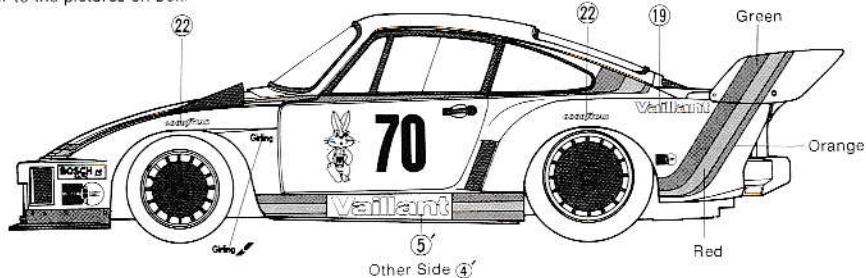


Car No. 4 and Car No. 51 Body Colour: Green or clear



Car No. 70 Body Color: White (X-2)

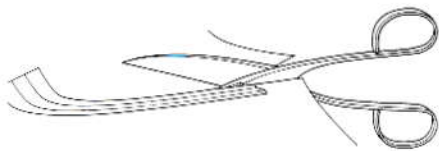
When the car number is 70, colours of stripes are different from those of decals. Refer to the pictures on box.



APPLYING DECALS

«Applying Decals»

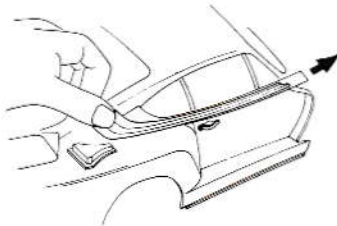
① A decal to be applied should be cut off beforehand.



② Dip it in water. When the backing film arches, remove from the water to place on a cloth such as a towel.

③ A minute or two later, hold edge of the backing film to slide the decal onto the model from the backing film.

④ Then, put a little of water on your finger to wet the decal so that the latter will be moved more easily onto the right spot.



⑤ Press the decal down with a soft cloth such as towel to force air bubbles out of underside of the decal. Continue the work until the excess water, too, will be fully absorbed. When the surface to be applied with a decal is uneven or curved, press the decal down with a steamed towel so that the warmed, wet decal will fit the surface well. Cut off the excess transparent portion around a decal before applying. When so done, you can expect a sharp finish with the decal precisely in its specified place.

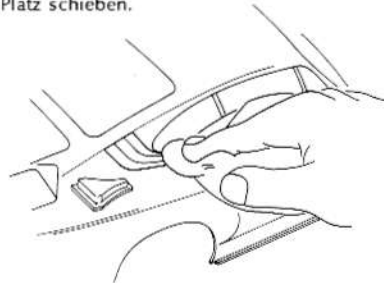
«Abziehbilder»

① Bild erst genau ausschneiden.

② In Wasser legen, wenn Bild abhebt, auf trockenen Stoff legen.

③ 1-2 Minuten später, Papier an Ecken halten und Bild abschieben auf Modell.

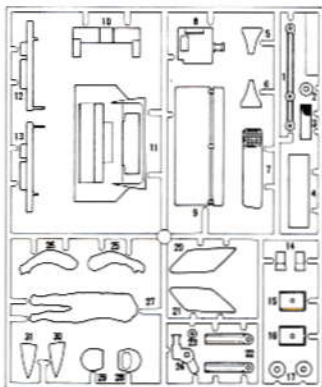
④ Etwas Wasser auf Finger und Bild auf genauen Platz schieben.



⑤ Mit Stoff Luftblasen herausdrücken, überflüssiges Wasser aufsaugen. Wenn Fläche uneben oder gebogen ist, Bild mit nassem heissem Tuch aufdrücken.

PARTS

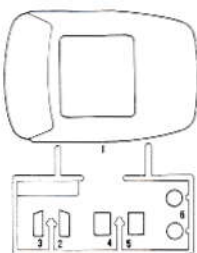
A PARTS



B PARTS



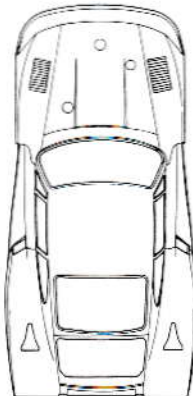
E PARTS



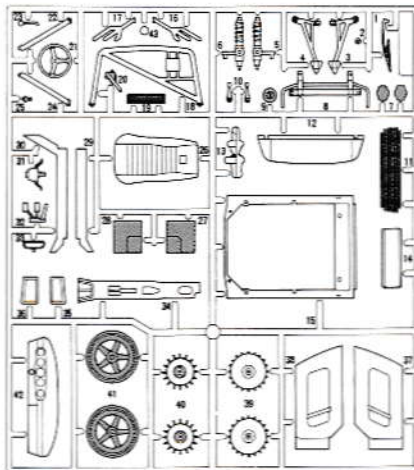
Chassis



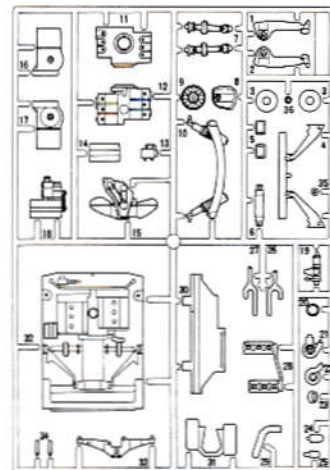
Body
Karosserie



C PARTS



D PARTS



(Metal Bag)

Front Tyre
Vordereifen



2mm Screw (long)
2mm Schraube (lang)



Drive Shaft
Antriebswelle



Vinyl Cord
Vinylkabel



2mm Screw (short)
2mm Schraube (kurz)



Poly Cap
Plastikkappe



Pinion Gear
Ritzel



Switch Metal
Schalter -
Kontaktblech



3mm Screw
3mm Schraube



Rear Tyre
Hintereifen



Battery Receptacle
Metal A
Kontaktblech A



Battery Receptacle Metal B
Kontaktblech B

