

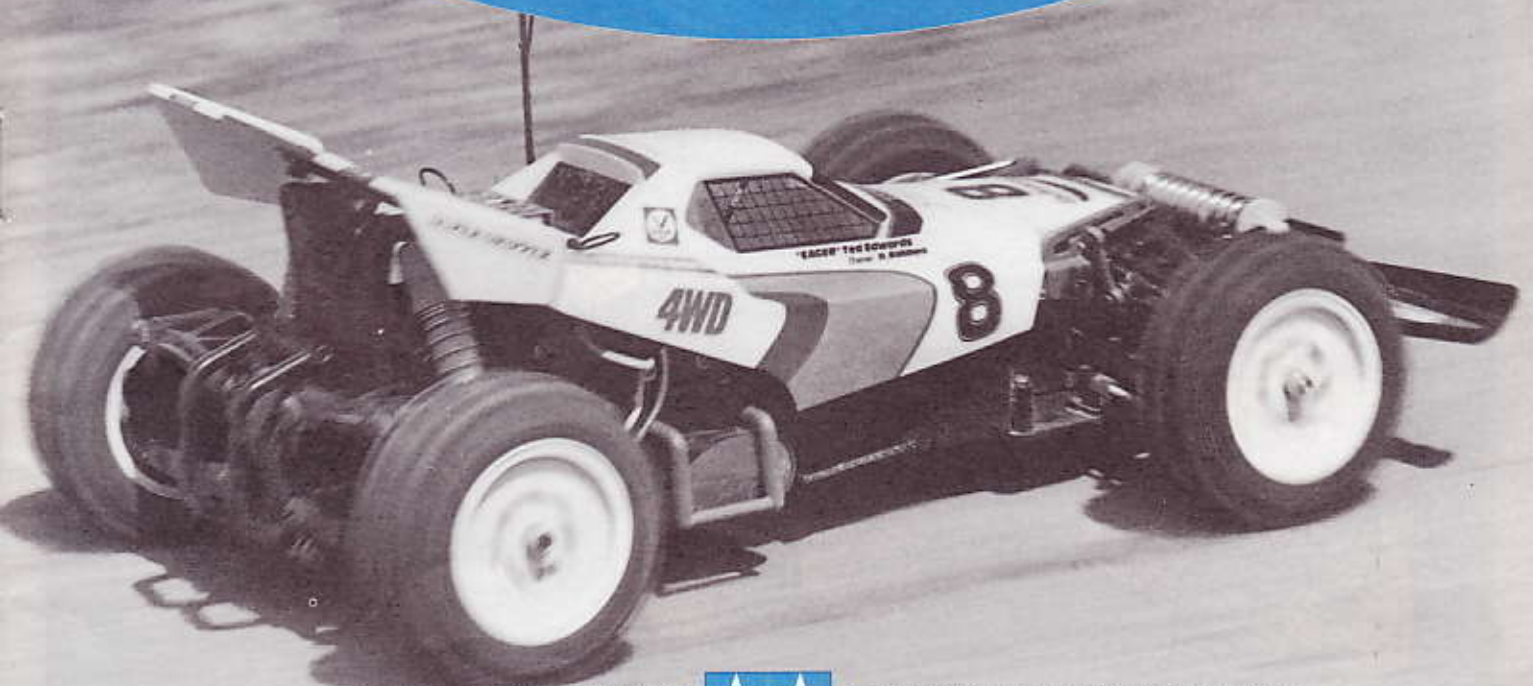
# The Boomerang

1/10 R/C HIGH PERFORMANCE 4WD OFF ROAD RACER

- READY TO ASSEMBLE R/C MODEL KIT ○ SHAFT DRIVEN 4WD
- FRONT AND REAR DOUBLE WISHBONE SUSPENSION ○ ADJUSTABLE OIL DAMPERS FRONT AND REAR
- LOW PROFILE RUBBER LIKE SEMI-PNEUMATIC TIRES ○ WITH POWERFUL 540 TYPE MOTOR ○ BATHTUB TYPE A.B.S. RESIN FRAME
- POLYCARBONATE BODY AND WING ○ FOR MAXIMUM PERFORMANCE USE ONLY TAMIYA Ni-Cd BATTERIES
- REQUIRES 2 CHAN. R/C EQUIPMENT (INCL. BEC-SYSTEM) OR NORMAL R/C EQUIPMENT & TAMIYA RECEIVER BATTERY ELIMINATOR. ACCEPTS 7.2V RACING PACK, REGULAR 7.2V OR 6V BATTERY.



\*MODEL MAY VARY FROM ARTIST'S IMPRESSION ON BOX\* MODELLING SKILLS HELPFUL IF UNDER 10 YEARS OF AGE



TAMIYA PLASTIC MODEL CO.



3-7, ONDAWARA, SHIZUOKA-CITY, JAPAN.

# The Boomerang

## RADIO CONTROL UNIT

A battery eliminator equipped 2 channel digital proportional radio system referred to as BEC (Battery Eliminator Circuitry). For the other 2 channel proportional units without BEC, a separately sold battery eliminator set from Tamiya is required.

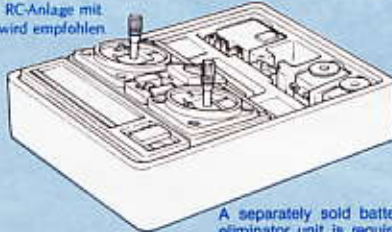
## FUNKFERNSTEUERUNG - RC-ANLAGE

Eine 2-Kanal RC-Anlage mit Akku-Anoden-Netzanschluss (BEC) wird empfohlen. (Made in Japan) Andere Anlagen ohne BEC können auch verwendet werden, jedoch ist ein A-Anschluss von TAMIYA dazu zu kaufen.

## NECESSARY ITEMS

### FOLGENDE TEILE WERDEN BENÖTIGT

- \* A BEC system unit is recommended.
- \* Ein RC-Anlage mit BEC wird empfohlen.

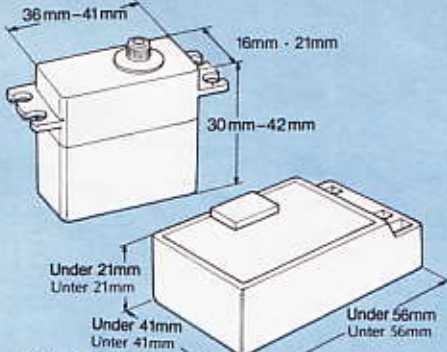


Batteries for R/C Unit  
Batterien für RC-Anlage



A separately sold battery eliminator unit is required when the radio does not have a BEC system. Zu RC-Anlagen ohne BEC ist unbedingt ein TAMIYA A-Anschluss zu kaufen.

## SUITABLE SERVO AND RECEIVER SIZE GRÖSSE DER SERVO'S UND DES EMPFÄNGERS



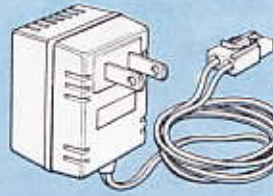
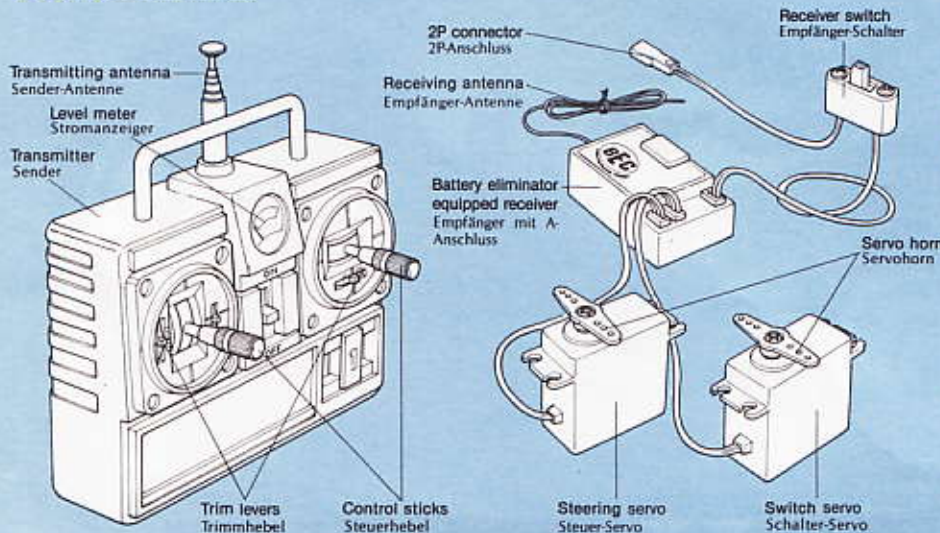
## POWER SOURCE

\* This kit is designed to use a Tamiya Ni-Cd (6V) or (7.2V) battery pack. Purchase it separately at your hobby supply house.

## STROMVERSORGUNG

\* Nur aufladbare NC Akku's von Tamiya verwenden 6 Volt (5 Zellen) oder 7,2 Volt (6 Zellen).

## 2 CHANNEL PROPORTIONAL WITH BEC SYSTEM 2-KANAL RC-ANLAGE MIT BEC



FOR MAXIMUM PERFORMANCE USE ONLY TAMIYA NI-CD BATTERIES.

Tamiya Ni-Cd (7.2V) Battery  
Tamiya NC 7.2V Akku

Tamiya Ni-Cd (7.2V) Racing Pack  
Tamiya NC 7.2V Racing Pack

Tamiya Ni-Cd (6V) Battery  
Tamiya NC 6V Akku

Im Kit sind Muttern-Steckschlüssel, Imbusschlüssel, Schmiermittel, Nylonbänder, und Stossdämpfer-Öl enthalten.

Grease  
Fett



Switch lubricant  
Schalter-Schmiermittel



Box wrench  
Steckschlüssel



Allen key  
Imbusschlüssel

Damper oil  
Stossdämpfer-Öl



## NOT INCLUDED IN KIT IM KASTEN NICHT ENTHALTEN.

- + & - Screwdrivers (large and medium)
- + & - Schraubenzieher (gross und mittel)



Long nose pliers  
Zange (lang)



Side cutter  
Zwickzange

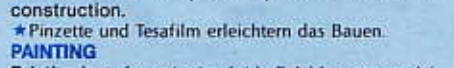


Scissors  
Schere

(Used for trimming polycarbonate body)



Modeling knife  
Messer



\* Tweezers and cellophane tape will also assist in construction.

\* Pinzette und Tesafilm erleichtern das Bauen.

## PAINTING

Painting is an important point in finishing any model. Refer to page 19 for suggestions and examples. Spray paint the large areas.

## COMPOSITION OF BEC DIGITAL PROPORTIONAL SYSTEM

**Transmitter** : Serves as a control box. Stick movements are transformed into radio wave signals which are transmitted through the antenna.

**Receiver equipped with battery eliminator** : Receiver and servos obtain power from the car running battery. For receivers without BEC, a separate battery eliminator unit is required.

**Servos** : Servo transforms signals received by the receiver into mechanical movements.

## ZUSAMMENSETZUNG DER BEC RC-ANLAGE

**Sender** : Hebelbewegungen werden in Funkwellen umgesetzt und geben über einen Empfänger Impulse an die im Auto eingebauten Servos.

**Empfänger mit A-Anschluss** : Der Empfänger erhält Signale von Sender. Der Strom für den Empfänger wird aus dem Fahr-Akku genommen. Für Empfänger ohne BEC muss ein separater A-Anschluss eingebaut werden. (BEC=Akku-Anoden-Netzanschluss)

**Servos** : Signale vom Empfänger werden im Servo mechanisch übersetzt.

**Grease** Apply grease to the places shown by this mark. Apply grease first, then assemble.  
**Fett** Stellen mit diesem Zeichen erst fetten, dann zusammenbauen.

**READ BEFORE ASSEMBLY.**

**ERST LESEN - DANN BAUEN.**

★There are many small screws, nuts and similar parts. Assemble them carefully referring to the drawings. To prevent trouble and finish the model with good performance, it is necessary to assemble each step exactly as shown.

★Viele kleine Schrauben und Muttern etc. müssen genau der Anleitung nach eingebaut werden. Exaktes Bauen bringt ein gutes Modell mit bester Leistung.

**BATTERY ELIMINATOR**

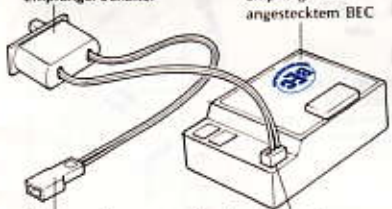
A BEC system proportional unit or a battery eliminator set is required. The battery eliminator installed receiver gets power from the running battery, and provides a stable current flow. Both systems are shown below.

**AKKU-ANODEN-NETZANSCHLUSS**  
 Es wird eine RC-Anlage mit BEC benötigt oder wenn die RC-Anlage kein BEC-System hat, ein separater A-Anschluss. Der Empfänger mit A-Anschluss erhält den Strom vom Fahr-Akku, dies gewährt eine konstante Spannung. Beside Anlagen sind unten gezeigt.

**BEC SYSTEM RECEIVER**

**EMPFÄNGER MIT BEC**  
 Receiver switch  
 Empfänger-Schalter

BEC system receiver (Eliminator equipped)  
 Empfänger mit angestecktem BEC



2P connector 2P-Anschluss  
 Receiver connector Empfänger-Verbindungskabel

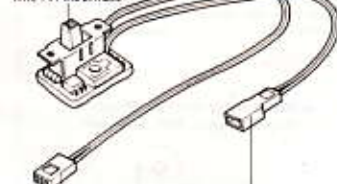
**BATTERY ELIMINATOR SET A-ANSCHLUSS**

Tamiya Battery Eliminators

Tamiya A-Anschluss

★Acorns, Sanwa, Futaba, JR and KO type available.  
 ★Auch von Acorns, Sanwa, Futaba, JR und KO gibt es einen Anschluss.

Eliminator equipped receiver switch  
 Ein/Aus-Schalter mit A-Anschluss



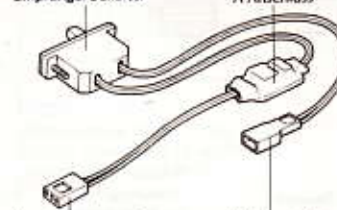
Receiver switch Empfänger-Verbindungskabel  
 2P connector 2P-Anschluss

**Other types of eliminators from R/C equipment manufacturers.**  
 A-Anschluss von anderen Fabrikaten können auch lieferbar sein.

★Shape of unit varies by manufacturers.  
 ★Die Forme des A-Anschluss ist je nach Fabrikat verschieden.

Receiver switch Empfänger-Schalter

Eliminator A-Anschluss



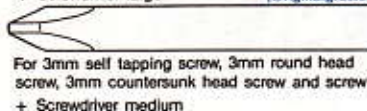
Receiver connector Empfänger-Verbindungskabel  
 2P connector 2P-Anschluss

**SCREWDRIVERS**

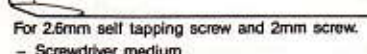
You should have at hand the 3 types of screwdrivers shown below. Use only the correct driver to prevent damage to screws.

**SCHRAUBENZIEHER**  
 Die unten gezeigten Schraubenzieher sollte man benutzen um Schäden an den Schrauben zu vermeiden.

+ Screwdriver large (Full-sized) (Originalgröße)



For 3mm self tapping screw, 3mm round head screw, 3mm countersunk head screw and screw pin.  
 + Screwdriver medium



For 2.6mm self tapping screw and 2mm screw.  
 - Screwdriver medium



For Steering pin and 8mm ball connector.

**RADIO CONTROL UNIT**

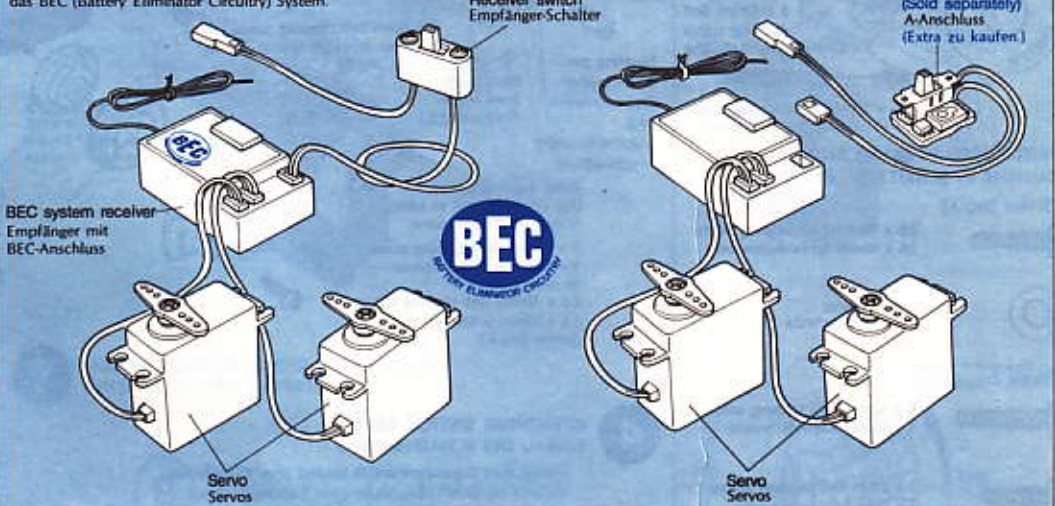
RC-ANLAGE

★When using BEC system receiver

★Wenn BEC-Empfänger verwendet wird

★The battery eliminator equipped proportional unit is referred to as BEC (Battery Eliminator Circuitry).

★Die RC-Anlage mit Akku-Anoden-Netzanschluss bezieht sich auf das BEC (Battery Eliminator Circuitry) System.



◀When using a normal receiver▶  
 ◀Bei Verwendung eines normalen Empfängers▶

Receiver switch Empfänger-Schalter

Battery eliminator (Sold separately) A-Anschluss (Extra zu kaufen.)

BEC system receiver Empfänger mit BEC-Anschluss



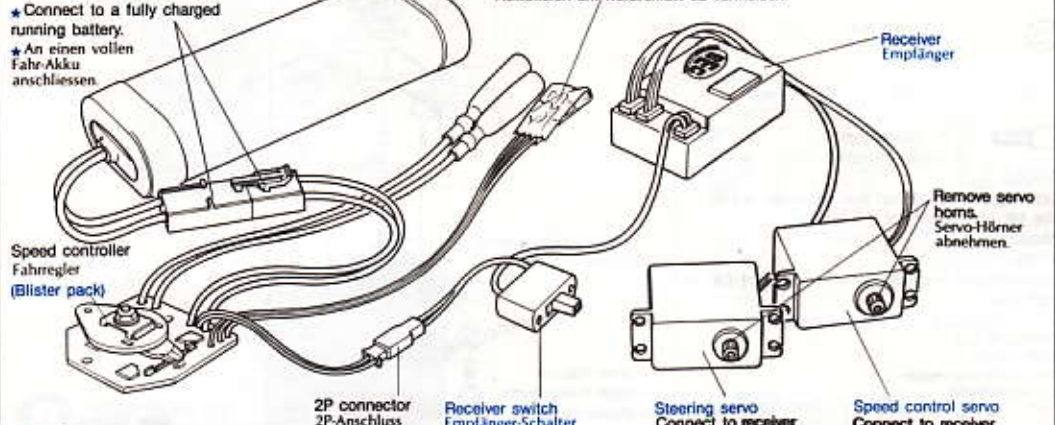
Servo Servos

Servo Servos

**1 CONNECTING RADIO CONTROL UNIT ZUSAMMENBAU DER RC-ANLAGE**

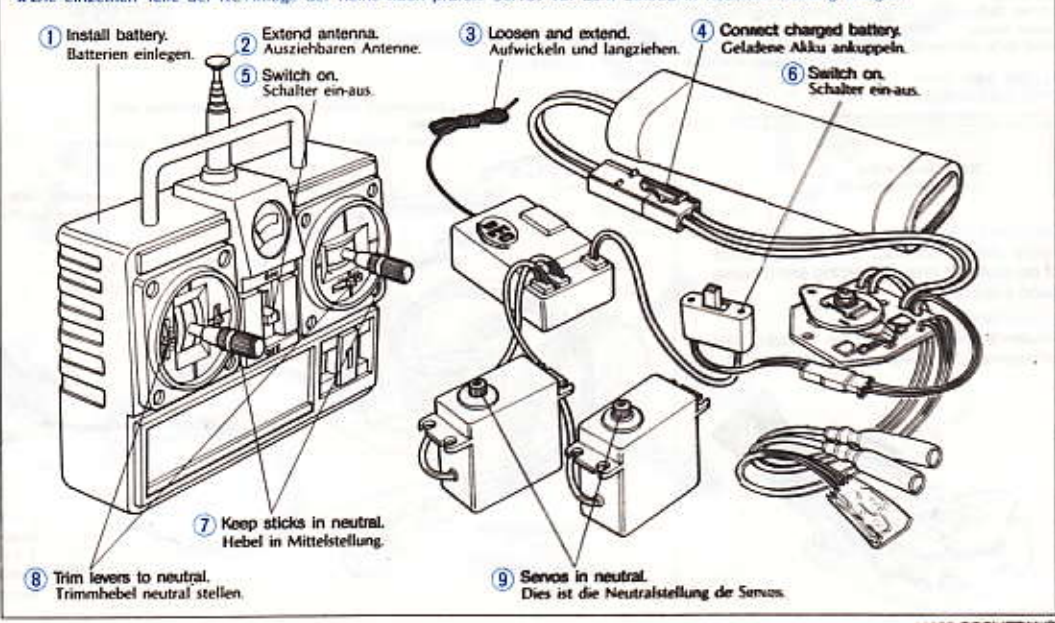
★Connect to a fully charged running battery.  
 ★An einen vollen Fahr-Akku anschliessen

Insulate with tape to prevent short circuits. Absisolieren um Kurzschluss zu vermeiden.



**2 CHECKING R/C EQUIPMENT ÜBERPRÜFEN DER RC-ANLAGE**

★Check out R/C equipment in sequence. Make sure the servos are in neutral prior to assembly.  
 ★Die einzelnen Teile der RC-Anlage der Reihe nach prüfen. Servos vor dem Einbau in neutrale Stellung bringen.



1 Install battery. Batterien einlegen.

2 Extend antenna. Ausziehbar Antenne.

3 Loosen and extend. Aufwickeln und langziehen.

4 Connect charged battery. Geladene Akku ankuppeln.

6 Switch on. Schalter ein-aus.

5 Switch on. Schalter ein-aus.

7 Keep sticks in neutral. Hebel in Mittelstellung.

8 Trim levers to neutral. Trimmhebel neutral stellen.

9 Servos in neutral. Dies ist die Neutralstellung der Servos.

### 3 SERVO SAVER

Select one servo saver base from below according to the make of your servo.  
Grundplatte zu Ihrer RC-Anlage (Servo) auswählen und auf Servo anbringen.

Servo saver base Servo-Saver Grundplatte  
Servo saver screw Schraube für Servo-Saver

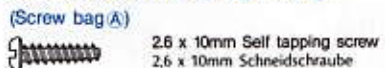


FUTABA  
2.6 x 10mm Self tapping screw  
2.6 x 10mm Schneidschraube

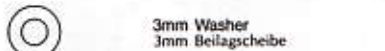


SANWA  
ACOMS  
JR  
3 x 12mm Self tapping screw  
3 x 12mm Schneidschraube  
KO  
2.6 x 10mm Self tapping screw  
2.6 x 10mm Schneidschraube

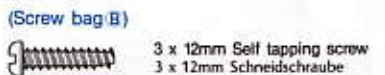
#### PARTS USED IN 3, 4 AND 5 BAUTEILE IN SCHRITT 3, 4 UND 5



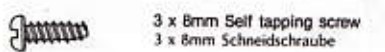
2.6 x 10mm Self tapping screw  
2.6 x 10mm Schneidschraube



3mm Washer  
3mm Beilagscheibe



3 x 12mm Self tapping screw  
3 x 12mm Schneidschraube



3 x 8mm Self tapping screw  
3 x 8mm Schneidschraube



2 x 6mm Round head screw  
2 x 6mm Rundkopfschraube



2mm Nut  
2mm Mutter

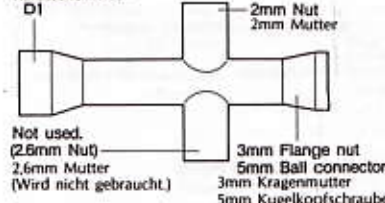


Steering pin  
Steuerzapfen

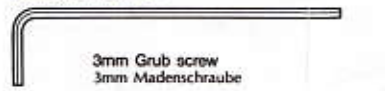
**TOOLS**  
Box wrench and allen key are included in the kit. Use them for screws and nuts as shown.

**WERKZEUG**  
Steckschlüssel und Imbusschlüssel sind im Kit enthalten.

**BOX WRENCH STECKSCHLÜSSEL**  
4mm Lock nut  
Body mount  
4mm Sicherungsmutter  
Karosserie-Halter



**ALLEN KEY IMBUSSCHLÜSSEL**



3mm Grub screw  
3mm Madenschraube

**SWITCH LUBRICANT**  
Apply switch lubricant on contact points of controller. It prevents arcing and insures good current flow.

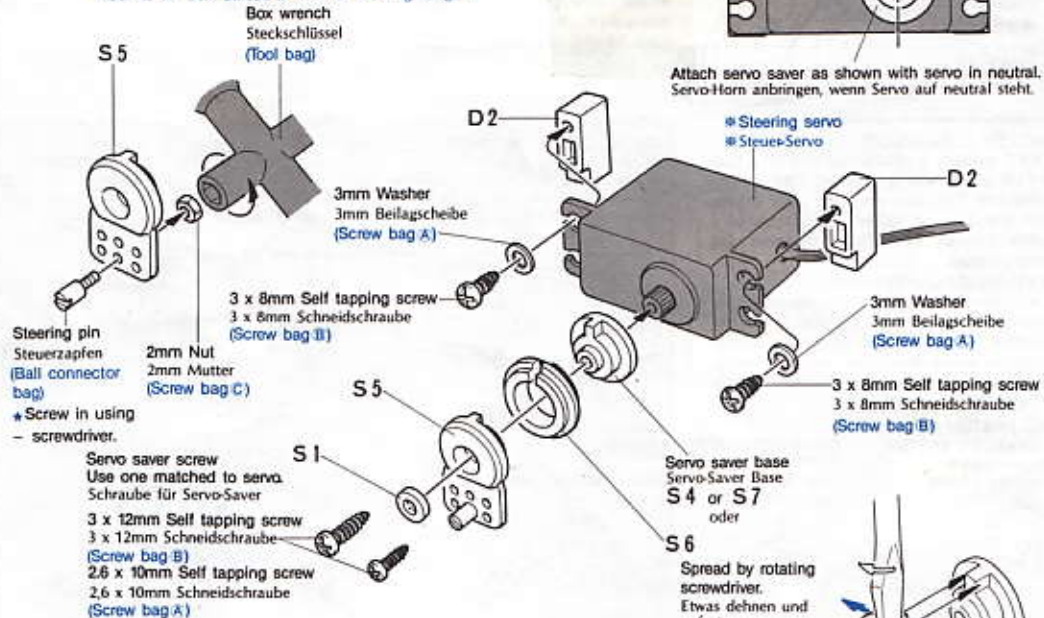
**SCHALTER-SCHMIERMITTEL**  
Schalter-Schmiermittel auf die Kontakte des Fahrreglers schützt vor schlechtem Kontakt.



### 3 ATTACHING SERVO SAVER SERVO-SAVER

\*Marked parts are not included in kit.  
Teile mit \* sind nicht in Kit enthalten.

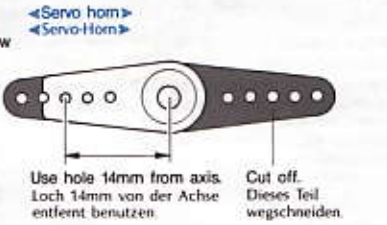
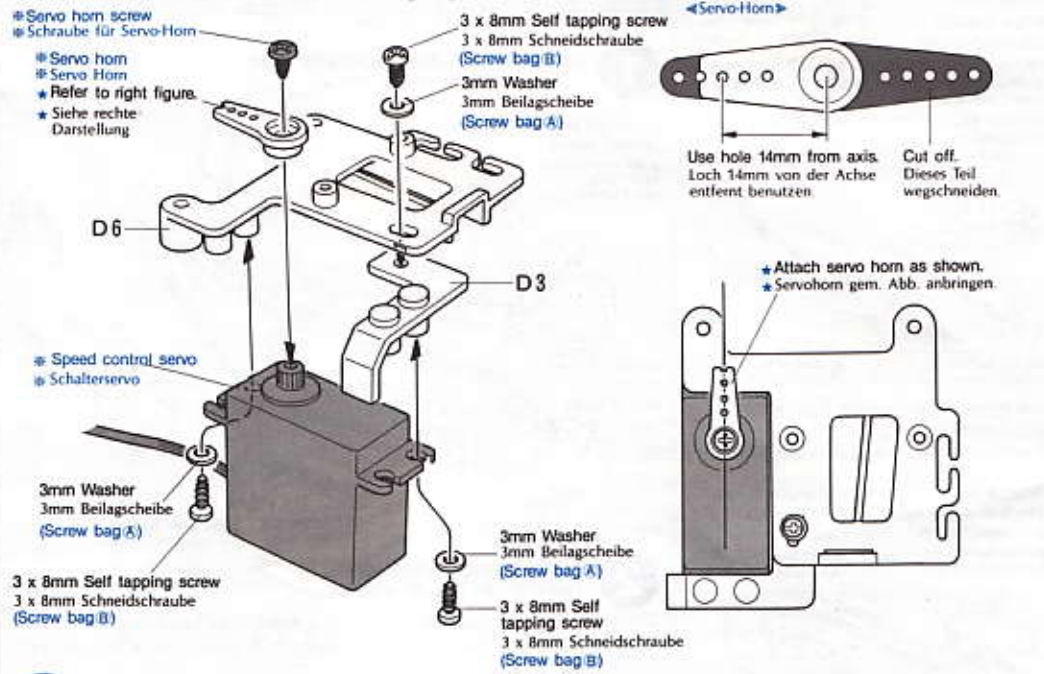
\*Make sure the servos are in neutral prior to assembly.  
\*Servos vor dem Einbau in neutrale Stellung bringen.



Attach servo saver as shown with servo in neutral.  
Servo-Horn anbringen, wenn Servo auf neutral steht.

### 4 ATTACHING SWITCH SERVO EINBAU DES SCHALTER-SERVO

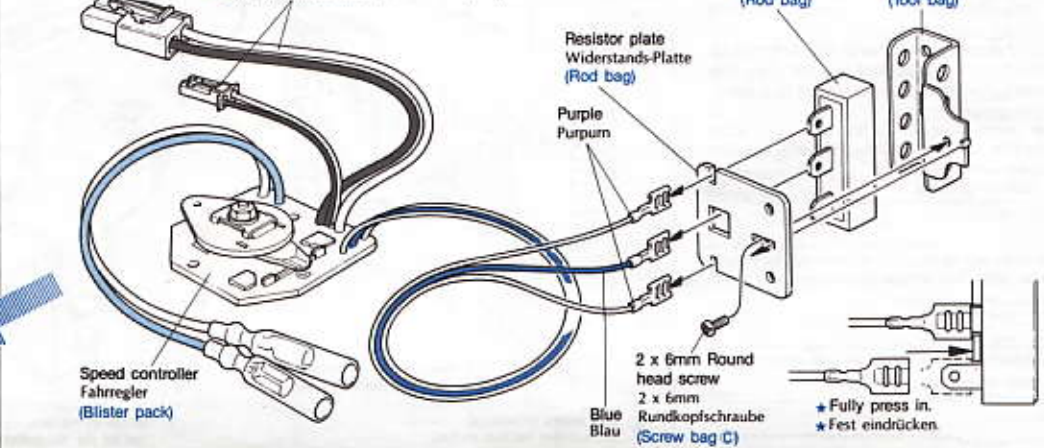
\*Make sure the servos are in neutral prior to assembly.  
\*Servos vor dem Einbau in neutrale Stellung bringen.



Use hole 14mm from axis. Cut off. This part is not used.  
Loch 14mm von der Achse entfernt benutzen. Dieses Teil wegschneiden.

### 5 ATTACHING RESISTOR WIDERSTAND

\*Disconnect cables and turn off transmitter and receiver.  
\*Kabel trennen und Sender und Empfänger ausschalten.



Resistor cover Abdeckung des Widerstandes (Tool bag)

Resistor Widerstand (Rod bag)

Resistor plate Widerstands-Platte (Rod bag)

Purple Purpur

Blue Blau

2 x 6mm Round head screw 2 x 6mm Rundkopfschraube (Screw bag C)

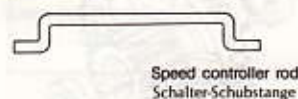
\*Fully press in. \*Fest eindrücken

**PARTS USED IN 6**  
**BAUTEILE IN SCHRITT 6**

(Screw bag B)

- 3 x 8mm Self tapping screw
- 3 x 8mm Schneidschraube

(Rod bag)

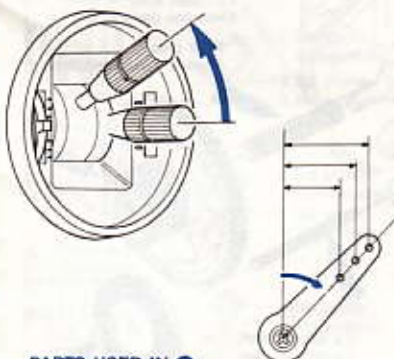


Speed controller rod  
Schalter-Schubstange

**7 SERVO HORN AND STROKE**  
**SERVO HORN UND AUSSCHLAG**

Movement of speed controller or steering can be altered by changing hole position of servo horn. The closer to the axis the hole is, the smaller the movement becomes, and the farther from the axis, the longer the throw.

Schalter, Steuerung oder Schaltung kann verändert werden durch Wechseln der Löcher im Servohorn.



**PARTS USED IN 7**  
**BAUTEILE IN SCHRITT 7**

(Gear box parts bag)

- Small bevel gear  
Kegelrad klein

- C-ring  
C-Ring

(Thrust washer bag)

- Thrust washer  
Druckscheibe

(Blister pack)

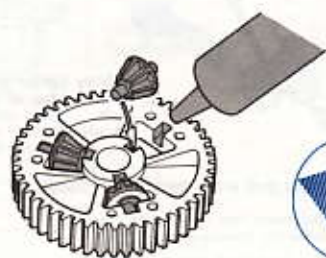
- Bevel gear R  
Kegelrad rechts

- Gear box joint  
Getriebewelle

**LUBRICATING**

Apply grease to gears and bearings. In particular, make sure to apply grease prior to assembly of gear boxes.

FETT



**TAMIYA COLOR CATALOGUE**  
The latest in cars, boats, tanks and ships. Motorized, radio controlled and museum quality models are all shown in full color in Tamiya's latest catalogue. At your nearest hobby supply house.

**6 ATTACHING SPEED CONTROLLER**  
**FAHRREGLER**

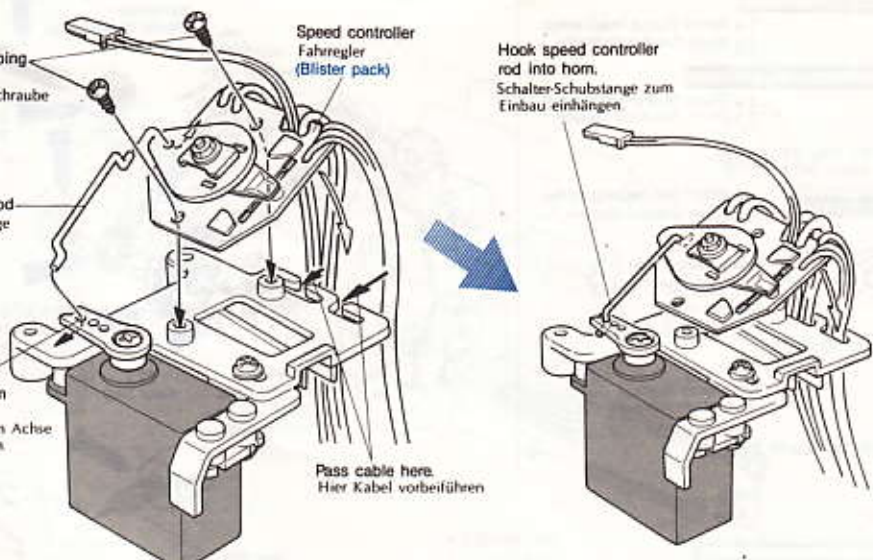
- 3 x 8mm Self tapping screw
- 3 x 8mm Schneidschraube
- (Screw bag B)

Speed controller rod  
Schalter-Schubstange  
(Rod bag)

- \* Use hole 14mm from axis.
- \* Loch 14mm von Achse entfernt benutzen.

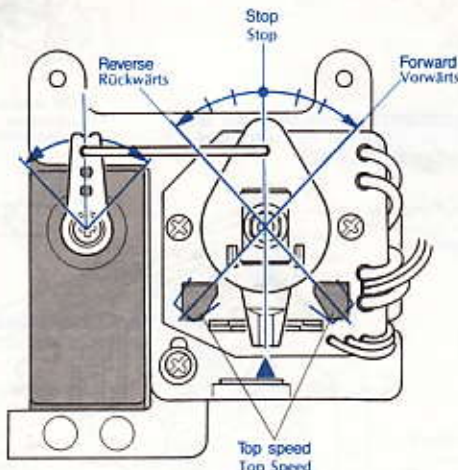
Speed controller  
Fahrregler  
(Blister pack)

Hook speed controller rod into horn.  
Schalter-Schubstange zum Einbau einhängen



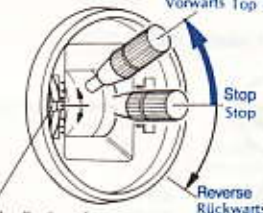
Pass cable here.  
Hier Kabel vorbeiführen

**7 ADJUSTMENT OF SPEED CONTROLLER**  
**EINSTELLUNG DES FAHRREGLERS**

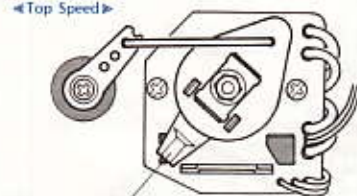


- \* Adjust hole position of servo horn so that switch blade moves to the place shown when transmitter stick is pushed full up and down.
- \* Loch im Servohorn so wählen, dass Schalterzunge sich richtig bewegen kann, wenn Senderhebel voll nach oben oder unten gedrückt wird.

Forward top speed  
Vorwärts Top Speed



- \* Make final adjustments with trim lever.
- \* Letzte Angleichungen mit Trimmhebel durchführen.



Forward top speed  
Vorwärts Top Speed

**8 REAR GEAR BOX — RIGHT SIDE**  
**HINTERES GETRIEBEGEHÄUSE RECHTE SEITE**

Apply grease to places shown by this mark.  
Stellen mit diesem Zeichen erst Fett fetten, dann zusammenbau.

Gear box joint  
Getriebewelle  
(Blister pack)

G3

C-ring  
C-Ring  
(Gear box parts bag)

Differential spur gear  
Differentialrad

Differential spur gear  
Differentialrad  
(Gear bag)

Small bevel gear  
Kegelrad klein  
(Gear box parts bag)

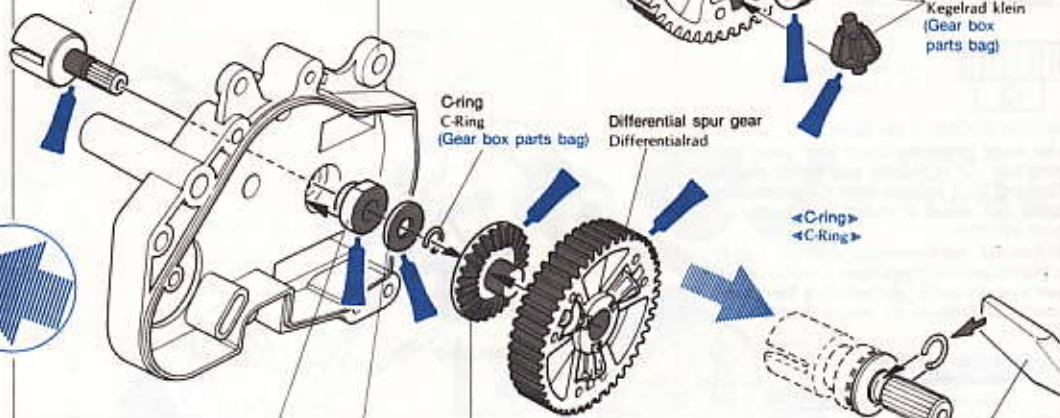
Differential spur gear  
Differentialrad

C-ring  
C-Ring

E11 Thrust washer  
Druckscheibe  
(Thrust washer bag)

Bevel gear R  
Kegelrad rechts  
(Blister pack)

Press on with screwdriver.  
Mit Schraubenzieher aufschieben



**PARTS USED IN ②, ③ AND ④  
BAUTEILE IN SCHRITT ②, ③ UND ④  
(Screw bag A)**

3 x 20mm Round head screw  
3 x 20mm Rundkopfschraube

3 x 27mm Round head screw  
3 x 27mm Rundkopfschraube

(Screw bag B)

3 x 12mm Self tapping screw  
3 x 12mm Schneidschraube

3mm Flange nut  
3mm Kragenmutter

(Screw bag C)

3mm Grub screw  
3mm Madenschraube

(Gear box parts bag)

C-ring  
C-Ring

2 x 28mm Shaft  
2 x 28mm Achse

5 x 25mm Pipe  
5 x 25mm Rohr

(Thrust washer bag)

Thrust washer  
Druckscheibe

850 Metal  
850 Metallring

(Plastic bearing bag)

Plastic bearing  
Plastiklager

(Blister pack)

Propeller joint  
Celenkwelle

Gear box joint  
Getriebewelle

Bevel gear L  
Kegelrad links

13T Pinion gear  
13 Z Motorritzel  
Normal

15T Pinion gear  
15 Z Motorritzel

**WATER PROTECTION BAND**

Use water protection band only when running the car in muddy and sandy place. Running long periods with the protection band can result in motor burn out.

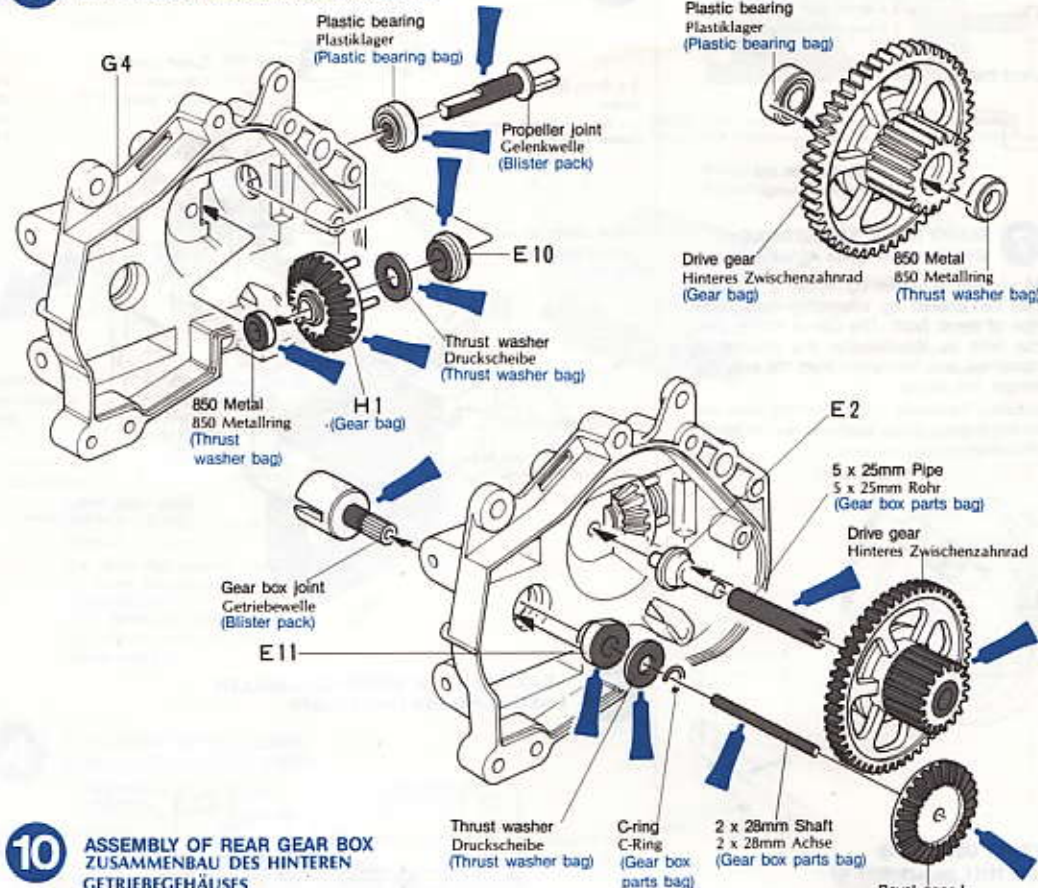
**ISOLIERBAND**

Isolierband - nur verwenden, wenn das Auto in schlammigem oder sandigem Gelände betrieben wird. Zu lange Fahrt mit dem Band kann zum Durchbrennen des Motors führen.

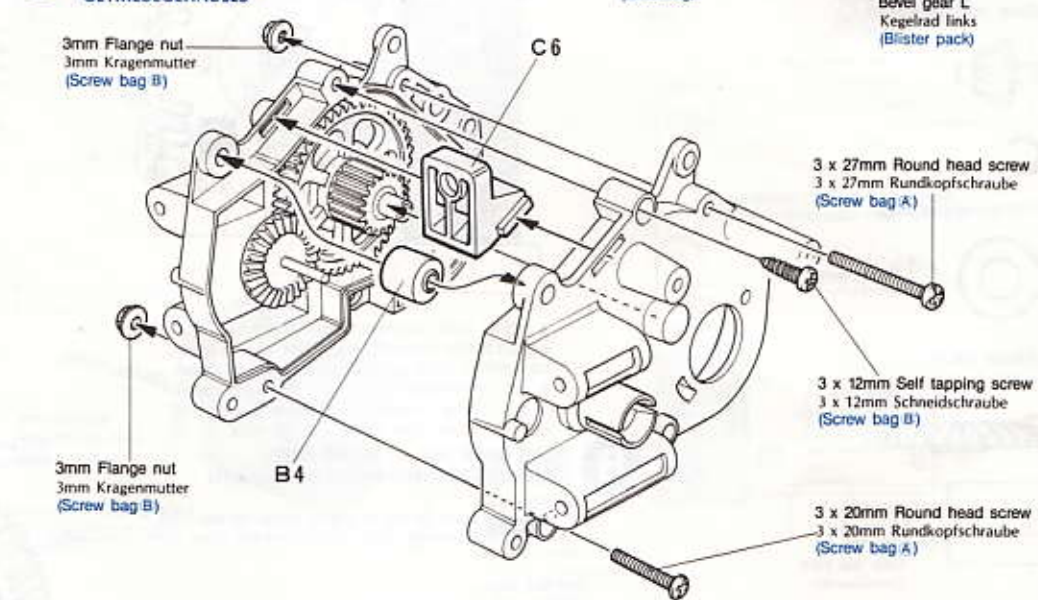


This is a very effective ceramic grease formulated with Boron Nitride and is ideal for lubrication of all gears, bearings and joints on radio control cars. Reduces friction and prolongs life of parts.

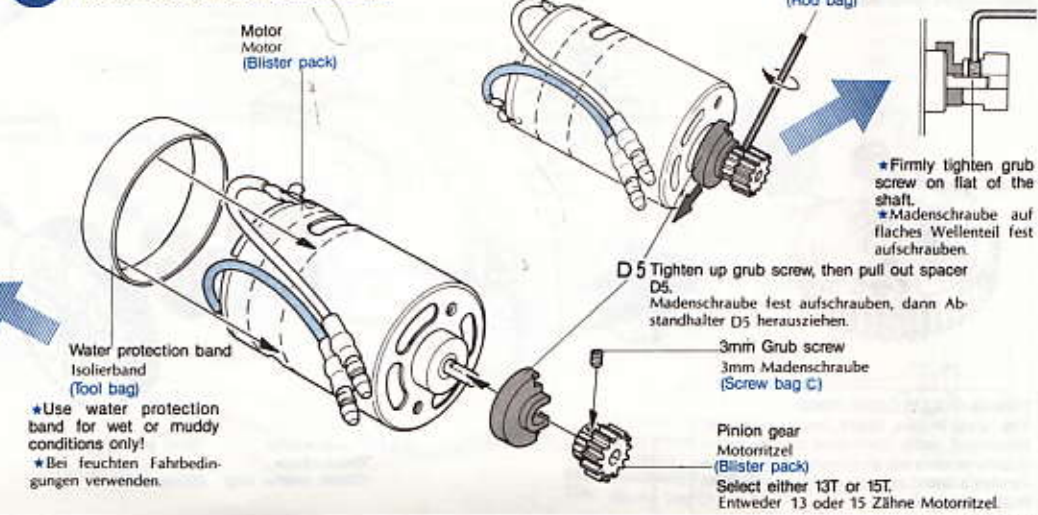
**9 REAR GEAR BOX — LEFT SIDE  
HINTERES GETRIEBEGEHÄUSE LINKE SEITE**



**10 ASSEMBLY OF REAR GEAR BOX  
ZUSAMMENBAU DES HINTEREN  
GETRIEBEGEHÄUSES**



**11 ATTACHING PINION GEAR  
AUFSCHRAUBEN DES MOTORRITZELS**



Water protection band  
Isolierband  
(fool bag)  
\*Use water protection band for wet or muddy conditions only!  
\*Bei feuchten Fahrbedingungen verwenden.

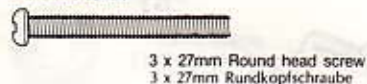
\*Firmly tighten grub screw on flat of the shaft.  
\*Madenschraube auf flaches Wellenteil fest aufschrauben.

D5 Tighten up grub screw, then pull out spacer D5.  
Madenschraube fest aufschrauben, dann Abstandhalter D5 herausziehen.

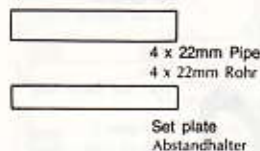
3mm Grub screw  
3mm Madenschraube  
(Screw bag C)

Pinion gear  
Motorritzel  
(Blister pack)  
Select either 13T or 15T.  
Entweder 13 oder 15 Zähne Motorritzel.

**PARTS USED IN 11**  
**BAUTEILE IN SCHRITT 11**  
(Screw bag A)



(Gear box parts bag)



**12 GEARING**  
**ÜBERSETZUNGEN**

Pinion gear positioning requires use of set plates.  
Das Greifen des Motorritzel ist von Abstandhaltern abhängig.

**WHEN USING OTHER PINION GEARS**  
**RITZEL AUS ERSATZTEIL ANGEBOT**

**14T Pinion gear**  
14 Z. Motorritzel



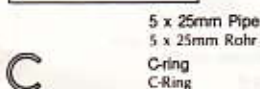
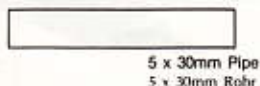
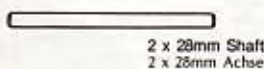
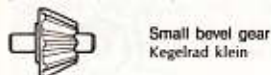
**16T Pinion gear**  
16 Z. Motorritzel



**17T Pinion gear**  
17 Z. Motorritzel



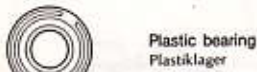
**PARTS USED IN 11 AND 12**  
**BAUTEILE IN SCHRITT 11 UND 12**  
(Gear box parts bag)



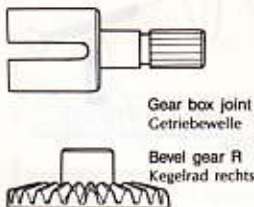
(Thrust washer bag)



(Plastic bearing bag)

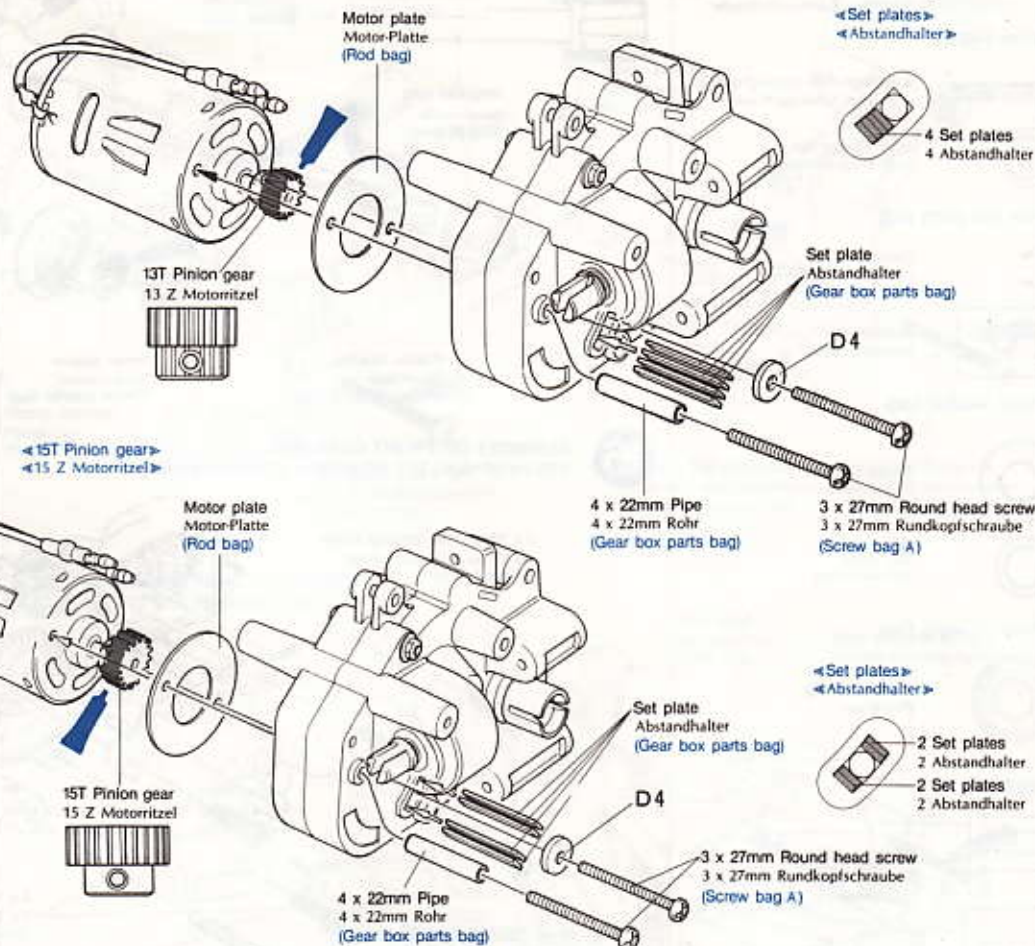


(Blister pack)



**12 ATTACHING MOTOR**  
**EINBAU DES MOTORS**

◀13T Pinion gear▶  
◀13 Z. Motorritzel▶



**13 COUNTER GEAR ASSEMBLY**  
**ZWISCHENZAHNRAD**

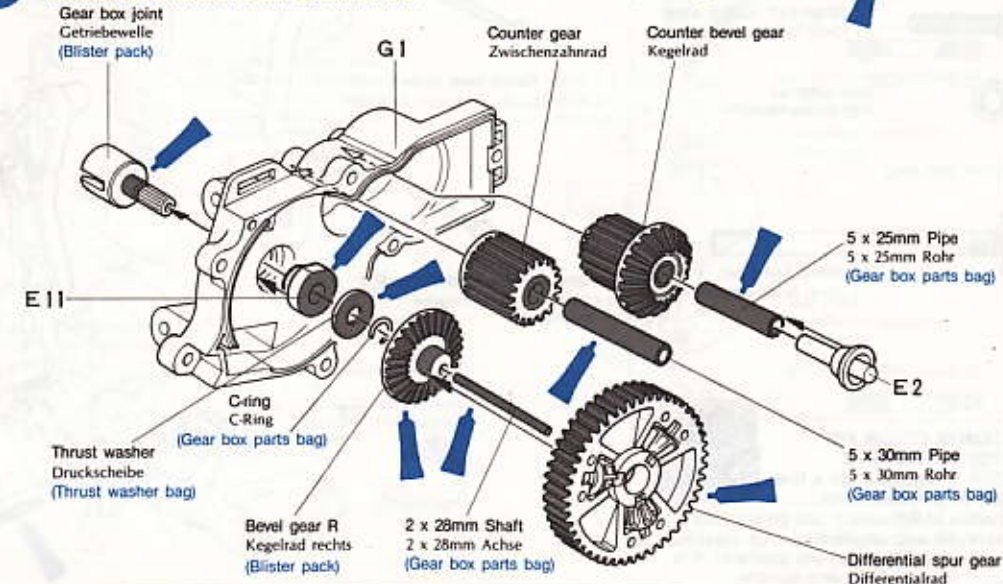
◀Counter gear▶  
◀Zwischenzahnrad▶

◀Counter bevel gear▶  
◀Kegelrad▶

◀Differential spur gear▶  
◀Differentialrad▶




**14 FRONT GEAR BOX — RIGHT SIDE**  
**VORDERES GETRIEBEGEHÄUSE RECHTE SEITE**




**PARTS USED IN ④ AND ⑤  
BAUTEILE IN SCHRITT ④ UND ⑤  
(Screw bag A)**

 3 x 27mm Round head screw  
3 x 27mm Rundkopfschraube


(Screw bag B)

 3 x 12mm Self tapping screw  
3 x 12mm Schneidschraube


 3mm Flange nut  
3mm Kragenmutter


(Gear box parts bag)

 C-ring  
C-Ring

 Bumper stay  
Stoßfängerhalter

(Thrust washer bag)

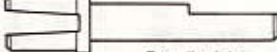
 Thrust washer  
Druckscheibe

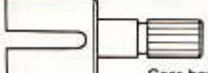
 850 Metal  
850 Metallring

(Plastic bearing bag)

 Plastic bearing  
Plastiklager

(Blister pack)

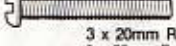
 Propeller joint  
Gelenkwelle

 Gear box joint  
Getriebewelle


 Bevel gear L  
Kegelrad links


**PARTS USED IN ⑥  
BAUTEILE IN SCHRITT ⑥  
(Screw bag A)**

 3 x 30mm Round head screw (black)  
3 x 30mm Rundkopfschraube (schwarz)

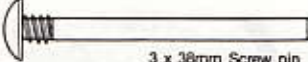
 3 x 20mm Round head screw  
3 x 20mm Rundkopfschraube

(Screw bag B)

 3 x 12mm Self tapping screw  
3 x 12mm Schneidschraube

 3mm Lock nut  
3mm Sicherungsmutter

(Screw pin bag)

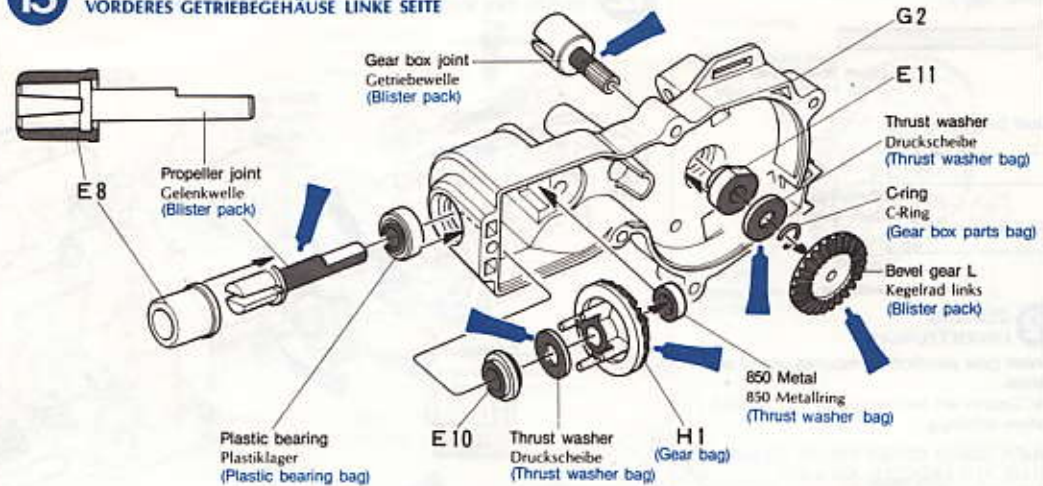
 3 x 38mm Screw pin  
3 x 38mm Schraubzapfen

**TAMIYA COLOR FOR  
POLYCARBONATE**

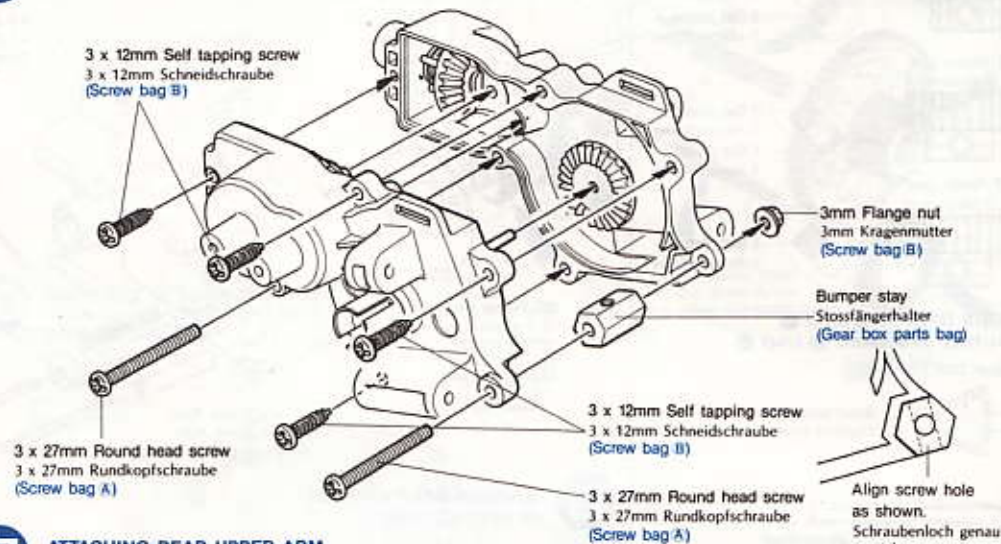
This is a paint to do a fine job on polycarbonate bodies of RC cars. It can be brushed or sprayed and brushes can be cleaned with water. 18 colors are available. It is collision resistant and durable.



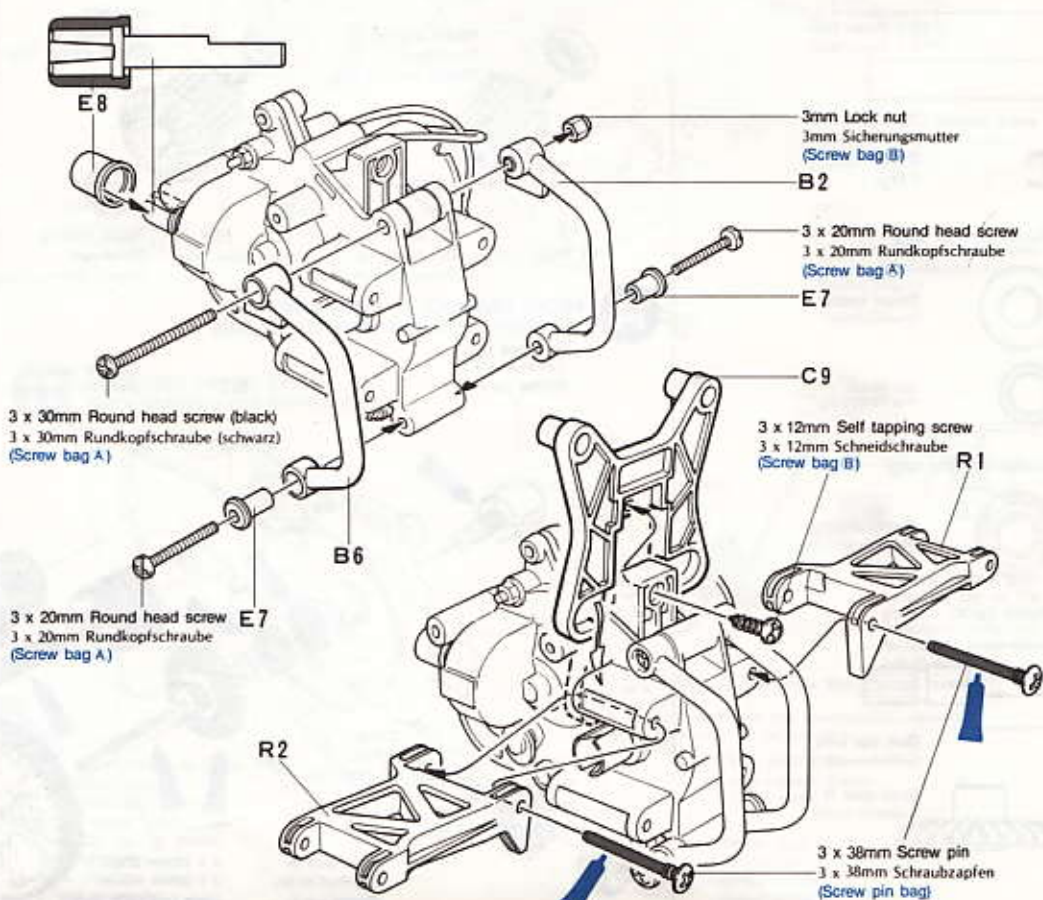
**15 FRONT GEAR BOX — LEFT SIDE  
VORDERES GETRIEBEGEHÄUSE LINKE SEITE**



**16 ASSEMBLY OF FRONT GEAR BOX  
ZUSAMMENBAU DES VORDEREN GETRIEBEGEHÄUSES**

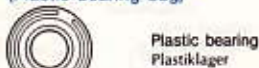


**17 ATTACHING REAR UPPER ARM  
EINBAU DER HINTEREN, OBEREN QUERLENKERARM**



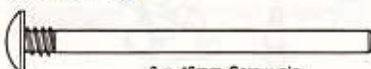


**PARTS USED IN ● AND ●**  
**BAUTEILE IN SCHRITT ● UND ●**  
 (Plastic bearing bag)

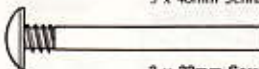


Plastic bearing  
Plastiklager

(Screw pin bag)

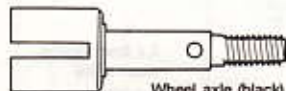


3 x 46mm Screw pin  
3 x 46mm Schraubzapfen



3 x 32mm Screw pin  
3 x 32mm Schraubzapfen

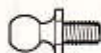
(Blister pack)



Wheel axle (black)  
Radachse (schwarz)

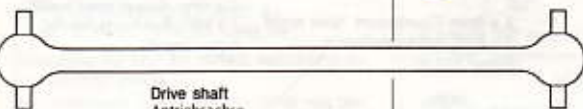
(Ball connector bag)

Blister pack



5mm Ball connector  
5mm Kugelkopfschraube

(Shaft bag)

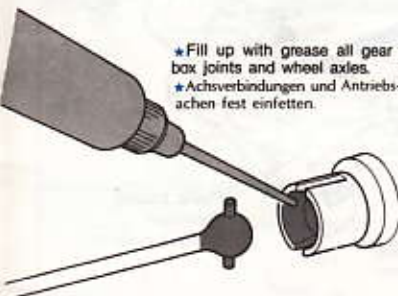


Drive shaft  
Antriebsachse

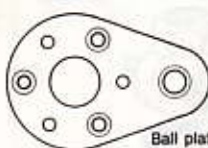
**19 LUBRICATING DRIVE SHAFTS**  
**FETTEN**

Make sure to check drive shafts and to fill up units with grease prior to running car.  
 Vor Fahren die Antriebsachsen überprüfen und gut einfetten mit Fett.

- Fill up with grease all gear box joints and wheel axles.
- Achsverbindungen und Antriebsachsen fest einfetten.



**PARTS USED IN ●**  
**BAUTEILE IN SCHRITT ●**  
 (Rod bag)



Ball plate  
Kugelkopf-Lagerplatte

(Ball connector bag)

Blister pack



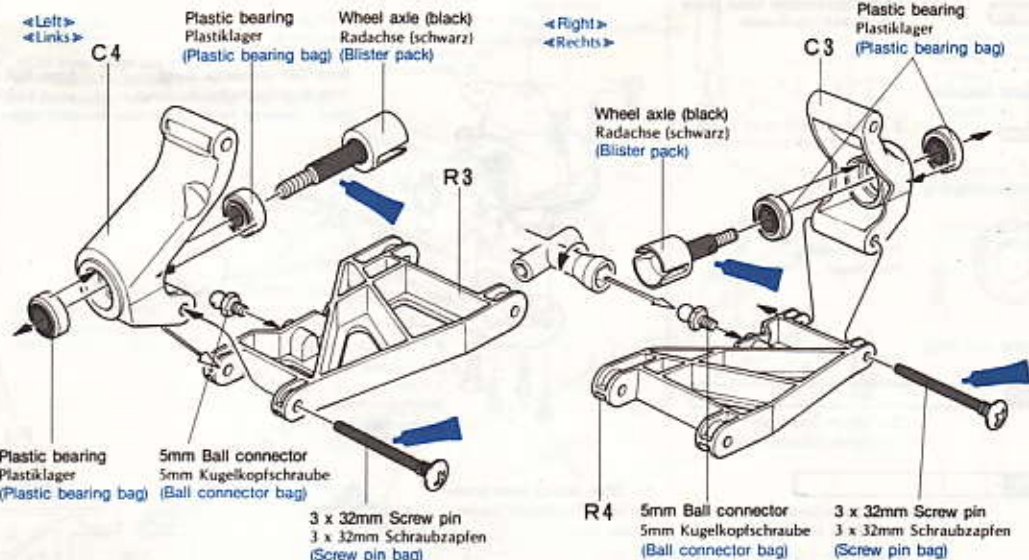
8mm Ball connector  
8mm Kugelkopfschraube

**SWITCH LUBRICANT**

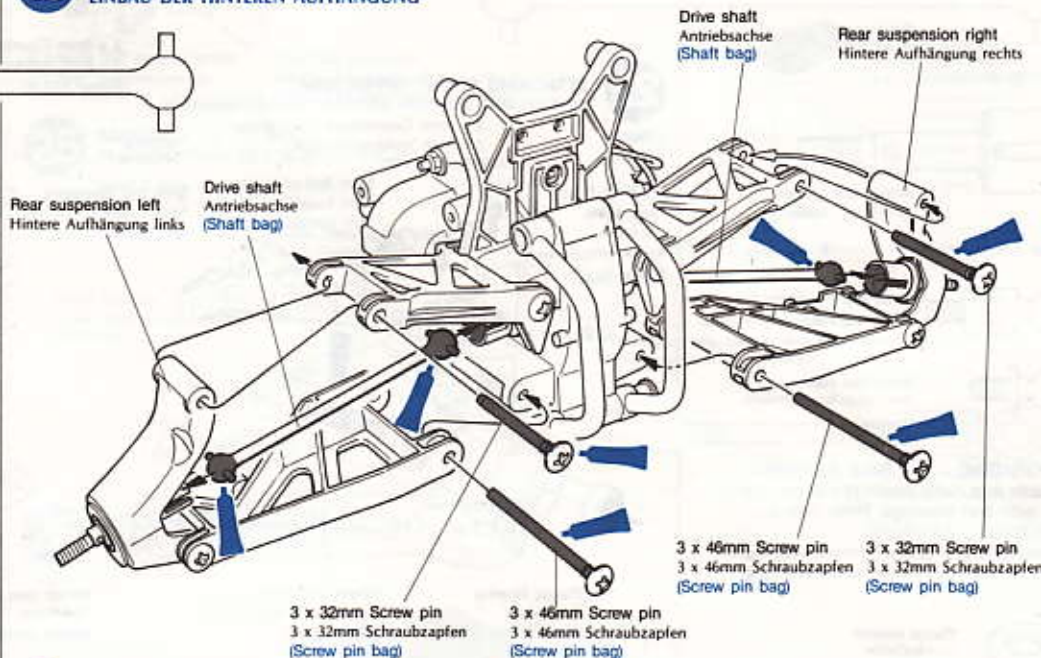


Specially formulated for use on R/C Speed Controllers to reduce arcing, prevent pitting and corrosion and improve current flow. It will maintain its viscosity over a wide temperature range and prolongs the life of the controller.

**18 ASSEMBLY OF REAR SUSPENSION**  
**ZUSAMMENBAU DER HINTEREN AUFHÄNGUNG**



**19 ATTACHING REAR SUSPENSION**  
**EINBAU DER HINTEREN AUFHÄNGUNG**



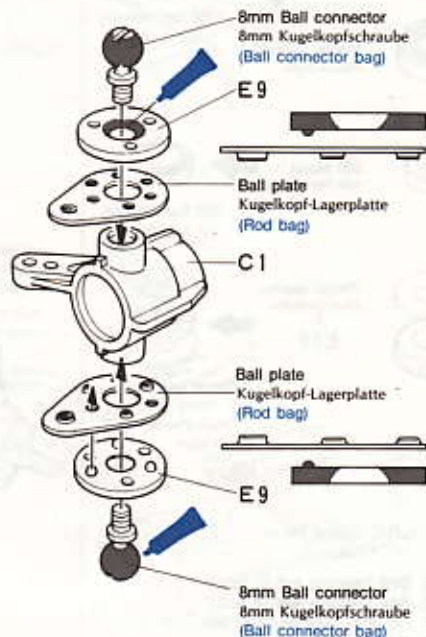
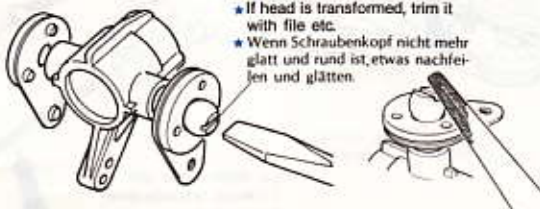
**20 UPRIGHT ASSEMBLY**  
**ZUSAMMENBAU DER ACHSSCHENKEL**

Make 2 sets.  
2 Satz machen.

• Tapping C1  
• Zusammenschrauben von C1



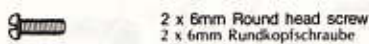
• 8mm Ball connector  
• 8mm Kugelkopfschraube



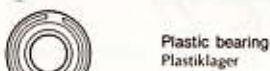
**PARTS USED IN ①, ② AND ③  
BAUTEILE IN SCHRITT ①, ② UND ③**  
(Screw bag B)



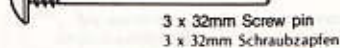
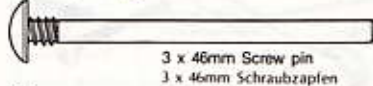
(Screw bag C)



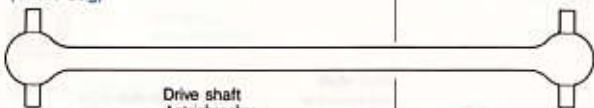
(Plastic bearing bag)



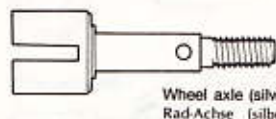
(Screw pin bag)



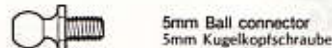
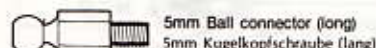
(Shaft bag)



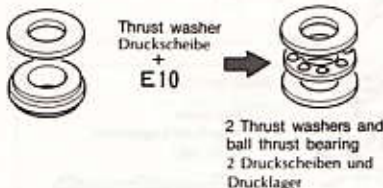
(Blister pack)



(Ball connector bag) Blister pack



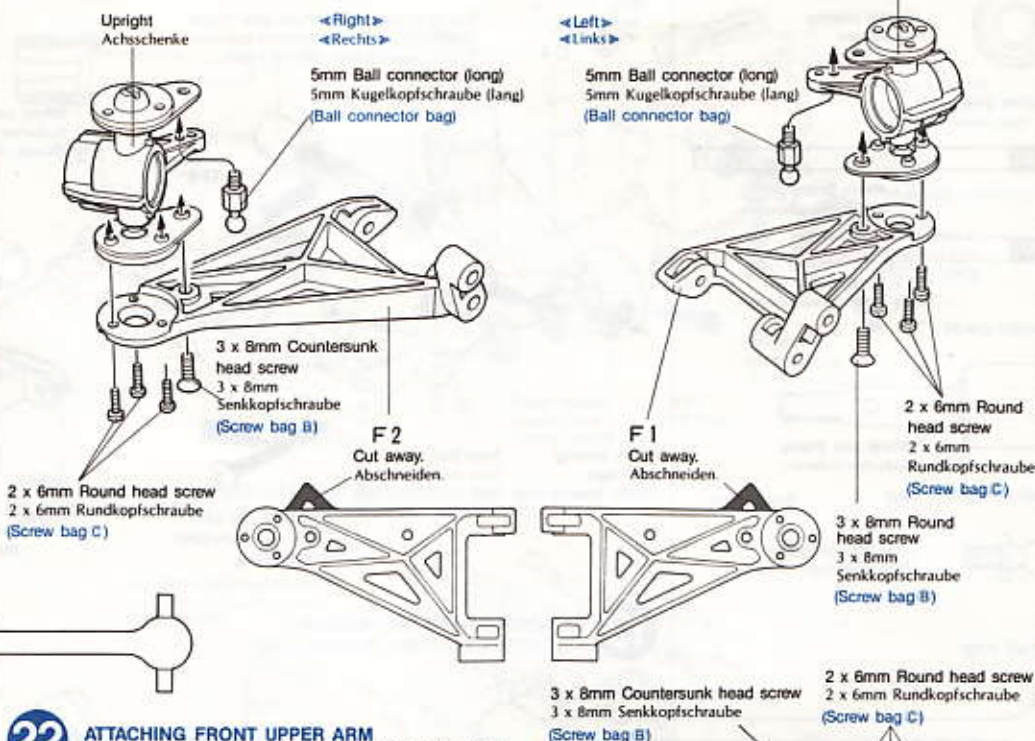
**UPGRADING WITH BALL BEARINGS**  
Plastic and metal bearings can be upgraded with ball bearings. Refer below.  
**LEISTUNGSSTÄRKUNG**  
Leistungssteigerung durch Einsatz von Kugellagern anstelle von Plastik- und Metall-Lagern.



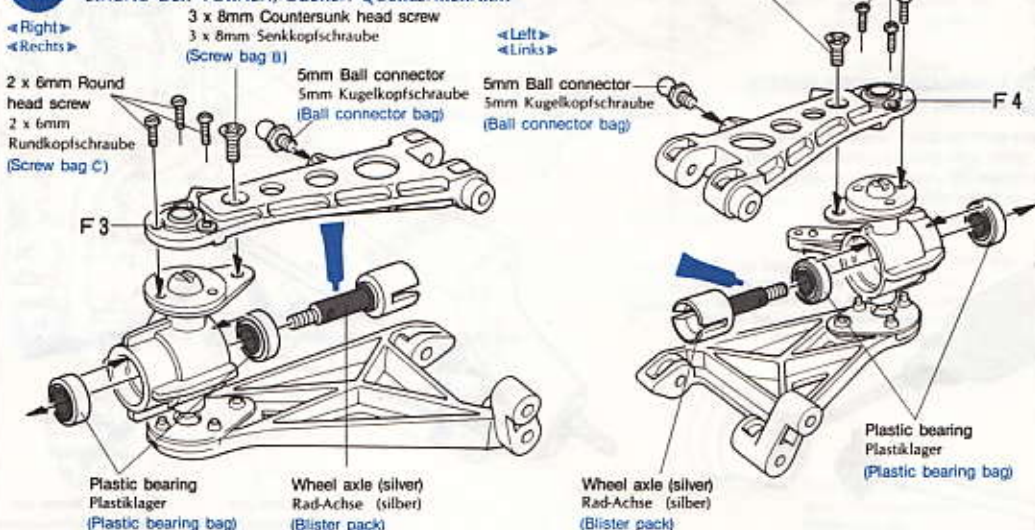
Tamiya R/C Spare Parts  
Tamiya-RC-Ersatzteile

- 50036 Ball bearing set (2 pcs.)
- 50073 Ball bearing set (4 pcs.)
- 50241 Hotshot ball bearing set
- 50242 850 Ball bearing set
- 50284 Ball thrust bearing set

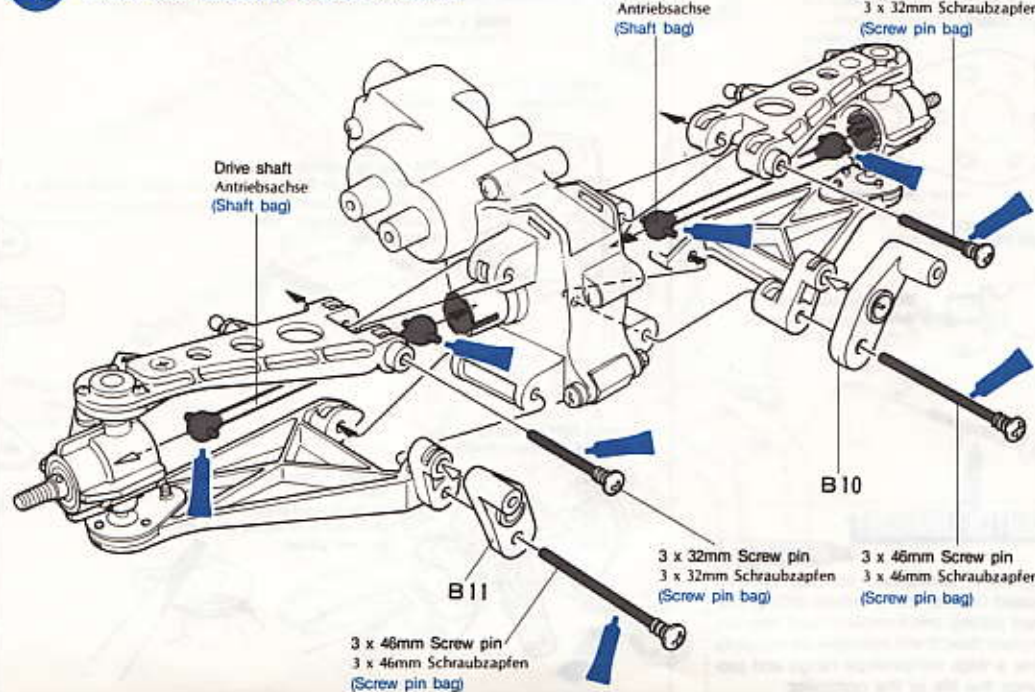
**21 ATTACHING FRONT LOWER ARM  
EINBAU DER VORNEN, UNTEREN QUERLENKERARM**



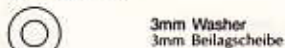
**22 ATTACHING FRONT UPPER ARM  
EINBAU DER VORNEN, OBEREN QUERLENKERARM**



**23 ATTACHING FRONT SUSPENSION  
EINBAU DER VORDEREN RADAUFHÄNGUNG**

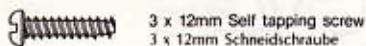


**PARTS USED IN ●, ○ AND ●**  
**BAUTEILE IN SCHRITT ●, ○ UND ●**  
 (Screw bag (A))

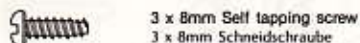


3mm Washer  
3mm Beilagscheibe

(Screw bag (B))

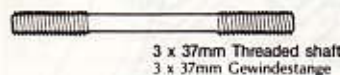


3 x 12mm Self tapping screw  
3 x 12mm Schneidschraube

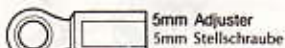


3 x 8mm Self tapping screw  
3 x 8mm Schneidschraube

(Rod bag)



3 x 37mm Threaded shaft  
3 x 37mm Gewindestange



5mm Adjuster  
5mm Stellschraube

(Ball connector bag) Blister pack



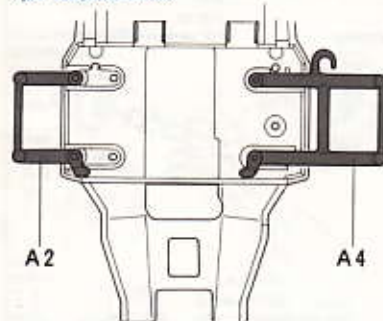
5mm Ball connector  
5mm Kugelkopfschraube

**24 ATTACHING A2 AND A4**  
**EINBAU VON A2 UND A4**

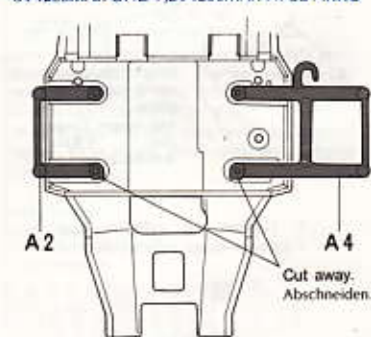
Attaching A2 and A4 differs according to the battery used.

Das Anbringen von A2 und A4 hängt von den verwendeten Batterien ab.

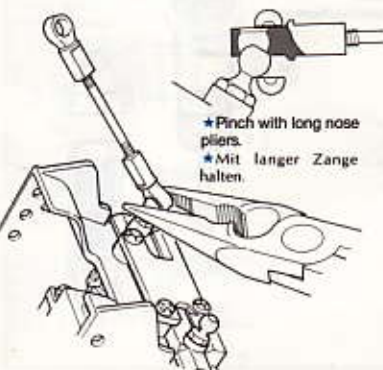
7.2V RACING PACK  
7.2V RACING PACK



TAMIYA 6V-1200mAh AND 7.2V-1200mAh Ni-Cd BATTERY  
6V-1200mAh UND 7.2V-1200mAh Ni-Cd AKKU



**26 ATTACHING ADJUSTER**  
**ANBRINGUNG DER STELSCHRAUBKÖPFE**



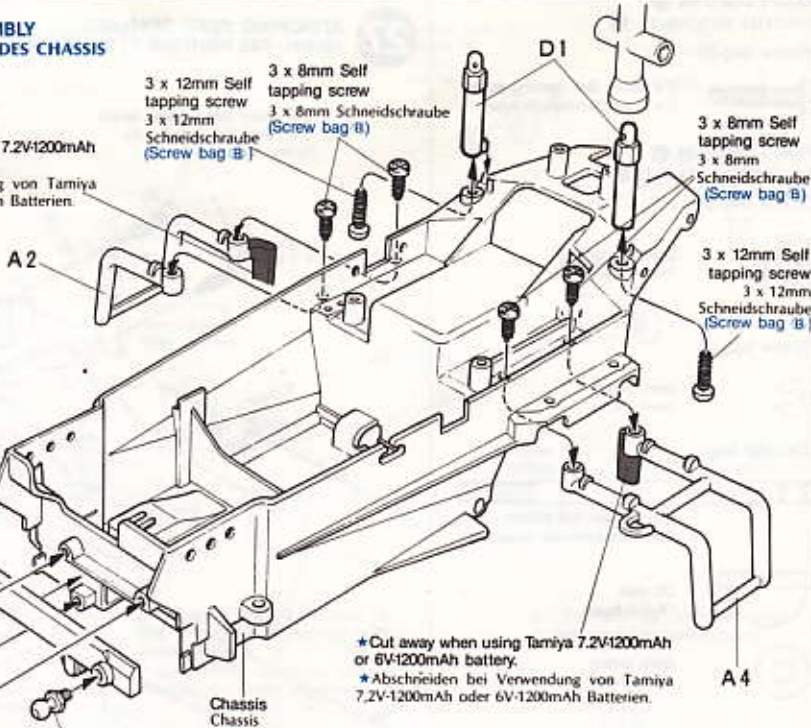
\*Pinch with long nose pliers.  
\*Mit langer Zange halten.

**24 CHASSIS ASSEMBLY**  
**ZUSAMMENBAU DES CHASSIS**

\*Cut away when using Tamiya 7.2V-1200mAh or 6V-1200mAh battery.  
\*Abschneiden bei Verwendung von Tamiya 7.2V-1200mAh oder 6V-1200mAh Batterien.

5mm Ball connector  
5mm Kugelkopfschraube  
(Ball connector bag)

3 x 8mm Self tapping screw  
3 x 8mm Schneidschraube  
(Screw bag (B))



3 x 12mm Self tapping screw  
3 x 12mm Schneidschraube  
(Screw bag (B))

3 x 8mm Self tapping screw  
3 x 8mm Schneidschraube  
(Screw bag (B))

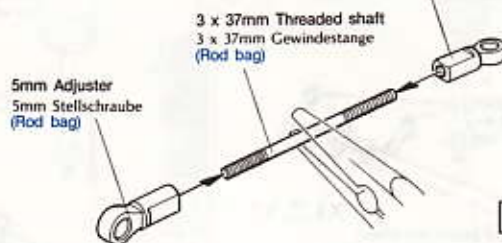
3 x 8mm Self tapping screw  
3 x 8mm Schneidschraube  
(Screw bag (B))

3 x 12mm Self tapping screw  
3 x 12mm Schneidschraube  
(Screw bag (B))

\*Cut away when using Tamiya 7.2V-1200mAh or 6V-1200mAh battery.  
\*Abschneiden bei Verwendung von Tamiya 7.2V-1200mAh oder 6V-1200mAh Batterien.

**25 ASSEMBLY OF TIE ROD**  
**ZUSAMMENBAU DER SCHUBSTANGEN**

Make 2 sets.  
2 Satz machen.



5mm Adjuster  
5mm Stellschraube  
(Rod bag)

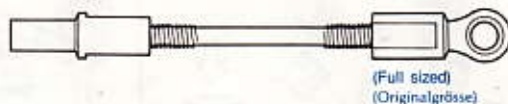
3 x 37mm Threaded shaft  
3 x 37mm Gewindestange  
(Rod bag)

5mm Adjuster  
5mm Stellschraube  
(Rod bag)



Cut away when using Tamiya 7.2V-1200mAh or 6V-1200mAh battery.  
Abschneiden bei Verwendung von Tamiya 7.2V-1200mAh oder 6V-1200mAh Batterien.

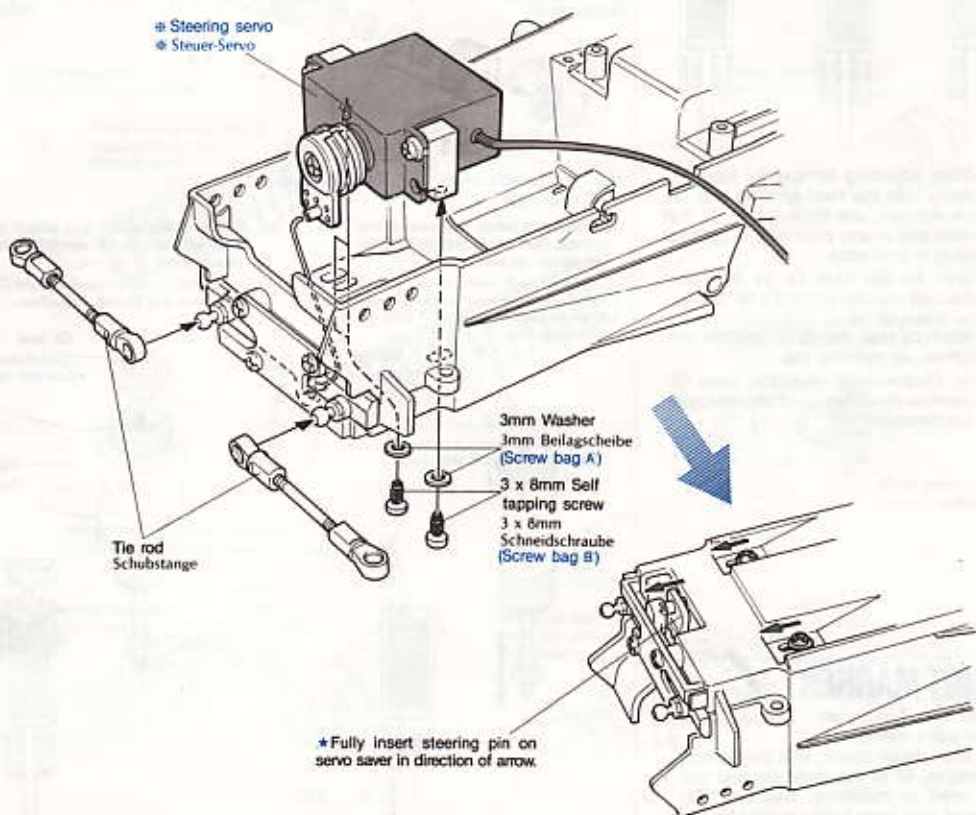
\*Tighten up adjusters to length as shown below.  
\*Länge angleichen gem. Zeichnung unten.



(Full sized)  
(Originalgröße)

**26 ATTACHING STEERING SERVO**  
**EINBAU DES STEUER-SERVO**

\*Steering servo  
\*Steuer-Servo



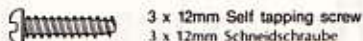
3mm Washer  
3mm Beilagscheibe  
(Screw bag (A))

3 x 8mm Self tapping screw  
3 x 8mm Schneidschraube  
(Screw bag (B))

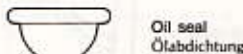
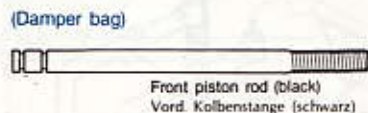
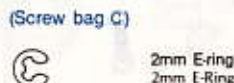
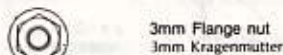
Tie rod  
Schubstange

\*Fully insert steering pin on servo saver in direction of arrow.

**PARTS USED IN 27**  
**BAUTEILE IN SCHRITT 27**  
 (Screw bag B)



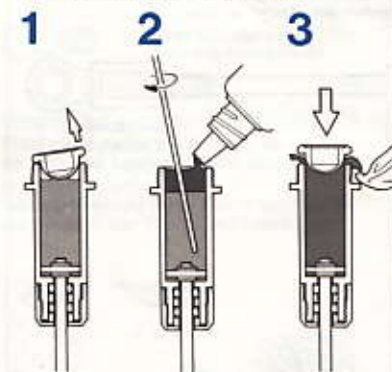
**PARTS USED IN 28**  
**BAUTEILE IN SCHRITT 28**  
 (Screw bag B)



**TAMIYA DAMPER OIL SET**  
 The separately sold Tamiya Damper Oil Set is for adjusting shock absorbers to various road conditions. The soft type and hard type damper oil comes in a set containing 20cc each.  
**TAMIYA DÄMPFER-ÖL** (nicht im Kit)  
 Dies besteht aus hartem und weichem Öl. Jedes Fläschen enthält 20cc. Je nach Gelände und Kurs kann man mit diesem Öl alle Dämpfer justieren.

**HOW TO ADJUST**  
**EINSTELLUNG DES DÄMPFERS**

**1** Remove oil seal gently. Pulling hard will result in oil spill.  
 Ölabdichtung langsam ausziehen. Schnelles Ausziehen sprüht Öl.



**2** When adjusting damper for high viscosity, use the hard type oil and for low viscosity, use the soft type oil. Pull down piston and pour oil into cylinder using a thin stick.

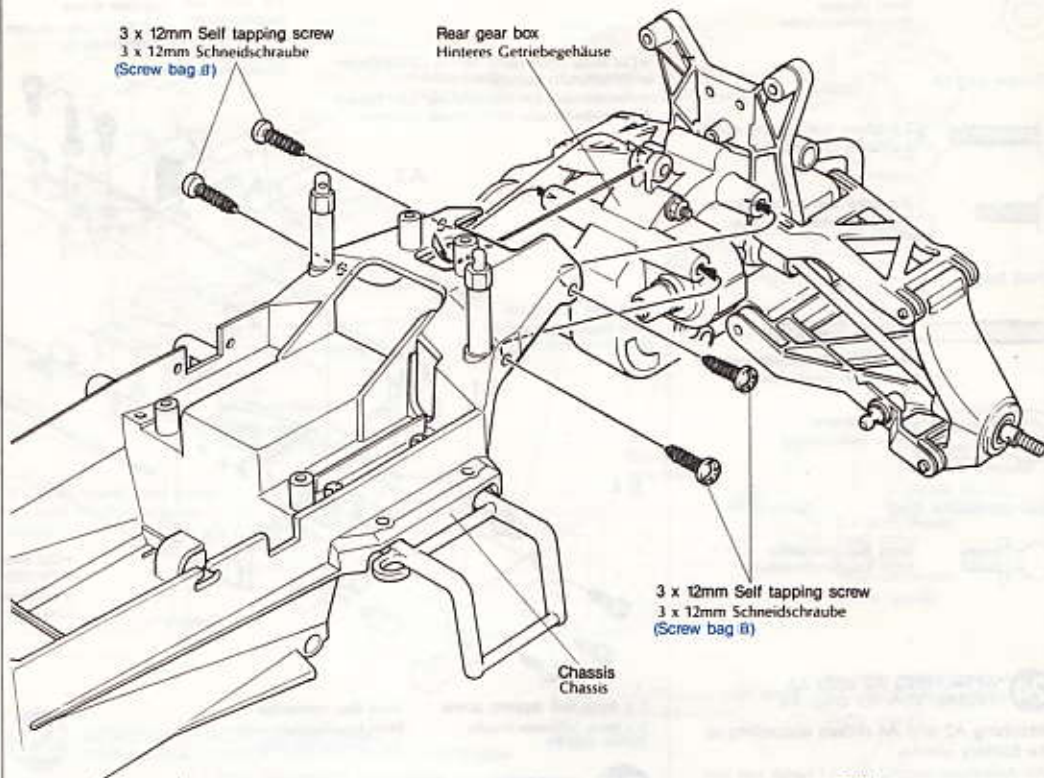
Füllen Sie das harte Öl für die harte Viskosität und das weiche Öl für die weiche Viskosität ein.

**3** Attach oil seal, absorb oil overflow and tighten up cylinder cap.  
 Erst Ölabdichtung einstecken, dann Öl-Überfluss abwischen und Dämpfer-Kappe aufschrauben.

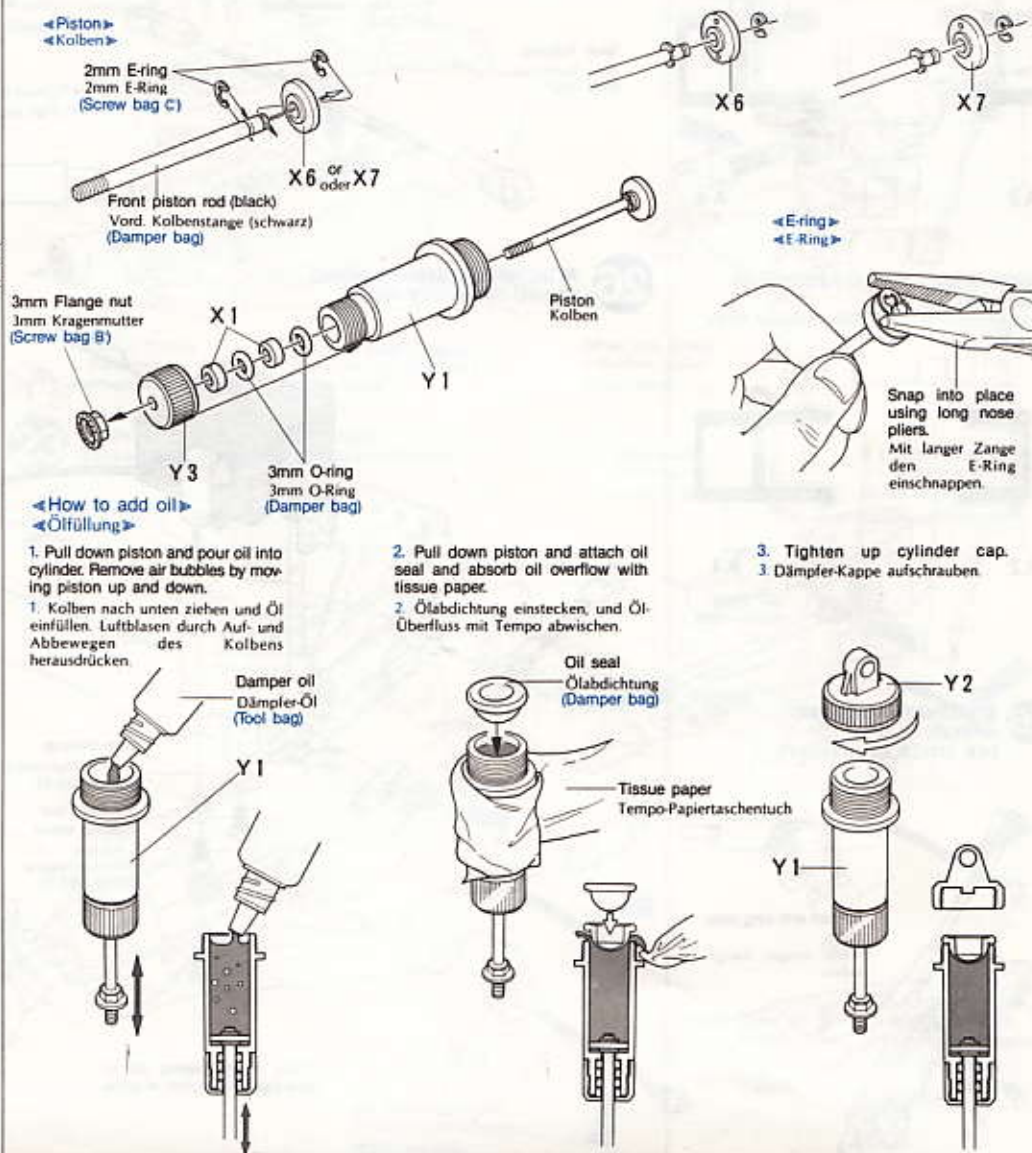
**PAINT MARKER**

Hand held, Tamiya enamel paint markers. For the final detail touch, and professional results. 12 of the most popular colors used in modeling. See and test them at your local hobby supply house.

**27 ATTACHING REAR GEAR BOX**  
**EINBAU DES HINTEREN GETRIEBEGEHÄUSES**



**28 ASSEMBLY OF FRONT DAMPER**  
**VORDERER STOSSDÄMPFER**

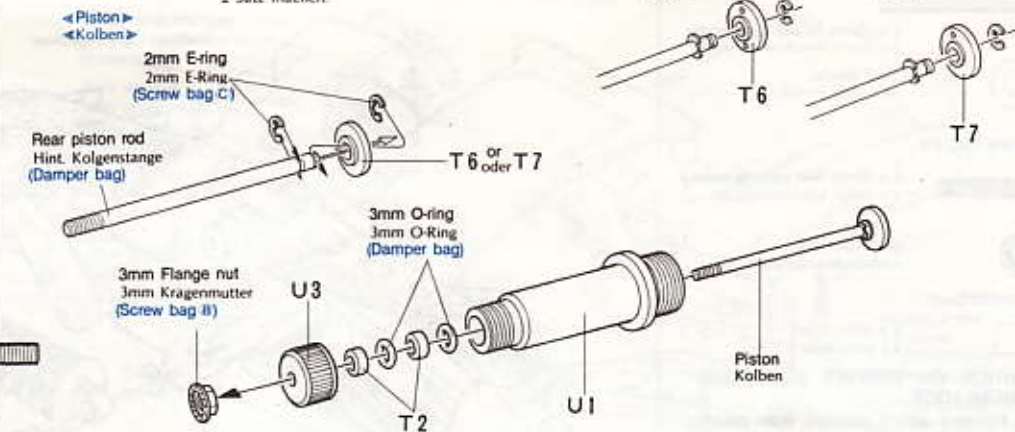


**PARTS USED IN 29 AND 30**  
**BAUTEILE IN SCHRITT 29 UND 30**  
 (Screw bag #)

-  3mm Flange nut  
3mm Kragenmutter
- (Screw bag C)
-  2mm E-Ring  
2mm E-Ring
- (Damper bag)
-  Oil seal  
Ölabdichtung
-  3mm O-Ring  
3mm O-Ring
-  Rear piston rod  
Hint. Kolbenstange

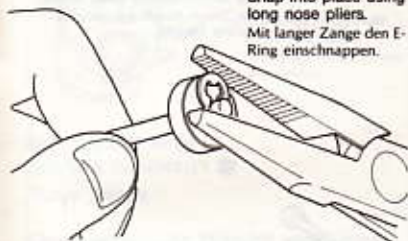
**29 ASSEMBLY OF REAR DAMPER**  
**HINTERER STOSSDÄMPFER**

Make 2 sets.  
2 Satz machen.



**ATTACHING E-RING**  
**EINSETZEN DER E-RING**

Snap into place using long nose pliers. Mit langer Zange den E-Ring einschnappen.



**30 TAPPING X8 AND T1**  
**ZUSAMMENSCHRAUBEN VON X8 UND T1**

Make sure to hold piston rod. Die Kolbenstange muss festgehalten werden.

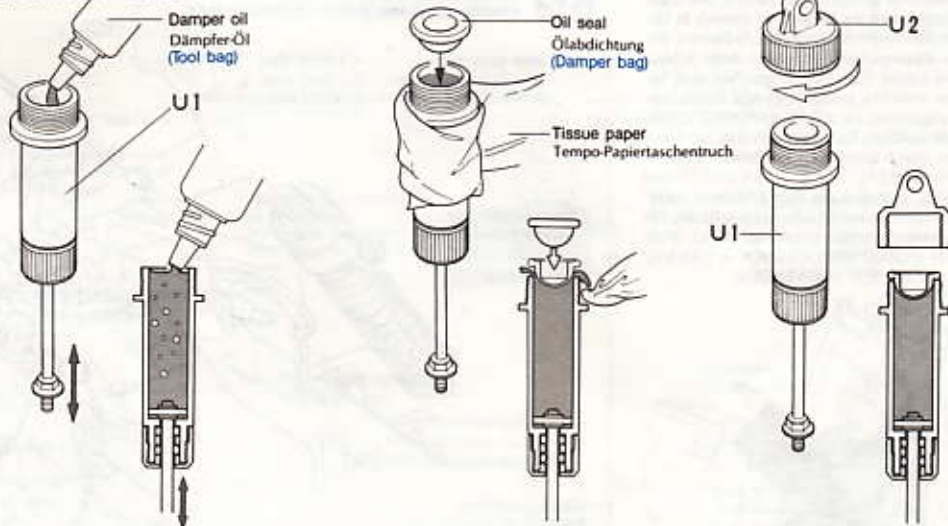


**«How to add oil»**  
**«Ölfüllung»**

1. Pull down piston and pour oil into cylinder. Remove air bubbles by moving piston up and down.  
 1. Kolben nach unten ziehen und Öleinfüllen. Luftblasen durch Auf- und Abbewegen des Kolbens herausdrücken.

2. Pull down piston and attach oil seal and absorb oil overflow with tissue paper.  
 2. Ölabdichtung einstecken, und Ölüberfluss mit Tempo abwischen.

3. Tighten up cylinder cap.  
 3. Dämpfer-Kappe aufschrauben.

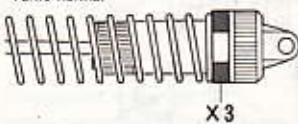


**COIL SPRING SPACER**

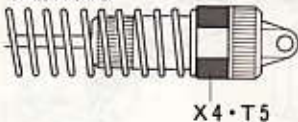
The coil springs can be adjusted with spacers. Adjust both the damper oil and spring to match road conditions.

FEDER-ABSTAND-RINGE  
 Je nach Kurs mit dem Ring die Federhärte einstellen. Es ist besser, gleichzeitig das Dämpfer-Öl zu justieren.

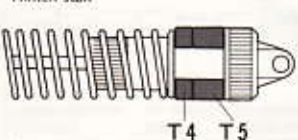
3mm Spacer  
Front Normal  
3mm Abstandsring  
Vorne normal



6mm Spacer  
Front Stiff  
Rear Normal  
6mm Abstandsring  
Vorne starr  
Hinten normal



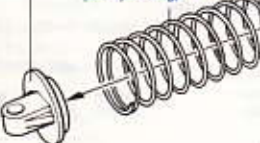
3mm Spacer + 6mm Spacer  
Rear Stiff  
3mm Abstandsring + 6mm Abstandsring  
Hinten starr



**30 ATTACHING COIL SPRING**  
**EINBAU DER FEDER**

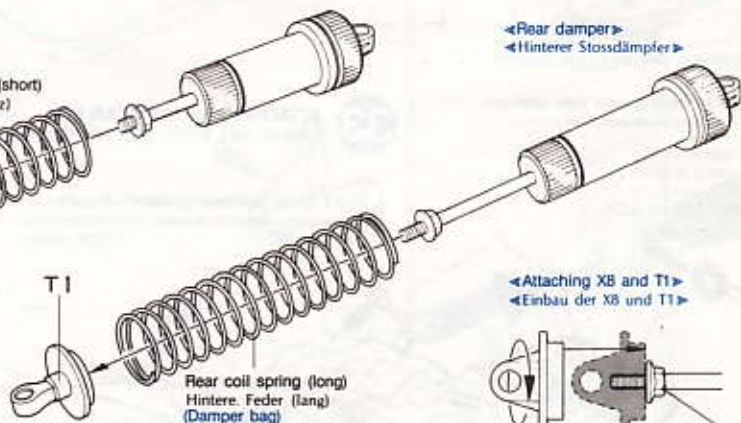
«Front damper»  
 «Vorderer Stossdämpfer»

X8 Front coil spring (short)  
Vordere Feder (kurz)  
(Damper bag)

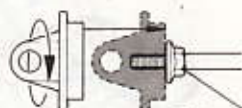


«Rear damper»  
 «Hinterer Stossdämpfer»

T1 Rear coil spring (long)  
Hintere Feder (lang)  
(Damper bag)



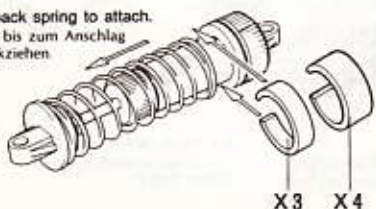
«Attaching X8 and T1»  
 «Einbau der X8 und T1»



«Attaching coil spring spacer»  
 «Anbringung der Feder-Distanzstücke»

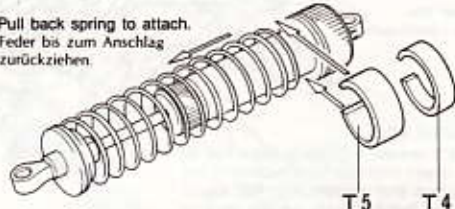
«Front»  
 «Vorn»

Pull back spring to attach. Feder bis zum Anschlag zurückziehen.



«Rear»  
 «Hinten»

Pull back spring to attach. Feder bis zum Anschlag zurückziehen.



**PARTS USED IN 1, 2 AND 3  
BAUTEILE IN SCHRITT 1, 2 UND 3**

(Screw bag A)



3 x 20mm Round head screw  
3 x 20mm Rundkopfschraube



3mm Washer  
3mm Beilagscheibe

(Screw bag B)



3 x 12mm Self tapping screw  
3 x 12mm Schneidschraube



3mm Lock nut  
3mm Sicherungsmutter

(Damper bag)



4 x 6mm Pipe  
4 x 6mm Rohr

**CAUTION ON THINNER AND LIQUID  
THREAD LOCK**

All thinners attack plastic, even plastic model paints and thinners. Never dip parts into thinners or paint, nor wash them with thinners. Be very careful in painting over areas where self tapping screws are used! Make sure to use only Tamiya Liquid Thread Lock to prevent screws from coming loose. Other brands will melt plastic!

**VORSICHT MIT VERDÜNNER UND LIQUID  
THREAD LOCK (SCHRAUBENSICHERUNG)**

Alle Verdüner greifen Plastikmaterial und sogar die Plastikfarben an. Plastikteile niemals in Verdüner legen oder zu versuchen, Farben mit Verdüner abzuwaschen. Flächen, an denen Schrauben mit Liquid Thread Lock gesichert sind, besonders vorsichtig bemalen. Es gibt Schraubensicherungsmittel, die das Plastikmaterial angreifen oder auflösen, hauptsächlich dort, wo Spannungen durch Schrauben entstehen. TAMIYA LIQUID THREAD LOCK, GREASE/FETT und SPRAYÖL verändert das Plastik-Material nicht. Wir übernehmen keine Haftung für Schäden, die durch andere Marken entstehen. ALSO, NUR TAMIYA LIQUID THREAD LOCK + GREASE/FETT + ÖL-SPRAY VERWENDEN.



**LUBRICATING PROPELLER SHAFT  
FETTEN**

Make sure to apply grease, then assemble.  
Erst gut einfetten, dann einbauen.

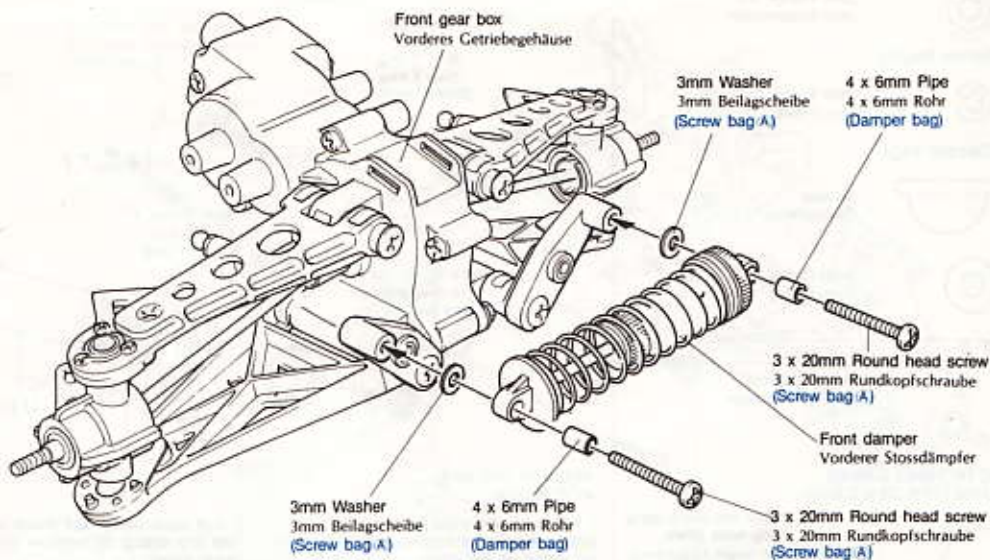


Front gear box  
Vorderes Getriebegehäuse

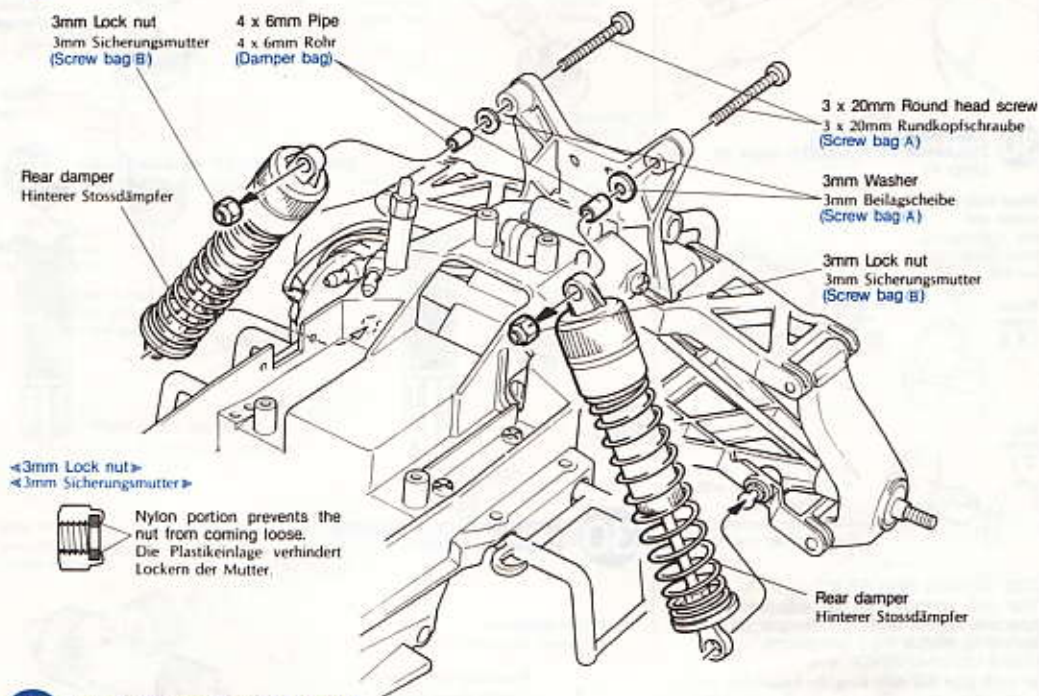
**R/C GUIDE BOOK**

Tamiya's newest R/C Guide Book has all of the latest information concerning the installation and operation of R/C equipment and helpful hints on the care of your R/C cars, buggies and tanks.

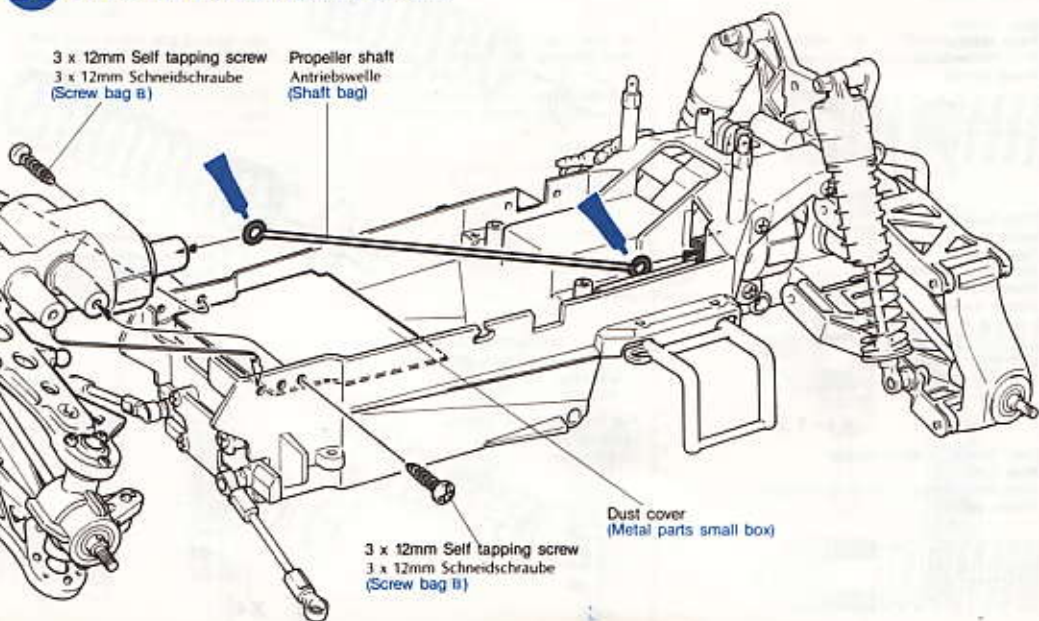
**31 ATTACHING FRONT DAMPER  
EINBAU DER VORDEREN STOSSDÄMPFER**




**32 ATTACHING REAR DAMPER  
EINBAU DER HINTEREN STOSSDÄMPFER**




**33 ATTACHING FRONT GEAR BOX  
EINBAU DES VORDEREN GETRIEBEGEHÄUSES**




**PARTS USED IN ②**  
**BAUTEILE IN SCHRITT ②**  
(Screw bag A)

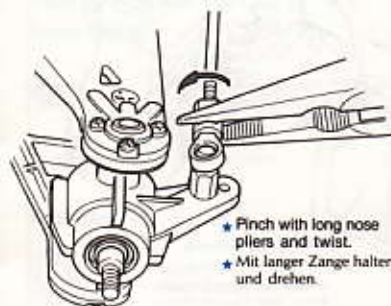
 3 x 6mm Round head screw  
3 x 6mm Rundkopfschraube

 3mm Washer  
3mm Beilagscheibe


(Screw bag B)

 3 x 12mm Self tapping screw  
3 x 12mm Schneidschraube


**34 HOW TO REMOVE ADJUSTER**  
**WIE MAN DIE STELLSCHRAUBE**  
**ABNIMMT**



**PARTS USED IN ③**  
**BAUTEILE IN SCHRITT ③**  
(Screw bag B)

 3 x 12mm Self tapping screw  
3 x 12mm Schneidschraube

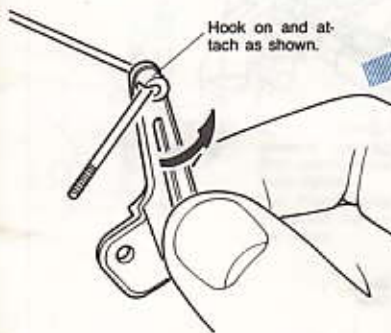
(Plastic bearing bag)

 3.5 x 20mm Rubber tubing  
3.5 x 20mm Gummirohr

(Ball connector bag) Blister pack

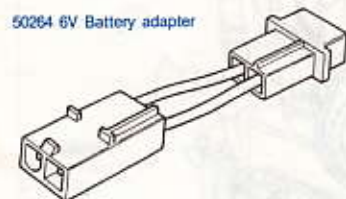
 5mm Stabilizer ball  
5mm Stabilisator-Kugel

**35 ATTACHING A5 AND A6**  
**EINBAU VON A5 UND A6**

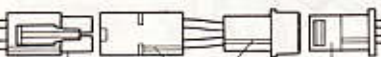


**6V-1200mAh Ni-Cd BATTERY**  
When using 6V-1200mAh battery, use 6V battery adapter (50264).

50264 6V Battery adapter



**ATTACHING BATTERY ADAPTER**



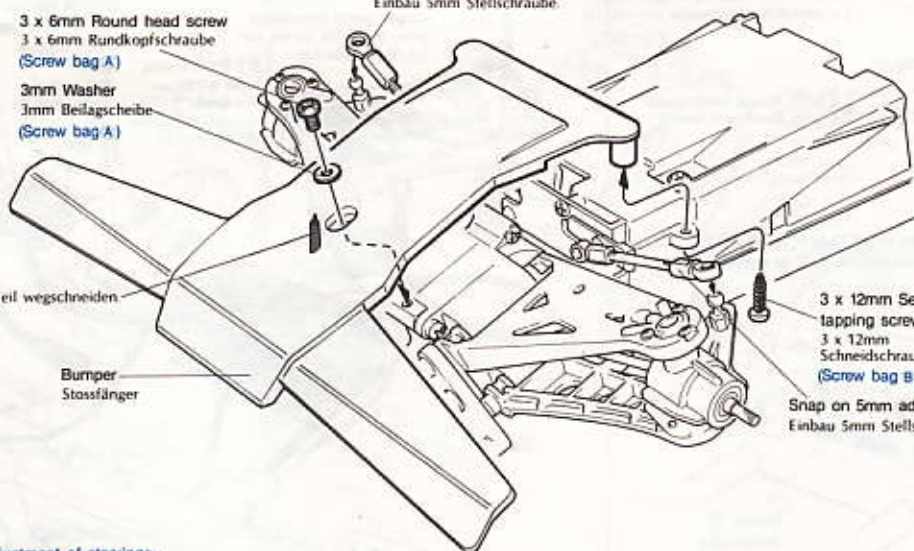
Speed controller connector 6V Battery adapter 6V-1200mAh Tamiya Ni-Cd battery

**34 ATTACHING FRONT BUMPER**  
**EINBAU DES VORDEREN STOSSFÄNGERS**

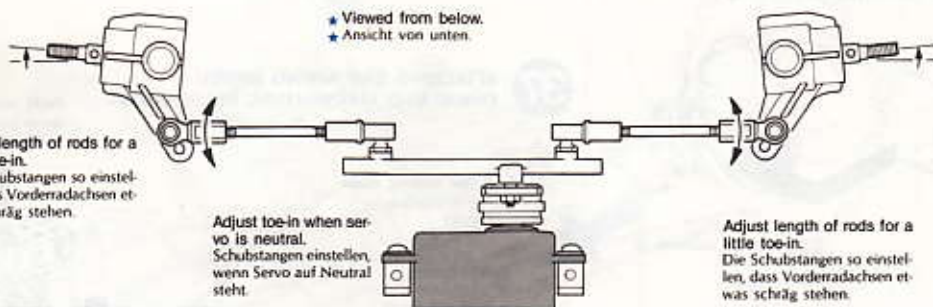
3 x 6mm Round head screw  
3 x 6mm Rundkopfschraube  
(Screw bag A)

3mm Washer  
3mm Beilagscheibe  
(Screw bag A)

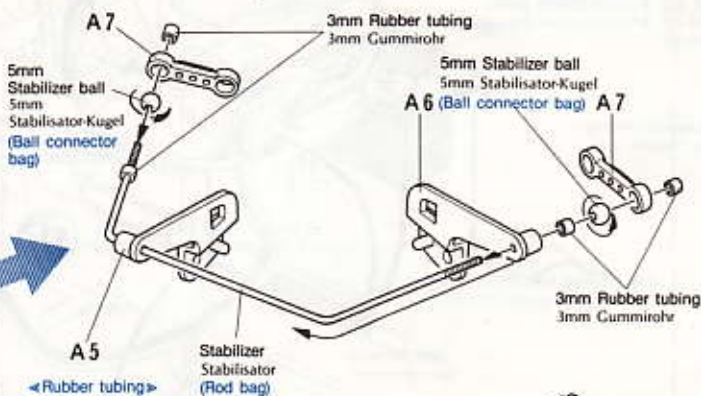
Snap on 5mm adjuster.  
Einbau 5mm Stellschraube.



«Adjustment of steering»  
«Einstellung der Schubstangen»



**35 ATTACHING STABILIZER**  
**STABILISATOR**

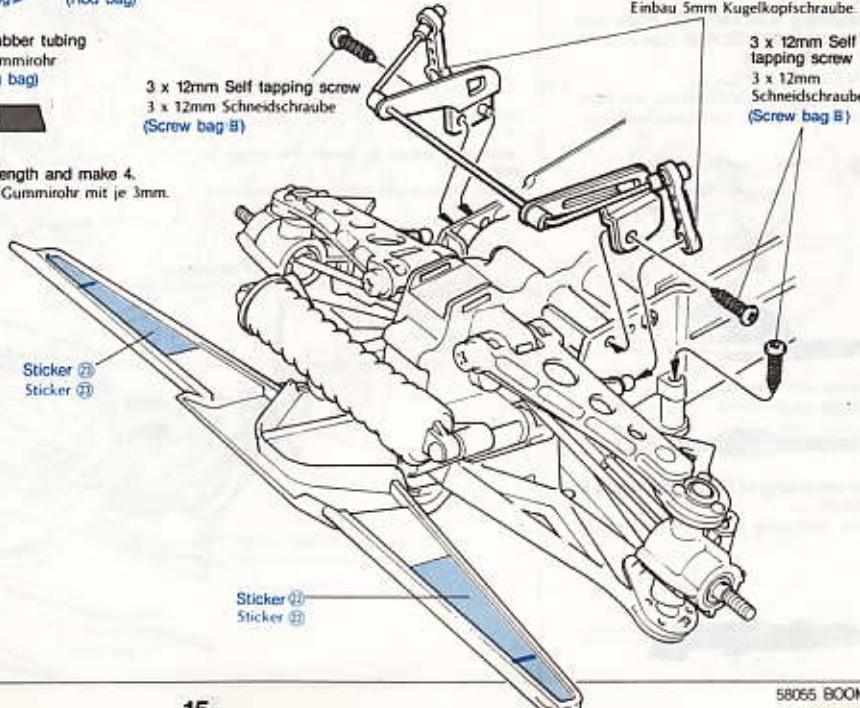


«Attaching A7»  
«Einbau A7»




★ Press on.  
★ Fest eindrücken.

Snap onto 5mm ball connector.  
Einbau 5mm Kugelkopfschraube.





**PARTS USED IN ③ AND ④  
BAUTEILE IN SCHRITT ③ UND ④**

(Screw bag B)

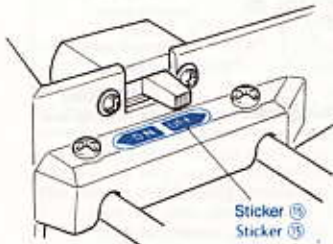
 3 x 8mm Self tapping screw  
3 x 8mm Schneidschraube

(Screw bag C)

 2 x 6mm Round head screw  
2 x 6mm Rundkopfschraube

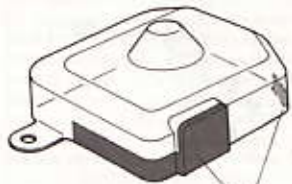
 2mm Washer  
2mm Beilagscheibe

**36 APPLYING SWITCH STICKER  
ANBRINGEN DES SCHALTERETIKETTS**



Sticker ⑬  
Sticker ⑭

**37 TRIMMING SWITCH COVER  
SCHALTERABDECKUNG**



Cut off using scissors or modeling knife.  
Abschneiden.

**RESISTOR**

Speed control resistor will become hot during running. Apply warning label to resistor cover as shown for safety. Be sure to properly adjust speed controller to prevent unnecessary heat build up.

**WIDERSTAND**

Der Fahrregler kann während des Fahrens heiß werden. Warmaufkleber anbringen. Der Fahrregler muss genau eingestellt sein um unnötige Hitzeentwicklung zu vermeiden.



Sticker ⑮  
Sticker ⑯

**WIRING**

When insulating worn cable etc, make sure to insulate properly with vinyl tape in order to avoid short circuit.

**VERDRAHTUNG**

Beschädigte Kabel zur Vermeidung von Kurzschlüssen sorgfältig mit Vinylband isolieren.



Twist.  
Verdrehen.



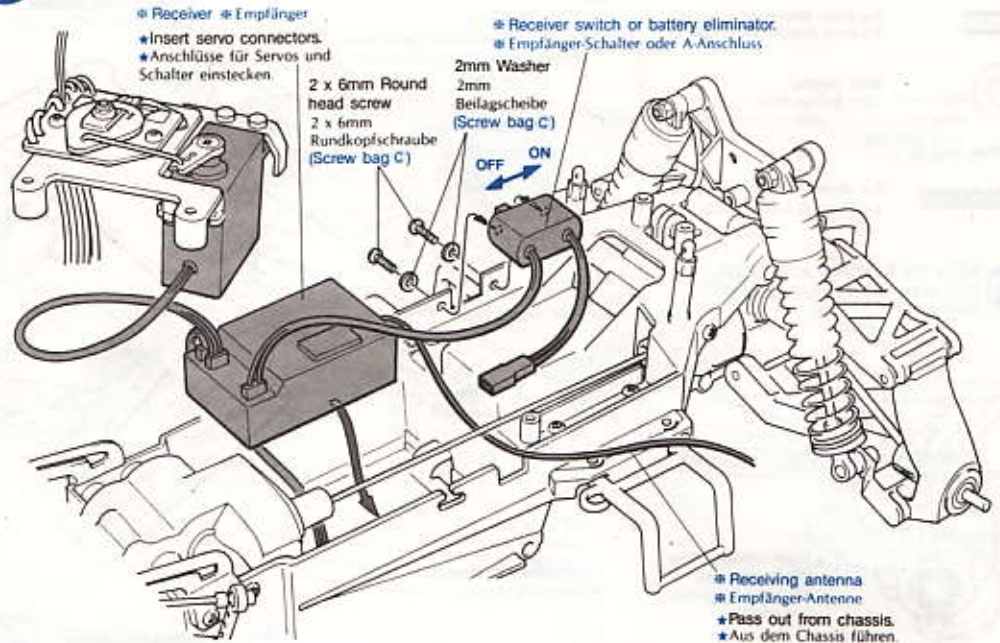
Insulate with vinyl tape.  
Isolieren mit Vinylband.

Improper insulating of cables will result in short circuit.

Unsaubere Isolierung führt zu Kurzschluss.



**36 ATTACHING RECEIVER  
EINBAU DES EMPFÄNGERS**



Receiver Empfänger  
Insert servo connectors.  
Anschlüsse für Servos und Schalter einstecken.

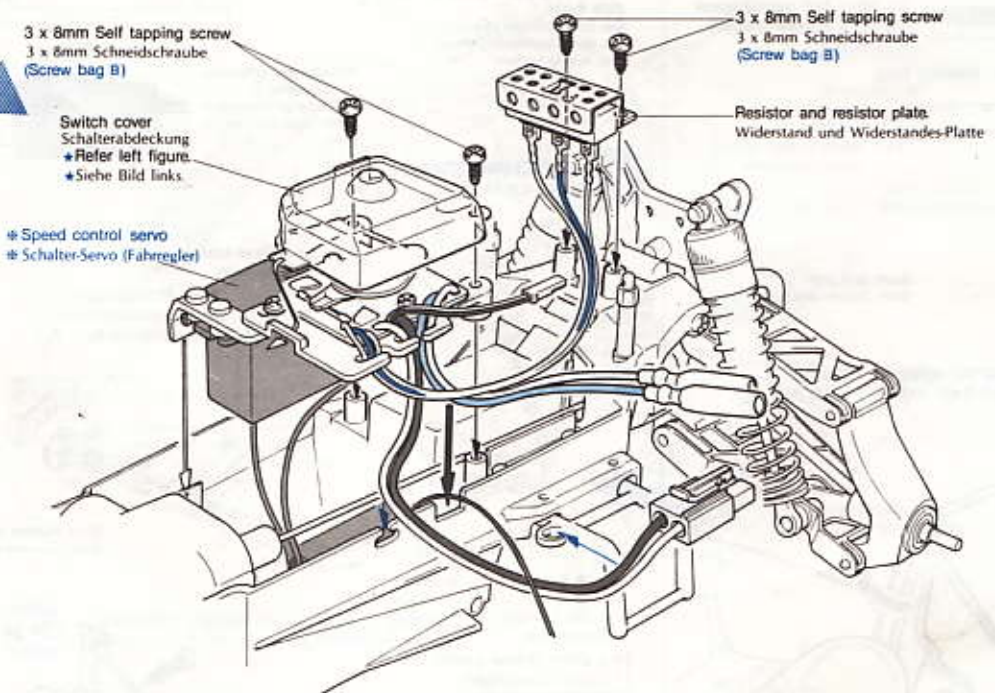
Receiver switch or battery eliminator.  
Empfänger-Schalter oder A-Anschluss.

2mm Washer  
2mm Beilagscheibe  
2 x 6mm Round head screw  
2 x 6mm Rundkopfschraube  
(Screw bag C)

OFF ON

Receiving antenna  
Empfänger-Antenne  
Pass out from chassis.  
Aus dem Chassis führen.

**37 ATTACHING AND WIRING SWITCH  
EINBAU UND VERDRAHTUNG DES SCHALTERS**



3 x 8mm Self tapping screw  
3 x 8mm Schneidschraube  
(Screw bag B)

Switch cover  
Schalterabdeckung  
Refer left figure.  
Siehe Bild links.

3 x 8mm Self tapping screw  
3 x 8mm Schneidschraube  
(Screw bag B)

Resistor and resistor plate  
Widerstand und Widerstandes-Platte

Speed control servo  
Schalter-Servo (Fahrregler)

Wiring  
Verdrahtung

Connect yellow to green and green to yellow.  
Gelb mit grün und grün mit gelb verbinden.

Yellow Gelb  
Green Grün

Green Grün  
Yellow Gelb

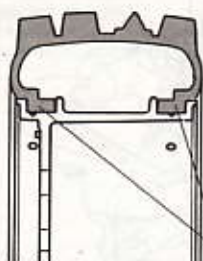
Connect 2P connectors.  
Kupplung zusammenstecken.

Nylon band  
Nylonband  
(Tool bag)

Secure cables using nylon band.  
Sicherstellen der Kabel mit Nylonband.




**38 ATTACHING TIRES**  
REIFEN-MONTAGE




Fix tires to grooves of wheels.  
Reifen in die Felgen richtig eindrücken.


**PARTS USED IN ③ AND ④**  
BAUTEILE IN SCHRITT ③ UND ④


(Screw bag A)

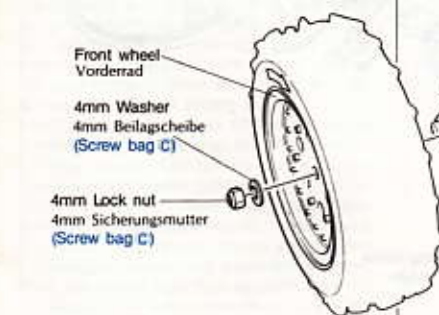
 3 x 6mm Round head screw  
3 x 6mm Rundkopfschraube

 2 x 10mm Shaft  
2 x 10mm Achse

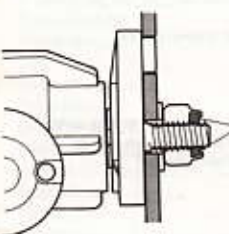
(Screw bag C)

 4mm Lock nut  
4mm Sicherungsmutter

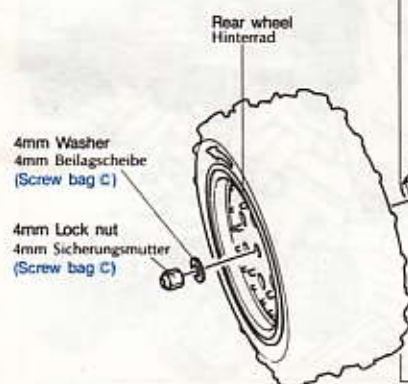
 4mm Washer  
4mm Beilagscheibe



4mm LOCK NUT  
4mm SICHERUNGSMUTTER



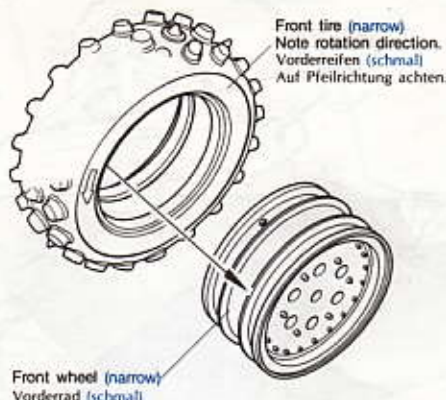
Nylon portion prevents the nuts from coming loose. Fully tighten.  
Die Plastikeinlage verhindert Lockern der Mutter.



**38 ATTACHING TIRES**  
REIFEN-MONTAGE

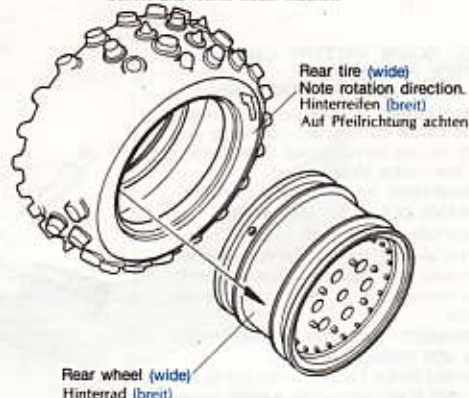
◀Front wheel▶  
◀Vorderrad▶

★Make right and left.  
★Linke und rechte Räder machen.



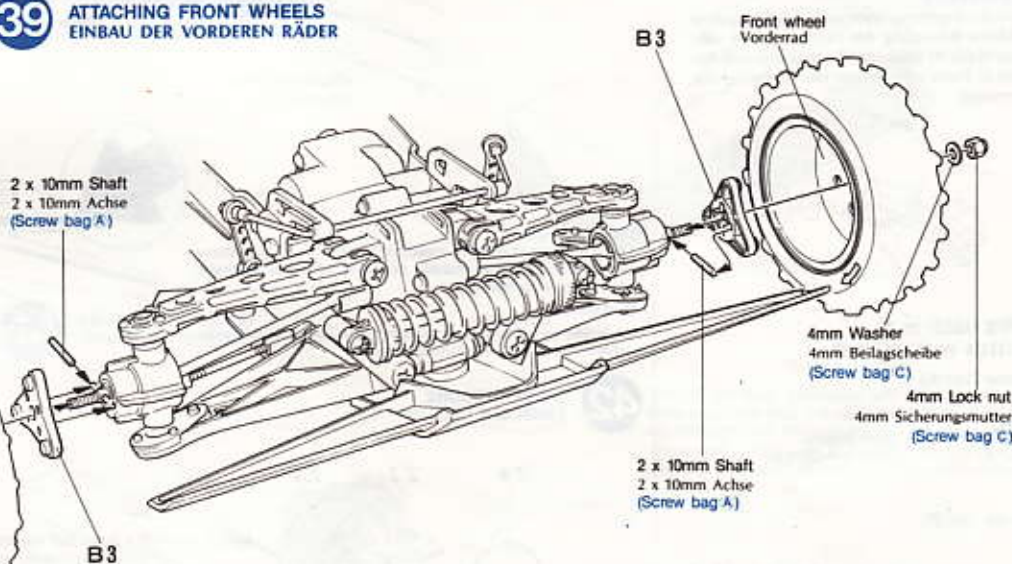
◀Rear wheel▶  
◀Hinterrad▶

★Make right and left.  
★Linke und rechte Räder machen.



**39 ATTACHING FRONT WHEELS**  
EINBAU DER VORDEREN RÄDER

2 x 10mm Shaft  
2 x 10mm Achse  
(Screw bag A)

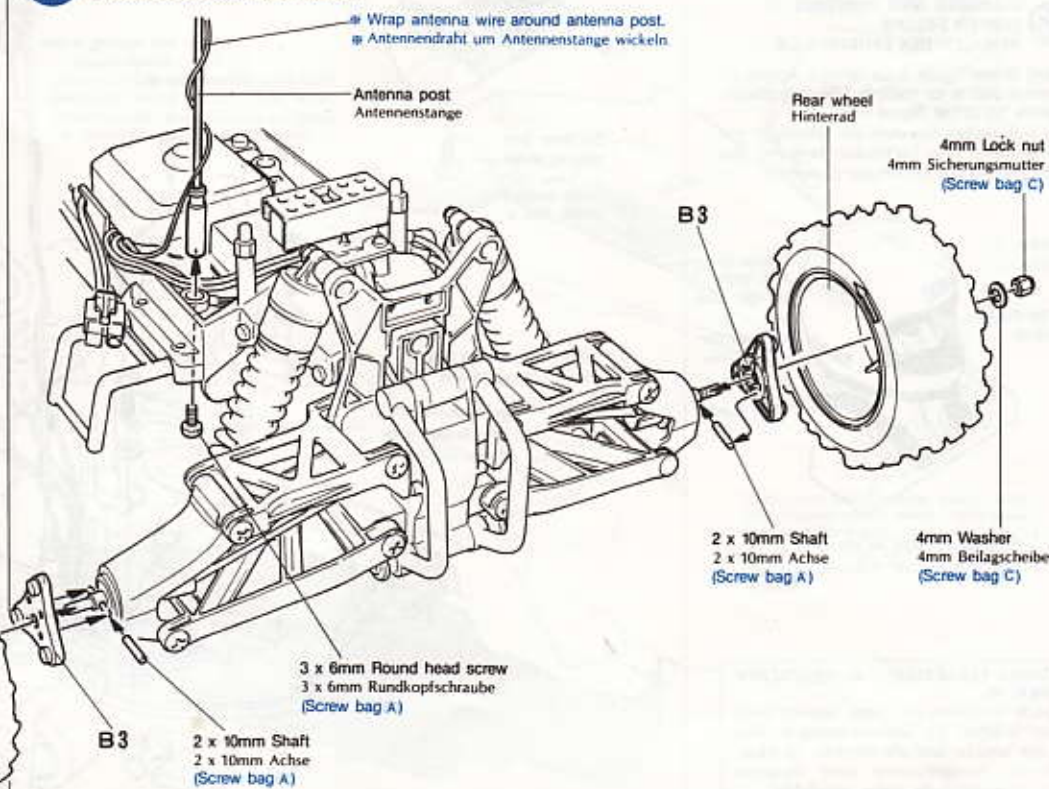


★Note rotation direction of tires on wheels when attaching.  
★Auf Pfeilrichtung achten.

**40 ATTACHING REAR WHEEL**  
EINBAU DER HINTEREN RÄDER

★Wrap antenna wire around antenna post.  
★Antennendraht um Antennenstange wickeln.

Antenna post  
Antennenstange



BE CAREFUL!  
VORSICHT!



**A RUN DOWN BATTERY CAN CAUSE CONTROL PROBLEMS!**

Even when using the BEC system, a depleted battery will cause problems in control. Never completely discharge your battery during running, but stop running when the motor slows down.

**DEN FAHRZEUG KANN MAN NICHT FAHREN, WENN DER AKKU LEER WIRD.**

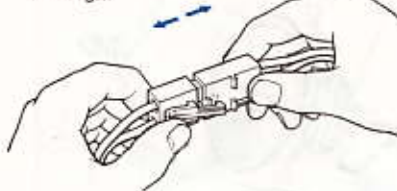
In diesem Fahrzeug hat der Empfänger und der Motor die gleiche Stromquelle. Wenn der Akku leer wird, kann der Empfänger nicht mehr richtig funktionieren und der Car gerät ausser Kontrolle.

**DISCONNECT BATTERY CONNECTOR WHEN NOT USING THE CAR.**

Disconnect Ni-Cd battery when car is not being used. If left connected, a slight movement of the speed controller can cause tremendous heat buildup in the resistor, causing a fire or damage to the model.


**WENN MAN NICHT FÄHRT, AKKU-KUPPLUNG AUSEINANDER.**

Wenn die Kupplung beieinander bleibt, kann eine kleine Bewegung des Fahrregler eine sehr grosse Hitze im Widerstand entwickeln und das endet in Feuer und grosser Beschädigung des Fahrzeuges.





**PARTS USED IN 41**  
**BAUTEILE IN SCHRITT 41**

(Screw bag A)

 3mm Washer  
3mm Beilagscheibe

(Screw bag B)

 3 x 12mm Self tapping screw  
3 x 12mm Schneidschraube

 3 x 8mm Self tapping screw  
3 x 8mm Schneidschraube

**42 MARKING AND PAINTING OF DRIVER FIGURE**  
**BEMALEN DER FAHRERFIGUR**

Paint driver figure with Tamiya Acrylic or Enamel paints for realism. Use only plastic paints for driver figure.

Für realistisches Aussehen die Fahrerfigur mit Tamiya-Acryl- oder Lackfarben bemalen. Nur Plastikfarben für Fahrerfigur verwenden.

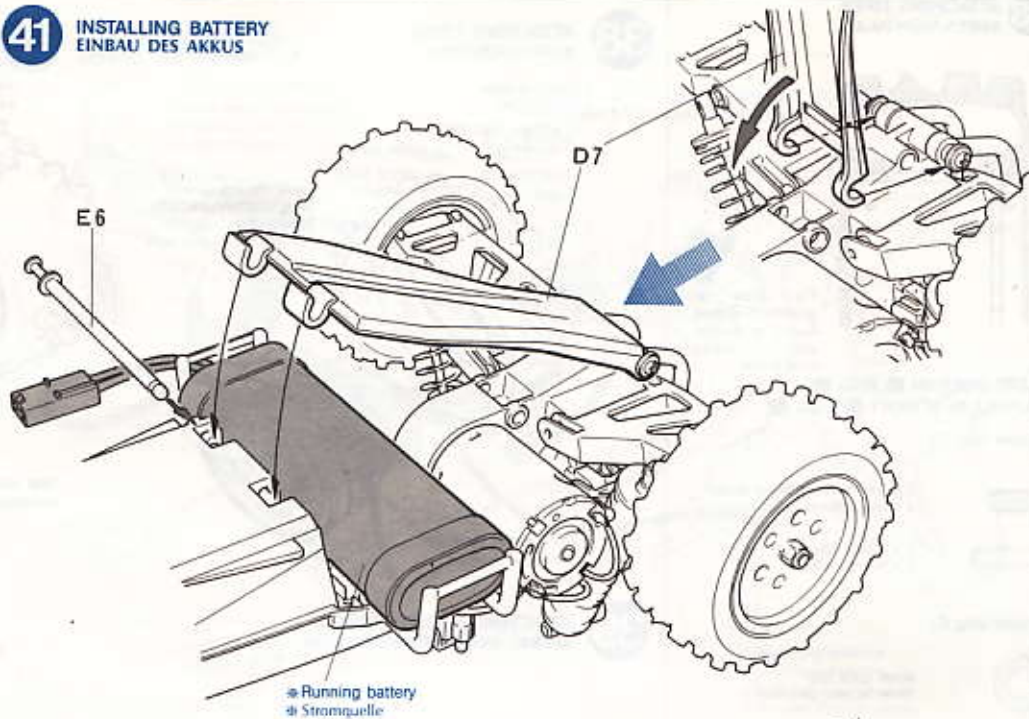


 Paint driver figure as you like.  
Bemalung wie man will.

**TAMIYA FARBKATALOG IN DEUTSCHER SPRACHE**

Letzte Neuheiten von Autos, Booten, Tanks und Schiffen. Im Tamiya-Katalog in deutscher Sprache sind alle Modelle, ob Motorisierte, Ferngesteuerte oder Museum-Qualitates-Modelle, farbig Abgebildet.

**41 INSTALLING BATTERY**  
**EINBAU DES AKKUS**

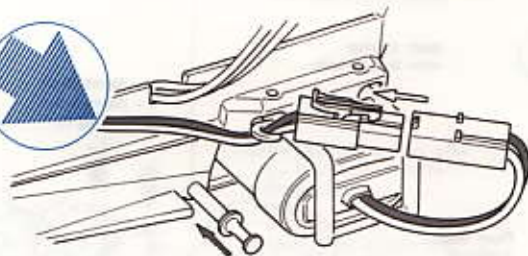


**BE CAREFUL!**

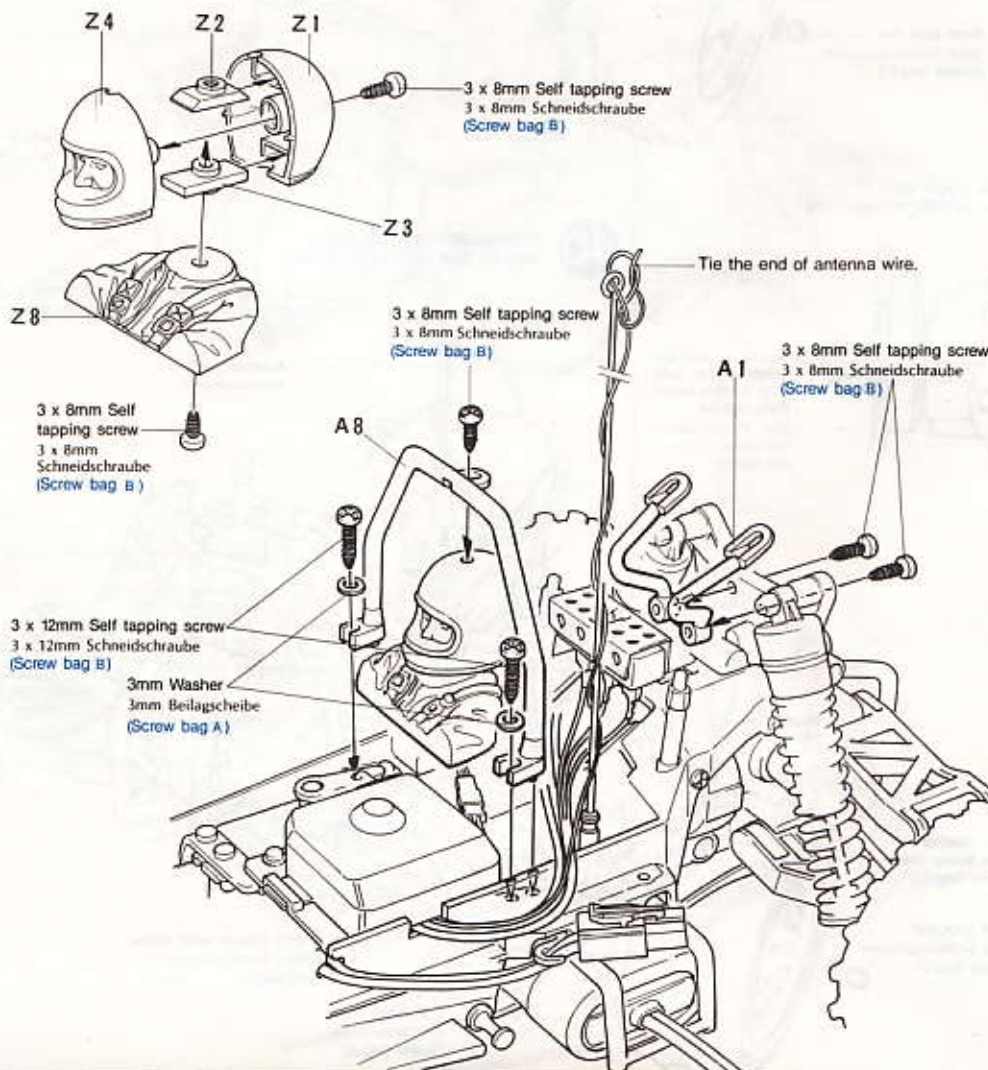
When connecting battery to speed controller, first switch on transmitter and receiver with chassis raised to rotate all 4 wheels, then connect up battery.

**VORSICHT!**

Erst Sender und Empfänger einschalten, dann Akku mit Fahrregler verbinden - sonst keine Fahrzeugkontrolle.



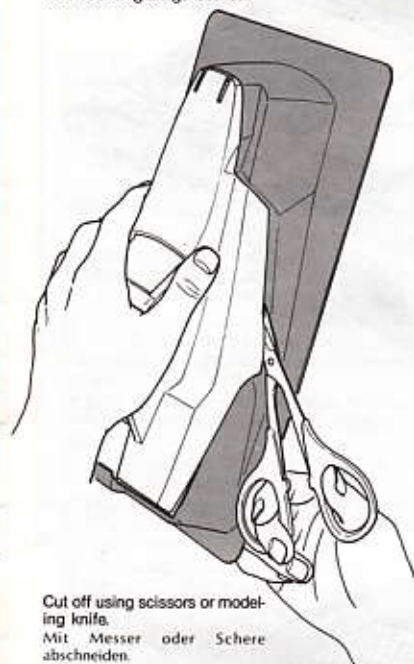
**42 DRIVER FIGURE**  
**FAHRERFIGUR**



### 43 TRIMMING OF BODY ZURICHTEN DER KAROSSERIE

★Cut off shaded part and drill holes as shown at right.

★Schraufierte Teile abschneiden und Löcher wie rechts gezeigt bohren.



Cut off using scissors or modeling knife.  
Mit Messer oder Schere abschneiden.

### 44 PAINTING THE BOOMERANG BEMALUNG DES BOOMERANG

Body design of this R/C model is a Tamiya original. Use box art and figures as a guide for painting and marking. Body and wing are of polycarbonate, therefore use paints for polycarbonate. Use your own color scheme and apply stickers of your choice. Be sure to paint driver and racing suit for a realistic off-road racing buggy.

Der Karosserie-Entwurf des R/C Modells ist ein TAMIYA-Original. Wie man den Modell bemalen kann, ersieht man aus den Karton-Bildern Karosserie und Spoiler sind aus Lexan. Zum Bemalen soll man für diese Teile Lexan-Farben nehmen. Bemalen kann man den Modell auch frei nach Schnauze und Stickers von anderen Fahrzeugen können auch angebracht werden. Halt, den Fahrer muss man natürlich auch anmalen, auch ein bunter Overall macht sich gut im Rennen.

#### COLORS AVAILABLE IN TAMIYA POLYCARBONATE PAINTS FARB-TÖNE IN TAMIYA-KUNSTSTOFF-FARBEN VERFÜGBAR

White /Weiss.....	PC-1
Red /Rot.....	PC-2
Light Blue /Hellblau.....	PC-3
Blue /Blau.....	PC-4
Black /Schwarz.....	PC-5
Yellow /Gelb.....	PC-6
Orange /Orange.....	PC-7
Light Green /Hellgrün.....	PC-8
Green /Grün.....	PC-9
Purple /Lila.....	PC-10
Pink /Pink.....	PC-11
Silver /Silber.....	PC-12

#### RADIO CONTROL CAR MODELS

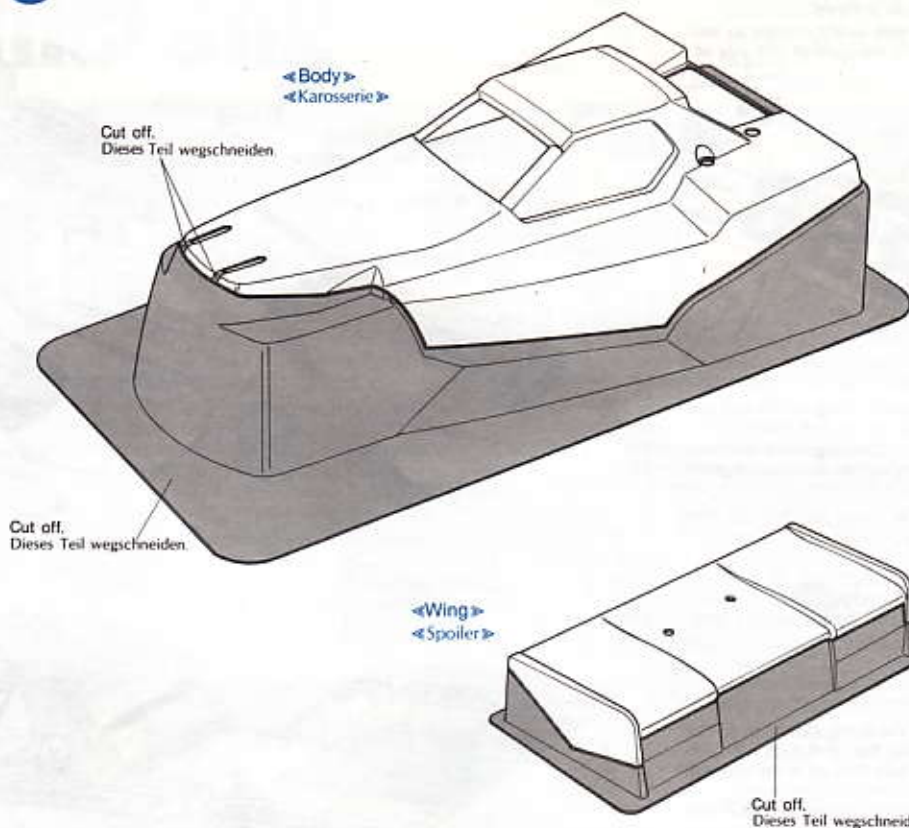
##### 1/12 PORSCHE 959 (PARIS-DAKAR)



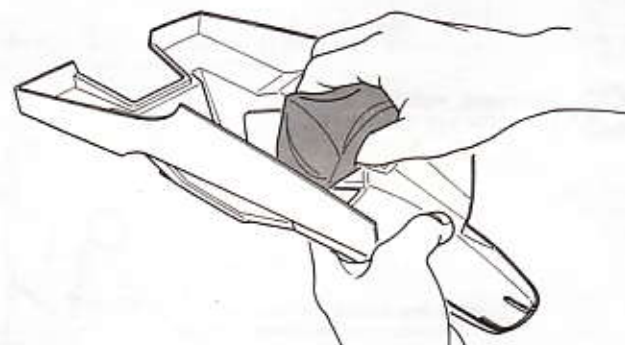
##### 1/10 MONSTER BEETLE



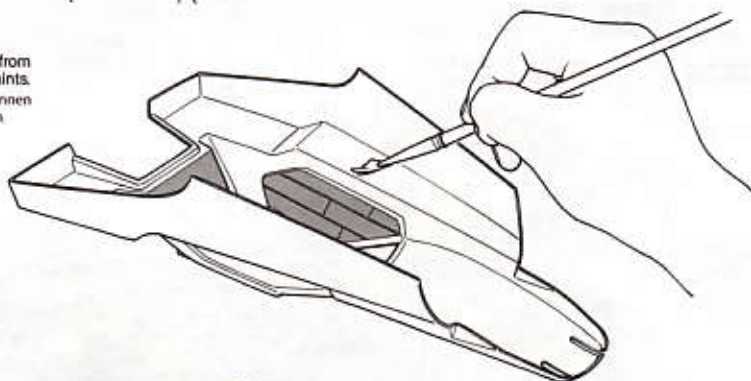
### 43 TRIMMING OF BODY ZURICHTEN DER KAROSSERIE



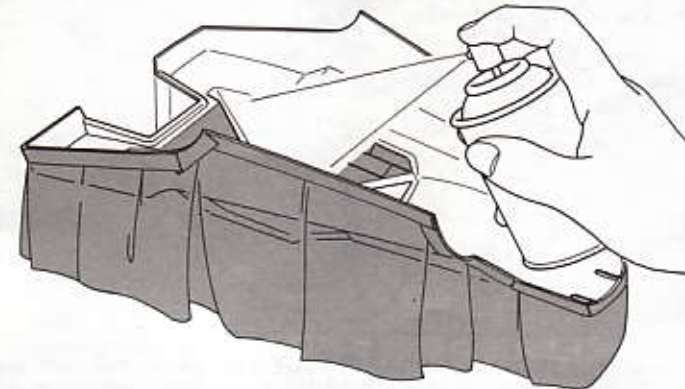
### 44 PAINTING OF BODY BEMALUNG DER KAROSSERIE



★Mask window portions and paint from inside with Tamiya Polycarbonate Paints.  
★Fensterpartien abdecken und von Innen mit Tamiya-Kunststoff-Farbe bemalen.



★Body can also be spray painted with polycarbonate paints. Make sure to mask outside surface when doing so.  
★Karosserie kann auch mit Farben besprüht werden. Umfeld gut abdecken.



## 45 STICKERS STICKERS

1 Cut stickers along colored edge so the transparent film is removed.

1 Die Sticker an den bunten Kanten so ausschneiden, dass der transparente Film weg ist.



2 Peel off the end of lining a little and put the decal in position on the body.

2 An einer Kante die Unterlage etwas abziehen und Sticker richtig auf die Karosserie legen.



3 Then, remove the lining slowly. In so doing, be careful that the decal does not move out of position and that air is not trapped under it.


3 Dann die Unterlage langsam ganz abziehen, darauf achten, dass sich der Sticker nicht verschiebt und dass keine Luft unter den Sticker kommt — sonst gibt es Luftblasen.



If the lining is completely removed in advance, the decal may be wrinkled or contain unwanted air bubbles.

Wenn die Unterlage vorher komplett entfernt wird, kann sich der Sticker zusammenkleben.

## PARTS USED IN ● BAUTEILE IN SCHRITT ● (Screw bag B)

 3 x 8mm Self tapping screw  
3 x 8mm Schneidschraube

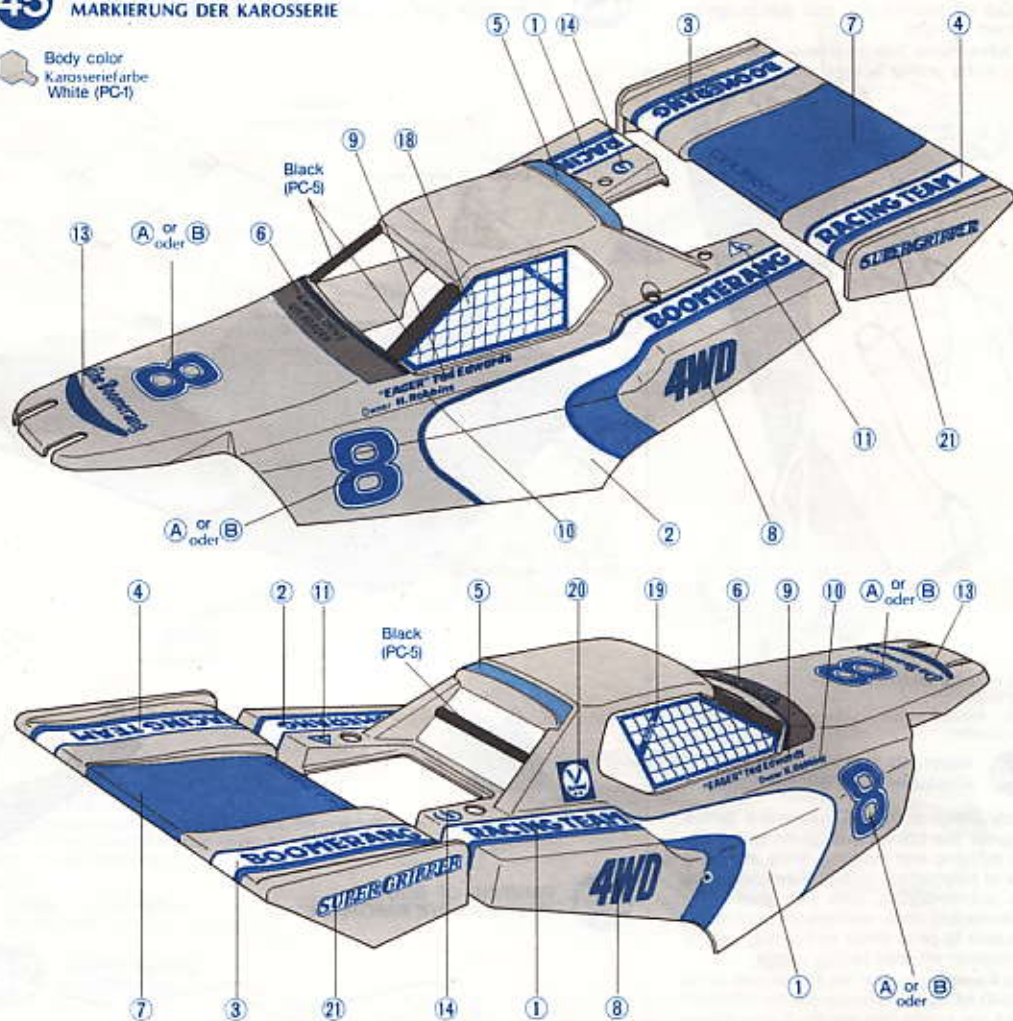
(Rod bag)



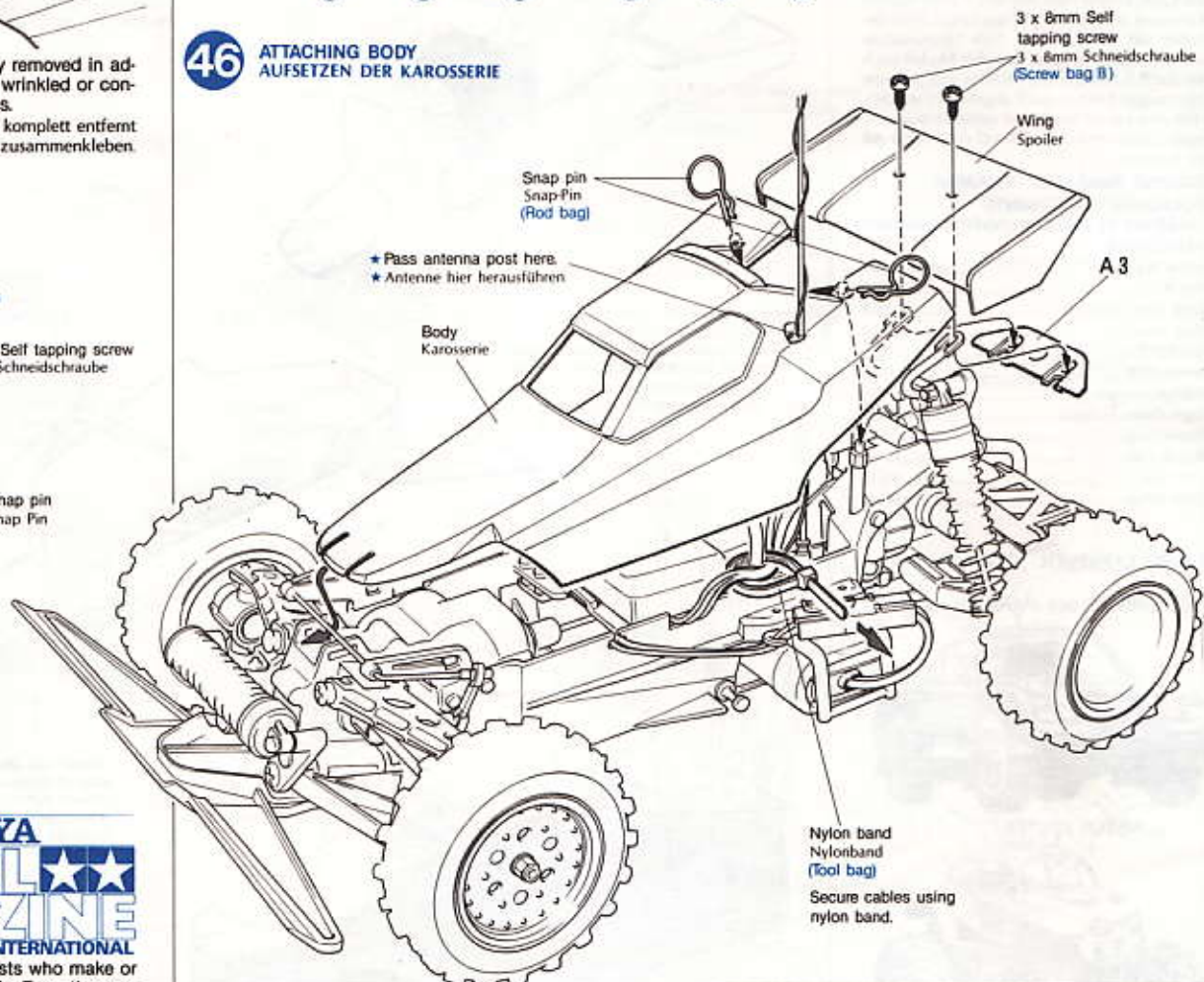
Snap pin  
Snap Pin

## 45 MARKING OF BODY MARKIERUNG DER KAROSSERIE

Body color  
Karosseriefarbe  
White (PC-1)



## 46 ATTACHING BODY AUFSETZEN DER KAROSSERIE



**TAMIYA**  
**MODEL** ★  
**MAGAZINE**  
INTERNATIONAL

A magazine for enthusiasts who make or modify models of all kinds. From the neophyte to the expert, articles of interest about modeling and the full sized vehicle. Coverage of all plastic kit maker's products.



**AVOID RUNNING IN WATER**  
**NICHT IN WASSER FAHREN**

Avoid driving into standing water and heavy rain. If the receiver and servos get wet, they could breakdown.

Nicht in stehendes Wasser fahren und bei Regen sollte man auch nicht fahren. Wenn der Empfänger und die Servos nass werden, können diese zerstört werden.

58055 BOOMERANG

# The Boomerang

**DISCONNECT BATTERY CONNECTOR WHEN NOT USING THE CAR.**  
**WENN MAN NICHT FAHRT, AKKU-KUPLUNG AUSEINANDER.**

## INSPECTION BEFORE OPERATION

Be sure to check the points shown in the figure before starting operation. This is necessary to prevent trouble and accidents. In the first operation after assembly, let the model run slowly for the first five minutes while checking the condition of the steering and switch.

- 1 Make sure that screws, particularly grub screws, are tight enough.
- 2 Make sure that batteries for the transmitter are new by means of meter or lamp.
- 3 Make sure that Ni-Cd battery has been sufficiently charged. If battery is not charged, no control occurs because receiver and motor use the same battery.
- 4 Adjust steering servo and/or trims so that the car tracks in a straight line with transmitter at neutral.
- 5 Double check the speed controller for full travel to high speed and stop limits.
- 6 Did you apply switch lubricant to controller? Be sure to apply switch lubricant to reduce arcing and burning.
- 7 Double check the wiring for breaks and short circuits. Secure with vinyl tape.
- 8 Be sure to apply grease on bearings, moving portions of suspension, etc.

## EINLAUFEN

Nach Zusammenbau das Modell langsam die ersten 5 Minuten laufen lassen und dabei die Steuerung und Schalter auf gute Wirkung beobachten.

- 1 Darauf achten, dass alle Schrauben gut angezogen sind.
- 2 Batterien für Sender müssen voll sein.
- 3 Nur volle Akku's bringen volle Leistung evtl. nachladen. Wenn Akku schwach ist, besteht keine Kontrolle, da Empfänger und Motor die gleiche Stromquelle haben.
- 4 Steuerung muss einwandfrei arbeiten. Modell muss geradeaus fahren. Wenn Fahrzeug nach links oder rechts zieht, mit Trimmhebel nach justieren.
- 5 Der Schalter muss auf Top speed gehen und genau stoppen.
- 6 Wurde der Fahrregler mit einem Schalter-Schmiermittel versehen? Ohne Schmiermittel kann der Fahrregler das brennen anfangen. Daher auf jeden Fall - Schalter-Schmiermittel verwenden.
- 7 Kabel gut isolieren um Kurzschluss zu vermeiden.
- 8 Auf Lager, bewegliche Teile der Aufhängung, etc. Fett anbringen.

## CAUTIONS

As an electric powered radio control car utilizes high capacity Ni-Cd batteries and high performance electric motors, currents as large as 200 watts flow in

the circuits. You must be very careful of all wiring, adjustments, and the handling of the speed controller, otherwise your receiver, servo or speed controller can be damaged. Please note the following carefully.

## BITTE BEACHTEN!

Ein ferngesteuertes Auto mit Elektro-Motor braucht viel Strom und einen Motor mit grosser Leistung Bis zu 200 Watt! Alle Verdrahtungen, Einstellungen und der Geschwindigkeitsregler müssen vorsichtig gehandhabt oder sicher eingebaut sein, sonst können Empfänger, die Servo's oder der Fahrregler beschädigt werden. Bitte folgendes beachten!

## CAR RUNS WITH SWITCH OFF

Whenever battery is connected, the switch blade of the speed controller must be on the stop position or the car will run as soon as the battery is connected. Make sure to use a stand to keep 4 wheels in the air and to check stop position of speed controller, then connect battery.

## DAS FAHRZEUG FÄHRT, OBWOHL DER SCHALTER AUF-AUS-STEHT

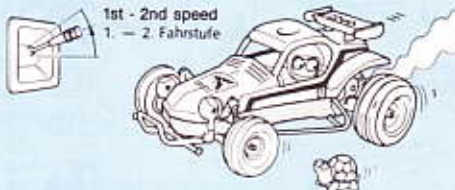
Wenn der Akku angeschlossen ist, muss der Fahrregler in der Stop Position sein, klar -sonst- haut das Fahrzeug ab.

## BURNT OUT RESISTOR DURCHGESCHMORTER WIDERSTAND



If your car stops due to some foreign object obstructing the wheels, the resistor of the speed controller can burn out.

Wenn das Fahrzeug durch ein Hindernis zum Stehen kommt, können die Räder blockiert werden und der Widerstand schmort durch.



Driving for long periods in the 1st or 2nd speeds can also burn out the resistor. Zu langes Fahren im 1. oder 2. Gang lässt den Widerstand heiss werden und durchbrennen.



Stopping the wheels from rotating when the speed controller is at high speed will seriously damage or burn out the motor. Never impose too much of a load on the motor.

## TROUBLESHOOTING

- 1 If the motor does not function (a rare occurrence), remove wires and check the motor by directly connecting its lead wire to a fresh battery.
- 2 Is the contact of controller good? Is it burnt or dirty? Are the wires of switch arm and plate long enough?
- 3 Is the servo horn in the proper position? It must be fitted so that the model turns right and left the same amount.
- 4 Antenna must be adjusted correctly.
- 5 When shaft or wheels become entangled, motor will overheat. Remove such hindrances immediately.
- 6 If the radio control unit is not satisfactory, enquire with the manufacturer. The radio control unit is very precisely constructed and must be handled with great care.

## STÖRUNGEN UND URSACHEN

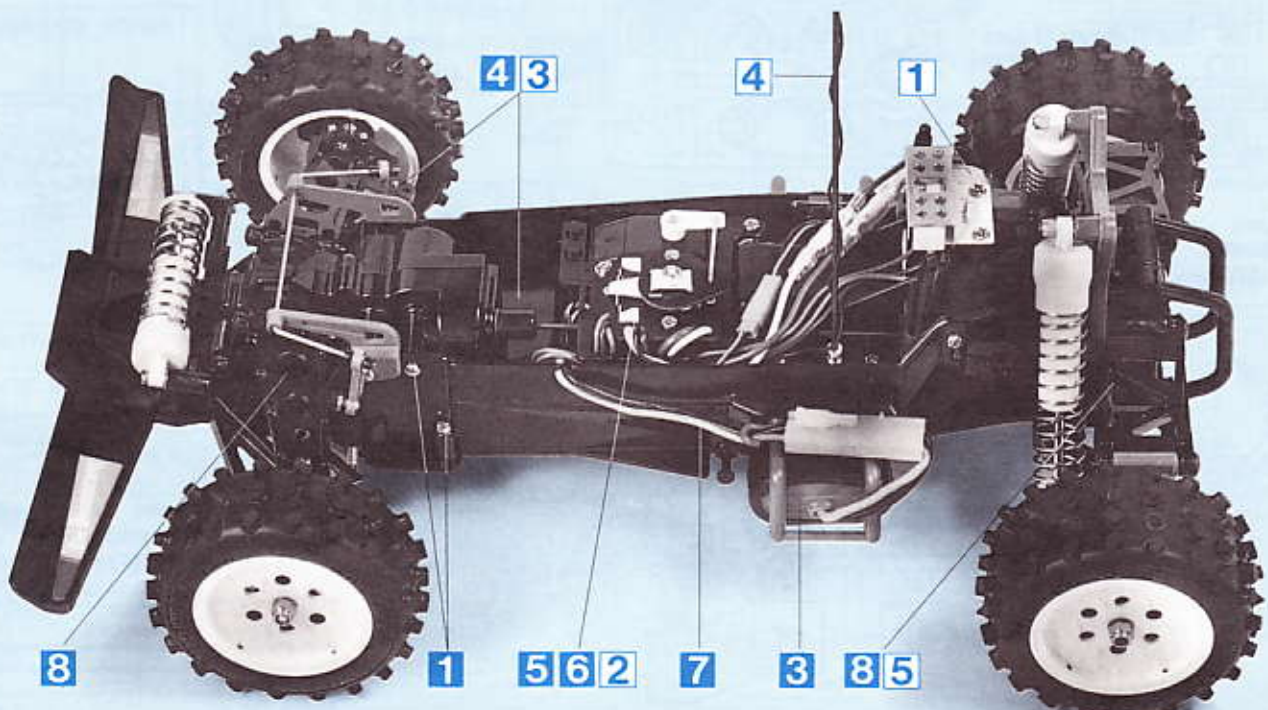
Wenn Fahrzeug nicht richtig fährt, versuche folgendes:

- 1 Wenn Motor nicht läuft, evtl. direkt an Batterie zum Prüfen anschliessen.
- 2 Sind die Kontakte des Fahrregler in Ordnung? Oder ist der Fahrregler staubig, dreckig oder ausgebrannt? Haben die Drähte am Schalter-Arm und an der Schalter-Platte genügende Länge?
- 3 Das Servohorn überprüfen. Es muss so eingebaut sein, dass links und rechts gleichmässige Drehung erfolgt.
- 4 Antenne richtig setzen.
- 5 Wenn Gras oder Steinchen die Antriebsachsen blockieren, wird der Motor überhitzt. Blockierung sofort entfernen.
- 6 Wenn Funkanlage nicht richtig arbeitet, zum Fachhändler gehen -NICHT versuchen, SELBST zu reparieren.

## MAINTENANCE AFTER RUNNING

After operating the model, do the following to keep optimum performance.

- ★ Completely remove sand, mud, dirt, etc.
- ★ Apply grease on the suspension, gears, bearings, etc.

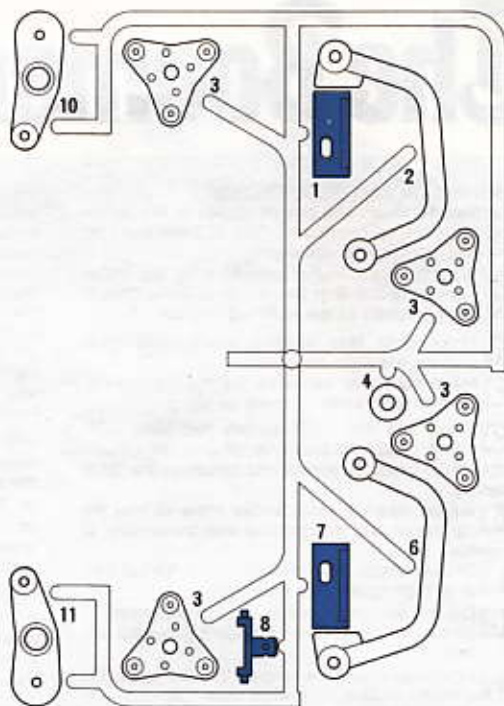
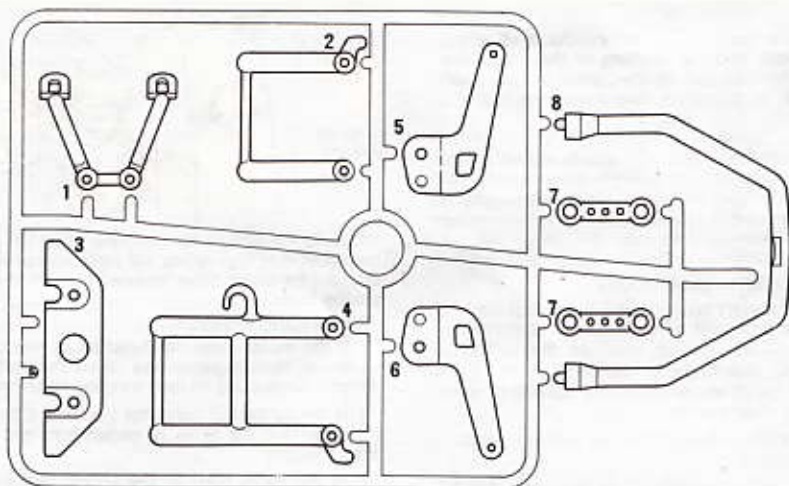


# PARTS

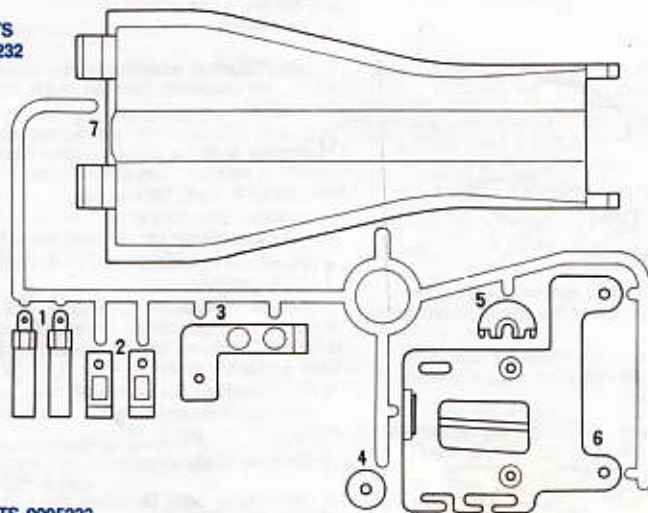
★ Extra screws & nuts are included.  
Use them as spares.  
★ Ersatz-Schrauben und Muttern liegen  
im Kit bei.

**B** PARTS  
B parts & bumper  
9005195

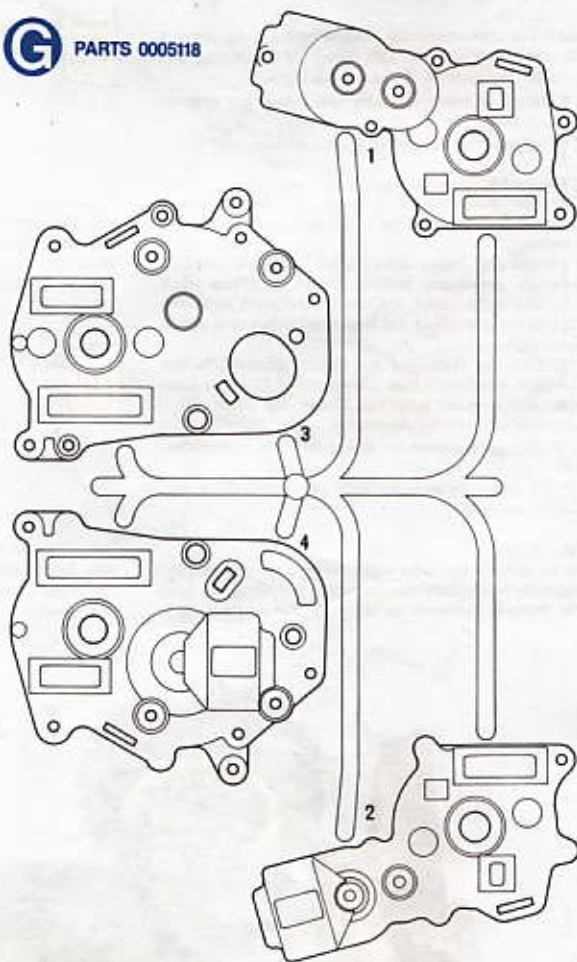
**A** PARTS 0005231



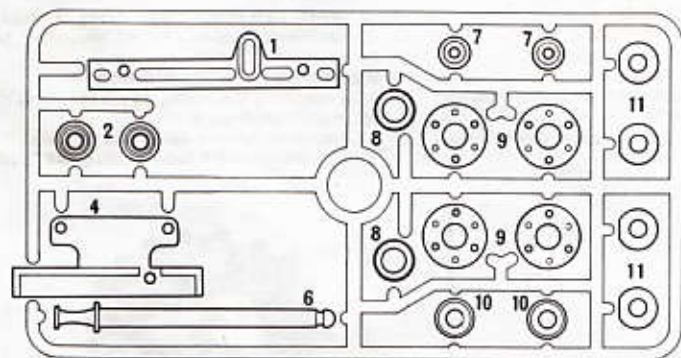
**D** PARTS 0005232



**G** PARTS 0005118

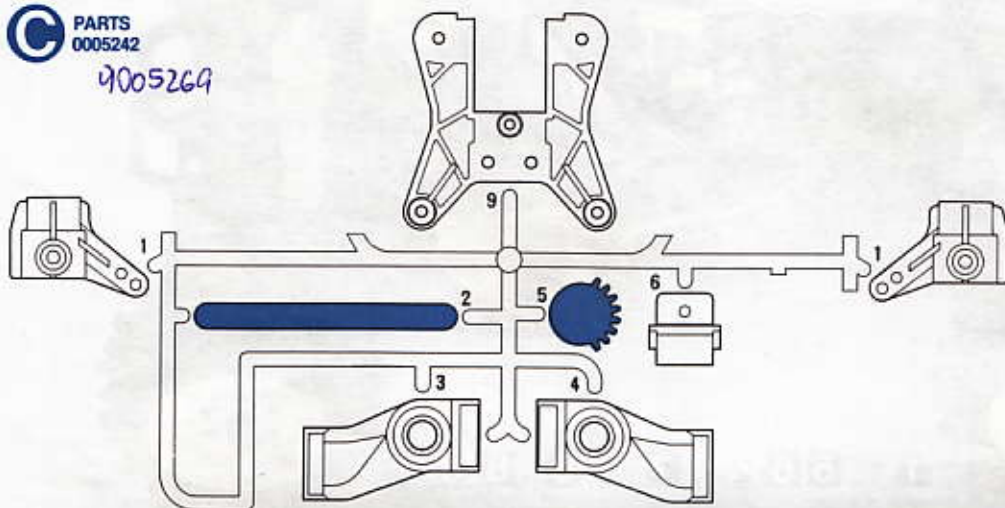


**E** PARTS 0005233



**C** PARTS 0005242

9005269



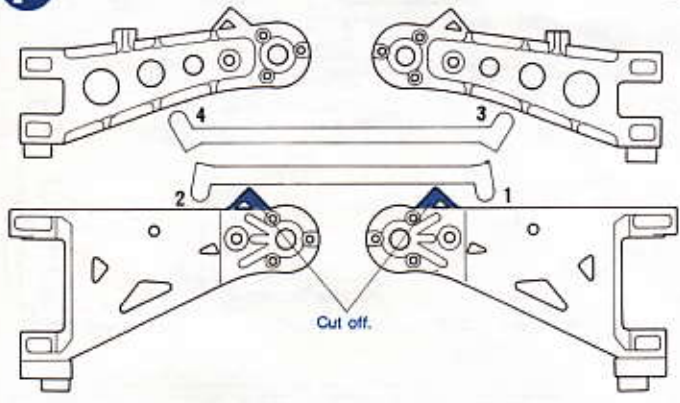
Not used.  
Nicht verwenden.

Body, wing, switch cover & dust cover .....	9805014
(Dust cover included in metal parts small box.)	
Front & rear wheels .....	9335009
Front tire .....	6205010
Rear tire .....	6215010
Sticker .....	9495067
Antenna post .....	5365002

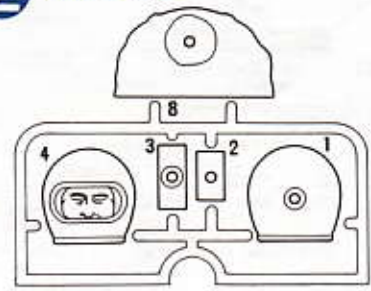
**PARTS**

**BUMPER** B parts & bumper 9005195

**F** PARTS 0005119

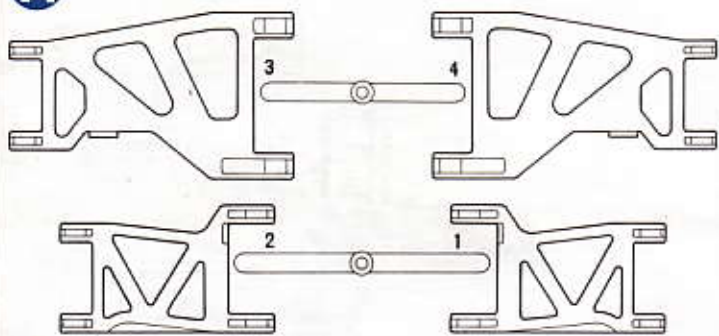


**Z** PARTS 0225033

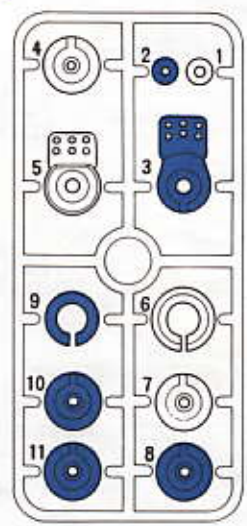


CHASSIS 0335071

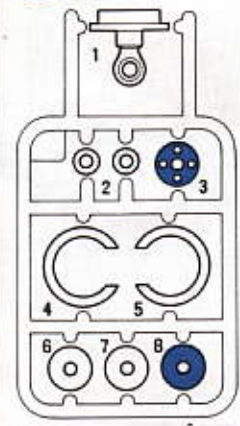
**R** PARTS 0115046



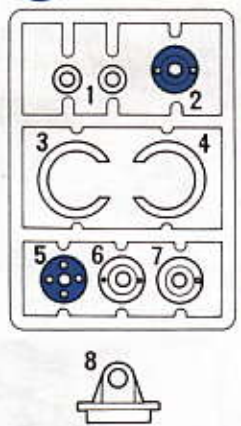
**S** PARTS 0115001



**T** PARTS 0225019

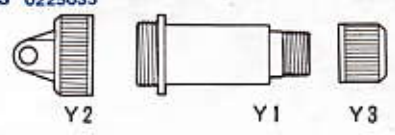


**X** PARTS 0225034

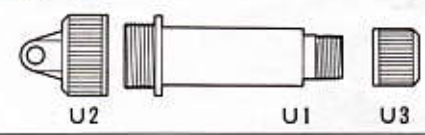


Not used.  
Nicht verwenden.

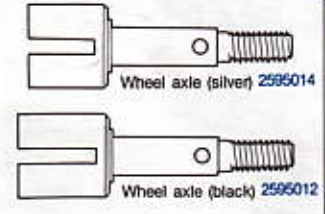
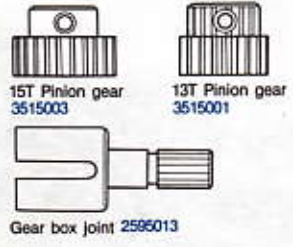
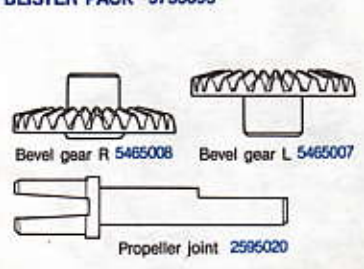
**Y** PARTS 0225035



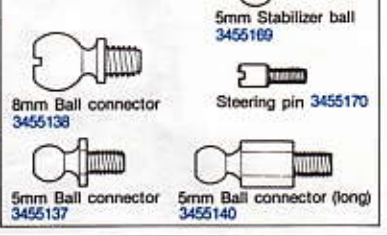
**U** PARTS 0225020



**BLISTER PACK** 9755095

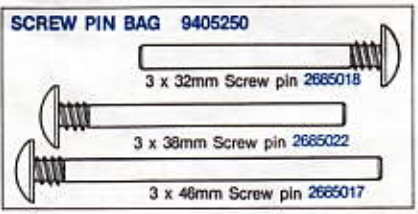


**BALL CONNECTOR BAG** 9405242

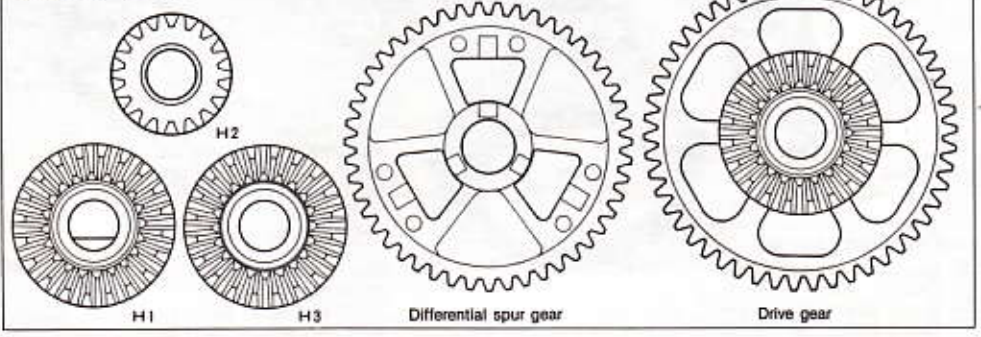


Speed controller ..... 4505024  
Motor ..... 7435018

**MATAL PARTS SMALL BOX** 9725089



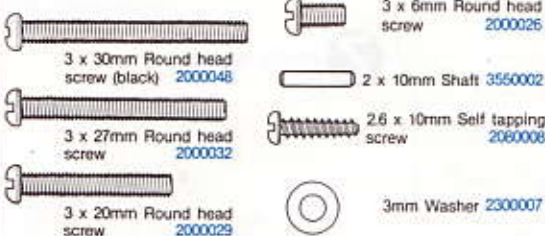
**GEAR BAG** 9005167



# PARTS

Continued from page 23.

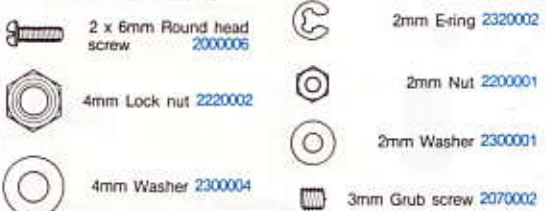
## SCREW BAG A 9465147



## SCREW BAG B 9465148



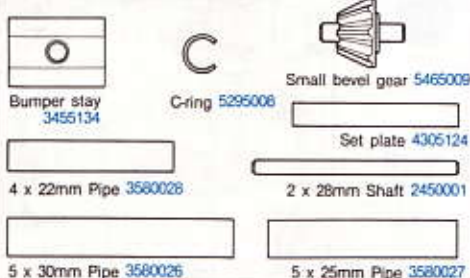
## SCREW BAG C 9465149



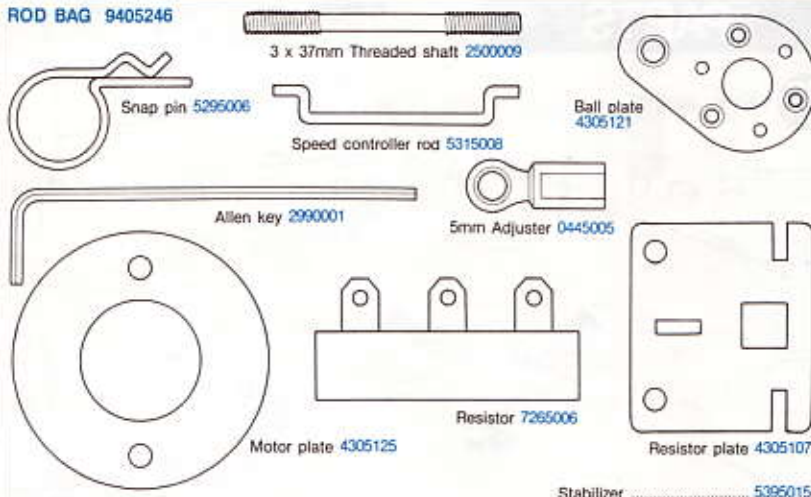
## THRUST WASHER BAG 9405248



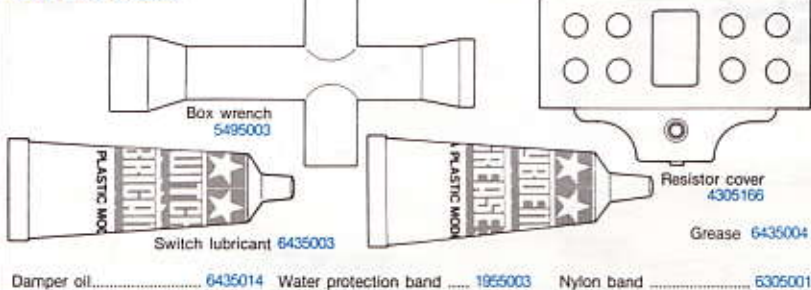
## GEAR BOX PARTS BAG 9405243



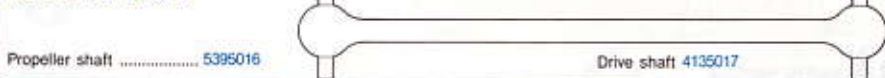
## ROD BAG 9405246



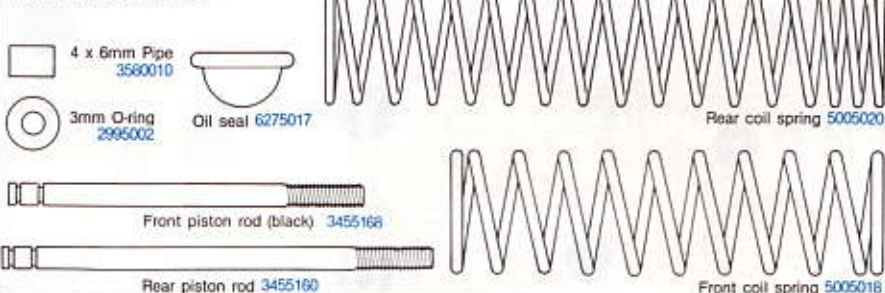
## TOOL BAG 9405245



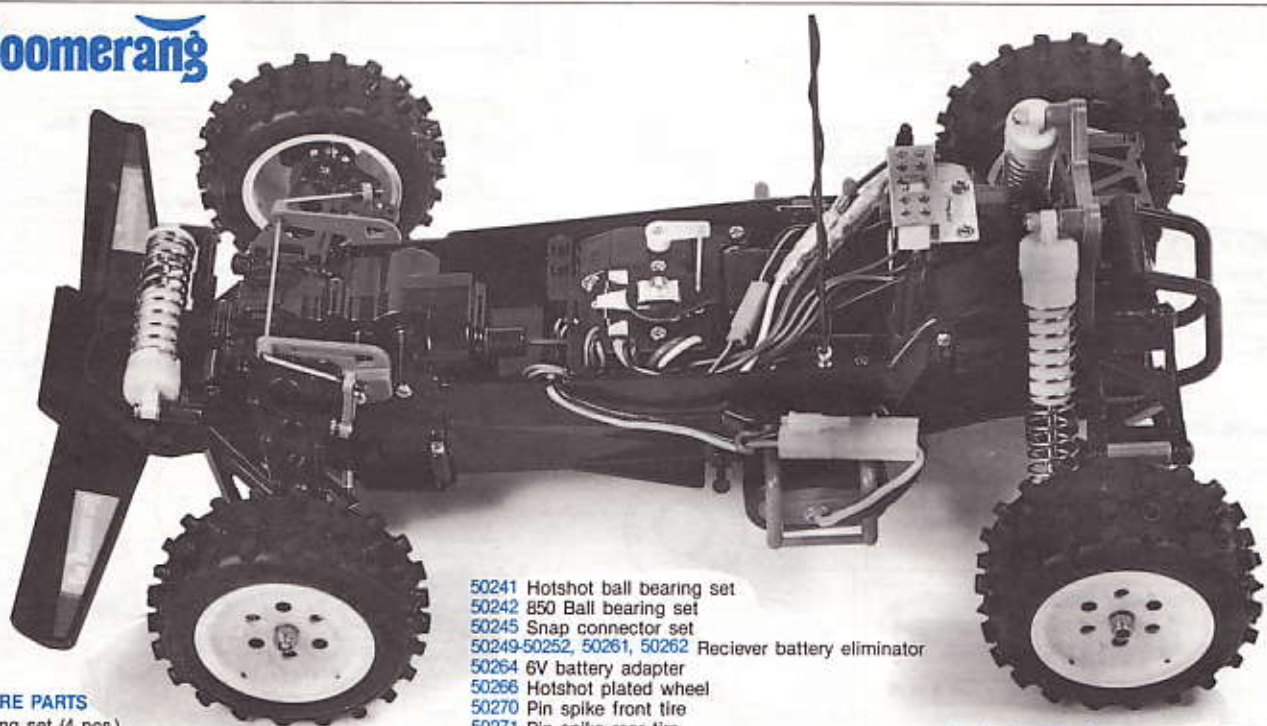
## SHAFT BAG 9405249



## DAMPER BAG 9405244



# The Boomerang



### TAMIYA RC SPARE PARTS

- 50073 Ball bearing set (4 pcs.)
- 50212 Ceramic resistor (3 terminal)
- 50238 Buggy pinion gear (13T, 14T)
- 50239 Buggy pinion gear (15T, 16T)

- 50241 Hotshot ball bearing set
- 50242 850 Ball bearing set
- 50245 Snap connector set
- 50249-50252, 50261, 50262 Receiver battery eliminator
- 50264 6V battery adapter
- 50266 Hotshot plated wheel
- 50270 Pin spike front tire
- 50271 Pin spike rear tire
- 50274 Damper oil set
- 50284 Ball thrust bearing set
- 50285 Boomerang body parts set

