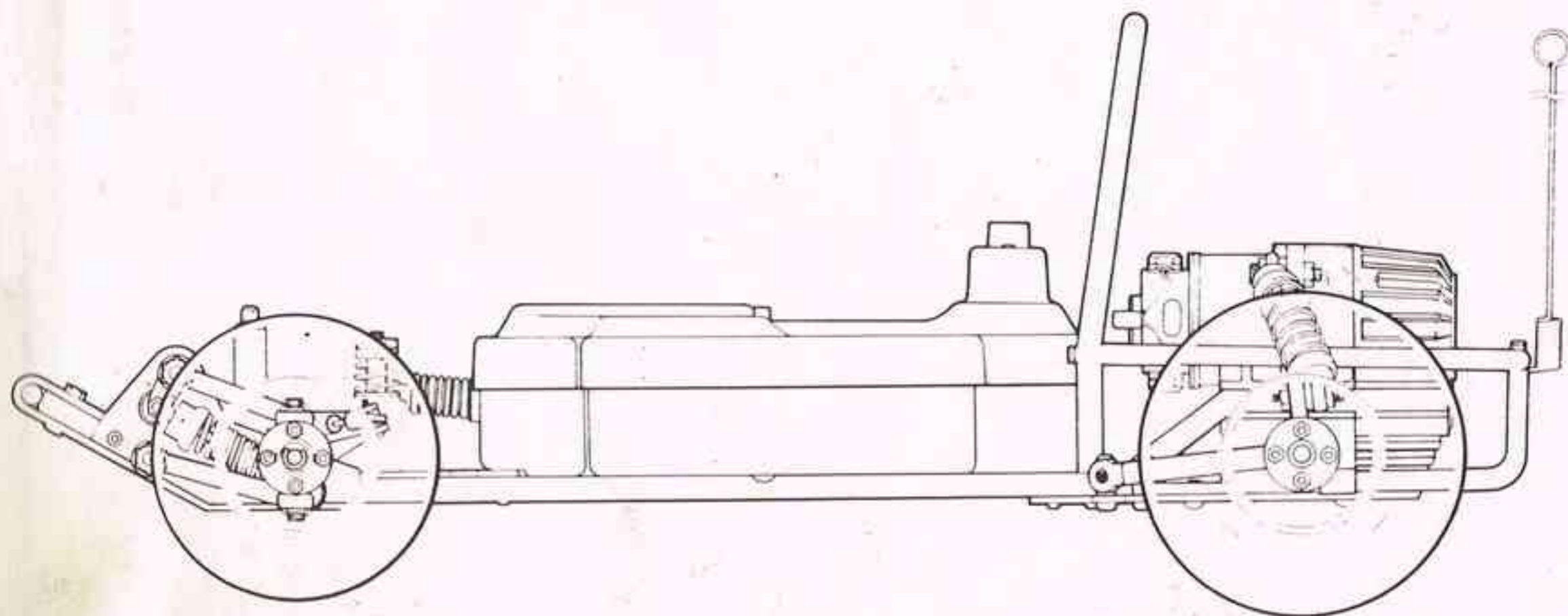


# 566B SUPER TRAIL

INSTRUCTION AND ASSEMBLY MANUAL.



**SUPER TRAIL**

IMPORTED BY



**WORLD  
R/C**

IMPORT & EXPORT INC.  
10440 PIONEER BLVD.  
SANTA FE SPRINGS  
CALIFORNIA 90670  
UNIT 4

stu68.no/rc

studio68.no/rc

2 CHANNEL, PROPORTIONAL RADIO CONTROL SYSTEM REQUIRED

ADDITIONAL ITEMS REQUIRED

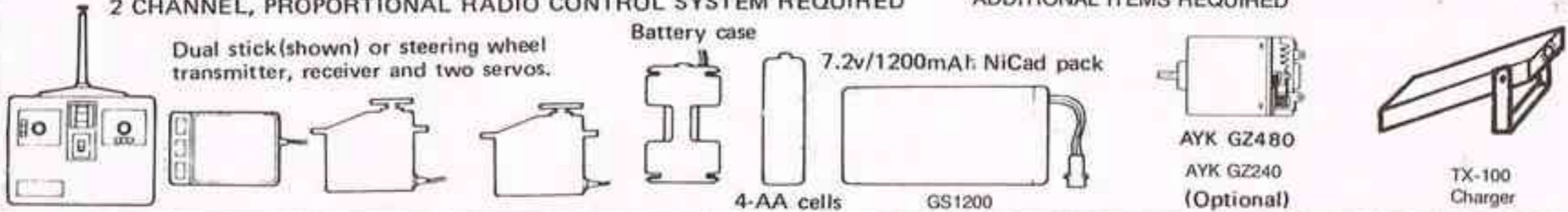
Dual stick (shown) or steering wheel transmitter, receiver and two servos.

Battery case

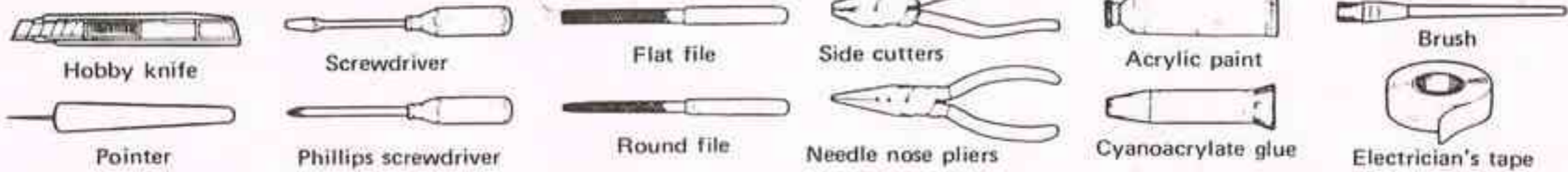
7.2v/1200mAh NiCad pack

AYK GZ480  
AYK GZ240  
(Optional)

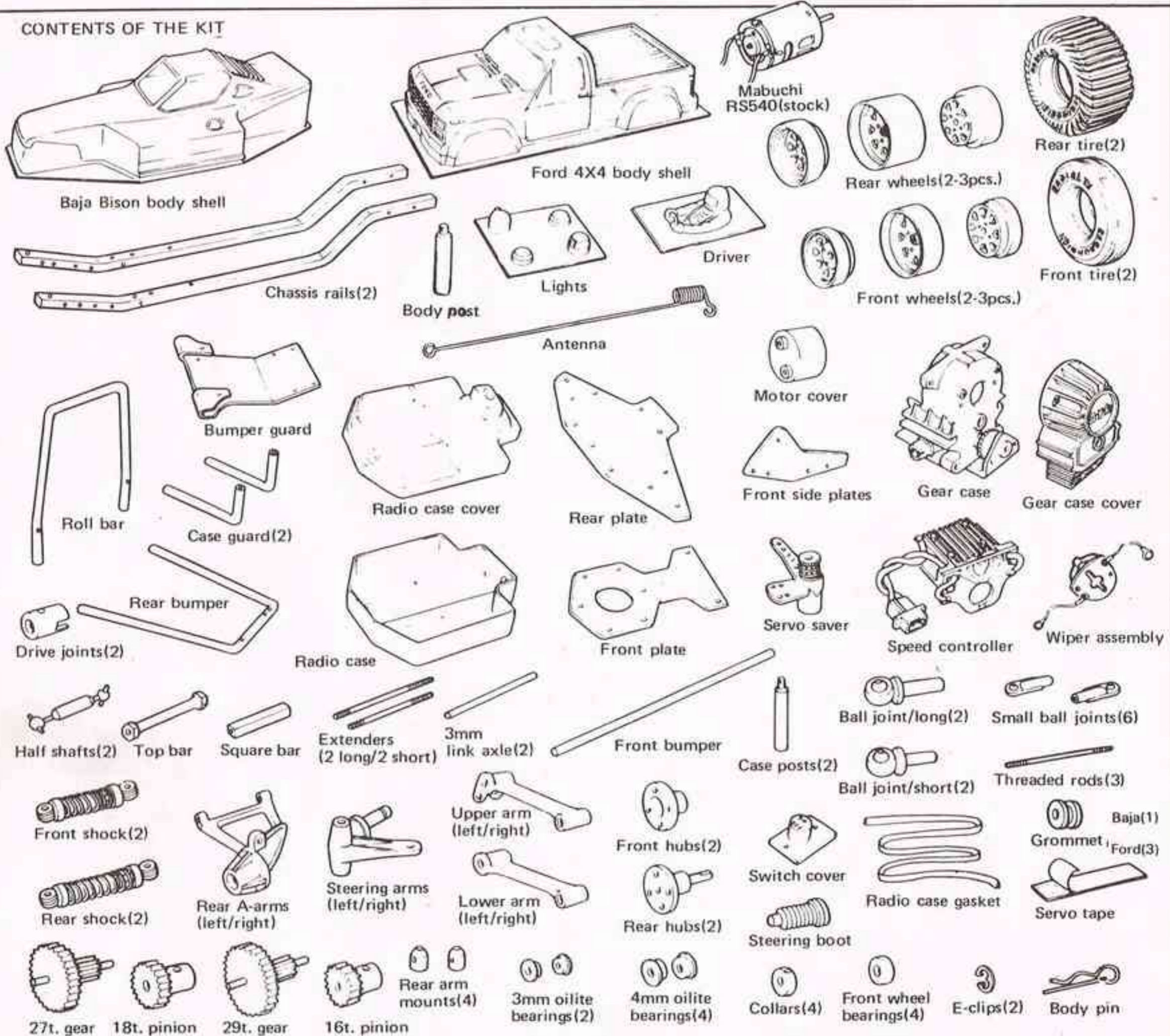
TX-100  
Charger



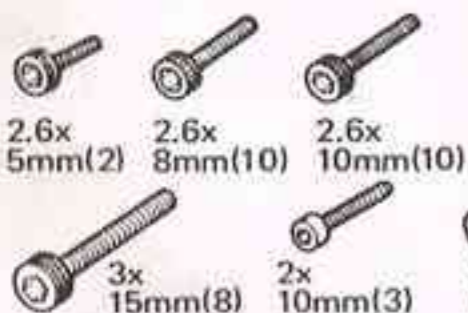
ADDITIONAL TOOLS REQUIRED



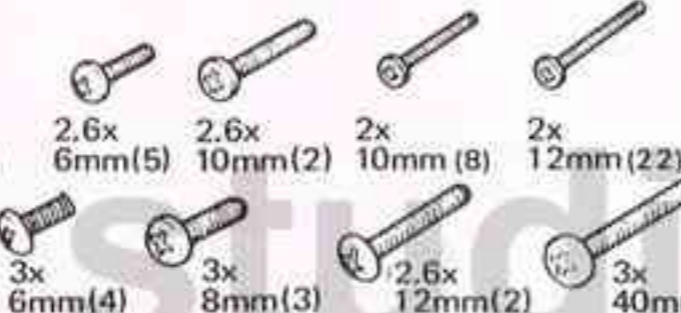
CONTENTS OF THE KIT



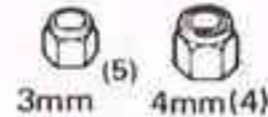
CAP SCREWS



PHILLIPS SCREWS



LOCKNUTS



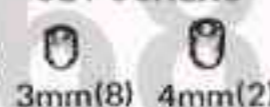
MACHINE NUTS



WASHERS

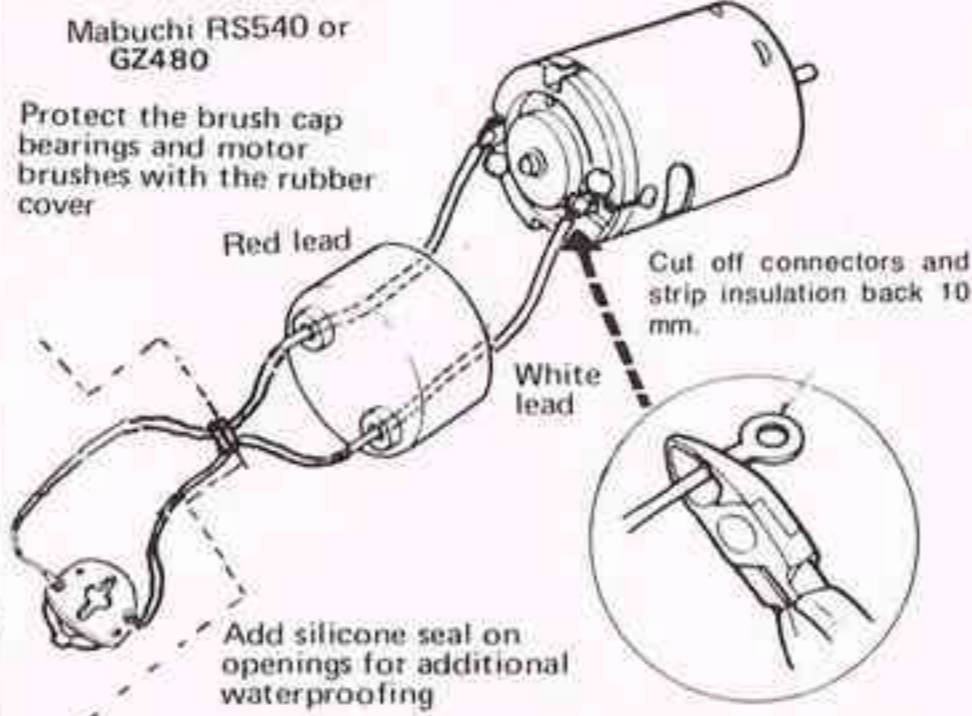


SET SCREWS



# 1 MOTOR DUST COVER

Feed wiper wires to motor terminals as shown. Note that the wiper wires feed through the hole and grommet out the rear of the radio box, then through the rubber motor cover. Tin the ends of the wires but do not solder leads to motor until later.



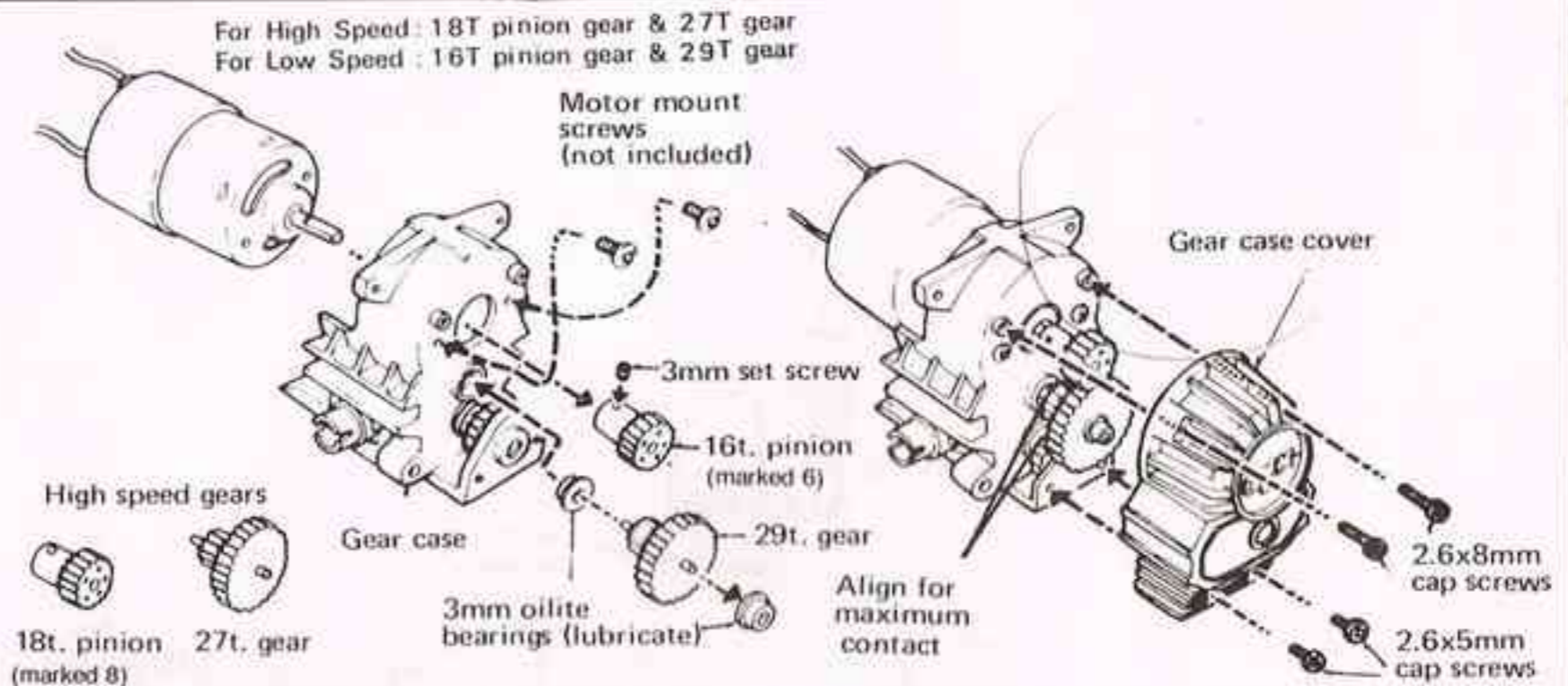
### NOTICE:

The gear box in this kit has been preassembled. The gears have been factory set and lubed. Shipping and storage may cause the gear box to leak. If any leakage has occurred, remove the bottom plate of the gear box and apply more lube to the gears. We recommend STP Tube in a Tube or Perfect Lube Multi Grease be used. A periodic check of the gear box is suggested for proper maintenance. A silicone sealant should be applied to the outer edges of the gear box to prevent leakage of the lubricant and to prevent moisture from entering the gear box.

# 2 GEAR BOX

- 2.6x5mm (2) cap screws
- 3mm oilite bearings (2)
- 2.6x8mm (2) cap screws
- 3mm set screw

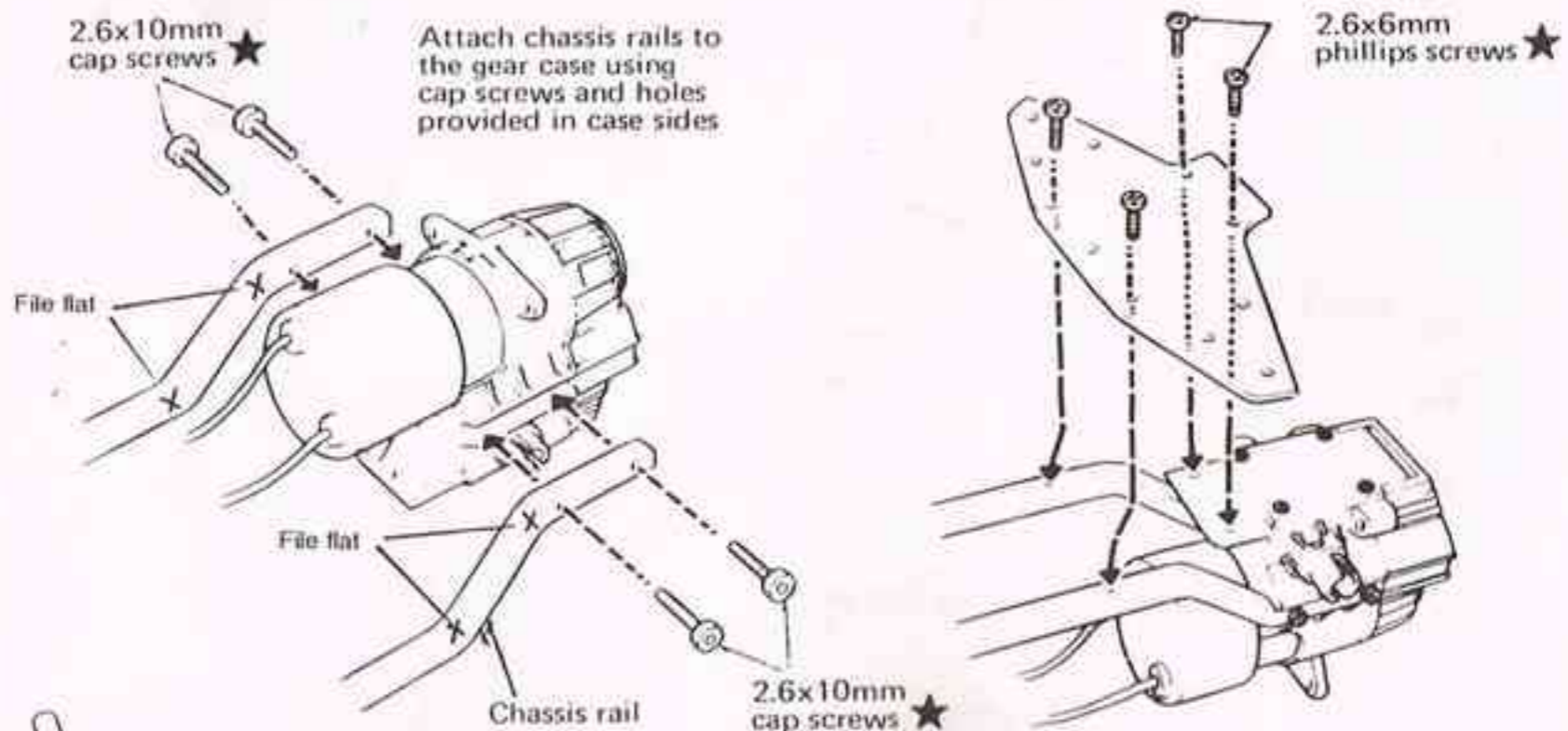
Assemble the motor assembly, gear case, gears, bushings, and gear case cover as shown. Use Loctite only on screws you never want to come loose again, like chassis frame fasteners. Do not Loctite the gear case components as periodic inspection and maintenance will be necessary.



# 3 CHASSIS RAILS

- 2.6x10mm cap screws (4)
- 2.6x6mm phillips screws (4)

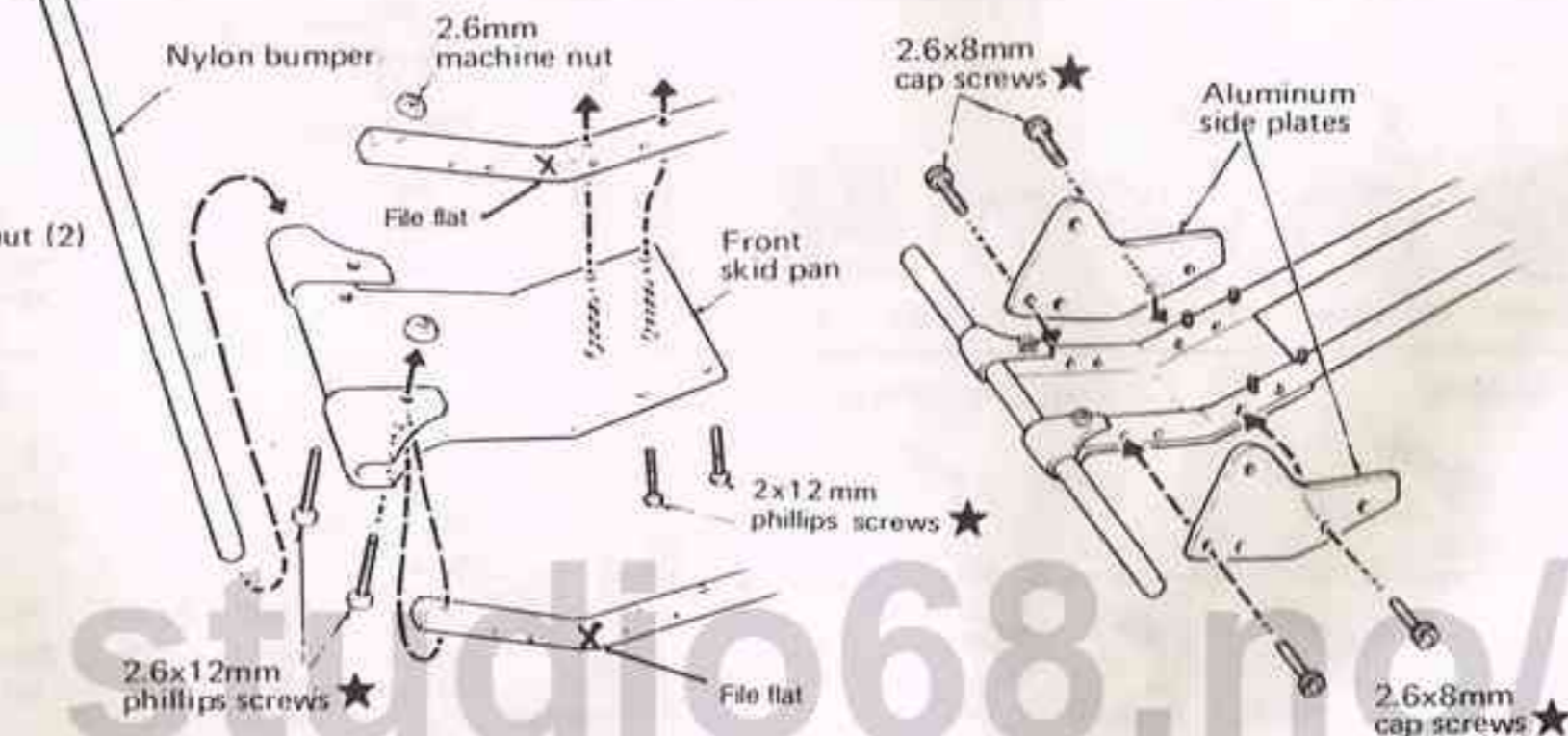
Loctite all fasteners marked with ★ throughout the instructions.



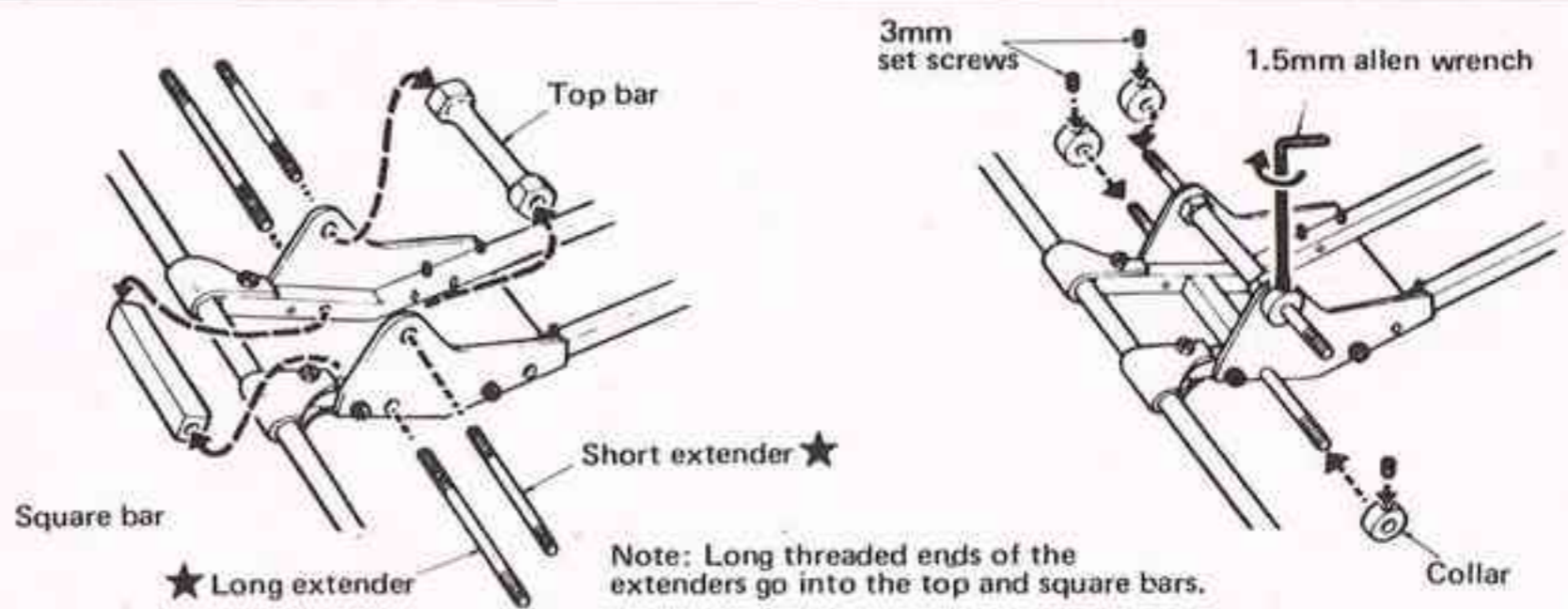
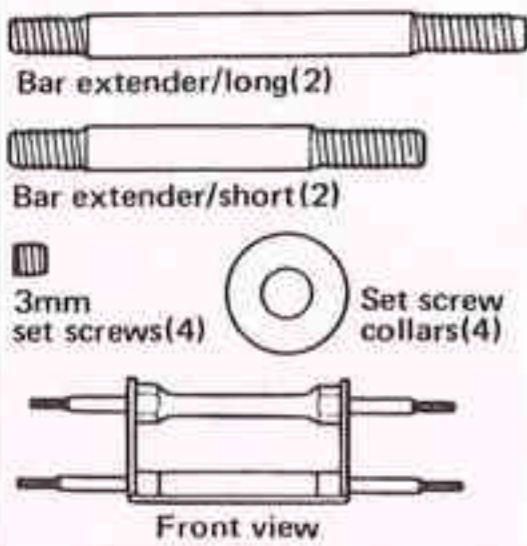
# 4 FRONT END

- 2x12mm phillips screws (4)
- 2.6mm machine nut (2)
- 2.6x12mm phillips screws (2)
- 2.6x8mm cap screws (4)

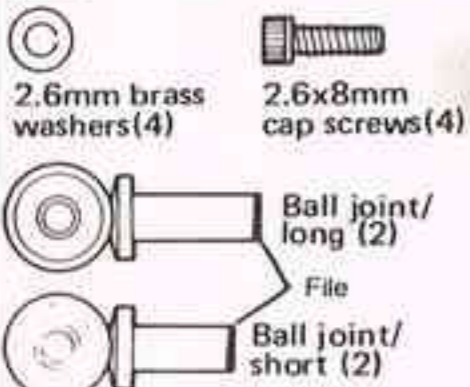
Assemble the front skid pan, front bumper, and aluminum side plates as shown. Loctite all fasteners.



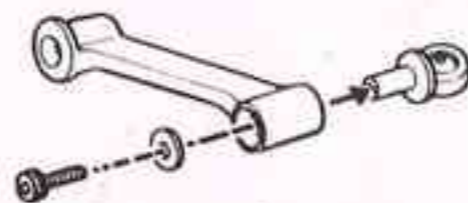
### 5 FRONT SUSPENSION



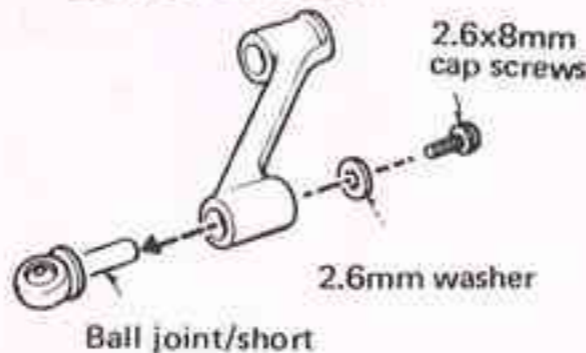
### 6 TRAILING ARM ASSEMBLY



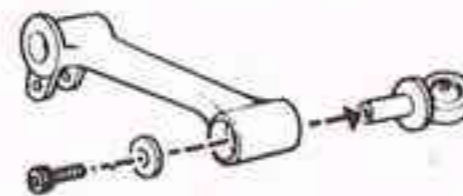
#### LOWER ARM/RIGHT



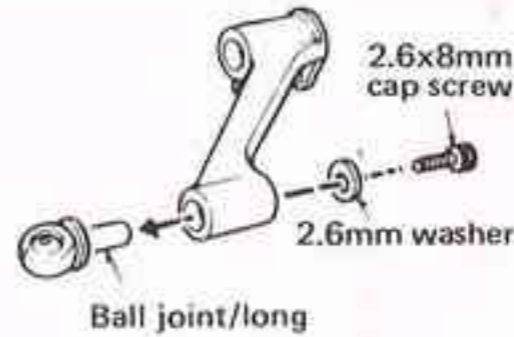
#### LOWER ARM/LEFT



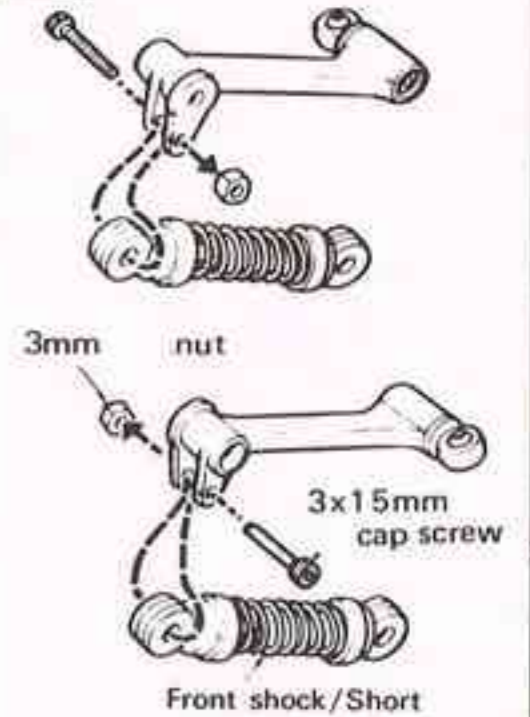
#### UPPER ARM/RIGHT



#### UPPER ARM/LEFT



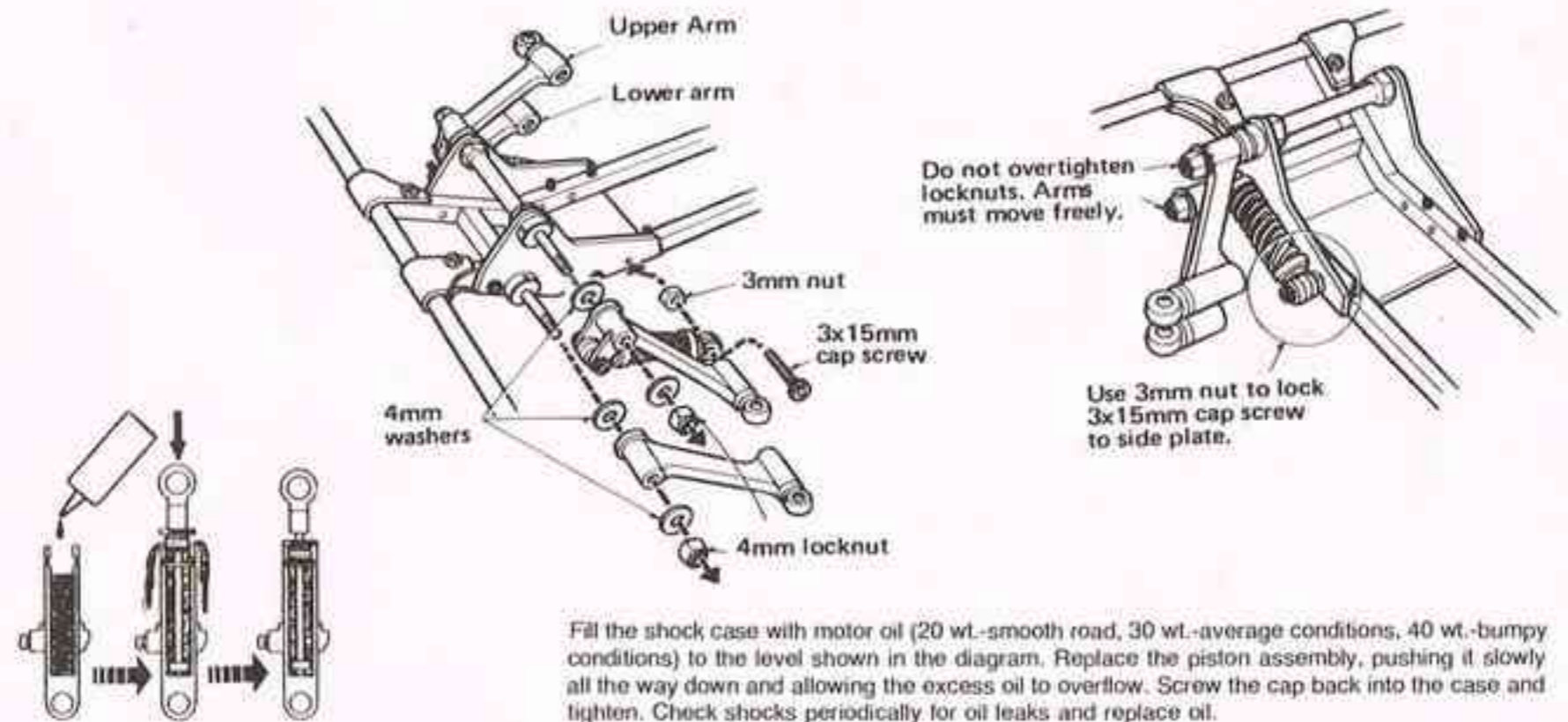
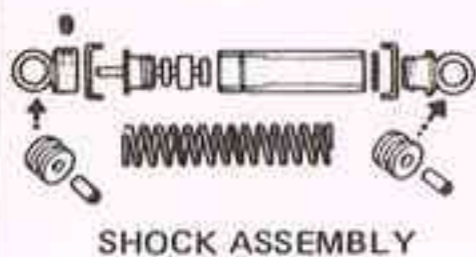
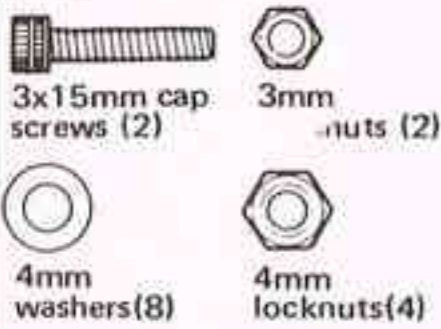
### 7



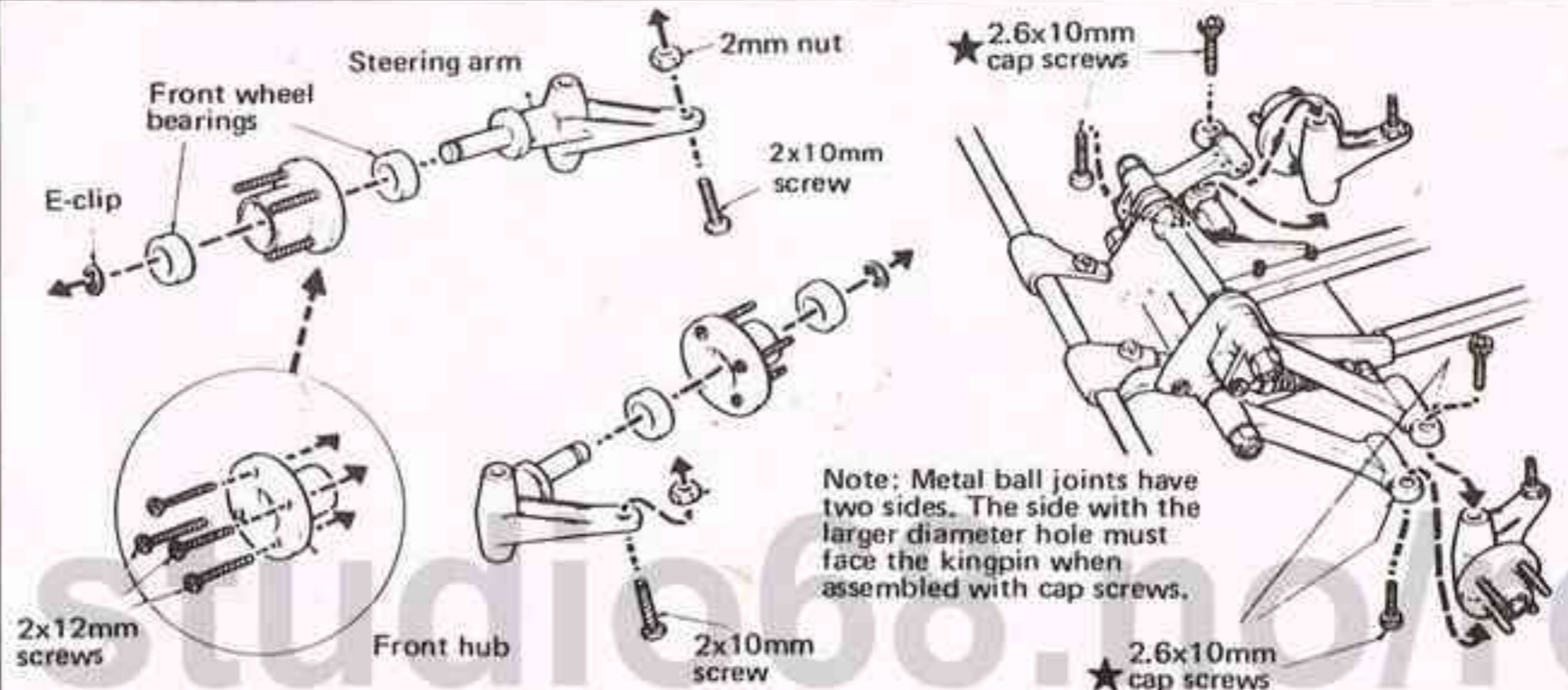
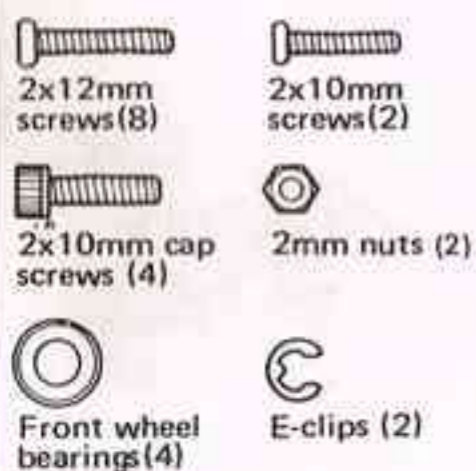
### 7 SHOCK MOUNTS



### 8 SHOCK ABSORBER INSTALLATION

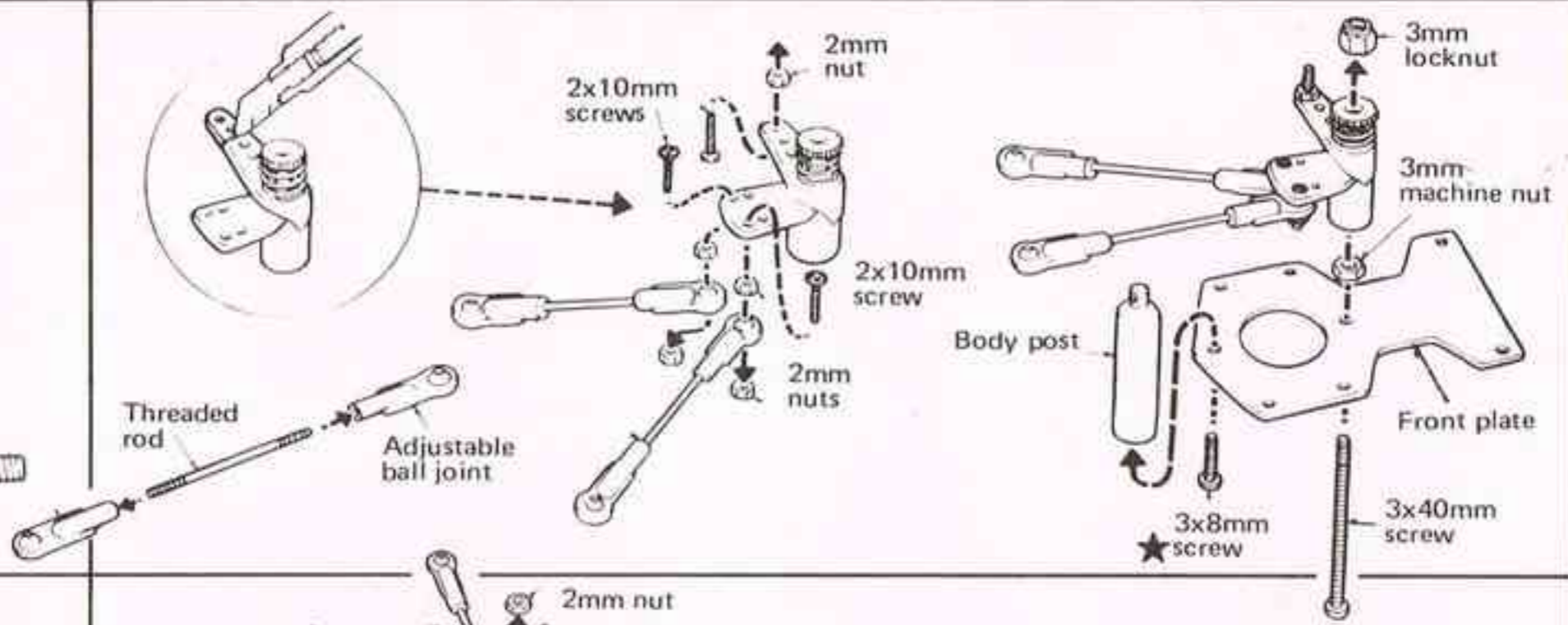


### 9 STEERING ASSEMBLY



### 10 SERVO SAVER

- 2x10mm screws(3)
- 2mm nuts(5)
- 3x8mm screw
- 3mm nut
- 3mm locknut
- 3x40mm phillips screw

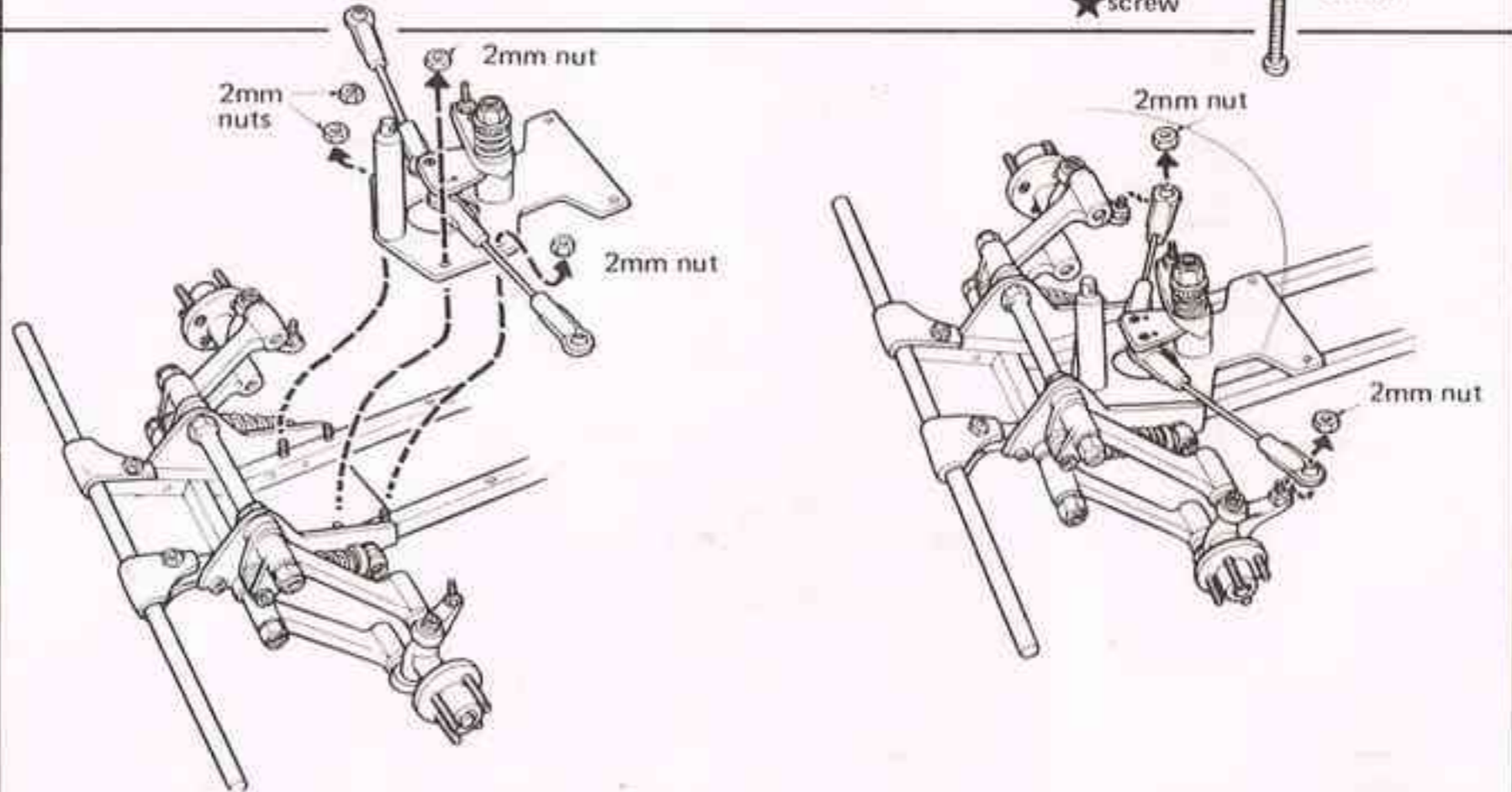


### 11 FRONT PLATE INSTALLATION

- 2mm nuts(6)



Tie-rods (assemble 2)

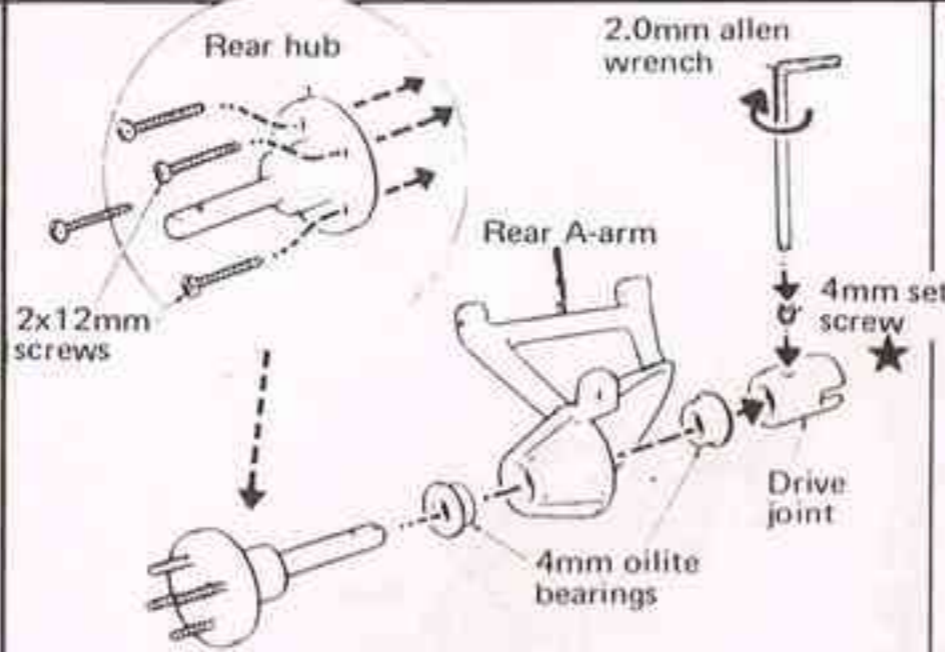


### 12 REAR TRAILING LINK

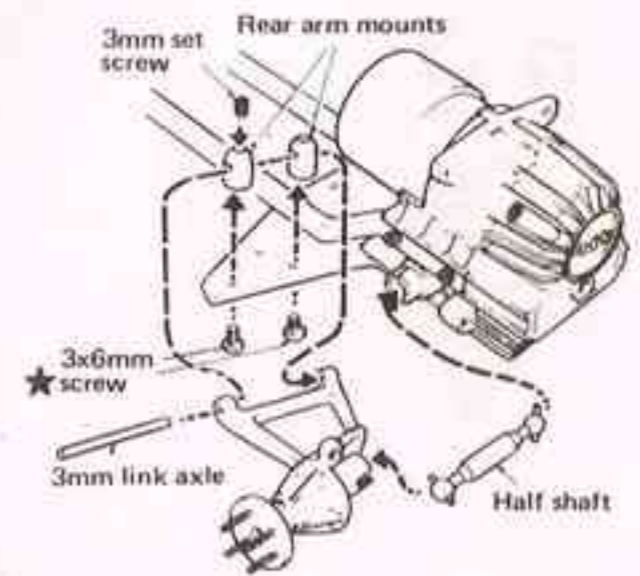
- 2x12mm screws(8)
- 4mm oilite bearings (4)
- 4mm set screws(2)

### 13 TRAILING LINK INSTALLATION

- 3mm link axle (2)
- 3x6mm screws(4)
- 3mm set screws(2)



### 13



Put half shaft on first-then rear A arm-make sure half shaft has horizontal play when rear of car is level. Half shaft has to be all the way into the drive joints.

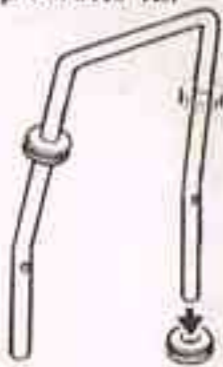
### 14 REAR SHOCK INSTALLATION

- 3x15mm cap screws(4)
- 3mm lock nuts(4)

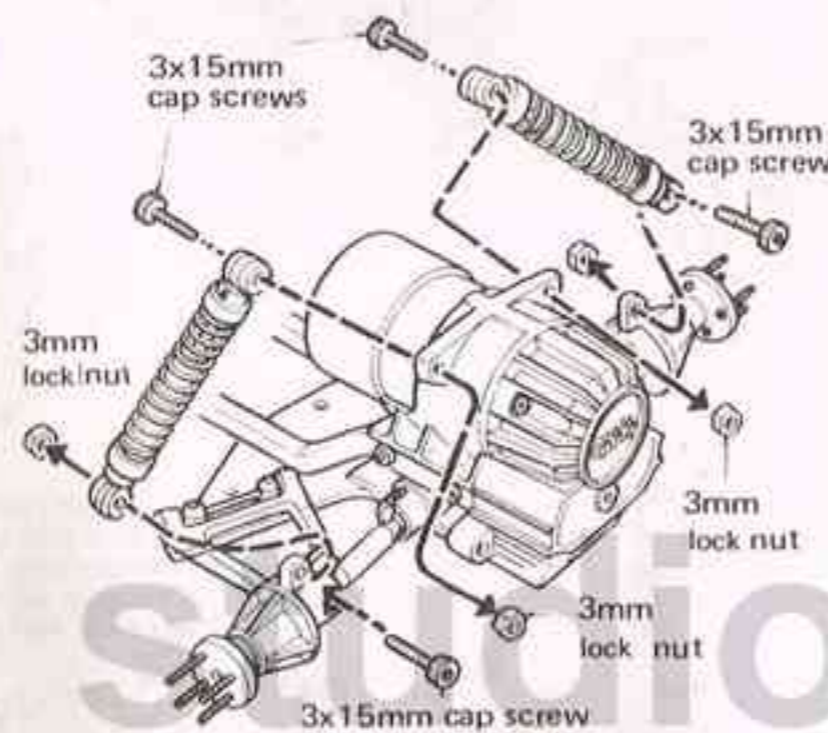
### 15 ROLL CAGE AND CASE GUARDS

- 2.6x10mm cap screws(2)
- 2x10mm cap screws (2)
- 2.6x10mm screws (2)

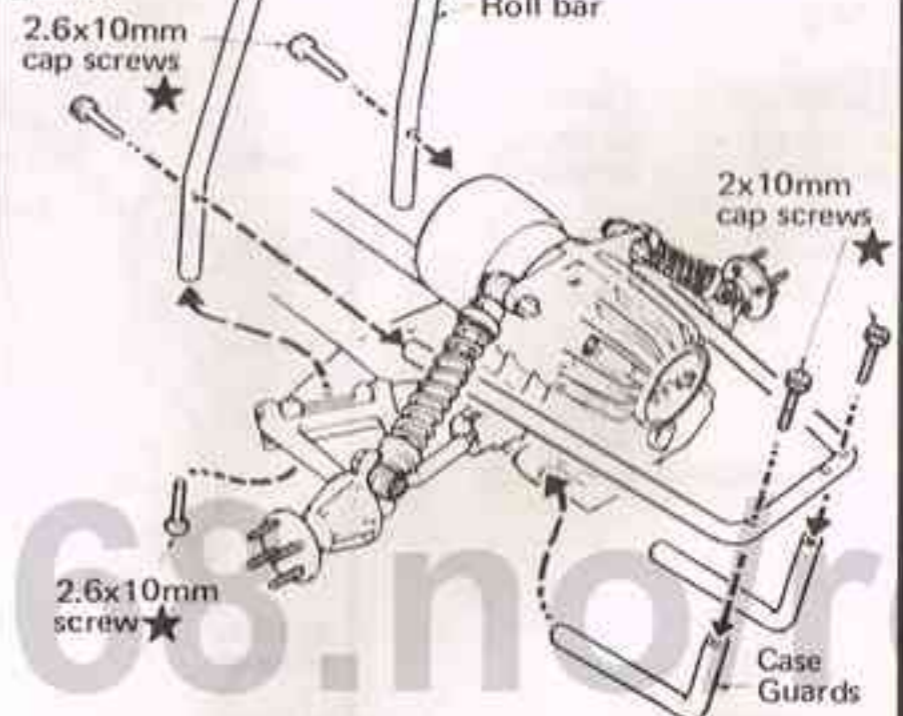
For Ford:  
Use 2pcs Grommet



Do not tighten too much and leave some looseness in absorber assembly.



### 15



**16 RADIO CASE ASSEMBLY**

**17 RADIO CASE MOUNTING**

- 2x12mm screws (2)
- 2mm nuts (2)
- 3x8mm screws (2)
- 2mm washer (2)
- 2.6x6mm screw
- 2.6mm nut

Steering boot



9mm hole after setting servo (see 21)

Make small hole and enlarge to fit with file

Enlarge switch hole to allow full on/off operation

Grommet

(3mm hole)

McCor lead wire grommet (8mm hole)

**17**

2mm washer

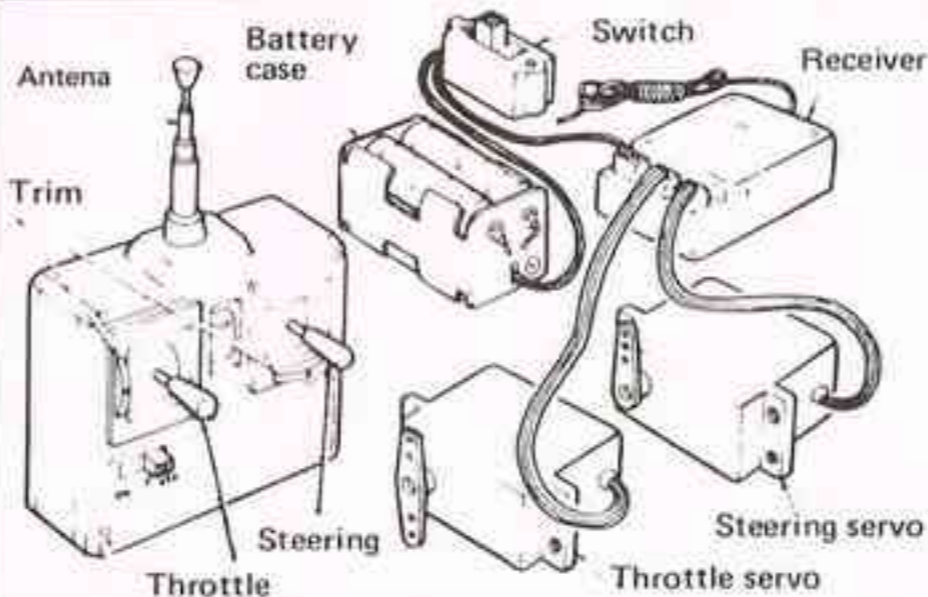
2mm nut

2.6mm nut

- 3x8mm screws ★
- 2x12mm screws ★
- 2.6x6mm screw ★

**18 RADIO SYSTEM CHECK OUT**

All functions should be tested for proper operation prior to installation



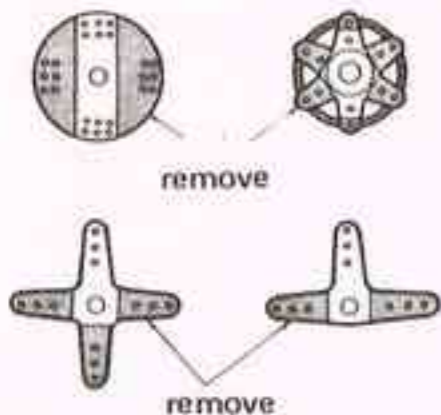
Install batteries in both transmitter and receiver cases

Check that the appropriate servo is actuated by your steering and throttle controls

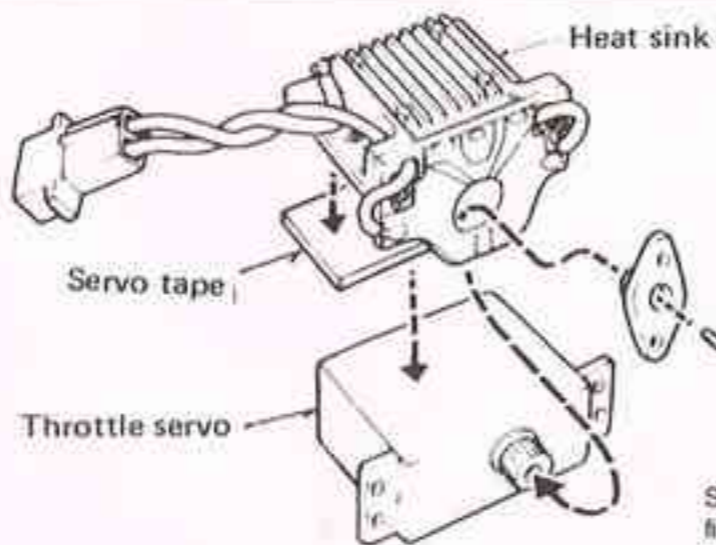
Make sure both servos center at neutral position

**19 SPEED CONTROL MOUNTING**

Modify servo arm as shown



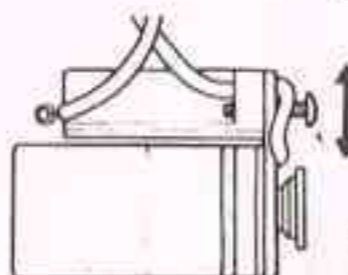
- 2x6mm self-tapping screws (2)



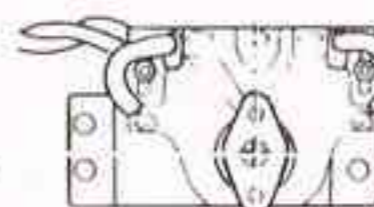
Mount control wiper

Servo horn screw must be firmly snugged into servo output shaft.

Self-tapping screws



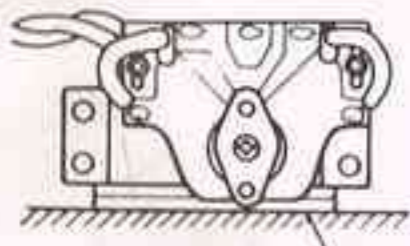
Use screws to center switch over output shaft



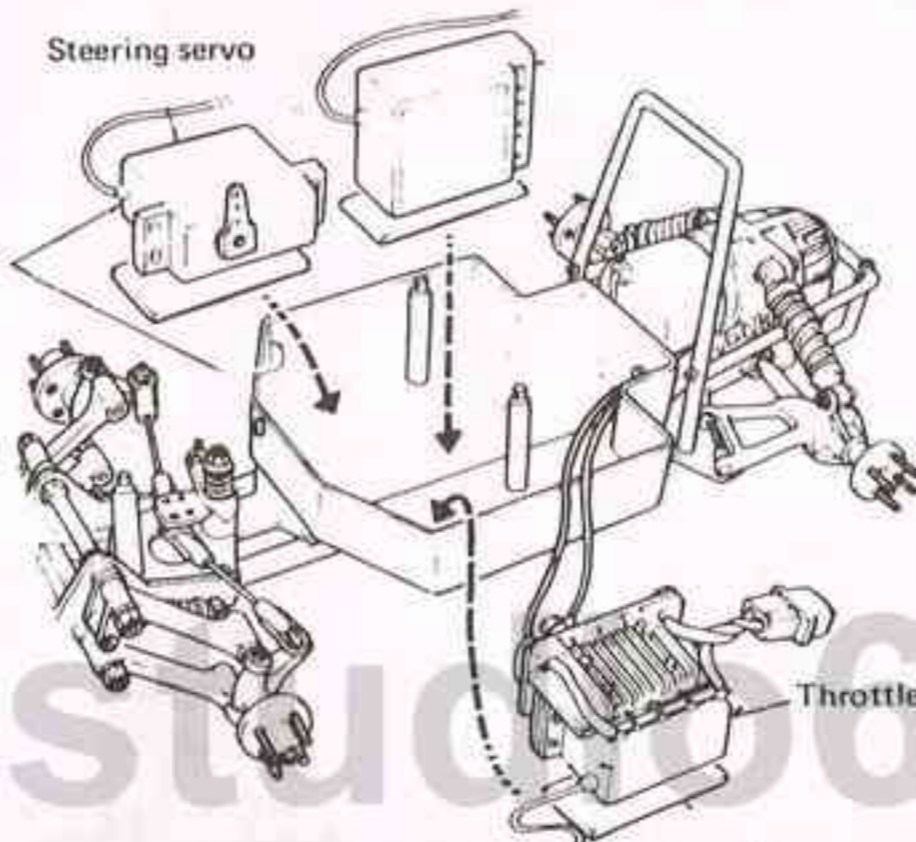
For proper operation the output shaft must be centered in speed switch hole

**20 STEERING SERVO AND RECEIVER MOUNTING**

Add layers of servo tape to clear wiper arm



Mount with servo tape



Servos position in opposite corners

Receiver




Steering servo

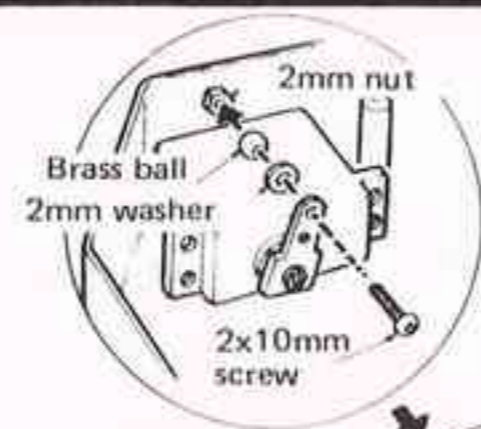
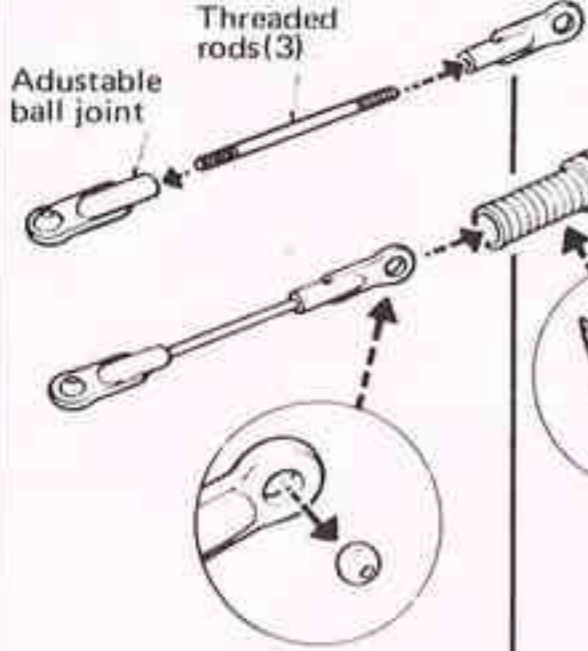
Lead wire grommet

NiCad pack

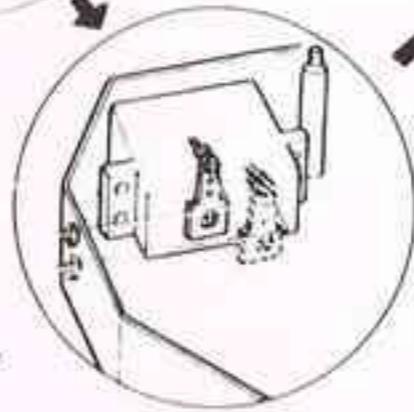
TOP VIEW OF RADIO CASE

## 21 STEERING LINKAGE

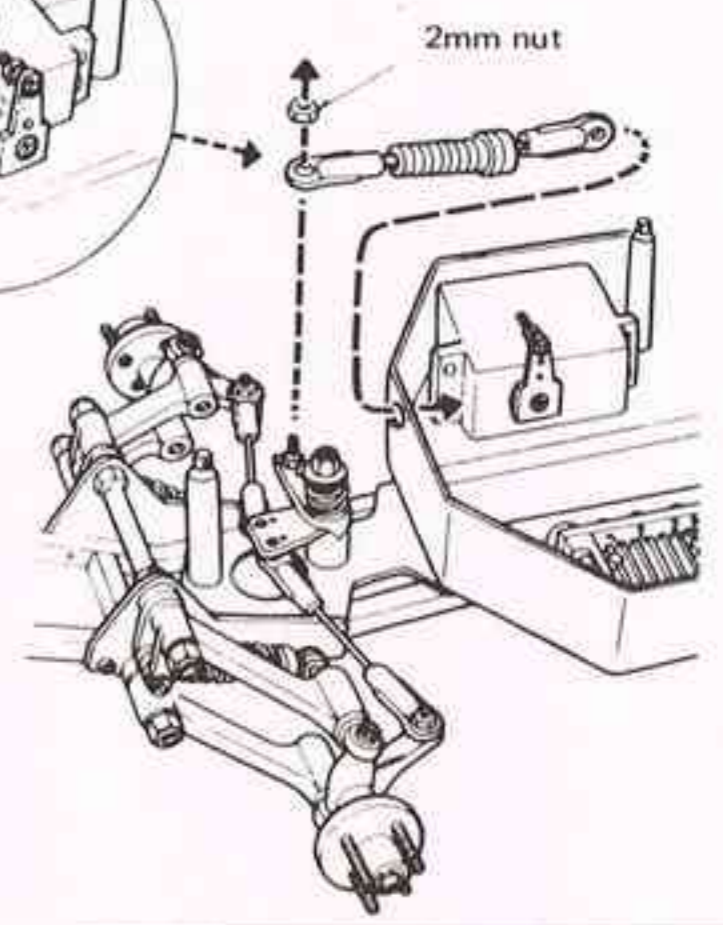
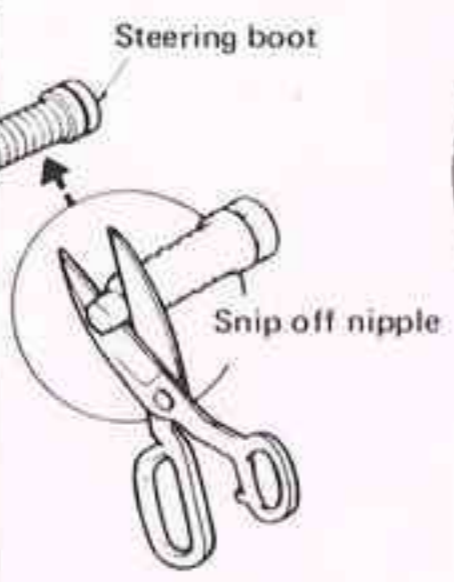
-  2x10mm screw
-  2mm nuts(2)
-  2mm washer



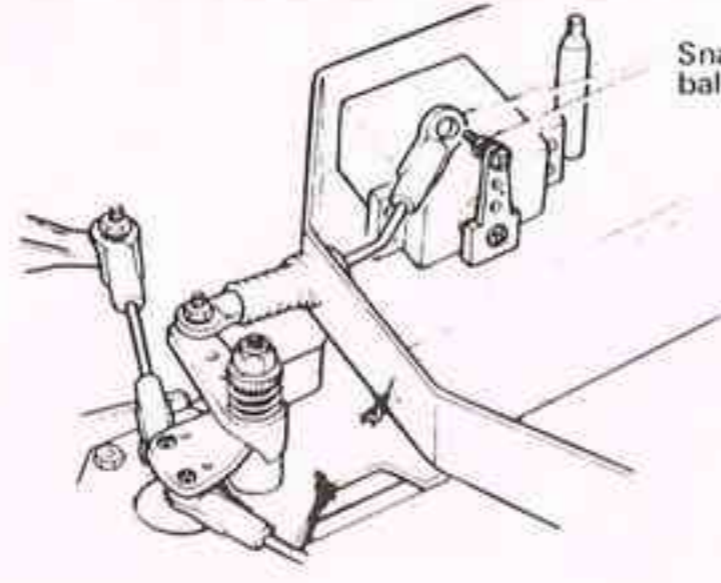
Bend tie-rod to match servo



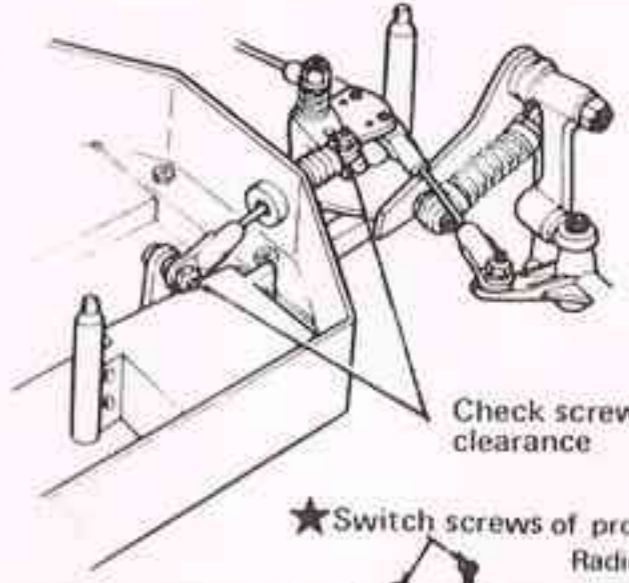
Drill 9mm hole according to servo height



Notch box lid to clear boot



Snap adjustable ball joint together



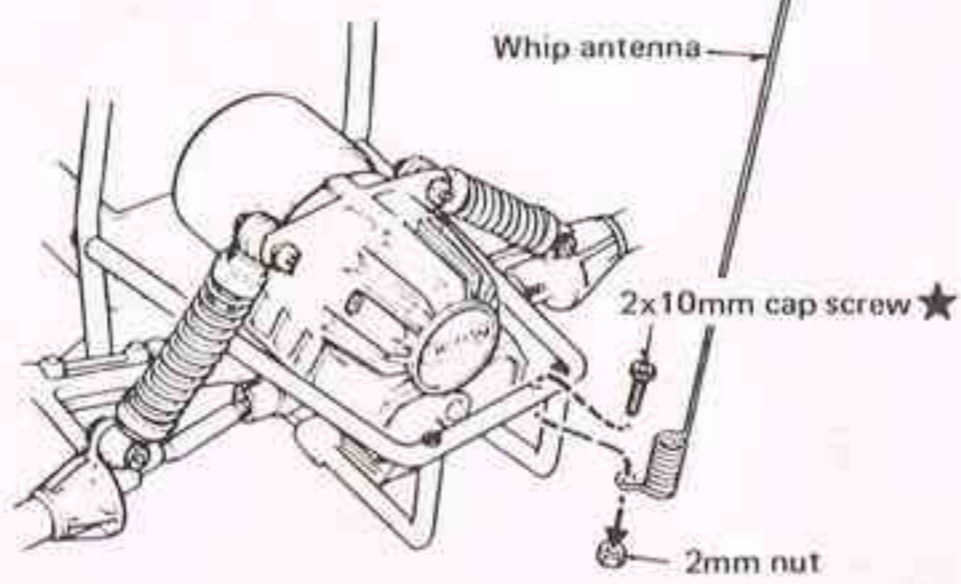
Check screws for clearance

★ Switch screws of proportional Radio Control

## 22 MOUNT ANTENNA

-  2x10mm cap screw
-  2mm nut

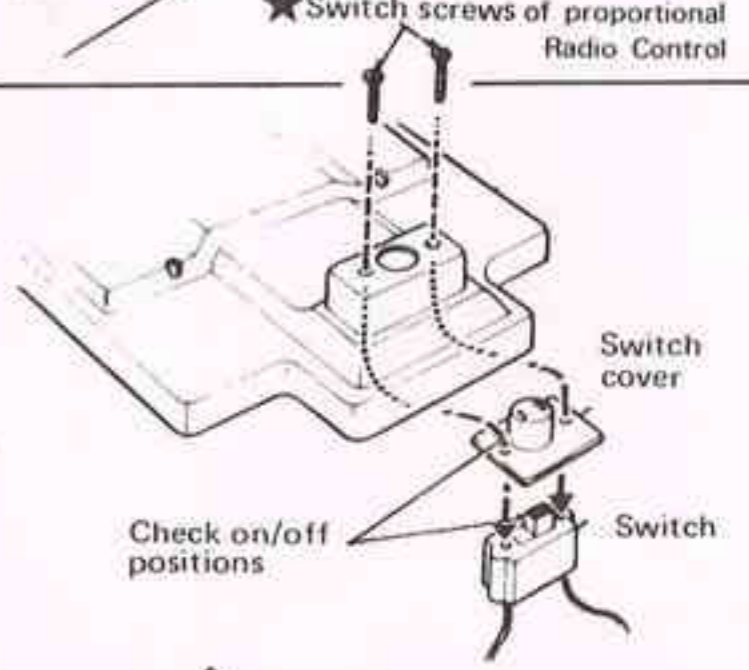
Interference problems? Move the antenna to the front and install it on the front plate half way between steering arm and radio box.



Whip antenna

2x10mm cap screw ★

2mm nut




Switch cover

Switch

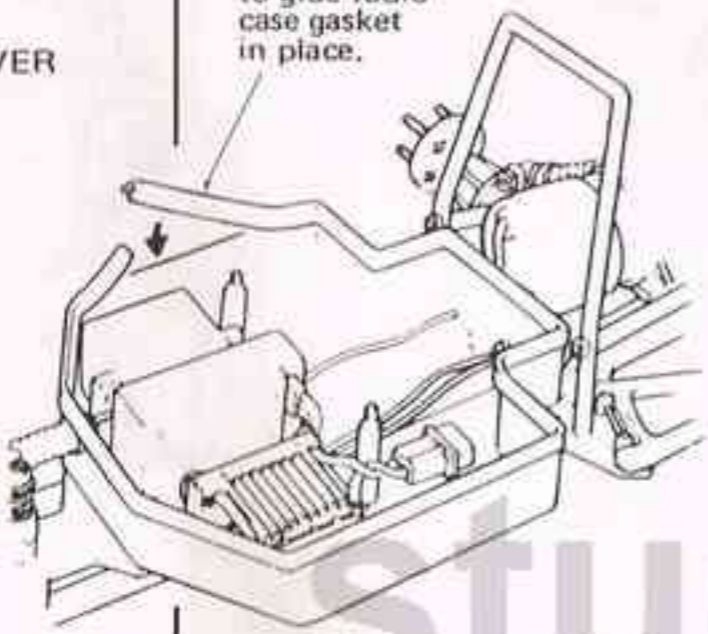
Check on/off positions

## 23 DUST SEALING

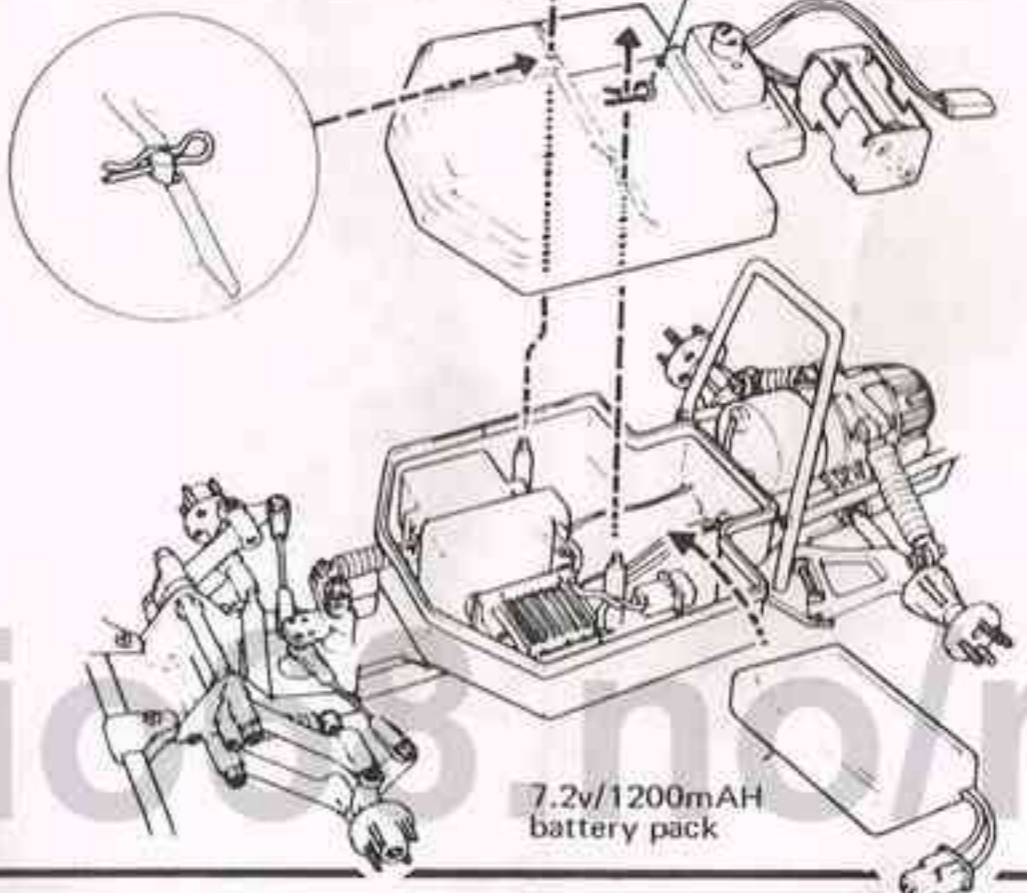
## 24 ATTACH COVER

-  Body pin (2)

Use silicone seal to glue radio case gasket in place.



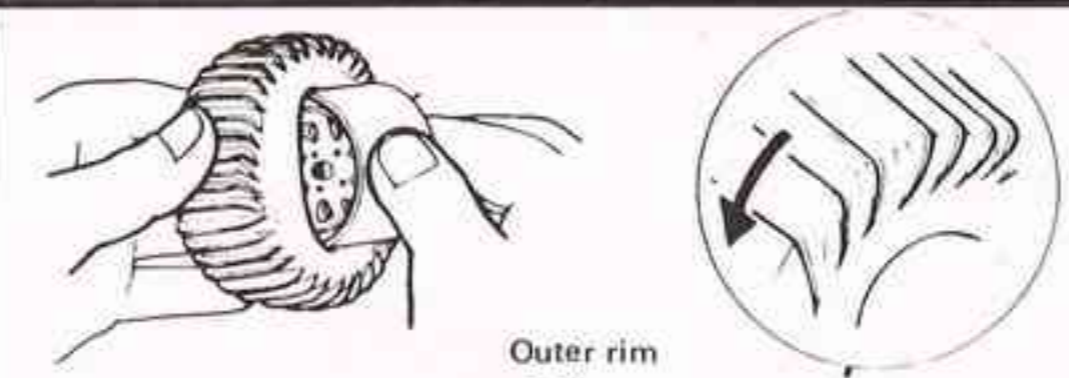
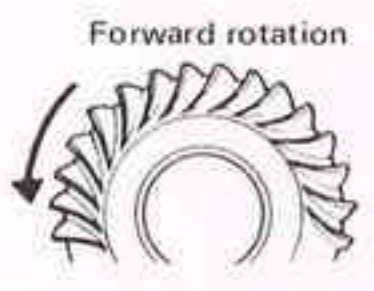
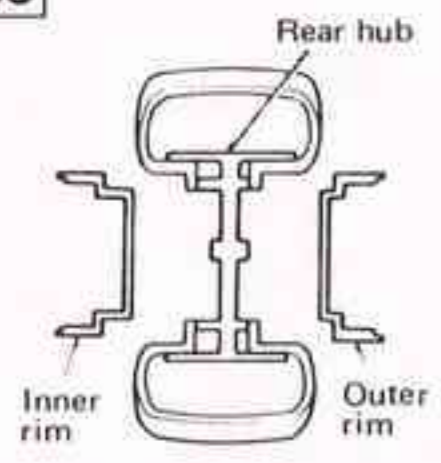
## 24



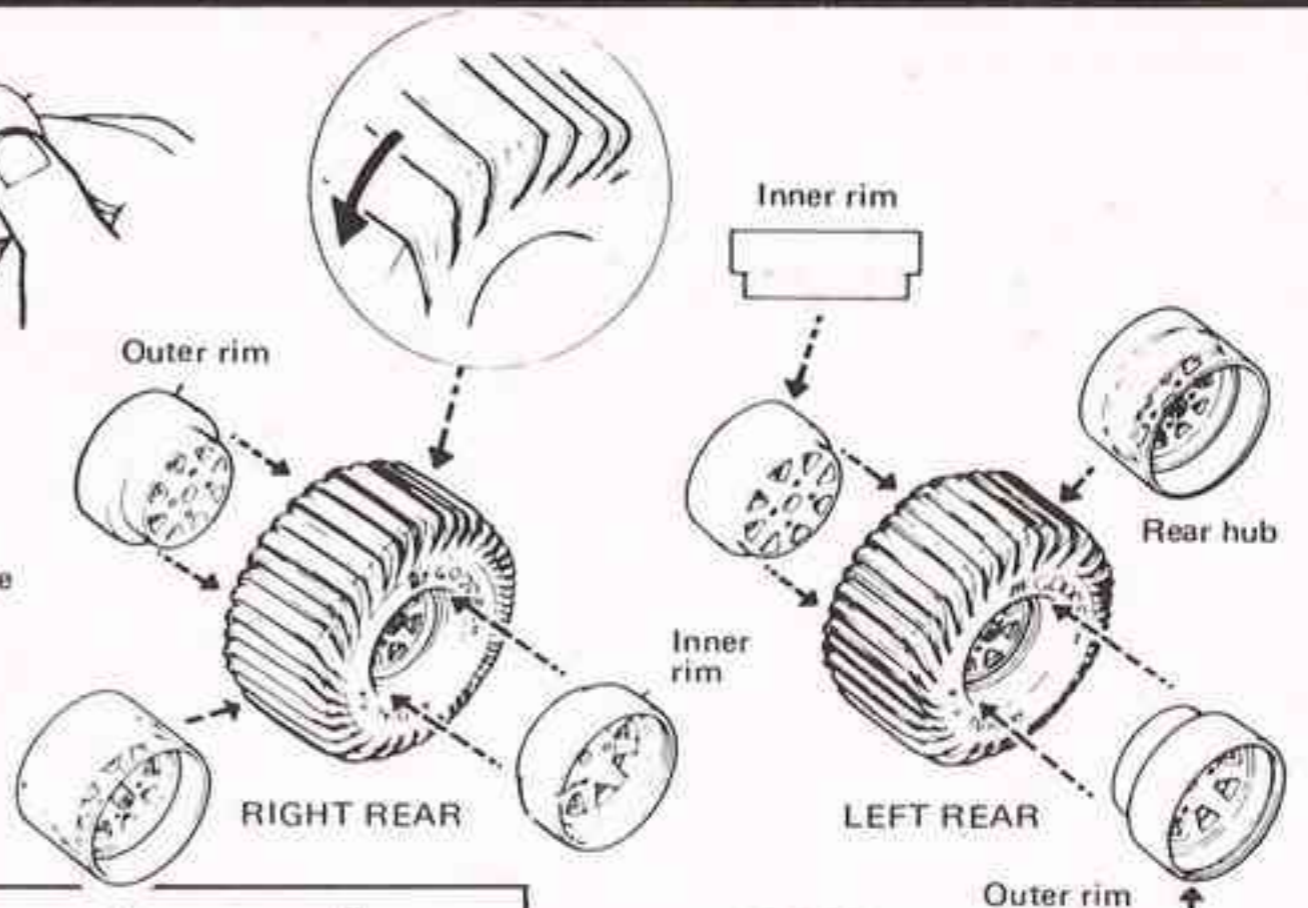
7.2v/1200mAH battery pack



**25** TIRE ASSEMBLY

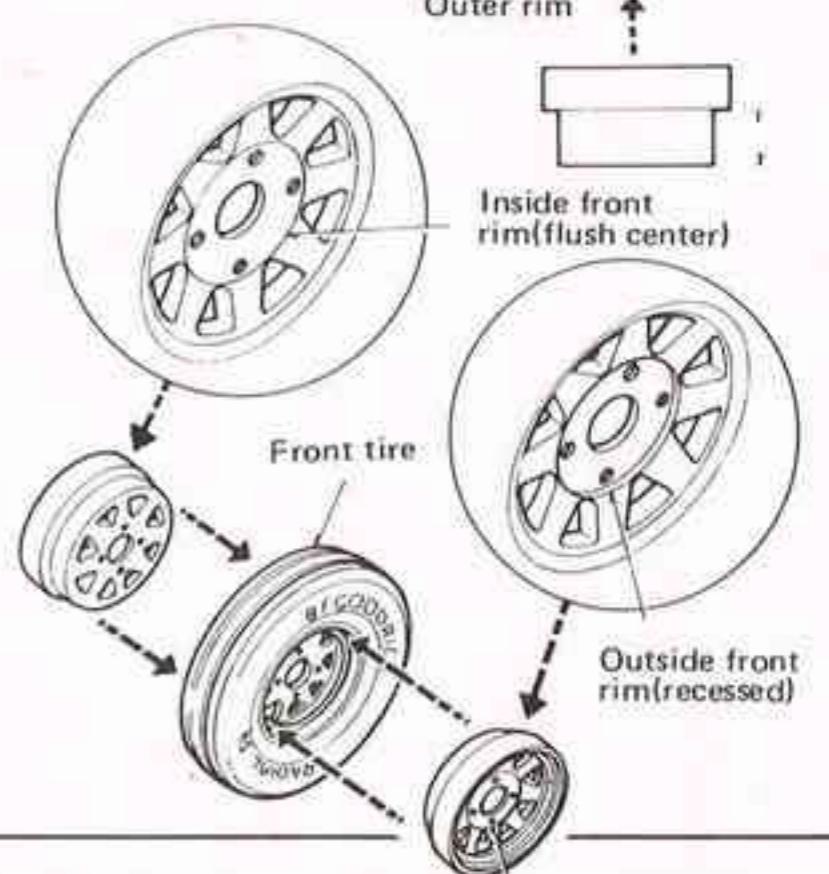
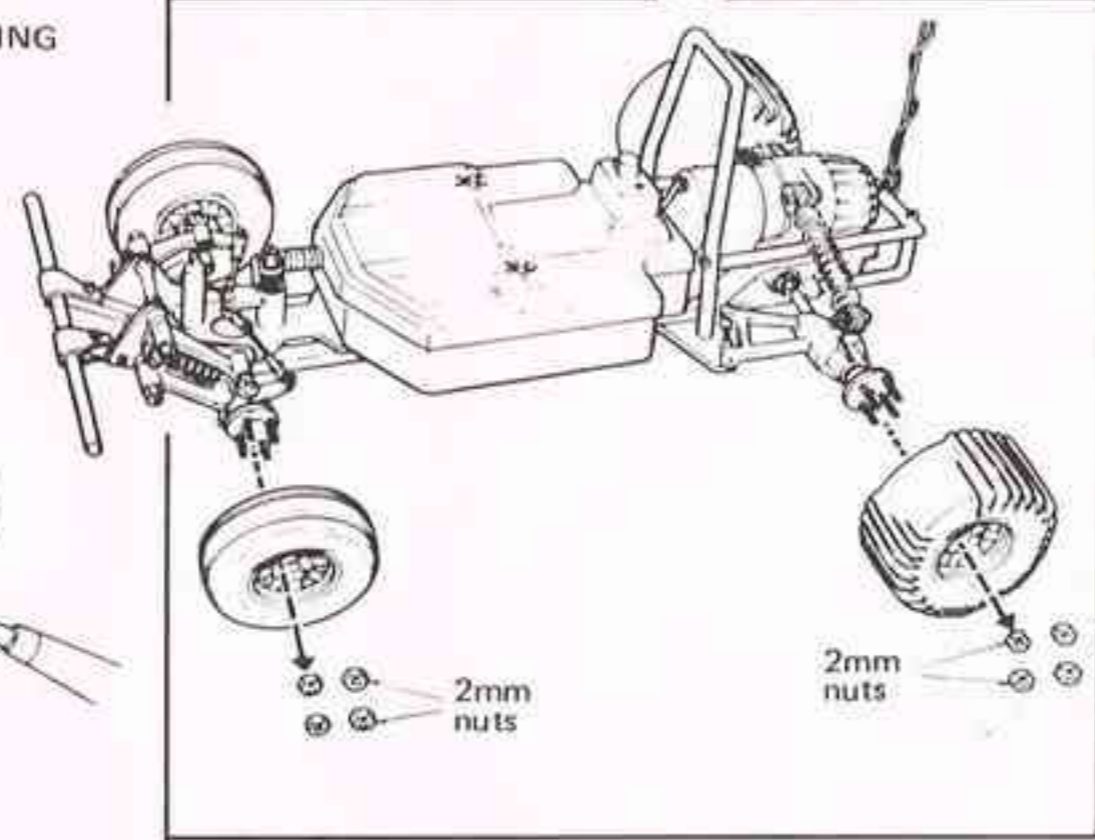
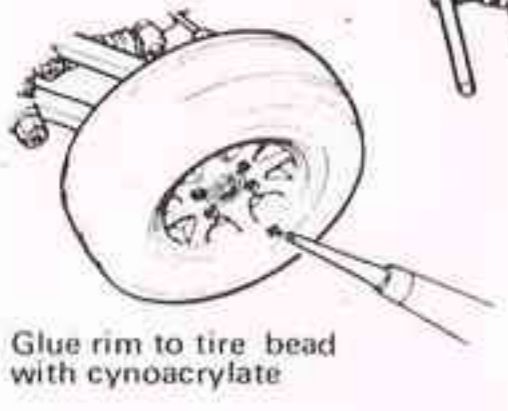


**IMPORTANT!** Make sure paddle tread pattern angles opposite the direction of forward rotation.

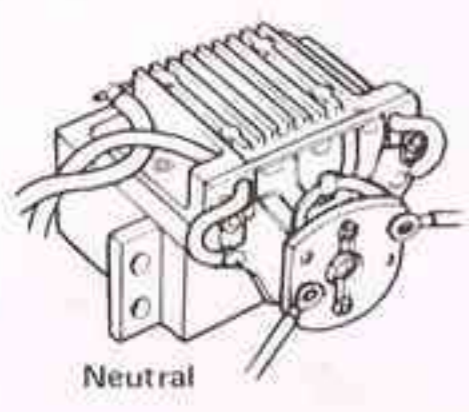


**26** WHEEL MOUNTING

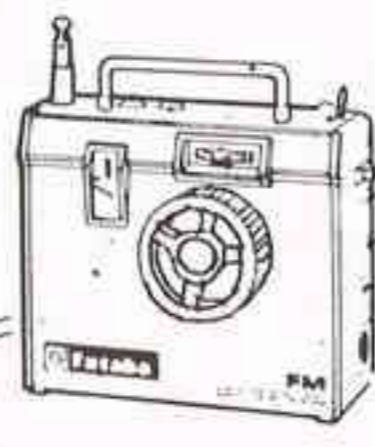
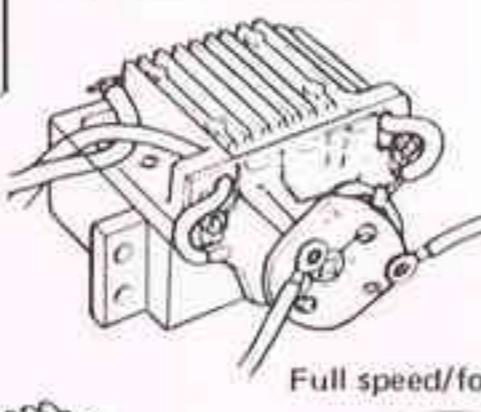
©  
2mm machine nuts (16)



**27** STAGE TUNING



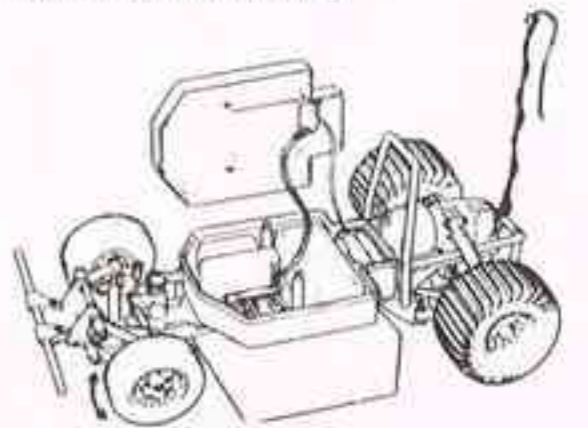
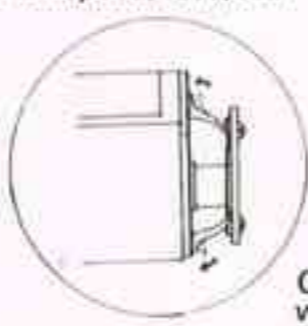
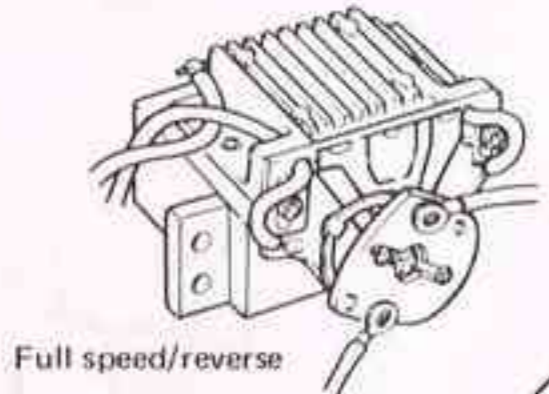
Reverse lead wires if car runs in opposite direction than desired



Solder (tack) the red lead wire to one of the motor terminals. With the car up on blocks, touch the white wire to the other terminal to see if wheels move in forward direction when throttle control is in forward position. Final solder the wires when the forward rotation of the tires matches the forward setting of the controls.

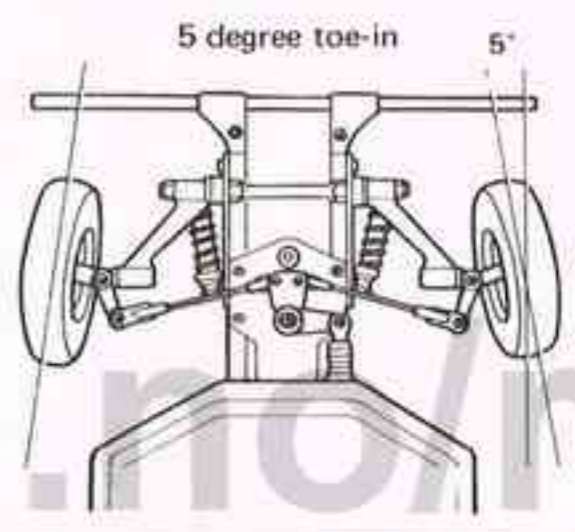
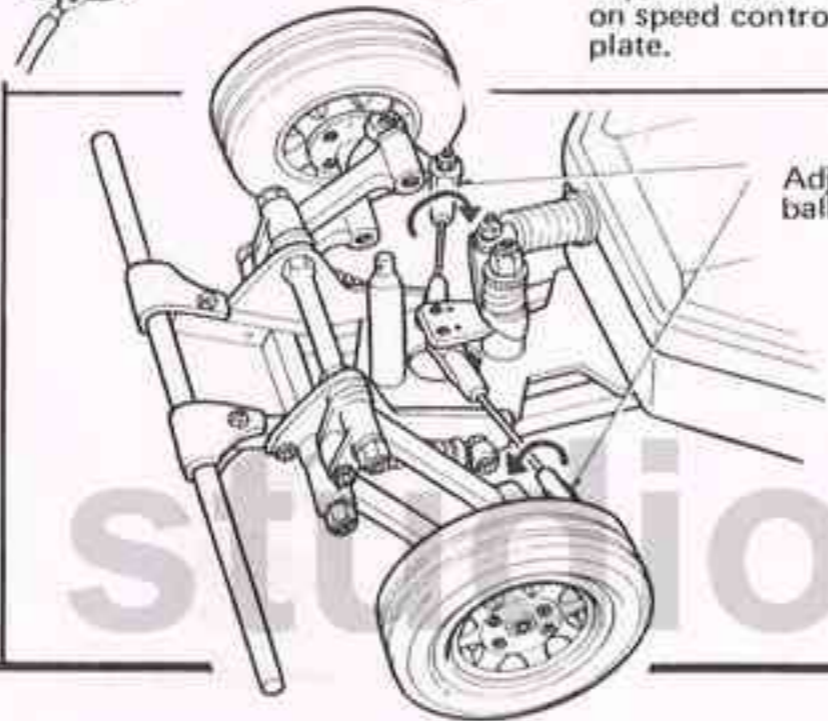
1. Pull up antenna.
2. Switch on transmitter.
3. Switch on receiver.
4. Check transmitter steering control for correct left/right and centering response.
5. Check throttle control and throttle servo for forward/reverse response.
6. With car placed on block allow to run at reduced speed for 15 minutes.

Running the car on blocks will break in the brushes against the armature. After the run change the oil and lube in the gear box compartments in case metal particles came off the gears in the initial run.



**28** FRONT END ALIGNMENT

Use adjustable ball joints to set toe-in.



## 29 TRIMMING THE BODY

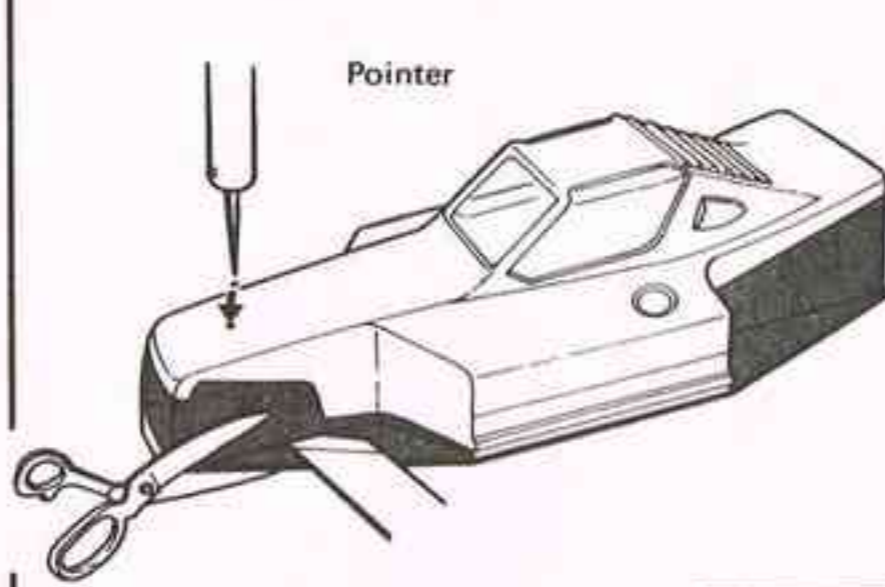


Roll cage opening for Ford pickup truck

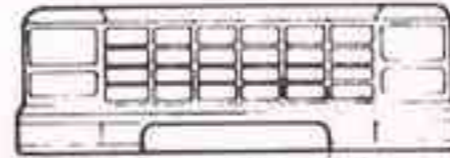
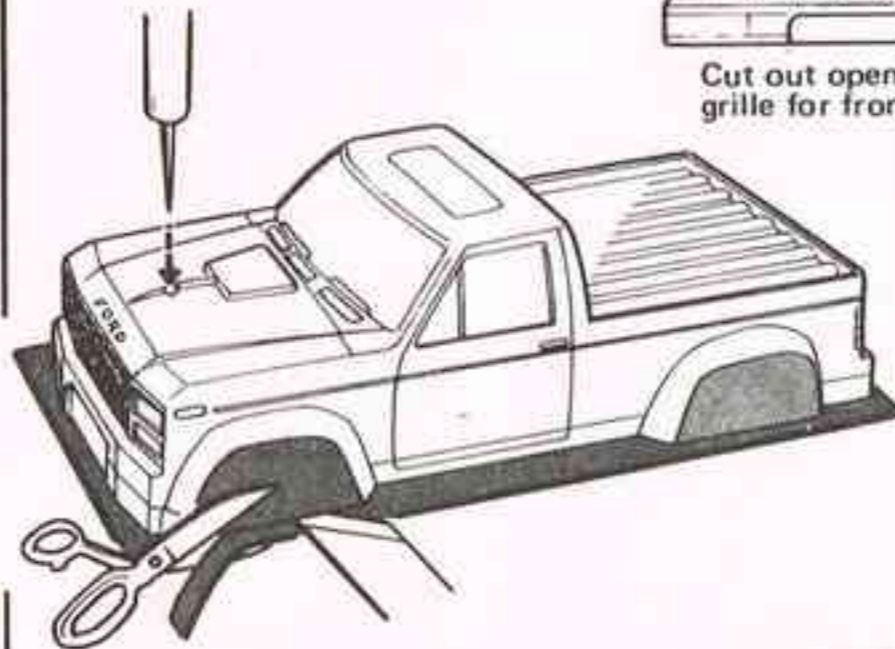
Bodies can be trimmed with scissors or by scoring along trim lines with an Xacto knife.

After scoring all trim lines flex the body back and forth and it will break cleanly along the lines.

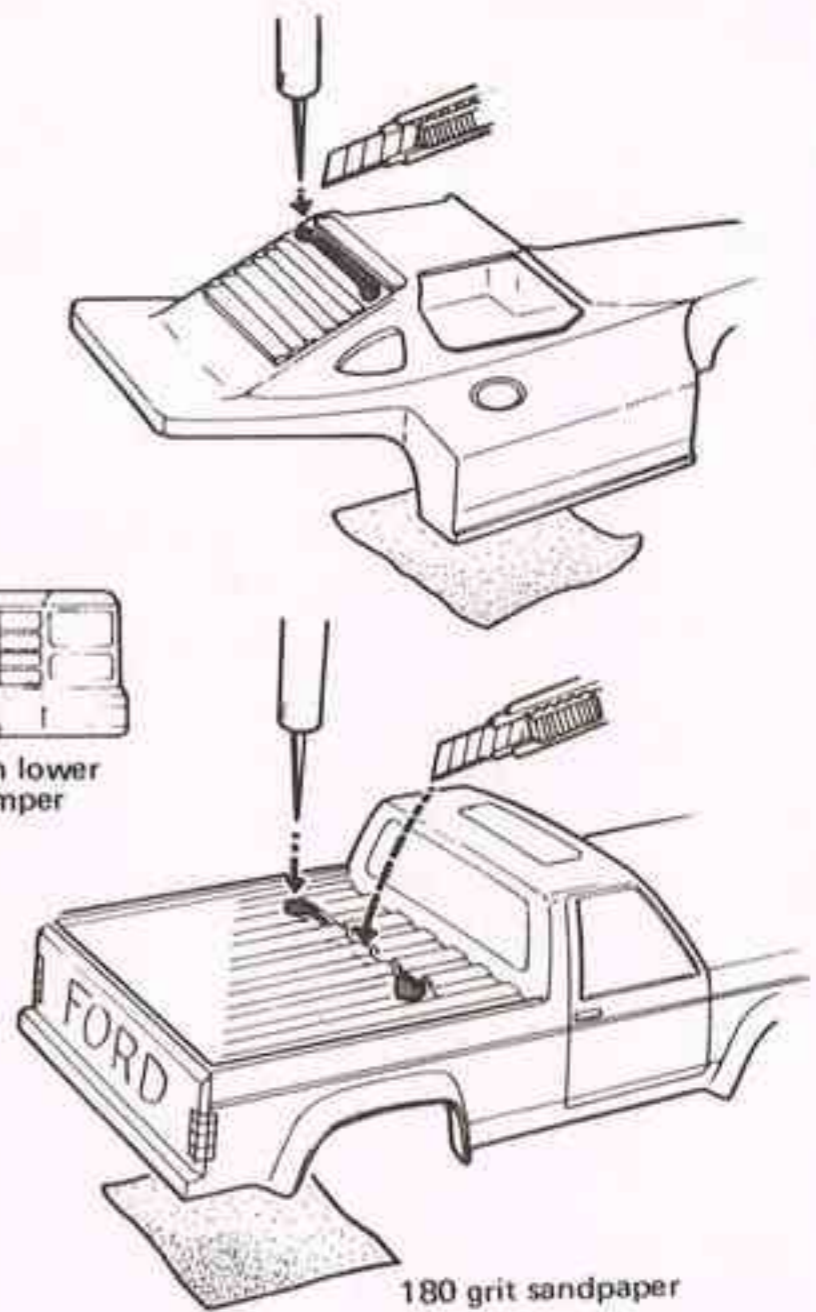
Use 180 grit sandpaper to finish up edges.



Pointer



Cut out opening in lower grille for front bumper



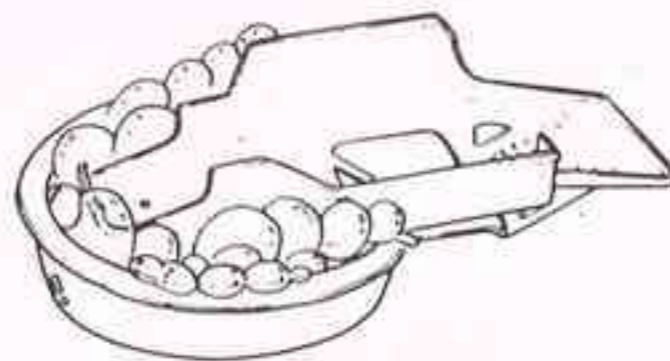
180 grit sandpaper

## 30 PAINTING THE BODY

Several kinds of paint will adhere well to the clear polycarbonate body without weakening it.

Avoid spray lacquers which can warp and damage the plastic.

Recommended paints include Parma and MRP/Hobby Nox (which must be airbrushed), Speedy Dry Rustoleum and artist's acrylics like BoLink's Mr. Concours brand.



Wash thoroughly in warm, soapy water.

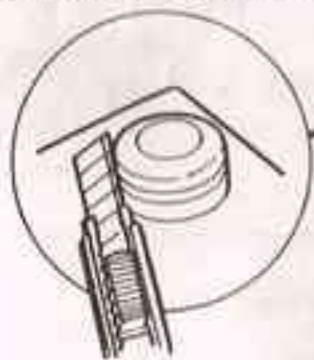


Masking tape for stripping.

Acrylics are easiest because they thin with water and can be brushed on.

## 31 LIGHTS AND MOUNTING

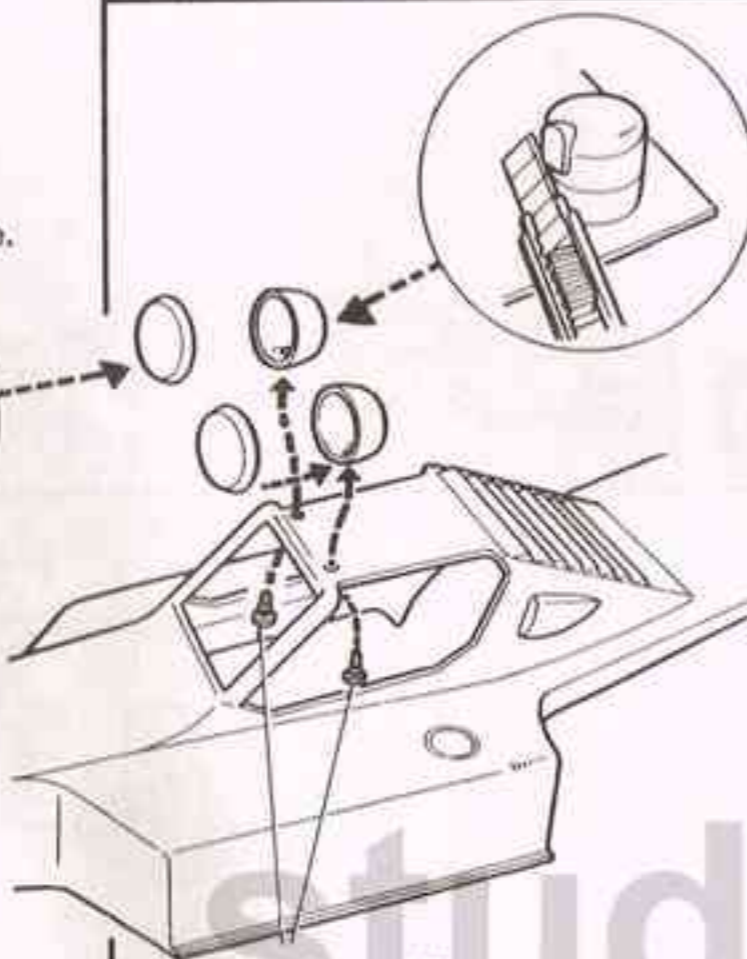
Trim light parts from the vacuum-formed sheet. Paint back half and glue on lens with cyanoacrylate.



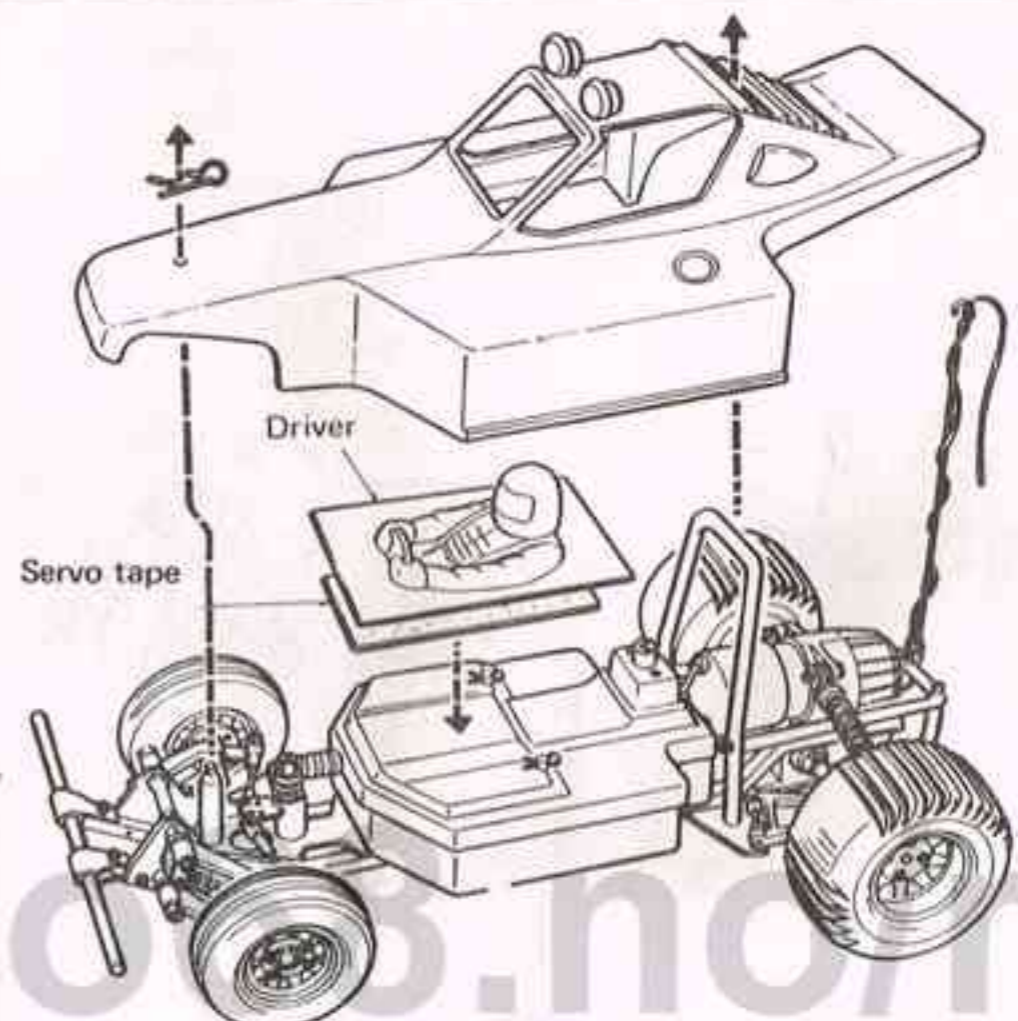
2x6mm self-tapping screws (2)



Body pin



2x6mm self-tapping screws



Driver

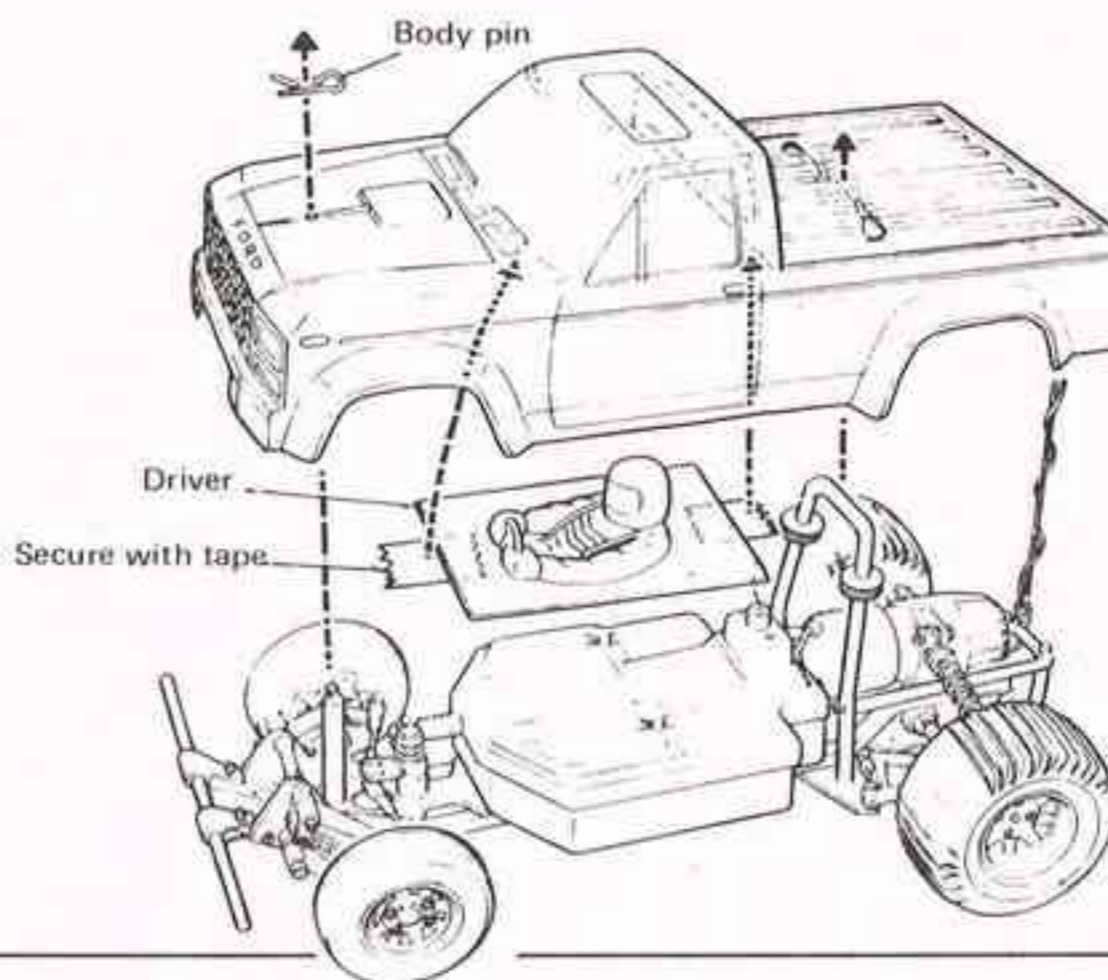
Servo tape

## 32 MOUNTING THE BODY

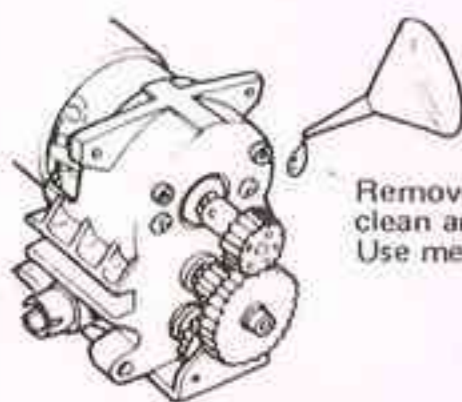
Check the wheel well cut-outs for proper tire clearance.



Body pin



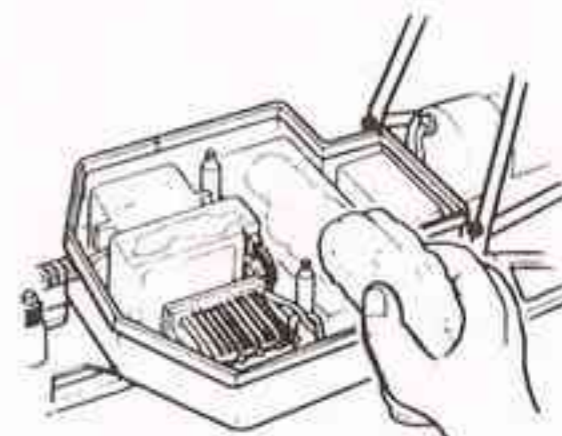
### IMPORTANT PRECAUTIONS!



Remove gearbox cover and clean and oil gears frequently. Use medium grade gear lube.

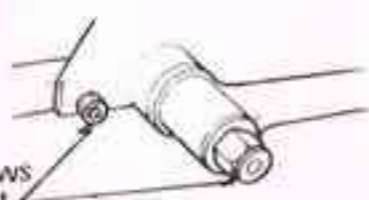


Check suspension and half-shafts for weeds and other debris that can become lodged in them.

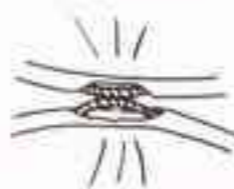


Use a cloth or brush to remove dust and dirt after each running.

Periodically check all screws and nuts to make sure that they are secure.



Check all wiring insulation.



### THE AYK SUPER TRAIL RACING TEAM.

Your completed AYK Super Trail can compete in the ORRCA stock class with restricted modification and the Mabuchi RS540 motor. Ball bearings and machined gears are also legal, and there is a limit of 6 cells (7.2v). There are also Modified and Open classes which allow elaborate modifications, rewound motors and unlimited battery packs.

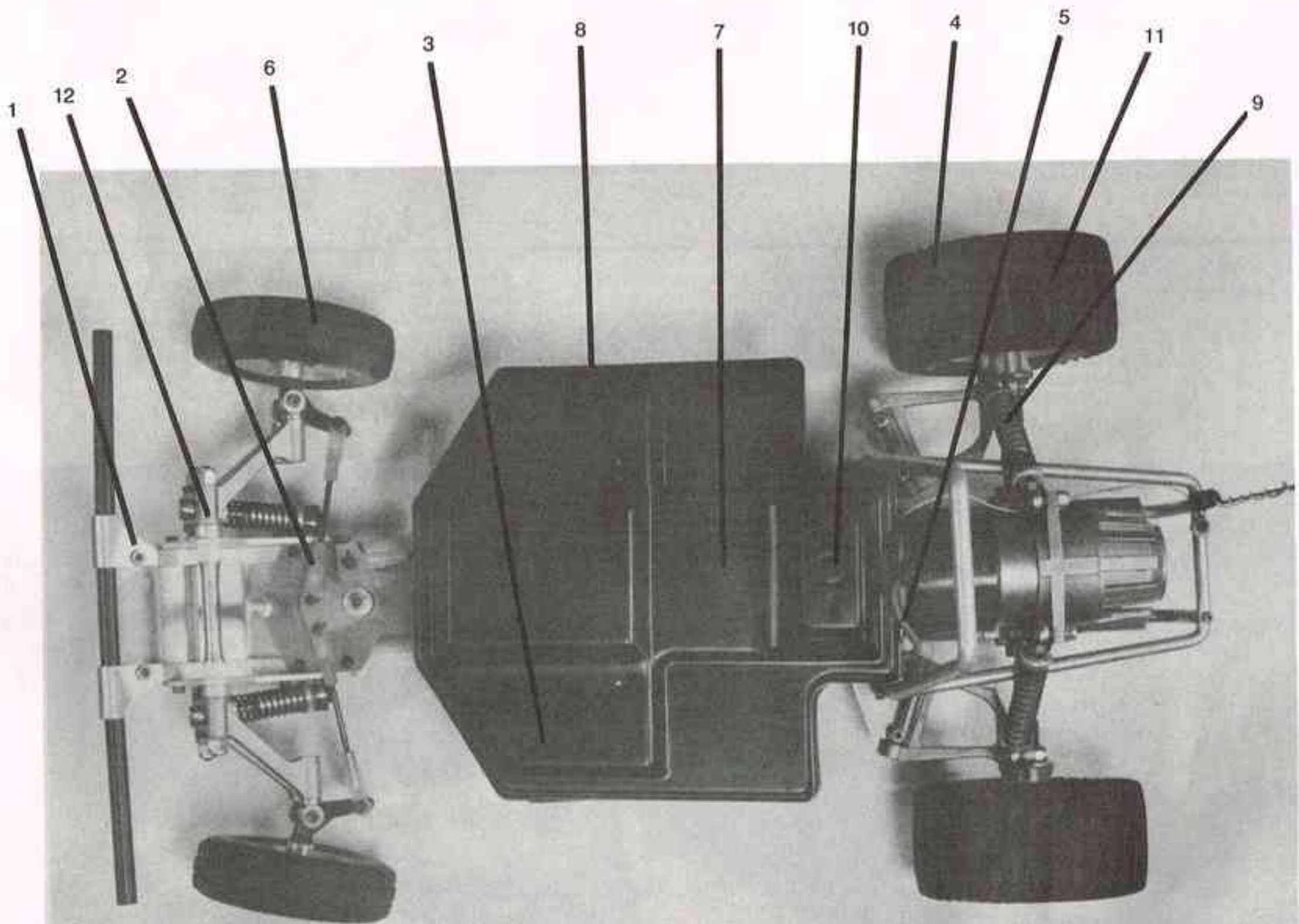
Because the Super Trail is designed for optimum off-road competition it is subject to AYK's continuing development program. Therefore, minor component changes from these instructions may occur. Please refer to supplements for this information.



## INSPECTION BEFORE RUNNING

To prevent problems and accidents, inspect the following before running the model. It is recommended that you make inspections with the model put on a base so that the wheels rotate freely. When running the car the first time, run it slowly inspecting the conditions of the speed controller and steering for 5 minutes.

- 1- Make sure all screws are tight after running. If they are loose apply screw locking agent and tighten.
- 2- Make sure that the steering operates properly in forward and reverse directions. Make sure the model runs straight forward. If it turns to the right or left adjust the trim lever of the steering stick on the transmitter. You can also adjust the ball joint/threaded rods at the servo saver.
- 3- Make sure that the speed controller can be properly changed between Fast and Slow and that the model properly stops.
- 4- Make sure the lock nuts for fastening wheels are tight.
- 5- Make sure that the wires are not in a position to be broken and that their insulation is not peeling off. If the insulation peels off a short circuit may occur. Insulate such portions of the wire by winding vinyl tape or the like around the wires.
- 6- Make sure that the front wheels rotate freely. Be sure to oil the wheel bearings.
- 7- Make sure that the Ni-Cad motor battery has been properly charged.
- 8- The radio control system is liable to be affected by water. Holes through which water may enter should be sealed with silicone rubber.
- 9- Make sure that the shock absorbers properly operate. If they do not absorb shocks well, the driving force of the wheels is not transmitted to the ground well. Move the shocks by hand. If they slowly return to the original position, they are operating properly.
- 10- Make sure the batteries of the receiver and transmitter are fresh.
- 11- Make sure that the rear wheels rotate freely.
- 12- All chassis parts should be lubricated with lightweight household oil like 3 in 1 oil.



studio68.no/rc

## TROUBLE SHOOTING

If the car does not run well read the following.

### Motor Does Not Operate

- 1- The speed controller is actuated by the servo. If the servo does not operate make sure transmitter and receiver switches are turned on.
- 2- If the motor does not operate with the switches on, make sure the battery source is charged. Check to make sure the wiring is correct and that no wires are broken.
- 3- If the motor still does not function, remove the wires and check the motor by directly connecting its lead wires to the power source.
- 4- If the radio unit is not functioning, check with the manufacturer for repair.

### Motor Operates But Car Does Not Move

- 5- The screws of the pinion gear and drive gear may be loose. Tighten the screws.
- 6- The wheels may not be properly fitted in. Tighten the nuts. Check the screws of the half shaft drive joints. Tighten if necessary.

### Speed Is Slow

- 7- The batteries have not been correctly charged.

8- The speed controller does not move well between fast and slow. Adjust the servo horn length for better movement of the speed controller.

9- Oil supply may be low in shaft and bearing area. Make sure there is enough lubrication so the shaft and bearings do not over-heat and bind.

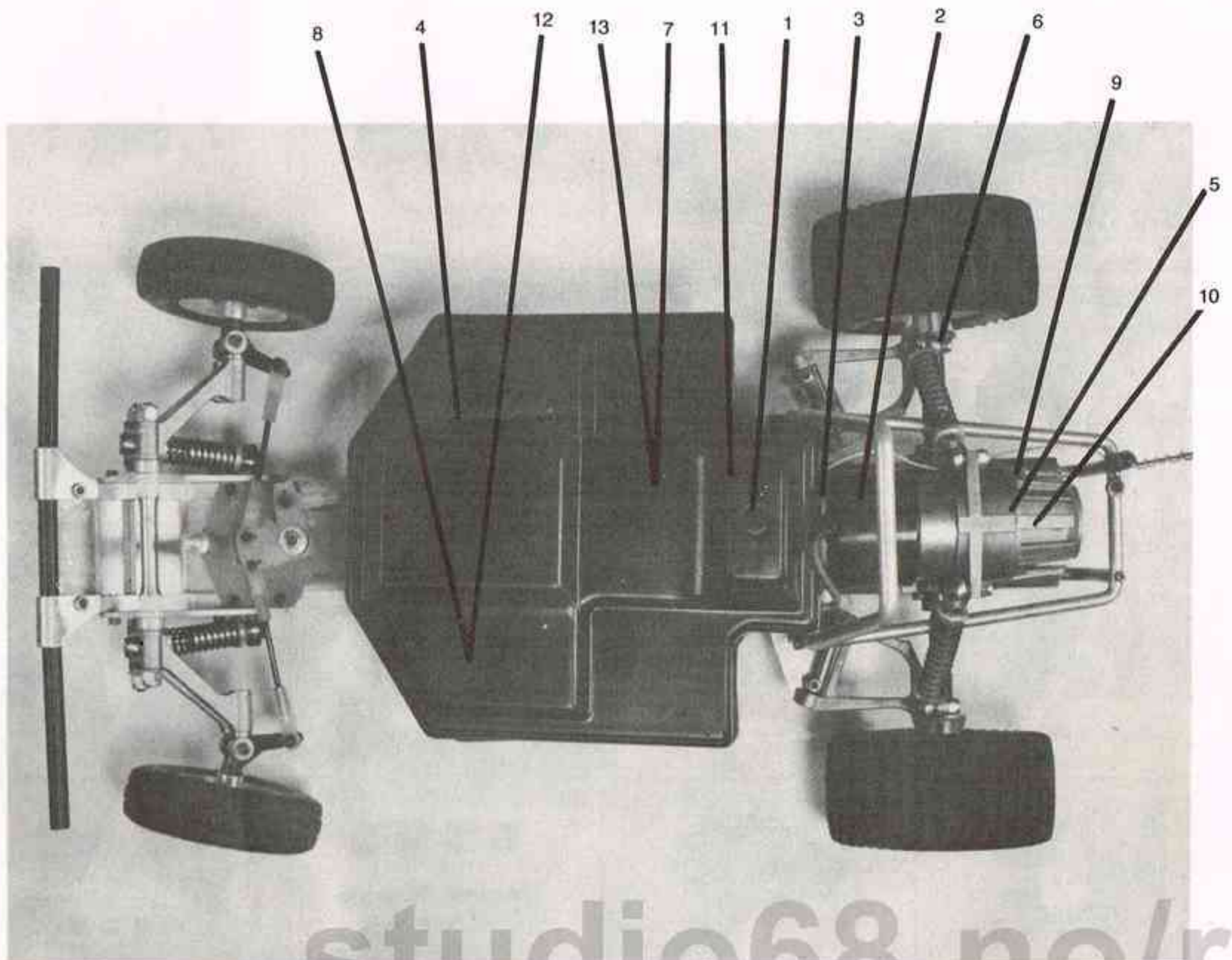
10- Debris may be caught on the shaft. Remove the debris so over-heating does not occur.

### Car Does Not Turn As Expected

11- Check the movement of the steering servo. Battery source may not supply enough current to operate the servo. Replace radio batteries.

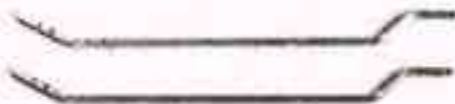



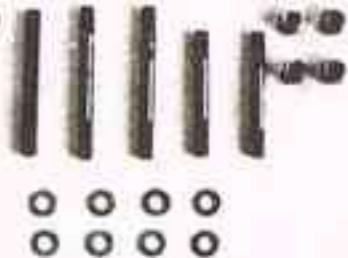























### Forward and Backward Functions are Reversed

- 12- Make sure the speed controller and motor wires are connected correctly.
- 13- Make sure the batteries are connected correctly.

























studio68.no/rc

Replacement Parts

<p>RB : 1</p>  <p>Chassis frame rails</p>	<p>RB : 2</p>  <p>Radio Case</p>	<p>RB : 3</p>  <p>Gearbox w/bearings</p>	<p>RB : 4</p>  <p>Front bumper kit</p>
<p>RB : 5</p>  <p>Front suspension extender set</p>	<p>RB : 6</p>  <p>Front and rear hub set</p>	<p>RB : 7</p>  <p>Front shock set</p>	<p>RB : 8</p>  <p>Front tire and wheel set</p>
<p>RB : 9</p>  <p>Rear shock set</p>	<p>RB : 10</p>  <p>Rear tire and wheel set</p>	<p>RB : 11</p>  <p>3mm ball bearings.</p>	<p>RB : 12</p>  <p>4mm ball bearings</p>
<p>RB : 13</p>  <p>Rubber sealing set (motor and switch covers, radio case gasket, grommets)</p>	<p>RB : 14</p>  <p>Front suspension arms</p>	<p>RB : 15</p>  <p>Side plate set w/collars</p>	<p>RB : 16</p>  <p>Ball joint set (4)</p>
<p>RB : 17</p>  <p>Steering arm set</p>	<p>RB : 18</p>  <p>16T. brass pinion</p>	<p>RB : 19</p>  <p>18T. brass pinion</p>	<p>RB : 20</p>  <p>27Tx10. brass idler gear</p>
<p>RB : 21</p>  <p>29Tx10. brass idler gear</p>	<p>RB : 22</p>  <p>20T. brass idler gear</p>	<p>RB : 23</p>  <p>10T Machined bevel pinion</p>	<p>RB : 24</p>  <p>20T Machined bevel drive gear</p>
<p>RB : 25</p>  <p>Speed controller set</p>	<p>RB : 26</p>  <p>Servo tape</p>	<p>RB : 27</p>  <p>Drive joint/half shaft set</p>	<p>RB : 28</p>  <p>Rear trailing link set</p>

Replacement Parts

<p>RB : 29</p>  <p>Front and rear plate set</p>	<p>RB : 30</p>  <p>Roll bar, bumper and guards</p>	<p>RB : 31</p>  <p>Threaded rods and ball joints</p>	<p>RB : 32</p>  <p>2mm machine nuts</p>
<p>RB : 33</p>  <p>2.6x5mm cap screws</p>	<p>RB : 34</p>  <p>2.6x8mm cap screws</p>	<p>RB : 35</p>  <p>2.6x10mm cap screws</p>	<p>RB : 36</p>  <p>2x12mm cap screws</p>
<p>RB : 37</p>  <p>Baja Bison body shell</p>	<p>RB : 38</p>  <p>Ford 4x4 body shell</p>	<p>RB : 39</p>  <p>Decals</p>	<p>RB : 40</p>  <p>Baja Bison body post</p>
<p>RB : 41</p>  <p>Ford Truck body post</p>	<p>RB : 42</p>  <p>Speed plate and wiper</p>	<p>RB : 43</p>  <p>Driver</p>	<p>RB:44</p>  <p>3mm Lock nuts</p>
<p>RB:45</p>  <p>Antenna</p>	<p>RB:46</p>  <p>4mm Lock nuts</p>	<p>RB:47</p>  <p>3x15mm cap screw</p>	<p>TX-100</p>  <p>Super charger</p>
<p>★ GZ480 GZ240</p>  <p>Motor</p>	<p>GS1200</p>  <p>7.2v/1200mAh NiCad pack</p>	<p>★</p> <p>The GZ240 and GZ480 motors are available but illegal to run in stock class. They are legal in open and modified classes.</p>	

**ayk**  
**ROYAGI METALS CO.LTD**

WORLD R/C IMPORT/EXPORT

10440 Pioneer Boulevard/Unit I-4/Santa Fe Springs, CA 90670

sta68.no/rc