

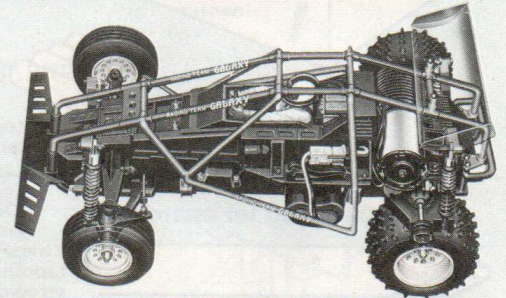
# GALAXY-RS

## 1/10 SCALE RADIO CONTROL OFF-ROAD RACING BUGGY

READY TO ASSEMBLE RADIO CONTROL OFF-ROAD RACING CAR MODEL KIT/REQUIRES TWO CHANNEL, TWO SERVO CONTROL EQUIPMENT AND 7.2V RACING PACK Ni-Cd BATTERY/INCLUDES MABUCHI RS540S POWERFUL MOTOR

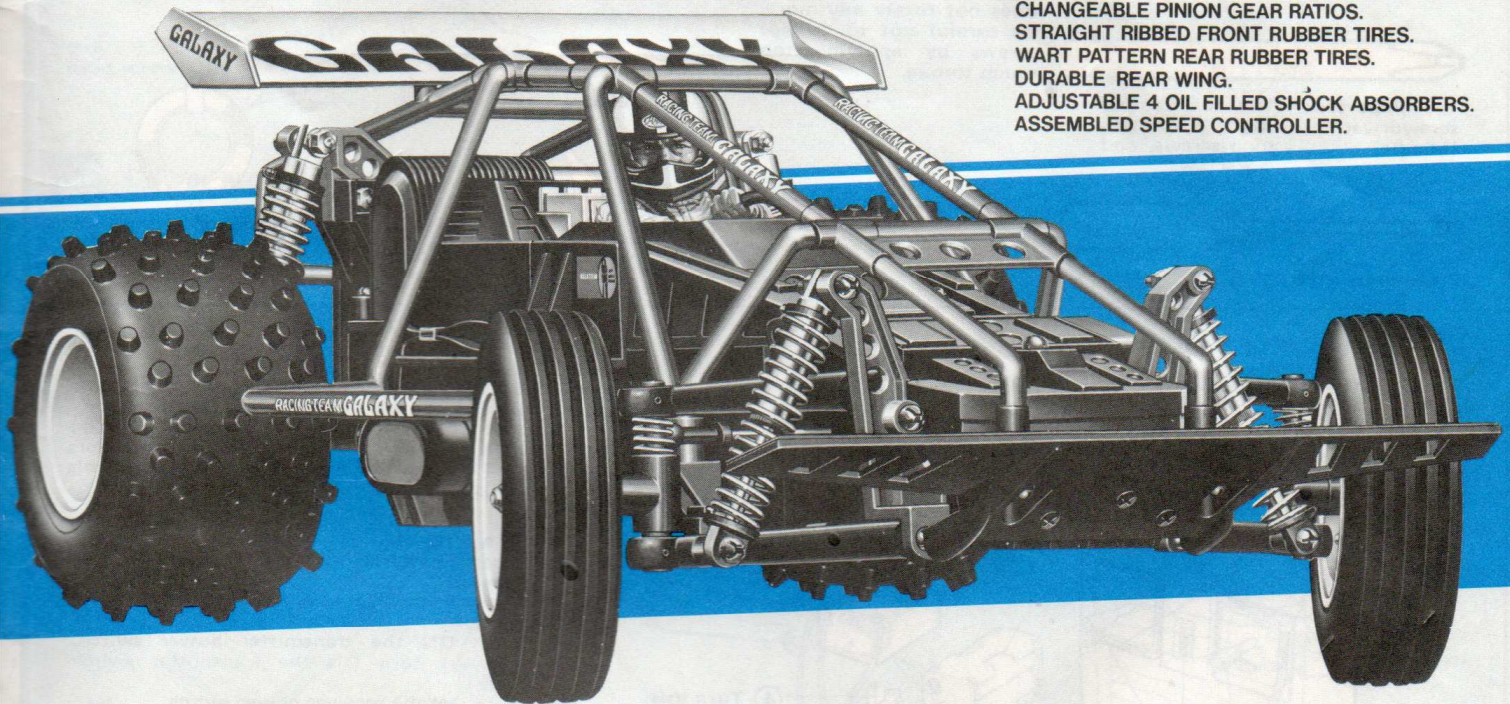
With RS-540S High Speed Motor

1/10 Size, Electrically Powered, Radio Controlled Buggy Racing Model



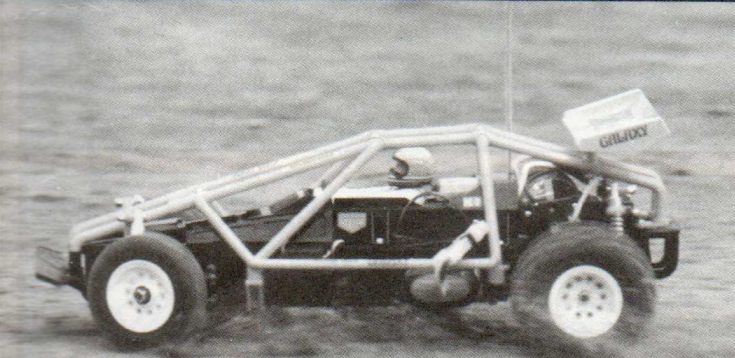
### MODELLING SKILLS HELPFUL IF UNDER 10 YEARS OF AGE.

DIFFERENTIAL GEAR DRIVE SYSTEM.  
CHANGEABLE PINION GEAR RATIOS.  
STRAIGHT RIBBED FRONT RUBBER TIRES.  
WART PATTERN REAR RUBBER TIRES.  
DURABLE REAR WING.  
ADJUSTABLE 4 OIL FILLED SHOCK ABSORBERS.  
ASSEMBLED SPEED CONTROLLER.



Tokyo Marui Plastic Model Co., Ltd.

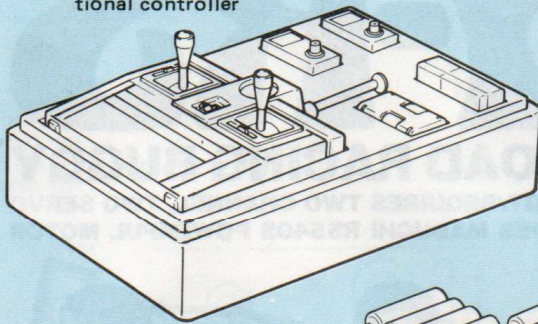
## HIGH PERFORMANCE R/C OFF-ROAD RACING CAR





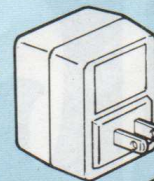
### «Parts not included in the kit»

- 2-channel proportional controller

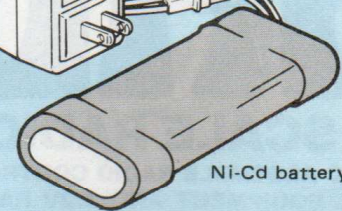


Most regular 2-channel proportional controllers may be used, but be careful as some types do not fit with this model. For those who are going to purchase a controller, the following models are recommended:  
 FUTABA . . . ATTACK  
 SAMWA . . . DASH  
 J.R. . . . BEAT 2  
 K.O. . . . FX-II

Special battery charger

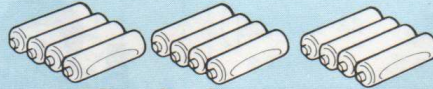


- Battery for driving: 7.2 or 6 V Ni-Cd battery



Ni-Cd battery

Use either 6 V or 7.2 V racing Ni-Cd battery. The battery may be recharged up to 300 times using a special charger connecting with household 100 V current or a quick charger (15 to 20 min) connecting with a 12 V power supply such as a car cigarette lighter plug.



- Batteries for proportional controller

### «Tools required for assembly»

+ Only phillips type screwdrivers are shown in actual sizes.



- + Phillips type screwdriver (Large) Use for  $\phi$  3 screws,  $\phi$  3 and  $\phi$  4 tapping screws.



- + Phillips type screwdriver (Middle) Use for damper shaft,  $\phi$  2.6 tapping screws, and  $\phi$  2 screws.

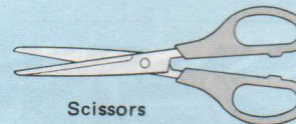


Plain screwdriver (Middle)

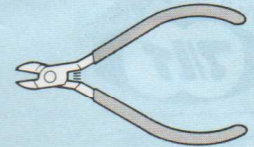
This kit includes many tapping screws. Use proper screwdriver and adequate torque to tighten screws. Release turning pressure on the screwdriver when the screw becomes tight and does not rotate any more. Be careful not to damage screws by applying too much torque.



Radio pliers



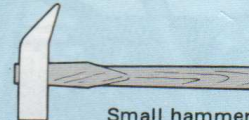
Scissors



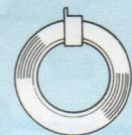
Cutting pliers



Cutter

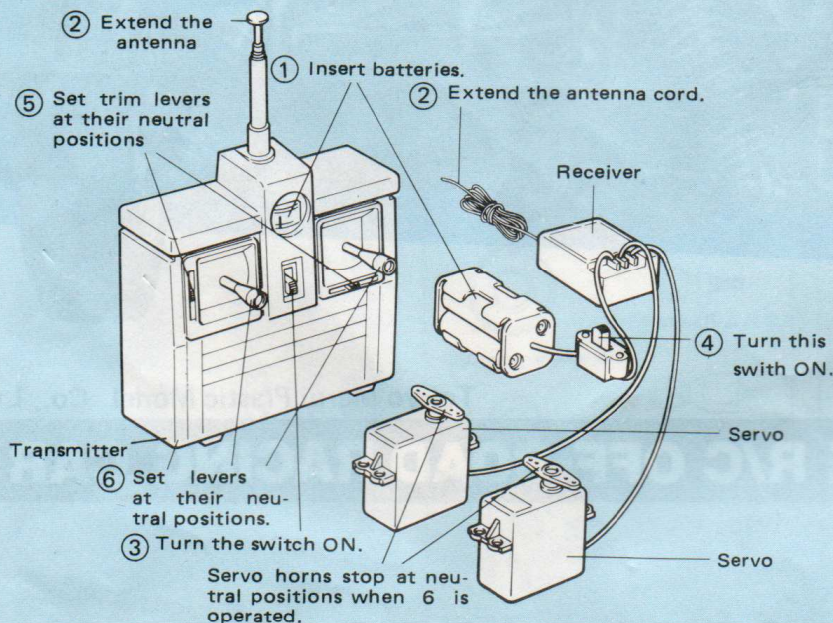


Small hammer



Insulation vinyl tape and scotch tape

### «Radio control unit»





Most of 2-channel digital proportional radio controller can be used for this model. But be careful as some types of 2-channel unit do not fit. Receivers and servos of controllers with 3 channels or more may not fit with this model.

#### • Check the controller operation

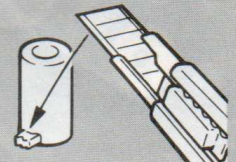
- 1 Insert batteries in the transmitter and receiver.
- 2 Extend the antenna of transmitter and receiver.
- 3 Turn ON the transmitter power switch. (Always turn ON the transmitter switch first.)
- 4 Turn ON the receiver power switch.
- 5 Set the levers at their neutral positions.
- 6 Set the levers at their neutral positions. (The servo horns stop at their neutral positions.)
- 7 Check servos operate correctly by moving levers.
- 8 Turn off the receiver and then transmitter switches in this order when test is complete.

See the radio control equipment instruction sheet for details.

### ★ Read the following instructions carefully before assembly

- Read the entire assembly instruction before beginning assembly.
- A  mark indicates the portion where grease included in the kit must be applied. Use a small hammer when the  mark is shown in the figure.
- The actual sizes of all screws, washers, etc. are shown to simplify the assembly and ensure that correct parts are used.

- Some screws, nuts, and washers may be left over as more than required numbers are included in this kit. Use them as spare parts.
- Thoroughly remove plastic part burrs with a cutter.
- Strengthened nylon part burrs must be completely removed as they may impair driving performance. (Be careful not to cut your fingers with a cutter.)





«Metallic part actual sizes used on P. 3»

φ 3 x 8 flat-head screw  
..... 2 pcs

2 mm nut  
..... 2 pcs

Front shaft ..... 2 pcs

Front suspension shaft  
(Long) ..... 2 pcs

φ 3 x 12 tapping screw  
..... 2 pcs

3 mm nut  
..... 5 pcs

Free ball (A) .... 2 pcs

φ 2 x 16 Spring pin ..... 2 pcs

3 mm spring washer  
..... 4 pcs

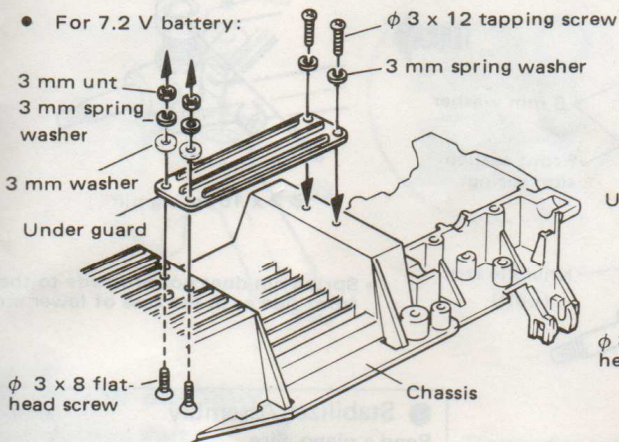
3 mm washer  
..... 4 pcs

φ 3 x 8 screw  
..... 3 pcs

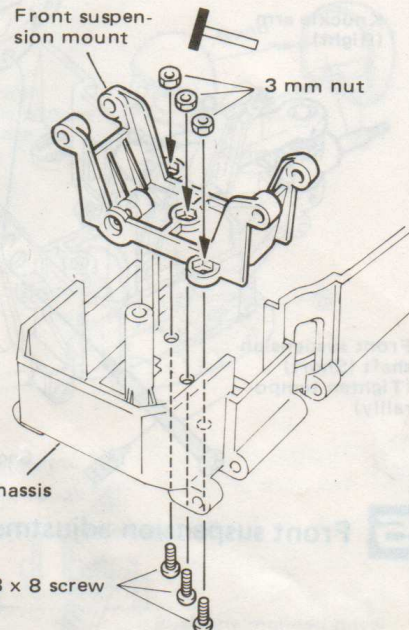
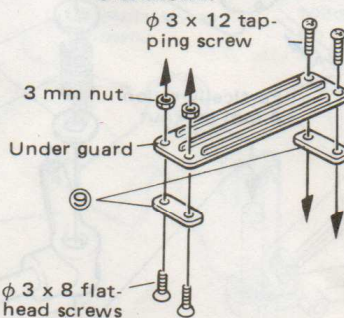
φ 3 x 10 spacer ..... 4 pcs

## 1 Under guard and front suspension mount assembly

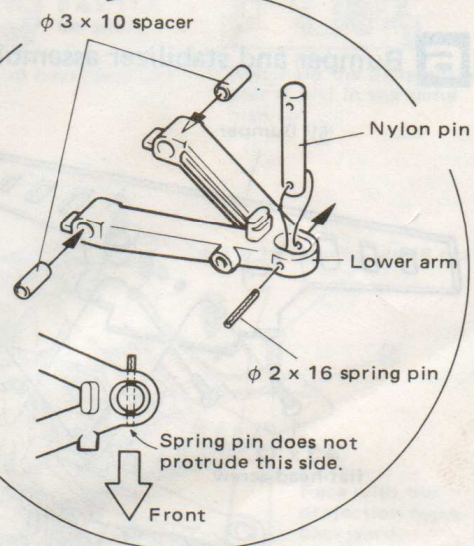
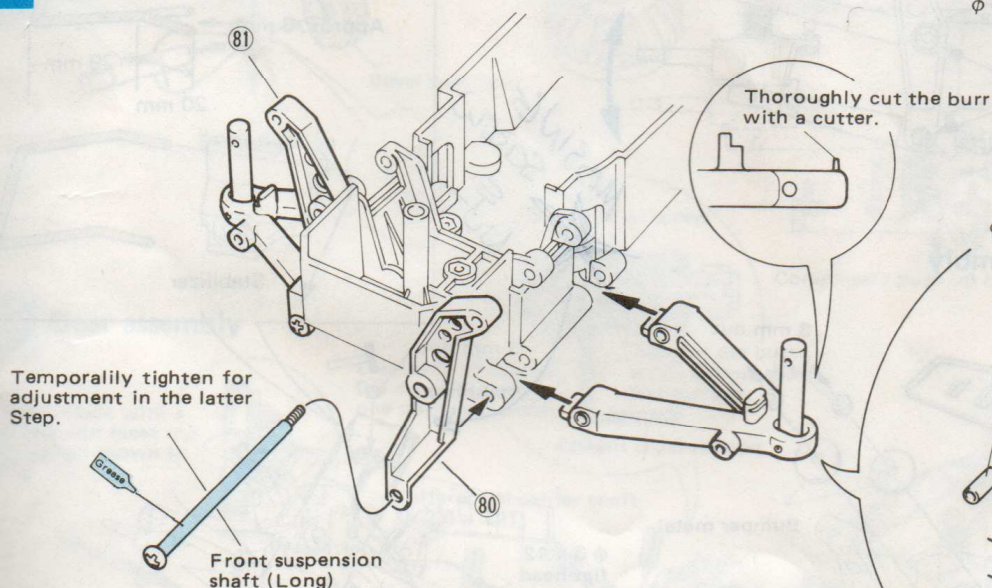
• For 7.2 V battery:



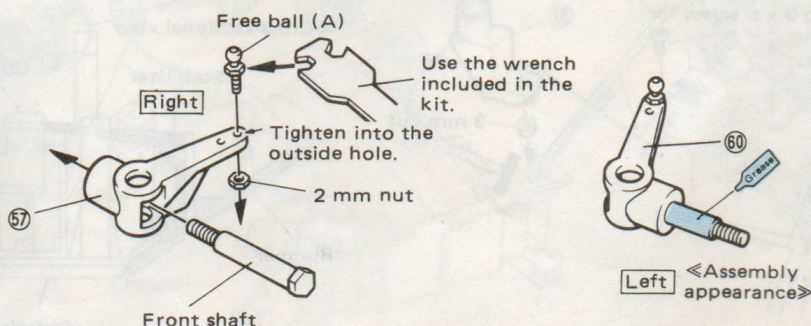
• For 6 V battery : Install parts 9 as shown.



## 2 Lower arm assembly



## 3 Knuckle arm assembly





«Metallic part actual sizes

used on P. 4»

φ 3 x 6 screw  
..... 2 pcs

φ 3 x 12 flat-head screw  
..... 3 pcs

φ 2 x 16 spring pin  
..... 2 pcs

Partially nylon 4 mm locknut ..... 2 pcs

3 mm nut  
..... 5 pcs

6 mm washer  
..... 4 pcs

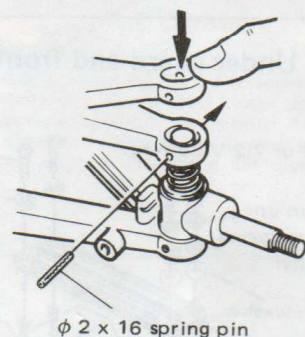
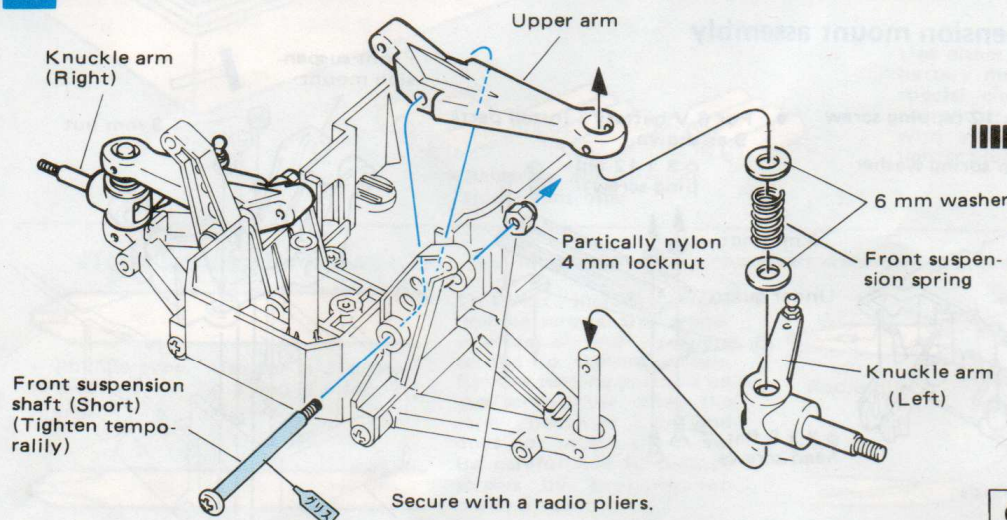
Bumper metal  
..... 2 pcs

Piano wire

Front suspension shaft (short) ..... 2 pcs

Front suspension spring  
..... 2 pcs

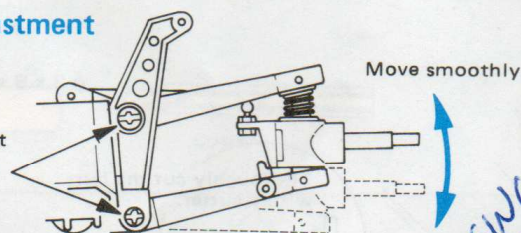
## 4 Upper arm assembly



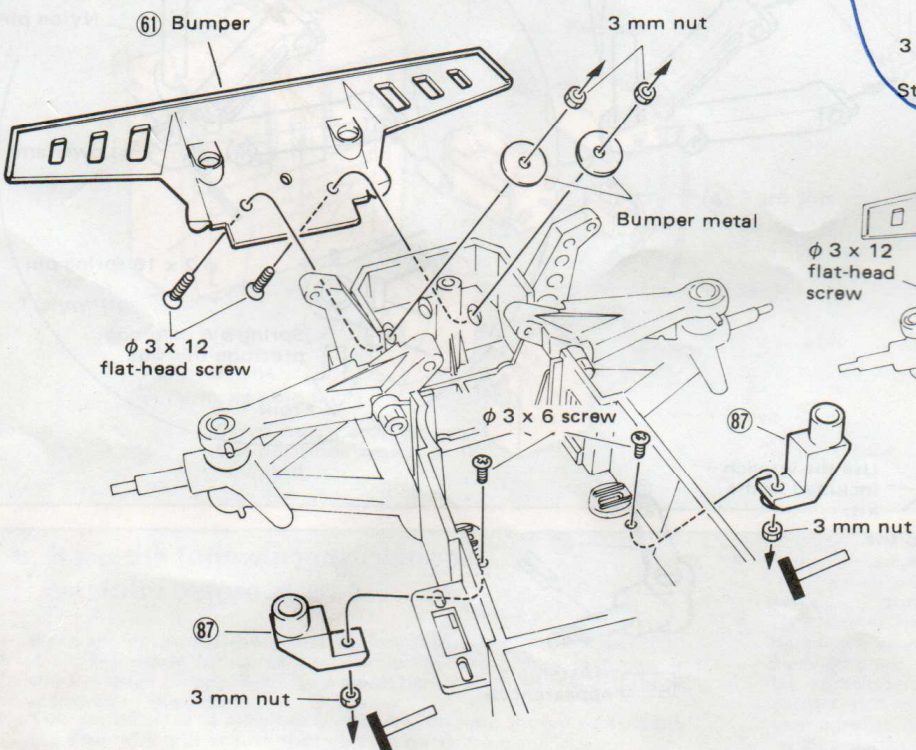
\* Spring pin does not protrude to the front side as in the case of lower arm.

## 5 Front suspension adjustment

Tighten these shafts such that upper and lower arms move smoothly.



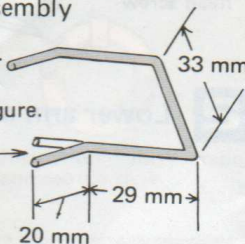
## 6 Bumper and stabilizer assembly



### ● Stabilizer Assembly

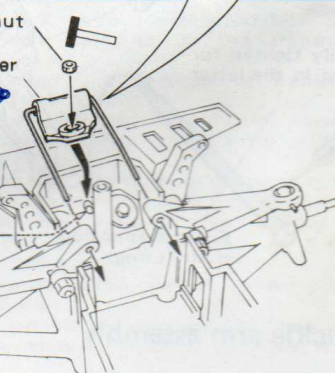
Bend a piano wire, at a bench or other convenient area, as shown in the Figure.

Approx. 3 mm

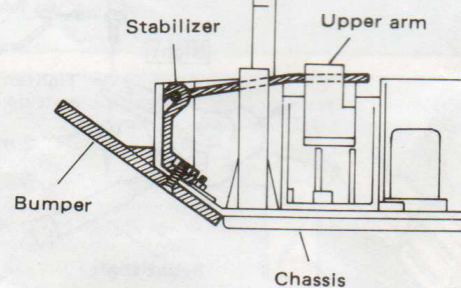


Stabilizer

MISSING SCREW & NUT

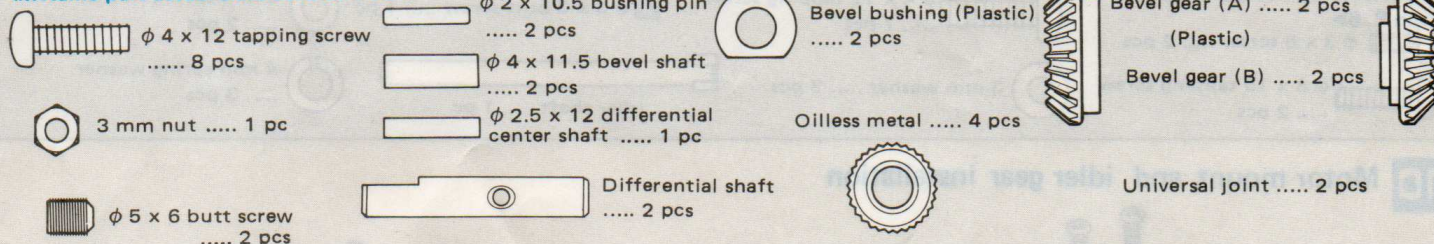


Cross-sectional view

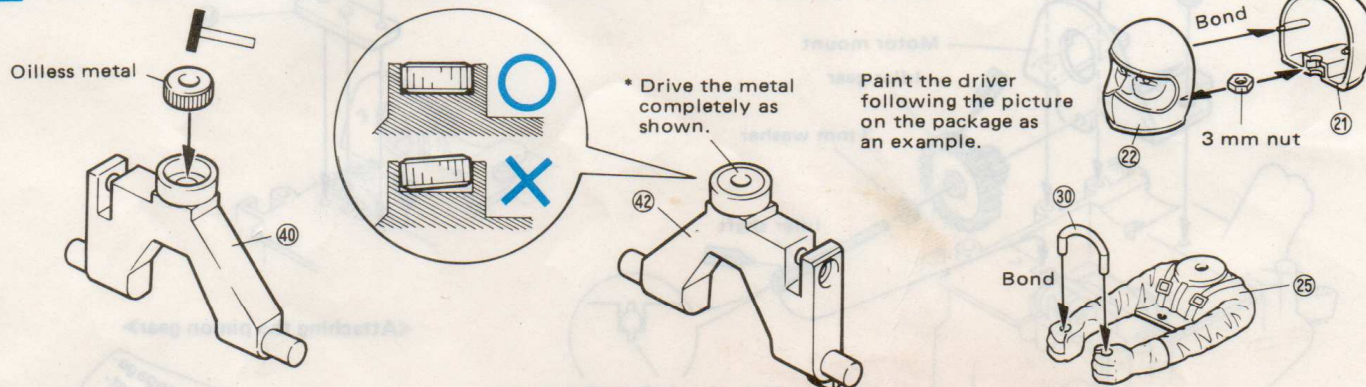




«Metallic part actual sizes used on P. 5»

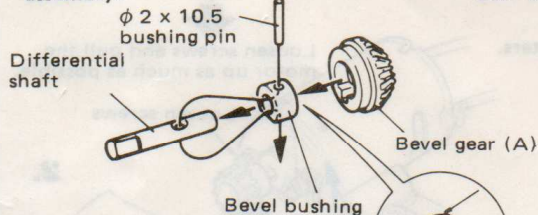


## 7 Driving the metal and bonding the driver

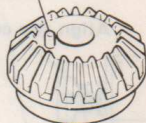


## 8 Gear assembly

### «Differential shaft assembly»

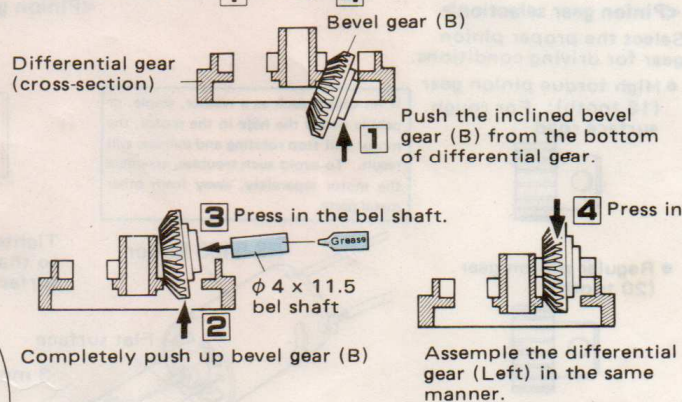


Thoroughly cut this burr with a cutter.

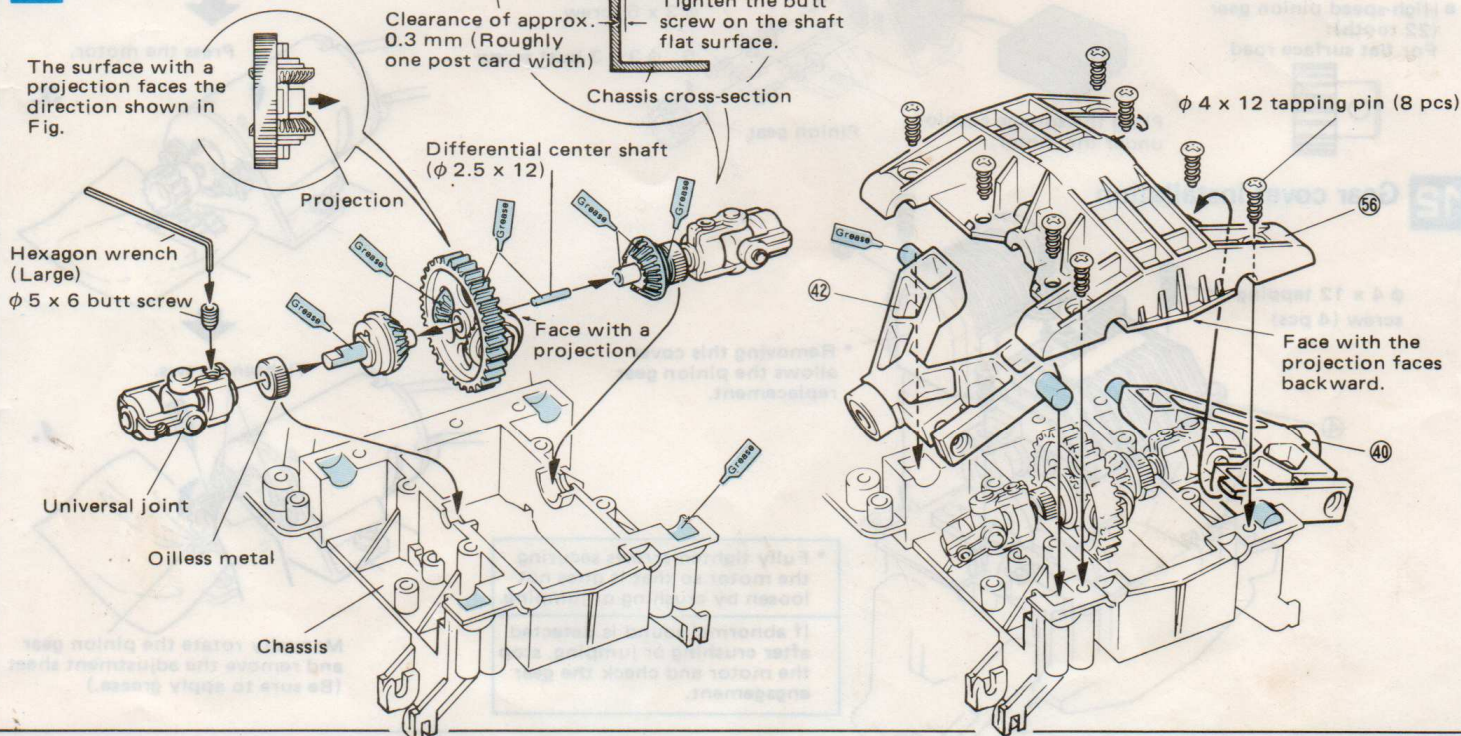


### «Differential gear assembly»

Assemble in order 1 through 4



## 9 Gear assembly





«Metallic part actual sizes used on P. 6»

φ 3 x 6 screw ..... 2 pcs

φ 3 x 10 tapping screw ..... 2 pcs

φ 4 x 12 tapping screw ..... 7 pcs

3 mm washer ..... 3 pcs

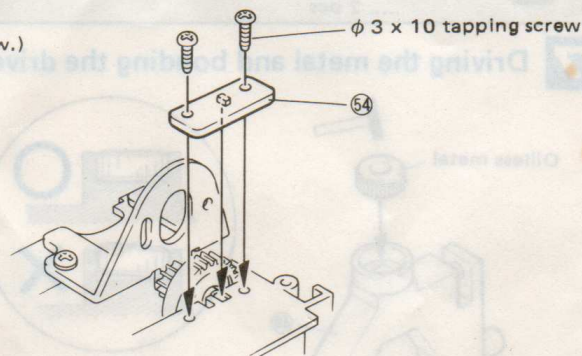
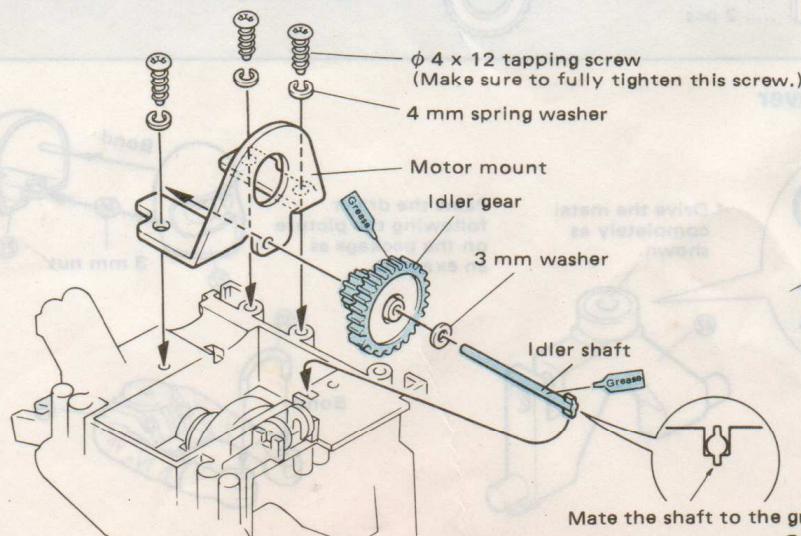
φ 3 x 3 butt screw ..... 1 pc

Idler shaft ..... 1 pc

3 mm spring washer ..... 2 pcs

4 mm spring washer ..... 3 pcs

## 10 Motor mount and idler gear installation



«Attaching the pinion gear»

## 11 Pinion gear and motor installation

The motor becomes hot after operation. Be careful not to burn yourself.

«Pinion gear position»

«Pinion gear selection»

Select the proper pinion gear for driving conditions.

- High torque pinion gear (18 tooth): For rough surface road

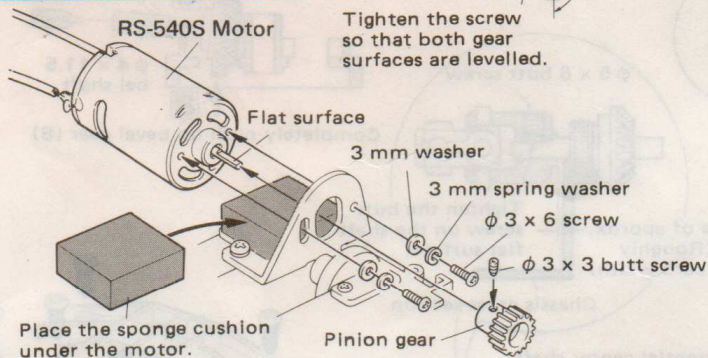


If an object such as a washer, staple, or pebble enters the hole in the motor, the motor will stop rotating and damage will result. To avoid such troubles, assemble the motor separately, away from other metal parts.

- Regular pinion gear (20 tooth):



- High-speed pinion gear (22 tooth): For flat surface road



Align the centers.

Tighten the screw so that both gear surfaces are levelled.

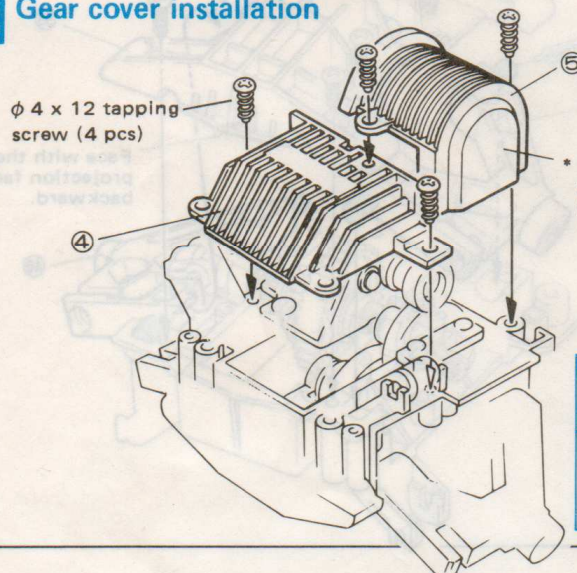
Loosen screws and pull the motor up as much as possible.

Loosen screws

Place the adjustment sheet between the pinion gear and idler gear.

Press the motor.

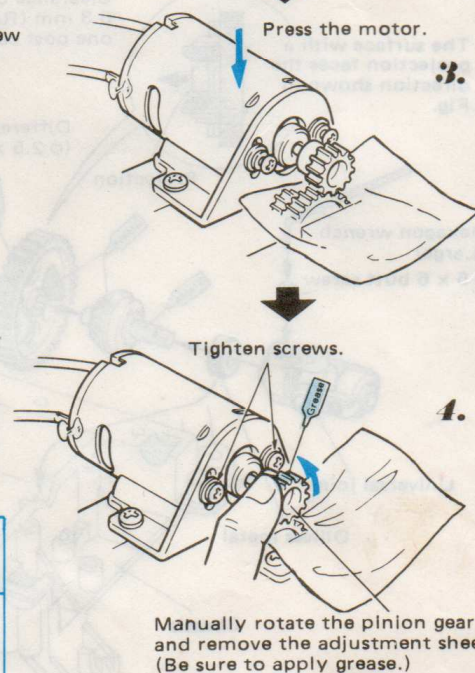
## 12 Gear cover installation



\* Removing this cover allows the pinion gear replacement.

\* Fully tighten screws securing the motor so that it does not loosen by crushing or jumping.

If abnormal sound is detected after crushing or jumping, stop the motor and check the gear engagement.



Manually rotate the pinion gear and remove the adjustment sheet (Be sure to apply grease.)



«Metallic part actual sizes used on P. 7»

$\phi 3 \times 10$  screw ..... 4 pcs

$\phi 3 \times 18$  screw ..... 2 pcs

$\phi 2.6 \times 11$  tapping screw ..... 1 pc  
(For servos of FUTABA, JR, or KO)

$\phi 3 \times 10$  tapping screw ..... 3 pcs

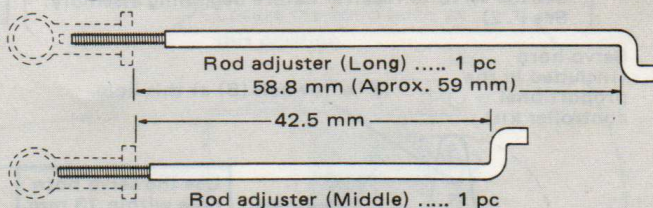
3 mm spring washer ..... 4 pcs

$\phi 3 \times 14$  screw ..... 2 pcs

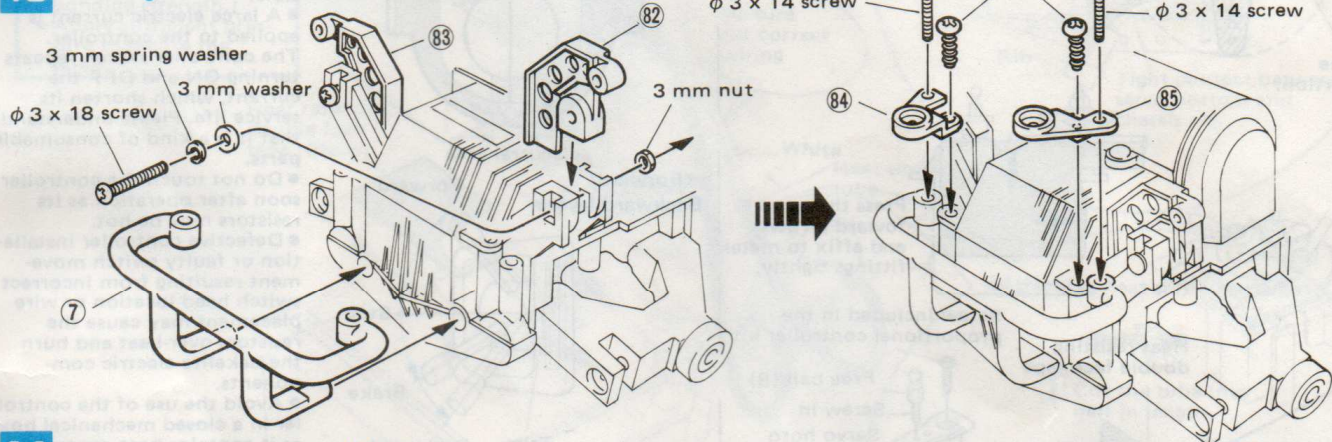
$\phi 4 \times 12$  tapping screw ..... 2 pcs

3 mm washer ..... 8 pcs

3 mm nut ..... 6 pcs



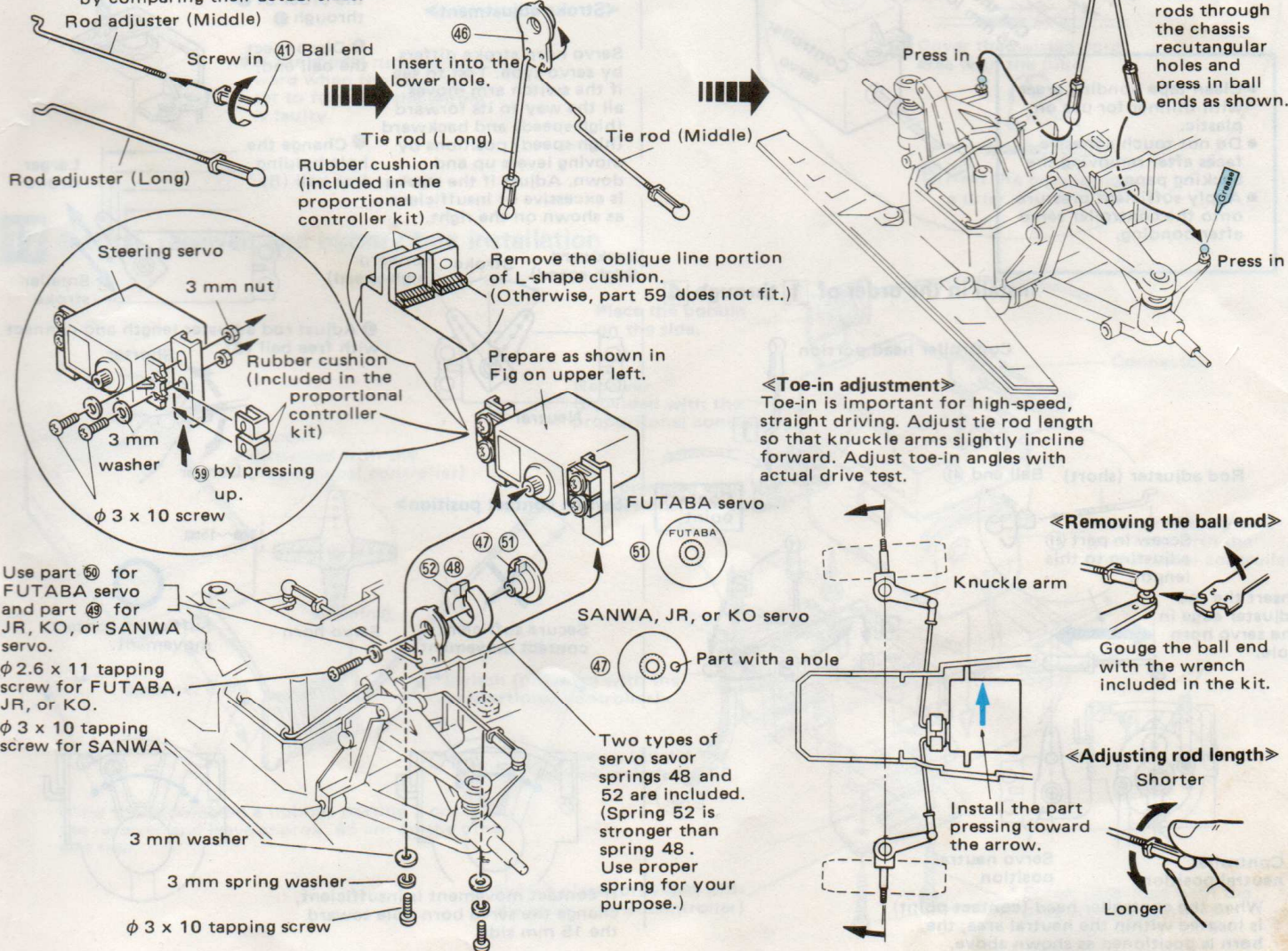
## 13 Rear guard installation



## 14 Steering servo assembly

«Tie rod assembly»

\* Ensure the use of correct components by comparing their actual sizes.





# 15 Speed controller assembly and adjustment

(Set the servo to receiver before beginning assembly. See P. 2)

«Metallic part actual sizes used on P. 8»

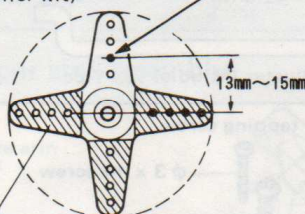
2 mm nut  
..... 1 pc

Free ball (B)  
..... 1 pc

Rod adjuster (short)  
..... 1 pc

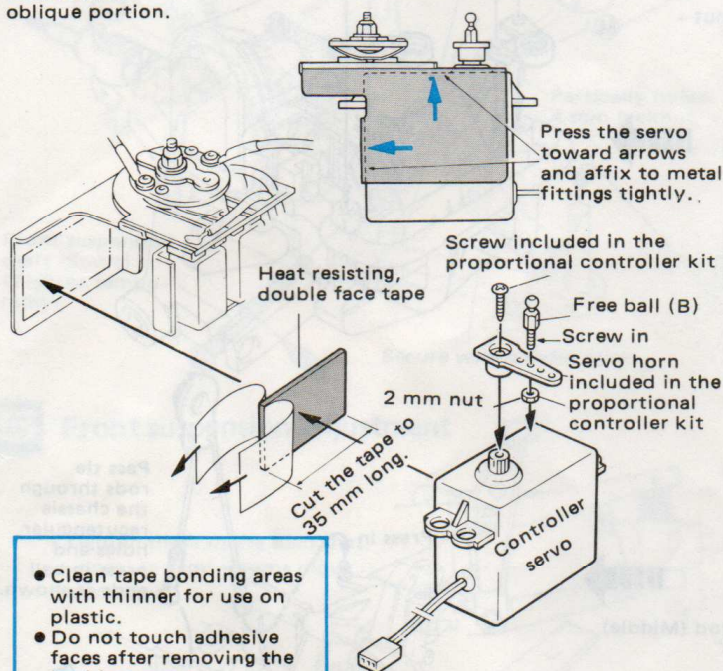
Servo horn  
(Included in the  
proportional  
controller kit)

Fix free ball (B) at this hole.



Use the servo horn  
hole within 13 mm  
or 15 mm from the  
center.

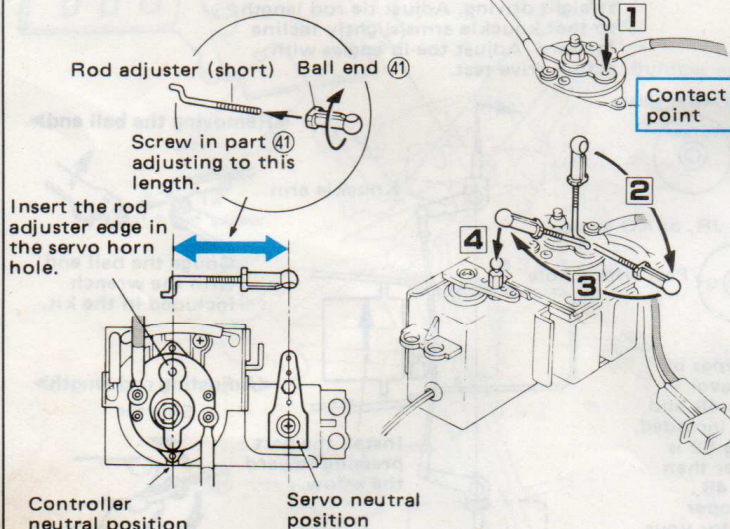
Remove the  
oblique portion.



- Clean tape bonding areas with thinner for use on plastic.
- Do not touch adhesive faces after removing the backing paper
- Apply sufficient pressure onto the controller servo after bonding.

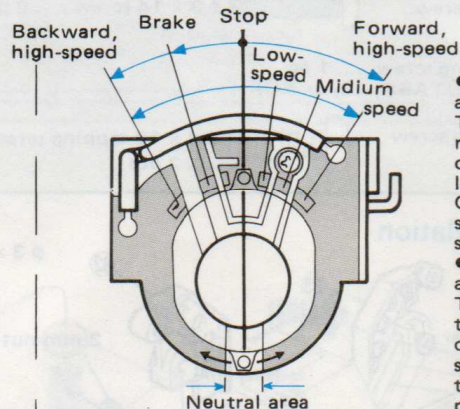
Install in the order of 1 through 4

Controller head portion

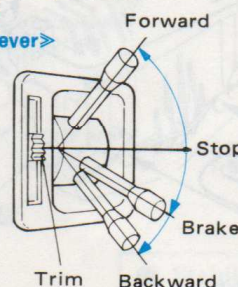


Controller neutral position  
Servo neutral position

When the controller head (contact point)  
is located within the neutral area, the  
horn is positioned as shown above.



«Forward/  
Backward lever»

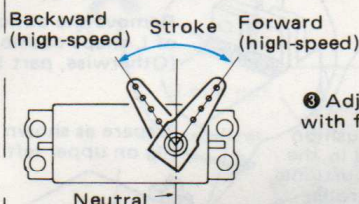


«Switch positions»

- The controller may be damaged if it is used incorrectly. The controller has built-in resistors which may over-heat or burn if it is used only at low or medium speed ranges. Operate the model at its high-speed setting as much as possible.
- A large electric current is applied to the controller. The controller switch repeats turning ON and OFF the current, which shortens its service life. Please understand that it is a kind of consumable parts.
- Do not touch the controller soon after operation as its resistors may be hot.
- Defective controller installation or faulty switch movement resulting from incorrect switch head location or wire placement may cause the resistors over-heat and burn the bakelite electric components.
- Avoid the use of the controller in a closed mechanical box as it contains heat generating resistors.

«Stroke adjustment»

Servo horn stroke differs by servo type. Test to see if the switch arm moves all the way to its forward (high-speed) and backward (high-speed) positions by moving levers up and down. Adjust if the stroke is excessive or insufficient as shown on the right.

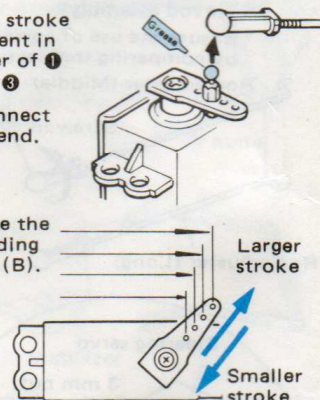


Perform stroke  
adjustment in  
the order of 1  
through 4

1 Disconnect  
the ball end.

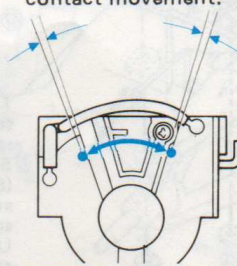
2 Change the  
hole holding  
free ball (B).

3 Adjust rod adjuster length and connect  
with free ball (B).



«Switch contact position»

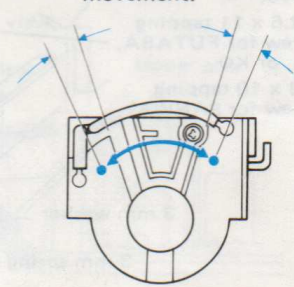
Secure sufficient  
contact movement.



If contact movement is insufficient,  
change the servo horn hole toward  
the 15 mm side.



Sufficient contact  
movement.





## 16 Speed control servo installation

- Clean bonding areas with thinner for use on plastic.
- Do not touch adhesive faces after removing the backing paper. (Oil on your fingers may adversely influence bonding strength.)
- Apply sufficient pressure to secure the servo.

Heat resisting, double face tape (Black)

35mm

Be sure for correct wiring

Red

White

Heat shrink tube

Black

Red

Locate the servo horn at this position.

Horn

Rib

Tight contact between servo bottom and chassis rib.

«Attaching heat shrinkage tube»

1 Cut the tube into half in length.

2 Pass the wire through the tube.

3 Twist the cords. Soldering recommended

4 Cover the twisted cord area with the tube.

5 Heat the tube using a drier.

- If the model runs backward when the lever is set to forward, the wiring is faulty.

## 17 Switch, receiver, and battery box installation

