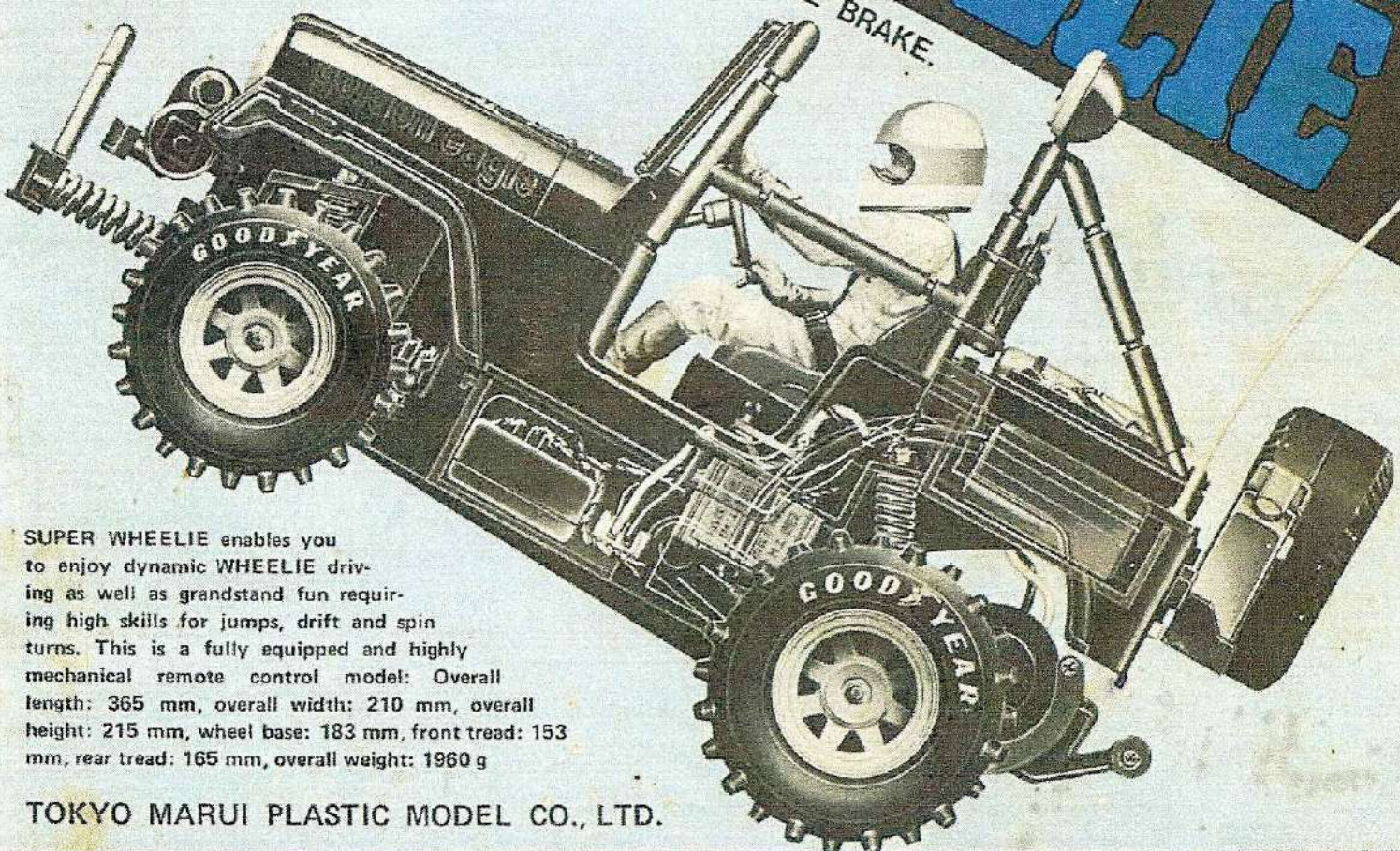
CJ-7 GOLDEN EAGLE

FORWARD THREE STAGE SPEED CONTROL / DIFFERENTIAL GEAR DRIVE.
INDEPENDENT FRONT SUSPENSION AND COIL SPRING RIGIO REAR SUSPENSION.

SUPER WHEELIE

1/10 SCALE DYNAMIC STUNT AND OFF-ROAD RACE RADIO CONTROL CAR

REVERSE ONE STAGE SPEED CONTROL AND TWO STAGE BRAKE.

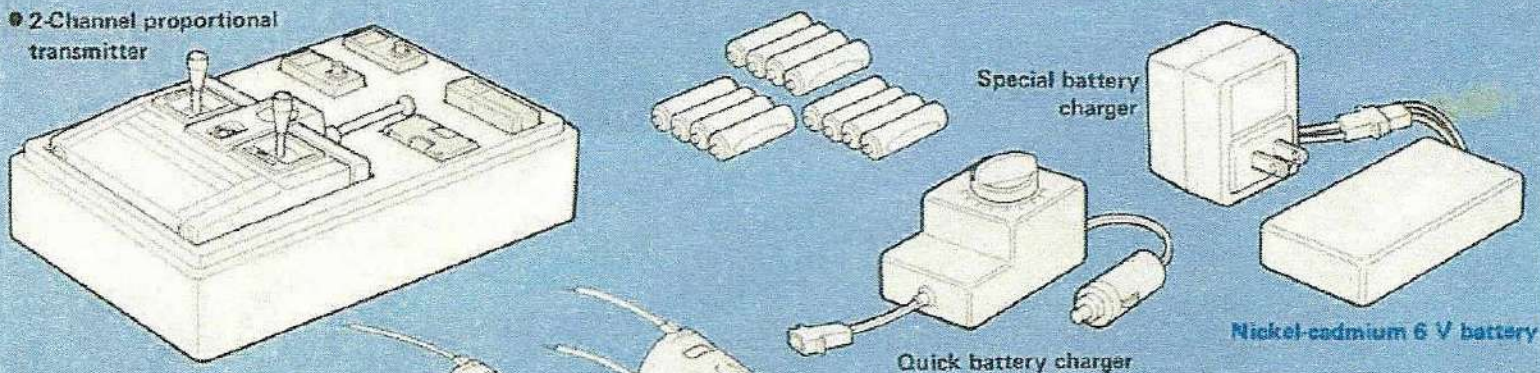


SUPER WHEELIE enables you to enjoy dynamic WHEELIE driving as well as grandstand fun requiring high skills for jumps, drift and spin turns. This is a fully equipped and highly mechanical remote control model: Overall length: 365 mm, overall width: 210 mm, overall height: 215 mm, wheel base: 183 mm, front tread: 153 mm, rear tread: 165 mm, overall weight: 1960 g

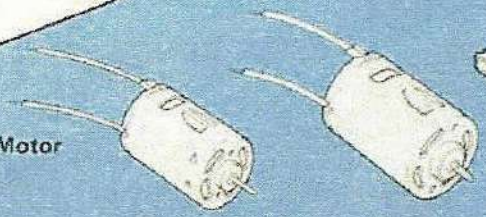
TOKYO MARUI PLASTIC MODEL CO., LTD.

SOLD SEPARATELY

- 2-Channel proportional transmitter
- Batteries for proportional transmitter
- Battery for motor: Nickel-cadmium 6 V battery
- Special battery charger
- Quick battery charger
- Nickel-cadmium 6 V battery



Motor



Mabushi RS-380 Mabuchi RS-540

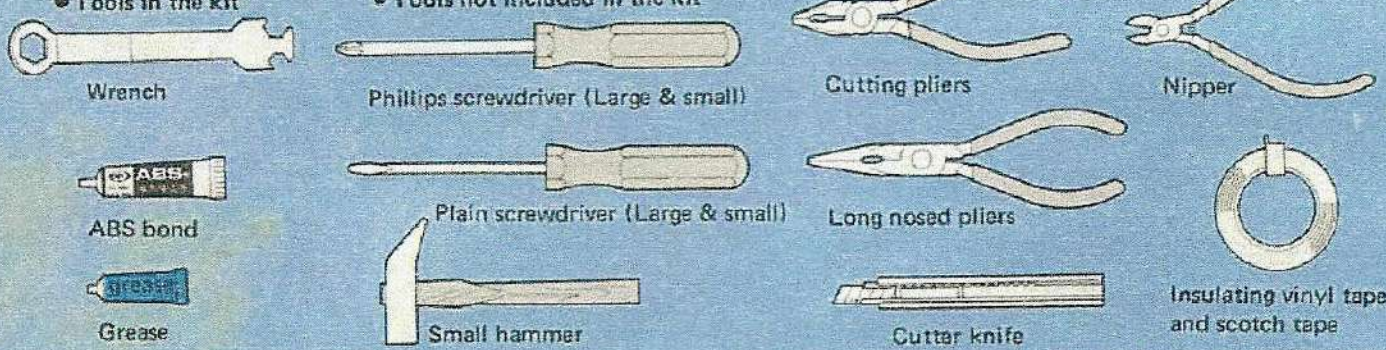
All motors shown above are applicable. Choose your favorate type.

Use a nickel-cadmium 6 V battery to run the car. This battery withstands 300 times charging. A special battery charger (household 100 V socket) needs 15 to 16 hours, while quick battery charger connected to automotive cigaret lighter plug needs only 15 min.

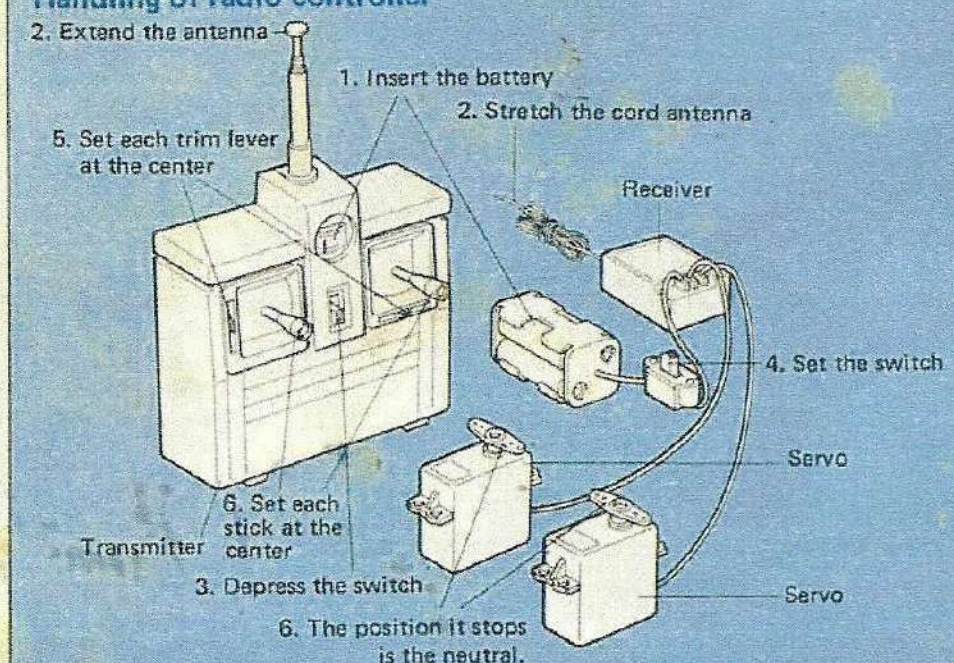
Caution: Do not use a 7.2 V battery.

Necessary tools for assembly

- Tools in the kit
- Tools not included in the kit



Handling of radio controller



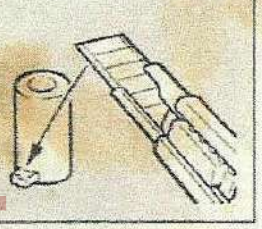
Use a 2-channel digital proportional radio controller for this kit. Be careful since some 2-channel and 3-to 8-channel proportional controllers have receivers and servo mechanisms that cannot be used for this kit.

- **Prepare the 2-channel proportional radio controller as follows:**

1. Insert proper batteries to transmitter and receiver.
2. Extend antennas of transmitter and receiver.
3. Set the transmitter switch. (Be sure to set from the transmitter side.)
4. Set the receiver switch.
5. Set each trim lever at the center.
6. Set each stick at the center. (The position it stops at is neutral.)
7. Check if the servo mechanism moves when the stick of each channel is moved.
8. When the above check is completed, switch OFF the receiver and then the transmitter.

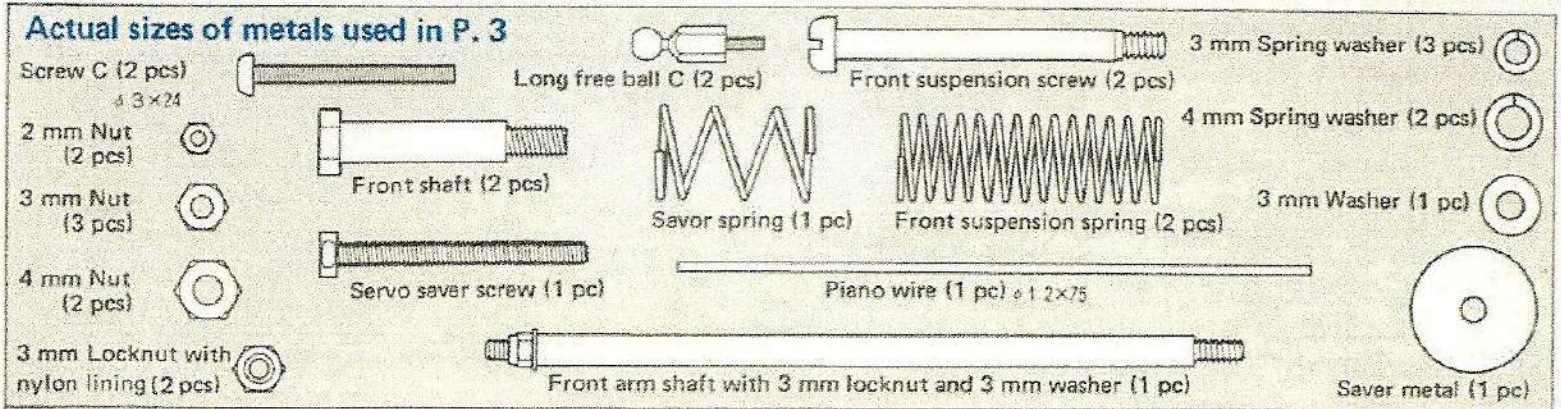
Read these instructions carefully before starting assembly

- Apply the grease included in the kit where ▬ is marked. Use a small hammer where ▮ is marked.
- All screws and washers are shown in full scale size. Be sure to use the correct ones by comparing with the drawings.
- Remove all unnecessary burrs using the cutter knife. In particular, burrs of nylon parts must be removed thoroughly. If not, they may cause malfunctioning.
- Thoroughly remove plastic burrs from parts using a cutter. Especially moving nylon parts must be burr free for smooth movement. (Be careful not to injure your fingers.)

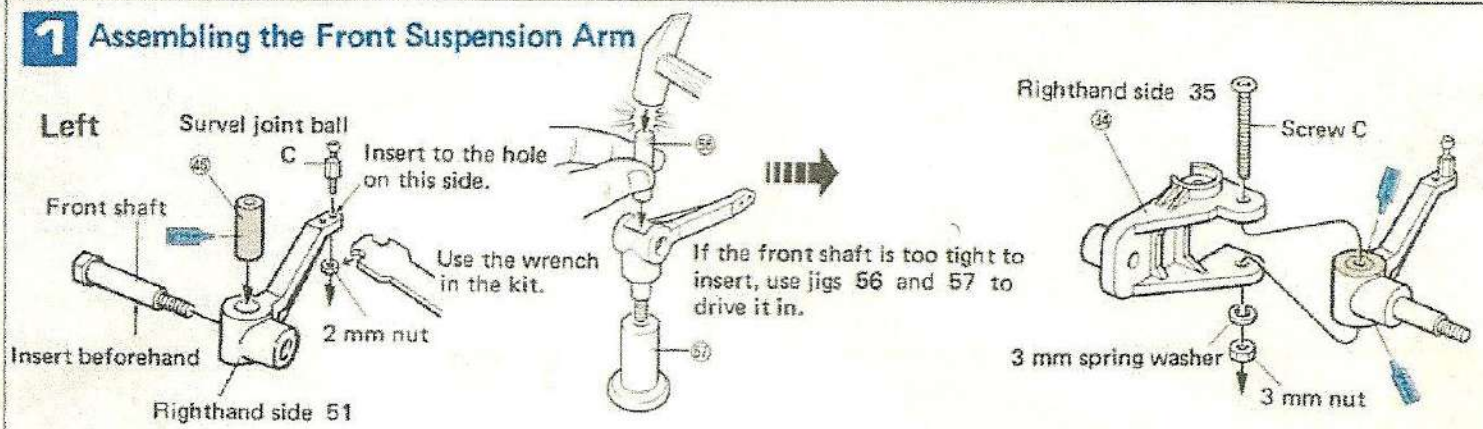


*** First bond the body and meter panel as shown in Fig. 21** (About 1 hours are needed for complete drying.)

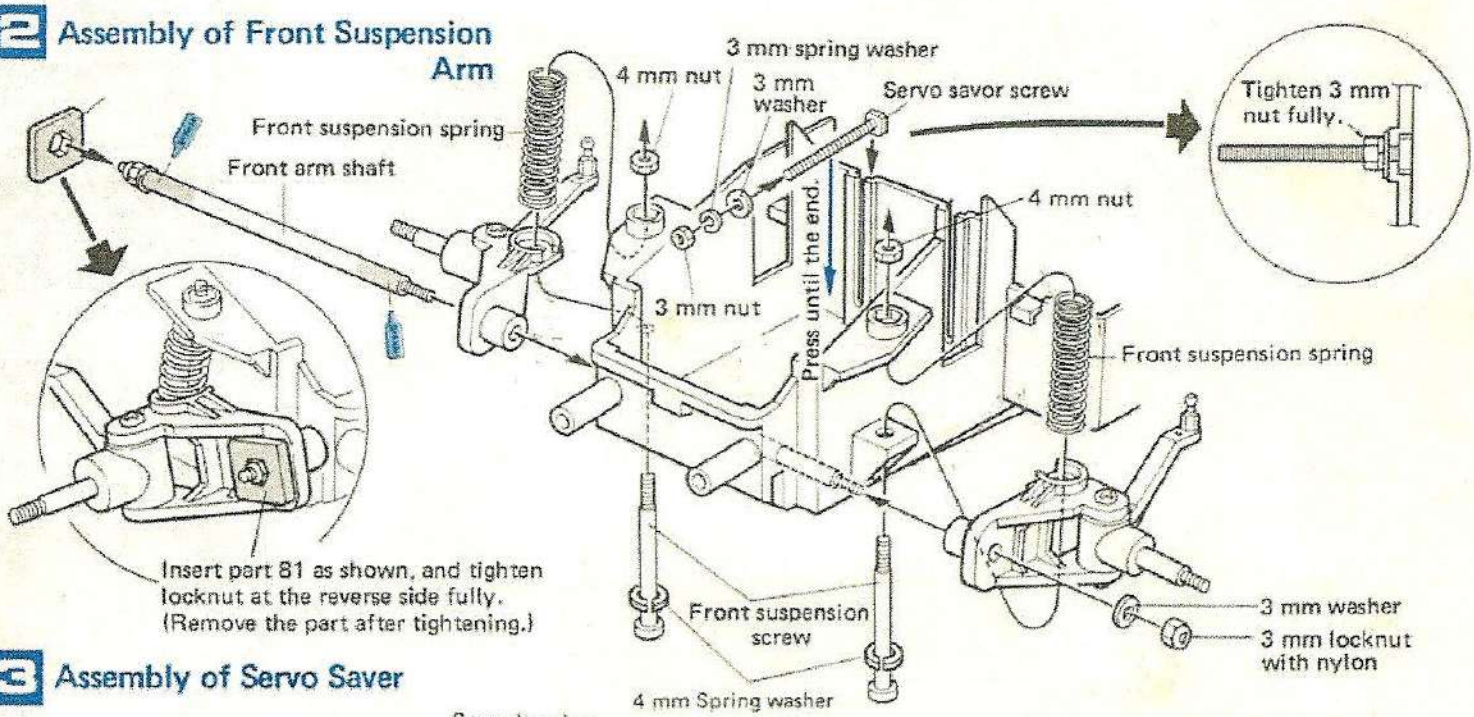
Actual sizes of metals used in P. 3



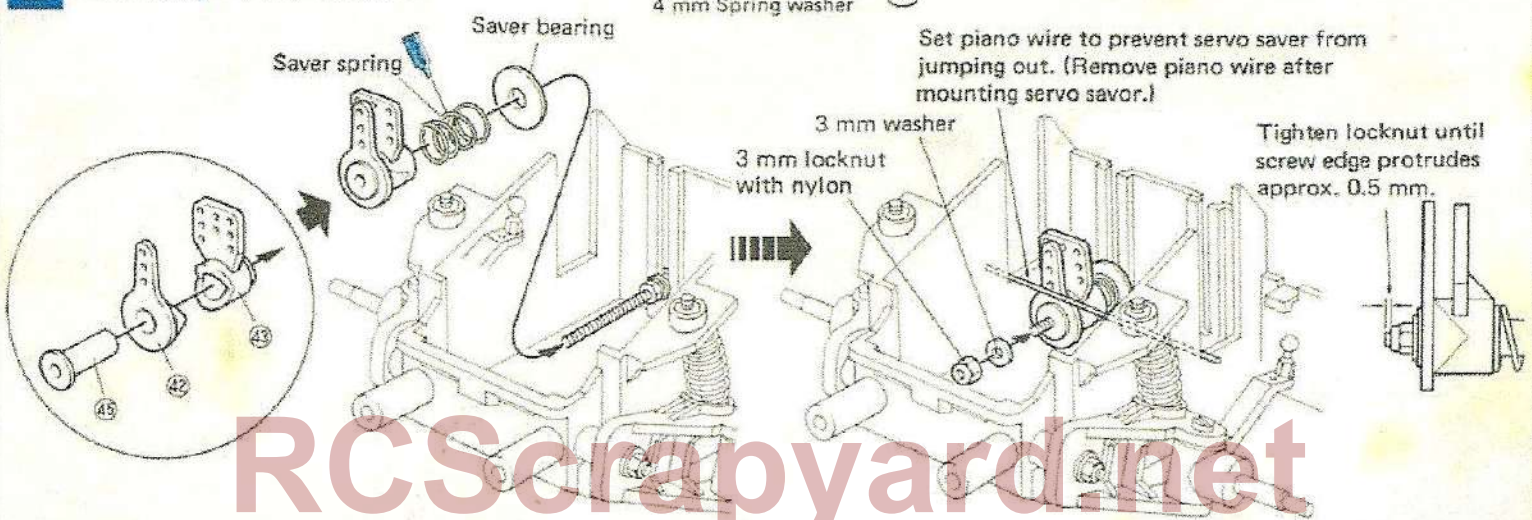
1 Assembling the Front Suspension Arm



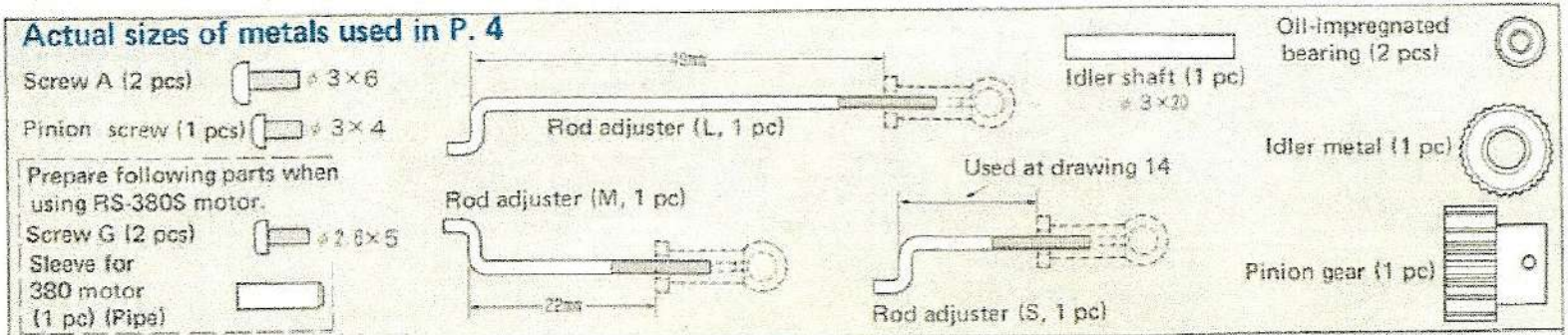
2 Assembly of Front Suspension Arm



3 Assembly of Servo Saver

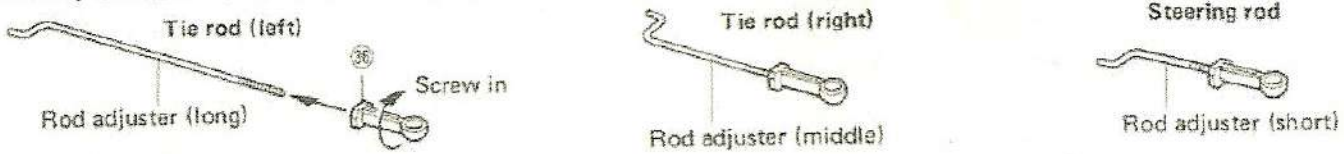


Actual sizes of metals used in P. 4



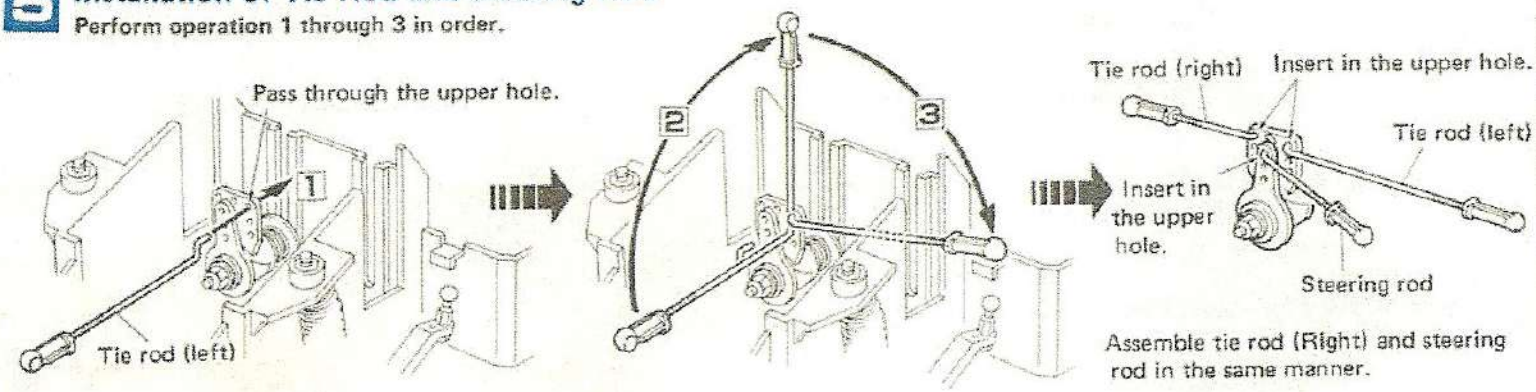
4 Assembly of Tie Rod and Steering Rod

Press in ball end 36 according to actual size drawing.

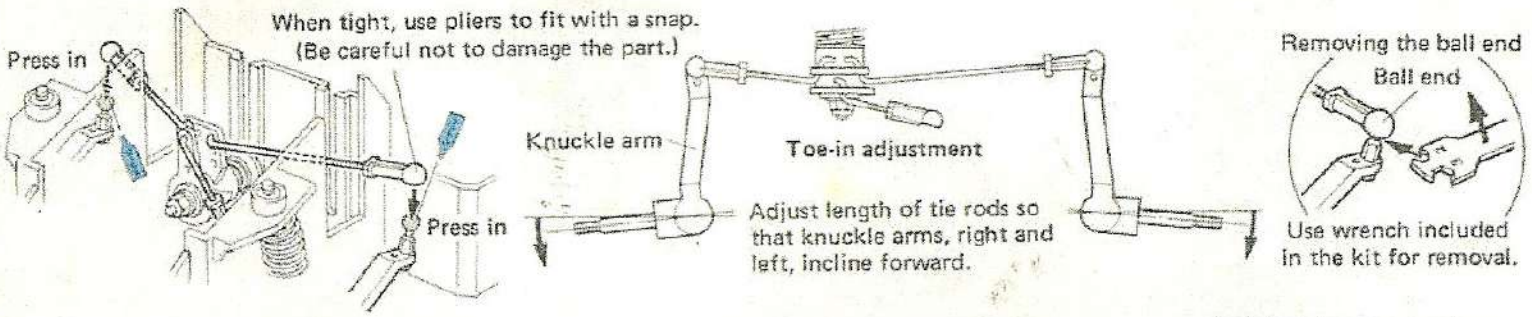


5 Installation of Tie Rod and Steering Rod

Perform operation 1 through 3 in order.

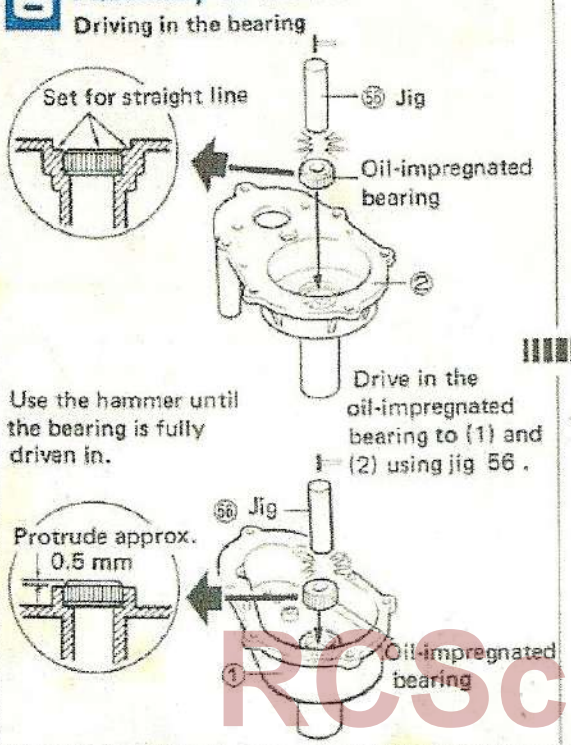


Assemble tie rod (Right) and steering rod in the same manner.

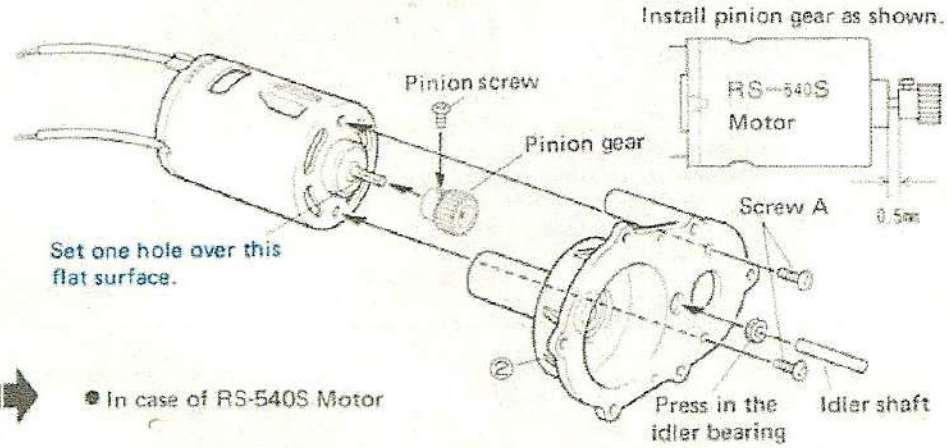


6 Assembly of motor

Driving in the bearing

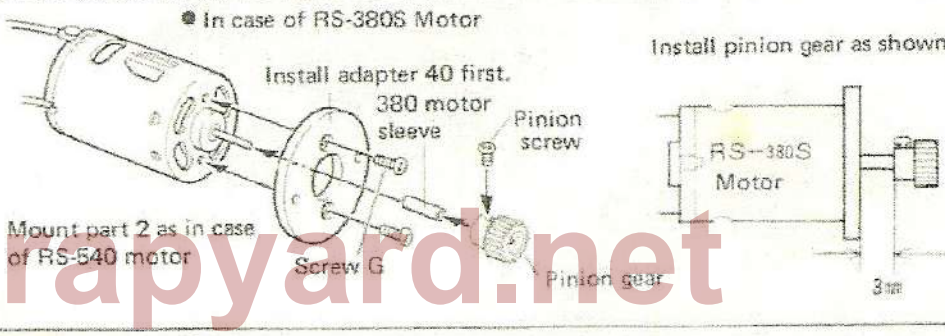


Install pinion gear as shown.

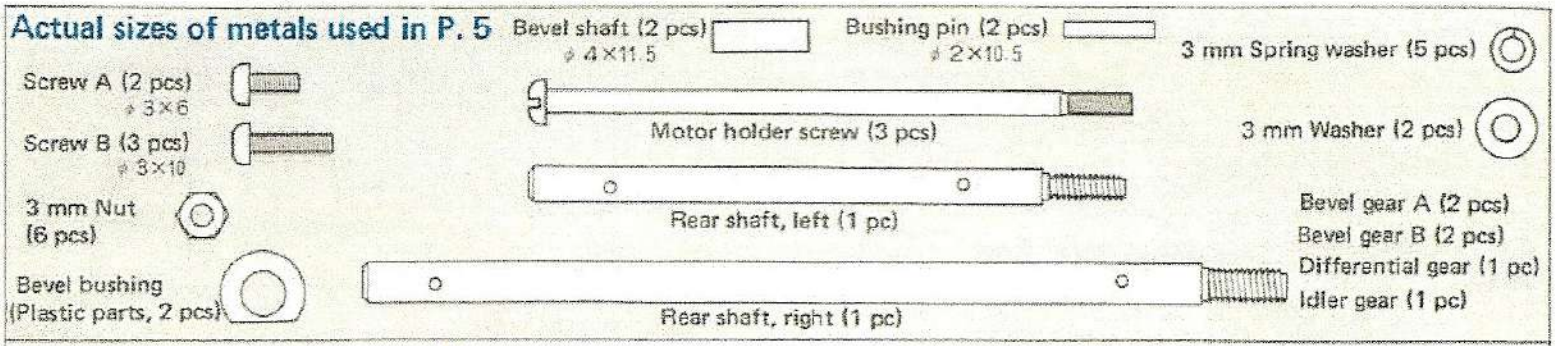


● In case of RS-540S Motor

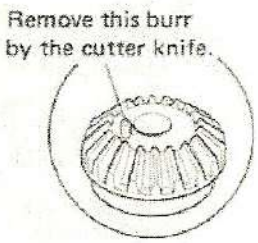
● In case of RS-380S Motor

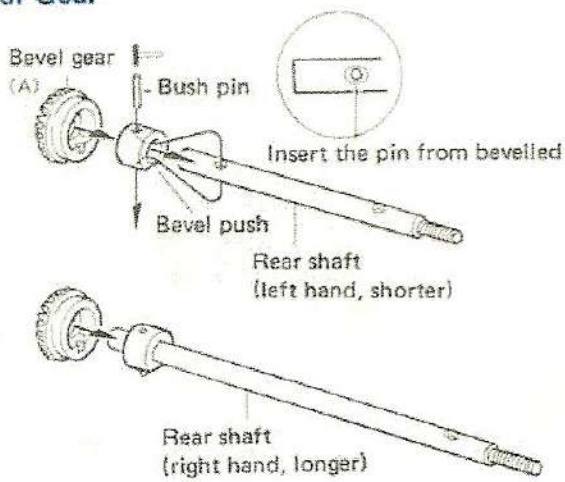


Actual sizes of metals used in P. 5

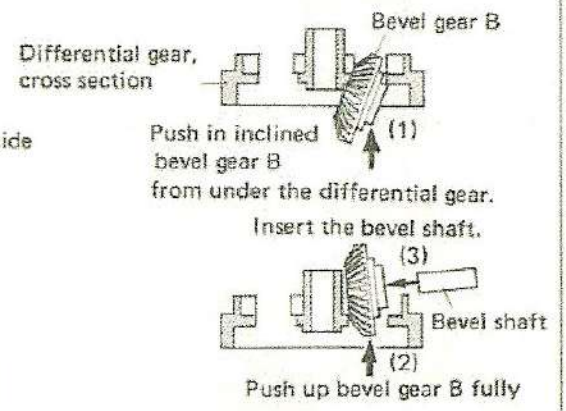


7 Assembly of Differential Gear

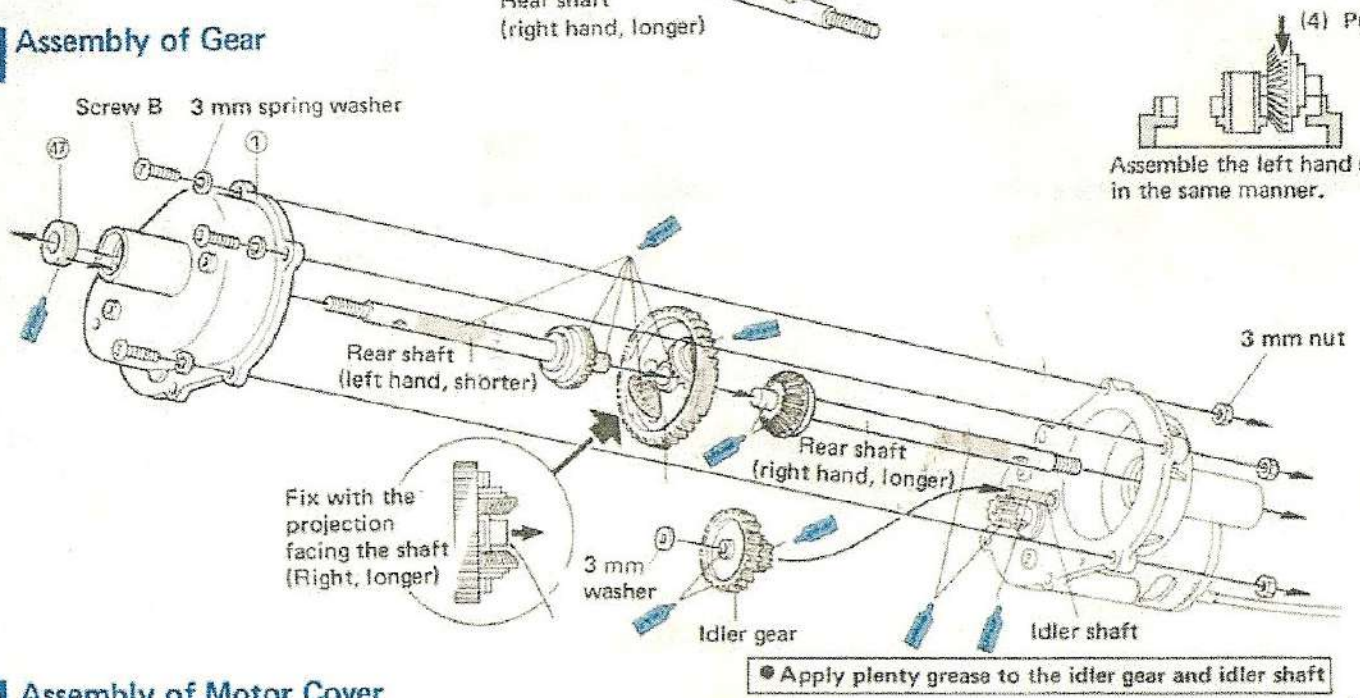




Bevel Gear Set



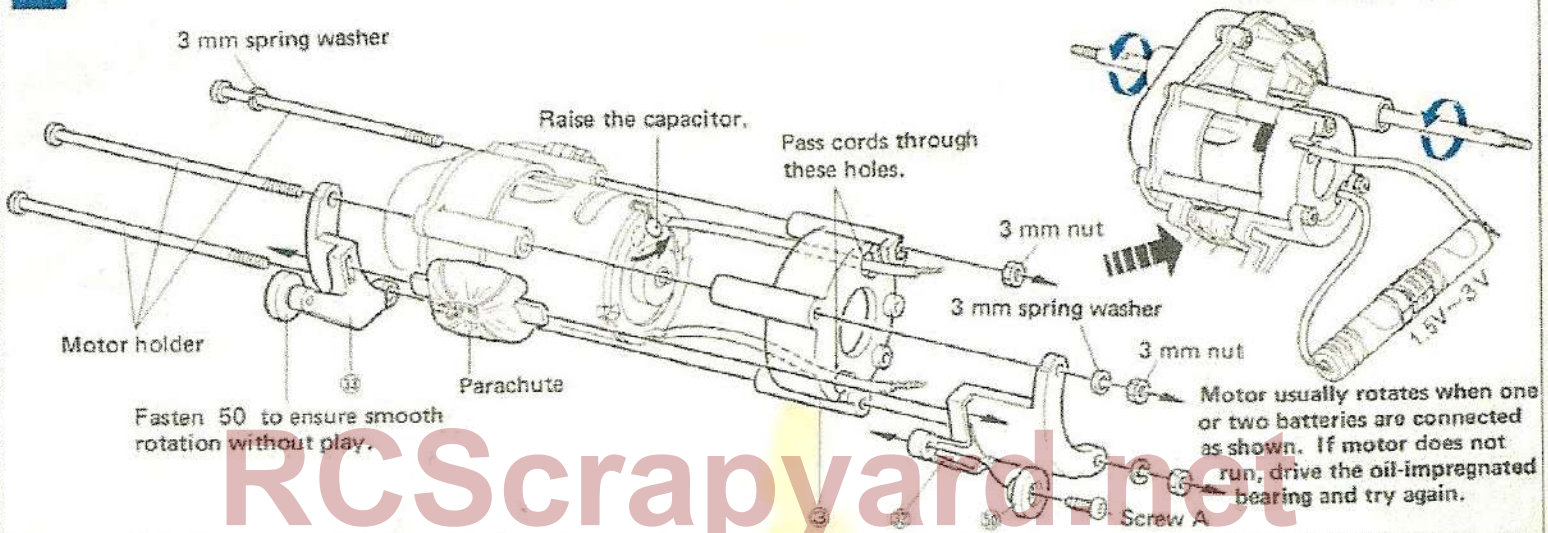
8 Assembly of Gear



● Apply plenty grease to the idler gear and idler shaft

Assemble the left hand side
in the same manner.

9 Assembly of Motor Cover



Motor drive test

Motor usually rotates when one or two batteries are connected as shown. If motor does not run, drive the oil-impregnated bearing and try again.

Actual sizes of metals used in P. 6

Tapping screw A (8 pcs) ø 3×8

Rear arm screw (2 pcs)

Rear suspension spring (2 pcs)

4 mm Washer (2 pcs)

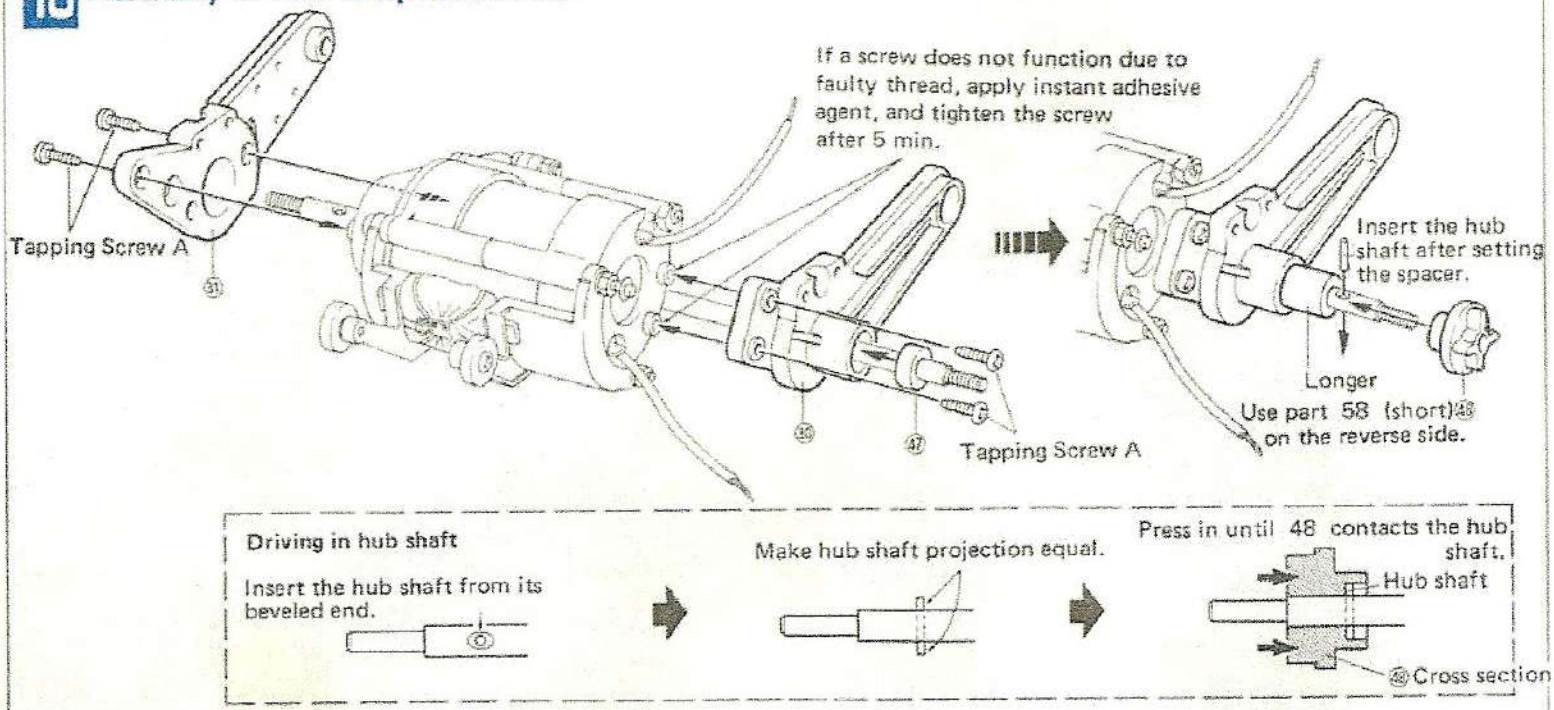
4 mm Locknut with nylon lining (4 pcs)

Rear suspension shaft (2 pcs)

Hub shaft (2 pcs) ø 2×9

5 mm Washer (2 pcs)

10 Assembly of Rear Suspension Arm



Driving in hub shaft

Insert the hub shaft from its beveled end.

Make hub shaft projection equal.

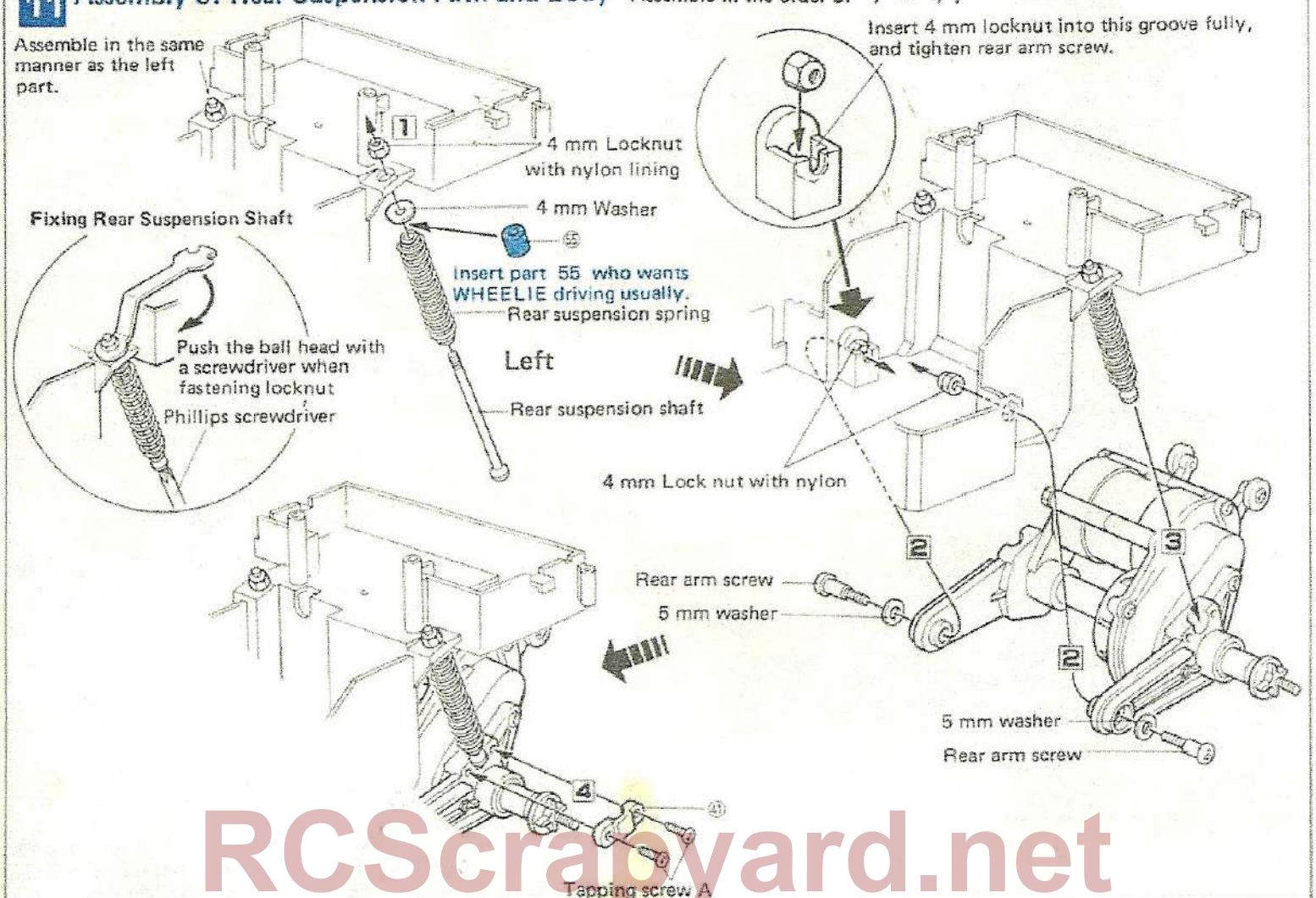
Press in until 48 contacts the hub shaft.

Hub shaft

Cross section

11 Assembly of Rear Suspension Arm and Body

Assemble in the order of 1 – 4 .



Actual sizes of metals used in P. 7

Tapping screw F ø 2×6.7 (16 pcs)

4 mm Locknut with nylon lining (4 pcs)

Piano wire (1 pc)

Bumper spring (2 pcs)

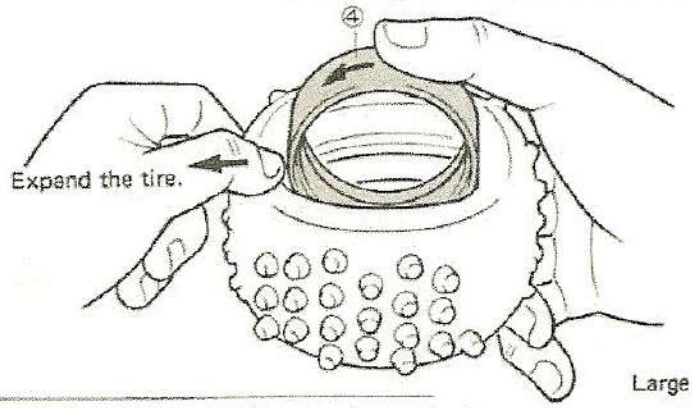
Body mount (2 pcs)

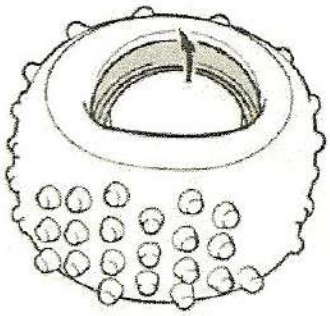
12 Fixing Tires and Wheels

Rear Tires

Insert 4 into the rear tire as shown below. Easy to insert if 4 is dipped in soap water.

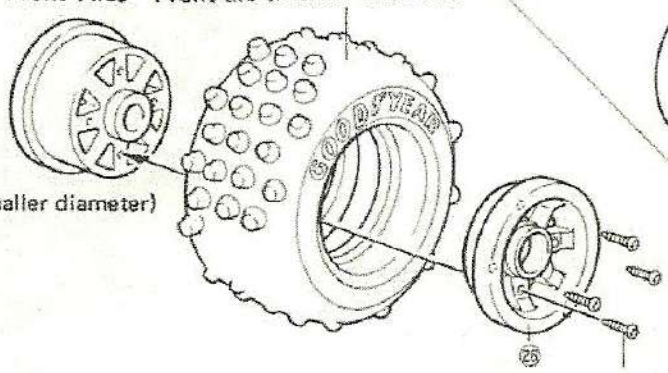
Push 4 in the direction of the arrow.





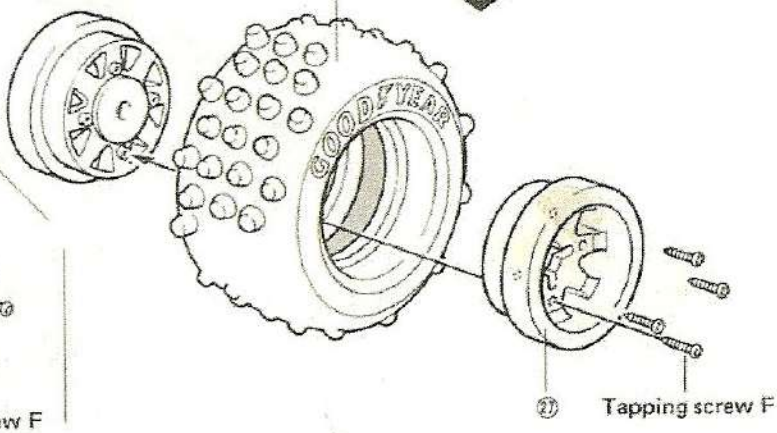
Front Tires

Front tire (Smaller diameter)



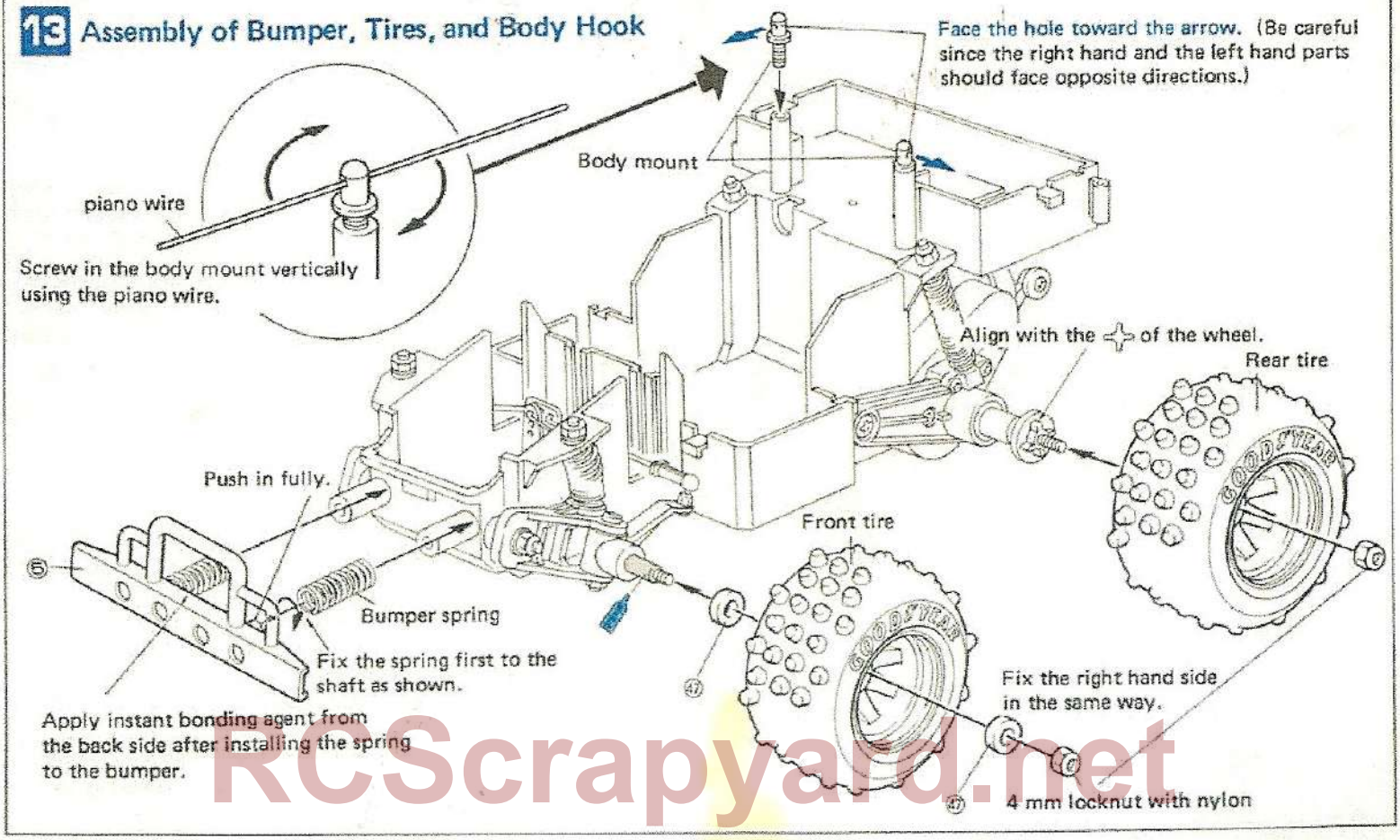
Large diameter

Rear tire (large diameter)



13 Assembly of Bumper, Tires, and Body Hook

Face the hole toward the arrow. (Be careful since the right hand and the left hand parts should face opposite directions.)



Actual sizes of metals used in P. 8

Screw K (1 pc) ø 3×16

3 mm Locknut with nylon lining (1 pc)

Sleeve for controller (Pipe, 1 pc) ø 4×5

3 mm Spring washer (1 pc)

2 mm Nut (2 pcs)

3 mm Nut (1 pc)

Free ball A (Small, 1 pc)

Free ball B (Middle, 1 pc)

3 mm Washer (1 pc)

14 Assembly of Steering Servo

(Assemble the servo to the receiver and set it ready for operation before proceeding to instructions in this page. See page 2.)

Set to the neutral position beforehand. (See page 2.)

Cut off the hatched portion

Mount free ball A at this hole.

Approx. 14 mm

The shape of the servo horn depends on the manufacturer, but any type can be caused by cutting or changing holes. (A round one is also sold)

Steering servo

2 mm nut

Free ball A.

Fix to the hole 14 mm off.

Clean with benzine or alcohol the place where heat resistant double-coated tape is pasted.

Heat resistant double-coated tape

Screw attached to proportional controller

Peel the lining paper

Cut into 35 mm in length

Insert the ball end after installing the servo to the chassis

Rotate these ball ends ㊱ to adjust the length so that tires become parallel or slightly inward.

Locate the servo on the arrow sides as far as possible.

Steering servo

Slightly inward

Slightly inward

Clean with benzine or alcohol the place where heat resistant double-coated tape is pasted.

Do not assemble with the double-coated tape at once, but place it temporalily or the chassis and mark the positions with a pencil before final fixing. Make sure servo is at the neutral position at this time.

If failed to place the tape properly, peel it off gradually and paste the tape again.

When the servo position is determined, adjust the length of this part by screwing it in or out.

㊷

When the tire steering angle is insufficient, use a lower hole.

Make sure the tire does not contact here because of over-steering.

15 Fixing the Speed Controller (1)

(Set the servo in the receiver ready for operation before starting assembly in this page. See page 2.)

Mount free ball B in this hole.

Approx. 10 mm

Cut off the hatched portion

3 mm Nut

3 mm Spring washer

Switch board

Controller mounting unit

Screw K

Tighten a Screw fully

White cord

Red cord

Mount part 91 in this direction

3 mm locknut with nylon

3 mm washer

Sleeve for controller

White cord

Red cord

Switch head

Screw included in proportional controller set

Plated free ball

Screw in

Servo Horn

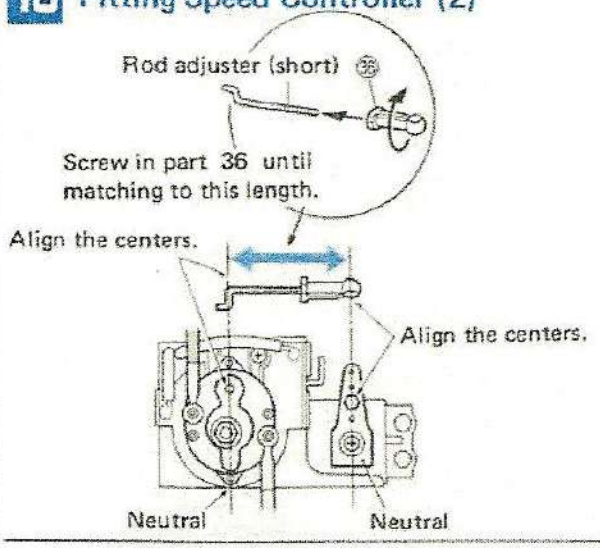
2 mm nut

Cut into 35 mm in length

Controller servo

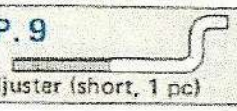
Press the servo toward arrowed direction until it contacts with metal fitting fully.

16 Fitting Speed Controller (2)

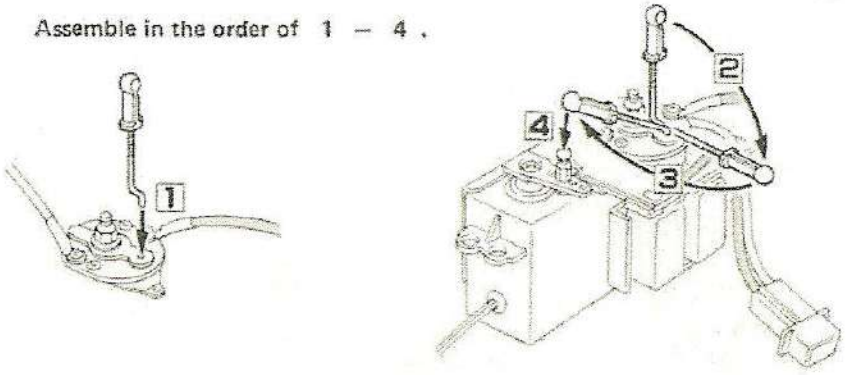


Actual sizes of metals used in P. 9

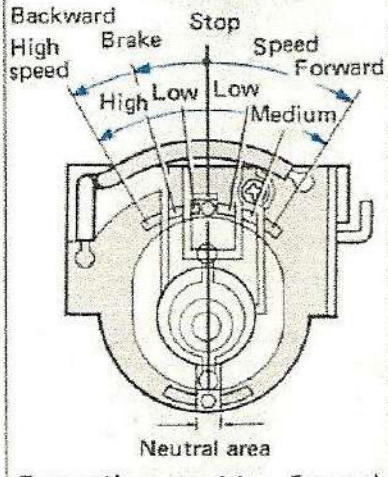
Screw A (2 pcs) ø3×6



Assemble in the order of 1 – 4 .

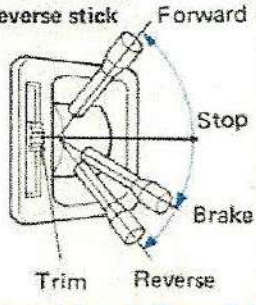


Switch position



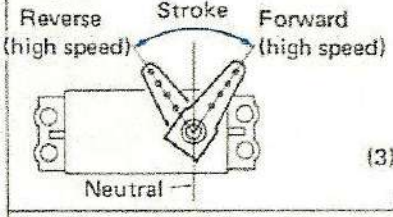
- Controller may be broken unless it is used correctly. If the controller is used at medium or low speed all the time, the resistor or circuit board in it may be burned. When the model runs too fast at high-speed setting, replace the motor to 380 type to slow down the speed and to use the controller at high-speed range as much as possible.
- Large amount of current is used to operate the controller which should be considered as consuming device.
- Do not touch the controller immediately after driving, as resistor may be hot.
- Faulty controller mounting or defective switch movement to forward high-speed area due to contact of switch head or codes is the possible cause of circuit board burn-out.
- This controller is equipped with a heat building resistor. Avoid use of the controller to models with closed mechanical box models.

Forward/reverse stick

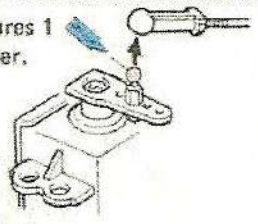


Stroke adjustment

Servo horn stroke differs by the servo type. Move forward and reverse stick to full positions as shown to check if switch arm contact moves from forward (high speed) to reverse (high speed). If stroke is too large or small, adjust according to instructions on right.

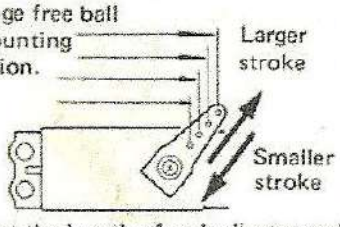


Perform procedures 1 through 3 in order.



(1) Remove the ball end.

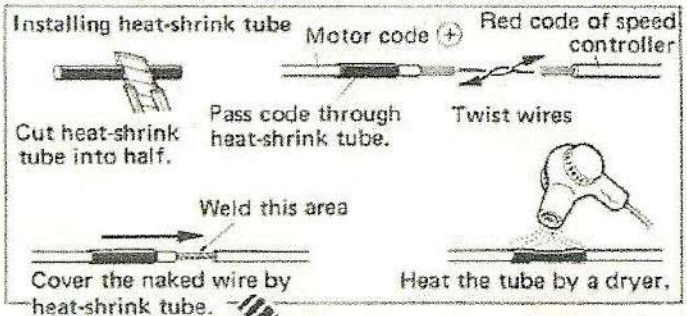
(2) Change free ball B mounting position.



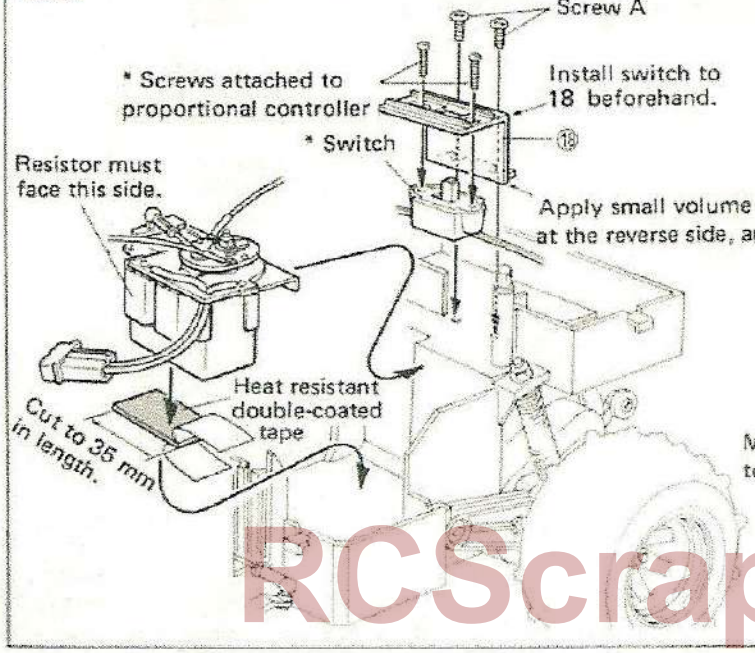
(3) Adjust the length of rod adjuster and set to free ball B. (See drawing 16.)

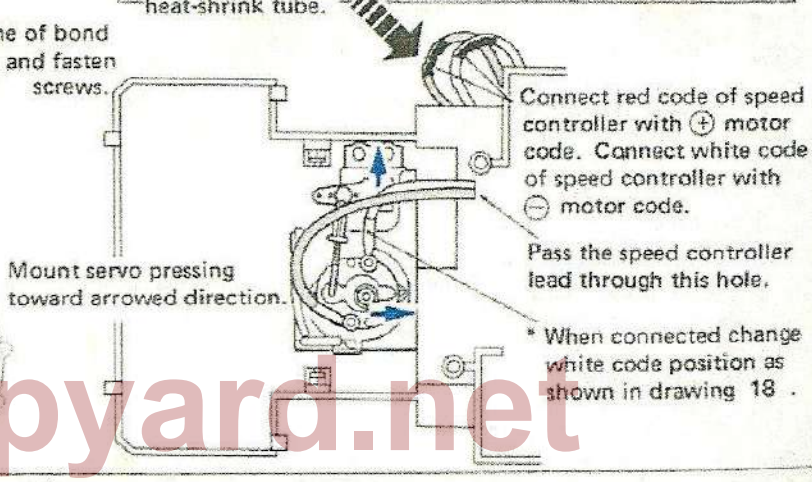
Checking the switch arm

Installing heat-shrink tube



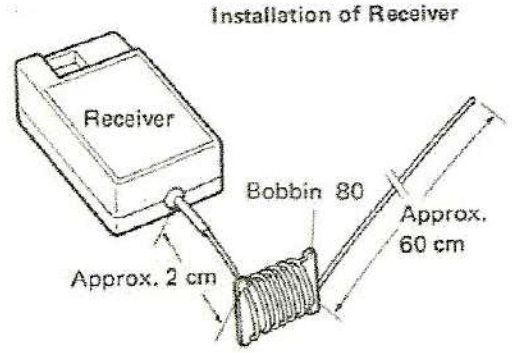
17 Assembly of Speed Controller Servo



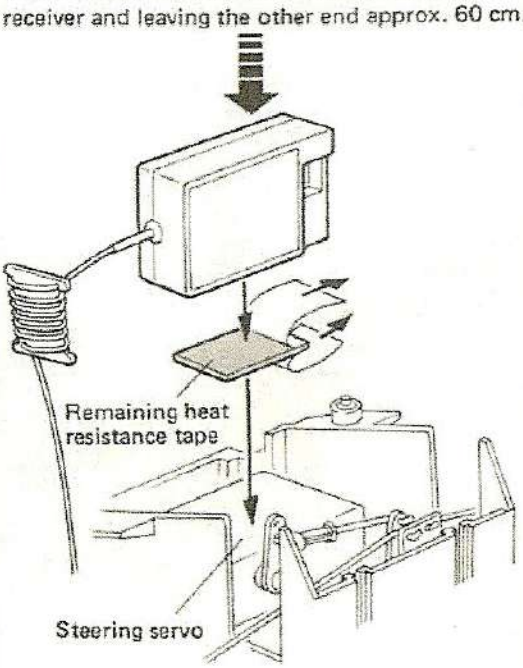


18 Installation of Proportional Controller

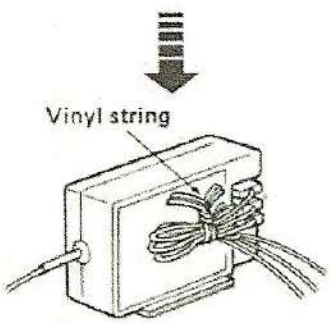
Installation of Receiver



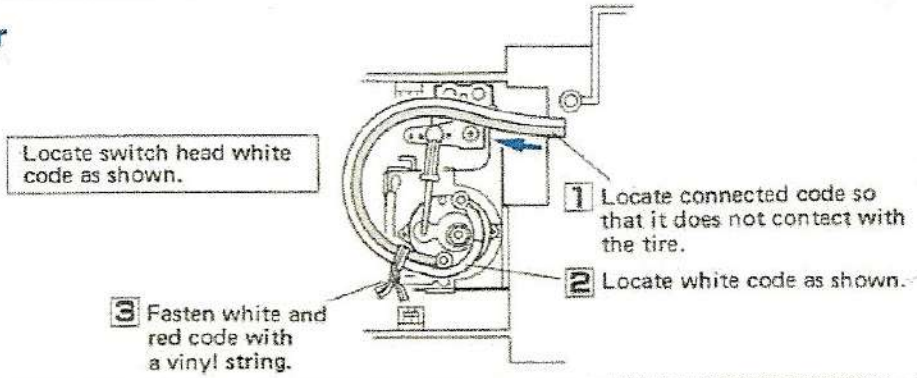
Wind antenna wire on the bobbin 2 cm from receiver and leaving the other end approx. 60 cm.



Install the receiver on steering servo.

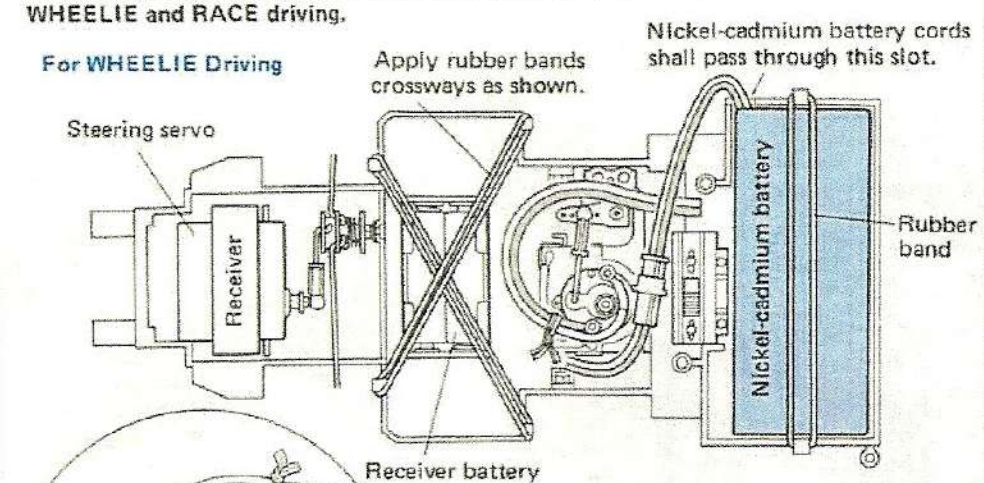


Plug in each connector to the receiver and fasten excess codes with a vinyl string.

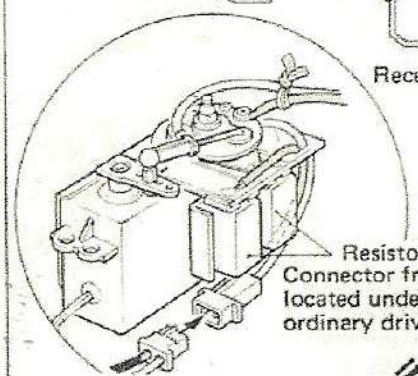


* Receiver, receiver battery and nickel-cadmium battery locations are different for WHEELIE and RACE driving.

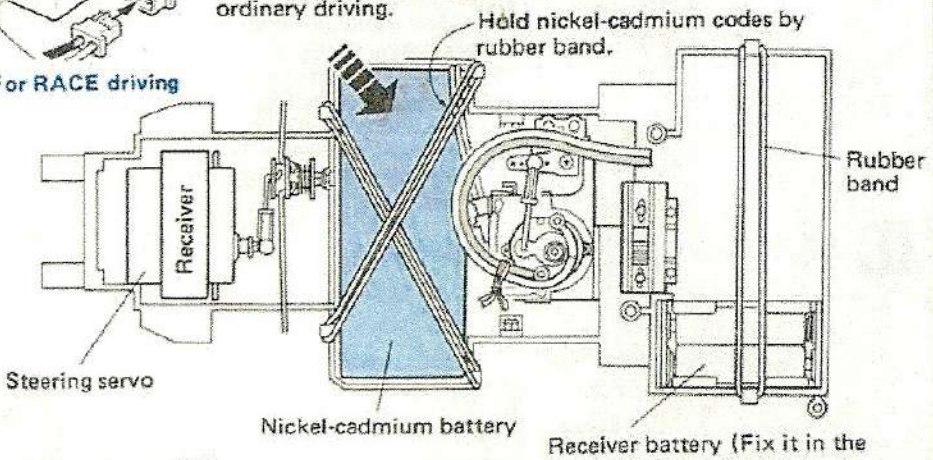
For WHEELIE Driving



* When connecting nickel-cadmium battery, always set the switch arm at the neutral position. If the battery is connected while switch is ON, controller, battery, or motor may be burned.

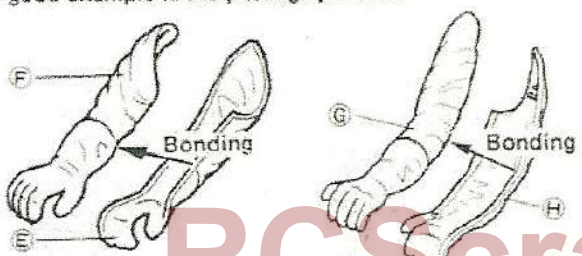


For RACE driving

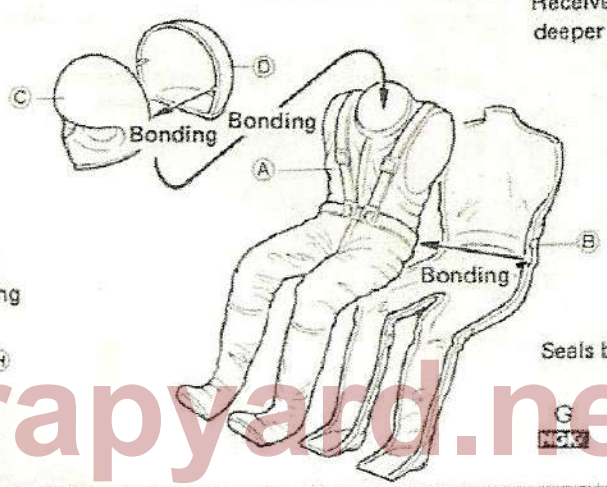


19 Assembly of Driver

Paint the helmet and wear as you like.
(A good example is the package picture.)



● Do not bond arms here.



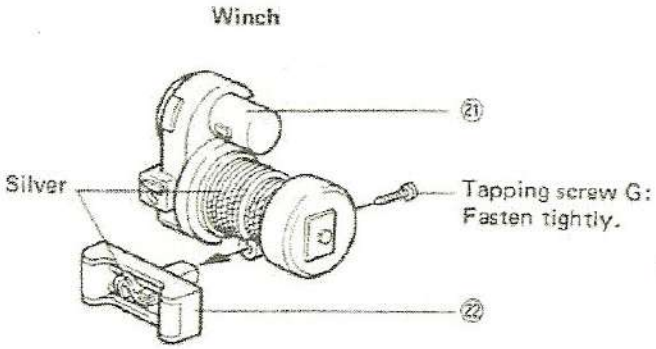
Seals below are for the driver.

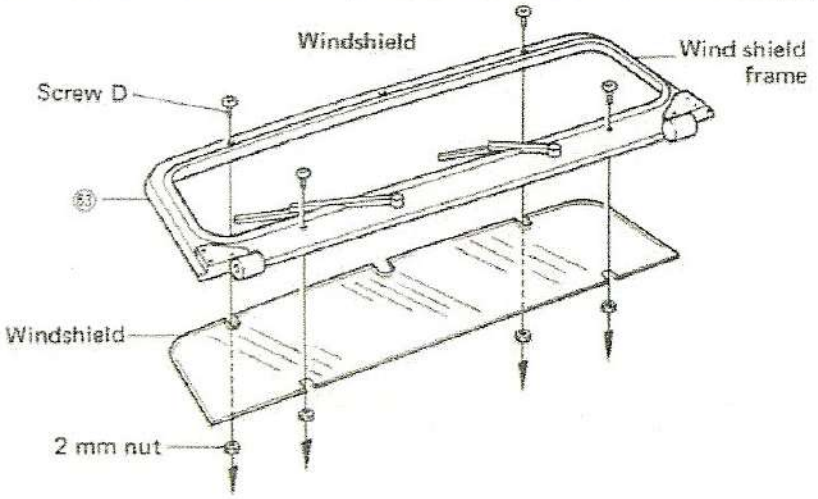
G NICK H Arai K GOODYEAR

Actual sizes of metals used in P. 11

Screw D (4 pcs) ϕ2×4 Tapping screw A (1 pc) ϕ3×8 Tapping screw G (1 pc) ϕ2×11 2 mm Nut (4 pcs)

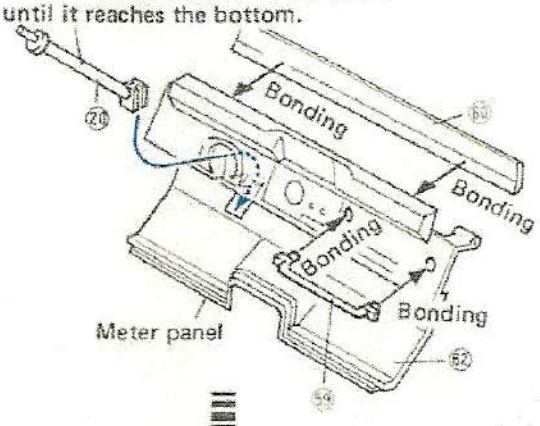
20 Assembling the Windshield and Winch

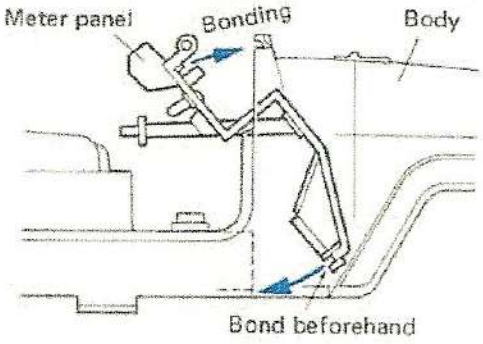




21 Installing the Driver, Meter Panel, Steering Wheel and Shift Lever

Insert the steering shaft from above until it reaches the bottom.

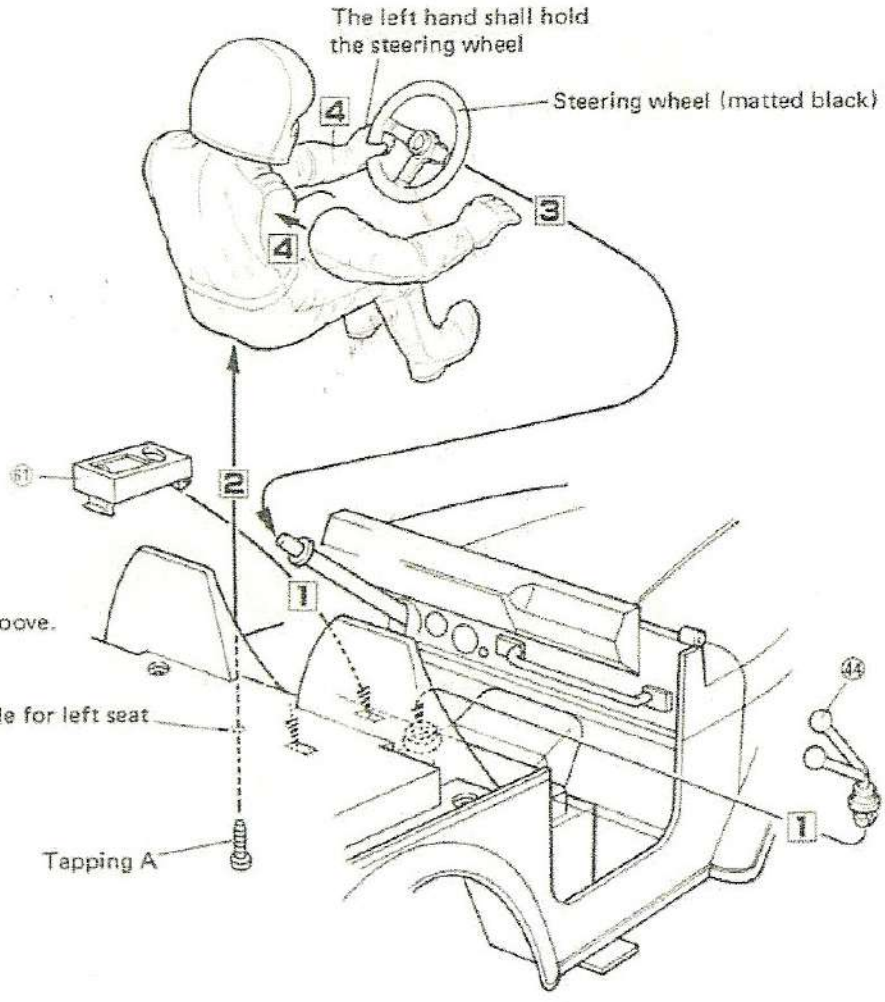




Mount meter panel by pressing diagonally into body groove.

Apply a rubber band included in the kit (Until the bonding agent is hardened).

Assemble in the order of 1 to 4.



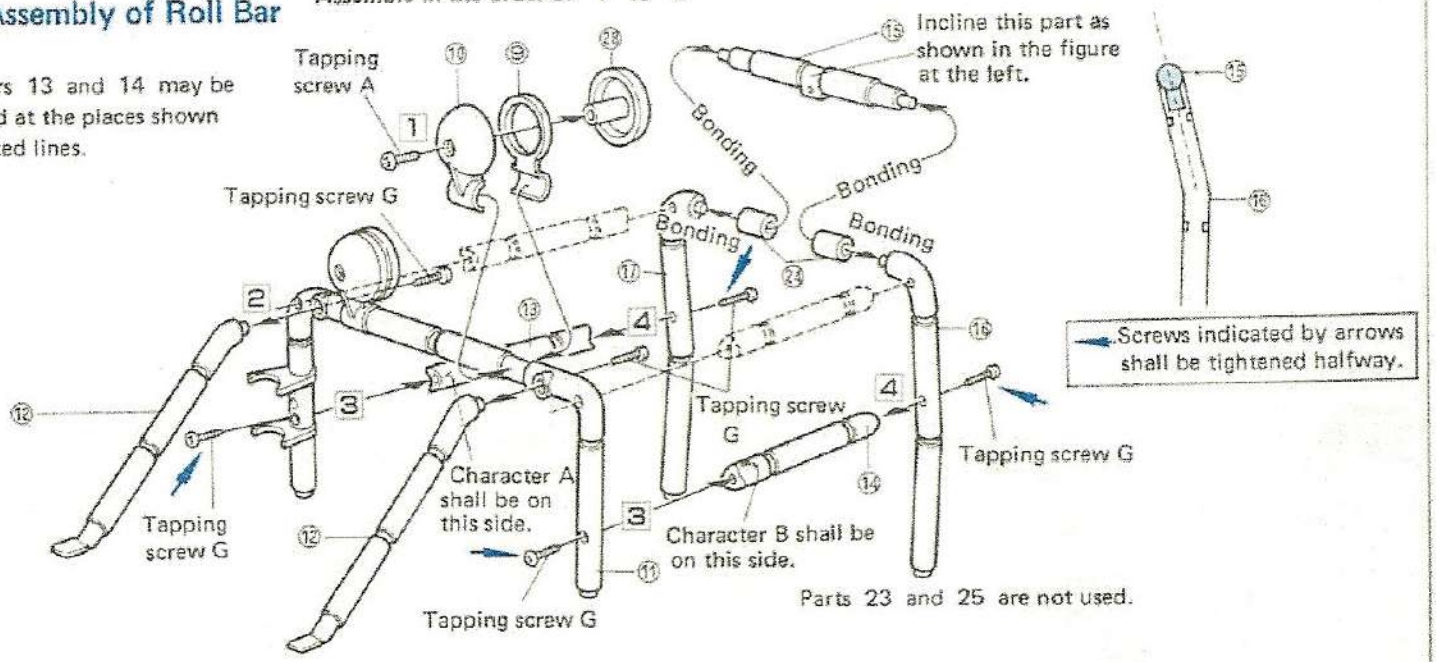
Actual sizes of metals used in P. 12

Screw A (1 pc) ø 3×6
Screw H (2 pcs) ø2.6×17
Screw J (1 pc) ø 2.6×23
2.6 mm Washer (6 pcs)
Tapping screw A (2 pcs) ø 3×6
Tapping screw B (4 pcs) ø 2.6×6
Tapping screw G (7 pcs) ø 2×11
2.6 mm Nut (3 pcs)

22 Assembly of Roll Bar

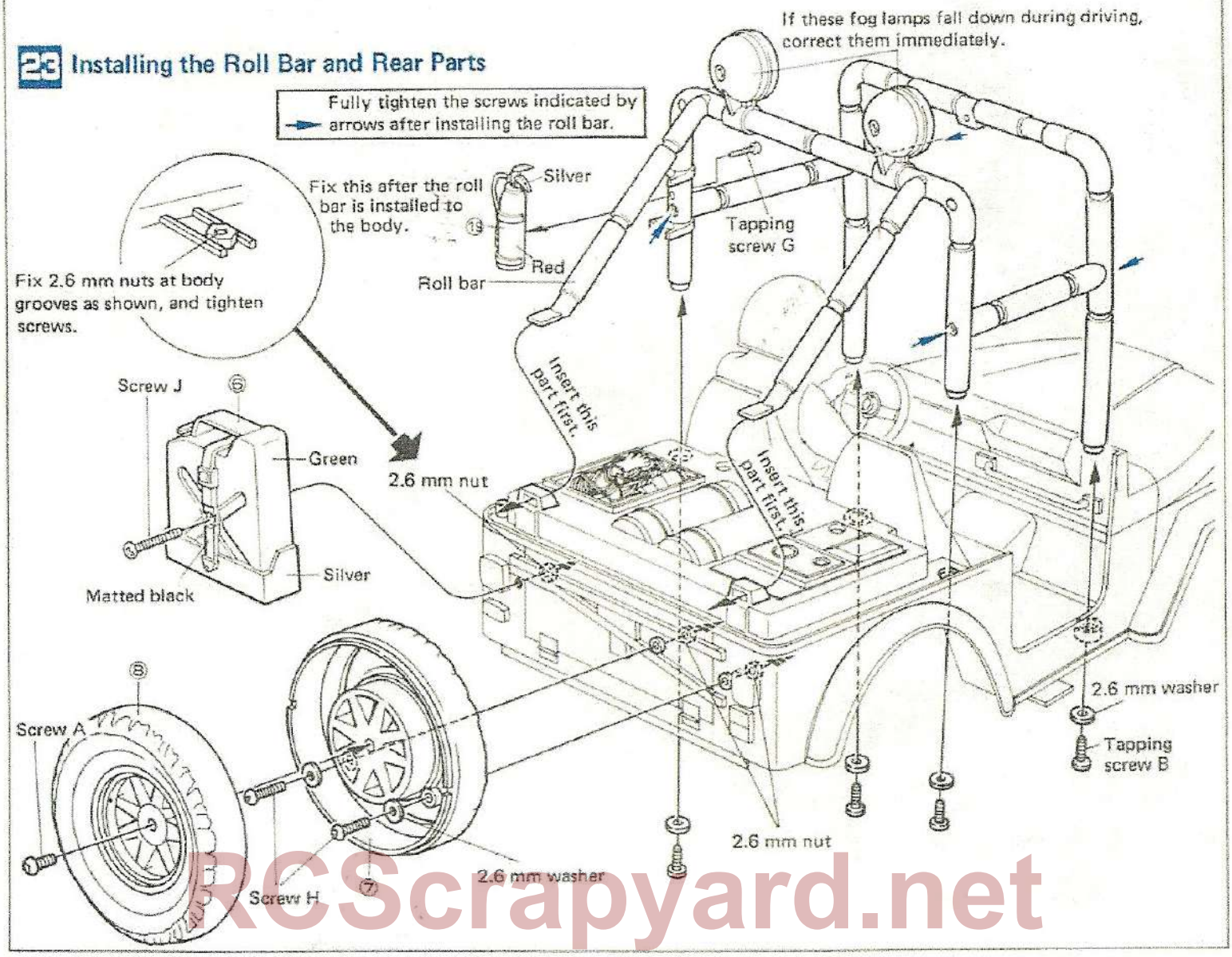
Assemble in the order of 1 to 4

Roll bars 13 and 14 may be installed at the places shown by dotted lines.



23 Installing the Roll Bar and Rear Parts

Fully tighten the screws indicated by arrows after installing the roll bar.



Actual sizes of metals used in P. 13

Tapping screw C ⌀2.6×11 (2 pcs)

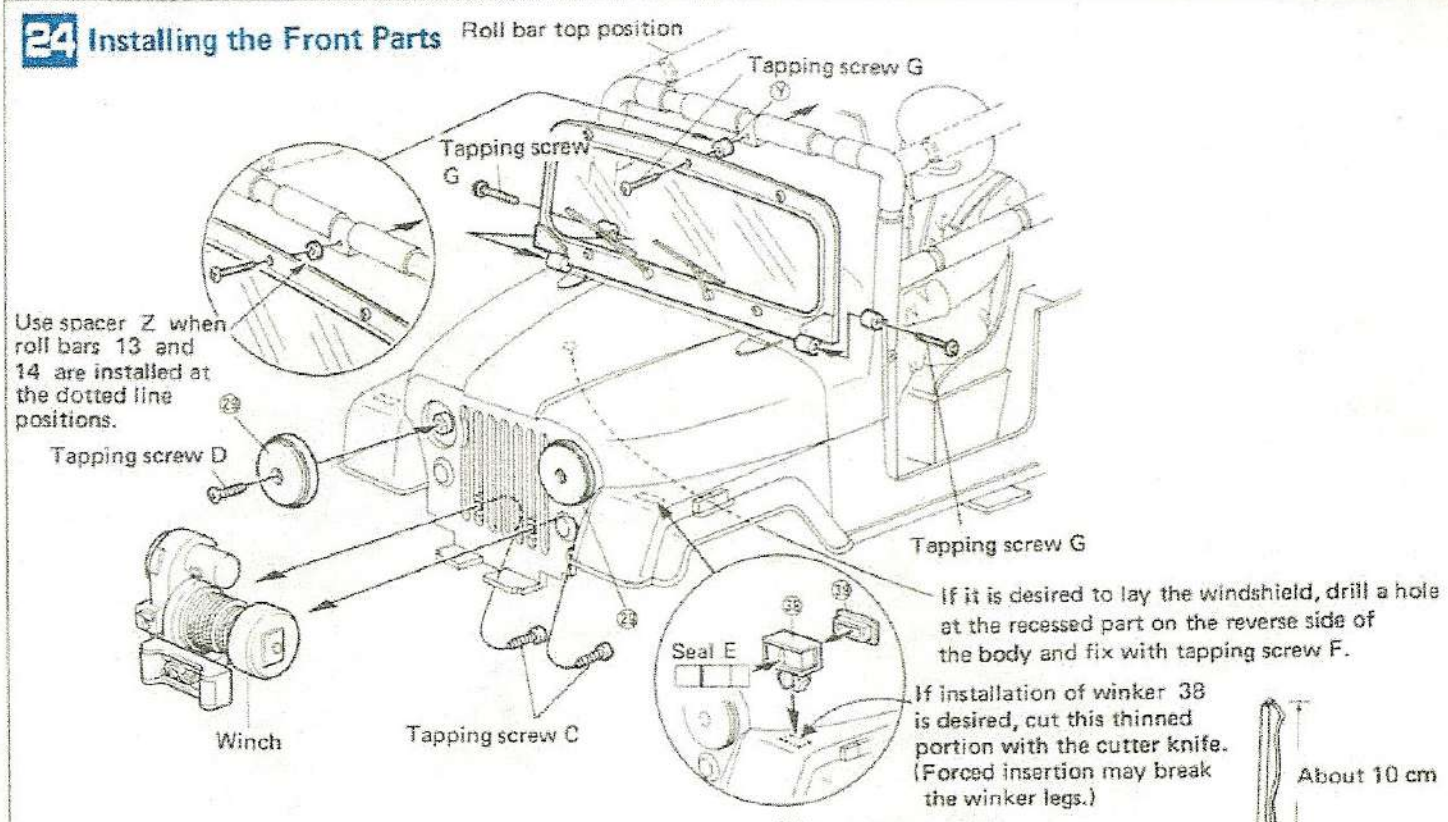
Tapping screw D (2 pcs) ⌀2.6×9

Tapping screw F ⌀2×6.7 (1 pc)

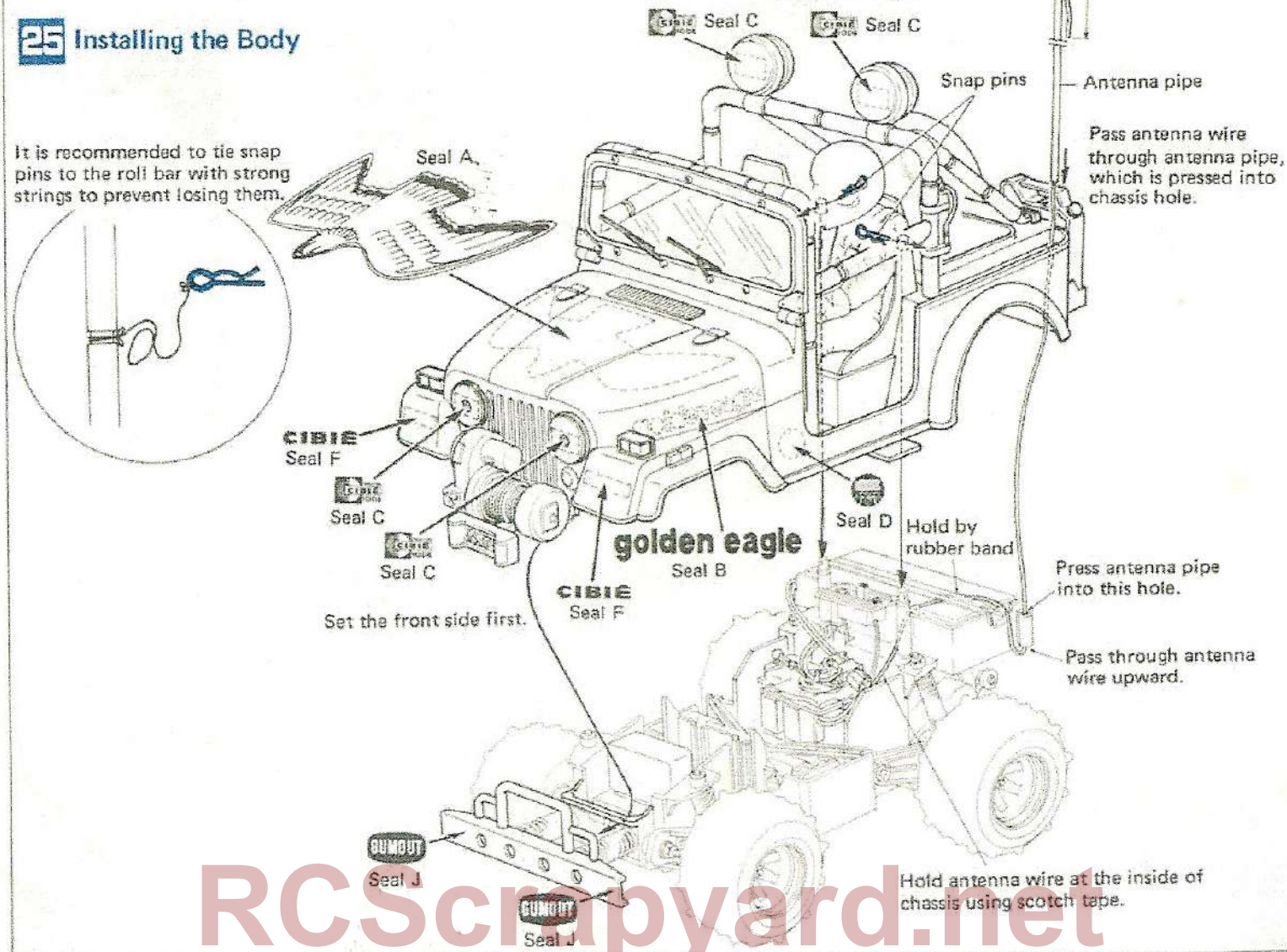
Tapping screw G ⌀2×11 (3 pcs)

Snap pin (2 pcs)

24 Installing the Front Parts



25 Installing the Body



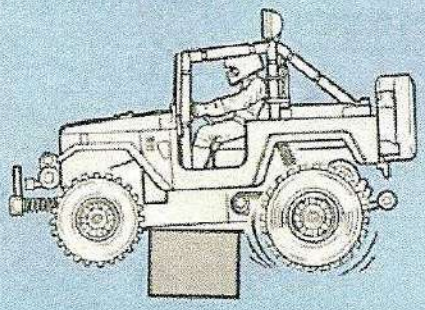
Caution for handling

The radio control wave may reach 300 to 600 m on the ground and about 2 km in the air. If somebody around is operating a radio control model check the frequency band she is using.
If the same band is used, interference will occur regardless of the type such as the car, plane or boat. Enjoy alternately in such a case. Be careful about transceivers and other radio control toys.

Always attach a ribbon in the color showing the band.

Checking Before Driving

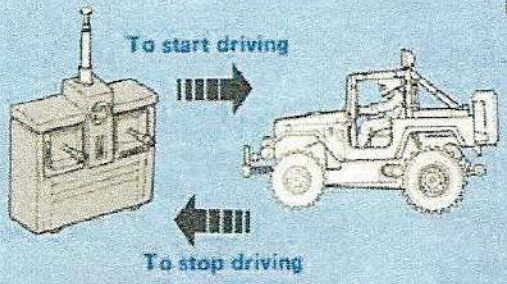
- Use a proper stand for check.



(1) Check if the controller functions surely to rotate tires at the low, medium and high speed and in the forward and reverse directions. (If not accurate, remove the switch head and bend the switch arms as shown in Fig. 16. Clean contacts and circuit board with benzine or alcohol.)
(2) Check if the front wheels rotate as controller commands.
(3) Check if the battery charge is sufficient for driving.
(4) Check cords for firm connections.
(5) Check screws for tight fastening.

Preparation for Driving

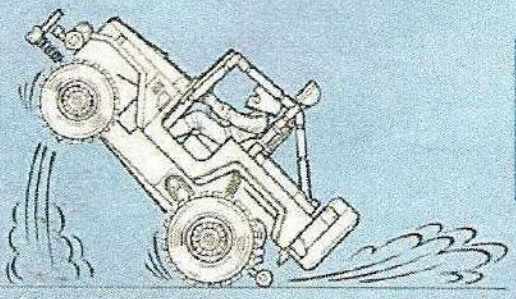
(1) Set all batteries for driving, receiver, and transmitter.
(2) Set transmitter sticks and trim levers to neutral center.
(3) Switch ON the transmitter.
(4) Switch ON the receiver.
(5) Confirm correct actions by moving the sticks. If necessary, adjust actions by trim levers.



- The sequence of switch ON/OFF.

To start driving: Transmitter switch → Receiver switch
To end driving: Receiver switch → Transmitter switch
If the receiver is switched ON prior to the transmitter, the car may burst into sudden run due to other waves. Always observe the above sequence.

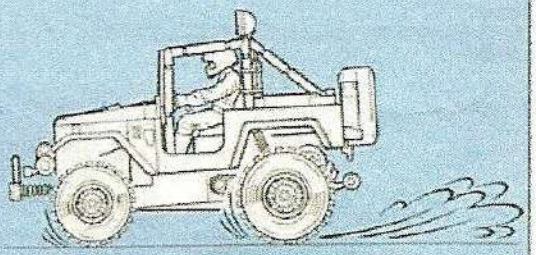
Driving Technique



- WHEELIE Driving

When the receiver and batteries are set for WHEELIE driving according to Fig. 18, a quick full throw of the speed control stick causes wheelie driving with front wheels up in the air. Steering is impossible during wheelie driving. Drop the speed by stick operation, and command steering after front wheels contact the ground. After the turn, drop the speed further by applying the brake, and push the stick quickly to restart wheelie driving. When the stick is operated slowly, ordinary driving can be performed even with the wheelie setting.

- Race Driving



When the receiver and batteries are set for race driving according to Fig. 18, the car runs without wheelie.
Caution:
Set for race driving when running the car off-road on a rough ground.

Maintenance after driving

Check part damage after use. Well-kept model lasts long.

- Clean all dirt and soil.
- Be sure to remove all batteries.
- Apply grease where necessary.

Caution

- Never use at a puddled place.

It is recommended to remove the switch head and clean the switch circuit board and contact with benzine, alcohol or CRC when controller commands are not well received during driving of the model. (Pull-up the contacts slightly as shown in Fig. 16).

TROUBLESHOOTING

Trouble	Cause	Countermeasure
Servo does not move	Insufficient battery charge in transmitter or receiver	Replace batteries
	Discontinuity in receiver or servo	Check cords and connectors
	Defective proportional controller	Ask the manufacturer for service if the proportional controller is defective.
Does not run (during driving)	Discontinuity in motor cord	Check for disconnected soldering
	Loosening of motor pinion gear	Tighten screws of pinion gear
	Defective controller	Clean controller contacts, and check cords for discontinuity
	Discontinuity in wiring	Check connectors and cords for discontinuity or faulty contact
Speed does not rise	Controller	Check if controller is set to high speed
	Deterioration of motor or nickel-cadmium battery	Replace with new parts
Does not run straight	No toe-in	Adjust the tie rod length to provide toe-in angle of about 1°
	Difference of toe-in angles between the left and right	Adjust the tie rod to make the toe-in angles equal

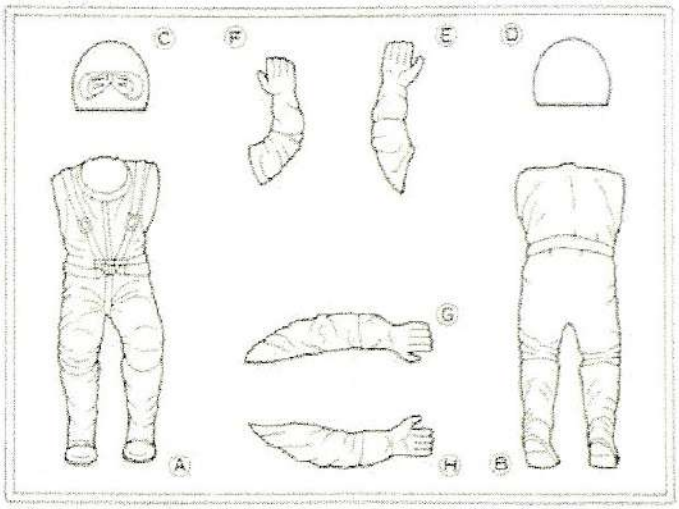
* Toe-in: Adjustment of front wheels to make them closer at the front than at the back.

Part List

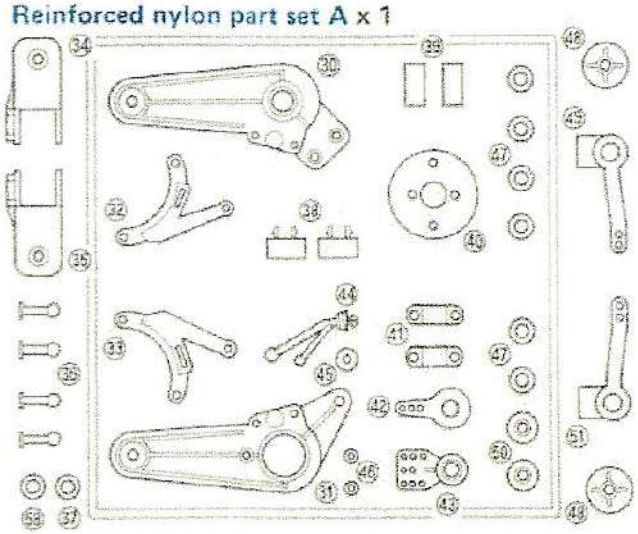
Body x 1 Chassis x 1

Nylon parts are easily moistened.
Wipe off moisture with wasted cloth.

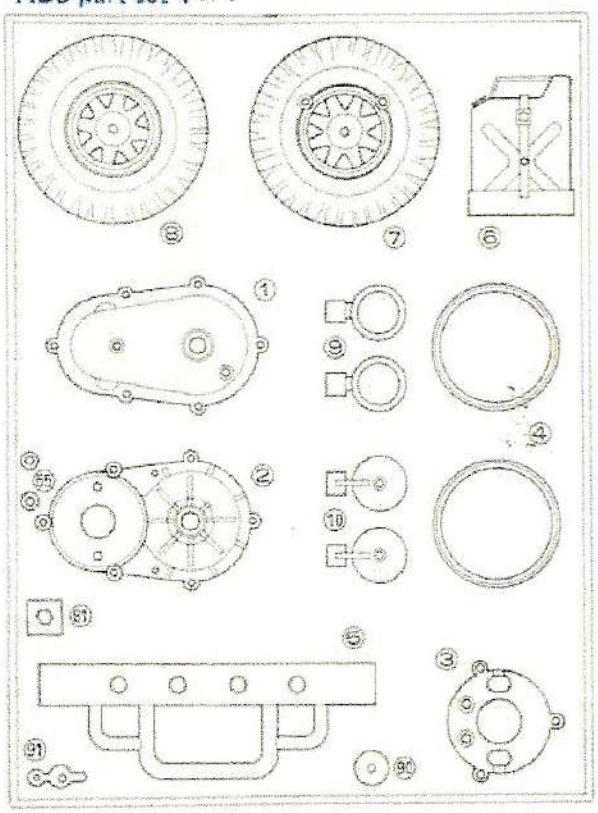
Driver set x 1



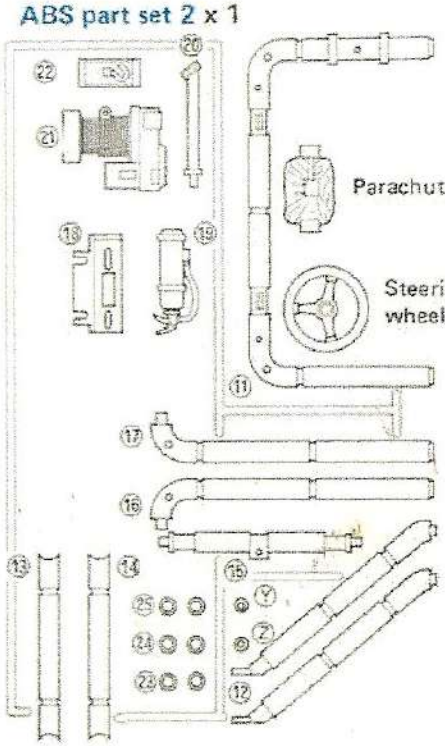
Reinforced nylon part set A x 1



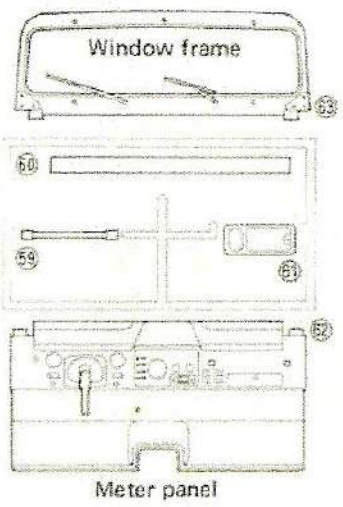
ABS part set 1 x 1



ABS part set 2 x 1

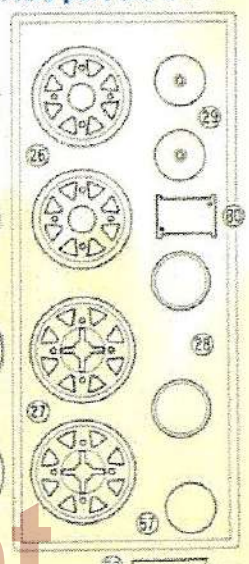


ABS part set 3 x 1

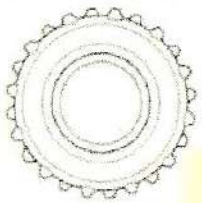


Window glass x 1

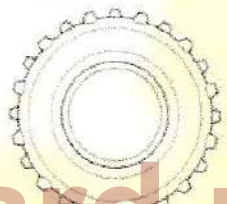
ABS part set 4 x 1



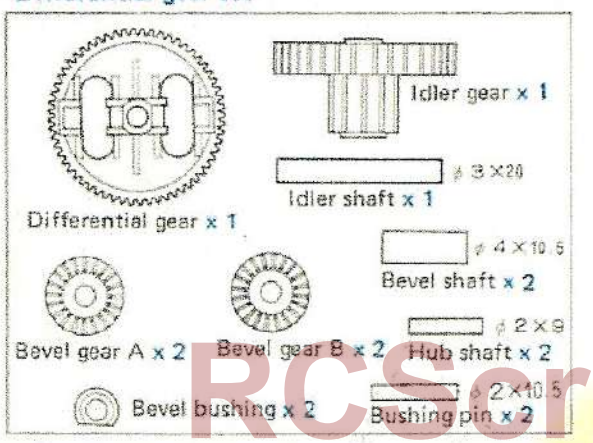
Front tires x 2



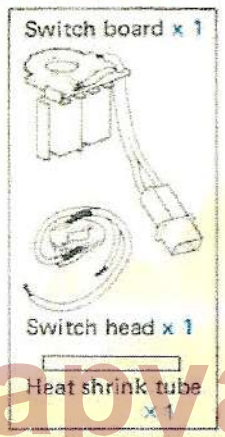
Rear tires x 2



Differential gear set



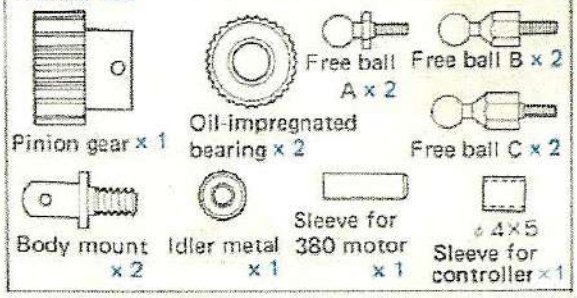
Controller set



Part List

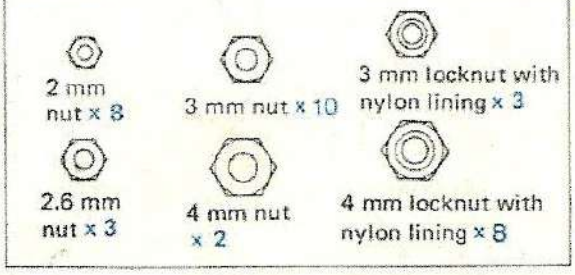
Excess screws and nuts are included, which are used as spare parts.
(ϕ3: Part with 3 mm diameters)

Metal set



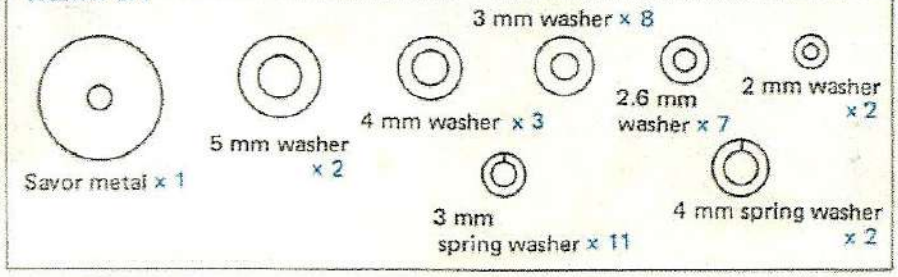
Pinion gear x 1
Oil-impregnated bearing x 2
Free ball A x 2
Free ball B x 2
Free ball C x 2
Body mount x 2
Idler metal x 1
Sleeve for 380 motor x 1
ϕ4×5 Sleeve for controller x 1

Nut set



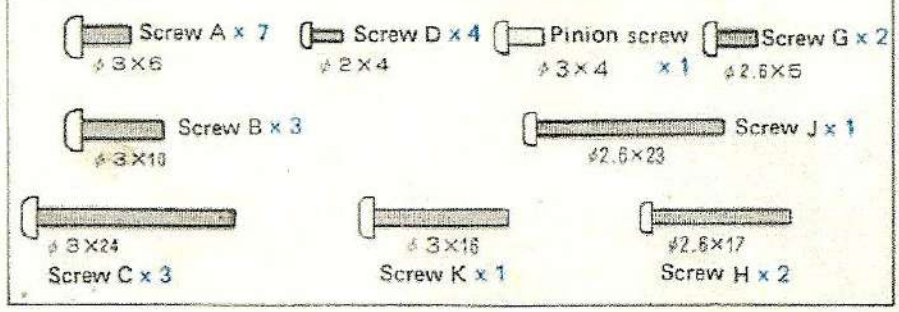
2 mm nut x 8
3 mm nut x 10
3 mm locknut with nylon lining x 3
2.6 mm nut x 3
4 mm nut x 2
4 mm locknut with nylon lining x 8

Washer set



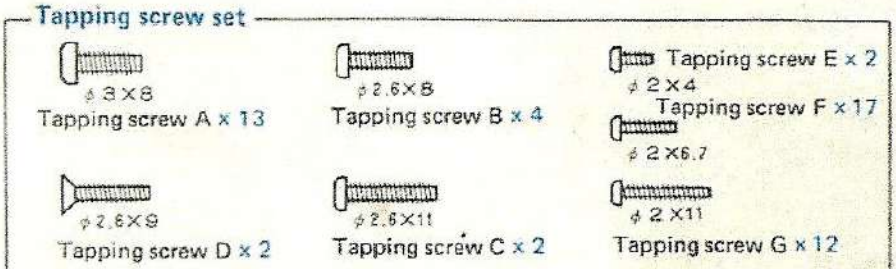
Savor metal x 1
5 mm washer x 2
3 mm washer x 8
4 mm washer x 3
2.6 mm washer x 7
2 mm washer x 2
3 mm spring washer x 11
4 mm spring washer x 2

Screw set



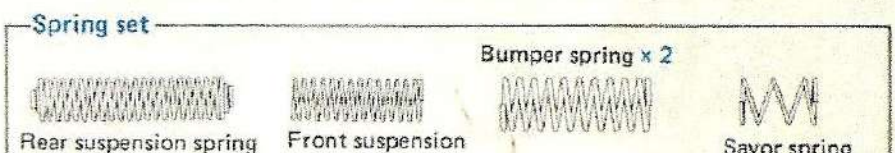
Screw A x 7 ϕ3×6
Screw D x 4 ϕ2×4
Pinion screw ϕ3×4 x 1
Screw G x 2 ϕ2.6×5
Screw B x 3 ϕ3×18
Screw J x 1 ϕ2.6×23
Screw C x 3 ϕ3×24
Screw K x 1 ϕ3×16
Screw H x 2 ϕ2.6×17

Tapping screw set



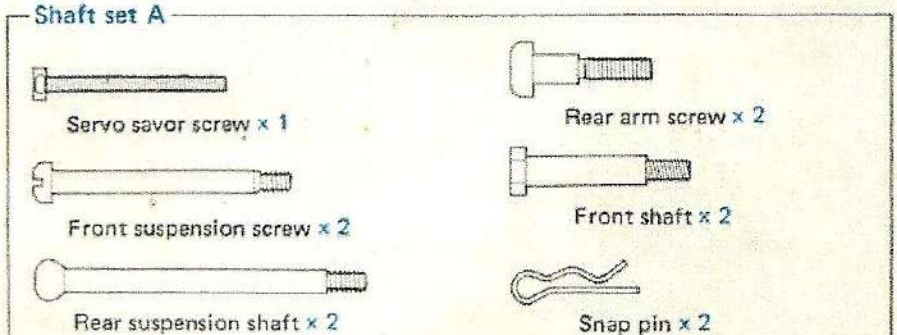
Tapping screw A x 13 ϕ3×8
Tapping screw B x 4 ϕ2.6×8
Tapping screw E x 2 ϕ2×4
Tapping screw F x 17 ϕ2×6.7
Tapping screw D x 2 ϕ2.6×9
Tapping screw C x 2 ϕ2.6×11
Tapping screw G x 12 ϕ2×11

Spring set



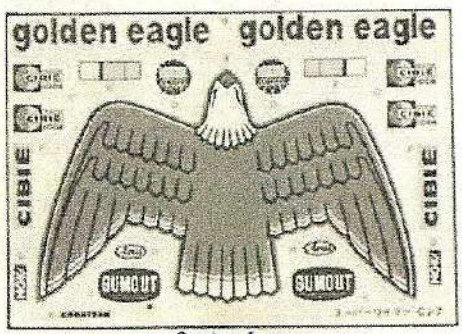
Rear suspension spring x 2
Front suspension spring x 2
Bumper spring x 2
Savor spring x 1

Shaft set A



Servo savor screw x 1
Rear arm screw x 2
Front suspension screw x 2
Front shaft x 2
Rear suspension shaft x 2
Snap pin x 2

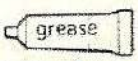
In addition following parts are included:



Seal x 1

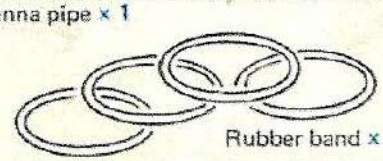
Heat resistant double coated tape x 1

Grease x 1 tube



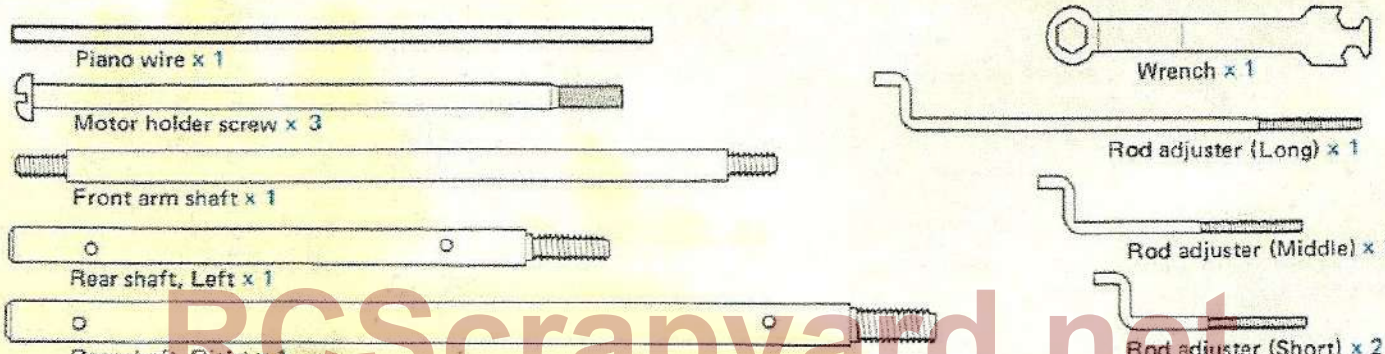
Bond x 1 tube

Antenna pipe x 1



Rubber band x 4

Shaft set B



Piano wire x 1
Motor holder screw x 3
Front arm shaft x 1
Rear shaft, Left x 1
Rear shaft, Right x 1
Wrench x 1
Rod adjuster (Long) x 1
Rod adjuster (Middle) x 1
Rod adjuster (Short) x 2