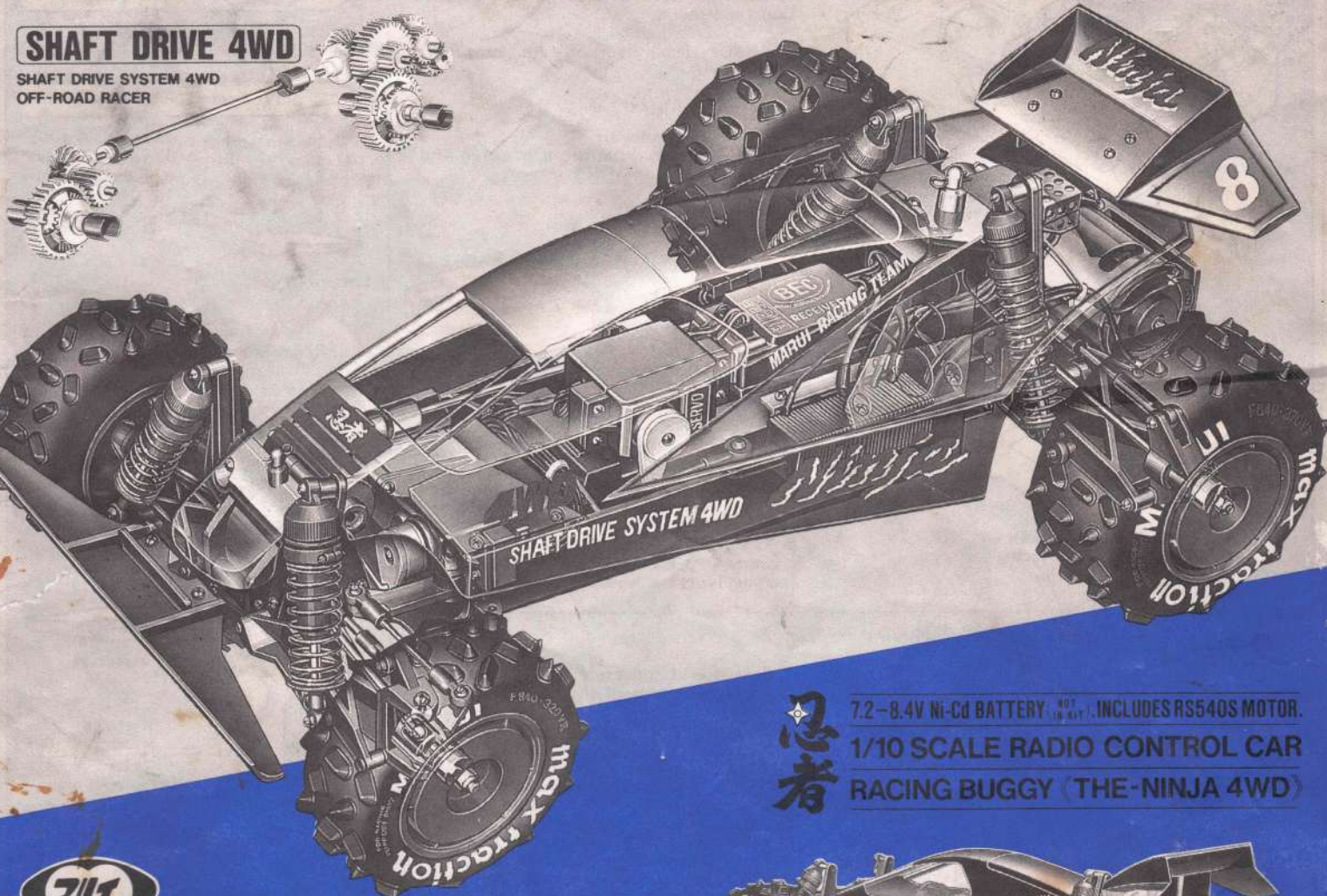


THE NINJA 4WD

1/10th SCALE HIGH PERFORMANCE R/C OFF-ROAD RACER

SHAFT DRIVE 4WD

SHAFT DRIVE SYSTEM 4WD
OFF-ROAD RACER



忍者

7.2-8.4V Ni-Cd BATTERY (NOT INCLUDED) INCLUDES RS540S MOTOR.

1/10 SCALE RADIO CONTROL CAR

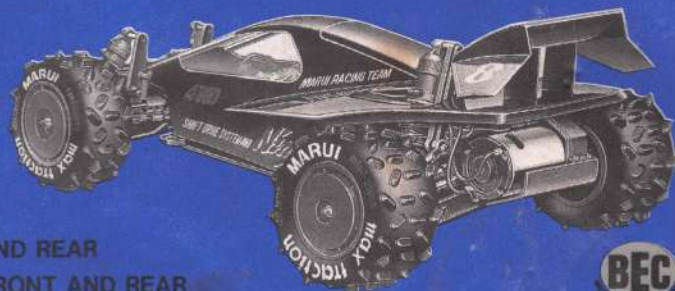
RACING BUGGY (THE NINJA 4WD)



FORWARD THREE STAGE SPEED CONTROL AND REVERSE
ASSEMBLED SEALED TYPE SPEED CONTROLLER / DURABLE BIG
BUMPER CHASSIS GUARD / ONE PIECE TYPE ABS RESIN WHEEL
DOUBLE WISHBONE SYSTEM INDEPENDENT SUSPENSION FRONT AND REAR
MAX TRACTION WART PATTERN SEMI PNEUMATIC RUBBER TIRES FRONT AND REAR

2 DIFFERENTIAL GEAR & SHAFT DRIVE SYSTEM 4WD. READY TO ASSEMBLE RADIO CONTROL CAR KIT.

PRODUCT BY TOKYO MARUI CO., LTD. MADE IN JAPAN.

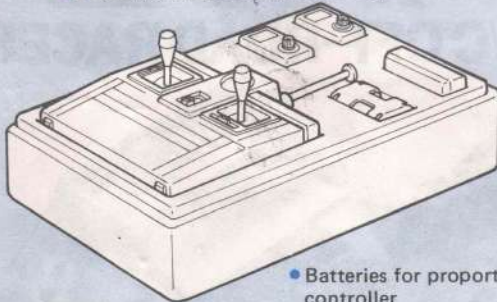


HIGH PERFORMANCE R/C OFF-ROAD RACING BUGGY

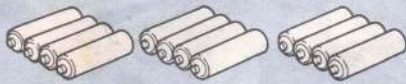


Parts Not Included In Kit

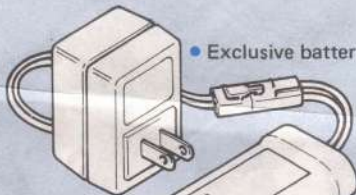
- 2-channel proportional controller



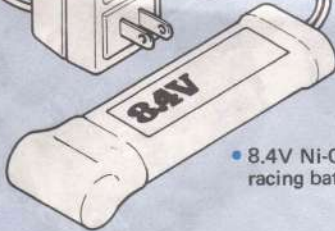
- Batteries for proportional controller



- Exclusive battery charger



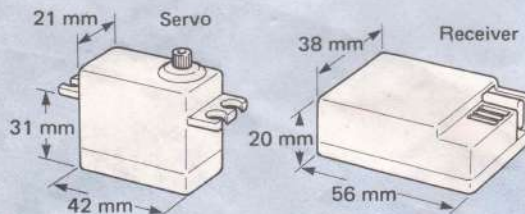
- 8.4V Ni-Cd or 7.2V racing battery



- A 2-channel proportional controller is required for the kit. Most standard proportional controllers can be used, but use care since there are some models that are not suitable, especially, receivers and servos of 3- to 8-channel proportional controllers.

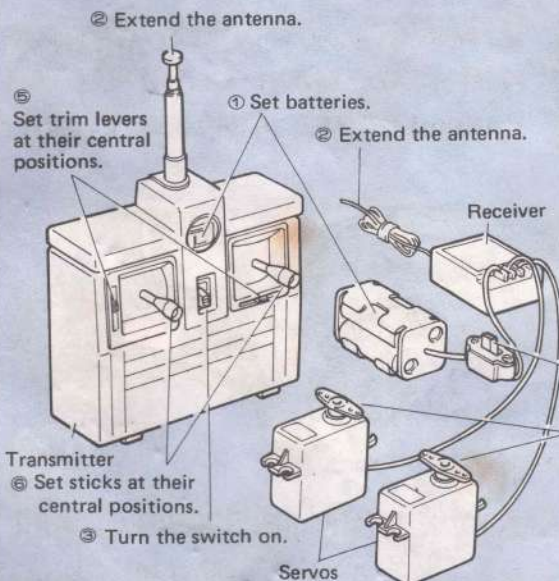
- The BEC system proportional controller may also be used.

Maximum dimensions of servo and receiver installed



- For driving, use an 8.4V or 7.2V Ni-Cd racing battery. The battery can be used 300 times or more by recharging. Use the exclusive charger, connected to a household 100V receptacle or 12V power source such as an automotive cigarette lighter. Chargers in slow and rapid charging types are available.

Check of Radio Controller and the Neutral Position



- 1 Set batteries in the receiver and transmitter.
 - 2 Extend antennas of the receiver and transmitter.
 - 3 Turn the transmitter switch on. (Always turn the transmitter switch on first.)
 - 4 Turn the receiver switch on.
 - 5 Set trim levers at their central positions.
 - 6 Set sticks at their central positions. (Servo horns stop at the neutral positions.)
 - 7 Move sticks to see if servos operate properly.
 - 8 When check of the proportional controller is complete, turn the receiver switch off first followed by the transmitter switch.
- * For other types of radio controllers, refer to their instruction manuals.

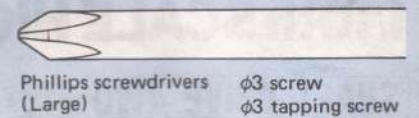
Positions that servo horns stop at in Step 6 are their neutral positions.

- If you use a BEC system proportional controller, install the exclusive connector to the speed controller according to Step 17 on Page 10. Check the proportional controller by referring to the instruction manual.

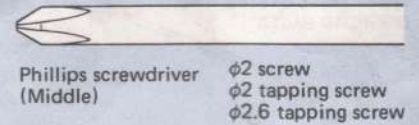


Tools Required for Assembly

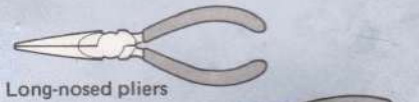
The actual size of screwdrivers are shown.



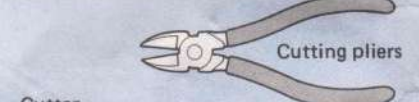
- Phillips screwdrivers (Large) $\phi 3$ screw $\phi 3$ tapping screw



- Phillips screwdriver (Middle) $\phi 2$ screw $\phi 2$ tapping screw $\phi 2.6$ tapping screw



Long-nosed pliers



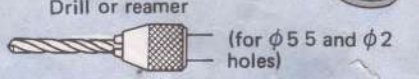
Cutting pliers



Cutter



Scissors



Drill or reamer

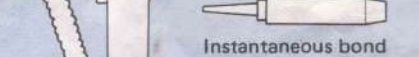
(for $\phi 5.5$ and $\phi 2$ holes)



Tweezers

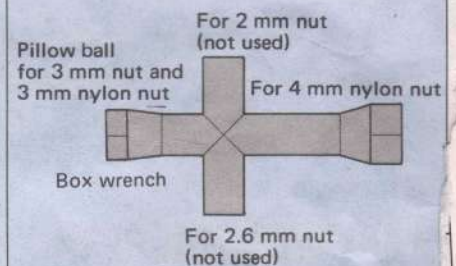


Hair dryer



Instantaneous bond

Tools Included in Kit



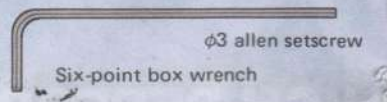
Box wrench

For 2 mm nut (not used)

Pillow ball for 3 mm nut and 3 mm nylon nut

For 4 mm nylon nut

For 2.6 mm nut (not used)

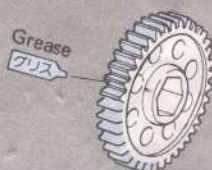


Six-point box wrench

$\phi 3$ allen setscrew

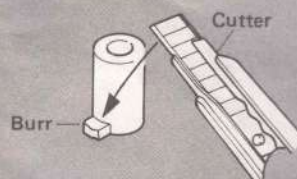
Precautions Before Assembly

- Read through the instruction manual and make sure you understand the procedures well before beginning assembly.
- Use proper screws and other parts shown in actual sizes.
- Excess screws, nuts, and washers are provided. Use them as spare parts.
- Parts Lists are attached at the end of this manual. Use them to find the proper parts.
- Thoroughly understand each assembly Step with drawings. Accurate assembly assures you of a high-performance model car.



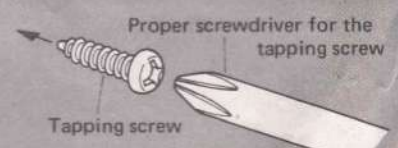
Grease

- Apply grease at places where the mark is printed. Use the grease provided in the kit or that for use with plastic. Other oil may damage the gear case.
- Do not apply grease to moving parts which are outside the case since contamination of sand may cause a malfunction.



Burr

- Remove parts from runner carefully so as not to damage them. Thoroughly remove burrs, especially, on the nylon parts. Burrs on nylon parts may result in faulty operation.



Proper screwdriver for the tapping screw

Tapping screw

- May tapping screws are used to assemble the model car. Since high torque is required to tighten the tapping screw, use the proper screwdrivers for the tapping screw to be tightened (see actual size drawing of screwdrivers). Stop rotating the screwdriver when the torque is sufficiently high. Too much torque may damage the threads.

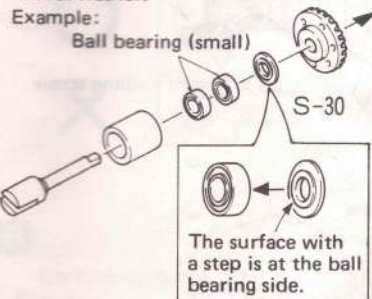
1

Ball Bearing (Small)

- P-21 may be replaced with the ball bearing (small) listed on the Marui Spare Parts List. The ball bearing (small) provides higher performance because of reduced friction force.



- When installing the ball bearing, install spacer S-30 instead of the thrust washer.



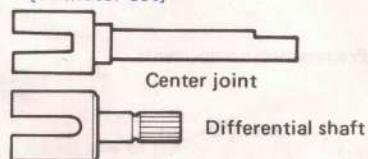
P-21



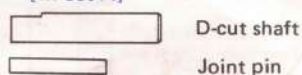
- Press the ball bearing P-21 with a proper tool that does not damage the part, like the rear portion of a screwdriver grip.

Actual size

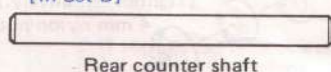
[In Motor Set]



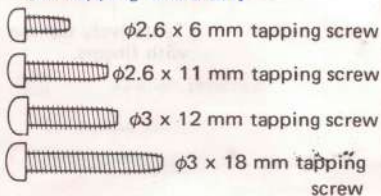
[In Set A]



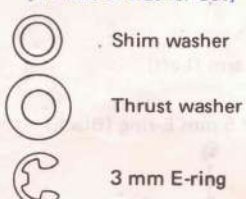
[In Set B]



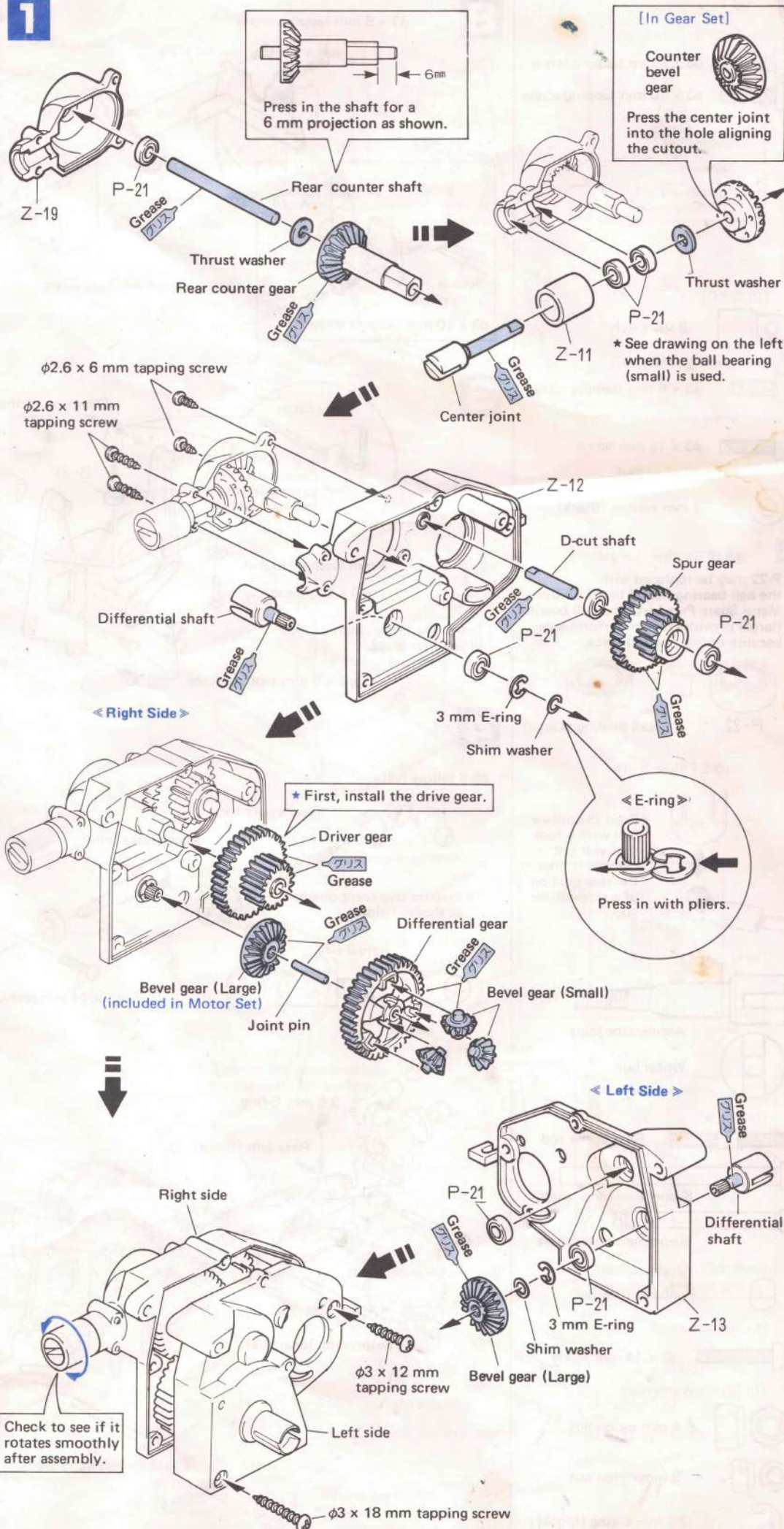
[In Tapping Screw Set]



[In Nut & Washer Set]

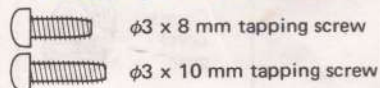


1



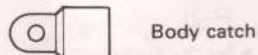
2

[In Tapping Screw Set]

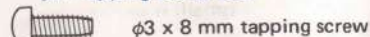


3

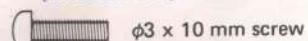
[In Set C]



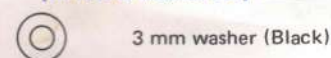
[In Tapping Screw Set]



[In Screw Set]



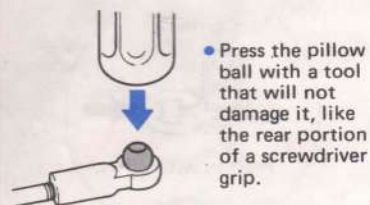
[In Nut & Washer Set]



4

<Ball Bearing (Large)>

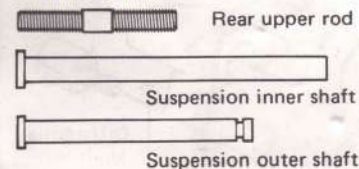
- P-22 may be replaced with the ball bearing (large) listed on the Marui Spare Part List. The ball bearing (large) provides higher performance because of less friction force.

< $\phi 5.8$ Pillow Ball>

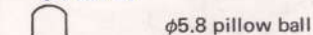
[In Motor Set]



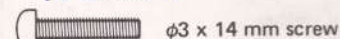
[In Set B]



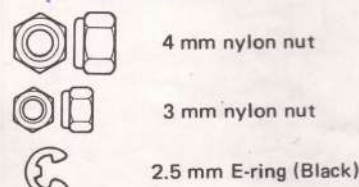
[In Set C]



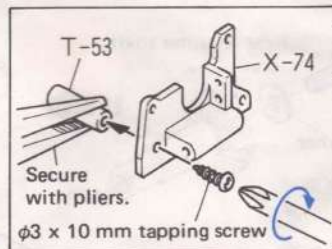
[In Screw Set]



[In Nut & Washer Set]



2

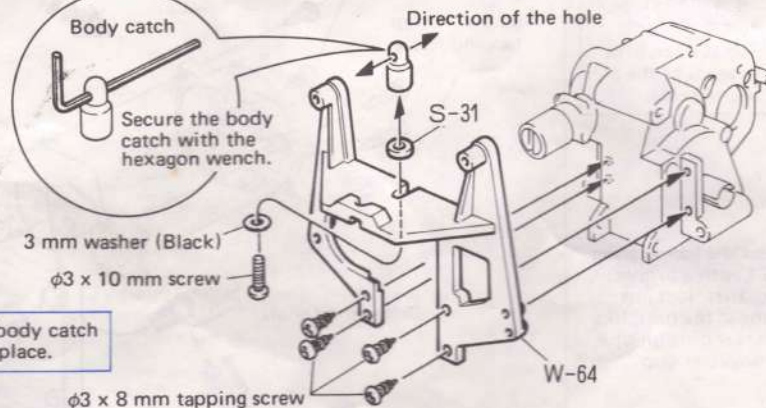
 $\phi 3 \times 8$ mm tapping screw

If the tapping screw is not tightened sufficiently, tighten it from both sides.

 $\phi 3 \times 10$ mm tapping screw $\phi 3 \times 10$ mm tapping screw

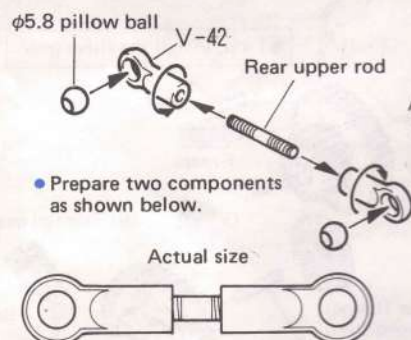
X-73

3

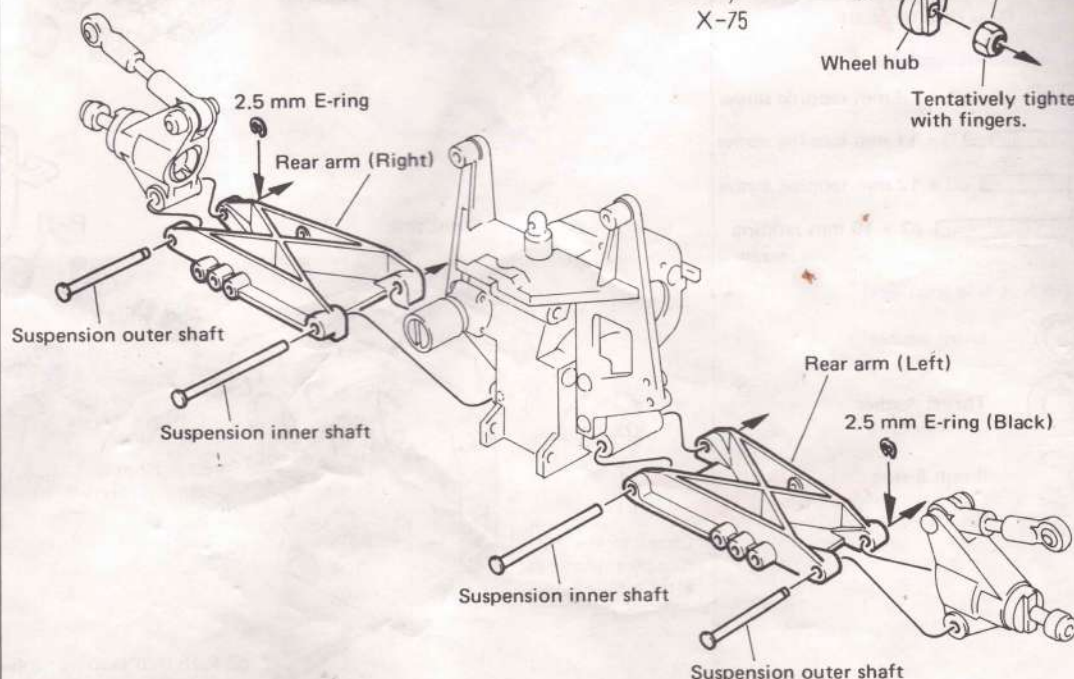
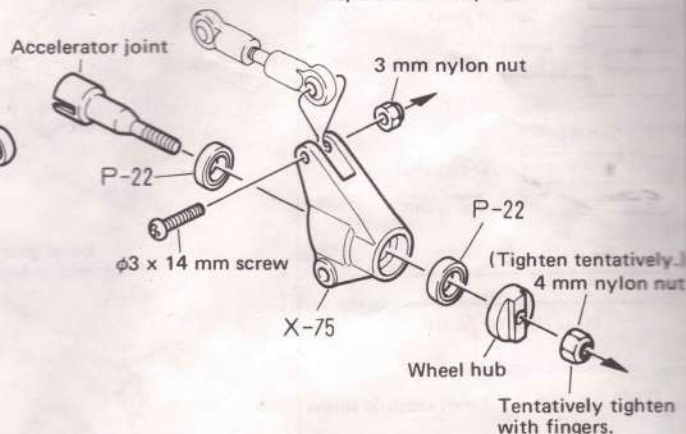


Install the body catch in the first place.

4



• Prepare two components.



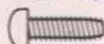
5

[In Set C]



O-ring (Small)

[In Tapping Screw Set]



φ3 x 10 mm tapping screw

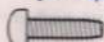
<<O-ring>>

- Properly install the O-ring in the accelerator joint as shown.



6

[In Tapping Screw Set]



φ3 x 10 mm tapping screw

[In Nut & Washer Set]



3 mm washer (Black)

7

<<Pinion Gear>>

- Select one of pinion gears according to road conditions.



[In Motor Set]

High-torque type (16 teeth)
for rough road surface



High-speed type (18 teeth)
for flat road surface

[In Set A]



φ3 allen setscrew

[In Screw Set]



φ3 x 23 mm screw

[In Nut & Washer Set]



3 mm washer (Black)



Fiber washer

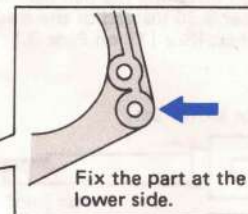
5

φ3 x 10 mm tapping screw

- Install the drive shaft and fix the upper arm.

Drive shaft (In Motor Set)

O-ring (Small)
(See drawing on the left.)



6

φ3 x 10 mm tapping screw

3 mm washer (Black)

W-62
Rear under guard

7

[In Motor Set]

Hexagon wrench

RS540S motor

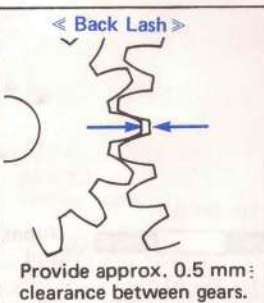
φ3 allen setscrew

18mm

Tighten the allen setscrew
on the shaft flat surface.

Pinion gear
(See description
on the left.)

<<Back Lash>>



Provide approx. 0.5 mm:
clearance between gears.

Grease

[In Set C]
Motor spacer

3 mm washer (Black)

Fiber washer

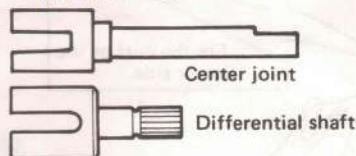
φ3 x 23 mm screw

Z-20

- Press part Z-20
then rotate in the
arrow direction.

◀Ball Bearing (Small)▶

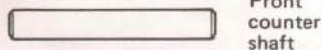
- [In Motor Set]



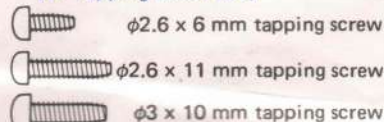
[In Set A]



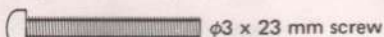
[In Set B]



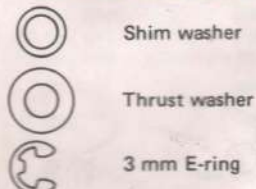
[In Tapping Screw Set]



[In Screw Set]



[In Nut & Washer Set]



Z-18

P-21

Z-11

Center joint

Grease

Thrust washer

Counter bevel gear [In Gear Set]

Align shapes of the center joint shaft and hole.

$\phi 2.6 \times 11$ mm tapping screw

$\phi 2.6 \times 6$ mm tapping screw

Differential shaft

Z-15

Front counter shaft

Front counter gear

Grease

P-21

3 mm E-ring

Shim washer

Thrust washer

Grease

Grease

Grease

« Right Side »

[In Motor Set] Bevel gear (Large)

Joint pin

Differential gear

Bevel gear (Small)

« Left Side »

Differential shaft

Z-14

P-21

3 mm E-ring

Shim washer

Bevel gear (Large)

Right side

Left side

$\phi 3 \times 23$ mm screw

$\phi 3 \times 10$ mm tapping screw

X-72

X-71

V-41

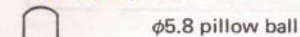
$\phi 3 \times 10$ mm tapping screw

After completion of assembly, check if it rotate smoothly with fingers.

[In Set B]



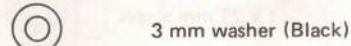
[In Set C]



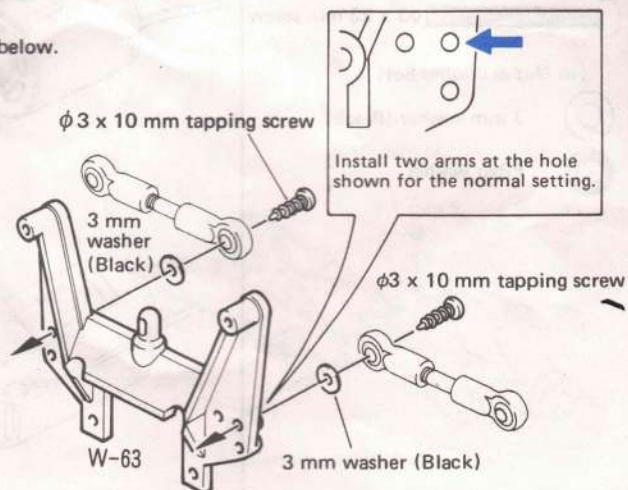
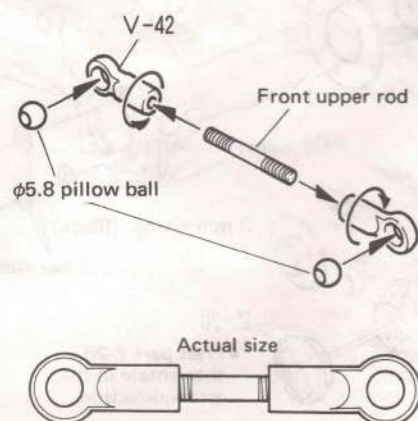
[In Tapping Screw Set]



[In Nut & Washer Set]




- Prepare two components as shown below.



10

[In Tapping Screw Set]

 φ3 x 8 mm tapping screw

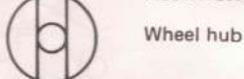
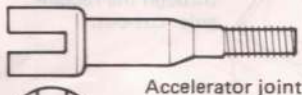
11

<Ball Bearing (Large)>

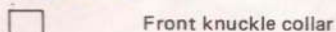
- P-22 may be replaced with the ball bearing (large) listed on the Marui Spare Part List. The ball bearing (large) provides higher performance because of less friction force.



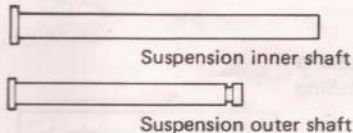
[In Motor Set]



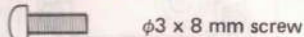
[In Set A]



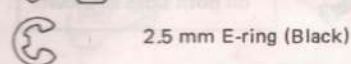
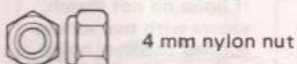
[In Set B]



[In Screw Set]



[In Nut & Washer Set]



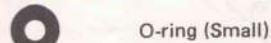
12

<O-ring>

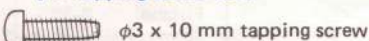
- Properly position the O-ring in the accelerator joint.



[In Set C]



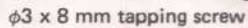
[In Tapping Screw Set]



[In Nut & Washer Set]

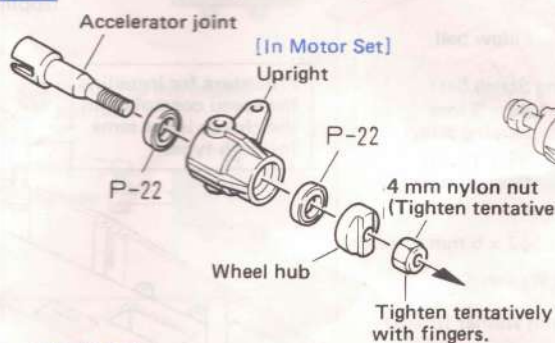


10

 φ3 x 8 mm tapping screw

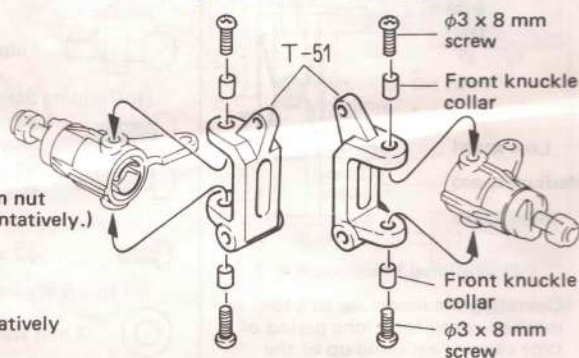
11

- Prepare two components.

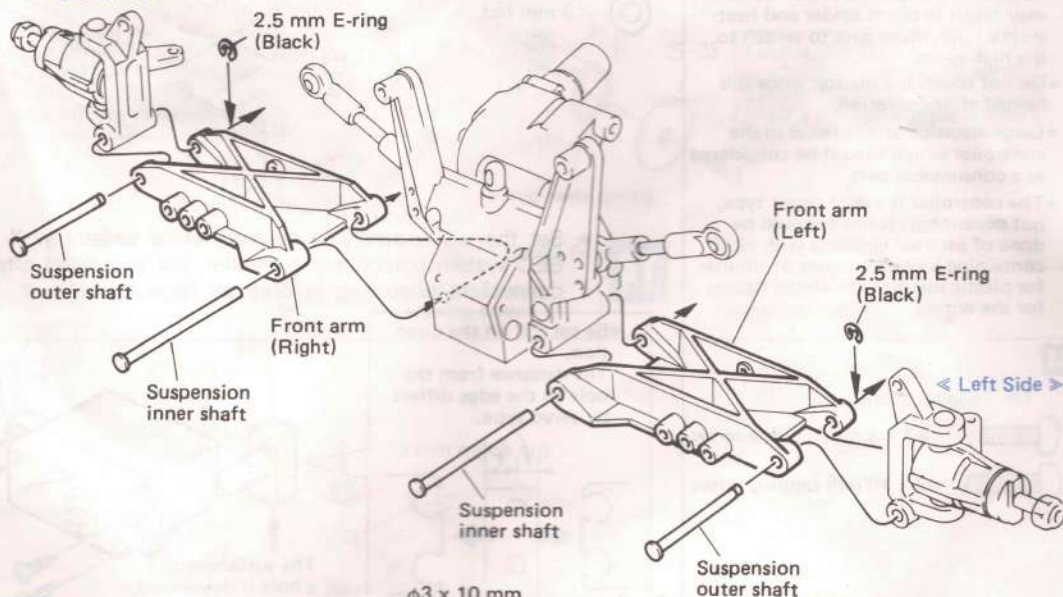


< Right Side >

< Left Side >

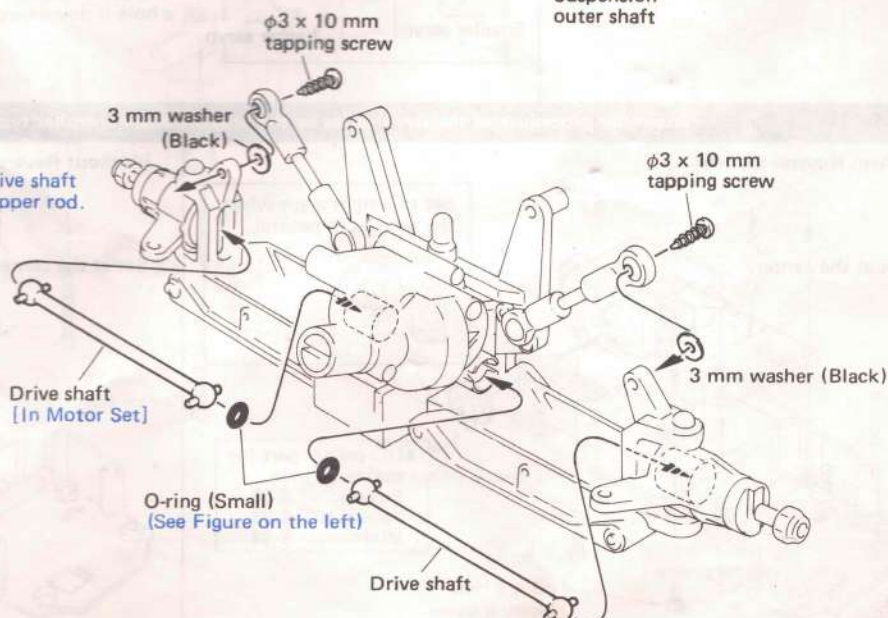


< Right Side >



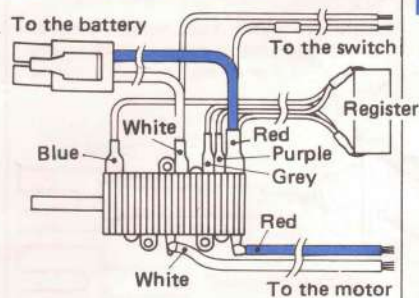
12

- *Install the drive shaft and fix the upper rod.



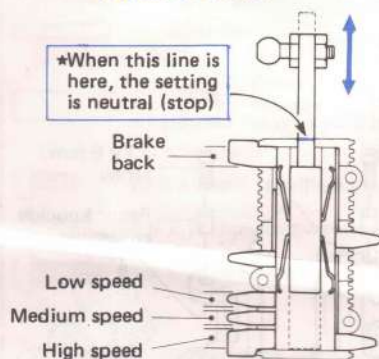
13

< Speed Controller >



< Switch Position >

★When this line is here, the setting is neutral (stop)



< Operational Precautions >

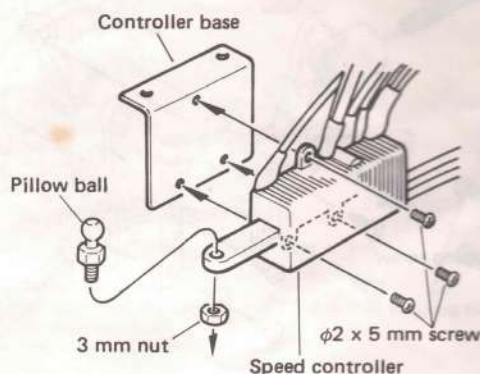
- Operating the model car at a low- or medium-speed for a long period of time causes heat build-up of the resistor in the speed controller, which may result in burnt solder and heat-shrink tube. Make sure to switch to the high-speed.
- Do not touch the register since it is heated after operation.
- Large electric current flows in the controller which should be considered as a consumable part.
- The controller is a dust proof type, but occasional cleaning should be done of internal contacts with cloth containing a small amount of thinner for plastic use. See the above figures for the wiring.

13

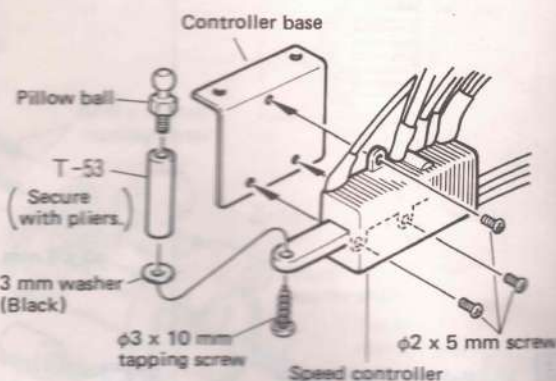
Assembly procedure varies by the proportional controller type (with or without reverse switch)

(Reverse switch changes the rotation direction of the servo motor.)

[With Reverse Switch]



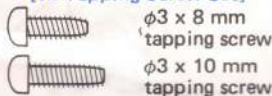
[Without Reverse Switch]



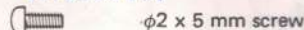
[In Set C]



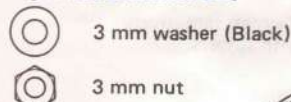
[In Tapping Screw Set]



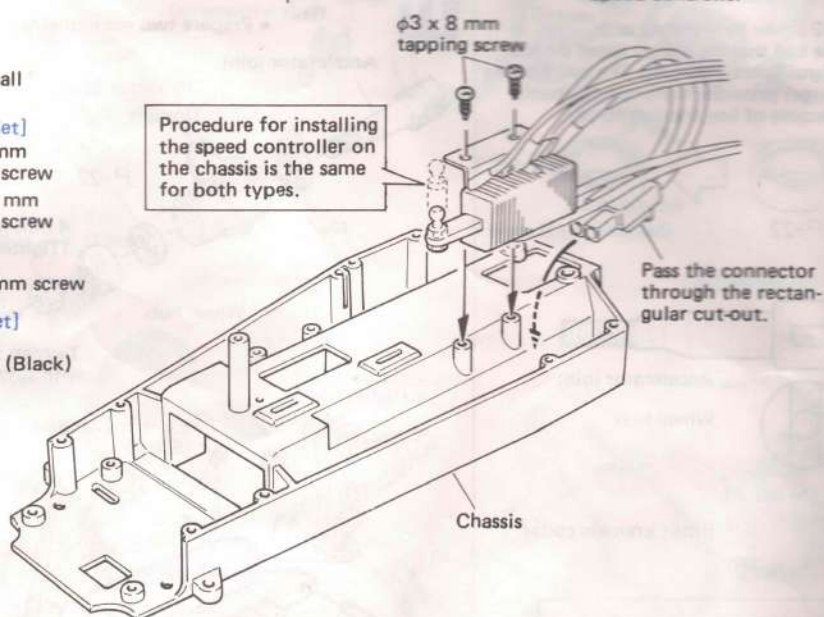
[In Screw Set]



[In Nut & Washer Set]



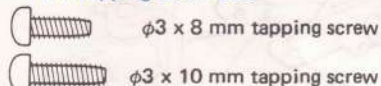
Procedure for installing the speed controller on the chassis is the same for both types.



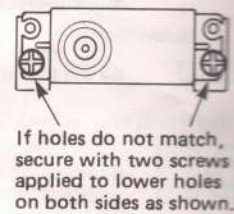
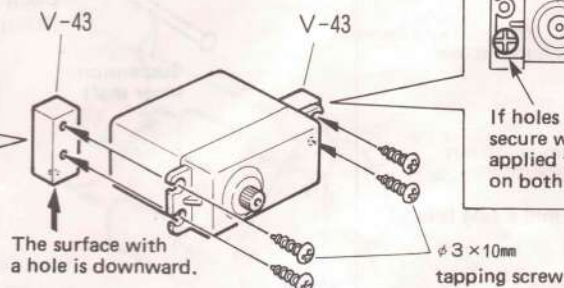
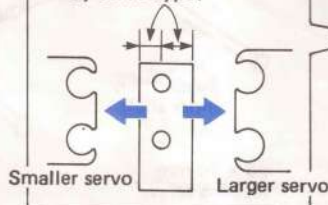
14

- ★ Set the servo surely in neutral before assembly. If you use a BEC system proportional controller, set in neutral after installing connectors according to Step on Page 10.

[In Tapping Screw Set]

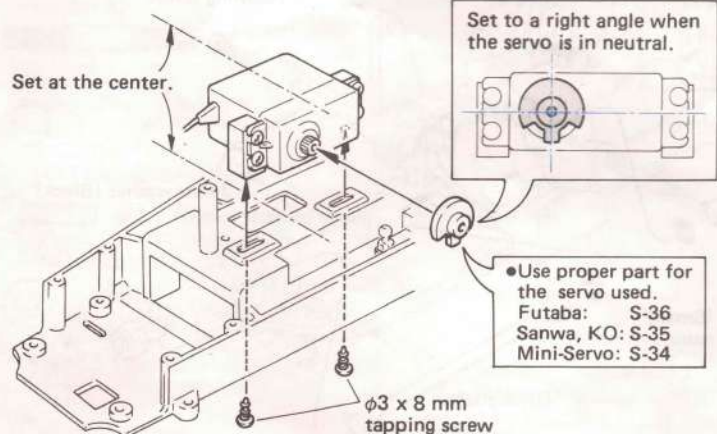


- Be careful on the direction. The distance from the hole to the edge differs by servo type.

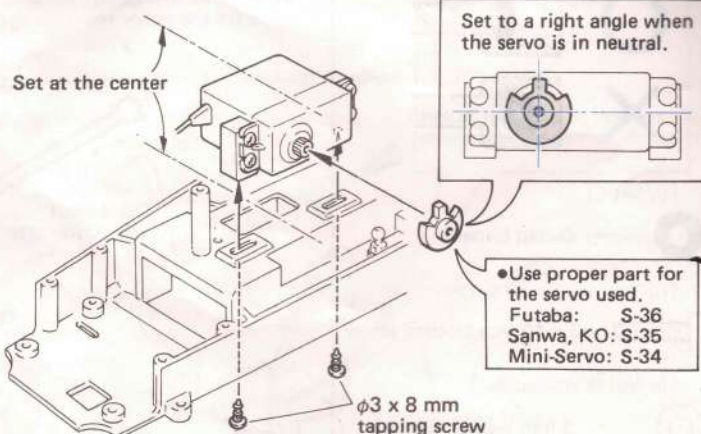


Assembly procedure of the servo varies by the proportional controller type (with or without reverse switch).

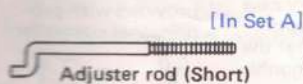
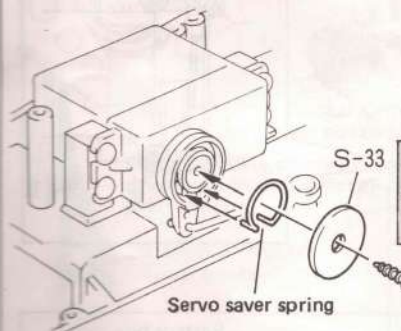
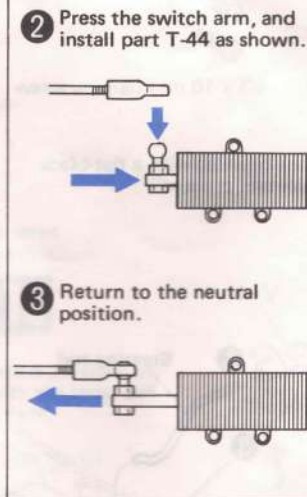
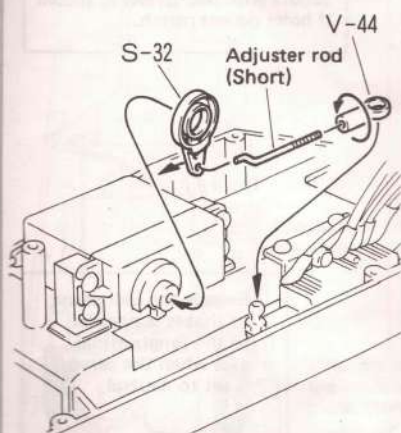
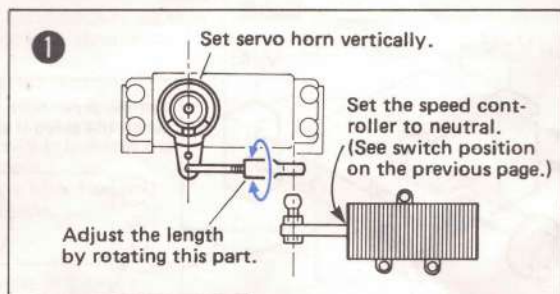
[With Reverse Switch]



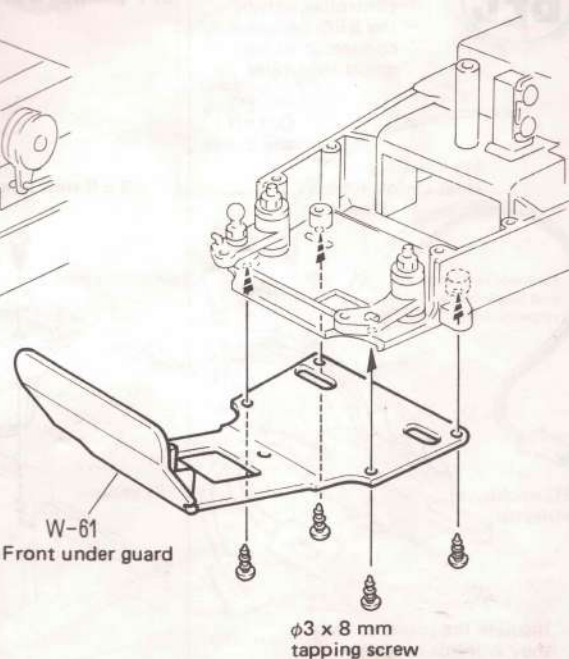
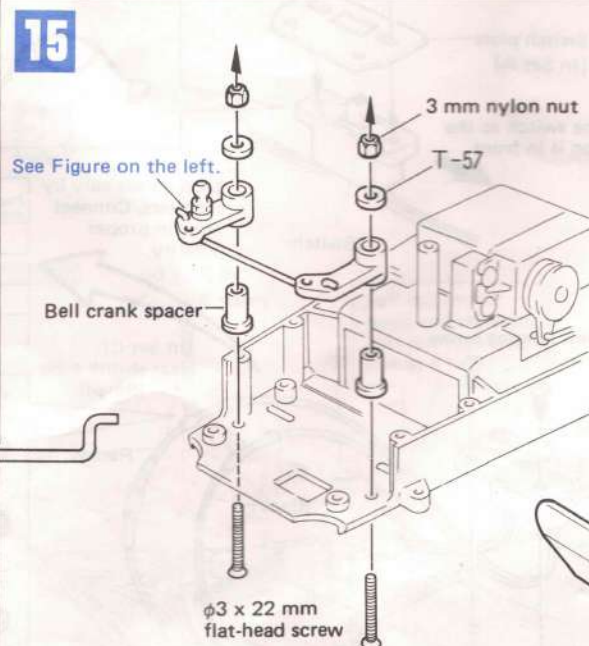
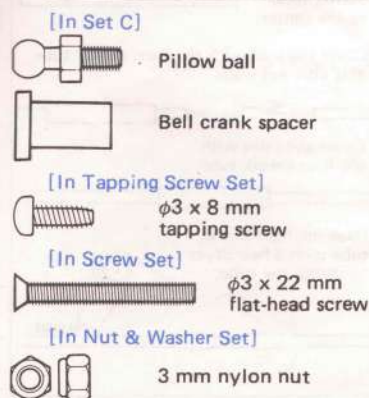
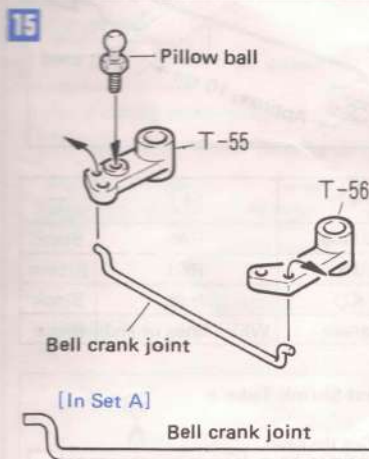
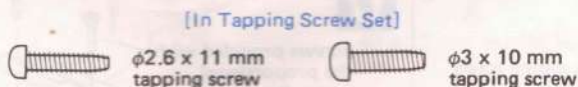
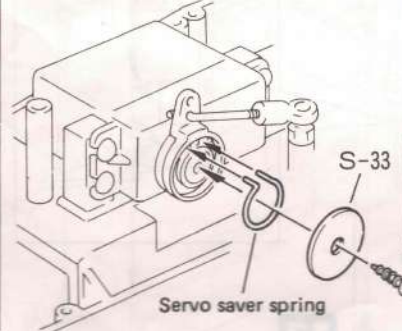
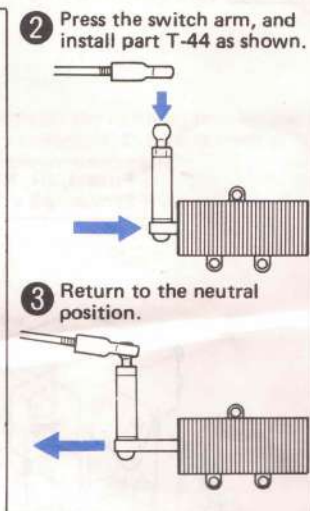
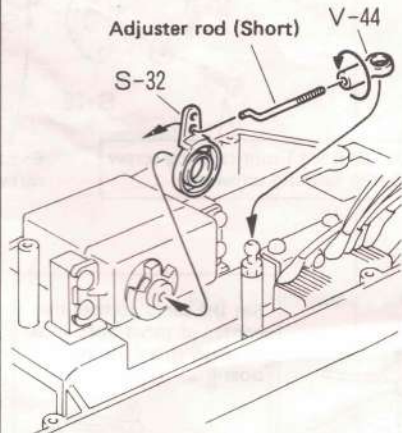
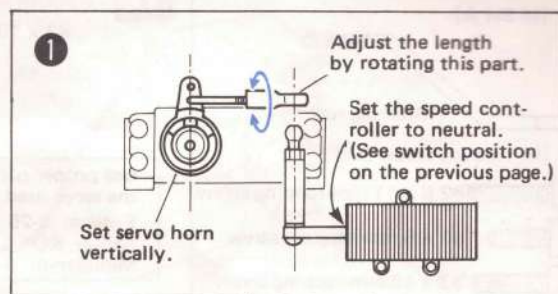
[Without Reverse Switch]



[With Reverse Switch]

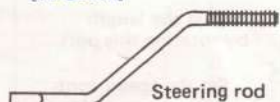


[Without Reverse Switch]

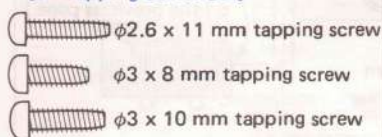


16

[In Set A]



[In Tapping Screw Set]



16

★ Set the servo to neutral before assembly

 $\phi 3 \times 10$ mm tapping screw

V-43

V-43

Use proper part for the servo used.

 Futaba: S-25
 Sanwa, KO: S-26
 Mini-Servo: S-27

S-31

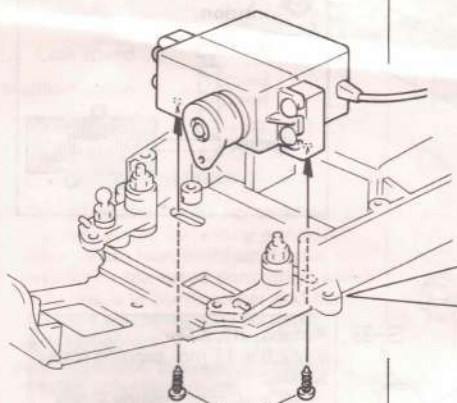
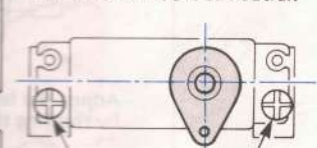
S-29

S-28

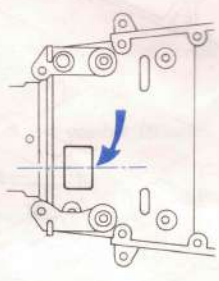
 $\phi 3 \times 10$ mm tapping screw
 Futaba, JR, KO: $\phi 2.6 \times 11$ mm tapping screw
 Sanwa: $\phi 3 \times 10$ mm tapping screw

Expand the opening with a flat-blade screwdriver and press in.

Set the servo horn at a right angle when the servo is set to neutral.

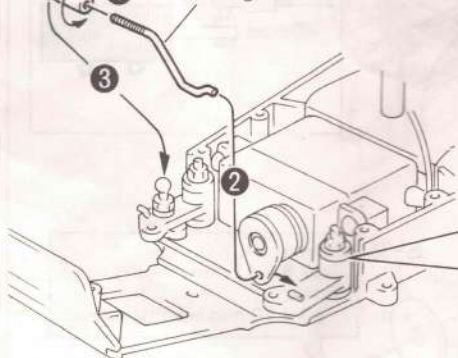


Set the servo so that the center of servo horn is as close to this dent as possible.

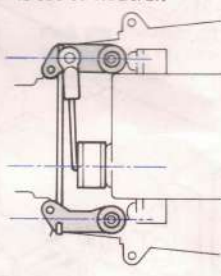


V-44

Steering rod

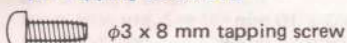


Engage the bell crank so that it is parallel to the longitudinal axis when the servo is set to neutral.



17

[In Tapping Screw Set]

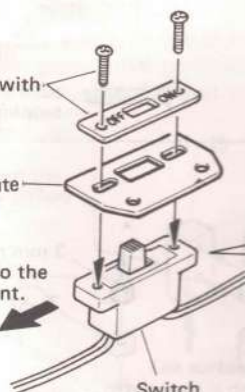


17

Screws provided with the proportional controller

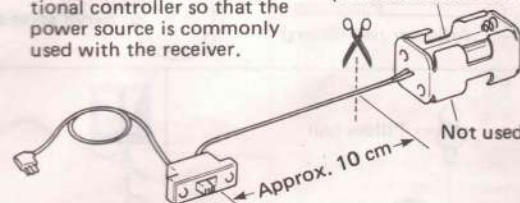
Switch plate
[In Set A]

Orientate the switch so the OFF position is in front.



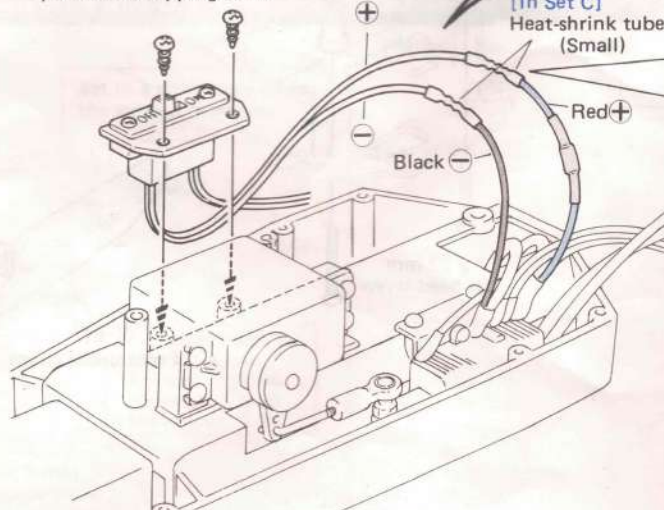
• Disconnect the battery case provided with the proportional controller so that the power source is commonly used with the receiver.

Battery box provided with proportional controller



Lead colors vary by suppliers. Connect leads in proper polarity.

Proportional controller	Polarity	+	-
Futaba		Red	Black
JR		Red	Brown
KO		Red	Black
Sanwa		White lines or red	Black

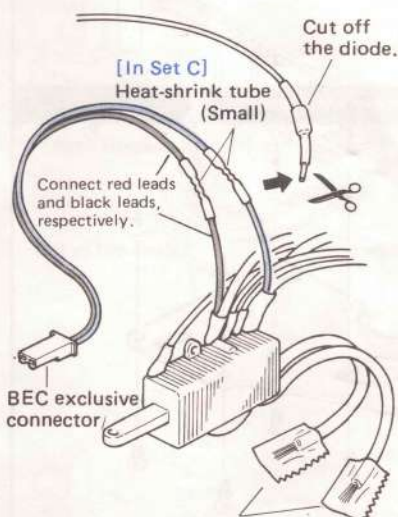
 $\phi 3 \times 8$ mm tapping screw[In Set C]
Heat-shrink tube (Small)

◀ Heat-Shrink Tube ▶

- 1 Cut the heat-shrink tube at the center.
- 2 Cover the lead with the heat-shrink tube and connect leads.
- 3 Cover the joint with the heat-shrink tube.
- 4 Heat the heat-shrink tube with a hair dryer to shrink the tube.



• If you use the BEC system proportional controller, attach the BEC exclusive connector to the speed controller.

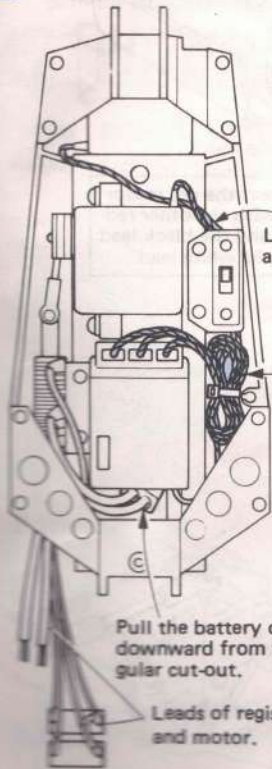


Insulate the joints so that they will not be short-circuited.

18 < Double-Faced Tape >

- Clean where the double-faced tape will be applied with thinner for plastic use.
- Do not touch the bonding surface after removal of protective paper. (Dirt and oil on fingers adversely influences the bonding strength.)
- Apply pressure after bonding double-faced tape.

19 < Orientation of Leads >



Leads from the servo are under the switch.

Bind the excess portions of the leads with the strap and place them here.

[In Set C]

Once the strap is fastened, it can not be loosened.

Pull the battery connector downward from the rectangular cut-out.

Leads of register and motor.

[In Tapping Screw Set]

φ3 x 12 mm tapping screw

20

[In Set B]

φ6 spacer

[In Tapping Screw Set]

φ3 x 10 mm tapping screw

[In Screw Set]

φ3 x 35 mm screw

φ3 x 58 mm screw

[In Nut & Washer Set]

3 mm nylon nut

3 mm washer (Black)

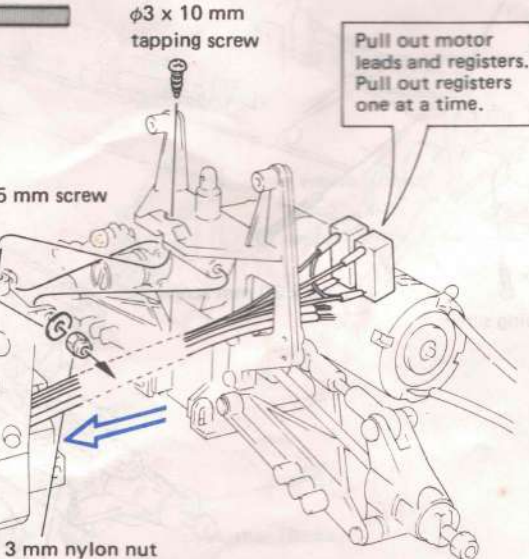
20

φ3 x 10 mm tapping screw

φ3 x 35 mm screw

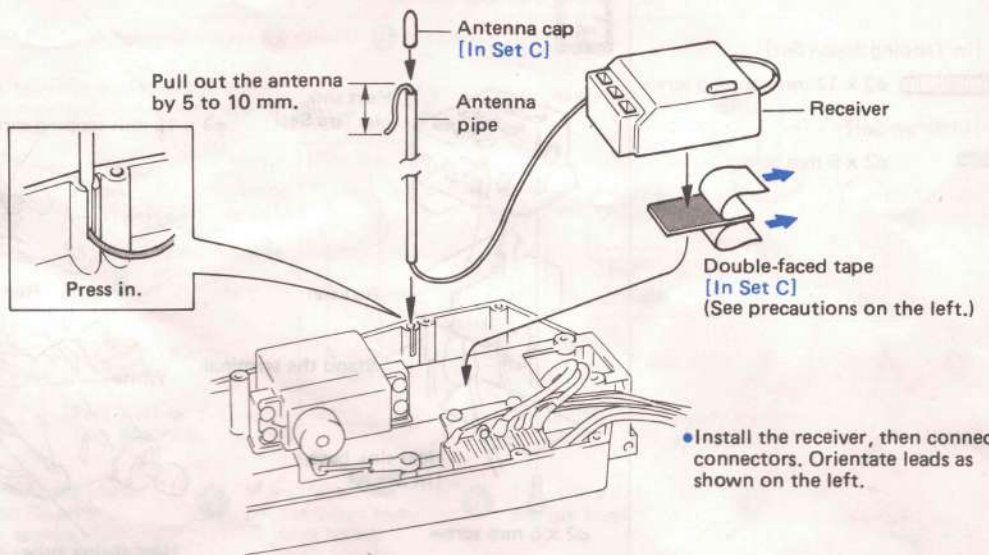
3 mm washer (Black)

3 mm nylon nut



Pull out motor leads and registers. Pull out registers one at a time.

18



Pull out the antenna by 5 to 10 mm.

Antenna cap [In Set C]

Antenna pipe

Receiver

Press in.

Double-faced tape [In Set C] (See precautions on the left.)

- Install the receiver, then connect connectors. Orientate leads as shown on the left.

φ3 x 12 mm tapping screw

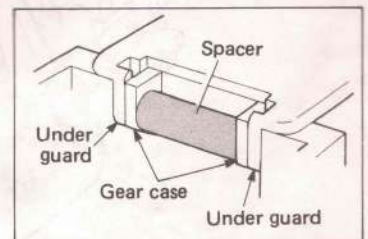
φ3 x 12 mm tapping screw

X-78

X-70

Pull out register and motor leads.

φ3 x 12 mm tapping screw



Spacer

Under guard

Gear case

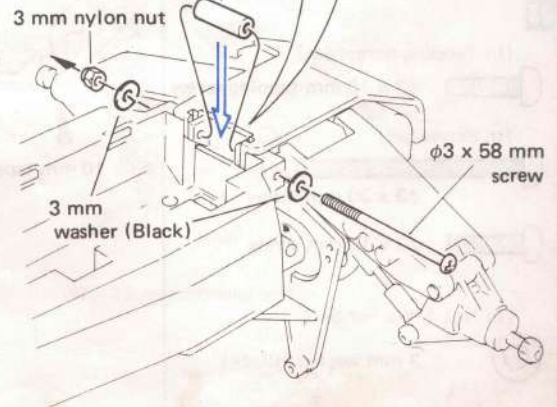
Under guard

φ6 spacer

3 mm nylon nut


3 mm washer (Black)

φ3 x 58 mm screw




21

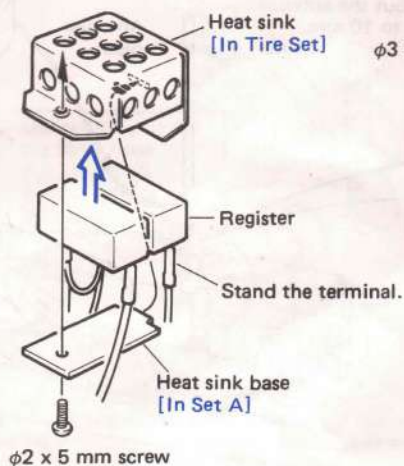
[In Tapping Screw Set]

 $\phi 3 \times 12$ mm tapping screw

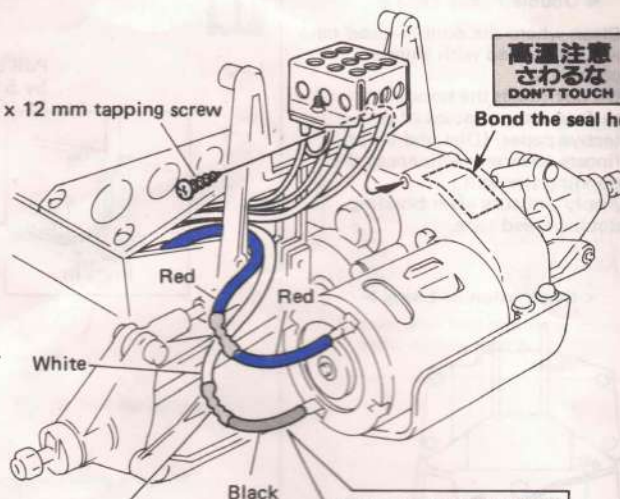
[In Screw Set]

 $\phi 2 \times 5$ mm screw

21

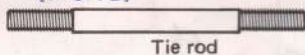
 $\phi 3 \times 12$ mm tapping screw
 高温注意
 さわるな
 DON'T TOUCH

Bond the seal here.




22


[In Set B]

 Tie rod

[In Set C]

 $\phi 5.8$ pillow ball

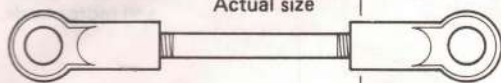
[In Screw Set]

 $\phi 3 \times 10$ mm screw

[In Nut & Washer Set]

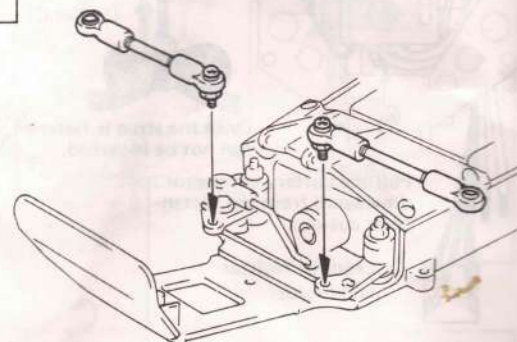
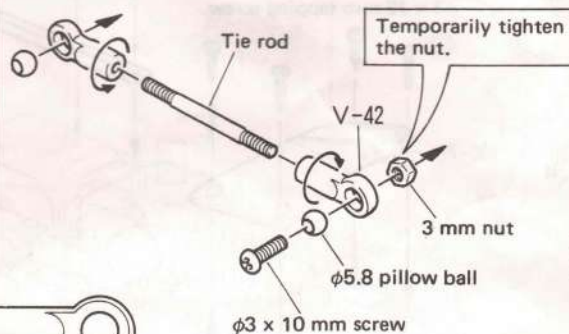
 3 mm nut

Actual size



22

● Assemble two tie rod sets.



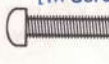
23

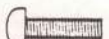
23

[In Tapping Screw Set]

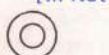
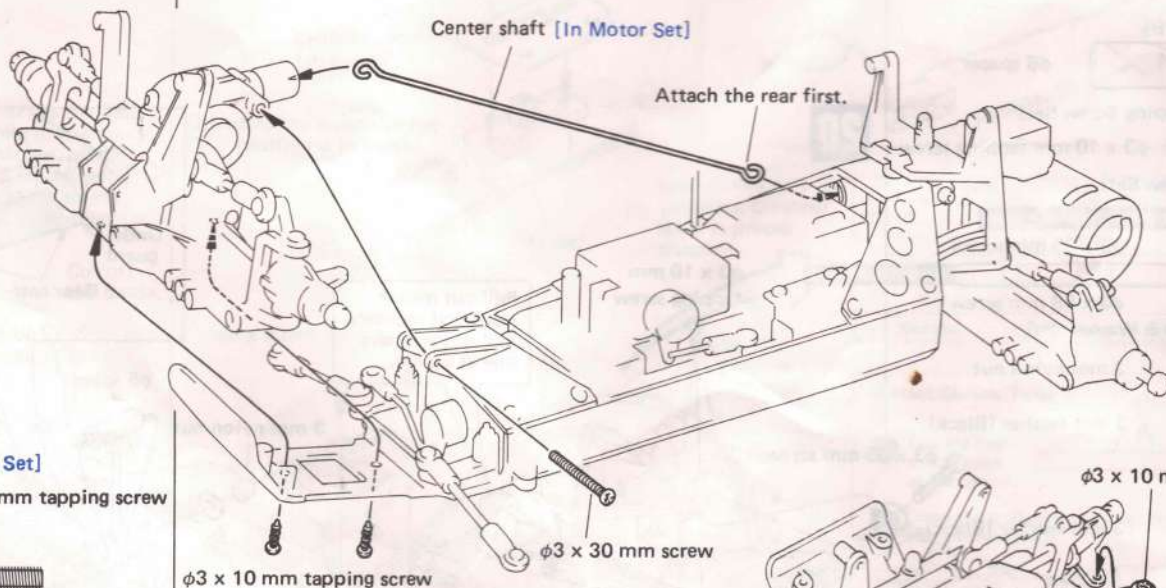
 $\phi 3 \times 10$ mm tapping screw

[In Screw Set]

 $\phi 3 \times 30$ mm screw

 $\phi 3 \times 10$ mm screw

[In Nut & Washer Set]

 3 mm washer (Black)
 $\phi 3 \times 10$ mm screw

3 mm washer (Black)

 $\phi 3 \times 10$ mm screw

3 mm washer (Black)

24

< Piston >

- Number of piston holes influences the damper effect.

Standard



For greater damper effect



The damper return speed is slower.

< Spring Adjustment >

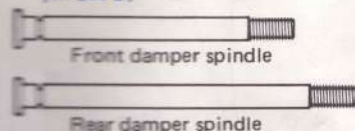
- The spring force is adjusted with the stopper position.



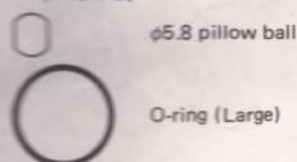
Weaker Stronger

Loosen the screw and adjust the spring force.

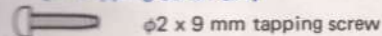
[In Set B]



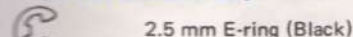
[In Set C]



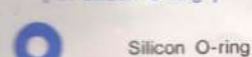
[In Tapping Screw Set]



[In Nut & Washer Set]



[In silicon O-ring]

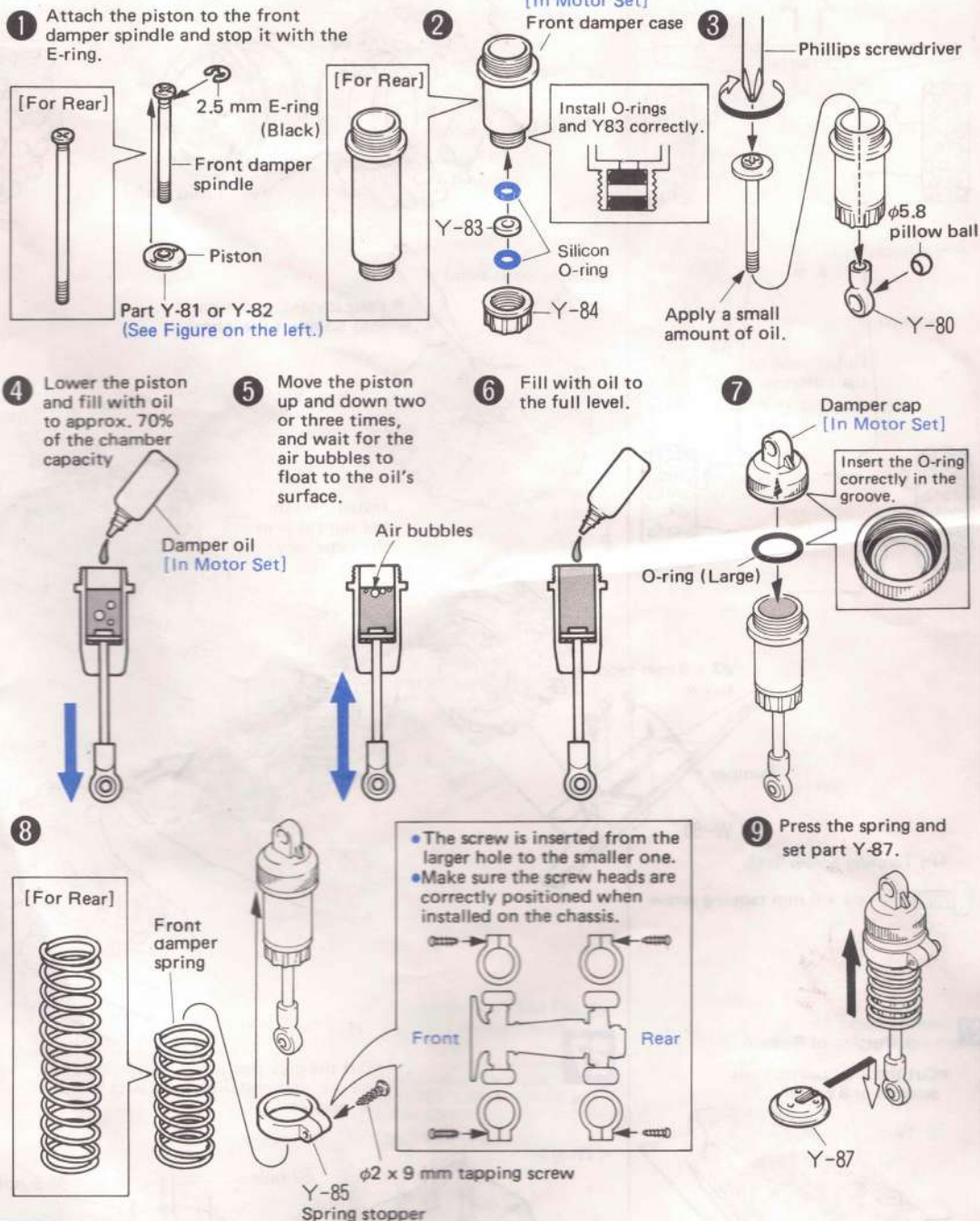


24

The front piston is shown. Assemble each two sets for front and rear.

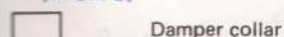
Perform Assembly Steps 1 through 9 in order.

- 1 Attach the piston to the front damper spindle and stop it with the E-ring.
- 2 [In Motor Set] Front damper case
- 3 Phillips screwdriver
- 4 Lower the piston and fill with oil to approx. 70% of the chamber capacity
- 5 Move the piston up and down two or three times, and wait for the air bubbles to float to the oil's surface.
- 6 Fill with oil to the full level.
- 7 Damper cap [In Motor Set]
- 8 [For Rear] Front damper spring
- 9 Press the spring and set part Y-87.

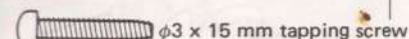
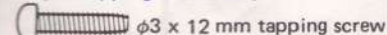


25

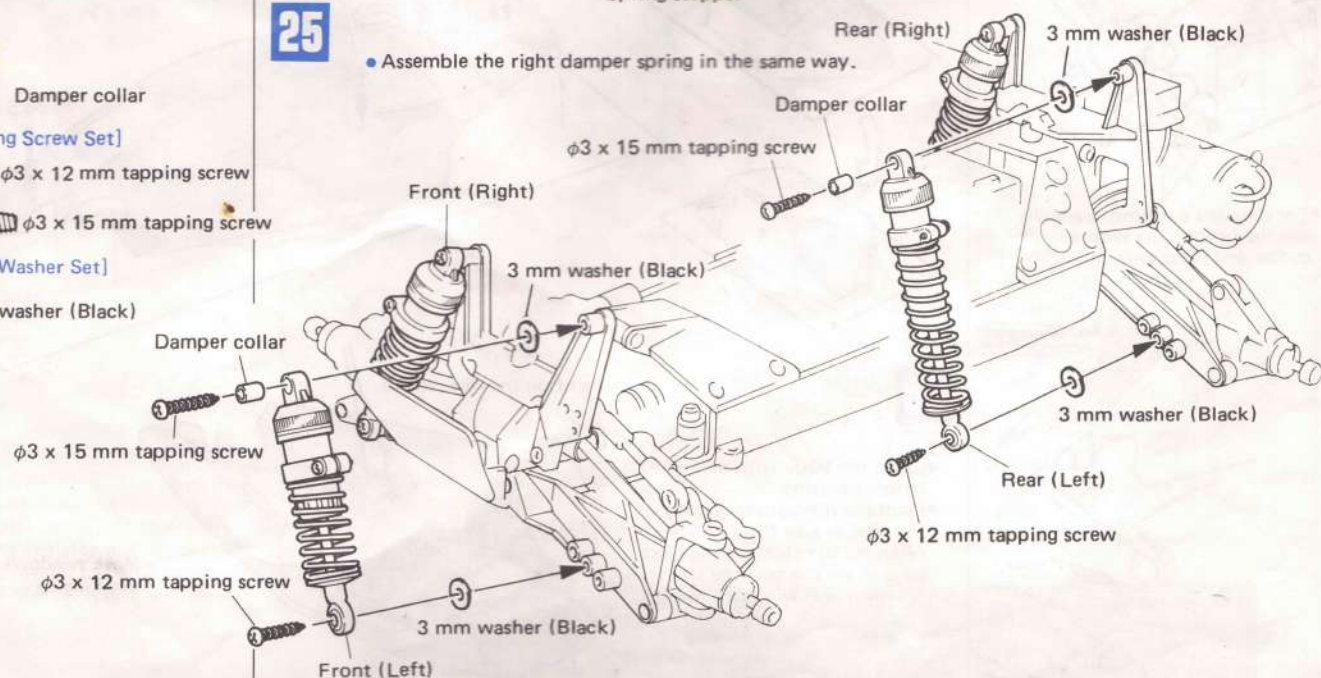
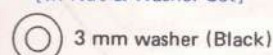
[In Set C]



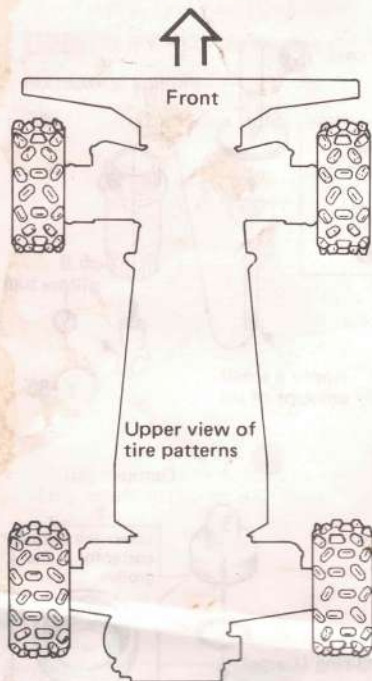
[In Tapping Screw Set]



[In Nut & Washer Set]

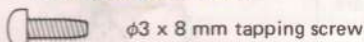


«Tire Patterns»



Upper view of tire patterns

[In Tapping Screw Set]

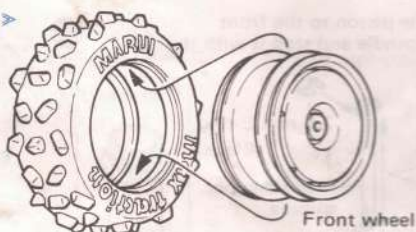


3 x 8 mm tapping screw

Install wheels into tires while referring to the tire pattern drawing on the left.

« Front »

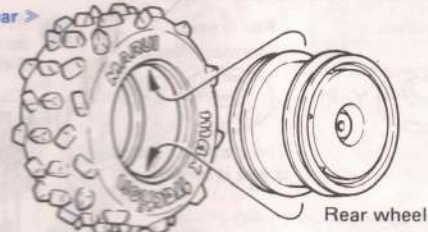
Front tire



Front wheel

« Rear »

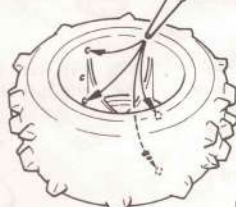
Rear tire



Rear wheel

Instantaneous bond

- Pour instantaneous bond into holes on the wheel.

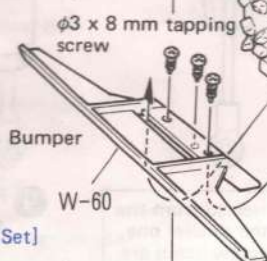


Install tires on the right side in the same way.

Match the hub concave and the wheel convex.



Rear



Bumper

W-60

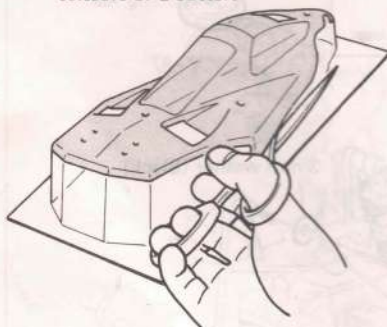
Front

Hold the tire with fingers and tighten the nut that was temporary attached to the screw.

4 mm nylon nut (Temporarily tightened)

« Cutting of Body »

- Cut the grey portion with scissors or a cutter.



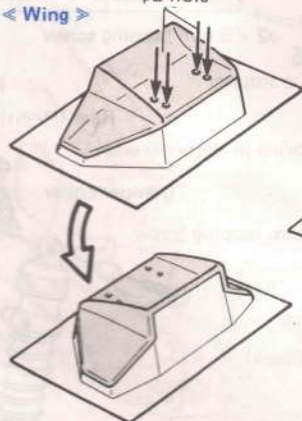
- For detailed patterns, gradually cut the border line with a cutter and press with a finger.



- Cut the grey portion (see descriptions on the left) and drill holes with a drill or reamer.

« Wing »

2 hole

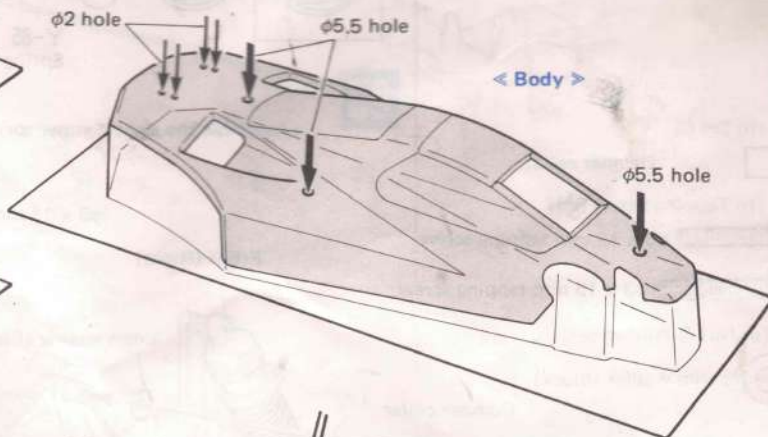


2 hole

5.5 hole

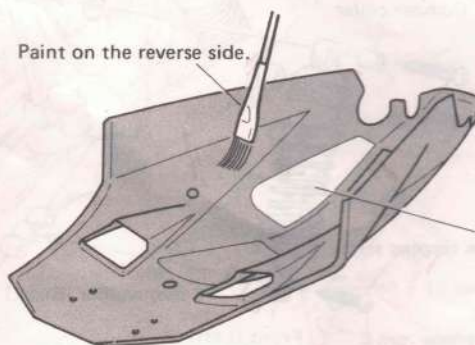
« Body »

5.5 hole



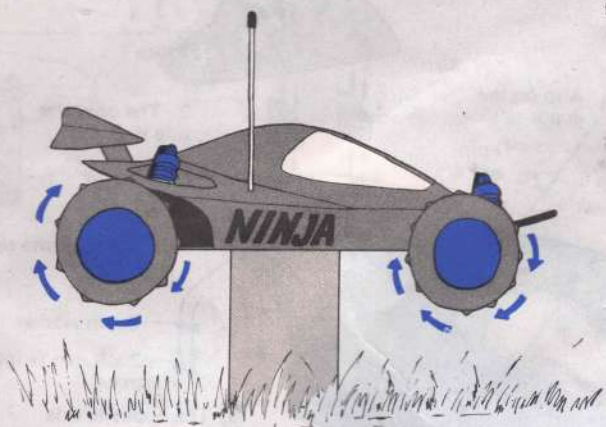
Paint on the reverse side.

- Clean the body with detergent before painting.
- Paint polycarbonate coating on the reverse side of the body referring to colors on the next page or on the package.
- Do not paint windows.



Mask windows with masking tape.

« Checks Before Operation »



- Always check components before operation. For the check, place the model car on a stand as shown, keeping all tires off the ground. If the model car is positioned on the ground during the check, it may suddenly run resulting in unexpected danger.

★ Observe the following check procedure:

- 1 Check for loose screws.
- 2 Check if the wiring is correct and connections are tight.
- 3 Check if the speed controller is set to neutral.
- 4 Use a fully charged battery.
- 5 Turn the transmitter switch on and check if the battery power is sufficient.
- 6 Turn the receiver (model car) switch on.
- 7 Check if the steering moves as instructed from the transmitter.
- 8 Check if the speed controller operates as instructed from the proportional controller.

- If the above checks are satisfactory, operate the model car for one or two minutes on the stand and check for abnormal contact. Be careful that the model car does not drop from the stand because of the vibration.

« Precautions For Operation »



- Avoid driving the model car on the road, in the presence of small children, or in places where it is crowded.



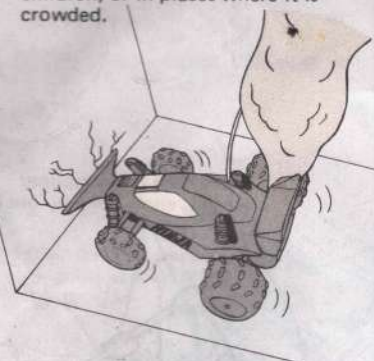
- Avoid driving in a water pool, which may result in a damaged proportional controller or motor or both.



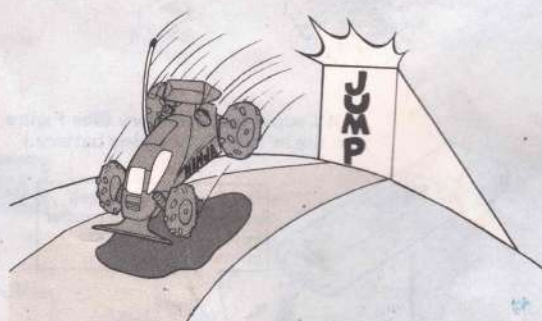
- Although the NINJA model car is designed for off-road racing, avoid places with large stones.



- When the model car is stuck in deep sand, do not continue to operate it.



- Do not continue operation when the model car is caught by an obstacle.



- Jumping may damage the frame and other components. When making a jump, drive straight at full speed.

- Driving on a grassy field may cause grass to wind around the shaft.

- When the battery is fully discharged, the model car is not controllable since the power is common for the motor and the controller.

- The register and motor are hot after an operation. Do not burn your fingers by touching them.

Since THE NINJA 4WD is designed for the off-road race, the model car reaches a high speed. Pay attention for safety.

« Maintenance After Operation »

- Always perform maintenance after driving to maintain the performance.
- Make sure to turn the receiver switch off, then the transmitter when turning off the proportional controller.
- Make sure to disconnect the battery connector after driving. Always remove the battery when the model car is not operated.
- Remove contaminated sand and dust with a dry cloth. Never wash with water.
- Periodically apply grease to gears and other moving parts.
- Check for loose screws and nuts.
- Check if the oil level of the damper is proper.

Make sure to disconnect the battery connector after operation.

« Troubleshooting »

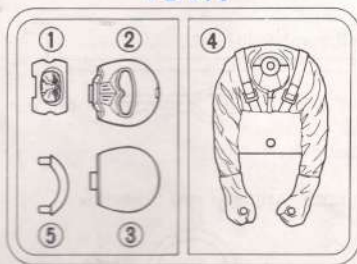
- The motor rotates, but the model car does not run. See Pages 3, 5, 9, 12 and 14.
- Abnormal sound from the motor and/or gear. Front and/or rear wheels do not rotate smoothly. See Pages 3 and 6.
- No-control or abnormal operation during driving. See Page 2.
- Abnormal speed control or the high-speed is not applied. See Pages 8 and 9.
- If the model car does not run straight, adjust the steering stick trim by shifting it to the opposite direction from the car curves. See Pages 10 and 12.
- If the proportional controller develops faults such as a servo that does not operate, check if the battery has sufficient power, the polarity of receiver power is correct, and the leads of the servo and motor are continuous. If the controller is still faulty, consult the after service of the proportional controller supplier.

« Technical Data »

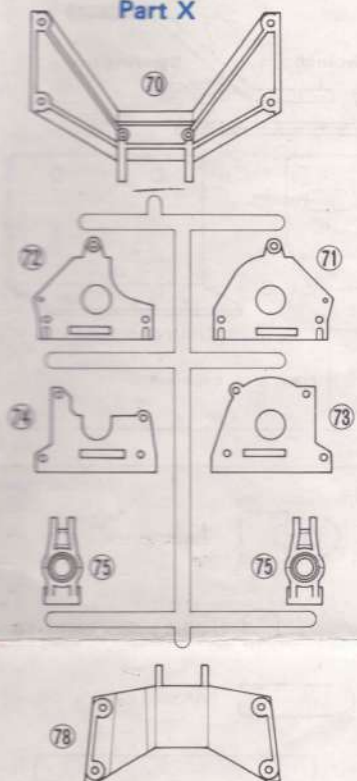
Overall length	390 mm
Overall width	237 mm
Overall height	140 mm
Wheel base	265 mm
Front tread	200 mm
Rear tread	200 mm
Front tire size	φ84 x 32
Rear tire size	φ84 x 37
Max. road clearance	42 mm
Min. road clearance	25 mm
Overall weight	1450 g
Gear ratio (16 teeth)	8.68 : 1
Gear ratio (18 teeth)	7.72 : 1

• Specifications are subject to change.

Part A



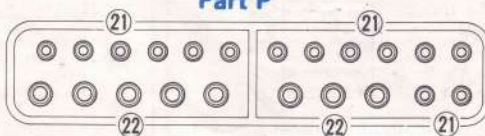
Part X



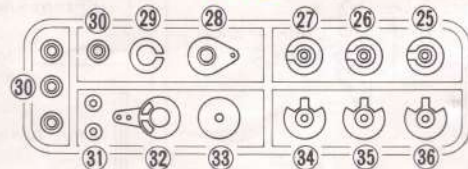
Front Wheel x 2

Rear Wheel x 2

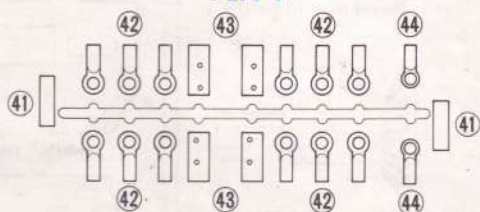
Part P



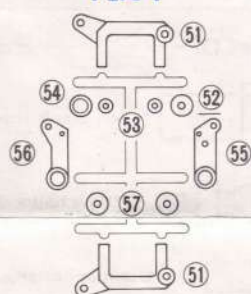
Part S



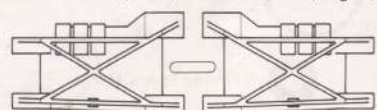
Part V



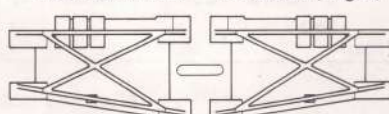
Part T



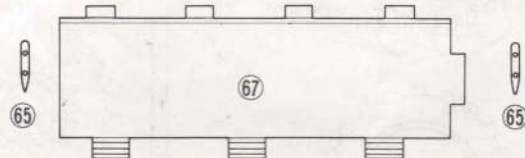
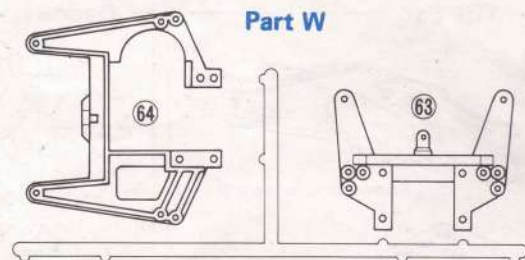
Front arm (Left) Front arm (Right)



Rear arm (Left) Rear arm (Right)



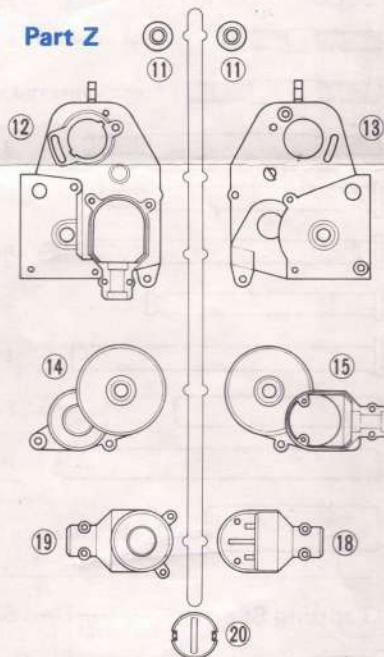
Part W



Rear under guard

Front under guard

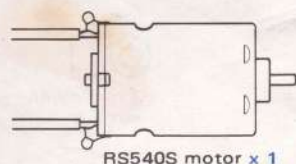
Part Z



Part Y x 2

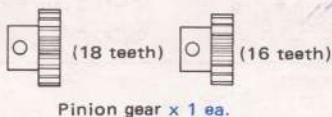


Motor Set

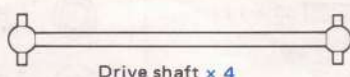


RS540S motor x 1

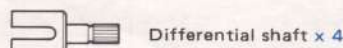
Damper oil x 1



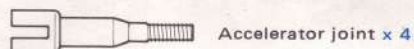
Pinion gear x 1 ea.



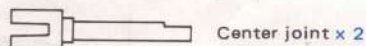
Drive shaft x 4



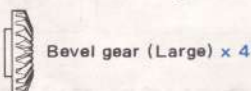
Differential shaft x 4



Accelerator joint x 4



Center joint x 2



Bevel gear (Large) x 4



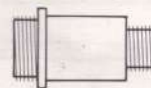
Wheel hub x 4



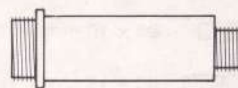
Front damper spring x 2



Rear damper spring x 2



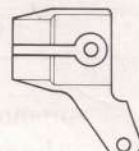
Front damper case x 2



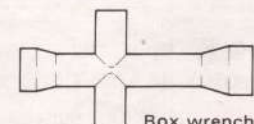
Rear damper case x 2



Damper cap x 4



Up-right x 2



Box wrench x 1

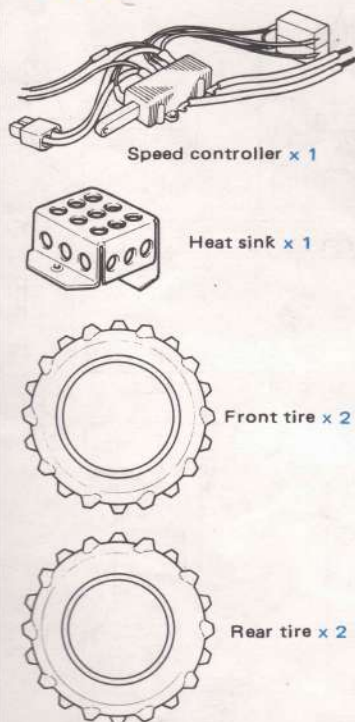
Center shaft x 1

PART DIAGRAM

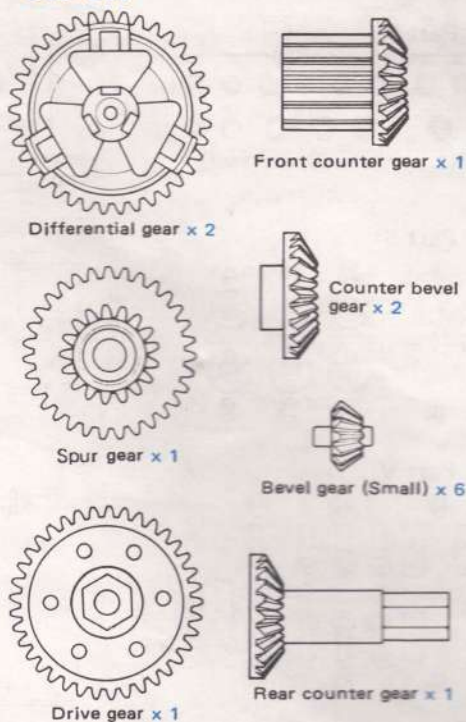
Excessive screws and nuts are provided. Use them as spare parts.
("φ3" means that the diameter is 3 mm.)

THE NINJA 4WD

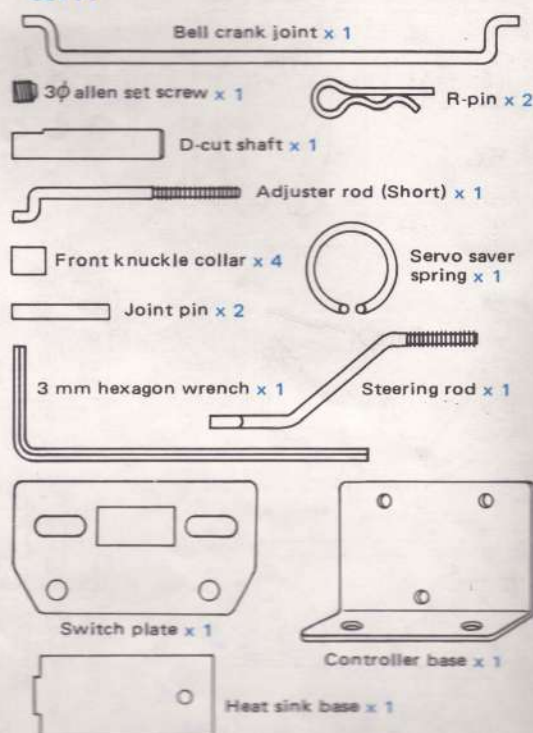
Tire Set



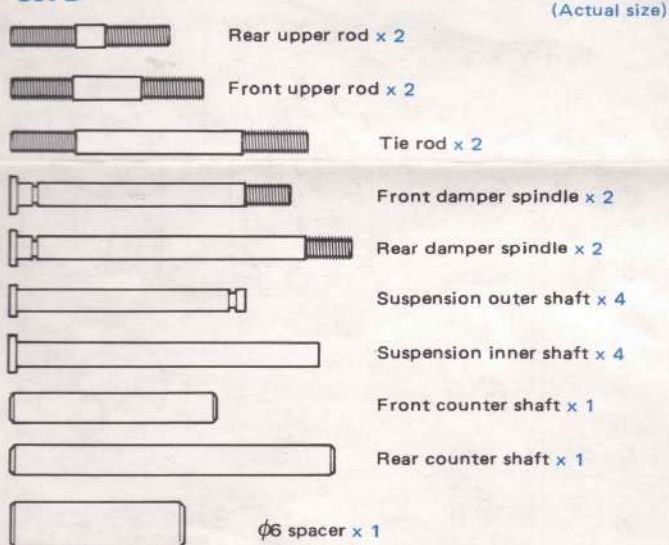
Gear Set



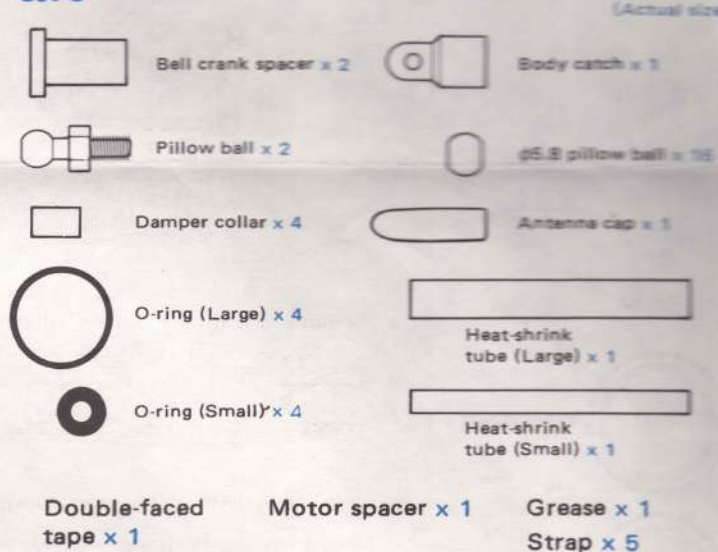
Set A



Set B

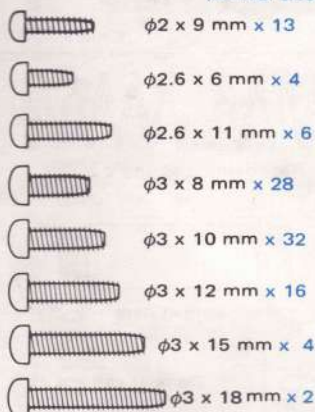


Set C



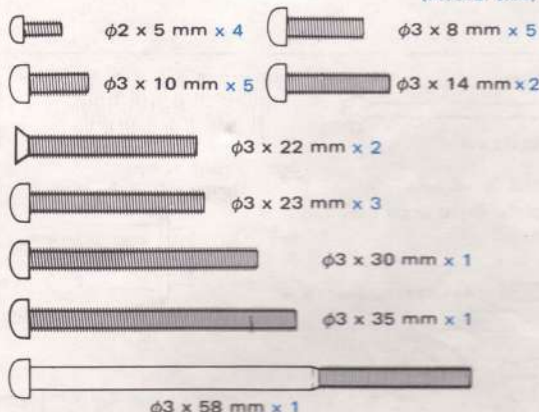
Tapping Set

(Actual size)



Screw Set

(Actual size)

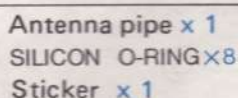
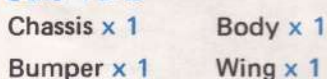


Nut & Washer Set

(Actual size)



Other Parts



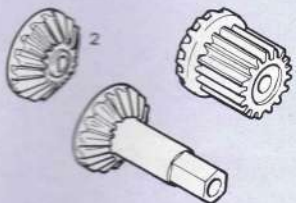
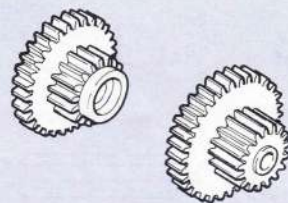
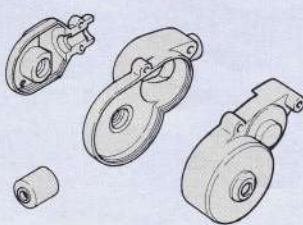
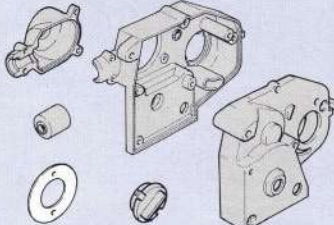
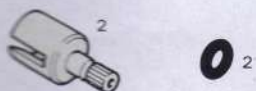
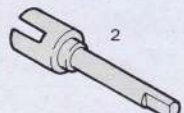
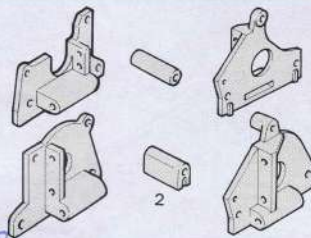
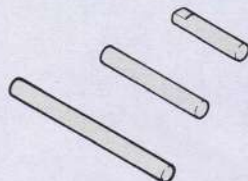

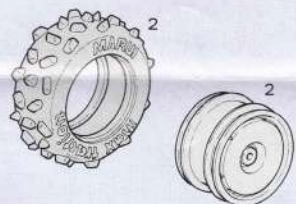
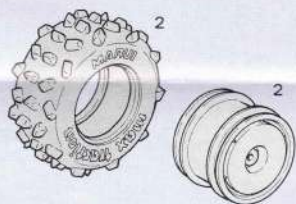
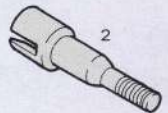
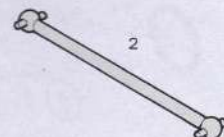

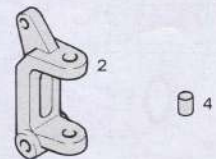
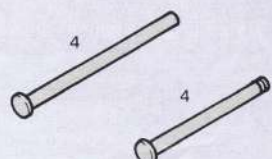
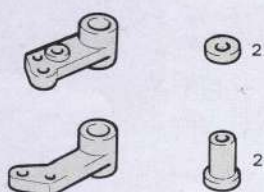

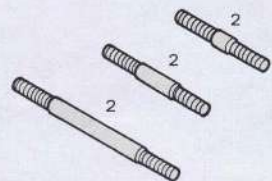
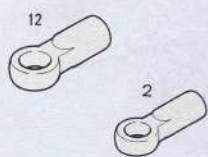
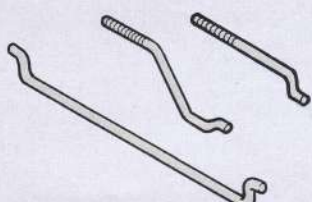
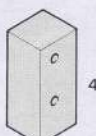
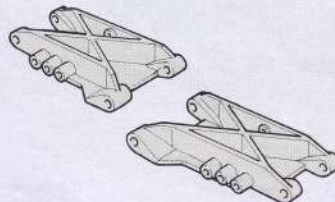
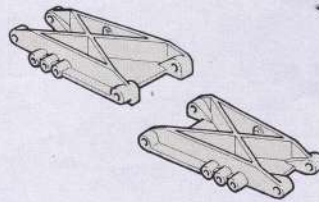
PRODUCT BY TOKYO MARUI CO., LTD.

MADE IN JAPAN.

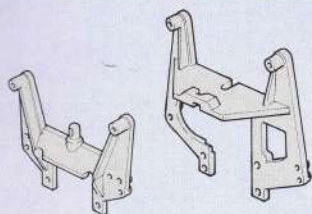
RC THE NINJA 4WD SPARE PARTS LIST

MARUI RADIO CONTROL CAR

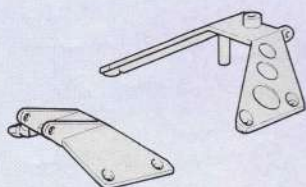
Specifications are subject to change. '87.2

302 Counter Gear Set	303 Spur Gear Set	300 Front Gear Box Set	301 Rear Gear Box Set
			
306 Diff. Shaft	307 Center Joint	304 Diff. Gear Set	305 Shaft Set
			
310 Wheel Hub	311 Front Tires Set	312 Rear Tires Set	309 Axle Joint
			
314 Driving Shaft	315 Rear Hub	316 Front Hub Set	317 Suspension Shaft Set
			
318 Bell-crank Set	319 Center Shaft	320 Rod Set	321 Ball-end
			
322 Adjuster Rod Set	323 Servo Mount	324 Front Arm Set	325 Rear Arm Set
			

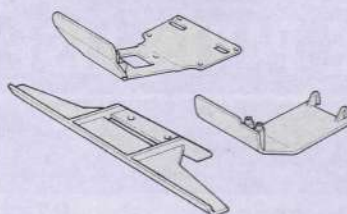
326



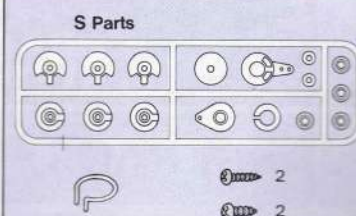
327



328



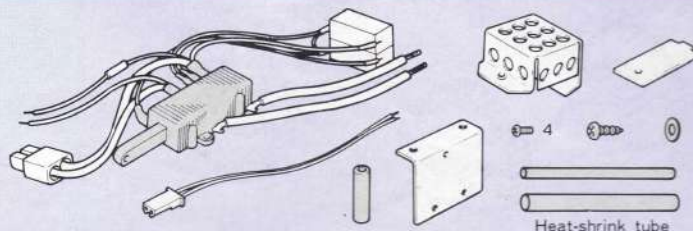
329



330



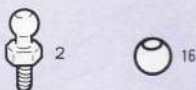
331



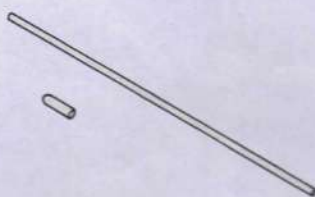
332



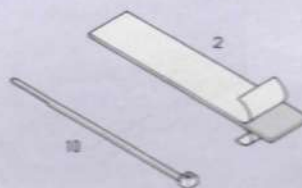
333



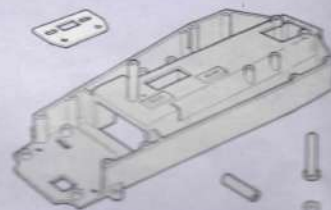
334



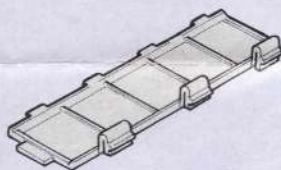
335



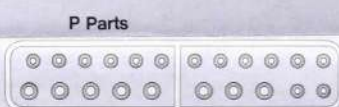
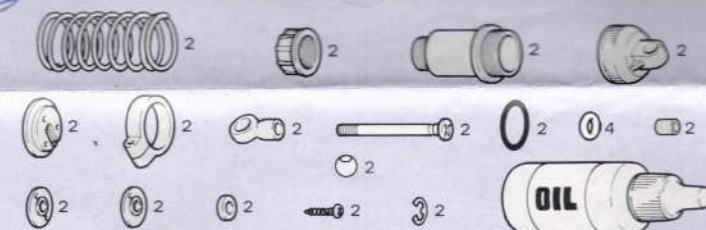
336



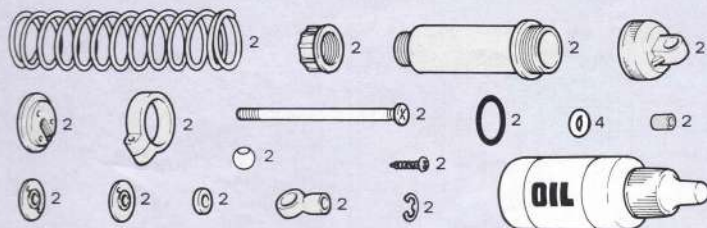
337



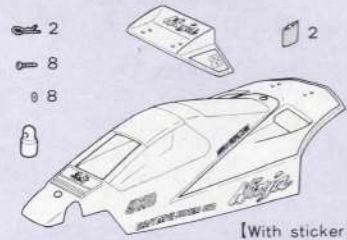
336

 Springer

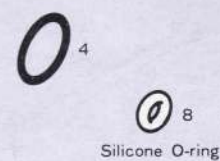
348



341



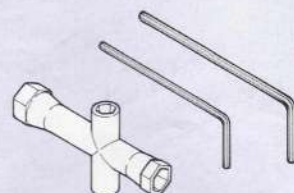
342



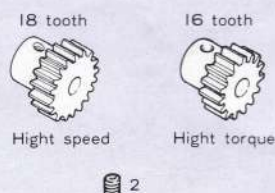
117



126



130



132



122

