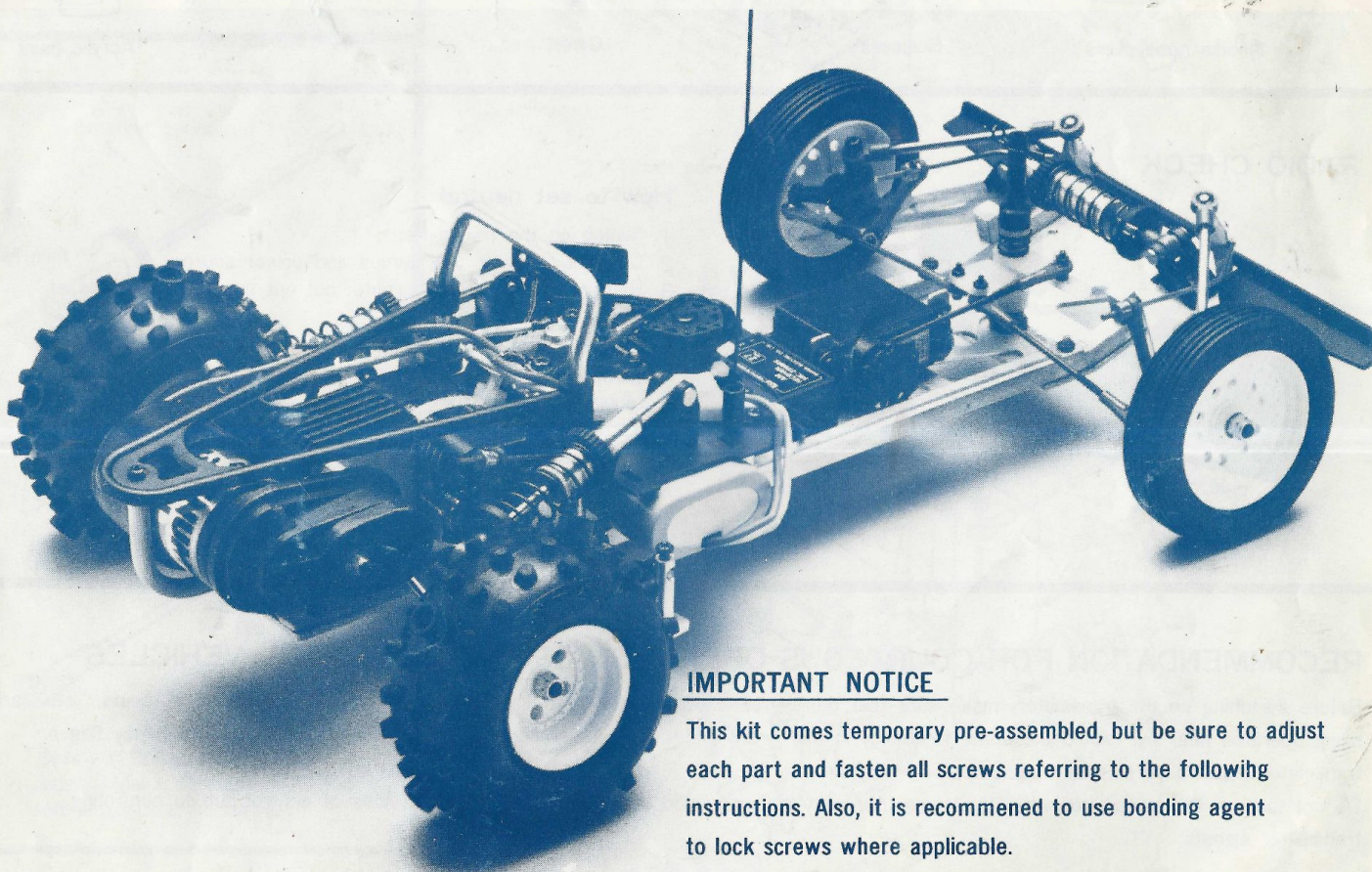


Buffalo Bobcat

RADIO CONTROLLED RACING OFFROADER

INSTRUCTION AND ASSEMBLY MANUAL



IMPORTANT NOTICE

This kit comes temporary pre-assembled, but be sure to adjust each part and fasten all screws referring to the following instructions. Also, it is recommended to use bonding agent to lock screws where applicable.

ayk
ROYAGI METALS CO. LTD

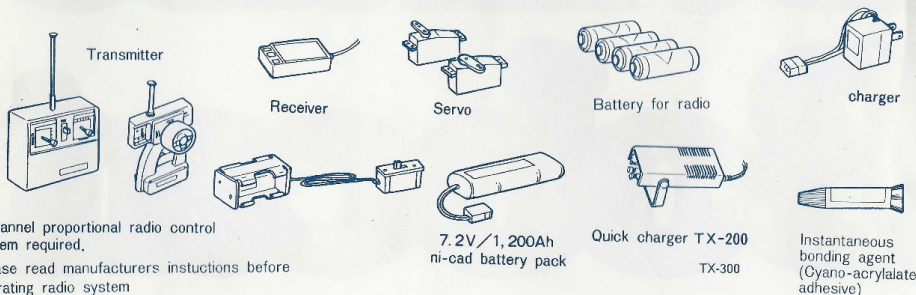
AYK RACING

RADIO CONTROL SYSTEM

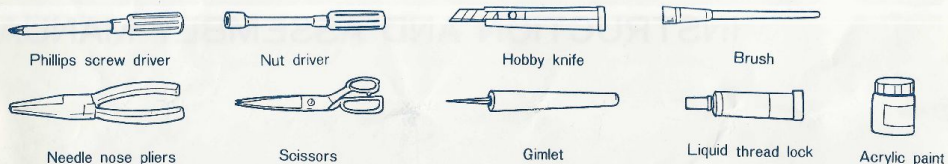
A 2-channel digital proportional radio is required to operate a RC car. Any standard system can be used, however, 3-8 channel system may not be applicable depending on the receiver size. Rechargeable nickel-cadmium batteries (ni-cads), are highly efficient and can be used as many as 300 times or more.

There are two basic types of battery chargers. The more common of the two is a low rate or trickle charger which operates off normal household current and requires approximately 15 hours to fully charge the system. A quick charger is also available, requiring only 15 minutes to fully charge the system. This type of charger operates off a 12 volt power source such as an automobile or motorcycle battery.

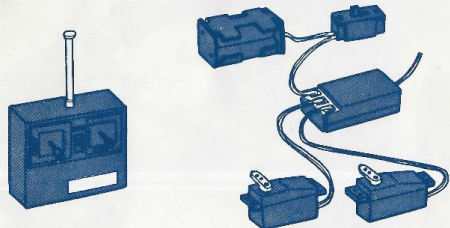
NECESSARY ITEMS FOR ASSEMBLY (not included in kit)



TOOLS REQUIRED FOR ASSEMBLY



RADIO CHECK



How to set neutral

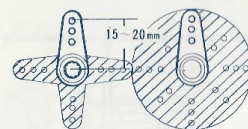
1. Switch on the transmitter.
2. Connect receiver, two servos and power source.
3. Remove the servo horn (note: cut out unnecessary parts of the servo horn)
4. Set the trim lever of steering controller at the middle position.
5. Turn on the receiver and set up the the servo horn to the required position.
6. Turn the receiver off first then the transmitter.

RECOMMENDATION FOR COURTEOUS OPERATION OF RADIO CONTROL VEHICLES

Before switching on the transmitter, make sure that there are no other radio controlled vehicles such as airplanes, cars, boats. etc. are being operated near by. Avoid the same frequency in use if any other radio controlled vehicles are nearby. (check frequency flag on transmitter antenna to find its frequency)

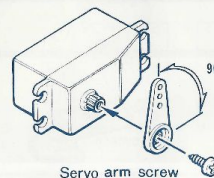
Do not turn on the transmitter while the same frequency is being used by others as it will cause loss of control due to conflicting transmitter signals.

1 Mounting and Adjusting of Steering Servo



Modify servo arm as shown, removing parts covered by slash mark.

Steering servo

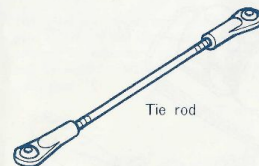


Plug the steering servo into the receiver and set the servo center at the neutral position.

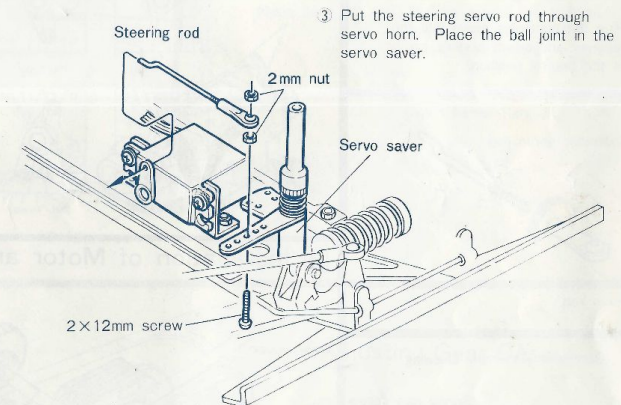
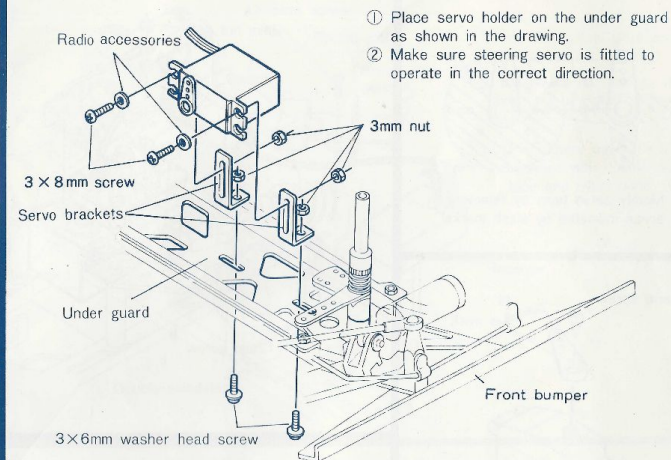
Steering servo rod



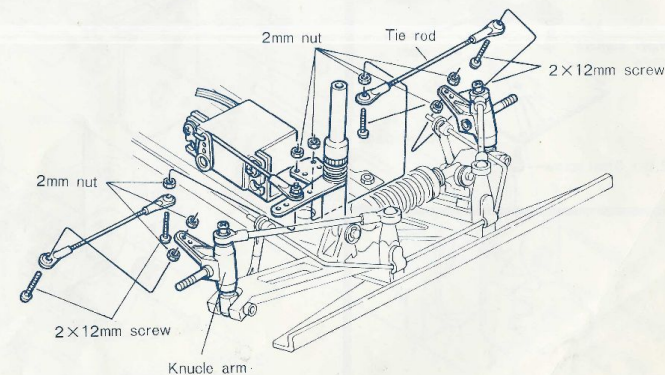
Screw ball joint into the steering servo rod.



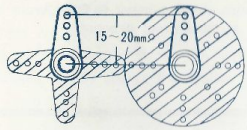
Screw in ball joints from both sides. Make sure the right and left length are the same.



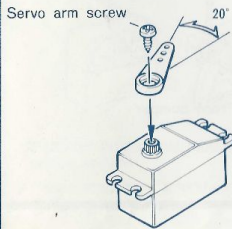
- 4 Connect the tie rod between the servo saver and the knuckle arm.



2 Mounting and Adjusting of Controller Servo



Modify servo horn by removing areas indicated by slash marks.

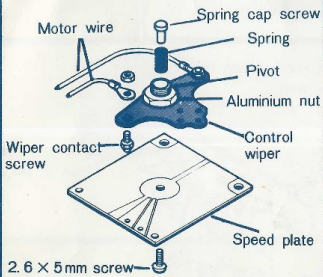


Plug the controller servo into the receiver and adjust servo's center at the neutral position.

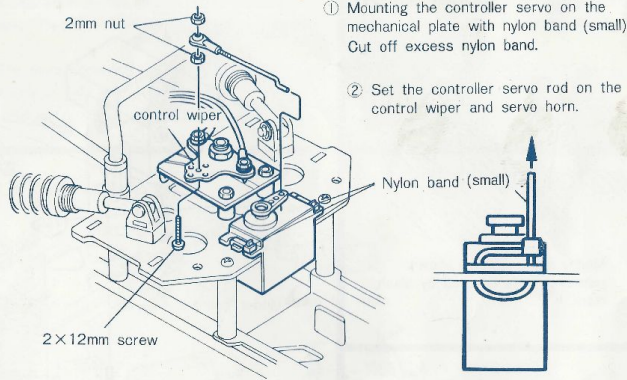


Screw ball joint in the controller servo rod.

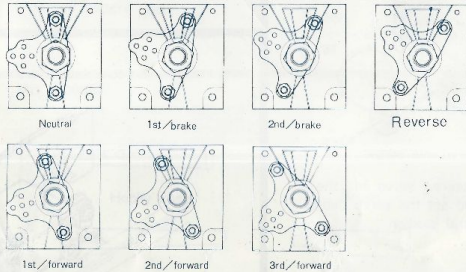
Controller Assembly Drawing



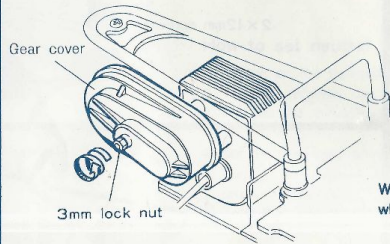
To align for maximum contact, leave sufficient space between the two gears to allowing a sheet of paper to pass through.



- 1 Mounting the controller servo on the mechanical plate with nylon band (small) Cut off excess nylon band.
- 2 Set the controller servo rod on the control wiper and servo horn.

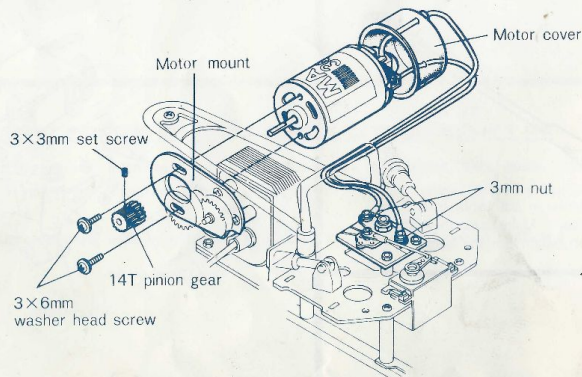


3 Installation of Motor and Wiring



- 1 Unfasten 3mm lock nut and remove the gear cover.
- 2 Fit the 14T pinion gear on to the motor shaft mount the motor.
- 3 Make sure to wire + and - correctly to the control wiper.

Wire the red cord to plus (+) and white to minus (-).



4 Installation of Receiver, Switch, Battery case



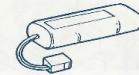
Receiver



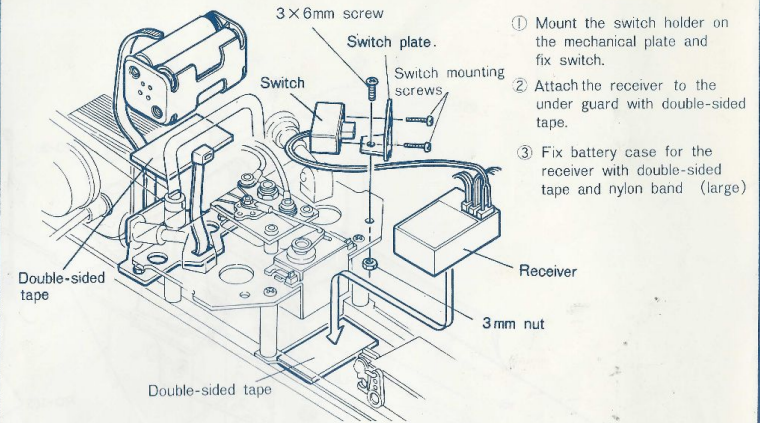
Battery case and switch



Battery

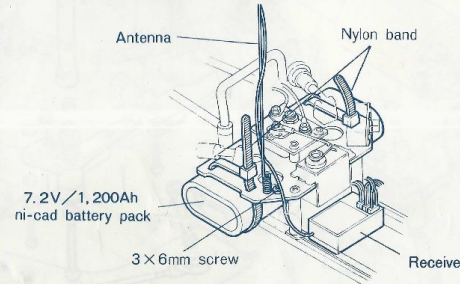


7.2V / 1,200Ah ni-cad battery pack



- 1 Mount the switch holder on the mechanical plate and fix switch.
- 2 Attach the receiver to the under guard with double-sided tape.
- 3 Fix battery case for the receiver with double-sided tape and nylon band (large)

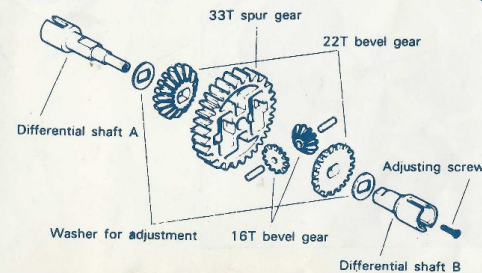
5 Installation of 7.2V/1200m AH Ni-cad Battery Pack



- 1 Do not extend the antenna beyond the length of the spring a real wire.
- 2 Fix ni-cad battery pack with nylon bands (large)

DIRECTIONS FOR USE OF WASHER FOR DIFFERENTIAL GEAR

16T bevel gear should be fully with 22T bevel gear to prevent damage. Insert one or two washers for adjustment on the right and left side between the differential gear and 22T bevel gear.



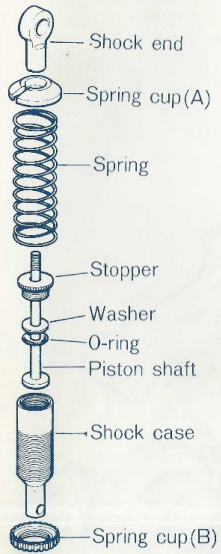
RO-114

Adjusting Gear Case

RO-108

RO-24

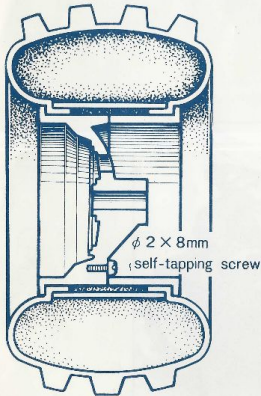
6 Assembly and Adjustment of Shock Absorber



- Remove M2.5 E ring and take off both front and rear shock absorbers. Fill front and rear shock absorbers as shown below.
- Push down the spring as shown. Remove the spring. Slide out the spring cup A to remove.
 - Unscrew the stopper to remove.
 - Push the piston all way down and pour oil up to the line shown in the drawing in order to prevent air bubbles.
 - Refit and tighten the stopper.
 - Move the piston up and down to see if it moves smoothly.

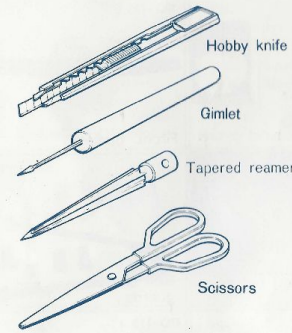
7 Tire Assembly

Cross-sectional view of the tire

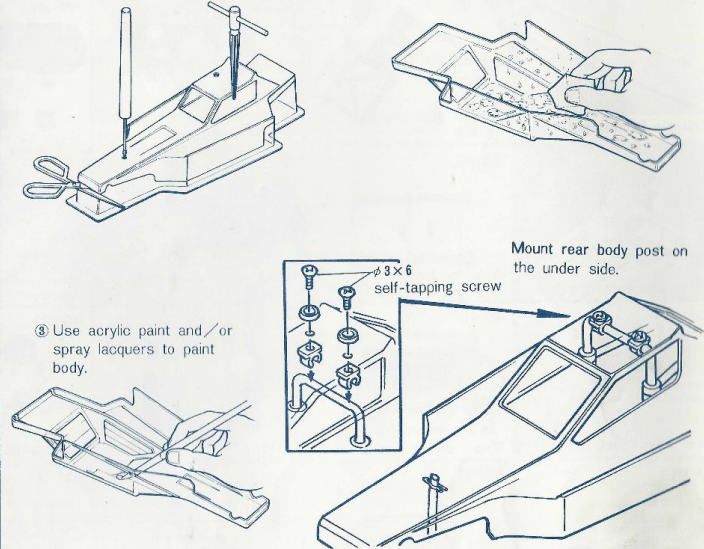


- Place front and rear tires and glue them with instantaneous (Cyano-acrylate) adhesive.
 - Put spikes on the rear tires on rough tracks such as sandy soil for better stability.
 - Tighten 4mm lock nut firmly to prevent tires from coming loose.
 - Use a hexagon wrench.
- Use a nut driver to tighten the rear wheel shaft.

8 Body Trimming and Mounting

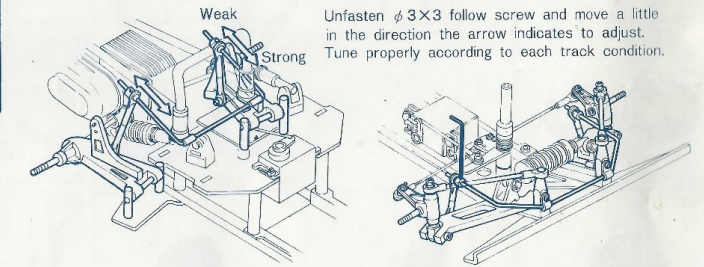


- Trim the body as shown in the drawing and drill holes as marked in a body with a gimlet.
- Wash the inside of the body thoroughly in a neutral detergent water.

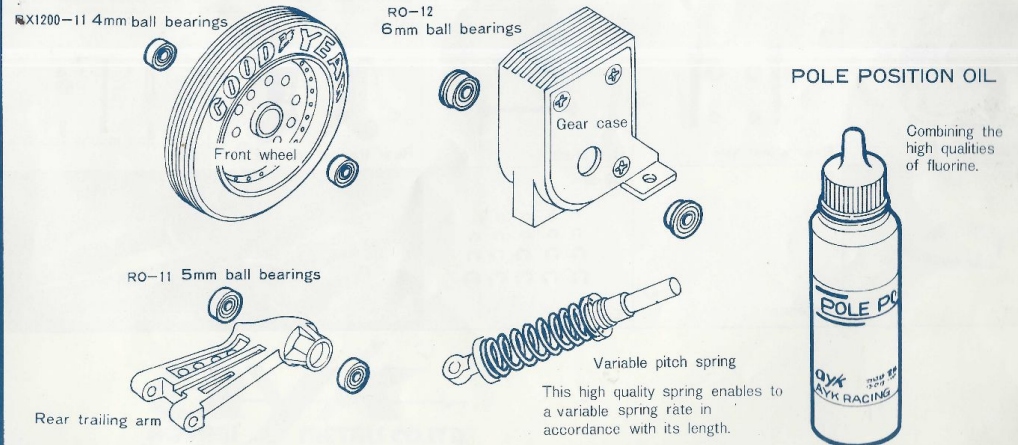


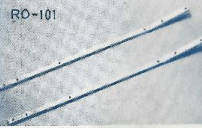

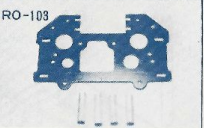

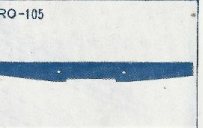

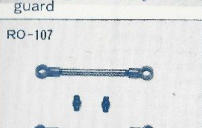
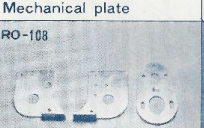

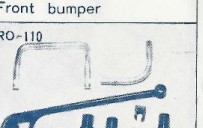

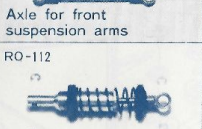
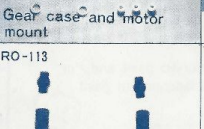
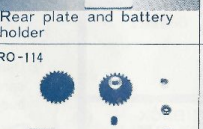
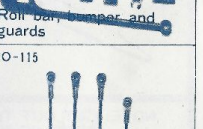
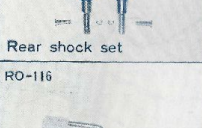
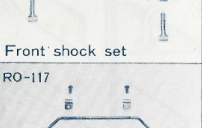

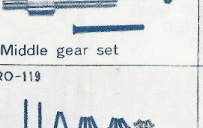
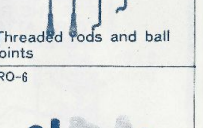
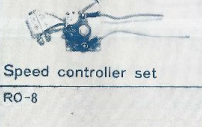
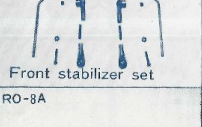


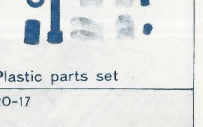

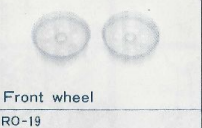






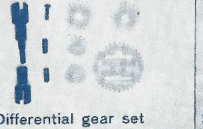
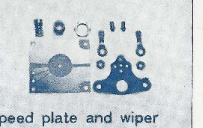

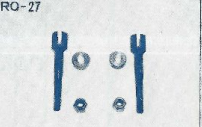
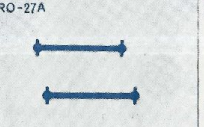

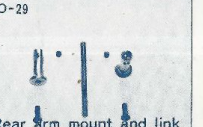
9 Adjustment of Stabilizer


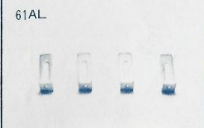
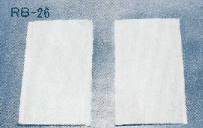
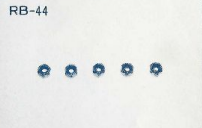

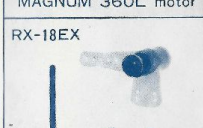
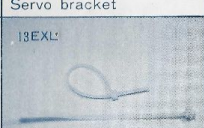

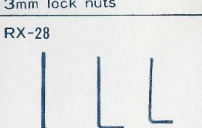
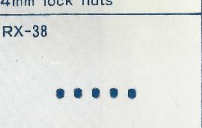
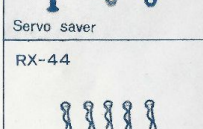
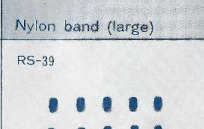
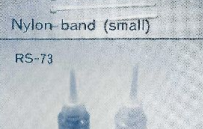

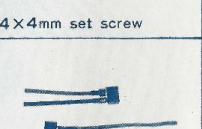
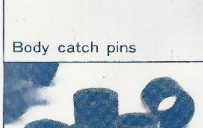

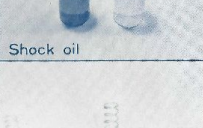
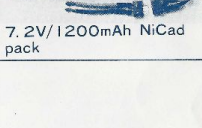
The car is equipped with stabilizers in order to control rolling and pitching of its body for the most efficient racing.



10 Option Parts



RO-101  Chassis frame rails	RO-102  Front guard and under guard	RO-103  Mechanical plate	RO-104  Gear case	RO-105  Front bumper
RO-106  Front suspension arms	RO-107  Axle for front suspension arms	RO-108  Gear case and motor mount	RO-109  Rear plate and battery holder	RO-110  Roll bar bumper and guards
RO-111  Rear shock set	RO-112  Front shock set	RO-113  King-pin	RO-114  Middle gear set	RO-115  Threaded rods and ball joints
RO-116  Speed controller set	RO-117  Front stabilizer set	RO-118  Rear stabilizer set	RO-119  Screw set	RO-6  Plastic parts set
RO-8  Front tire	RO-8A  Front wheel	RO-10  Rear tire	RO-10A  Rear wheel	RO-17  Steering arm set
RO-18  12T. motor pinion gear	RO-19  13T. motor pinion gear	RO-20  14T. motor pinion gear	RO-24  Differential gear set	RO-26  Speed plate and wiper
RO-26A  Resistor	RO-27  Rear wheel axle	RO-27A  Half shaft	RO-28  Rear trailing arm set	RO-29  Rear arm mount and link axle
RO-33  Driver	RO-35  Antenna	RO-39  E-clip set	RO-121  Buffalo body shell	RO-120  Bobcat body shell

 MAGNUM 360L motor	61AL  Servo bracket	RB-26  Double-sided adhesive tape	RB-44  3mm lock nuts	RB-46  4mm lock nuts
RX-18EX  Servo saver	18EXL  Nylon band (large)	CX-13  Nylon-band (small)	RX-28  Hexagon wrench set	RX-38  4X4mm set screw
RX-44  Body catch pins	RS-39  Set screw 3X3mm 3X5mm	RS-73  Shock oil	 7.2V/1200mAh NiCad pack	 4P Connector
 Rear tire spikes (40pcs)	 Washers for adjustment of differential gear and screws	 Variable pitch spring set	 Decals	

