

1:10 SCALE RADIO CONTROLLED OFF-ROAD BUGGY

**CIRCUIT 10**

*Wildcat*



RADIO 2CH. ENGINE .09 ~.11

KIT NO. 3026

**KYOSHO**  
THE FINEST RADIO CONTROL MODELS

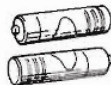
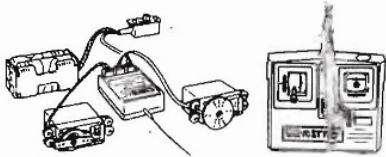
## BEFORE ASSEMBLY

Thank you for your purchasing the Kyosho radio controlled car, Wildcat, Circuit 10. For achieving a well planned assembly and bring the performance potentiality of the model into full play, read this instruction thoroughly before assembly. The previously grasped knowledge of the structure will enable you fabricate the model in an orderly manner.

When the engine mounted on the car is new, give it a running-in operation in accordance with the procedures stated in the engine instruction to let the engine display its maximum capability and durability.

## ARTICLE REQUIRED BESIDES THIS KIT

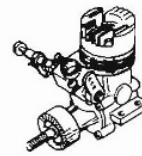
2 Channel Radio Control System



Transmitter Unit 3(AA) x 6 - 8 pcs.  
Receiver Unit 3(AA) x 4 pcs.  
Dry Battery for Radio Control System



Glow Plug  
(1.5V White Gold  
will be the best)



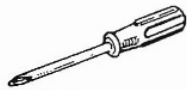
Engine  
(OS-10, Enya 09, 11CX)



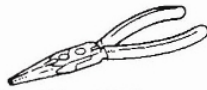
Heat Sink

NOTE: Muffler and heat sink are not included in this kit.  
Please buy muffler and heat sink to fit the engine.

## TOOLS REQUIRED FOR ASSEMBLY



+ Driver



Radio Plier



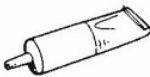
Cutter



Awl



Wrench



Cement



Vinyl Tape



Paint

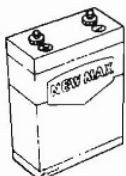


Spray type  
PVC Paint

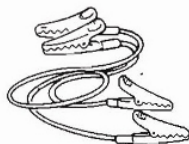


Brush

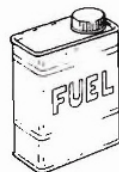
## ARTICLE REQUIRED FOR RUNNING



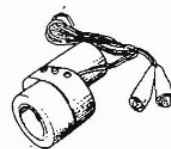
Battery for  
Plug Heating



Booster  
Cord



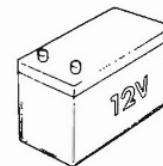
Fuel



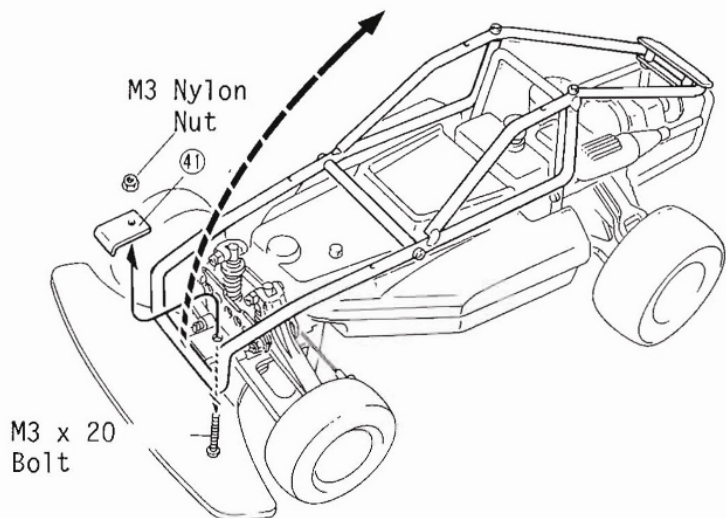
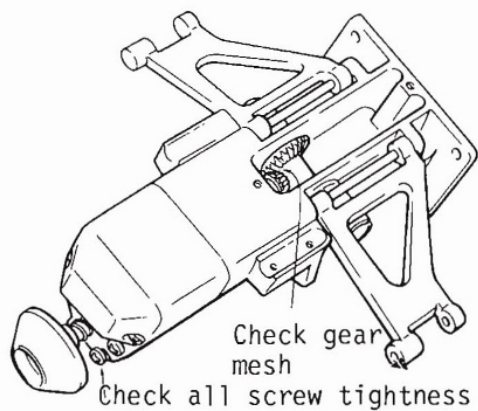
Electric  
Starter



Fuel  
Pump



Starter  
Battery

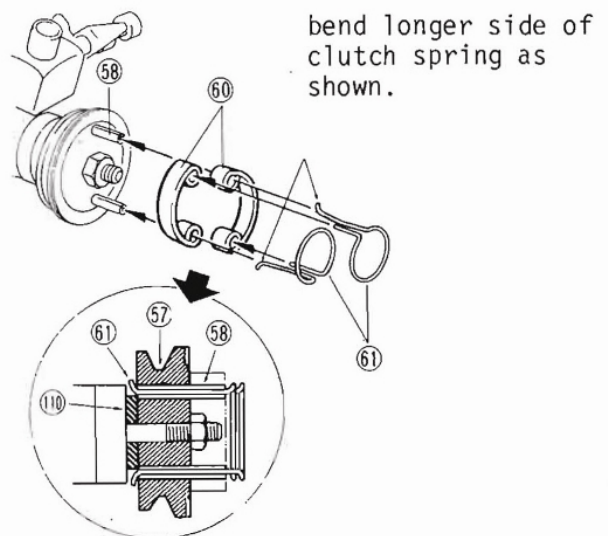
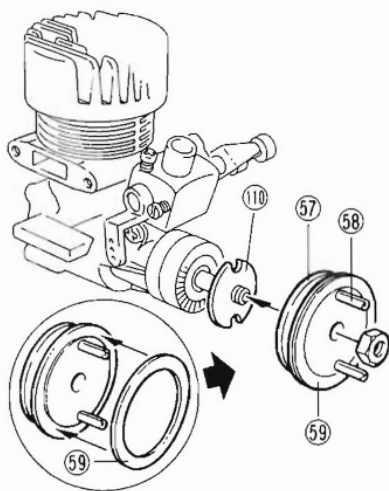


**1**

The gear box is already assembled but tighten all screws once more and check the gear mesh.

**2**

Take off the front body retainer 41 by unscrewing M3 x 20 screw and M3 nylon nut, and fold back the front portion of the body toward the back.

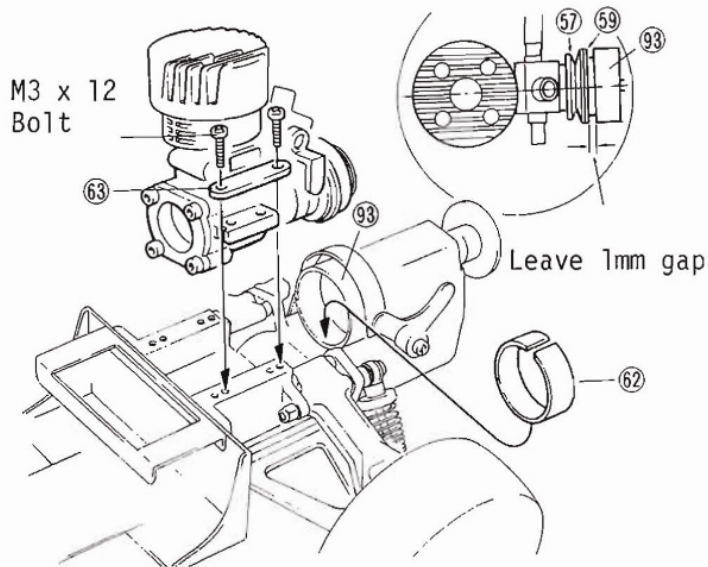


**3**

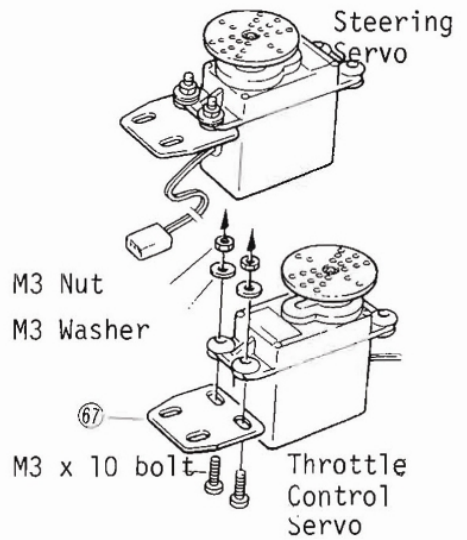
Cement the starter liner 59 to the flywheel 57 with contact cement. Install the flywheel spacer 110 first, then the flywheel onto the engine shaft.

**4**

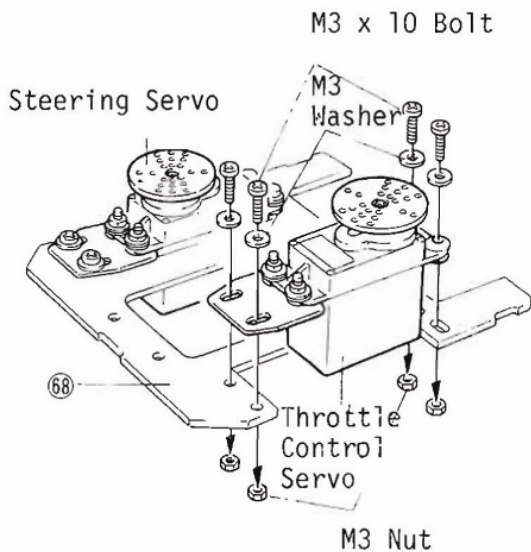
Install clutch shoe 60 onto flywheel pin 58, the longer side of clutch spring 61 is inserted into the hole of the flywheel pin 58 and the shorter side into the clutch shoe 60 hole. At this time, bend the longer side of the clutch spring 61 in crank shape to make it hard to come off.



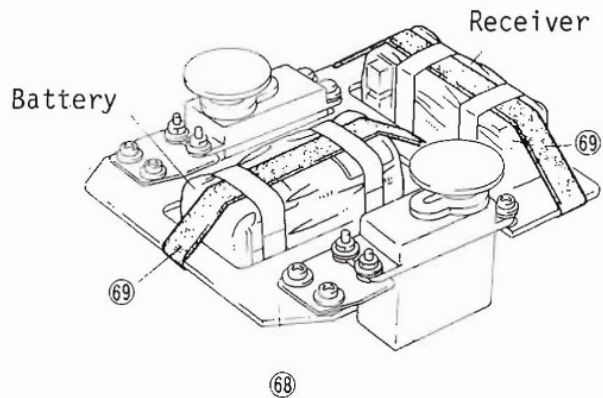
**5** Cement clutch lining 62 onto the inner side of the clutch bell 63 with rubber type cement. Next the engine is installed but when doing so, leave about 1mm gap between clutch bell 63 and starter lining 59 that was cemented onto the flywheel 57 and then install the engine with engine mounting plate 63.



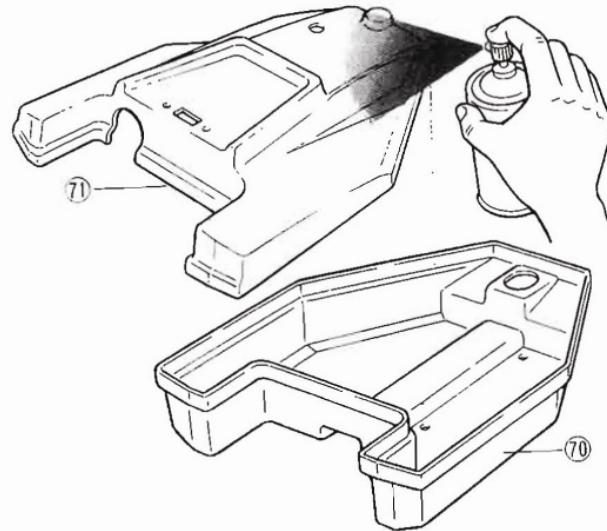
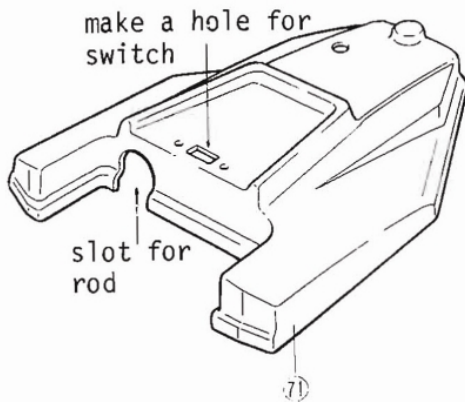
**6** Install adjustor plate 67 to steering servo and throttle control servo.



**7** Install each servo onto mechanism plate 68 as illustrated.

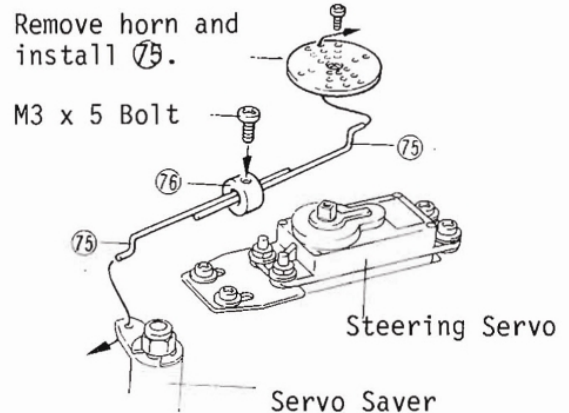
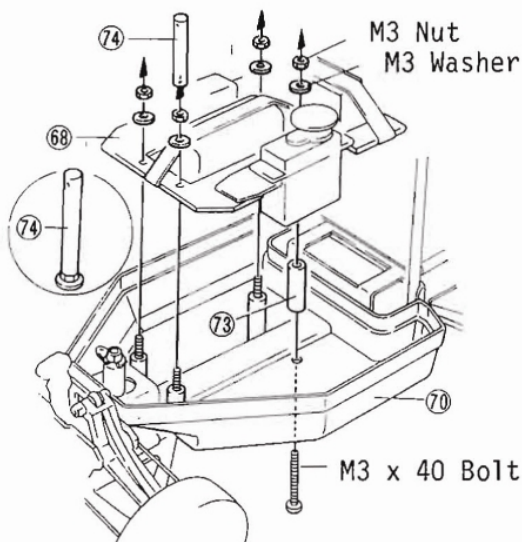


**8** Put battery for radio control system and receiver into vinyl bag, close with vinly tape and install with mechanism stopper band 69 onto the mechanism plate.



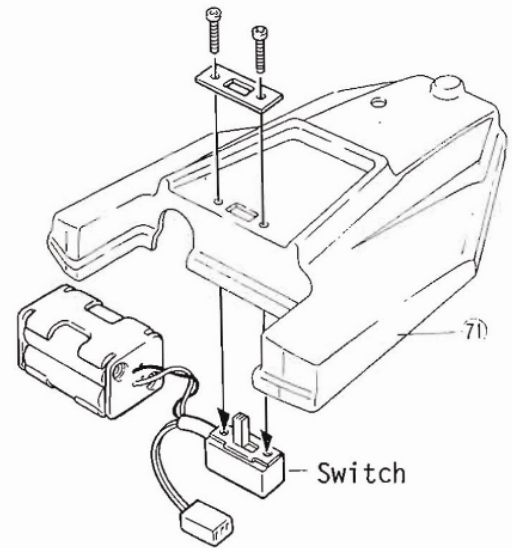
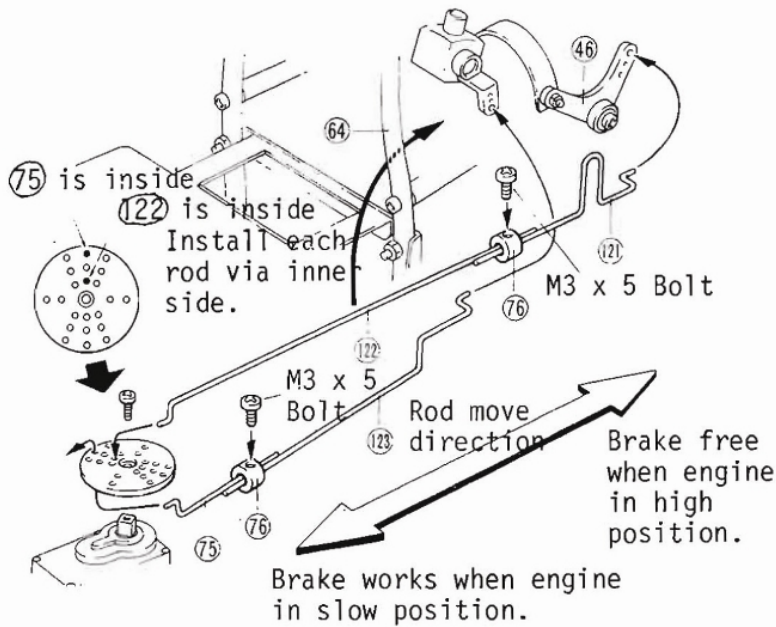
**9** Make holes with knife and awl in position illustrated on the mecha box lid 71.

**10** When painting the mechanism box 70 and the top 71, take off the mechanism box 70 from the chassis, and wash them with neutral detergent, and paint them in any colors at your choice with spray type PVC paints.



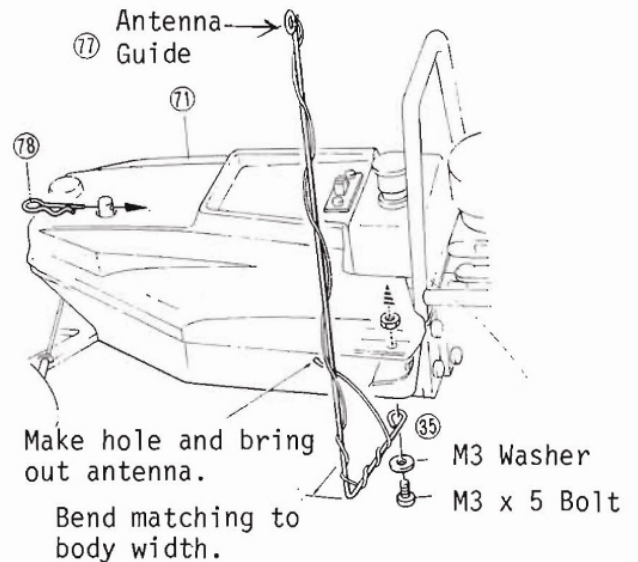
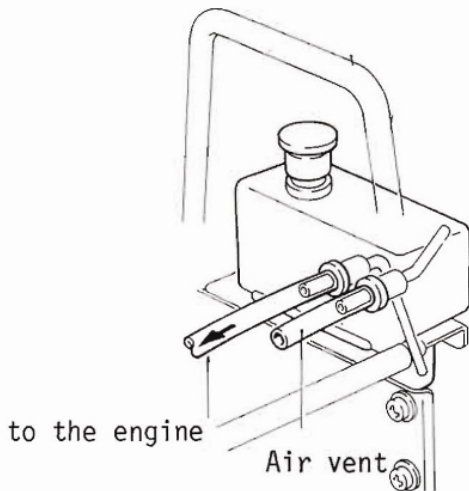
**11** Place mechanism box 70 on top of main chassis 1, insert M3 x 40 screw from the bottom of the main chassis, then install in the order of mechanism plate collar 73 and mechanism plate 68 with M3 nut and install mechanism box 70 in position shown in illustration.

**12** When installing steering linkage, first keep the servo and servo saver in the neutral position, install linkage rod 75 as illustrated onto servo horn and servo saver and finally stabilize the center with linkage stopper 76.



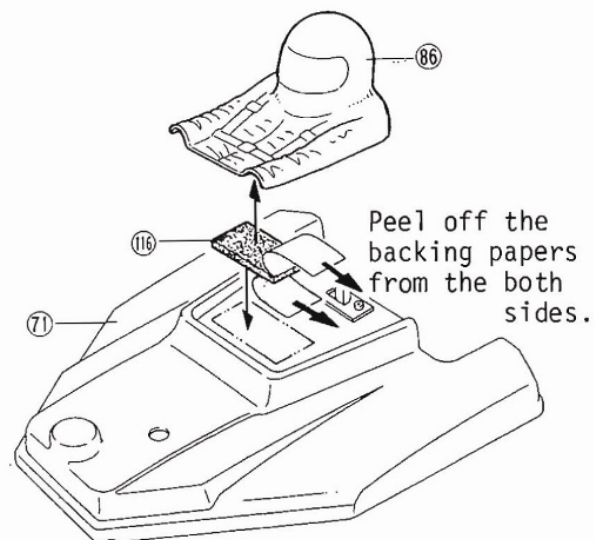
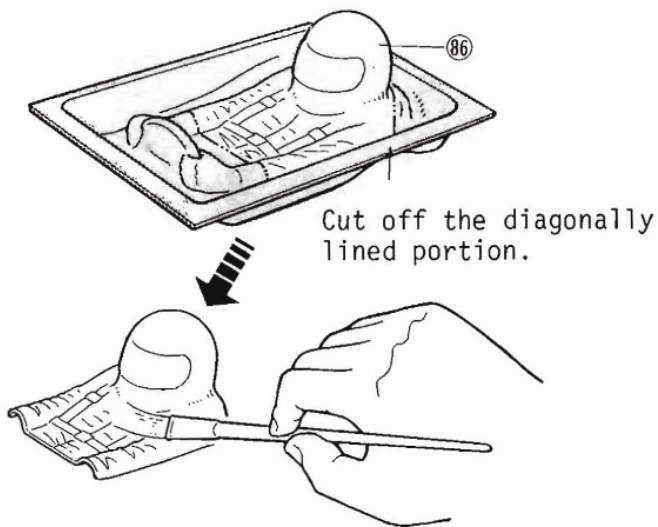
- 13** First, keep the throttle control servo and the throttle lever in the high position set throttle control rod (123) and linkage rod (76) as illustrated and stabilize with linkage rod (76). Install brake rod (A) (122) to "L" crank, install brake rod (B) (122) to inner side of the servo horn and stabilize with linkage rod (76). After above linkage has been finished, adjust so taht the brake will work as the engine throttle goes into the slow position when the servo is put into the slow side.

- 14** Switch is instabed as illustrated on mechanism box lid (71).



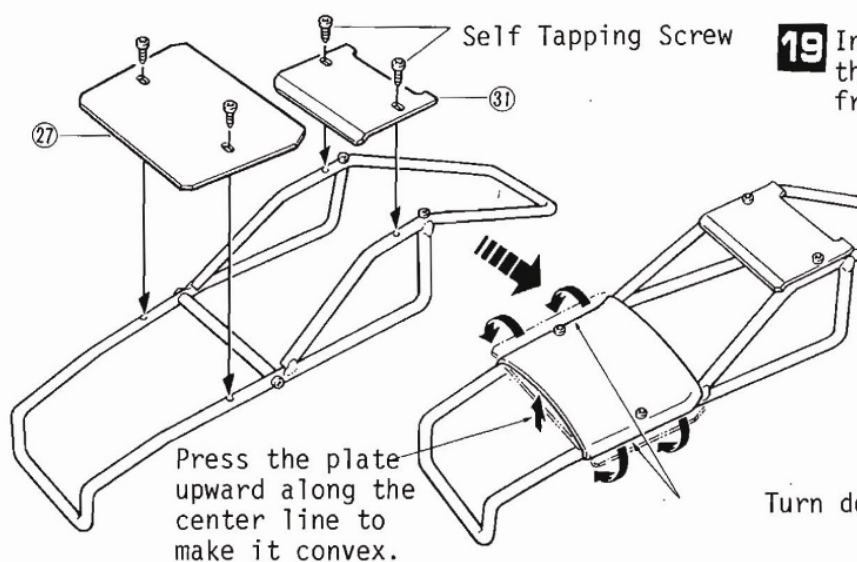
- 15** Assemble the fuel tank as shown in the drawing. One of the pipes should be led to the engine, the other is to be attached with a short tube as it is an air vent.

- 16** Receiver antenna is installed by making antenna guide (77) as illustrated and loosening the installation screw for joint plate (35) once, it is installed together with the antenna guide (77). Mechanism box lid (71) is down with clip (78).



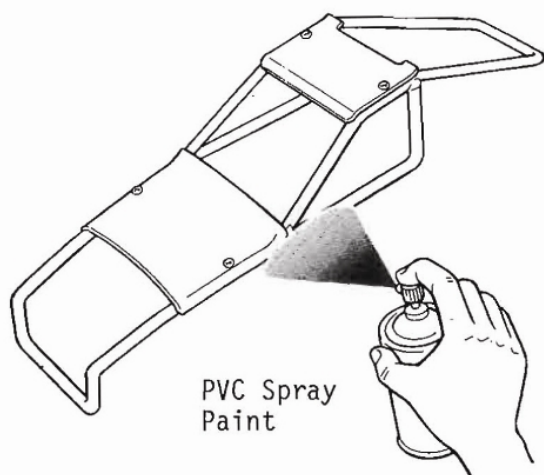
**17** Trim off the driver doll 86 as shown in the drawing. Wash it with neutral detergent and paint it in any color you like.

**18** Tape down the driver doll 86 onto the mechanism box top 71 with pressure-sensitive tape.



**19** Install the front plate 27 and the roof plate 31 onto the body frame with self tapping screws.

Turn down the edges inward.

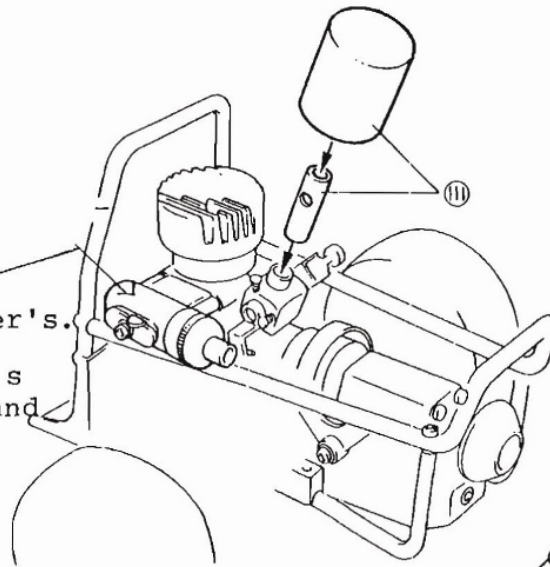


**20** The body can be used without being painted. When you like to paint it, detach it from the chassis and wash it well with neutral detergent. After it has dried up, paint it in any color at your choice with PVC paints.

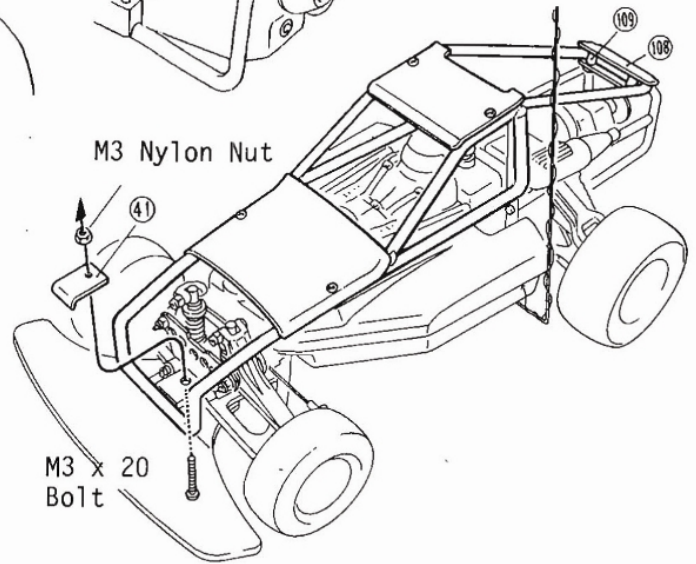
**21**

Engine muffler from different engine maker's.

Install engine maker's muffler onto engine and install (111) air cleaner.



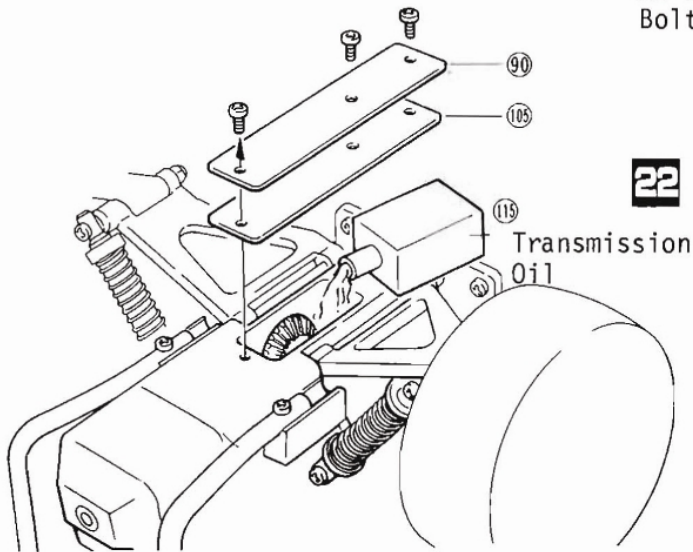
M3 Nylon Nut



M3 x 20 Bolt

**22**

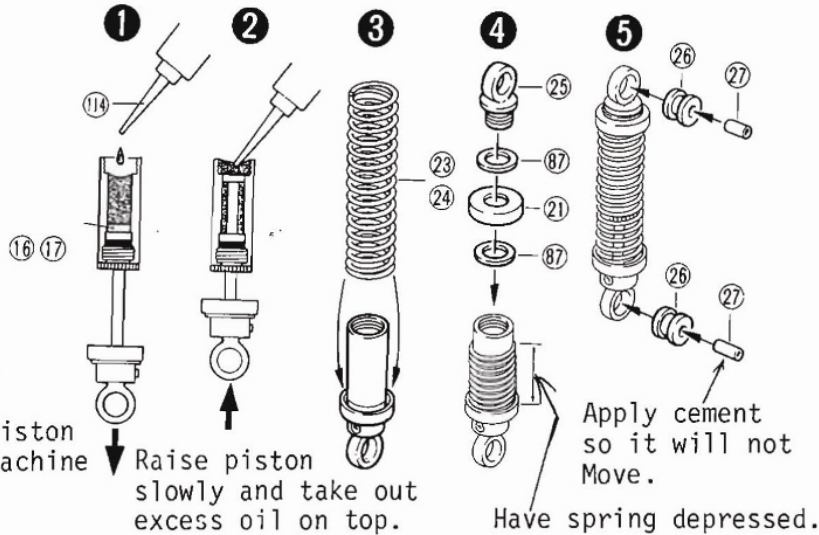
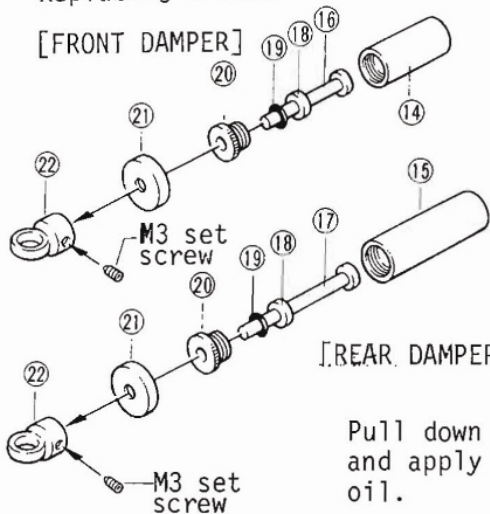
Put back the body onto the chassis as it was.



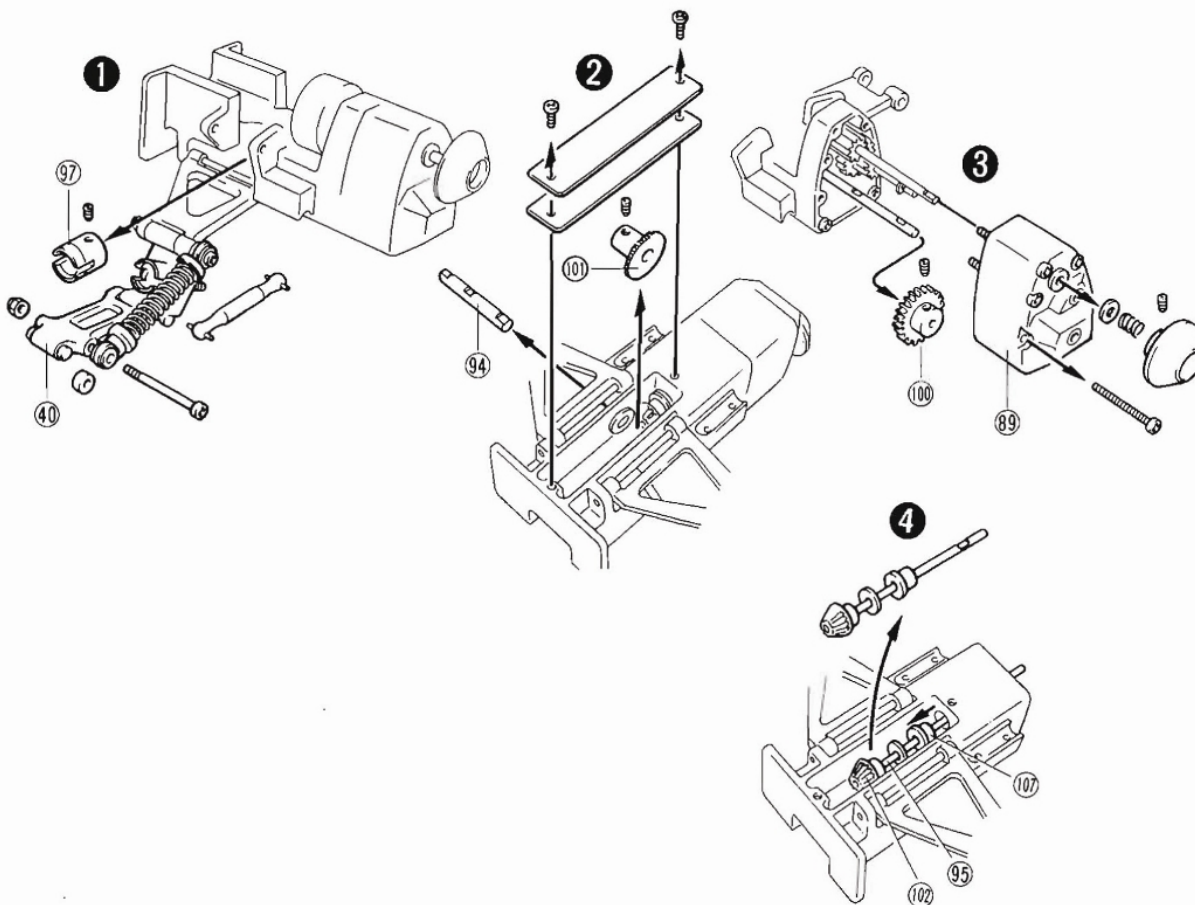
**23** Remove gear cover (90) and oil seal (105) from the gear box, fill gear case about 1/3 full with transmission oil (115), install tightly gear cover (90) and oil seal so the oil will not leak. Check transmission oil after every 1 hour of running and keep transmission always filled 1/3 full.



\*\*\*Replacing oil\*\*\*



**24** Fit onto front damper pin (16) and rear damper pin (17), damper piston guide (18), "O" ring (19), oil catch (20) in sequence and then screw in oil catch (20) into front damper cylinder (14) and rear damper cylinder (15) as shown in illustration. Next insert spring holder (21) and piston end (22) in sequence. Then stabilize piston end (22) with M3 set screw. After applying machine oil (114) in the order of 1,2 as illustrated insert into damper cylinder front damper with front spring (23) and rear damper with rear spring (24) as shown in illustration 3. Next lay down damper seal (87), spring holder (21) damper seal (87) and then tighten firmly by screwing in damper cylinder (14/15) and damper top (25) so that oil will not leak. Finally, as shown in illustration 5 insert damper bushing (26) into damper top (25) and onto piston end (22) and insert damper collar (27) into damper bushing.



When replacing gears due to damage replace in the following sequence. First, remove rear upper arm ⑩, then gear box joint ⑨. (illustration 1)

Next loosen bevel gear ⑩① installation screw and take off bevel gear and center shaft ⑨. (illustration 2)

Next remove back plate ⑨ and counter gear ⑩②. (illustration 3)

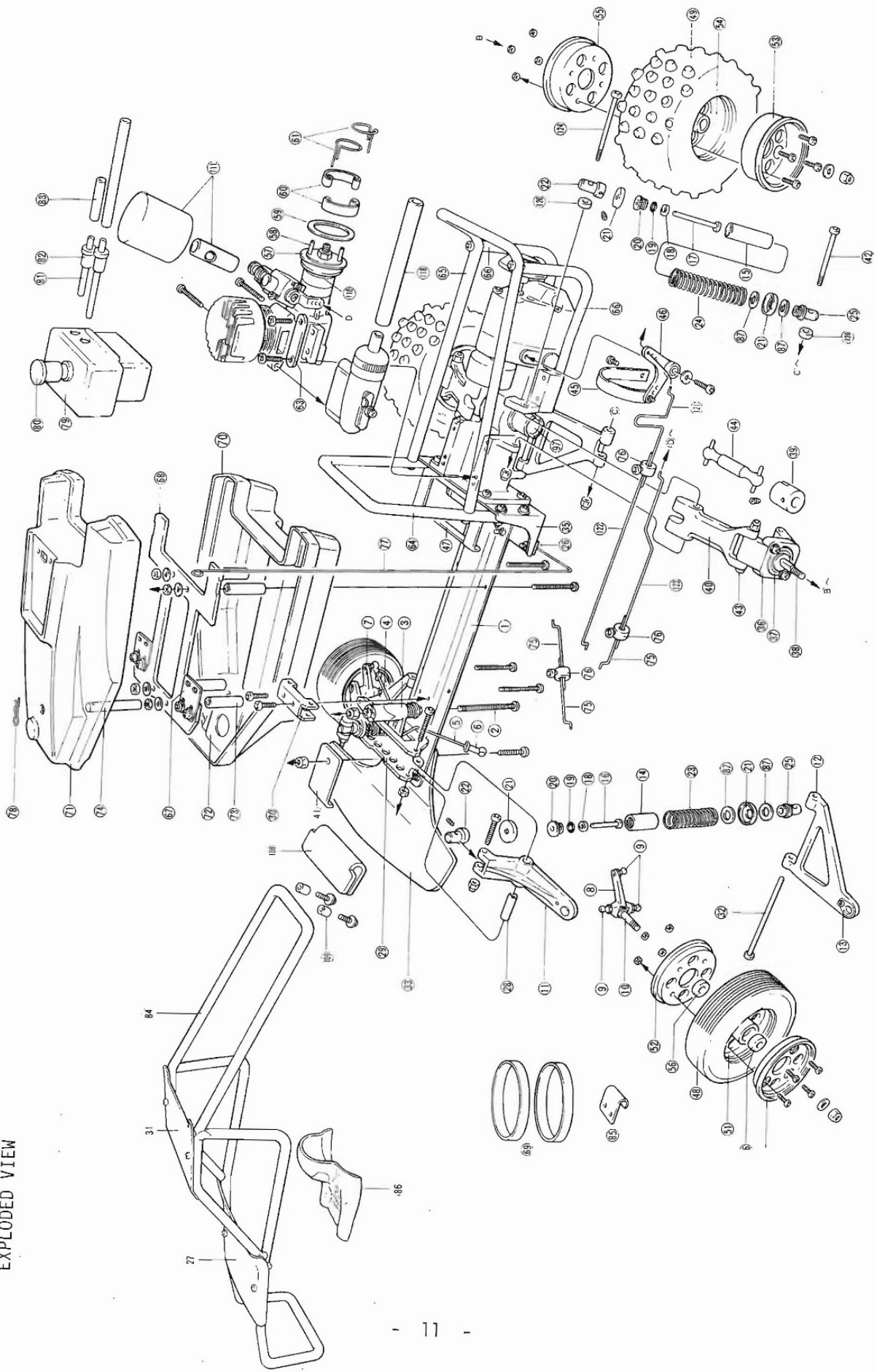
When removing bevel pinion ⑩②, as bevel pinion ⑩② and countershaft ⑨⑤ are made as one unit, only the bevel pinion ⑩② cannot be removed. To replace the bevel pinion ⑩②, remove the ⑩⑦ 4mm diameter bearing from the gear case first, and by taking it off together with the countershaft ⑨⑤ it can be replaced. (illustration 4) When assembling, also, have the 4mm diameter bearing ⑩⑦ inserted through the countershaft ⑨⑤ and assemble it into the gear case together with the 4mm diameter bearing ⑩⑦.

#### CHECK POINTS BEFORE RUNNING

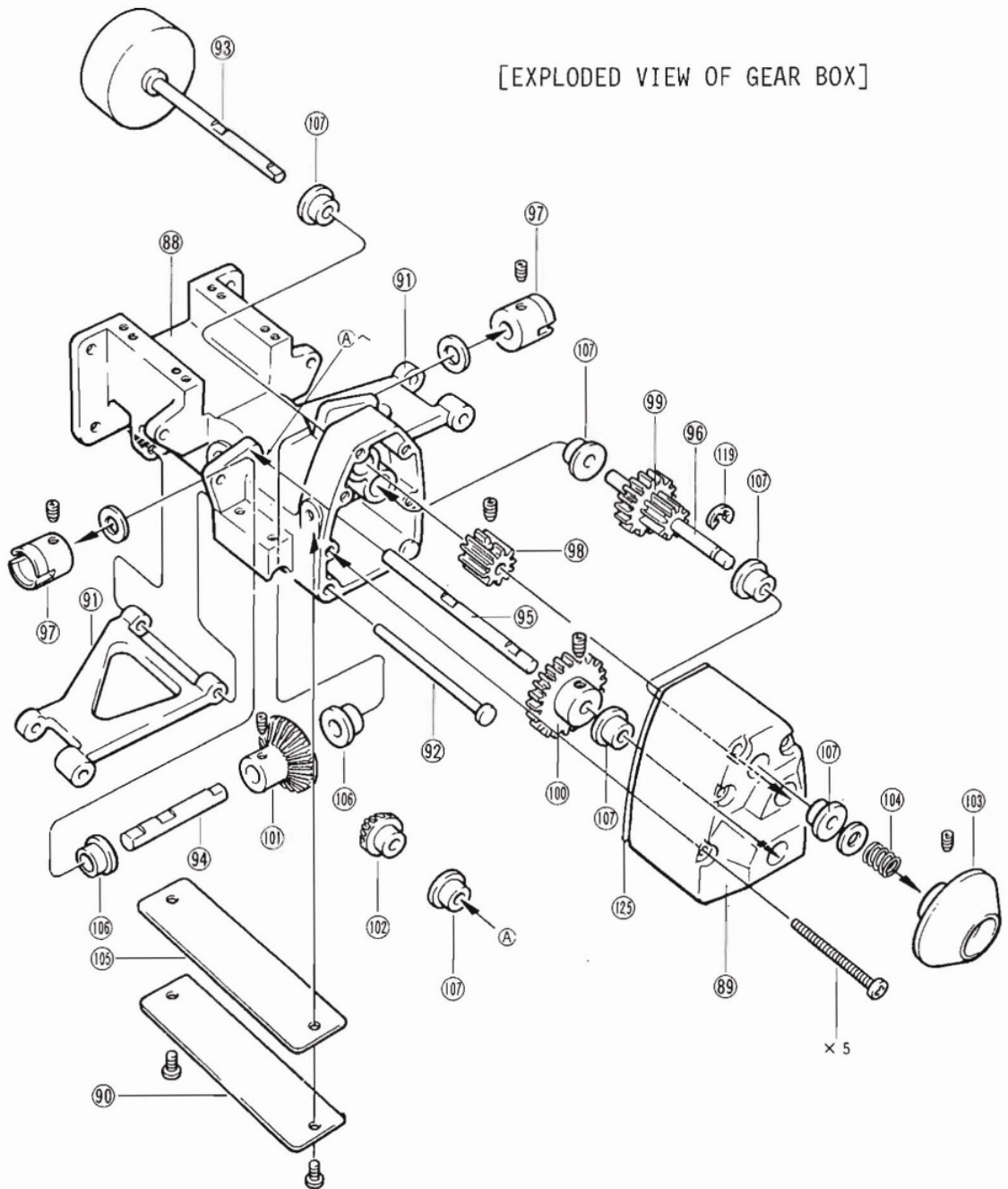
To avoid trouble and accidents check the following points before running.

1. Are all nuts and bolt tightened? If loose, tighten up using screw lock cements.
2. Radio Control system operation. Are batteries fully charged? Especially check the movements of steering, throttle control and braking.
3. Check if the front and rear tire as well as gear box systems rotate smoothly. Be sure to apply lubricants on the shafts.
4. Check to see that there are no pressure being applied on the oil damper and suspension areas. Particularly, if the oil damper movement is sluggish, the shocks from the bumpy roads cannot be absorbed and the power cannot be transmitted with the tire to the surface of the road.

EXPLODED VIEW



[EXPLODED VIEW OF GEAR BOX]



PARTS LIST

Key No.	Parts Name	Qty.	Key No.	Parts Name	Qty.
①	Main Chassis	1	14	Front Damper Cylinder	2
②	Servo Saver Shaft (M4x50 Bolt)	1	15	Rear Damper Cylinder	2
③	Servo Saver Set	1 set	16	Front Damper Piston	2
④	Tie Rod (A)	1	17	Rear Damper Piston	2
⑤	" (B)	1	18	Damper Piston Guide	4
⑥	Ball Link	2	19	O Ring	4
⑦	Knuckle Arm (A)	1	20	Oil Catch	4
⑧	" (B)	1	21	Spring Holder	8
⑨	Ball End	6	22	Piston End	4
⑩	Front Wheel Shaft	2	23	Front Spring	2
⑪	Rocking Arm	2	24	Rear Spring	2
⑫	Front Lower Arm	2	25	Damper Top	4
⑬	Ball Receptacle	4	26	Plate Reinforcement	1

Key No.	Parts Name	Qty.			
27	Front Plate	1	84	Body	1
28	Arm Collar	2	85	Rear Body Hook	1
29	Bulkhead	1	86	Doll	1
30	Bracket	1	87	Damper Seal	8
31	Roof Plate	1	88	Gear Box	1
32	Front Rower Arm Pin	2	89	Back Plate	1
33	Bumper	1	90	Gear Cover	1
			91	Rear Lower Arm	2
35	Joint Plate	1	92	" Pin (B)	2
36	Rear Suspension Hub	2	93	Clutch Bell (w/shaft)	1
37	Rear Wheel Shaft Bearing	2	94	Center Shaft	1
38	Rear Wheel Shaft	2	95	Counter Shaft	1
39	Joint	2	96	Idle Shaft	1
40	Rear Upper Arm	2	97	Joint	2
41	Front Body Metal	1	98	Pinion Gear	1
42	Rear Lower Arm Pin (A)	2	99	Idle Gear	1
43	Rear Upper Arm Pin (A)	2	100	Counter Gear	1
44	Swing Shaft	2	101	Bevel Gear	1
45	Brake Shoe	1	102	Bevel Pinion	1
46	L Crank Set	1 set	103	Starter Pulley	1
47	Tank Holder	1	104	Return Spring	1
48	Front Tire	2	105	Oil Seal	1
49	Rear Tire	2	106	5ø Metal	2
50	Front Wheel (A)	2	107	4ø Metal	6
51	" (B)	2	108	Rear Body Metal	1
52	" (C)	2	109	Rear Body Metal Collar	2
53	Rear Wheel (A)	2	110	Body Pin	1
54	" (B)	2	111	Air Cleaner	1 set
55	" (C)	2	112	Seal	1
56	Front Wheel Metal	4	113	Instruction	1
57	Flywheel	1			
58	Flywheel Pin	2	115	Transmission Oil	1
59	Starter Lining	1		(square bottle)	
60	Clutch Shoe	2	116	Pressure Sensitive Tape	1
61	" Spring	2			
62	" Lining	1	118	Rubber Pipe	1
63	Engine Mount Plate	2	119	E Ring for Idle Shaft	1
64	Roll Bar	1	120	Damper Bush	4
65	Side Guard	1	121	Brake Rod (A)	1
66	Rear Under Guard	2	122	" (B)	1
67	Adjust Plate	2	123	Throttle Control Rod	1
68	Radio Plate	1	124	Rear Upper Arm Pin (B)	2
69	Radio Mechanism Stopper	2	125	Gear Box Packin	1
70	Radio Box	1			
71	" Lid	1			
72	Dust Seal	1			
73	Radio plate Collar	4			
74	Radio Box Post	1			
75	Linkage Rod	3			
76	" Stopper	3			
77	Antenna Guide	1			
78	Body Hook Pin	1			
79	Fuel Tank	1			
80	" Bush	1			
81	" Aluminum Pipe	2			
82	" Bush	2			
83	" Tube	1			

\* mark prior to part nos. are parts assemble in the gear box.

PART NO.	PART NAME	KEY NO. & CONTENTS
CK- 1	Main Chassis	1 x 1
2	Servo Saver Set	2, 3 x 1
3	Tierod Set	4, 5 x 1, 6 x 2
4	Knuckle Arm Set	7, 8 x 1, 9 x 4, 13 x 4
5	Rocking Arm	11 x 2
6	Front Lower Arm	12 x 2
7	Front Damper Set	1 set
8	Rear Damper Set	1 set
9	Spring Set	23, 24 x 2
10	Arm Collar	28 x 2
11	Bulkhead	29 x 1
12	Bracket	30 x 1
13	Front Lower Arm Pin	32 x 2
14	Front Bumper	33 x 1
70	Body (Wildcat)	27, 31, 84 x 1
16	Joint Plate	35 x 1, 26 x 1
17	Rear Suspension Hub	36 x 2
18	Rear Shaft Wheel Bearing	37 x 2
19	Rear Wheel Shaft	38 x 2
20	Joint	39 x 2
21	Rear Upper Arm	40 x 2
22	Rear Arm Pin Set	42, 43, 124 x 2, 92 x 2
23	Swing Shaft	44 x 2
24	Brake Set	45, 46 x 1
25	Tank Holder	47 x 1
26	Front Tire	48 x 2
27	Rear Tire	49 x 2
28	Front Wheel Set	50, 51, 52 x 2
29	Rear Wheel Set	53, 54, 55 x 2
30	Front Wheel Metal	56 x 4
31	Fly Wheel	57 x 1, 58 x 2
32	Starter Lining	59 x 10
33	Clutch Shoe	60 x 6
34	Clutch Spring	61 x 10
35	Roll Bar Set	64, 65 x 1, 66 x 2
72	Radio Box (For Wildcat)	68 x 1, 67, 69 x 2
37	Radio Box	70, 71, 72 x 1
38	Radio Box Collar	74 x 1, 73 x 4
39	Linkage Set	121, 122, 123 x 1, 75, 76 x 3
40	Fuel Tank	79, 80, 83 x 1, 81, 82 x 2
41	Body Mount	85, 86, 109, 34 x 1
42	Gear Box	88 x 1
43	Back Plate	89 x 1
44	Gear Cover	90, 105 x 1
45	Rear Lower Arm	91 x 2
46	Clutch Bell (w/shaft)	93 x 1
47	Gear Box Seal	125 x 5
71	Body Mounting Metal	41, 108 x 1, 109 x 2
49	Pinion Gear	98 x 1
50	Idle Gear	99 x 1, 96, 119 x 1
51	Counter Gear	100 x 1
53	Starter Pulley	103, 104 x 1
54	5ø Metal	106 x 6
55	4ø Metal	107 x 6
56	Body Seal	112 x 1
58	Rubber Pipe	117, 118 x 2
PR-16	Engine Mount Plate	63 x 2
21	Air Cleaner	111 x 1

PART NO.	PART NAME	KEY NO. & CONTENTS
PR-25	Center Shaft	94 x 1
EP-22	Hook Pin	78 x 5
SD-56	Lining	62 x 5
CK-61	Screw Set	1 set
62	Gear Box Assembly	
65	Joint	97 x 2
68	Ball Receptacle	13 x 4 $\frac{1}{2}$
71	Bevel Gear Set	95, 101, 102 x 1
74	Antenna Guide	77 x 1
75	Transmission Oil	115 x 1

OPTIONAL PARTS

CK-63	4 $\phi$ Bearing	For front wheel & gear box-2 pcs.
64	5 $\phi$ Bearing	For Center shaft-2 pcs.
PN-59	Heatsink	

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