RADIO CONTROLLED ELECTRIC POWERED RACING BUGGY

SHADOW4VD

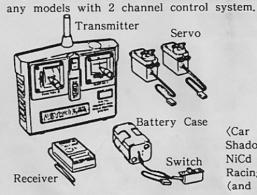
- •MIDSHIPS-MOUNTED MOTOR AND BATTERY FOR BEST BALANCE.
- SHAFT DRIVE TO FRONT WHEELS FOR MINIMUM-WEIGHT 4-WHEEL DRIVE.
 - DOUBLE-WISHBONE INDEPENDENT SUSPENSION ON ALL WHEELS.
 - **OLARGE CAPACITY SHOCKS ON ALL WHEELS.**
- SIMPLY ASSEMBLY AND ADJUSTMENT. REQUIRES NO SPECIAL SKILLS.
- FRONT AND REAR DIFFERENTIALS FOR EFFICIENT POWER DELIVERY.
 - POWERFUL LeMANS "STOCK 05" MOTOR INCLUDED IN KIT.
 - EXCELLENT ENTRY-LEVEL BUGGY. GOOD PERFORMANCE AT REASONABLE COST.



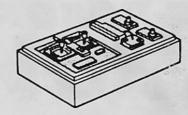
OFF-ROAD RACER

HADOW 4W

NOTE ON RADIO CONTROL SET A 2 channel, 2 servo digital proportional radio control unit is required for driving this model car. A unit of such a radio can be used for



ITEMS REQUIRED TO COMPLETE THE MODEL (2 channel Radio Control System)

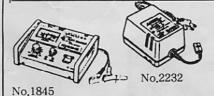


(Car Battery) Shadow is disigned to use a rechargeable 7.2V-1200mAh NiCd battery pack or 7.2V Power battery. A Kyosho Racing Battery, part number 2218, Power Battery 2306 (and some other brands) may be recharged at a wide range of rates. The charging rate depends on the type of charger used.





			7,2V Power Battery 7,2V Racing Battery						
Model	Model Name Charging		Charging Rate	e Features					
No. 2221	Super NiCd Charger (AC100V)	14 to 16 hrs.		For biginners					
	7.2V Power Charger (DC12V)	15 minutes	about 70%	For biginners; Timer built in					
No. 1846	Multi Charger (DC12V)	20 minutes	100%	Timer, Ammeter built in					
No. 1845	Lambda Quick Charger (DC12V)	about 20 minutes	100%	Trickle charging Automatic cut-off at peak of charge.					
No. 2232	Super NiCd AC Rapid Charger	about 40 minutes	about 100%	Chargeable from Household outlet.					









REQUIRED TOOLS Several tools are required for assembling Shadow. The followings are included with the kit. 1.5mm Hex Key 2mm Hex Key Grease Nylon Strap *The followings are not included. Philips-head Screwdriver (L,S) Slot-head Screwdriver 5.5 and 7mm Nut Driver =Round Cutter Pliers Wire Cutter

Hobby Cutter Knife

Polyca (or

paint

similar) acrylic



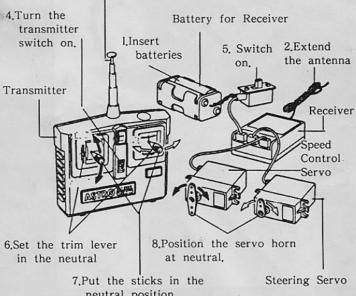
Micron-line

Tape

HOW TO CHECK THE RADIO CONTROL UNIT

Manipulate the radio in order of the number 1 to 8.

3.Extend the antenna.



neutral position.

*Always switch the transmitter on first, followed by the receiver.

A 2 channel radio control set is composed of a transmitter, a receiver, two servos, and a battery box.

Transmitter This is to control the needle The operation of the contrl sticks sends a signal via the antenna in the form of radio waves.

Receiver Transmits the wave signals received to the

Servos Operate the controls by means of motor and gears according to signals provided from the receiver.

Antenna Plays an important role of emitting the wave signals from the transmitter antenna, and the receiver antenna catches them. They must be fully extended when in operation,

Trim Lever ----- Adjust the neutral position of the servos and fine tuning of steering, and of the speed controller.

Battery Meter..... This indicates the power of the transmitter battery.

Servo Horn----- This is to transfer the movements of the servo to a controlled component. There are several types of shapes.

*Please read through these instructions before assembly. Your through understanding of the assembly will enable you to build the kit without difficulty. Check the components in the kit prior to your startings the assembly. Any claims for replacements or refunds for the model in the process of assembly will not be accepted.

⟨Please understand the following points before assembly⟩ I. Learn the marks described in the instruction

Points where grease should be applied. (It will reduce friction and assure smooth movement,)

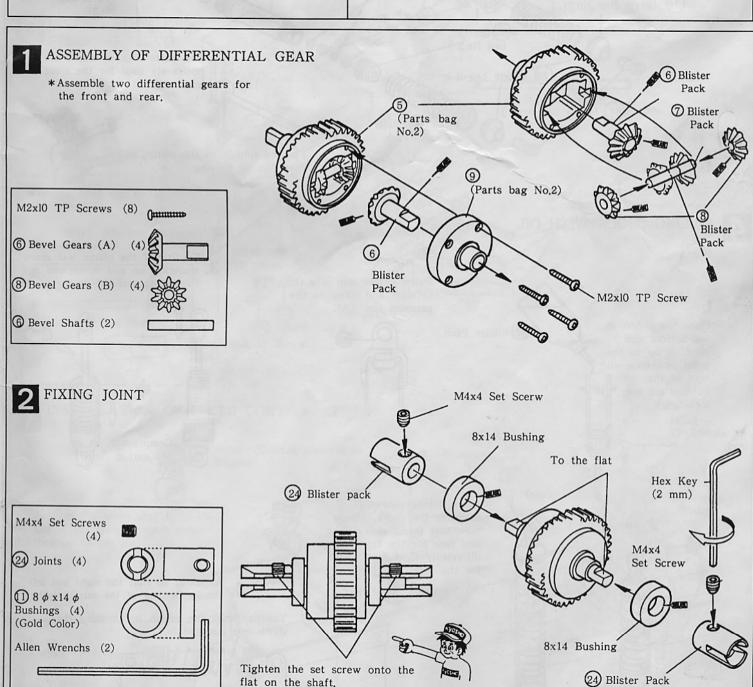
Steps where your particular attention is required,

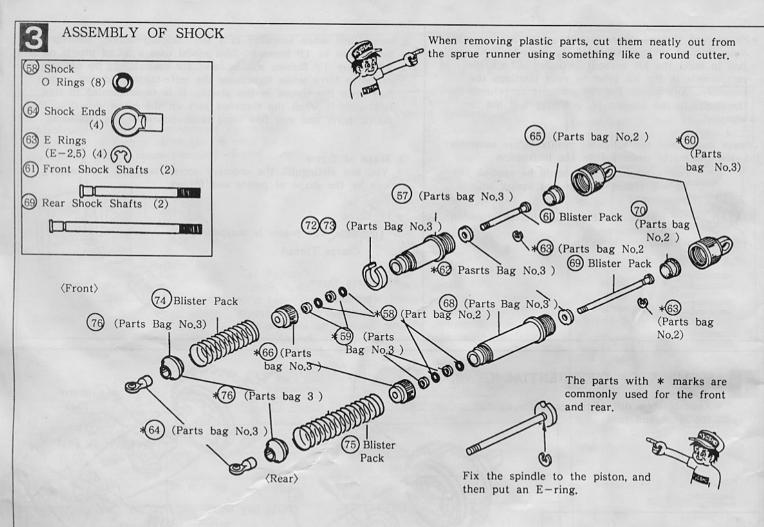
- 2. Some Hints when screwing in a self-tapping-screw, (hereinafter referred to as TP Screw.) This model uses a lot of plastic parts, And many TP Screws will be used for assembling. Do not use excessive force when tightening the self-tapping screws, or you may strip the thread in the plastic. It is recommended to stop tightening it when the threaded part on the screw goes into the plastic parts and you feel some resistance from the tightening.
- Shape of Screw You can distinguish the ordinary screw form the self-tapping one by the shape of points and thread.
- *TP Screw

The points is sharpened.

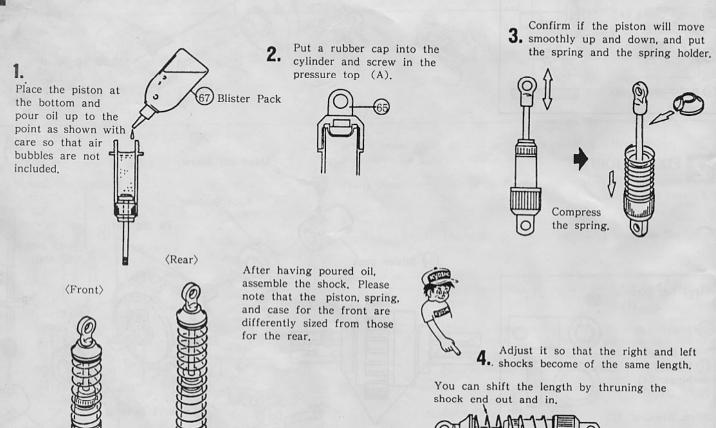
*Ordinary Screw



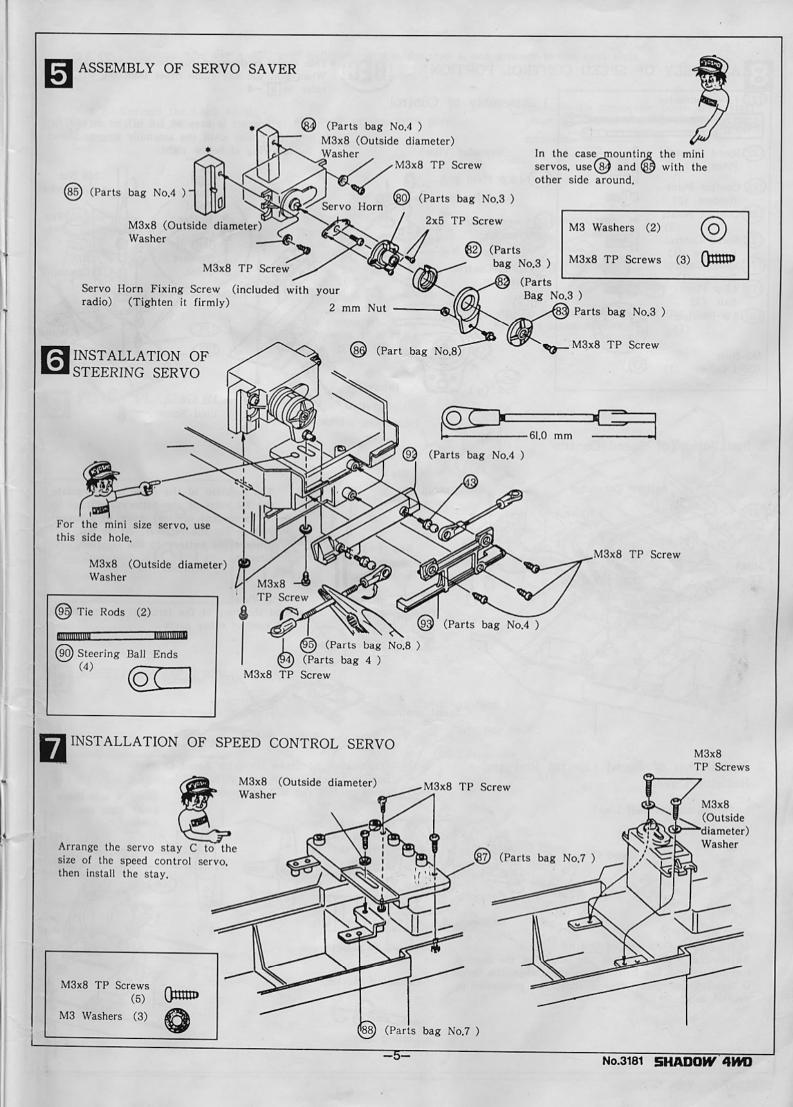


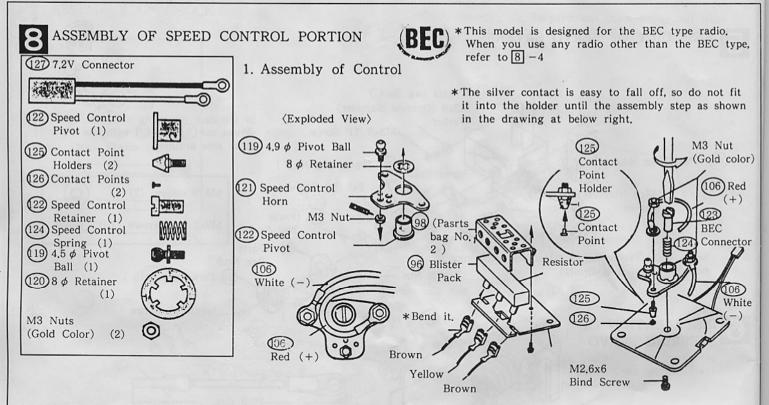




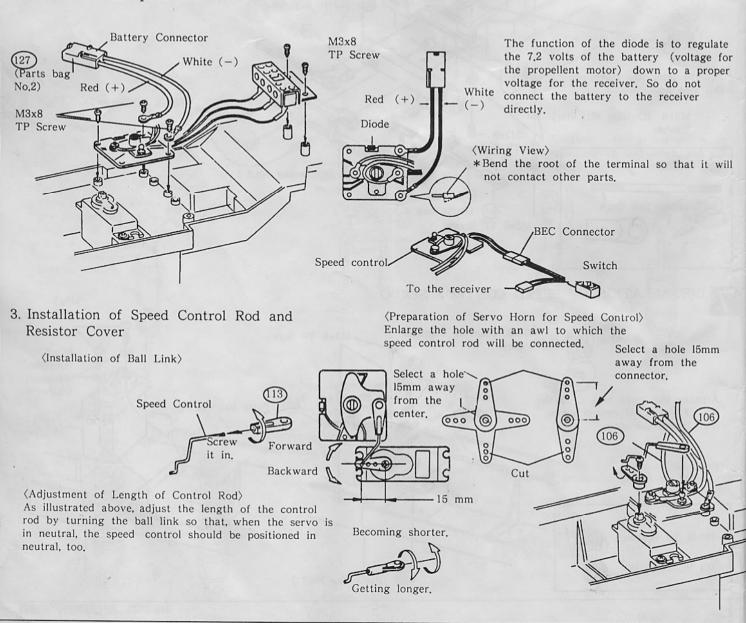


- Length





2. Installation of Speed Control

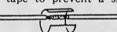




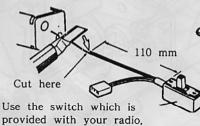
For those who use a BEC type radio, please skip the step 4, and proceed to the next step.

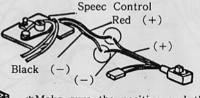
(How to Connect the Lead Wire) Slice the cords of the same porality. (1) Trim off about 5mm.

(3) Insulate the connection points with vinyl tape to prevent a short-circuit.

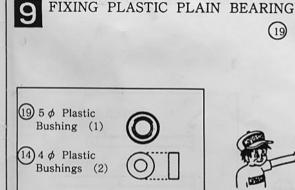


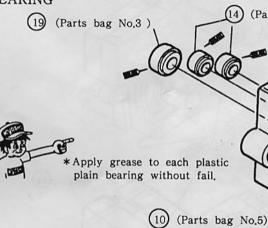


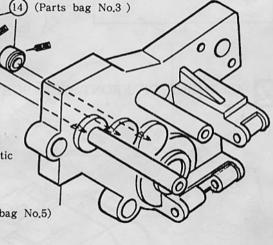




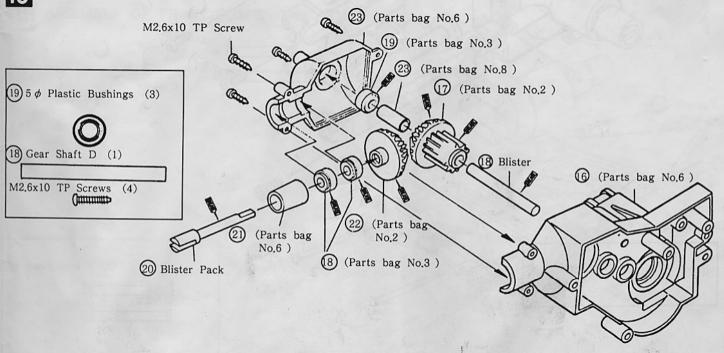
*Make sure the positive and the negative not to make mistake.

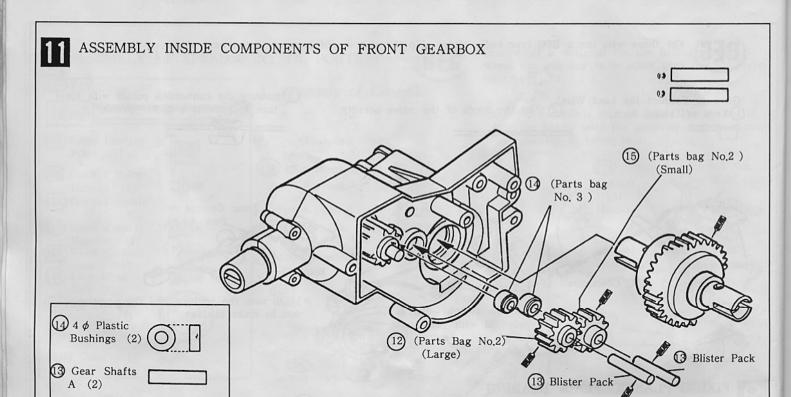




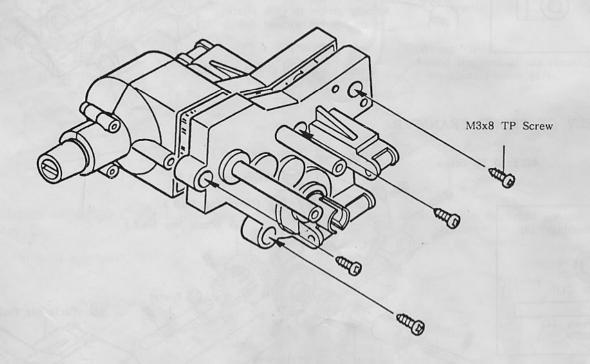


ASSEMBLY OF FRONT TRANSFER

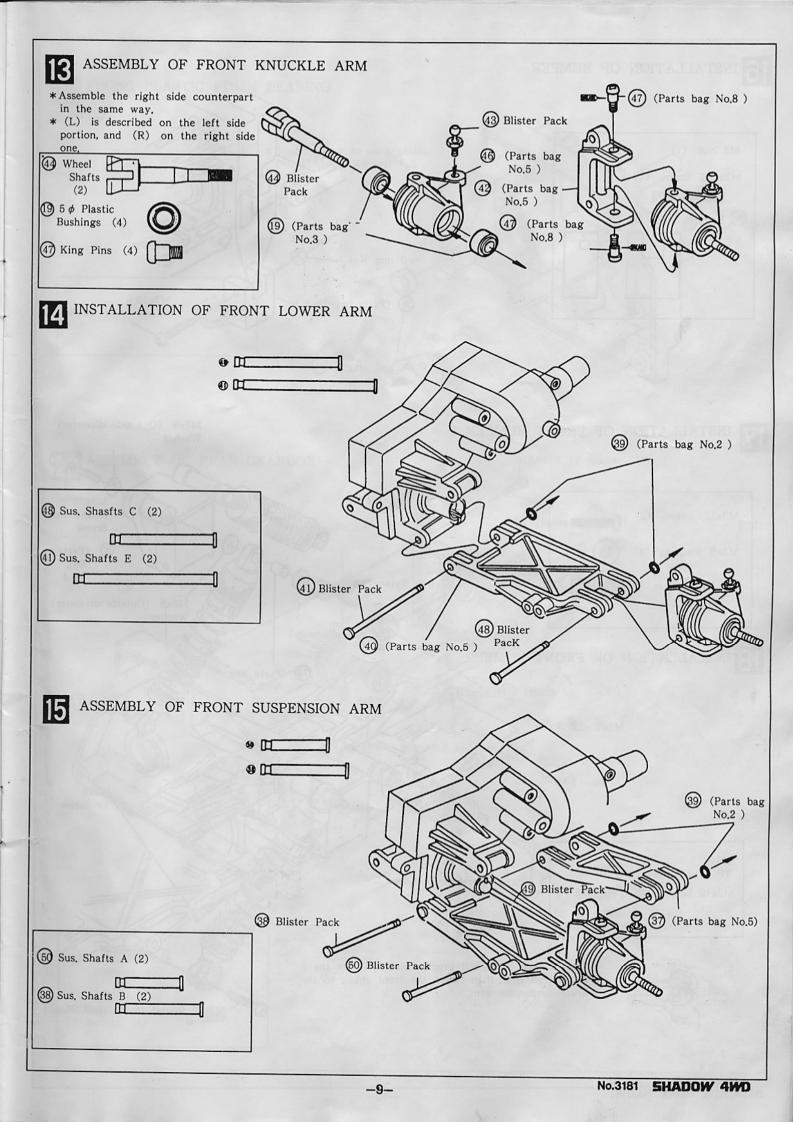


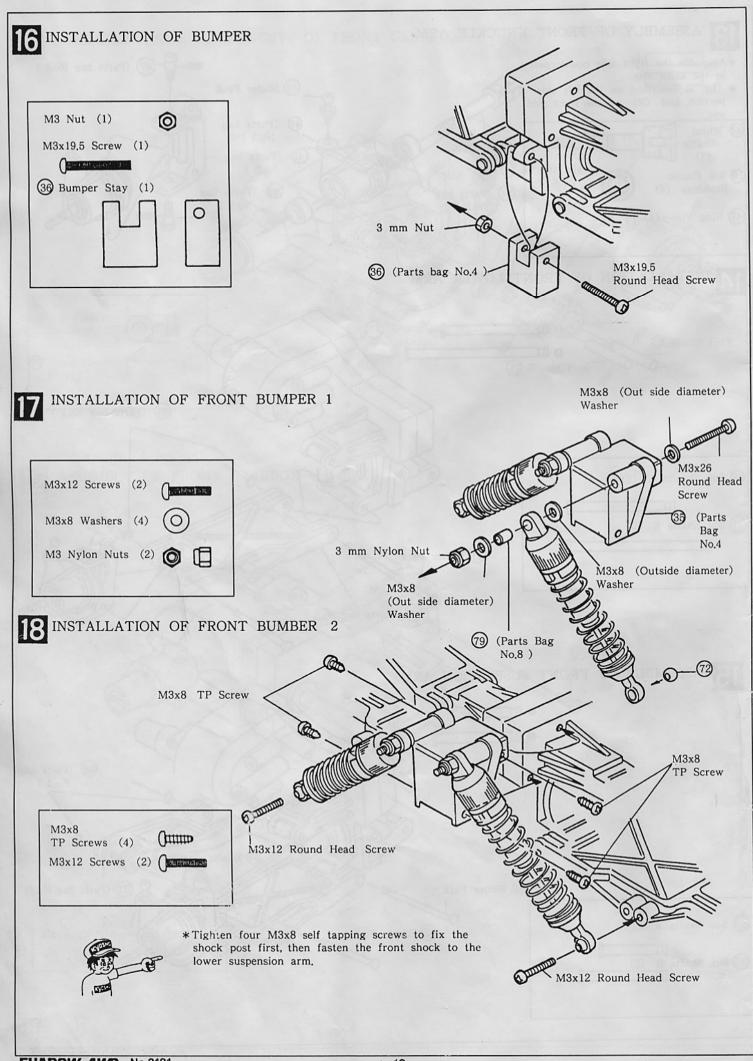


12 ASSEMBLY OF FRONT GEARBOX

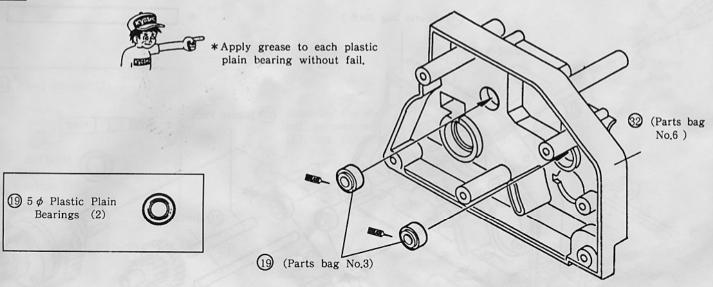


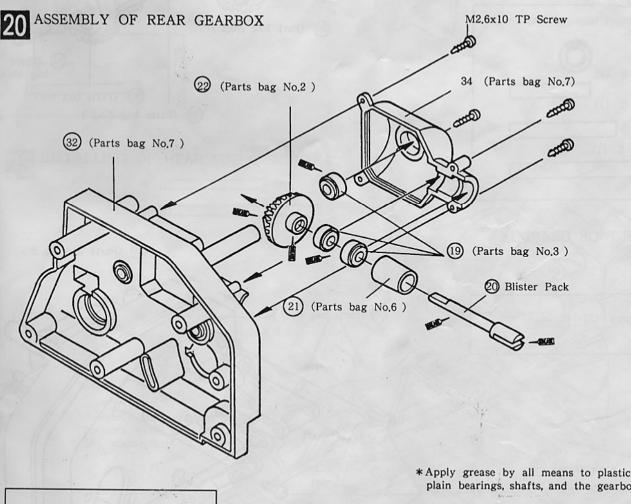
M3x8 TP Screws (4) ()







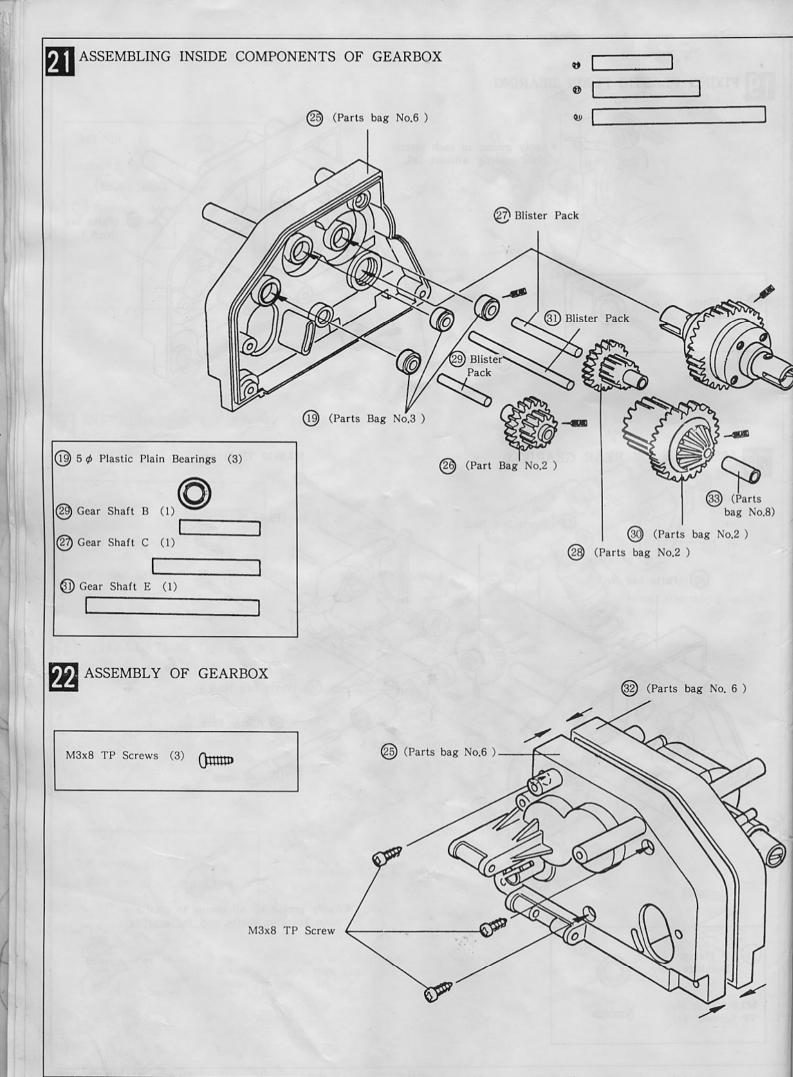


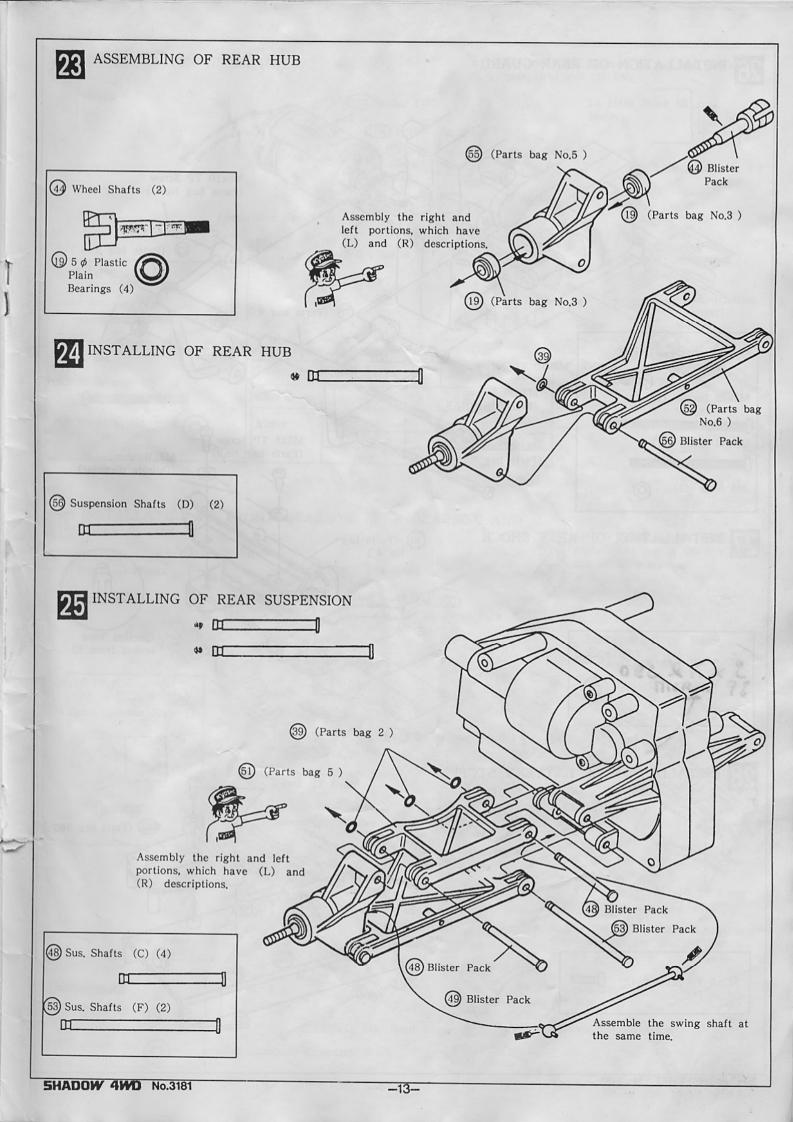


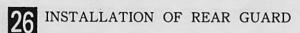
19 5 \phi Plastic Plain Bushings (3) M2.6x10 (himmin) TP Screws (4)

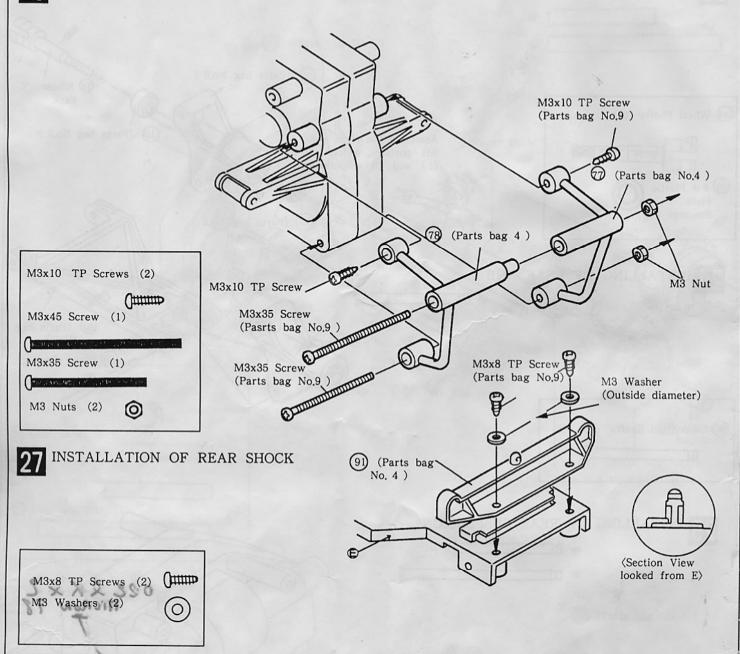
*Apply grease by all means to plastic plain bearings, shafts, and the gearbox.

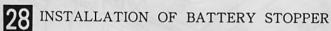


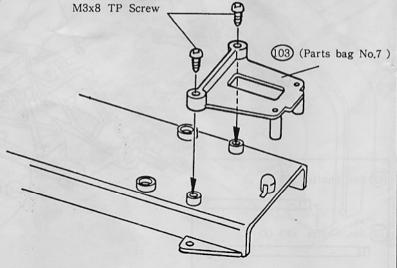




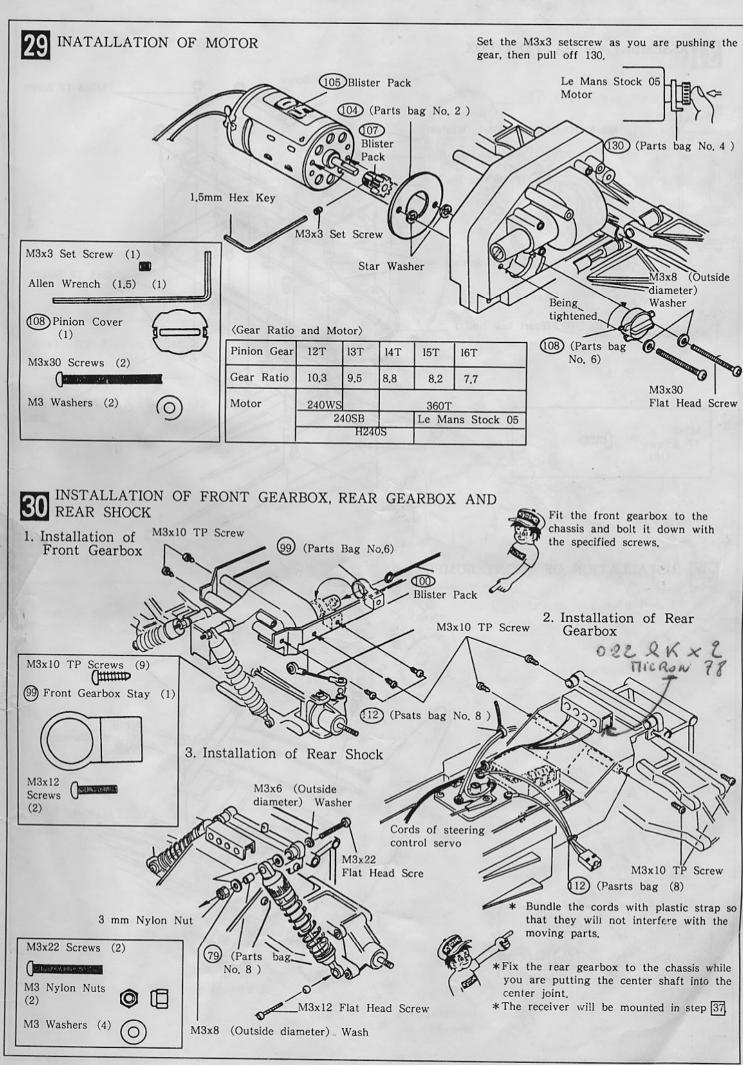


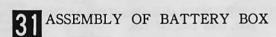


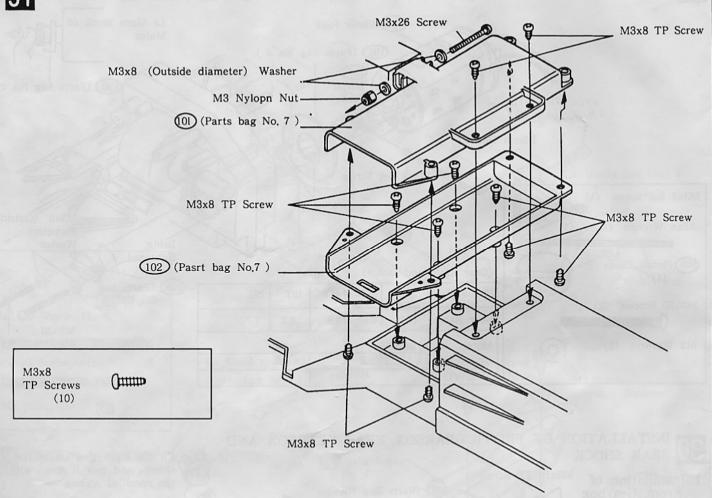




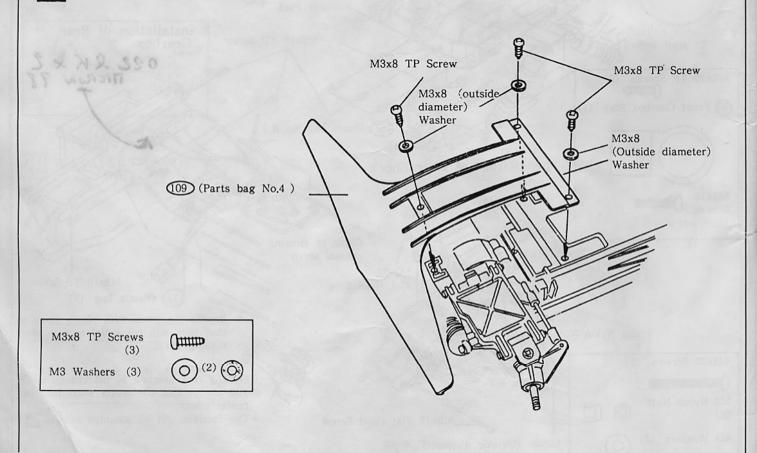
M3x8 TP Screws (2)

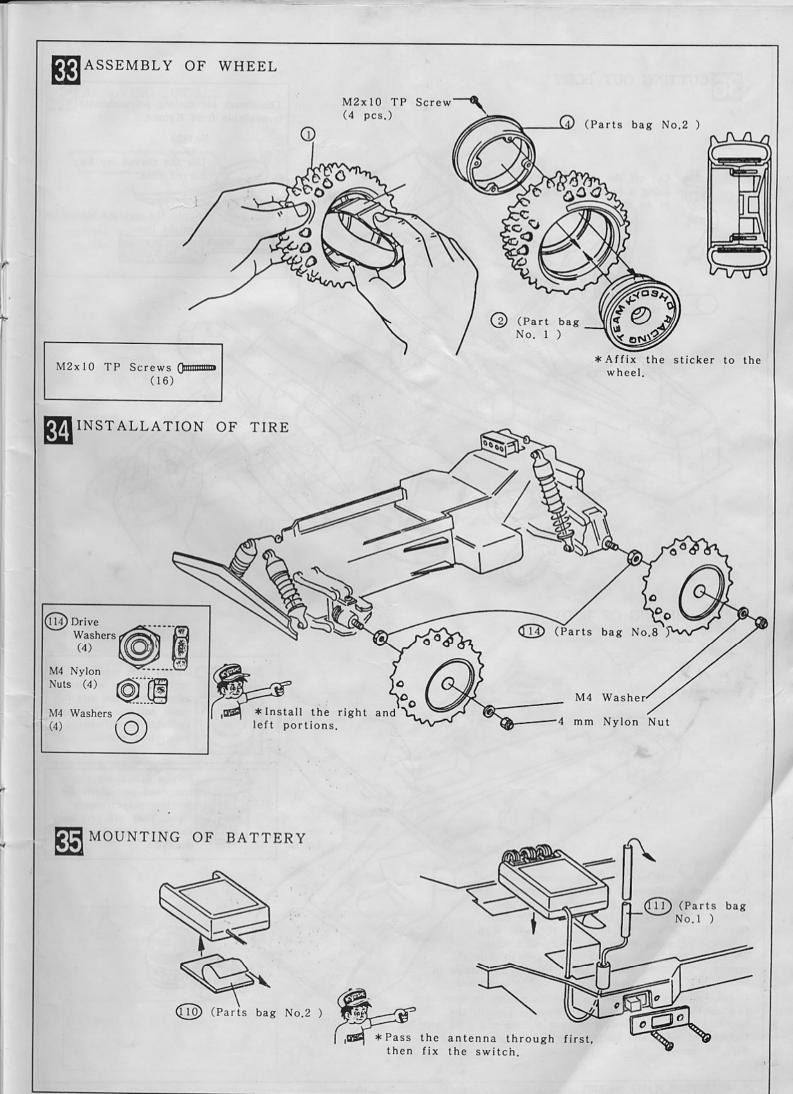


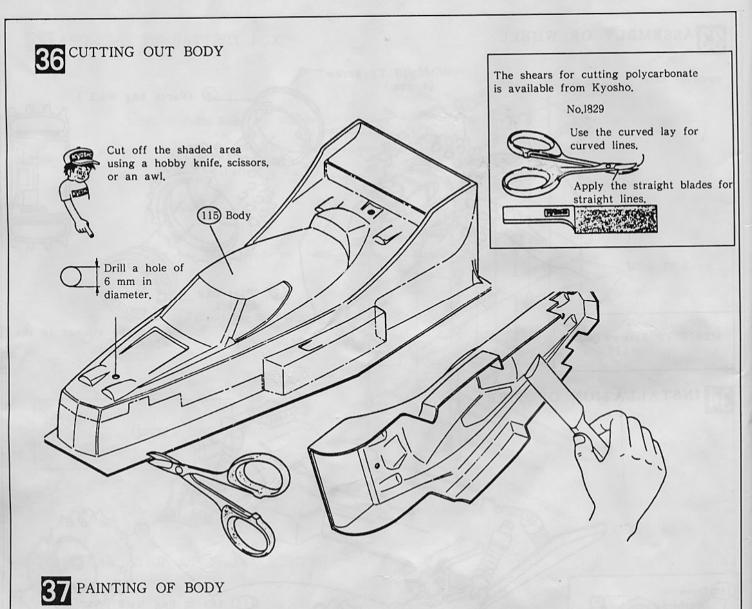


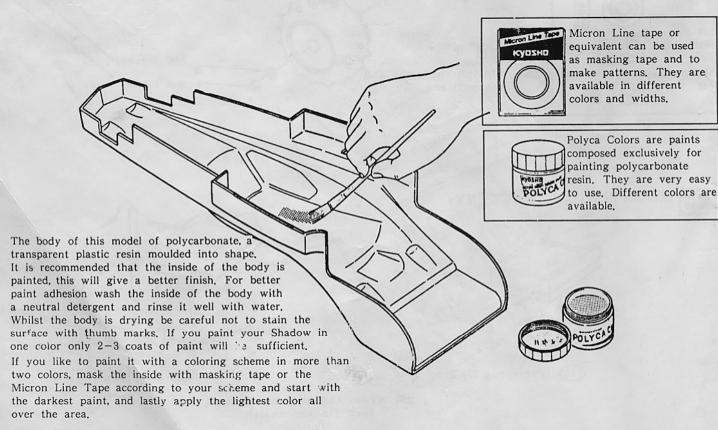


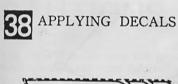
32 INSTALLATION OF FRONT BUMPER



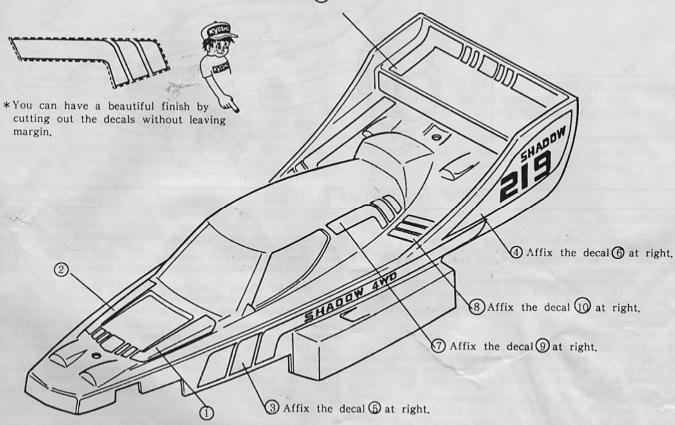


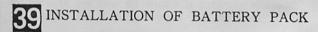


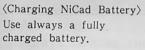


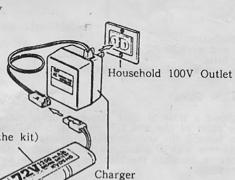


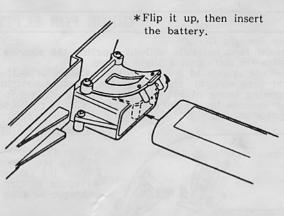
Affix the decal (1) at left.

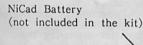


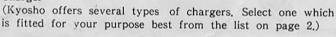






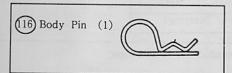


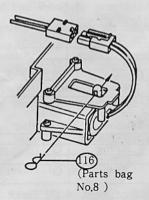






For maximum performance, usea high performance battery. The Kyosho 7.2V Power Battery or Racing Battery is recommended.





kEY #	NAME	QTY	KEY #	NAME	QTY	KEY #	NAME	QTY
0	Tire	4	63	Sus, Shaft (F)	2	(8)	Motor	1
2	Wheel (1)	4	9	Rear Hub (R)	1	(%)	Motor Lead Cord	2
3	Wheel (2)	4	63	Rear Hub (L)	1	0	Pinion Gear (16T)	1
(4)	Wheel (3)	4	89	Sus, Shaft (D)	1 2	(1)	Pinion Cover	1
(5)	Main Gear	2	9	Front Shock Case	2	(1)	Bumper	1
6	Bevel Gear (A)	4	59	O Ring (P-3)	8	0	Double Sided Tape	1
1	Bevel Shaft	2	59	Shock Collar	8	0	Antenna Pipe	1
8	Bevel Gear (B)	4	60	Shock Cap (A)	4	0	Nylon Strap	3
9	Diff, Case	2	0	Front Shock Shaft	2	0	Ball End (S)	1
0	Front Gearbox (R)	1	63	Shock Piston	4	0	Drive Washer	4
0	8 φ x14 Bushing	4	63	E Ring (E-2.5)	4	(1)	Body	1
(3)	Idle Gear (A)	1	69	Shock End	4	(1)	Body Pin	3
(3)	Gear Shaft (A)	2	63	Presser Top (A)	2	0	Decal	1
<u>(4)</u>	4 φ Plastic Plain Bushing	4	66	Shock Cap (B)	4	0	hobby Grease	1
<u>(3</u>	Idle Gear (B)	1	60	Shock Oil	1	(II)	4.5 φ Pillow Ball	1
(6)		1	69	Rear Shock Case	2	(8)	8 φ Retainer	100
0	Front Gearbox (L) Front Drive Gear	1	69	Rear Shock Shaft	2	0	Speed Control Horn	1
0	Gear Shaft (D)	1	100		2	(B)	Speed Control Horn Speed Control Pivot	1
0		20	0	Presser Top (B) 5.8 \(\phi \) Ball	4	100	Speed Control Stud	1
3	5 φ Plastic Plain, Bushing Center Joint	2	103		4	100	+ -	1
20	Center Joint Cover	2	63	Spring Spacer (A) Spring Spacer (B)	4	(B)	Speed Control Spring Contact Point Holder	2
8		2	0			(1)		
3	Center Bevel Gear Front Bevel Cover	-	-	Front Spring	2		Contact Point	2
		1	69	Rear Spring	2	0	7.2V Connector BEC Connector	1
23	Joint	4	0	Spring Holder	4	(1)		1
8	Rear Gearbox (R) Counter Gear (A)	1	0	Rear Guard (R)	1	_	M3 Nut	1
8		1	03	Rear Guard (L)	1		M3 Nut Gold Color	2
1	Gear Shaft (C)	1	(9)	Shock BusheSaver Base	4	(1)	Chassis	1
®	Counter Gear	1	89	0 01 1	1	(3)	Thickness Guage	1
29	Gear Shaft (B)	1	9	Saver Shock	1		*	
99	Rear Drive Gear	1	82	Saver Arm	1		And and warmen and any	- M
10	Gear Shaft (E)	1	83	Saver Cap	1		- Can led in	0.0
3	Rear Gearbox (L)	1	8	Servo Stay (A)	1			
33	Bevel Collar	2	89	Servo Stay (B)	7			
39	Rear Bevel Cover	1	86	Steering Pin	1		I LA	
33	Front Shock Stay	1	8	Speed Control Base	1			
36	Bumper Stay	1	88	Servo Stay (C)	1			
9	Front Upper Sus. Arm	2	89	Speed Control PC Plate	1			
38	Sus, Shaft (B)	2	99	Speed Control Rod	1			
39	O Ring (P-2.3)	16	9)	Rear Shock Stay	1			
0	Front Lower Sus, Arm	2	93	Steering Lluck	1			
•	Sus, Shaft (E)	2	93	Steering Plate	1			
•	Front Hub	2	99	Ball End	4	- 12000		
0	4.8 φ Pillow Ball	4	99	Tie Rod	2			
0	Wheel Shaft	4	99	Resistor	1 1	100	. 3	
•	Knuckle Arm (R)	1	9	Heat Sink Base	1		TO DIAMETER	7 - 1
•	Knuckle Arm (L)	1	99	Heat Sink.	1			
0	King. Pin	4	99	Front Gearbox Stay	1, 1,	3		
0	Sus, Shaft (C)	6	(8)	Center Shaft	100			
(3)	Swing Shaft	4	(0)	Battery Box (A)	12			
50	Sus, Shaft (A)	2	(I)	Battery Box (B)	1 -1			
		2				-		-
1	Rear Upper Sus, Arm	4	(0)	Battery Box (C)	1			

PURCHASING PARTS FOR YOUR KIT

You can purchase replacement and optional parts for your kit. All of the part identified by key numbers are usually not available singularly, but we offer these parts in convenient parts 'packs' which can be purchassed separately. To figure out which parts pack you need, find the key number for that part within the manual. Then consult our parts pack guide, below. When refering to the parts you needs, always use the parts pack number. For instance, if you need a Main Gear (key #5) ask your dealer for Kyosho Parts Pack SB-6 (Diff, Gear Set).

ion you	i dealer for Hydding Farth	Tuon of a commentation	O. Morete L.		Red smu21 W				
No.	Name	Includes Key No.	Optional Parts						
B- 1 B- 2	Front Gearbox Set Rear Gearbox Set	10 16 21 23 99 x 1 104 21 25 32 34 108 x 1	1911	8 φ x14 Bearing	2pcs. Replacement for Bushing 11				
	Bumper Stay Set Wheel Set	35 91 77 78 109x1 2 3 4 x 2	1901	5 φ x10 Bearing	2 pcs. Replacement for Bushing 19				
B- 5	Gear Set	12 15 17 26 28 30 x l 22 x 2	1903	4 φ x8 Bearing	2 pcs. Replacement for Bushing 14				
B- 6	Diff, Gear Set	579 x 2 6 8 x 4	OT-50	Pinion Gear 13T					
B- 7	Front Sus, Arm Set	37 40 x 2	OT-51	Pinion Gear 14T	The state of the s				
	Rear Sus, Arm Set	51 52 x 2	OT-24	Pinion Gear 15T					
B- 9	Knuckle Hub Set	42 x 2 45 46 54 55 x 1	OT-53	Pinion Gear 17T					
B-10	Chassis	129 87 88 84 86 36 x 143	W-5021	Low profile Wheel	Silver				
B-11 B-12	Steering Set Servo Saver Set	94 x 4 92 93 x 1 95 x 2 80 81 82 83 86 x 1	W-5001	Pressure Oil Shock (S)	High performance, Large 12 ϕ shock				
SB-13 SB-14	Battery Box Set Tire Set	101 102 103 x 1 1 x 2	W-5002	Pressure Oil Shock (L)					
B - 14 B - 15	Gear Shaft Set	13 33 x 2 4 18 27 29	W-5003	Adjustable Shock (S)	Adjustable damping action				
DD-10	Gear Shart Set	31 x 1	W - 5003 W - 5004	Adjustable Shock (L)					
B-16	Sus, Shaft Set	48 x 6 39 x 16 38 41 50 53 56 x 2	W-5031	Low Profile Tire, Allround type	For Hard Truck 2pcs.				
SB-17	Front Shock Set	58 59 x 4 57 60 61 62 63 64 65 66 71 72 73 74 76	W-5032	Low Profile Tire High Grip type	For Soft Truck 2 pcs.				
		79 x 2	W-5061	Universal Swing Shaft	Wheel Shaft (2pcs.)				
SB-18 Re	Rear Shock Set	58 59 x 4 60 62 63 64 66			Swing Shaft Set				
		68 69 70 71 72 73 75 76 79 x 2	1863	Sponser Sticker	1 pc.				
SB-19	Bushing Set	11 14 x 4 19 x 20							
SB-20	Joint	24 x 2							
SB-21	Center Joint	20 x 2							
SB-22	Wheel Shaft	44 x 2							
SB-23	King Pin	47 x 4							
SB-24	Swing Shaft	49 x 2							
SB-25	Speed Control Set	88 90 96 97 98 119 128 120 121 122 123 124 x 1			Knuckle Arm (L) (R)				
		125 126 x 2		~^	indokie ilim (E) (it)				
SB-26	Body	115 x 1	no result						
SB-27	Drive Washer	114 x 4	avener 2	4.1	8 φ Pivot Ball				
SB-28	Decal	117 x 1		Y MENOUSE	0 800				

Decal Center Shaft

Screw Set

Hook Pin

OT-52 Pinion Gear

SD-79 Antenna Pipe

Nylon Strap (S)

Double Sided Tape

Shock Oil Set (S,M,H)

Connector Read Wire Set

SB-30

PG-43

1840

1951

1889

100 x 1

1 set 6pcs.

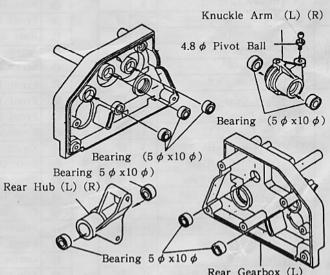
1 pcs.

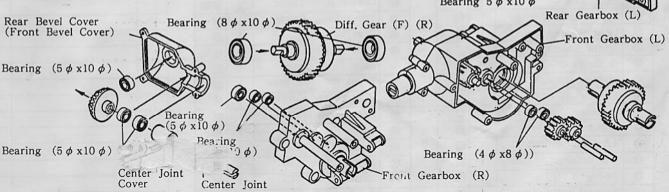
16T

111 x 5

Soft, Medium, Hard

106 127 x 1





"SHADOW 4WD" BAGGED PARTS LIST

Dag +	Key #	Name	Qty	Step	Bag :	#Key #		Qty	Step	Bag #	Key #	Parts	Qty	Step	
	00	Motor	1			(1)	Speed Control Stud	1	8		(9)	Shock Bush	4	100 0	
	0	Swing Shaft	4		SH	(1)	Speed Control Spring	1	8		•	Steering Pin	1	9	
	•	Wheel Shaft	4			(3)	Contact point Holder	2	8	s	0	King Pin	4		
	29	Joint	4			130	Contact Point	2	8	SH	0	Body Pin	3	2	
	6	Bevel Gear. (A)	4		2	0	7.2V connector	1	8	8	69	Tie Rod	2	1	
	(8)	Bevel Gear (B)	4		1	-	M3 Nut	1	[3]		0	Drive Washer	4		
	0	Bevel Shaft	2	13		-	M3 Nut (Gold Color)	2	13		0	Nylon Strap	3	0	
-4	(3)	Gear Shaft (A)	2	100		100	Saver Base	1			-		2	-	
B	23	Gear Shaft (B)	1	7		10	Saver Shock	1		18		M2x5 TP Screw	24		
	20	Gear Shaft (C)	1			63	Saver Arm	1	4			M2x10 TP Screw		-	
	0	Gear Shaft (D)	1			8		-	-			M2,6x10 TP Screw	8	-	
	9)	Gear Shaft (E)	1		200	-	Saver Cap	1				M3x10 TP Screw	11	L	
	89	Center Joint	2		a colo	0	4 φ Plastic Plain Bushi		800			M3x8 TP Screw			
	89	Speed control PC Boar			107	0	5 φ Plastic Plain Bush	-	86			M2x6 Round Head			
	0	4.8 \phi Pillow Ball	-	-	s	9	Front Shock Case	2				M3x12 "			
		5.8 φ Ball	4		H	9	Shock Collar	8	B			M3x19.5 "	T	1	
	0	Pinion Gear (16T)	4		3	69	Shock Cap (A)	4	3			M3x22 "	12		
	0		1		The same	63	Shock Piston	4	8			M3x26 "			
	0	Center Shaft	1			69	Shock End	4		- 32-1		M3x30 "	1.2	The	
	99	Resistor	1	8		6	Shock Cap (B)	4	B	S		M3x35 "	17	1	
	0	Front Shock Shaft	2	B		69	Rear Shock Case	2	8	H		M3x45 " .	1		
	69	Rear shock Shaft	2			0	Spring Spacer (A)	4	13	9		M3x3 Set Screw	1		
	0	Front Spring	2			13	Spring Spacer (B)	4	3			M4x4 "	4		
	3	Rear Spring	2	B		100	Spring Holder	4		23.8	-	1,5mm Hex Key	1		
	80	Sus, Shaft (A)	2		Maria	3	Thickness Guage	1	2		Commence	Omm Hex Kye	1	-	
	39	Sus, Shaft (B)	2	100		93	Steering Luck	1	6	1.00		John Hex Ryc	· ·	-	
	0	Sus, Shaft (C)	6	田屋			Steering Plate	1	6			Omana Nut			
	\$6	Sus, Shaft (D)	2			9	Ball End		-			2mm Nut	1		
1	0	Sus, Shaft (E)	2	08	S H - 4		Bumper Stay	4	0	- V		3mm Nut	3		
1	9	Sus, Shaft (F)	2			_		1				3mm Nylon Nut	5		
+	0	Shock Oil		9		(9)	Bumper	1	00			4mm Nylon Nut	4		
1	0	hobby Greases	1	0		9	Rear Guard (R)	1		1 18		M3x6 O.D. Washer	4		
+			1	_			Rear Guard (L)	1				M3x8 "	24		
-	(B)	Motor Lead Cord	2			9	Front Shock Stay	1	OE.			M4 Washer	4		
; }	2	Wheel (1)	4			0	Rear Shock Stay	1			0	Tire	4		
	3	Wheel (2)	4					Servo Stay (A)	1 1	5		(1)	Body	1	
	(4)	Wheel (3)	4				Servo Stay (B)	1	5		(3)	Chassis	1		
_	0	Antenna Pipe	1			9	Front Upper Sus. Arm	2							
1		Main Gear	2	0		0	Front Lower Sus. Arm	2	10		0	Decal	1		
	9	Diff. Case	2	11		•	Front Hub	2	B	1	-	Instruction Manual	1		
	0	Idle Gear (A)	1	10	SH	0	Knuckle Arm (R)	1	Œ	1	_	The state of the s	_		
	(3)	Idle Gear (B)	1	11		•	Knuckle Arm (L)	1	DE					-	
	0	Front Drive Gear	1	10	±-15		Rear Upper Sus. Arm		+						
	A COLUMN TWO IS NOT THE OWNER.	Center Bevel Gear	2	10 20			Rear Lower Sus. Arm	2	720	-					
1		Counter Gear (A)	1	71			Rear Hub (R)			+					
1		Counter Gear (B)	1	2	5		Rear Hub (L)	1	245						
-		Rear Drive Gear	1				Front GearBox (R)	1	88			* * * * * * * * * * * * * * * * * * * *			
-		Heat Sink Base	1		SH-6	-		1				3 2 3			
-				8			Front Gearbox (L)	1.							
+	-	Heat Sink	1	8			Center Joint Cover	2	10 20						
+		Speed Control Rod	1	8			Front Bevel Cover	1	m		100000000		THE ST		
+		Double Sided Tape	1				Rear Gearbox (R)	1		1					
-		Motor Spacer	1	21	6		Rear Gearbox (L)	1	B B						
		O Ring (P-2.3)	16	19 15			Rear Bevel Cover	1	20						
		O Ring (P-3)	8	8	1		Front Gearbox Stay	1	9						
		E Ring (E-2.5)	4	3		(0)	Pinion Gear Cover	1							
	63	Pressher Top (A)	2	8		®	Speed control Base	1	Z						
	100	Pressher Top (B)	2	8	s		Servo Stay (C)	1	7						
	(1)	4.5 φ Pillow Ball	-	8	H		Battery Box (A)	1							
-		8 φ Retainer	_	8	++		Battery Box (B)	-							
		Ball End (S)	_	3			Battery Box (C)	_							
-	-	Speed Control Horn	-	-				-	2						
		Speed Control Pivot		8	SH-8		8 φ x 14 Bushing Bevel Collar	4	2						
	170			447	100	63		-0700000	回回						

