

HIROBO[®]

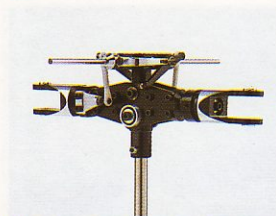


RADIO CONTROLLED SKY SPORTS INDEX '94

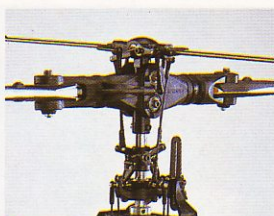
HELICOPTERS
PARAPLAN SPORT
OPTIONAL PARTS
ACCESSORIES

SST, EX, SX OPTIONAL PARTS

■ : TSURUGI & SST-EAGLE Compatible ■ : For SST-EAGLE ■ : For TSURUGI



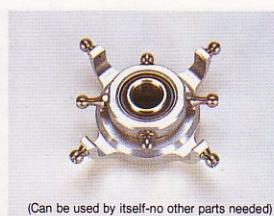
■ **SSR II Rotor Head Assy**
New seesaw-type rotor head attached to large size dampers.
0404-220



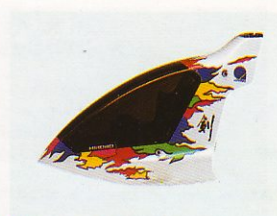
■ **FFR Rotor Head Assy**
High strength engineer plastic with carbon. 7mm thrust bearing equipped.
0404-533



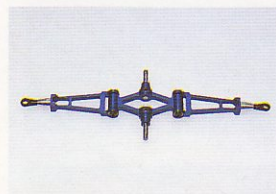
(Can be used by itself-no other parts needed)
■ **EX-II Wash-out Set**
A2017S Machine cutting. Phase adjuster equipped. High rigidity
0404-120



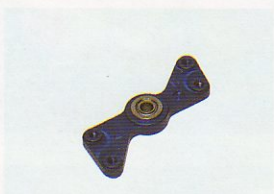
(Can be used by itself-no other parts needed)
■ **EX Swash Plate**
A2017S Machine cutting. High rigidity
0404-121



■ **SX FRP Cabin Set**
Available for SST Eagle and TSURUGI. Canopy & Decal included.
0404-539



(Can be used by itself-no other parts needed)
■ **EX Elevator Lever Set**
A2017S Machine cutting. High precision part with double elevation arms.
0404-122



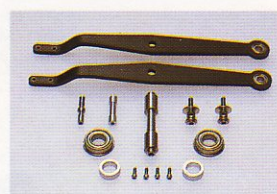
■ **EX X-Type Lever (for elevator sets)**
A2017S Machine cutting. Levers for push-pull types. Prolongs servo axis Preventing clatter.
0404-127



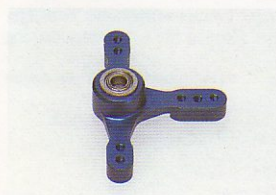
■ **EX Elevator Torque Lever**
A2017S Mechanic cutting. Designed for push-pull types.
0404-125



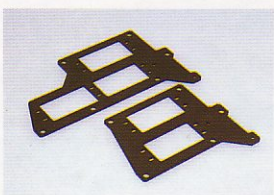
■ **EX Aileron Lever**
A2017S Machine cutting. Designed for push-pull types of equipment.
0404-123



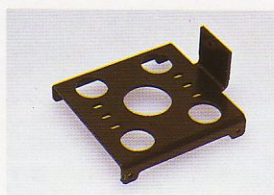
■ **EX Collective Pitch Control Lever Set**
A2017S Machine cutting. High rigidity part, utilizing bearing process.
0404-124



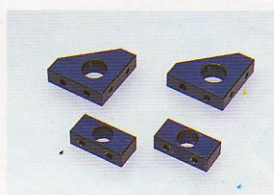
■ **EX T-Type Lever (for pitch sets)**
A2017S Machine cutting. Lever for push-pull types. Prolongs servo axis Preventing clatter.
0404-128



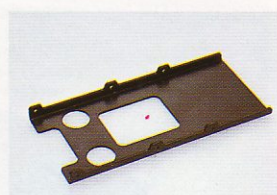
■ **EX Side Servo Mount R,L-Types**
A5052 Push-pull types servo mount. All servos can be fit to straight push-pull types.
0404-130



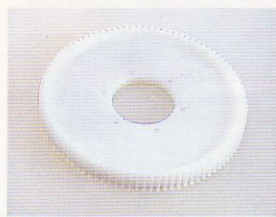
■ **EX Upper Sarvo Mount**
A5052 Servo mount for push-pull types. All servos can be fit to straight push-pull types.
0404-129



■ **EX Servo Mount Base Set**
High quality servo mounting parts.
0404-132



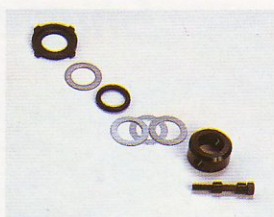
■ **EX Mecha Plate**
A 5052 push-pull type servo mount. All servos can be fit to straight push-pull types.
0404-131



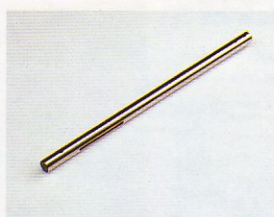
■ **EX Main Gear 95T,97T,99T**
Machine cutting. Main gear.
● 95T 0404-056
● 97T 0404-057
● 99T 0404-058



■ **EX Autorotation Drive Shaft Set**
Autorotation clutch drive shaft set designed for tail-drive type. Specially used for competition.
0404-119



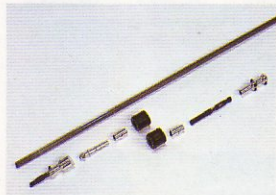
■ **SX Auto-rotation Torque Limiter**
For rudder control while auto-rotation. Available for TSURUGI.
0404-543



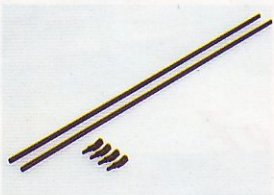
■ **EX 10φ Main Mast (SUS quenching)**
High grade mast ground from hardened SUS-420 material to a super high-finish.
0404-344



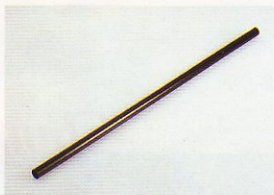
■ **Side Exhaust Muffler**
General purpose muffler. Suppresses noise effectively. 2 versions available.
● For OS 61 0404-340
● For ENYA YS 0404-341



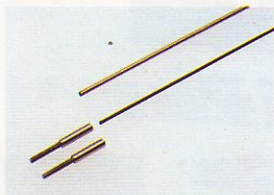
■ **EX Carbon Tail Drive Pipe Set**
Uses a new type of straight universal joint for improved strength.
0404-141



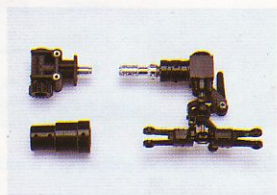
■ **EX Carbon Boom Brace**
Using advanced carbon-fiber materials, these tail boom braces combine improved strength with ultralight weight.
0404-142



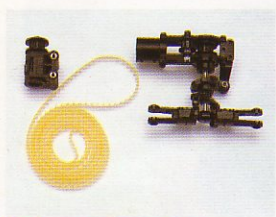
■ **EX Carbon 60 Tail Boom**
Strengthened tail boom with light weight.
0404-339



■ **Tail Control Shaft (Carbon)**
Carbon rod composite, combined with our SUS pipe. Gives less resistance.
2523-008



■ **SST Tail Drive Set**®
Counter and tail gear sets for shaft drives.
0404-939



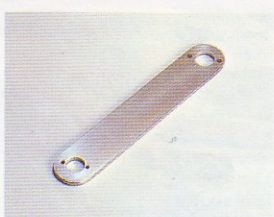
■ **SST Tail Drive Set**®
Counter gear and tail unit sets for belt drives.
0404-940



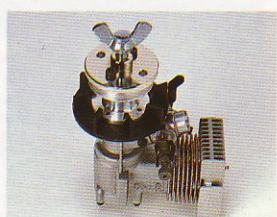
■ **SST Mechanical Kit**
Main components of our SST EAGLE-all parts are suitable for fuselage body.
0404-938



■ **EX Mechanical Kit**
Push-pull linkage parts are full equipped. For high precision control.
0404-954



■ **Flywheel Wrench**
For installation and removal of the flywheel or starter pulley.
2513-035



■ **Puller**
For Removal of the flywheel or starter pulley of TSURUGI and Shuttle.
2513-034

SHUTTLE WORLD

Stunt Trainer Helicopter 32 for beginner to expert use.



Shuttle ZX

Shuttle ZXX

The top-end model of Shuttle series.

- New vertical shaft starter system with double bearings.
- New universal pulley and cooling fan with better cooling performance.
- New blade holder with thrust bearings for precision control.
- Precise and durable swash plate newly designed.
- New radius arm support precise control.

Shuttle ZX

High cost-performance and easy maintenance.

Shuttle Z

Easy assembly and maintenance. High flight performance and reasonable price!

- Body length/1,403mm(Z) • 1,458mm(ZX•ZXX)
- Body width/198mm
- Height/393mm
- Main Roter dia./1,100mm(Z) • 1,240mm(ZX•ZXX)
- Tail Roter dia./225mm
- Gear Ratio/Engine : Main Roter : Tail roter = 9.625 : 1 : 5.5
- Overall weight/2,300g(Z) • 2,350g(ZX) • 2,400g(ZXX)



Shuttle ZX



Shuttle Z

Shuttle	Z	ZX	ZXX
Starter System		Belt starter	Shaft starter
Linkage	Bushings	Bearings	
OS32F-H	0402-908	0402-905	0402-903
OS32F-HX	0402-909	0402-906	—
Unassembled	0402-910	0402-907	0402-904



Shuttle NOVA

0402-943 Fluorescent body

- Rear-slanted skid assembly shown at left is available separately.
- Main blade L=550, tail boom L=617, and timing belt XL=564 are required.

OPTIONAL
BODY

32-46 SCALE HELICOPTERS



The work of Kenichi Ookura (Miyagi)

30 iroquois BELL UH-1B

- FZ2 rotor head attached.
 - Flexible tail drive shaft $\phi 4$.
 - Main frame designed for a scale craft.
 - FRP-made gel coat finished body (ivory off-white).
 - Body frame partly built in.
 - Equipped with lights, antennas, tail skid, wipers, and other accessories.
 - Realistic front, lower, side, and upper windows.
 - Aluminum skid foot.
 - Main rotor dia./1,240mm
 - Overall body length/1,250mm
 - Overall height/400mm
 - Skid foot width/270mm
 - Overall weight/3,350g
 - Engine/32-46 class
- 0402-998



★The photograph shows cockpit and exterior set having optional extras.

37 lama SA-315B

- Compatible with Shuttle series.
 - Shaft driven tail rotor system.
 - Utilizes main frame for new scale series helicopters.
 - Scale tail truss assembly.
 - Accommodates optional MRB-III (3 Blade) rotor head, available separately.
 - Engine standard 32-35 class, but up to 46.
 - Main Rotor dia./1,240mm
 - Body length/1,110mm
 - Overall weight/3,100g
 - Engine/32-46 class
- 0402-991

MRBIII Rotor Head Conversion Set

0402-135

Cockpit Accessory Parts Set for 30 Lama

0402-342

Exterior Accessory Parts Set for 30 Lama

0402-345



37 BELL 222

- Main frame for scale series helicopters.
 - Realistic FRP Body.
 - Injection molded tail fin.
 - Including retractable landing gear.
 - Engine standard 32-35 class, but up to 46.
 - Main Rotor dia./1,240mm
 - Body length/1,210mm
 - Overall weight/3,300g
 - Engine/32-46 class
- 0402-992



VERTOL KV-107II 32/46

- Multi Rotor Blade Fly-barless head brings realistic smooth flight.
 - Tooth belt drive system brings an excellent mechanism of light-weight and high rigidity.
 - Fuselage is made of F.R.P
 - Decal for U.S. MARINE and Japan Self-defense forces are included.
 - You can use any Radio sets for Heli. by mechanical mixing system.
 - Rear mast has a tensioner for drive belt.
 - Gear ratio/Engine:F. rotor/R. rotor/9.625:1:1
 - Direction of main rotor/F. rotor...Clock wise, R.rotor...Counter clock wise
 - Gyro/1-3(Elevator⊙, Rudder⊙, Aileron○)
 - ※ It's necessary to use "Gyro" for elevator (pitch control)
 - Rotor dia./Front 1,050mm·Rear 1.050mm
 - Body length/970mm ● Body width/320mm
 - Height/400mm
 - Overall weight/4,350-4,800g
 - Engine/32-46 class ● Radio/5ch. 5s
- 0406-902

SPORTS FLIGHT HELICOPTERS



<High performance sports helicopter>

Its high performance is demonstrated in a wide range of flights from hovering to acrobatics. The model won prizes in various competitions, such as the F3C World Championship and Japan Tournament.

- Standard-equipped SSR-II rotor head. Developed for competitions.
- Either shaft drive(S) or belt drive(B) is optional.
- Equipped with reinforced main frame and large fuel tank.
- Standard equipped EX starter pulley(designed for OS model).
- Shaft starter-optional.
- FRP made light-weight cabin and light weight tail gear assembly.
- Various carbon parts and EX optional parts are available.
- Main rotor dia./1,500mm ● Tail rotor dia./280mm
- Body length/1,330mm ● Overall weight/4,600g
- Radio controller (for a helicopter)/4ch. 5servo
- Engine/Class60~61

0404-936 Shaft drive 0404-937 Belt drive



<PERFORMANCE-DURABILITY-SIMPLICITY A SPECIAL VALUE FROM HIROBO>

- Completely new 'servo slide' pitch control system.
- New, advanced rotor head assembly made from high strength engineering plastics and carbon fiber.
- Stylish new lexan canopy.
- All 'push-pull' linkage system for precision flight control.
- Precision, flat aluminum side frames for maximum rigidity.
- Shaft starting system fitted as standard.
- All metal tail gear and tail shaft as used in the STT-EAGLE.
- New style tail gear case combined with tail gear holder.
- New main blade holder with integral aluminum bearing housing.
- Main rotor dia./1,520mm ● Engine /60~61 class
- Tail rotor dia./280mm ● R/C unit/4ch.5servo
- Body length/1,330mm ● Item NO./0404-953
- Overall weight/4,600g

★The photograph shows SX,F.R.P. cabin & Decal having optional extras.



OPTIONAL BODY

NOVA-2

- Available for any 60 class helicopter (TSURUGI, Eagle EX etc.).
 - Any mufflers are available for this body.
 - For Shaft drive type only.
 - Body length/1,440mm
 - Body width/200mm
 - Height/270mm
 - Body weight/450g (unpainted)
- 0404-950



JESS

- Available for SST-Eagle, SST-Condor and BBZ-Stork.
 - Wide & Broad opening for easy maintenance.
 - Strong tail boom reducing rudder vibration.
 - Body weight/400g (unpainted)
- 0404-931

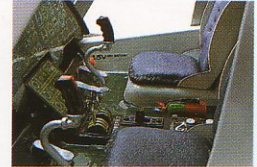
60 SCALE HELICOPTERS



The work of Masanobu Hasimoto <Fukuoka>

⑦ BELL 222

- Metal machining rotor head SSR-III.
- Detailed scale cockpit area.
- Realistically detailed with wiper, door handles, and other accessories.
- Requires 60-80 size engine.
- Including retractable landing gear.
- Shaft starter.
- Body frame members already built in.
- Main Rotor dia./1,550mm
- Body length/1,590mm
- Overall weight/5,600g
- Engine/60-80 class



0404-945



The work of Shozou Takahashi <Gifu>

⑦ TOW COBRA AH-1S

- Metal machining rotor head SSR-III.
- New frame for 60 to 80 size scale series helicopters.
- Compatible with SST series helicopters.
- Realistically detailed with Tow launcher, gun sight, wipers, door handles, and other accessories.
- Shaft starter.
- Body frame members already built in.
- Main Rotor dia./1,550mm
- Body length/1,490mm
- Overall weight/5,800g
- Engine/60-80 class
- Rear exhaust engine-highly recommended.

0404-944



⑦ SUPERCOBRA AH-1W

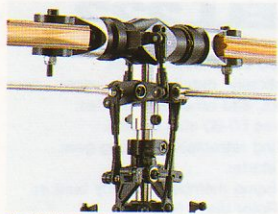
- The latest 60 scale helicopter from HIROBO.
- FFR Rotor head standard equipped.
 - Realistic details of the accessory parts.
 - Fuel & Battery Chacker standard equipped.
 - Body length/1,450mm
 - Body width/450mm
 - Height/300mm
 - Main Rotor dia./1,550mm
 - Tail Rotor dia./256mm
 - Overall weight/5,800g

0404-955



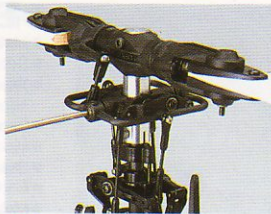
HIROBO

SHUTTLE OPTIONAL PARTS



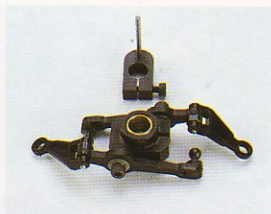
SZ 2 Rotor Head Assy

This part is equipped with thrust BRG and is capable of high performance flight.
0402-539



FZ 2 Rotor Head Assy

Enhances flying performance and stunt ability. Available for all SUTTLE models.
0402-538



SE W-Type Wash Out Assy

Metal control arm makes for accurate steering.
0402-233



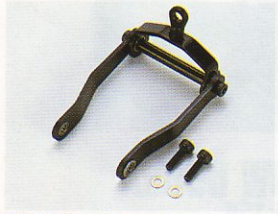
Metal Swash Plate (coaxial 8φ type)

High strength, high durability, shear tolerant metal parts. Suitable for stunt flying.
0402-140



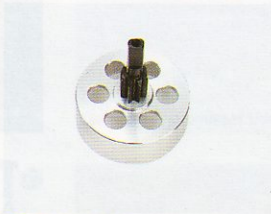
SF Swash Plate Assy

High precision and high stability. Stainless ball, metal made upper plate and pivot bolt are equipped.
0402-510



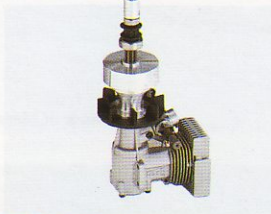
SE Radius Arm Assy

This part reduces shearing forces on the swash plate.
0402-232



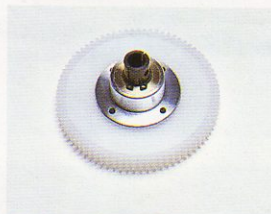
SE Clutch Bell

High rigidity and durability are exhibited by this machined aluminum part.
0402-230



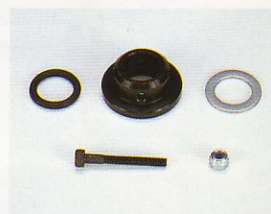
SF Shaft Starter Assy

New vertical starting system with double bearings.
0402-519



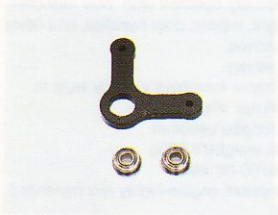
SE Main Gear 77T

High rigidity machined main gear part with autorotation assembly.
0402-243



SE Tail Drive Autorotation Assy

Directional control is easy with this assembly, which uses autorotation for improved performance.
0402-231



SE L-Type Lever

More accurate steering possible with this aluminum component and Brg.
0402-239



SE Muffler

Aluminum construction produces Power-up and Noise-dampening.
0402-248



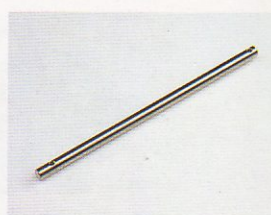
SE Tail Unit Case Assy

High grade machined aluminum component. Durable.
0402-241



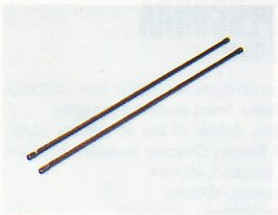
SE Guide Pulley

This metal part displays high rigidity and durability.
0402-235



SE Main Mast

SUS 420J2 material is hardened and ground in this high grade mast.
0402-268



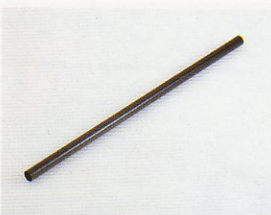
SE Tail Boom Brace

Reinforcement for tail boom.
0402-238



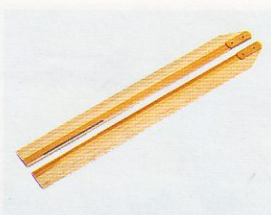
SE Tail Boom

Whit this tail boom, Long main rotor makes dynamic stunt flying and autorotation easy.
0402-236



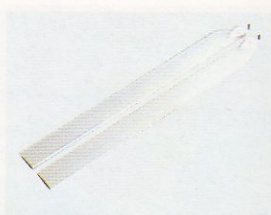
Tail Boom (Carbon)

Ultra-light, superstrong carbon fiber composite tail boom pipe.
0402-267



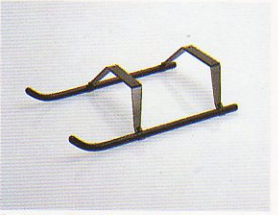
Class 30 Glass-coated Main Blade L=550

This high grade symmetric glass-coated rotor is made by adjustment of the center of gravity forward-backward.
0402-270



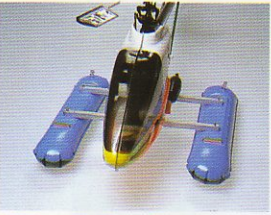
SE Symmetrical Main Blade L=550

Symmetrical rotor designed for inverted flight.
0402-234



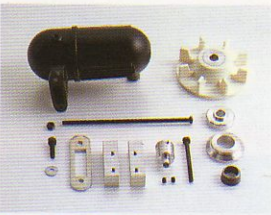
SE Landing Gear Assy

Forwarding-tilting, increased-strength landing gear.
0402-237



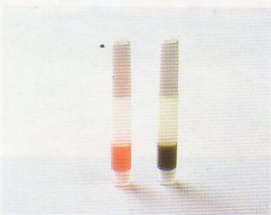
Air Cushion Skid Foot

Float skid suitable for beginners' flight training and instruction.
2513-015



Scale 46 Parts Set

Upgrade parts for OS46SF-H exclusive use by scale helicopter.
0402-341



Hobby Tight Glue

Screw can be locked tightly and loosely using two type of glue: hard and soft.
2513-023



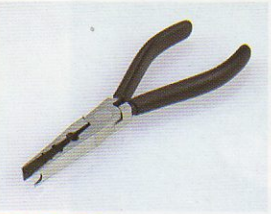
Hobby Oil

This high grade oil contains molybdenum for increased viscosity.
2515-003



Rod End Driver

This part enables easy installation of rod end.
2513-024



Rod End Pliers

Conveniently removes rod-end from ball-links, easily adjusts rod as desired.
2513-027



SE Plug Wrench (for Shuttle)

Enables easy plug removal.
2513-025



EX Plug Wrench (for SST & Scale)

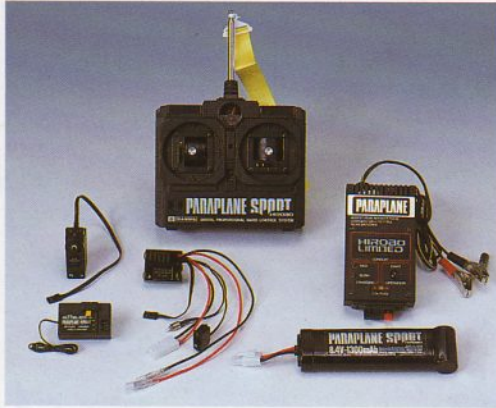
Enables easy plug removal. Please use in conjunction with the SE plug wrench.
2513-026



IRVINE 36 Engine

High power ABC type engine made in U.K.
2800-101

PARAPLANE SPORT



- Only 30 mins to assemble. Everyone can enjoy flying this paraglider.
- Easily controlled with only two channels : moving forward and moving left and right directions.
- Canopy area/0.97 m²
- Overall body length/406mm
- Overall body width/458mm
- Overall body height/458mm
- Flight condition/1,120mm
- Flight speed/22-26km/h ● Flight time/4-7mins
- Battery/8.4V 1300mAh Ni-cd battery
- Motor/Mabuchi RS 540VH high power motor
- Propeller/14×7 ● Ratio of gear/3.8 : 1
- Overall weight/1,300g ● Radio control set/2ch.

FULL SET 003-903

Content of the set/
2ch. Transmitter and receiver 1 Servo and 1 Amplifier, quick charger, 8.4V 1300mAh Ni-cd battery, Mabuchi RS540VH high power motor.

ONLY KIT 0003-902

Mabuchi RS540VH high power motor is included.
R/C unit, Ni-Cd battery, charger are not included.

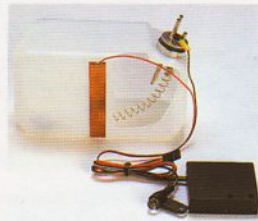
SILVER LINE



2410-001

Digital Rev-counter

- A flying RC helicopter's rotor rpm can be measured accurately.
 - The display is easy to read because of the adopted LCD.
 - Can be used for two or three rotors helicopters.
 - Provided with a power saving function so that if the measuring dial is not operated for more than one minute, the shutter will be closed and the display will be turned off.
 - The compact electronics used make this unit pocket-sized.
- Japanese Utility Model pending.
(Utility Model Application No. Hei-4-9530)
Principal specifications
Measuring rpm range ● 512rpm~2559rpm
Resolution ● 1rpm
Power source ● 9V manganese dry battery (006P×1pc)
Outside dimensions ● approx 60H×110W×33D(mm)
Weight ● approx 150g



Fuel & Battery Chacker

- New item of SILVER LINE series.
- Check the amount of fuel and the voltage of battery at one time.
- 10mm LED for indicator distinguishable in outdoor field.
- Easy assembling not necessary to make any holes on fuel tank.
- Available for any R/C model using fuel and battery.
- Dimension/55mm×40mm×20mm
- Weight/50g
- 2410-002



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