Assembly Instructions

KV 20 Katana
Super Dimona TC-80

RC-Electric Flight Aircraft

	DV-20 Katana Order No. 1344/00	TC 80 Super Dimona Order No. 1345/00
Specification:		
Wingspan	approx. 1470 mm	approx. 2140 mm
Length	approx. 1000 mm	approx. 1000 mm
Wing area	approx. 23.05 dm²	approx. 31.48 dm²
Tail area	approx. 3.7 dm²	approx. 3.9 dm²
Total surface area	approx. 26.75 dm²	approx. 35.38 dm²
Geometric aspect ratio	9.37	14.55
All-up weight incl. 10 x Sanyo 1400 cells	approx. 1250 g	approx. 1300 g
Total surface loading at all-up weight	approx. 46.7 g/dm²	approx. 36.74 g/dm²
Wing loading (wing only)	approx. 54.2 g/dm²	approx. 41.3 g/dm²
RC functions:		
Elevator, aileron, rudder, motor speed		
Replacement parts:		
GRP fuselage Order No.	1344/02	1345/02
GRP motor cowl	1344/03	1344/03
Pair wing panels	1344/05	1345/05
Canopy	1345/04	1345/04
ABS accessory set (cockpit, wheel spats)	1344/04	1344/04

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Power system for 8 / 10 cells:

Speed 480 BB Race 7.2 V, Kyosho AP-29BB, LRP Super 400, Permax 400BB (timing adjustment required)

Plus adaptor	7120/90
3.0:1 gear set	7121/79
Motor mount “M”	7120/94
Gearbox housing	7120/98
Ballraces	7821/41 and 7822.40
8.5 x 6” propeller	7228/28 or 7229/28

Caution: with 10 cells the maximum current must be limited to about 13.5 to 14 A. This can be done either at the transmitter (servo travel) or by using a speed controller with variable current limiting.

Power system for 10 cells:

a.)	Race 400-6.0 V with gearbox	2.64 - 3.0:1	7121/06 or 7121/07
	with propeller	8.5 x 6”	7228/28 or 7229/28
b.)	Race 400-7.2 V with gearbox	2.07:1	7120/04
	with propeller	8.5 x 6”	7228/28 or 7229/28

Power system for 12 cells:

a.)	Race 400-7.2 V with gearbox	2.33 - 2.64:1	7120/05 or 7120/06
	with propeller	8.5 x 6”	7228/28 or 7229/28
b.)	Race 400-7.2 V with gearbox	2.64 - 3.0:1	7120/06 or 7120/07
	with propeller	9.5 x 7”	7228/45 or 7229/45
c.)	Race 410		7000/44
	Plus adaptor		7120/93
	3.0:1 gear set		7121/79
	Motor mount “M”		7120/94
	Gearbox housing		7120/98
	Ballraces		7821/41 and 7822/40
	Propeller	9.5 x 6”	7228/42 or 7229/42
	or	9.5 x 7”	7228/45 or 7228/45

It is essential to use a speed controller which features a generously rated BEC system: a capacity of about 1.0 A is sufficient. Do bear in mind that the model’s primary turning control is ailerons (two servos) with elevator support, which means that three servos are virtually in constant motion. Your controller should also include a switchable EMF brake.
The power system in this model is very highly stressed, and we strongly recommend that you set up the motor as described below:

If using a “400” motor: with the help of the motor timing adjustor, Order No. 7329/34, rotate the rear bearing plate by 20 - 30° in the direction opposed to the direction of motor rotation. In linear terms this means a distance of 5 to 7 mm, measured at the motor housing.
If using a “480” motor: loosen the screws in the rear bearing plate and rotate it by up to 8 mm. 8 mm is the maximum, as any further rotation could cause the plate to part company from the motor.
If using a “410” motor: the rear bearing plate on these motors is retained by two pressed-in lugs. Saw through and remove these lugs using a small, high-revving rotary cutter, then rotate the bearing plate by 9 - 10 mm. Note that the bearing plate is a relatively free fit in the motor housing, so be sure to glue the parts together afterwards using Loctite 601 or 603. It is also possible to make new lugs by cutting into the edges of the motor can using the rotary cutter; they can then be bent over to engage in the recesses in the bearing plate.

Dismantle the gearbox. Early versions utilised a brass sleeve as hub for the plastic main gear, but in the course of time this was superseded by a steel version. If your gearbox features the earlier brass sleeve, the first step is carefully to slide the main gear along the sleeve without removing it completely. Apply a few drops of Loctite fluid No. 601 or 603 to the brass sleeve, then push the gear back into place. This joint will now hold permanently. You may wish to glue the ballraces in their recesses - but take care to keep glue out of the races themselves.
Lubricate the gears with a little high-viscosity grease, then re-assemble the gearbox.
The system should now be run-in as follows: connect the speed controller to the geared motor, and the controller to a servo tester. Run the motor on a very light load (e.g. with a 6 x 5" electric propeller) at a current of about 3 - 4 A for about 15 minutes, then fit the propeller with which you intend flying the model. Watch the sparking at the commutator during the running-in process; the severity of sparking should reduce steadily as the brushes bed in.
Warning! The motor heats up relatively quickly when under load.
For this reason the motor should always be test-run with the motor cowl removed.
Before installing the power system permanently, dismantle the gearbox again and wash out any residues with white spirit or petrol. Oil the ballraces with good-quality oil and lubricate the gears with high-viscosity grease.
Adhesives: as most of the wooden parts are supplied in the kit virtually ready-made, we only need to provide a few tips on using laminating resin for gluing parts to the fuselage. Laminating resin is a low-viscosity material which makes a much better adhesive than five-minute epoxy. Firstly it is easier to apply just the right quantity to produce a really strong joint, and secondly the thin resin penetrates into the smallest cracks and gaps, fills them completely, and produces a highly reliable bond. For some joints a thicker resin is needed to avoid it running out of the joint, and in this case you can thicken the laminating resin by mixing in thixotropic filler. You can then apply it exactly where you want it, and it will stay put. Laminating resin and thixotropic filler are available from all good model shops.
Preparation: these building instructions include a reduced-scale drawing of the die-cut plywood sheet supplied in the kit. Start by writing the part number on each component using a soft pencil, referring to the drawing, then cut the parts out of the sheet using a balsa knife. Don't forget to trial-fit all the wooden parts and trim them where necessary; many of them are supplied slightly oversize to allow for this process.
If you wish to build the model in a different order to that described in these instructions, that is your prerogative, but please think your actions through carefully to avoid making mistakes which are hard to remedy later.
Refer to the building instructions and the parts list constantly when building the model, and keep the motor and gearbox, servos, receiver and flight pack to hand at all times so that you can fit them at the appropriate stage. All models of this size and type require micro-sized servos and a small receiver, and this one is no exception.

Examine the GRP fuselage (1) carefully and sand all rough edges smooth. Internal surfaces where die-cut wooden parts are to be glued must be roughened thoroughly beforehand, again using abrasive paper. Cut the openings to accept the main undercarriage and the noseleg unit, but take care: the moulding seam of the fuselage is slightly off-centre. Drill the hole in the rudder pushrod shroud at the tail end, and file it out to an **angled slot** as shown.
Position the doublers (2) as shown on the plan, and check that they line up correctly when viewed from the side. Glue them in place using thickened laminating resin.
Trim the vacuum-moulded cockpit (7) to fit exactly: it must rest squarely on the fuselage recess as shown in section D-D. Trim the half-former (5) to fit inside the cockpit moulding; it should be located parallel to the integral instrument panel. Glue part (5) to the cockpit using Stabilit-Express. Glue the rear doubler (6) in place using cyano-acrylate glue ("cyano" or "CA"). The canopy latch (9) should be mounted on a scrap piece from the die-cut plywood sheet. Glue the latch and plywood spacer in the fuselage using thickened resin.
Drill two 3 mm Ø holes in part (3) at the marked points, holding the drill at a slight angle as shown in the side view. Mark the position of the holes on the doublers (2), which are already in place, and drill 2.5 mm Ø holes at the marked points, again at an angle. Cut the two dowels (4) to length, and sand the front end of each to a slight taper. Push them into the plate (3) and glue them with a little thin cyano. Sand back the end of the dowels projecting at the rear so that they are flush with part (3). Now gradually file out the 2.5 mm Ø holes in the two doublers (2), so that the dowels in part (3) can be slid easily into them without slop, as shown in the fuselage side view.
Push part (3) into place on the fuselage, then place the cockpit in the fuselage recess and engage the latch to secure it. Working through the opening in the nose of the fuselage, push part (3) back until it rests against the half-former (5). Trim if necessary; when it fits correctly, remove the cockpit, apply glue to the rear of part (3), fit the cockpit on the fuselage again and tape it in place. Check that it is positioned accurately. Press part (3) against part (5) again, then leave the glue to set hard. When the glue has cured, disengage the latch and

lift off the cockpit, and part (3) will be attached to it in the correct position.
The canopy moulding (8) can now be trimmed to fit neatly over the cockpit. Paint the cockpit moulding, using enamel paints designed for Humbrol and Revell plastic kits, then glue the canopy to the cockpit moulding.

The cockpit is located accurately at the front by the two dowels. If the moulding tends to curve away from the fuselage flange at any point, cut narrow strips of tape about 3 mm wide and pull the errant areas back down against the fuselage before sticking the canopy to the cockpit.
Glue together the following two-part components using laminating resin: the wing joiner support (10 + 11), the motor bulkhead (34 + 35) and the noseleg support (31 + 32), and clamp the parts together while the glue is hardening. Glue the doublers (14) and (15) to the underside of the undercarriage support (12), also using epoxy.
Cut the brass tube (17) to a length of 129 mm, mark the centreline on it, and saw a slot at that point 6 mm deep using a hacksaw. You may need to file the top of the slot slightly wider, to allow the tube to bend in the centre to take up the dihedral defined by parts (10 + 11).
Glue together the wing joiner support (10 + 11), the undercarriage support (12) and doublers (14 + 15), and the half-former (13), and sand the assembly to follow the internal curvature of the bottom of the fuselage. Check that the main undercarriage units can be slid into place as shown in section E-E, and that they rest squarely on the undercarriage support (12). Roughen up the wing joiner tube (17) with abrasive paper, remove all traces of grease, and fit it in the fuselage. Check that parts (10 + 11) fit snugly under the tube and support it correctly. When you are confident that everything fits exactly as shown, tack the parts together and to the fuselage using thin cyano. Let the glue harden, then apply a little thin resin to fill the gaps, and finally apply thickened resin to reinforce all the joints. Apply a layer of glass cloth over the wing joiner tube and the joiner tube supports (10 + 11).
Cut an opening in the bottom of the fuselage to accept the air vent (19), and glue the vent in place as shown.
The next step is to install the bowden cables (22) in the fuselage. Cut a circular piece of styrofoam (20) 42 mm in diameter, and push a length of scrap 5 x 5 mm strip wood into the middle of it to act as a “handle”. Mark a point on the wood strip which coincides with the rear edge of the canopy recess when part (20) is in the correct position, as shown on the plan, then gradually trim back part (20) until it can be slid into the correct position using the wood strip as a guide. Cut holes in the foam disc for both bowden cable outers (22) and for the receiver aerial guide tube (23). Mark the top centreline on part (20) to ensure that it is always in the same position.
Slide the bowden cables through part (20), leaving them overlength at the rear, then glue them in the foam disc as shown on the plan. Trim the half-former (21) to fit, but don’t install it at this stage. Part (20) can now be installed in the fuselage, using the bowden cables to position it, and secured with a few drops of epoxy.
The only potential problem in this procedure is routing the the rudder bowden cable through the shroud at the tail. The solution is to slip the rudder pushrod (24) through the shroud from the tail end, and then into the bowden cable outer. The whole assembly of guide tubes and part (20) can now be slipped into the fuselage, and the pushrod will guide the bowden cable sleeve through the slot. Thread the half-former (21) onto the bowden cables, position it in the fuselage, and tack it in place using thin cyano. Reinforce the joints with epoxy once the cyano has set hard.
Glue the rudder bowden cable sleeve in the opening with thin cyano, taking care to glue it securely. In order to angle the sleeve correctly, we recommend that you tape the projecting end of it towards the fuselage side while the glue is setting, then cut it off flush with the fuselage side using a sharp chisel. Cut a piece of scrap wood from the die-cut sheet to make the sealing piece for the tailskid. This piece to locates and fixes the end of the receiver sleeve (23). Glue it in place as shown on the plan.
Route the elevator bowden cable outer up the fin as shown on the plan, and support it so that it runs approximately along the centreline of the fin. Make up scrap 3 mm plywood supports as shown, and glue them to one side only of the inside of the fin.
Mount the pushrod connectors (63) on the servo output arms, glue the vertical supports (29) to the servo plate (28), and install the servos. Drill holes in the pushrod guide (30) at the marked points, and slip it onto the bowden cables. Place the servo plate and servos in the correct position in the fuselage, and secure it with thin cyano. Slip the steel pushrods (24) into the outer sleeves and through the pushrod connectors mounted on the servos. Position the pushrod guide (30) so that the pushrods have a smooth, non-kinked route to the tail. Check carefully, then glue the guide in place.
The wing panels are retained in the fuselage by the two spring clips (61), which engage in slots in the brass tube (17), which is already installed in the fuselage. The slots are shown in the fuselage plan view and section E-E. Cut the slots using a hacksaw blade, and carefully remove all rough edges. Run a 6 mm Ø twist drill through the brass tubing to de-burr the slots on the inside. Cut the GRP joiner rod (25) in half, remove all rough edges, and slide them into the joiner tube. With the rods in place, saw notches in them working

through the saw-cut slots, as shown in section K-K. Drill two 1.5 mm Ø holes in the wing joiner support as shown in sections E-E and K-K, and bend the wing retaining clips to shape from 1 mm Ø steel rod as shown in Section K-K.
You have already laminated the inner part of the noseleg support. Sand this assembly to a taper as shown in Section C-C; the top face should be 4 mm wide to support the 4 mm Ø GRP rod noseleg (26). Epoxy the outer supports (32) and (26) in place. When the resin has cured, round off the top of the structure as shown in section K-K, and apply glass cloth over the whole assembly. Glue the support (33) to the rear end.
Carefully mark out the position of the holes in the main undercarriage units from the plan and drill them 2.2 mm Ø. Round off the edges and paint the undercarriage units.

Install the undercarriage units and fix them to the supports using the self-tapping screws (59). Temporarily fit the main wheels (66) on the axles, omitting the wheel spats for the moment.
Trim the bottom surface of the noseleg support to follow the curvature of the fuselage bottom, and tack it in place with thin cyano. Work carefully, and ensure that it is absolutely central. Apply thin laminating resin to the joint, followed by a fillet of thickened epoxy.
Sand the brass tube (48) and the wheel yoke (49) at the solder joint positions and solder the parts together, taking care to produce a really sound joint. Drill 3 mm Ø holes in the yoke as shown on the plan, and solder an M3 nut on the inside, as shown in Section B-B. Temporarily fit the wheel so that you can determine the correct length of the GRP rod (height of fuselage bottom - see side view). Saw off the excess length of part (26).
You have already laminated the motor bulkhead (34 + 35), and it can now be trimmed to fit accurately in the fuselage. To promote a good airflow, round off the bottom lip of the motor opening as shown in the side view. Drill 2.5 mm Ø holes for the gearbox retaining screws, run thin cyano into the holes and allow it to set hard, then run the drill through again. Install the gearbox and glue the nuts in place with Stabilit Express.
Tack the cowl screw doublers (27) to the inside of the fuselage shell using thin cyano, and do the same with the motor bulkhead - after positioning it very carefully. Let the cyano set hard, then apply thin laminating resin to the joints, wait until it penetrates into the joint, and finish off with a fillet of thickened resin.
The rudder is supplied with the sleeve for the aluminium pivot tube (46) already in place. From the GRP sheet (39) cut two hinge lugs as shown in section J-J (three lugs for the Super Dimona); cut out the elevator horn at the same time. Cut slots in the rudder leading edge as shown in section J-J, and extend them to provide clearance for the hinge lugs. Fit the lugs in the slots and slide the aluminium tube (46) through the pivot sleeve and the lugs. Cut off the excess tube at the top, ensuring that you can still withdraw it. Mark the position of the hinge lugs on the tail post (45), and cut dead central slots to accept them. Note that you will need to shorten the tail post as shown if your model is the Katana.
Tape two or three pieces of 2 mm sheet balsa to the leading edge of the rudder to provide proper clearance, then carefully epoxy the tail post to the hinge lugs.
The tail post is now ready to be installed in the fin, but first the tailplane retainer system must be completed. Mark the position of the screw hole using the tailplane itself as a template, after positioning and aligning it very carefully as shown in the plan view. Drill the hole and place the nut on the inside. Fit and tighten the tailplane retaining screw, then glue the nut in place using thickened resin. Solder the threaded coupler (43) securely to the elevator pushrod (24), fit the locknut and clevis on the coupler, and slip the pushrod into the bowden cable outer (22). You will need to file a recess in the tail post to ensure that the elevator linkage does not bind at any point; you may also need to file out the tailplane mount slightly to provide clearance. Fit the rudder and tail post in the fin, recessed as shown in section I-I; the hinge pivot axis should be in line with the trailing edge of the fin moulding. Press the sides of the fin against the tailpost using two straight, stout strips of wood located exactly over the tailpost. Check that the fin-rudder transition is neat and accurate, and trim the tailpost if necessary.
Before finally gluing the tail post in the fin, slide the GRP wing joiner rods (25) into their sleeves and fit the retaining clips, so that you can line up the fin accurately while the glue is still soft (check that it is vertical by eye, using the projecting rods as a guide).
Roughen up the inside joint surfaces of the fin with abrasive paper and apply thickened resin to both sides. Fit the tail post (with the rudder attached) into the fin and tape the rudder in position top and bottom. Press the sides of the fin in against the tail post using two pieces of balsa about 30 - 40 mm wide and 4 - 5 mm thick, with the packing pieces resting flat on the sides of the rudder. Check that the fin is exactly vertical by sighting along the fuselage from the front and the tail, then leave the epoxy to set hard. When the resin has cured, withdraw the hinge pivot tube (46), remove the rudder, and reinforce the tail post joint with more glue as required. Run a few drops of thin cyano into the 3 mm Ø hole for the rudder horn and let it harden. Run the drill through the hole again. Repeat the procedure with the horn holes in both ailerons.
Carefully cut out the wheel spat mouldings, and sand the gluing flanges perfectly flat. Carefully align the shells, and apply a little acetone to the joints using a small paintbrush. When you have cut out the opening for the wheel, apply Stabilit Express on the inside of the joints. Carefully mark the position of the wheel axle holes, and drill them 3 mm Ø. Check that the spat can be positioned correctly on the shaft, and only then

open up the holes to 6 mm Ø. Fitting the wheel is a ticklish job; take your time over it, and be sure to have a pair of tweezers handy.
Cut away the top of the nosewheel spat (50) as shown, insert the wheel yoke with the soldered-in brass tube, and slide it onto the glass rod (26). Check that the spat (50) is at the correct angle as seen from the side, then roughen up the wheel yoke, de-grease it, and glue it in the wheel spat (50) using Stabilit Express. Install the nosewheel, then glue this assembly to part (26) using laminating resin, taking care to align it exactly "straight ahead".

Remove all rough edges from the motor cowl and cut out the radiator opening at the bottom. With the motor system mounted on the fuselage, place the cowl over the nose and fit the spinner on the gearbox output shaft. Check the alignment of the cowl, especially from the front, then fit the cowl retaining screws one by one, i.e. hole + screw, then second hole + screw etc. This method prevents the cowl slipping out of its proper position.
Remove the cowl and join the air duct shells (37) using acetone as adhesive. Carefully saw off the top of the duct, and cut an opening in the bottom the same size as the radiator opening in the cowl. Apply Stabilit Express on the inside of the joint between the duct shells.
Bevel the inside of the opening in the motor cowl to accept the grille (38) and the air duct (37). The best way to do this is to use our Policap abrasive cutters and a small hand-held electric drill.
Trim the top of the air duct carefully to ensure that the cooling air flows to and around the motor unhindered (see fuselage side view).
Sand all the wooden surfaces - the wing panels and winglets, the tailplane and elevator, and the rudder - smooth overall using a large flat sanding block (320- to 450-grit paper). Apply a coat of well-thinned sanding sealer (approx. 40% thinners) by brush, and rub down to a smooth surface again when completely dry, using 400-grit paper on the sanding block.
The wing panels are supplied with integral aluminium tubes fitted, into which the GRP wing joiner rods (25) are glued. Thoroughly clean the tubes and the rods (25), and shorten the joiner rods if necessary. Glue the rods in the wing roots using laminating resin, then slide the wings into the fuselage and secure them with the steel spring clips. Tape the wings firmly to the fuselage while the glue is setting. Allow the resin plenty of time to cure completely, then remove the wings from the fuselage. Open up the servo wells in the wings to suit the servos you intend using. Fit the pushrod connectors (62) on the inside of the servo output arms as shown, and establish the exact position of the servos in the wells by slipping the pushrods (24) into the sleeves. Fix the servos in place using double-sided tape or a similar method.
The wing panels are supplied factory-prepared to accept the winglets. Pin the plywood winglets in place, sand them flush with the wing on the underside, and shape them carefully as shown.
If you wish to reproduce the scale appearance of the Katana winglets, glue 5 mm thick balsa on top of the plywood, and 2 mm thick balsa on the underside. Use a small balsa plane and sanding block to shape them correctly.
If you intend painting the fuselage - and both models are worthy of the slight extra effort - start by rubbing down the moulding with 400-grit wet-and-dry paper, used wet, as this ensures that the paint adheres really well. The wheel spats should be painted with enamels as used for plastic kit models.
When the wings have been covered, the aileron horns (54) can be installed. To ensure a sound glued joint, lay the horns on a hard surface, press a sharp file on each one in turn and roll it to and fro several times to imprint the pattern of the file on the surface. Attach the control surfaces using hinge tape, then epoxy the horns in the prepared holes. Align them correctly by passing the pushrods (24) through the cross-hole in the horns.
Carefully cut out the self-adhesive decals and mark guide lines on the model to help you position them correctly. Moisten the area to be decorated with a solution of water and liquid detergent, slide the decal into position, then press down lightly. Check the position again, then gently wipe the water out and away using a piece of kitchen paper.
The final stage is to program your radio control system so that the control surface travels are exactly as stated on the plan. Check the longitudinal dihedral (difference in incidence between wing and tailplane - identical for both models), and also the CG position - see the plan for the correct position.
For the first few flights we recommend that you wait for calm weather, and carry out a ground take-off from a smooth, hard surface. Don't overload the motor by running it at full speed longer than necessary, as scale flying speed does not require full throttle, and the model looks very attractive when flown in a scale manner.
Check the control response and the aileron differential (you may wish to couple the ailerons to the rudder - this applies especially to the Super Dimona), and try out the minimum airspeed and stall characteristics at a safe altitude. A few "dry runs" at a landing approach will give you confidence when it comes to the real landing.

We hope you have great pleasure building and flying your new model. Happy landings!
"aero-naut" Modellbau

Parts list - “Katana” and “Super Dimona”

Part No.	Description	No. off	Material	Dimensions in mm
1	Fuselage	1	GRP	Ready made
2	Doubler	2	Plywood	3 mm, die-cut
3	Plate	1	Plywood	3 mm, die-cut
4	Dowel		Beech	3 mm Ø, as plan
5	Half-former	1	Plywood	3 mm, die-cut
6	Rear doubler	1	Plywood	3 mm, die-cut
7	Cockpit	1	Plastic	Ready made
8	Canopy	1	Plastic	Ready made
9	Canopy latch	1	Brass / steel	Ready made
10	Wing joiner support	1	Plywood	3 mm, die-cut
11	Wing joiner support	1	Plywood	3 mm, die-cut
12	Undercarriage support	1	Plywood	3 mm, die-cut
13	Half-former	1	Plywood	3 mm, die-cut
14	Doubler	1	Plywood	3 mm, die-cut
15	Doubler	2	Plywood	3 mm, die-cut
16	Main undercarriage unit	1+1	Aluminium	Ready made (1 x L, 1 x R)
17	Brass tube	1	Brass	7/6 mm Ø x 140 mm
18	Glass cloth		Glass	As plan
19	Air vent	1	Plastic	Ready made
20	Pushrod guide	1	Styrofoam	As plan
21	Half-former	1	Plywood	3 mm, die-cut
22	Bowden cable inner tube	2	Plastic	2/1 mmØ, as plan
23	Bowden cable outer sleeve	1	Plastic	3 / 2 mm Ø, as plan
24	Steel pushrod	3	Steel	0.6 mm Ø, as plan
25	Glass rod		GRP	6 mm Ø, as plan
26	Glass rod		GRP	4 mm Ø, as plan
27	Reinforcement	4	Plywood	3 mm, die-cut
28	Servo mount	1	Plywood	3 mm, die-cut
29	Servo mount side panel	2	Plywood	3 mm, die-cut
30	Pushrod guide	1	Plywood	3 mm, die-cut
31	Noseleg support	2	Plywood	3 mm, die-cut
32	Noseleg support, outside	2	Plywood	3 mm, die-cut
33	Noseleg support	1	Plywood	3 mm, die-cut
34	Motor bulkhead	1	Plywood	3 mm, die-cut
35	Motor bulkhead	1	GRP	3 mm, die-cut
36	Motor cowl	1	GRP	Ready made
37	Air duct	1+1	Plastic	Ready made (1 x L, 1 x R)
38	Grille	1	Brass	As plan
39	GRP sheet		GRP	2 mm, as plan
40	Rudder	1	Balsa	Ready made
41	M4 nut	1	Steel	Ready made
42	M4 x 25 screw	1	Plastic	Ready made
43	Threaded coupler	1	Steel	Ready made
44	Clevis	1	Steel	Ready made
45	Tail post	1	Plywood	3 mm, die-cut
46	Rudder pivot tube	1	Aluminium	2/1.5 mm Ø, as plan
47	Wing panel	1+1	Balsa	Ready made (1 x L, 1 x R)
48	Tube	1	Brass	5/4 mm Ø; part of 49
49	Wheel yoke	1	Brass	Ready made

Part No.	Description	No. off	Material	Dimensions in mm
50	Nosewheel spat	1+1	Plastic	Ready made (1 x L, 1 x R)
51	M3 x 30 screw	3	Plated steel	Ready made
52	M3 nut	7	Brass	Ready made
53	Wheel spat	2+2	Plastic	Ready made (2 x L, 2 x R)
54	Horn	3	Plated brass	Ready made
55	M2 x 18 screw	3	Brass	Ready made
56	M2 nut	1	Brass	Ready made
57	M2.5 x 18 screw	3	Steel	Ready made
58	M2.5 nut	3	Brass	Ready made
59	Self-tapping screw, 2.2 Ø x 9.5	8	Plated steel	Ready made
60	Self-tapping screw, 2.2 Ø x 6.5	4	Plated steel	Ready made
61	Spring clip		Steel	1 mm Ø, as plan
62	Pushrod connector	2	Plated steel	Ready made
63	Pushrod connector	2	Plated steel	Ready made
64	Elevator	1	Balsa	Ready made
65	Balloon wheel	1	Plastic	45 mm Ø
66	Balloon wheel	2	Plastic	50 mm Ø
	Plan	1		
	Decal sheet	1		

As plan: refer to the drawing; take dimensions from the plan or the model.

To complete the model you will need the following additional items:

Ponal Express (white glue)	Order No. 7638/10
Stabilit Express (polyester resin)	Order No. 7646/01
Pattex cyano-acrylate (“cyano”)	Order No. 7639/21
Pattex cyano-acrylate, thick	Order No. 7639/25
Laminating resin (low-viscosity)	
Thixotropic filler (for thickening laminating resin)	

Die-cut 3 mm plywood parts Dimona / Katana

[plan]

1 Section F-F
2 Section H-H
3 Receiver aerial sleeve
4 Rudder
5 Elevator
6 Section D-D
7 Section K-K
8 Bend to shape from 1 mm Ø steel rod
9 Flight pack - 10 cells, SANYO KR-1400 AE shown
10 Sand back top of part 31 to 2 + 2 mm
11 Apply glass cloth and resin over the top
12 Section C-C
13 Aileron linkage
14 Arrangement of cells in 10-cell pack - not to scale
15 Section J-J
16 Relieve here
2 mm - see building instructions
17 Fitting the hinge tape
18 Full-length
19 Hinge tape (short strips)
20 Left-hand wing - view of underside
21 Open out well to suit servo
22 Plywood plate fitted

23 Glue M2.5 nut in place with STABILIT Express
24 Section A-A
25 Bowden cable supports from scrap die-cut material, glue to one side of fin
26 Super Dimona: three off
27 Pivot sleeve for part 46 factory-installed; not shown in drawing
28 Scrap 3 mm plywood
29 Section E-E
30 Enlarge undercarriage slot by about 1 mm all round
31 Saw slot 6 mm deep in centre of part 17
32 Self-tapping screw, 2.2 Ø x 9.5 mm, part 59
33 Apply glass cloth and resin over brass tube (17) and joiner support (10 and 11)
34 Washers; number required may vary
35 Section G-G
36 Centre of Gravity (CG): DV-20 Katana 65 - 73 mm
Super Dimona 70 - 75 mm
37 Glue parts together as described in building instructions
38 Longitudinal dihedral ref. tailplane: +1.5°
39 Hole for servo lead
40 Glue wheel yoke 49 to wheel spat 50 with STABILIT Express
41 Solder M3 nut to wheel yoke 49
42 Section B-B
43 Flight pack compartment - 8 to 10 cells, 700 to 1400 mAh capacity
44 Centre of Gravity, CG
45 Self-tapping screw, 2.2 Ø x 6.5 mm
46 Leave about 3 mm space to sides of motor for cooling air to escape
47 Spinner, Order No. 7253/36
48 Route of cooling airflow
49 Sand back edge of radiator opening - see building instructions
50 We reserve the right to introduce modifications in the interest of progress