

1. GENERAL INFORMATION

1.1 KIT OVERVIEW

1.1.1 The drawings have been presented on A3 sheets at reduced scale for what we hope will make for more convenient referencing, and take up less space on your workbench. Since none of the construction is built over the plan, it isn't necessary to have full size plans. In any event, the machined parts are more accurate than a drawing, particularly as paper dimensions are more affected by humidity than the materials we are using. The construction method ensures that, providing a few simple precautions are followed, the various assemblies will be square and in-line where necessary.

1.1.2 The drawings are numbered GNF234-1, -2 etc. In the following notes and notes on the drawings whenever we mention GNF234- (some number), we will be referring to a drawing, not a machined part. We have put as much explanatory detail on the drawings as we can squeeze in, but it will be important to read the relevant parts of the written instructions at the same time before starting any construction.

1.1.3 There are a great many parts in this kit, many interlocking, and so for clarity we have deviated from some engineering drawing conventions. We have used colours to help differentiate between components and sometimes to link the same items in different views. Also we have sometimes not used dotted lines for 'hidden' parts, but used colours to make clear what's going on. We cannot say that we have been completely consistent but nevertheless we hope that at the very least the colours brighten things up a bit! We apologise to anyone who is colour blind, or partially so, and if they are having difficulty, please get in touch.

1.1.4 We have used a part identification system using letters which will have some connection with the type of part together with a number. Reference to the Parts Schedule will identify in which sheet the part is to be found, and reference to the Parts Sheet Drawings GNF234-6 ~GNF234-10 will show the layout of every sheet and exactly where the part is, on that sheet. **See also section 1.8 on page 8 for further advice on finding the parts you require.**

1.1.5 As a means of defining or describing where certain parts go, we may use terms common in aircraft use which historically have been borrowed from nautical terminology, such as 'aft' for 'rear', 'port' & 'starboard' meaning on the left and right side respectively looking towards the front. Also we may use abbreviations such as l/e for 'leading edge', t/e for 'trailing edge'. Whereas we know these terms are common amongst our experienced builders, they may not be with builders approaching this kind of project for the first time, so we mention them here just in case.

1.1.6 One other – grammatical – point, for those that care about such things: because we use the suffixes 'a', 'b', 'c', etc after the numbers of parts, to indicate membership of a related group, in those instances where we refer to more than one of something, it would be normal and grammatically correct just to put an 's' on the end. However that could be confused with a suffix 's', so when we want to indicate a part number in the plural we may use an apostrophe before the 's' to make clear it is not a suffix.

1.1.7 The cut sheets are identified with a letter pre-fix denoting the kind of material (B=Balsa, P=Ply, EG=Epoxy Glass), followed by a number indicating the thickness (eg 04=0.4mm, 10=1.0mm, 15=1.5mm etc).

1.1.8 The 1½mm balsa, ply and epoxy glass which we supply is nominally 1.5mm, however it's not unusual for this to vary by + or – 0.1mm, or even more. This also applies to the 0.8mm birch ply. This may not seem very much, but has relevance for the halving joints that we use in our construction. We measure all our material, and try to use material that's close to our nominal specification. (Sometimes – especially with balsa – the thickness can vary not only along the sheet length but also across the width of it as well). The epoxy glass is usually around 1.65mm thick and our joint data takes this into account.

1.1.9 It is generally a good idea to keep the parts in the mother sheet until just before you need them. It will not usually be necessary to mark up the parts with their reference numbers, the lack of which results in a much more attractive framework during construction and before covering. Where the odd mark is advisable, we will mention this.

1.1.10 Some machined parts are supplied separately, these are the aluminium undercarriage plates, plastic 'glass' windscreen inserts and some epoxy glass parts including the aileron servo links and the elevator push rod adaptor flanges. These will be found in the Accessory Bags. See the Parts Schedule for which one, which lists all the machined parts in blue, and non-machined parts in red.

1.1.11 Wire, and rigid tubing are supplied banded together within the kit box. The A4 sized coated-paper sheet for the Aileron leading edges is folded and laid on top of the wood packs.

1.1.12 We have included some items not usually provided in construction kits, because we think they will be very helpful for this kind of construction. These include a thin penetrating aliphatic glue (Deluxe Materials 'Superphatic'), a syringe for washing out it's nozzle, and a small artists brush with just the right stiffness for spreading glue where you want it and removing excess where you don't want it.

1.1.13 We expect that most builders will probably use electric motors for power, and so we have provided a

universal motor mount which will take almost any motor up to 37mm diameter, though most brushless types of 28mm diameter will have more than adequate power. For those who wish to use diesel or glow power, we have of course provided sufficient tank – and throttle servo - space, but custom mounts present more difficulties than with electric because of the wider range of shapes and sizes. Nevertheless we will eventually aim to provide mounts for what we expect to be the most popular motors, so please ask us if you have such a requirement.

1.1.14 A major part of the philosophy behind this kit is the pre-assembly of components, before any glue is applied, and the parts themselves ensure correct alignment. For this to work we obviously have to use a penetrating glue as mentioned above, but this will only work really well if the joints are a very close fit, (a feature of Sequoia kits), for this will cause the glue to wick into the tiniest spaces and get an extremely strong joint but with very little weight penalty. Also, there is very little glue oozing out of joints and getting in the way of other components which butt up to that joint. A further advantage is that the complete assembly dries at the same time ensuring no distortion of the structure.

1.1.15 Finally, a few words about realism: as mentioned earlier, this is a model of no particular aircraft, but there is no reason why it shouldn't masquerade as one. So we have tried to avoid some of the more obvious giveaways that this is a model – apart from it's size of course - such as plastic clevises and bolted-on horns. (Metal clevises are reasonably realistic but are too big for this scale of aircraft). So we have used built in horns, and link arrangements which though not modelled exactly on full-size practice, are at least close to the right proportion, and easily adjustable and removable.

1.1.16 Since we usually have a birds eye view of a model before it takes off, it is unfortunate that with many models we have to look at a pilot who has sunk up to his armpits in a rather high floor. So we have made space in the cockpit for a pilot with legs, if you should feel so inclined to provide them! But, even if legless, the pilot will be able to look at a properly instrumented dashboard – though he/she might have problems focusing on it properly ...

1.2 TOOLS & EQUIPMENT

1.2.1 Basically what is required is a flat building board, and tools for cutting and shaping, glueing and clamping. Although that sounds modest enough, the following list reveals some of the stuff that a modeller will find essential and some at least very useful.

1.2.2 Flat building board. Commercial examples are available around 2' x 1' (610 x 305mm) at modest prices but may not be quite as flat as they should be, so check them first before buying. An off-cut from a kitchen worktop is good. Check that it is truly flat by using a 24"

(or longer) straight edge along each side and diagonally. This can be surfaced with a medium fibre board which can take pins, though the building methods used for the Finch kits generally will not require the use of pins stuck into the base board, as is usual with conventional building methods.

1.2.3 To one side of your building board, a small table or shelves to put these instructions and drawings conveniently to hand, so that they don't get in the way of your building operations.

1.2.4 A3 cutting mat – this is really very, very useful, and will help preserve the edge of your scalpel blades. They also have handy grid lines on them, useful for cutting things at right angles.

1.2.5 Non-stick sheet – we supply a poly bag in the kit which you can slice down on adjacent sides, and open up to form a usefully sized sheet, to prevent glued structures from bonding to the building board.

1.2.6 Selection of weights. You can make your own from a selection of wooden pieces with lead attached to them. Bags of flour are also useful, as are small plastic bags filled with lead shot. (Try a fishing shop ...). Old nicad or lead acid gel cell batteries may also be found useful, if you haven't thrown them away.

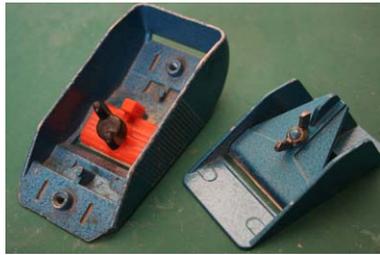
1.2.7 Selection of scalpel handles with different blades. Swan Morton blades are available in a variety of shapes, and in two sizes. The No.3 handle is for a range of smaller blades, shown right are the No16 blade at the top, No10 underneath, then a 10A and at the bottom a No11. The No.4 handle takes bigger blades which are roughly ½ as big again as the smaller ones - you may find these more suitable for carving the wheel spats and the cowl. Shown right are the No27 at the top, No26 in the middle and a No23. (See note 1.3.2 below for blade suggestions). Swan Morton make retractable versions for the smaller blades as do Plasplug™ who make an inexpensive plastic version.

1.2.8 DIY type trimming knife – you will need this for cutting free the 1½mm ply and epoxy glass parts.



1.2.9 Razor Planes.

Useful for trimming leading and trailing edges and working along the grain.



1.2.10 Junior Hacksaw and Razor Saws. Some razor saw blades have the teeth set rearwards, and work by pulling the saw towards you, so known as 'pull saws'.



1.2.11 Hand held small drill holder. This one has a 1mm drill in one end, and a 1.7mm in the other.



1.2.12 A selection of files – circular cross section, flat and half round are most useful, and in small and medium sizes. Diamond files work very well and a quality medium set in the red wallet is shown right. Modestly priced miniature diamond sets shown at right in the photo have usefully thin blades and are available from discount tool suppliers. Shown right are the most useful shapes - half round, circular, and triangular, with a handle that twist-locks on to the file extension.



1.2.13

Propellor Reamer - may be required depending upon shaft size of prop adaptor that suits your motor.



1.2.14 A selection of sanding blocks. You can make these yourself in a variety of patterns – long and thin, short and square, in a range of grits from coarse (40~80 grit) to medium (120~180 grit) to fine (200 ~ 400 grit), to suit every situation. Long ones are good for wing leading and trailing edges. The range of tungsten grit sanding blocks by Permagrit™ (shown far right) are extremely useful, and the small diamond sanding blocks illustrated are expensive enough to be a good present but they do last a very, very long time and are especially handy to use. The most useful are the red and black as pictured, the red being fine and the black a little more coarse but still relatively fine by most standards. (We can supply these). Shown at the back is a piece from a linear sanding belt - an economical source of very effective coarse sanding material which can be easily stuck to lengths of wood or just used on it's own. Good for rough shaping of the spats and cowl.



1.2.15 A selection of clamps – note that the clamps fitted to clothes hangers and often given away with clothes purchases usually have at least two clamps which can be used. (These are shown in the centre of the photo with the clothes hanger bar cut away). For a very small outlay there are spring clamps available which have pivoting jaws which work very well. Those shown at right are from Wolfcraft™. There are also simple plastic modelling and craft clamps which use rubber bands, and therefore can be adjusted to suit the pressures required. Those shown at left are made by SLEC and can use either rubber bands for the clamping force, or can be pushed to the required pressure and lock by their geometric design. These work very well because the jaws close in a parallel fashion, therefore tending not to squeeze the object out like a pip between the fingers...



1.2.16 Pliers – side cutters, combination and narrow nosed (radio) type.



1.2.17 Surgeons pliers, (shown top in the photo) – these have a clamping arrangement on the (springy) handles, making them invaluable for – for example –



holding nuts in tight places while turning screws to engage with them. These can be bought quite cheaply at discount tool suppliers. Also shown are three kinds of tweezers. The top pair rely on hand pressure to hold the item, while the centre pair are sprung by the cross-over grip design, The tweezers at the bottom have a self-sliding lock which maintains whatever pressure is applied to them and therefore can hold small things - such as nuts and washers - quite firmly

1.2.18 Sealing Iron for applying the covering. The better ones also work well for shrinking the covering, and it's easily possible to cover the complete



Greenfinch without using a specialist modelling Hot Air gun. However a hot air gun is useful where we make use of low temperature heat shrink tube (shrinks at 80 deg C) in the kit. However, the sealing iron can be used for this as well. (Note: DIY type heat guns sold for paint stripping are not recommended since their temperature is much too high, and not compatible with modelling materials).



1.2.15 Selection of glues: Cyano , Resin and Epoxy. We supply a thin aliphatic in the kit, but a thicker aliphatic or white glue will also be required. M&D Aliphatic works well, also very good are DeLuxe Material's Speed Glue, RC Modellers Glue and Aliphatic.

1.2.19 Things to measure with: 6", 12" steel rules, set-squares small and medium. Digital vernier – serious engineering examples exhibit serious prices, nevertheless some inexpensive ones are available which function well and are at least much



more accurate than a ruler and very useful for checking the diameter of wire and tube and so on.

1.2.20 A jam jar filled with water, and a small plastic syringe, (supplied). The former for storing brushes used for applying water based glues, (resin PVA or Aliphatic), the latter for pushing rinsing water through the thin metal application tube that comes with each bottle of Superphatic.



1.2.21 Glue brushes (one supplied) – inexpensive synthetic art brushes are best eg. Reeves 'Golden' synthetic.

1.2.22 Thin cyano is best delivered through fine capillary tubing, allowing control of a drop at a time - ZAP CA comes with a short length, which can sometimes get a little loose in the nozzle, some drafting tape wrapped around helps secure it. SLO-ZAP also shown here is very good for laminating, and does not require any special nozzle. Store it upside down for immediate use.



1.2.23 Small screwdrivers, both flat and cross head. A set of metric Allen keys are useful *though this kit requires just a 1.5mm key.*



Small spanners - metric AF (across flats) will cover most circumstances.

1.2.24 M2, M2.5 & M3 Nutrunners – these are like small tubular box spanners with screwdriver handles, and are extremely useful.



1.2.25 Sets of small box spanners, useful for prop nuts.



1.2.26 A vice. This need only be a small one which can be clamped to the edge of your workbench. For this kit, it's required only for bending the aluminium undercarriage axle plates, though it's handy for clamping items that need sawing to length or filing.



1.2.27 Low tack drafting tape for temporary clamping of parts - masking tape from DIY stores works well.

1.2.28 Degreasing agent – such as methylated spirits or methanol, (methanol is useful for thinning or cleaning up epoxy glues and many other gooey substances and can be obtained from glow fuel suppliers). However, methylated spirit is readily available and inexpensive.

1.2.29 Small battery powered desk fan (essential if using cyanoacrylate ('cyano' or 'superglue') adhesives.



1.2.30 Large dress making shears and curved blade trimming scissors for cutting covering material. Also shown is a Scotch™ branded craft tool for slitting paper which also works very well for covering material.



1.2.31 Sucking up the dust as you go, always a good idea...



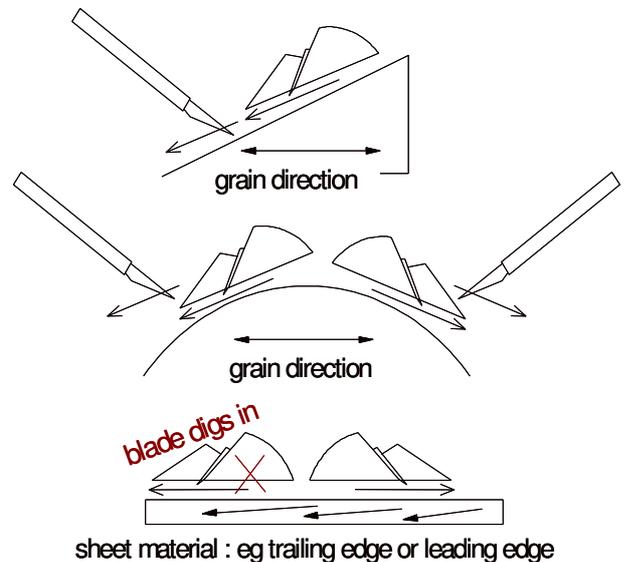
1.3 CUTTING

1.3.1 Remember that a worn blade is more dangerous than a fresh sharp one – a worn one requires more pressure, so it is more difficult to control and if it slips, it can do more damage. Don't put off changing a blade too long, it's false economy.

1.3.2 It is useful to have several scalpel handles loaded with different blades, so you always have the right shape to hand for a particular job. From the Swann-Morton range our favorites are Numbers 10A & 11, from the small range, (No3 Handle) and 23 & 26 from the larger size, (No 4 Handle). (No.11 is like 10A only a bit longer). If you only want *one* scalpel to do everything, choose a No4 handle with No 23 & 26

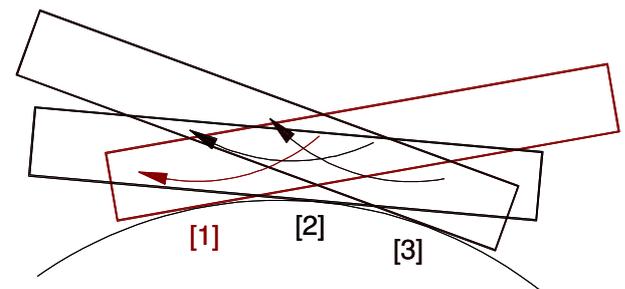
blades. No23 is good for general carving, No26 ditto and also for cutting tube - (see note 1.3.7 below).

1.3.3 When cutting, bear in mind that the grain of the wood will always try to guide the blade along it. So, to



avoid 'digging in', always cut in a direction so that the grain of the wood guides the blade away from the edge you are cutting around – and this applies also to carving. This may mean that you will need to cut from the opposite end or side than is really convenient, (unless you are ambidextrous and can swap hands). If this is the case when carving, you may consider it safer to use a coarse sanding block to remove the initial material.

1.3.4 When sanding around a curve, instead of guiding the sanding block tangentially to the curve, i.e. following the curve, rock the sanding block in the



opposite direction to the curve as you push the block around it. So as you push the block forwards, the contact point with the curve moves backwards. This will produce the smoothest results.

1.3.5 Most of the machined parts in this kit are held inside a mother sheet by short tabs. For the balsa parts use a scalpel pressed gently along the side of the part. For the ply parts, use a DIY type trimming knife and slice or chop through the tab. For the best way of applying the pressure, especially for the epoxy glass parts, hold the knife with one hand so the blade rests across the tab and use the other hand to press down on the forward end of the knife handle. The 1.5mm balsa

and ply have tabs which are full depth, but the 5mm balsa and epoxy glass parts have tabs which are only about half depth.



For the epoxy glass use the same 'chopping' technique as with the ply, but do it from the reverse side – ie. tab flush with the top surface.

When parts are cut free, it may leave a small nib protruding from the edge of the component which will need to be removed. With balsa this is usually best done by carefully slicing off with a scalpel, and this may be appropriate for the thinner ply as well, but with thicker ply and epoxy glass a sanding block or file is best.

Note that when chopping through the epoxy glass tabs, as you cut through the last tab holding the part, the chopping action tends to propel the cut part away from you. This is most likely with the smaller pieces, and is doubly troublesome because they are more difficult to find on the floor. So with these cover your hands and the sheet with a rag to catch any wayward pieces.

1.3.6 When cutting piano wire, use a good pair of side cutters. Note that the action of cutting generates a force which can propel the free end of wire quite vigorously in the direction in which it is pointing – so beware others, and also losing the part. Try to aim the free end into a resilient pile of rags to catch it. The squashing action of the cutter leaves the end slightly chisel shaped, which can make the wire a little wider than it's nominal diameter and this can interfere with the fit of the wire where it has to fit inside any tubing. It is therefore generally good practice to file the end of the wire square and smooth after cutting. A small bench grinder is ideal for this, but if the wire is short, please hold it in pliers ...

1.3.7 When cutting aluminium tube, (and also thin walled brass tube, though there is none of this in this kit), the best way is to roll the tube under a long scalpel blade. (Swann-Morton No26 is ideal). Beware the same propulsive effect as the wire above ... often it is better to nearly cut through, and then just break the tube like you might a twig. If you are careful to roll the tube **exactly** at right angles to the knife blade, (the grid on the cutting mat will help here), you will get a good square finish to the end. The same rolling technique is useful for cutting the 1½mm carbon rod and the 2mm plastic tube which is used often in this kit for bushing holes which are bearings for control surfaces, undercarriage and tail attachments.

1.4 GLUEING

1.4.1 If using cyano, you should use a small desk fan close to where you are working and angled to blow the

fumes away from you. Note that the worst fumes do not come from the glue just on it's own, it's when the glue contacts the material to be bonded that the fumes are worse. Note that people can become sensitized to cyano fumes over a period, and the effects can be serious. (The writer once glued some epoxy glass strips into a wing having cleaned them with acetone first – absolutely not advisable since the combination of traces of acetone (I assume) and the cyano produced most unpleasant effects including swollen and sore throat tissue ... it took a few days to recover.)

1.4.2 Aliphatic glues are sometimes preferred to standard white pva glue, and are not expensive. There is a very thin penetrating kind called 'Superphatic' which we supply in the kit, which is very good for pre-assembled joints. Thicker kinds of pva or aliphatic can be thinned with water and applied with a brush to pre-assembled joints. Where glue has to be applied before assembly, a small brush is very useful for applying the glue just where you want it, (and for mopping up if it goes where you don't want it ...). Remember always to have a small soft rag or a paper kitchen towel handy, for removing traces of glue, especially around the neck of the glue dispenser. Also have a small jar of water handy into which you can place the brush afterwards – this can be a permanent fixture, and means the brush will always be ready – just squeeze the bristles inside a rag or kitchen towel to dry off a bit before using.

1.4.3 The bottles of Superphatic come with a very handy small diameter steel tube dispenser. This enables small quantities of glue to be applied with good control, however the tube easily becomes blocked if not rinsed out after each use. We find the best way to clean the tube is to use a small plastic syringe available from most chemists, and you can use water from your jam jar to rinse with.

1.4.4 In the following instructions, we refer to the different glues as either: Cyano, or Resin (PVA or Aliphatic), or Epoxy. In each case, the cyano could be very thin, medium or thick as appropriate, the Resin may be PVA or Aliphatic, thin or thick, or some variation, such as RC Modellers Glue. Epoxy could be rapid 5 minute variety, 30 minute, or the extra strong 24 hour kind which might also include some of the polyurethane glues. The construction of the epoxy glass motor mounts is best done with the extra strong kind, certainly not the 5 minute variety.

1.4.5 There are a number of occasions in this kit where parts have to be joined face to face, generally known as laminating. This can be done with a slow setting cyano, but slow here is relative, and will still only give you a few seconds to align the parts properly. The advantage, apart from speed, is that cyano is non-wetting, and therefore the mating parts will not try and curl up. So as long as you're happy with the alignment situation, ok. Otherwise, use resin glue and keep weights on the parts to prevent curling. Sometimes however, weights on their own are not enough, since the lubricating effect of the glue can cause the upper

piece to slide relative to the lower, and you won't know this until it's too late. Where this is particularly critical in this kit, (for example, the two F1 formers), and the lower hatch lugs, we have provided holes for dowels (made from the 2mm plastic tube) to hold the pieces in alignment.

1.5 HEAT SHRINKING

1.5.1 You will need to do this for two reasons – one is to apply the common covering materials that you are likely to be using for finishing the Greenfinch, and the other is to shrink the Heat Shrink tubing that we supply for a number of applications within the kit.

1.5.2 As far as covering the model is concerned, you will find more details in Section 8. Covering materials commonly available are usually very thin self coloured polymer films with an adhesive backing. (Some are actually woven, and therefore give a very realistic canvas finish). The adhesive is activated by application of heat and a little pressure, applied with either a normal domestic iron, but preferably with a heat sealing iron designed specifically for the purpose, which will have adjustable temperature settings appropriate for these materials. Also useful is a hot air gun designed for shrinking the covering material once it has been 'tacked' around the edges of, say, a wing structure. If you have managed to cover the panel with very little slack material – as you should try to do anyway - it is possible to use the heat sealing iron for this purpose, by turning the temperature up a small amount and holding the iron just a little off the surface of the material.

1.5.3 The Heat Shrink Tubing is Low Temperature heat shrink, (80 deg C) and therefore doesn't need very high temperatures to activate it. This material is usually used industrially to cover and/or reinforce exposed electrical connections, but we use it for bonding wire parts together and also holding them in position. If you have a hot air gun for film covering, this is an ideal tool for shrinking the tube. However, if it's necessary to do this near an already covered surface, protect the surface with aluminium foil, or use the tip of a sealing iron, since stray heat from the heat gun may interfere with the covering.

Note: DIY Paint stripping hot air guns are not recommended - they usually provide air at excessively high temperatures for our requirements and used on or near a modelling bench represent a considerable hazard. If you have one with a low temperature control, this may be appropriate but even this may be excessive so extreme caution should be used.

1.6 SOLDERING

1.6.1 There is no direct requirement to solder any part of the structure of this kit, (with the exception of wiring connections between your motor, battery and ESC if you are using electric power), however for those

of you who are used to making good joints in piano wire, you will see some opportunities to use this skill instead of using the heat shrink tube method we have described elsewhere. Typical cases would be the 0.6mm piano wire push rod retainers, which could be soldered to the 1mm piano wire pushrods instead of fixed with the heat shrink tube. However, much as we like soldering ourselves, the heat shrunk tubing is much easier, provides a neat finished appearance, and can be easily cut away if you need to make changes.

1.6.2 For those who may have made good electrical soldered joints, but haven't had the delights of joining piano wire, we offer the following tips: Clean the wire really well, (abrasive paper or file plus degreasing agent) and use an *acid* flux prior to tinning all the joint contact areas. Hold the wire components tightly together with thin fuse wire, preferably doing this while wearing cotton or latex gloves to prevent contamination of the joint from your skin oils, then apply heat to the joint and apply a *little* more solder only when all the tinning has started to flow, so that it all flows together. Make sure the whole joint is heated throughout, and not just the melted solder on the top. Also make sure that as the joint cools there is no movement within the joint, and the solder remains shiny in appearance.

1.7 PAINTING

1.7.1 Make sure all bare wood is well primed, or otherwise sealed with dope and tissue,(or nylon), finishing resin, or glass cloth and finishing resin. If using just primer, then use many coats, sanding well down between coats.



1.7.1 Method of support for parts while spraying ...

We've used Halfords acrylic car spray primer and finishing coats.



Tamiya masking tape gives excellent results, including over Solartex covering material.



1.8 How to Find Everything ...

This kit has an enormous number of parts, and though this contributes to the interest and technical integrity of the kit, it also poses a challenge with locating them! Helpful information is included elsewhere in the Construction Notes, Drawings and the Parts Schedule, however these notes will help point you in the right direction.

Packed alongside these manuals are the five Accessory Bags, AB1 ~ AB5, and a selection of wire, aluminium and carbon rod and tube banded together and 'Bundled In the Box', (BIB). The Parts Schedule details the location of every part so long as you know the Part Identification Reference, which will be on the drawings or referred to in the construction notes which follow. However, as a further guide, here are the contents of the Accessory Bags and 'BIB'.

1.8.1 AB1: Assorted Flexible Tubing

- HST24 Low Temp Heat Shrink Tubing 2.4Ø x 100mm
- HST16 Low Temp Heat Shrink Tubing 1.6Ø x 300mm
- PVC20 PVC sleeving 2Ø x 400mm
- RB1 Rubber Bands No10 size(35mm flat) x15 aprox
- SFT5/2 Silicone Fuel Tube 5Ø x 2Ø inside x 120mm

1.8.2 AB2: Miscellaneous items

- DP1 Serial Number data plate
- ASL1 x 4 Aileron Servo Links - 1mm epoxy glass
- EPR1 x 2 Push Rod Adaptor Flanges 1.5mm epg
- SAV1 self-adhesive Velcro™ pad for seat mounting
- SC1 x 2 2 amp electrical connectors
- M30GS4 3Ø grub screws for SC1 x 4
- AK15 1.5mm AF allen key for M30GS4
- WS1a 1mm clear plastic main windscreen 'glass'
- WS2a 1mm clear plastic side screen 'glass' x 2

1.8.3 AB3: Fasteners

- M2x6 pan headed machine screws x 20 (2 spare)
- M2x8 pan headed machine screws x 7 (1 spare)
- M2 Nuts, Washers & Lockwashers as per schedule (see parts list M20 for more details)
- M2.5x6 pan headed machine screws x 10 (2 spare)
- M2.5x10 pan headed machine screws x 5 (1 spare)
- M2.5x16 pan headed machine screws x 20 (2 spare)
- M2.5 Nuts, Washers & Lockwashers as per schedule (see parts list M25 for more details)
- No2 x 6mm Self tapping screws x 20 (3 spare)
- No2 x12mm Self tapping screws x 5 (1 spare)

1.8.4 AB4: Wheels & Axle assembly

- TW19 19mm aluminium hub rubber tailwheel x 1
- UC45 45mm hollow rubber tyre main u/c wheels x 2
- UC2 Aluminium axle plates x 2
- M3x25 steel machine screws for main wheel axles
- M3 Nuts, Washers & Lockwashers as per schedule (see parts list M30 for more details)

1.8.5 AB5: General Construction items

- DeLuxe Materials' 'SuperPhatic'™ 50ml bottle - penetrating aliphatic resin

- Artists synthetic brush for distributing glue
- Syringe for cleaning tubular steel SuperPhatic nozzle
- Non-stick sheet (LDPE bag - slit sides & open up)

1.8.6 Bundled In the Box

- Piano Wire : PW06 - 2 pieces 0.6mmØ x 455mm
PW10 - 6 pieces 1mmØ x 455mm
- Plastic Tube: PT2/1 - 4 pieces 2mmØ x 455mm
- Carbon: CT4/3 - 1 piece 4mmØ x 198mm
CR15 - 5 pieces 1.5mmØ x 500
CR30 - 1 piece 3Ø carbon rod x 110mm
- Aluminium tube: AT1/8 - 4 pieces min 115mm 1/8"Ø
AT4/3 - 1 piece 4mmØ x 150mm

1.8.7 A4 sheet of coated paper for Aileron L/E

- Folded lengthwise and laid above plywood sheets, and enclosed within:
- F4i High res printed dashboard instrumentation

1.8.8 When you first opened the box ...

You will have found the Drawings, Manuals, Accessory Bags, Tube and Wire packed alongside a stack of balsa sheets, which are laid on top of a number of ply sheets and some epoxy glass sheets also. The epoxy glass sheets are taped to the ply sheets beneath to hold them during transportation.

The 1.5mm ply sheets (P15/...) are at the bottom, with P15/1 at the very bottom, P15/2 above that, and so on up to P15/4.

The five 0.8mm ply sheets are stacked above the 1.5mm sheets, with P08/1 first, up to P08/5.

Above that is laid the triangular epoxy glass sheets EPG1a and EPG1b, EPG2 (the electric motor mount components), and also the 0.4mm ply cowl parts, and the 5th 1.5mm ply sheet P15/5 - that one is half the width of the others, so is stacked on top.

Since the ply sheets are a close fit inside the box, it is rather difficult to just lift them out - so try this instead: Remove the balsa and epoxy glass sheets and then tip the box up on it's side towards you - the ply sheets will also tilt towards you and you can select whichever you require.

1.8.9 The Box itself ...

Is made from 6mm MDF and is supplied with the joints only tack glued so is strapped firmly for transportation. If you feel so inclined, applying Superphatic to the joints on the outside of the box will give a more permanent assembly.

1.8.10 And the cut sheets ...

Take each one in turn, and compare with the illustrations on drawings GNF234-6 to GNF234-10, this exercise will help you find out roughly where everything is. Don't cut anything out until you are ready to use them. When in doubt - have a glance at the Parts Schedule. Also, spend a little time just studying the drawings, and the relevant sections of the Construction Notes. They start in the very next section. Go Build ...