

# **ASSEMBLY MANUAL ADDENDUM**

# Grand Prix Car "Type-H" Body Set



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#### STEP 1 – THANK YOU!

- We would like to thank you for purchasing the GP3D Grand Prix "Type-H" Body Set for use with the GP3D RC car kit.
- This kit is a totally new fusion of radio control cars, plastic model making, 3D printing and of course the glorious and iconic "Grand Prix" era of the 1960's.
- The various printed components have been made from carefully selected polymers to achieve various characteristics, such as; strength, flexibility, impact resistance, colour and texture. This results in scale looks and colours (without the need for painting unless desired!) whilst ensuring a durable and functional RC car.
- The inherent nature of 3D printing parts means for a given material and shape it will not be quite as strong as an injection moulded equivalent. To counteract this, we have used the latest available high quality and hence higher cost 3D printing filaments to ensure an equivalent durability to other plastic moulded RC kits. More information about these materials is covered in the next step!
- We hope you love and enjoy building and driving this model, so we are always available to help and support and questions or issues you may have. We would also love to receive pictures of your finished model in your chosen livery that we can add to our online gallery!
- Please contact us if needed: grand.prix.3d@gmail.com
- Information and all spare parts are available in our online shop: <u>www.GrandPrix3D.com</u>



## **STEP 2 – TERMINOLOGY**

| • | 3D Printing        | All the plastic components in this kit are 3D printed using the latest equipment and high quality, high-cost materials.  |
|---|--------------------|--|
| • | Nylon G/X          | Nylon is a very impact resistant plastic. We use two variants of this material;<br>NylonG is <u>glass fibre</u> impregnated and is used for the main chassis, bulkheads,<br>engine bay and suspension components. NylonX is <u>carbon fibre</u> impregnated<br>and provides a stiffer component mainly used in the front steering links, shock<br>absorbers and diff output hubs.  |
| • | PC Blend           | Is a blended variant of polycarbonate and is extremely strong and impact resistant. It's used in the wheels, uprights, gears, axles, battery retainer and cosmetic parts like the rollover hoops, trumpets and mirrors.  |
| • | TPU                | Is an amazing flexible polymer we have used for the body shell and the 'active' driver figure! This material is super tough and capable of absorbing any impacts. The kit comes with all white colour, however we also offer these option parts printed in colours including; red, blue, yellow and black. The texture and finish perfectly captures the essence of the grand prix cars of the 1960's era. You can also paint them with any flexible paint, such as polycarbonate paint to achieve your favourite driver/livery! |
| • | CPE                | Is a high-end industrial manufacturing material with resistance to heat and<br>impacts and available in semi-transparent tinted colours; used for the<br>windscreens. The windscreens are very thin and exposed, ensuring the scale<br>appearance, however the tough CPE can still absorb impacts before breaking.   |
|   | PETG Carbon        | Is a strong and hard polymer we have used for its cool matt texture for the dashboard and rocker covers.   |
| • | PLA                | Is the most basic and cheapest 3D printing material, we've only used it for the cosmetic engine bay and gearbox <u>detail panels</u> due to its fine accuracy.   |
| • | Brim               | For many of the printed parts a thin extra material layer is used during printing<br>to ensure the part does not detach from the print bed, this is called a 'brim'. We<br>remove most of the brim material during post processing the components, but<br>any remains should be removed using a scalpel and sand paper.  |
| • | Hairs/blobs        | During the printing process sometimes very fine 'hairs' or small 'blobs' of plastic<br>remain on the part. We remove most of these during post processing the<br>components, but any remains can be removed using a scalpel and sand paper.  |
| • | M1.6, M2, M2.5, M3 | These four sizes of bolts/washers/nuts are used in this kit. Bolts all have Allen socket head unless specified otherwise.  |
|   | M#cs               | The 'cs' part refers to counter sunk head.   |
|   | M# <b>button</b>   | The 'button' part refers to button head.   |
| • | M# <b>x10mm</b>    | Measurement in millimetres indicates the length of the screw thread. For socket/button head this <u>ex</u> cludes the head, for counter sunk <u>in</u> cludes the head.  |
|   |                    |  |

• M# nylock nut The nylock nuts have the nylon insert part of the thread to resist coming loose.

# **STEP 3 – ICONS & SYMBOLS**

| •            | Dark orange bullet | Standard bullet for general text/instructions   |  |
|--------------|--------------------|---|--|
| •            | Coloured bullet    | Coloured bullets match text with coloured arrows/indicators on images                       |  |
| $\mathbf{N}$ | Arrow              | Images are augmented with arrows and indicators colour matched to the bullets (noted above) |  |
| x2           | Make 2             | Indicates you need to repeat this step to build 2 items, or Left and Right.                 |  |
| Y            | Gentle             | Exercise care and love and gently tighten bolts/nuts!                                       |  |
| i            | Information        | Indicates some extra information or hints or options  |  |
| <u>.</u>     | Very Important!    | Highlights a very important item to take note   |  |
| 0            | Check              | Check your assembly matches the picture   |  |

Bag Type

Bag QR Code

Other parts

Bag Type: Hardware

#### **STEP 4 – LABELS GUIDE**



- Bags All the bags are labelled with a bag number and name and a type. Each Bag number/name correlates to the original Type-L designation and supplements/replaces the parts from your original kit.
   Bag Number Bags are numbered in the sequence and correspond exactly to each SECTION of the assembly manual.
   Bag Name Each bag is named, also correspond to the assembly section.
  - Each bag in the pair contains either; Components or Hardware.
  - This links to the Bag-specific parts list on the GrandPrix3D website
  - Bag Type: **Components** The larger bag containing the section required parts, and also contains the *smaller hardware bag*.
    - The small bag contains all the required hardware such as screws, nuts, shims, bearings etc.
    - Some larger parts are not bagged or labelled, but these will be identifiable in the images! E.g.: Body!

#### STEP 5 – TOOLS

Some of the tools you used for building the original kit will be used for fitting this Body Set...

#### Tools:

|  | Allen drivers | 1.3mm, 1.5mm | (and for disassembly; 2.0mm & 2.5 | ūmm) |
|--|---------------|--------------|-----------------------------------|------|
|--|---------------|--------------|-----------------------------------|------|

- Socket Driver 5.5mm (for the M3 wheel nuts)
- Scalpel Trimming excess material off plastic parts. Optionally cutting out stickers.
- Scissors Cutting out stickers.
- Sand paper
   From your original kit, or any grit you desire to clean up edges of parts if needed.

#### **Optional:**

- Small Pliers Can be useful inserting and removing the suspension hinge pins.
- Tweezers Pick up/hold smaller screw/items!
- Callipers/ruler For measuring screws to ensure correct usage



### **STEP 6 – TECHNIQUES**



- Always be **GENTLE** when tightening screws for this entire build! A little trick to keep in mind is imagine yourself softly petting our kitten 'Oreo'.
- Nothing should be over tightened as this can damage the printed parts. As soon as you feel the bolt bottom-out tight → then STOP! :

#### **STEP 7 – HOW TO USE THIS MANUAL ADDENDUM**

Addendum
 This manual is <u>not</u> a "complete stand-alone" manual as per the original Type-L kit manual. Please use this <u>in conjunction</u> with the original manual.
 This manual contains all the variations that specifically relate the new parts of this Type-H Body Set.
 The parts bags and sections <u>correlate</u> to the original manual and call-outs are noted where you can refer back to the original, especially for installation of some parts such as the Front Bulkhead Plate, Motor Plate and Gearbox Plate as they are identically designed parts and only differ in their colour.
 Support
 And also remember we are here to support you with your GP3D experience, please email us at any time for questions you may have or to resolve any issues that occur <sup>(2)</sup>
 <u>grand.prix.3D@gmail.com</u>

