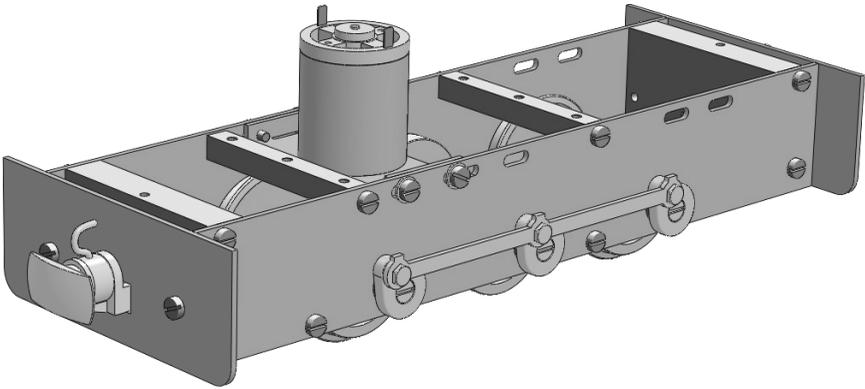




# **Instruction Manual** *for* **HBK-D3 Chassis Kit**



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# HBK-D3 Chassis kit

## Introduction

These instructions cover the construction of a 0-6-0 chassis.

No machining is necessary, though certain parts may require the use of hand tools to obtain a good fit.

You will need to supply a battery pack, charger, switch, Electronic speed controller and radio control set.

Before starting to assemble the chassis, check the contents against the check list on the following page and read through these instructions fully so that you identify all parts and understand where each is fitted. Refer to diagrams at all times as these will make it clear which way round certain parts go and which holes are used. With this type of working model, it does not pay to work to 'close fits' in certain areas when assembling. Pay attention to any clearances and slotted holes etc to ensure that the chassis will run freely when assembled.

### **Painting-**

Parts can be painted using an acrylic finish which is readily available in aerosol form from any auto supplies. The metal should be thoroughly de-greased with solvent and then 'keyed' using either wire wool or wet and dry paper. Wipe it over again with solvent before applying a coat of good quality etch primer. Once this is dry, lightly flat down the surface with some fine wet and dry and then finish off with the colour top coat.

Please note: - drawings and pictures in this manual are not to scale.

## **Tools required**

The following tools will be required during construction:-

Small and medium sized screwdrivers.

Small (Swiss) files (needle files).

Pair of long nose pliers.

Small clamp (tool makers clamp or similar).

6 BA spanner

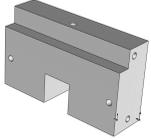
## **Maintenance**

Regularly lubricate the rods and axles with a 20-50 motor oil and the gears with a small amount of light oil.

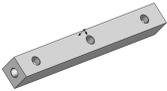
# Parts list



**(A)** Frame - x 2



**(B)** Frame spacer block - x 2



**(C)** Frame spacer - x 4



**(D)** Plain axle - x 2



**(E)** Drive axle - x 1



**(F)** Worm wheel - x 1



**(G)** Flanged driving wheel - x 4



**(H)** Flangeless driving wheel - x 2



**(I)** Outside crank - x 6



**(J)** Connecting rod - x 2



**(K)** M3 x 6 brass C/H screw - x 26



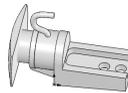
**(L)** Motor mount - x 1



**(M)** Motor gear - x 1



**(N)** Buffer beam - x 2



**(O)** Centre buffer - x 2



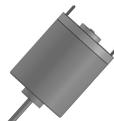
**(P)** 4BA steel CSK screw - x 6



**(Q)** Short crank pin - x 6



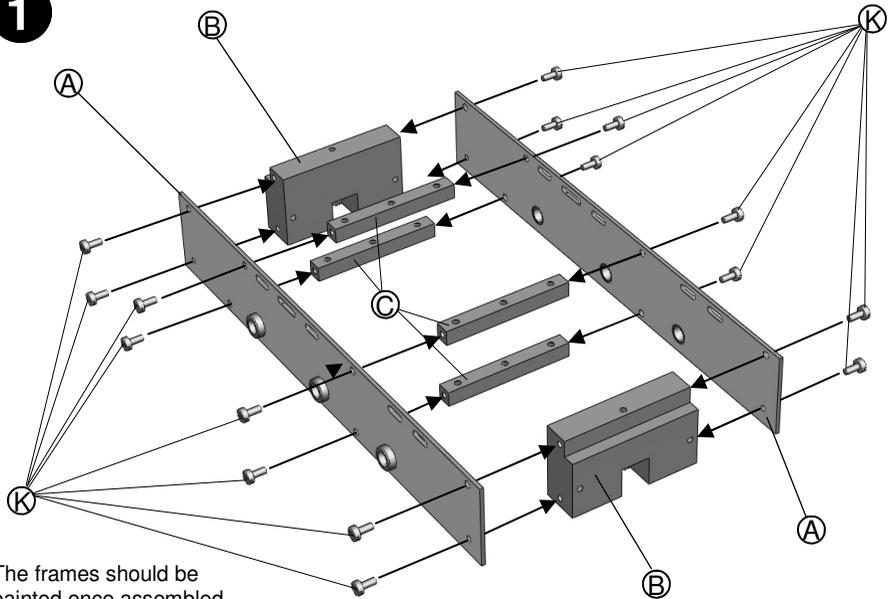
**(R)** 5BA steel washer - x 12



**(S)** Electric motor - x 1



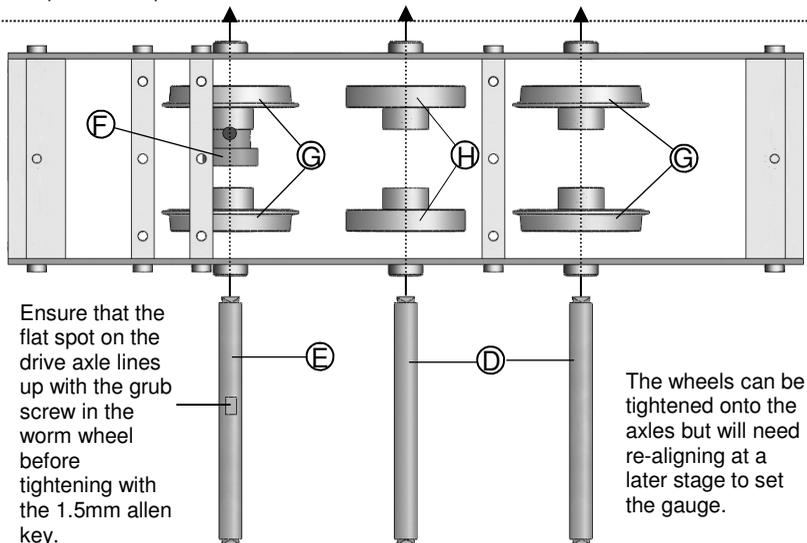
**(T)** M2.5 screws - x 2

**1**

The frames should be painted once assembled.  
(See painting notes in the introduction)

**2**

Note: There are 3 possible motor mounting positions so ensure drive axle is in the correct place for the motor position required.

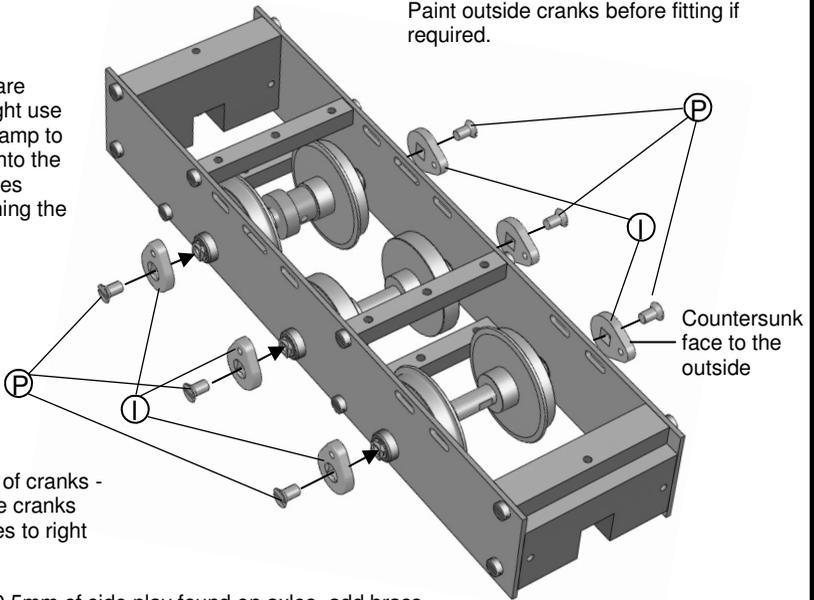


Ensure that the flat spot on the drive axle lines up with the grub screw in the worm wheel before tightening with the 1.5mm allen key.

The wheels can be tightened onto the axles but will need re-aligning at a later stage to set the gauge.

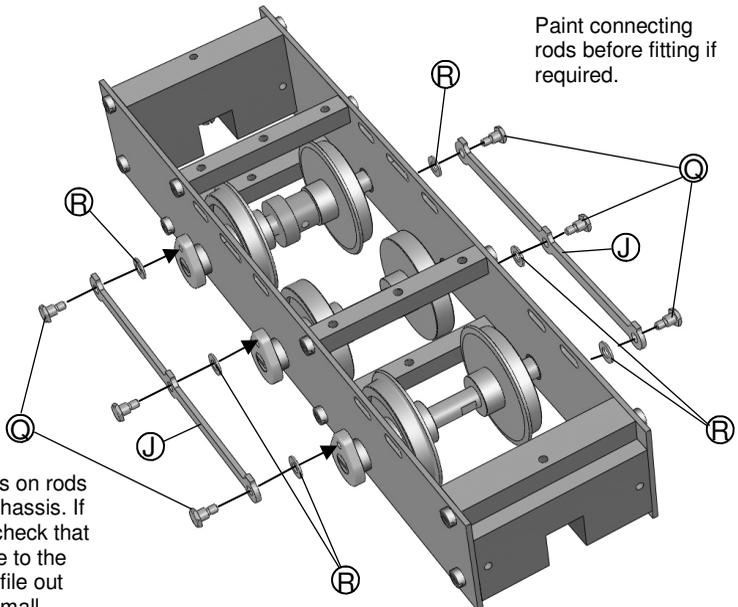
**3**

If the cranks are particularly tight use a vice or G-clamp to press them onto the end of the axles before tightening the screws.



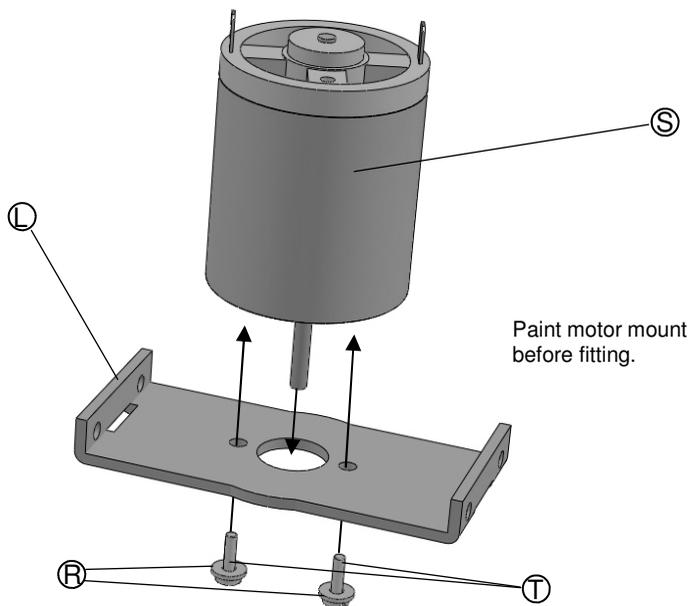
**4**

Paint connecting rods before fitting if required.

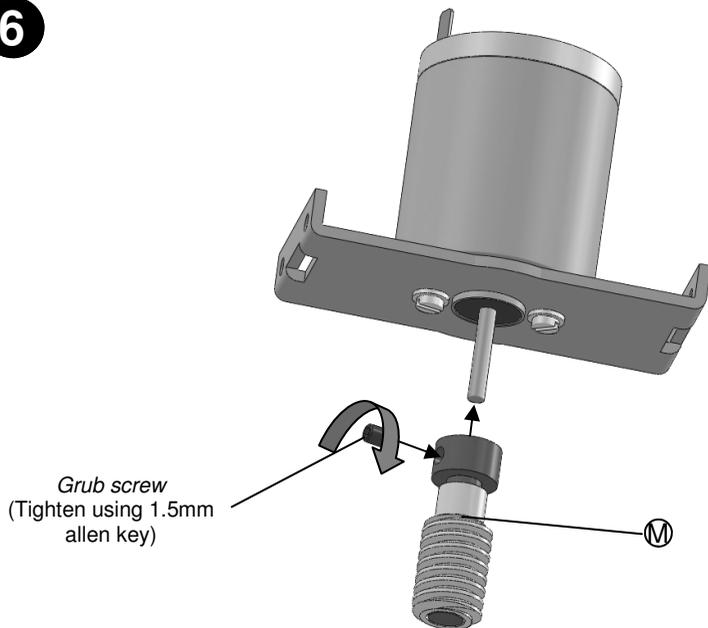


Check for tightness on rods by free-wheeling chassis. If found to be tight, check that the crank is square to the frame. If still tight, file out one hole by very small amounts until movement is smooth.

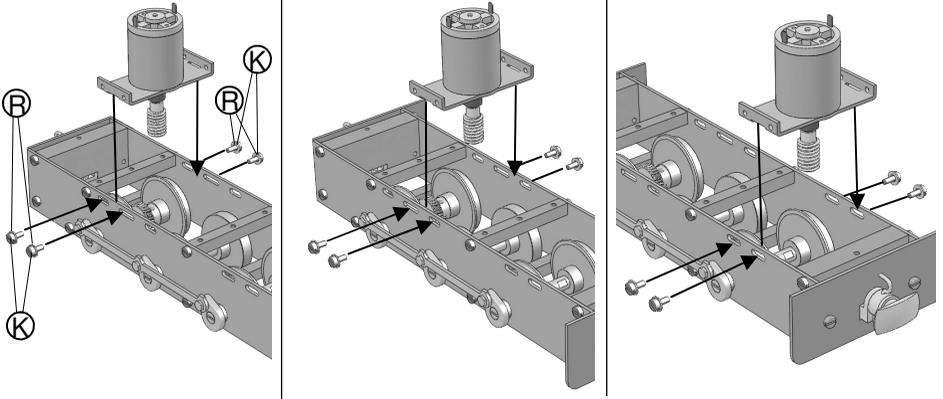
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6



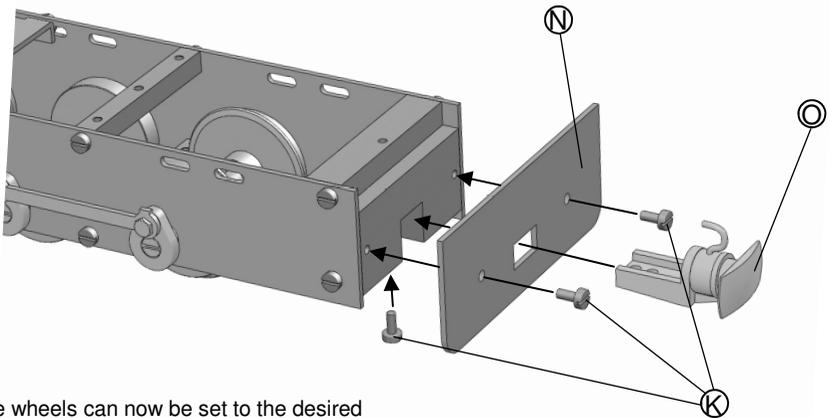
7



Fit the motor according to the position the drive axle and gear has been fitted in.

Ensure that the gear on the axle meshes correctly with the gear on the motor spindle. Rotate the wheels to check the meshing and use the slotted mounting holes in the frames to alter the motor position if needed. Lubricate gears with a small amount of light oil.

8



Fit buffer beams and centre buffers front and rear.

The wheels can now be set to the desired gauge using the back to back gauge and 2mm allen key provided.

## HBK-D3 Checklist

- 2 Mainframes with axle bushes fitted
- 4 Flanged wheels with grub screws fitted
- 2 Flangeless wheels with grub screws fitted
  
- 2 buffer beams
- 1 Motor mount
- 1 Motor gear
- 1 Worm gear
- 2 Centre buffers
- 1 Motor
- 2 Frame spacer blocks
  
- 4 Frame spacers
- 2 Plain axle
- 1 Drive axle
- 2 Connecting rods
- 6 Outside cranks
- 6 Short crank pins
- 6 4BA steel CSK screws
- 26 M3 Brass CH screws
- 12 Steel washers
- 6 Brass axle shims
- 2 M2.5 screws
  
- 1 Back to back gauge
- 1 1.5mm allen key & 2mm allen key

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