Your 1:18 model of the Japanese Zero is reproduced in the most exquisite detail, with electronics allowing you to recreate aeronautical operations such as take-off and landing, turning, firing and night combat. Lights, machine-gun and propeller sounds bring your legendary fighter plane to life.

In your eleventh model pack, you will assemble:

- **Stage 85**: Assembling and installing the power supply connector and the lifting device
- **Stage 86**: Installing the left horizontal tail wing and the engine frame cover
- **Stage 87**: Assembling the lifting device power supply
- **Stage 88**: Installing the engine, canopy and air intake
- **Stage 89**: Attaching the mesh cover and assembling the display pedestal
- **Stage 90**: Checking the top surface of the left wing
- **Stage 91**: Installing the lifting device and power supply
- **Stage 92**: Checking the top surface of the right wing
Advice from the experts

Spare screws are included with each part. Occasionally, you may be instructed to keep spare or unused screws for a later stage. Keep these spares in a safe place and label them correctly.

Please make sure you don’t mix up the screws. They look quite similar, but the threads do vary slightly. Using the wrong screws may damage the parts.

When securing parts together using multiple screws, fit each screw loosely to ensure all the parts are correctly aligned before gently tightening them firmly, but not overtight, in the order in which you placed them.

The screwdriver can be magnetised by stroking it with a magnet (fridge magnet, etc.) enabling it to hold the screws and make assembly easier.

If a screw is tight going into a metal part, do not force it as you may shear the head off. Remove it and put a tiny smear of Vaseline, soap or light oil on the thread. That will lubricate it and make it easier to drive home.

During the course of this build, you will receive many pieces that you will assemble immediately – following the instructions in the corresponding stage – and other pieces that you should store safely to one side, for use in future assembly stages.

When gluing parts together, glue may be applied to either of the two parts. Some experts find it asier to apply glue to a hole rather than a pin. Choose a method that works best for you.

It's a good idea to test fit your parts so that you can check their positioning before gluing.
Stage 85: Assembling and Installing the Power Supply Connector and the Lifting Device

In this stage we'll be assembling the lifting device and parts connecting the power supply, which runs from the rear part of the fuselage to the display pedestal. When working on inserting the slider in the lifting device gearbox mind how you fit the camshaft into place.

### STAGE 85 PARTS

![Stage 85 Parts Diagram]

### PARTS LIST

<table>
<thead>
<tr>
<th>Part</th>
<th>No.</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>085-01</td>
<td>1</td>
<td>ABS resin</td>
</tr>
<tr>
<td>085-02</td>
<td>1</td>
<td>Power supply connector</td>
</tr>
<tr>
<td>085-03</td>
<td>1</td>
<td>Power supply connector</td>
</tr>
<tr>
<td>085-04</td>
<td>1</td>
<td>Plastic</td>
</tr>
<tr>
<td>085-05</td>
<td>1</td>
<td>ABS resin</td>
</tr>
<tr>
<td>085-06</td>
<td>3 (1 spare)</td>
<td>Steel</td>
</tr>
<tr>
<td>085-07</td>
<td>7 (1 spare)</td>
<td>Steel</td>
</tr>
<tr>
<td>085-08</td>
<td>5 (1 spare)</td>
<td>Steel</td>
</tr>
<tr>
<td>085-09</td>
<td>6</td>
<td>Steel</td>
</tr>
</tbody>
</table>

You will also need: screwdriver

*Parts may differ slightly from those shown but this will not affect assembly.*
STEP 1  Assembling the power supply connector

1. Plug the power connector 085-02 into pipe 085-01.
2. Secure the power connector 085-02 with 1 x screw 085-06.
3. Plug the large socket on power connector 085-02 into the large socket on the power connector 085-03.
4. Plug the small socket on power connector 085-02 into the small socket on the power connector 085-03.
5. Insert the power connector 085-03 into the pipe 085-01 and fix it with 1 x screw 085-06.

When installing lifting device frame 083-02 make sure the power supply connector 084-04 wire runs out of the frame as shown in the photo above. You don't want the frame clamping down on the wire.
Assembling the lifting device

STEP 2

1. Align the slider (with power connector) 085-04 that came with stage 84 with the slider 084-04, and fix together using 3 x screws 084-06 that came with stage 84.

2. Insert the two shafts 083-06 that came with stage 83 into the lifting device base 085-05 and fit the slider 085-04 assembled in 1. onto the shaft.

3. Place the lifting device frame 083-02 that came with stage 83 on the lifting device base 085-05 and insert two shafts 083-06 into the lifting device frame 083-02.

NOTE

When installing lifting device frame 083-02 make sure the power supply connector 084-04 wire runs out of the frame as shown in the photo above. You don’t want the frame clamping down on the wire.
STEP 3

Installing the lifting device (1)

4. Fit the lifting device frame 083-02 using 6 x screws 085-07.

5. Slide the limit switch frame 083-01 assembled in stage 83 onto the lifting device frame 083-02 and fix it with 1 x screw 083-07 that came with stage 83.

1. Fit the gearbox assembled in stage 67 onto the lifting device assembled in stage 66.

NOTE

When inserting the gearbox firstly insert camshaft 067-05 into the groove on slider 065-02.
Fit the fixtures 063-01 and 063-02 that came with stage 63 onto the lifting device base 085-05, and fix each one with 2 x screws 063-05 that came in stage 63.

Place the lifting device assembled in 2 on the pedestal base plate 073-03 assembled in stage 84.
Fix the lifting device in place using 6 x screws 063-06 that came in stage 63.

**STEP 4** Installing the lifting device (2)

Fit the gearbox assembled in stage 82 onto the lifting device assembled in stage 79. As in STEP 3 insert the camshaft 082-05 from the gearbox into the groove of the slider 079-01.

Fit the fasteners 071-04 that came with Stage 71 into the lifting device base 071-05, and fix in place with 4 x screws 071-08 that came with Stage 71. Note: fasteners 071-04 come in two sizes, big and small, so be careful not to make a mistake.
STEP 4

3.

Place the lifting device assembled in 2 on the pedestal plate 073-03 next to the lifting device that was attached in STEP 3.

4.

Fix the lifting device in place using 6 x screws 071-07 that came with Stage 71.

STAGE COMPLETE
Stage 86: Installing the Left Horizontal Tail Wing and the Engine Frame Cover

In this stage we'll be installing the left horizontal tail wing and the engine frame cover. When temporarily removing the carburettor and air intake make sure these are kept away from other parts so as not to confuse them.

You will also need: screwdriver

* Parts may differ slightly from those shown but this will not affect assembly.
**STEP 1**

Installing the left horizontal tail wing

Apply superglue to the five pins on the lower surface of the left horizontal tail wing (underside) 086-02 and glue it to the left horizontal stabilizer of the aircraft, and then attach the left horizontal tail wing topside 086-01 from above.

**STEP 2**

Installing the engine frame cover

Temporarily remove the carburettor and air intake from the engine.
Installing the left horizontal tail wing

1. Install the engine frame cover 086-03 and fix in place with 2 x screws 086-04.

2. Refit the carburettor and air intake that you removed in step 1.

STAGE COMPLETE
Stage 87: Assembling the Lifting Device Power Supply

In this stage we’ll carry on assembling the lifting device for the display pedestal.

You will also need: screwdriver
* Parts may differ slightly from those shown but this will not affect assembly.
STEP 1  Assembling the lifting device gearbox

1. Insert three shafts 087-03 into the gearbox 087-01. The holes are a little narrow, so make sure to insert them all the way to the bottom.

2. Pass the cord of motor 087-04 through the hole of gearbox 087-01 and fit it with the cord side down.

3. Insert the longer shaft on the camshaft 087-05 from underneath the gearbox 087-05.
**NOTE**

Assembling the lifting device gearbox

**STEP 1**

1. Assembling the lifting device power supply

**STEP 2**

Assembling the lifting device power supply

**NOTE**

Cover the gearbox 087-01 with the gearbox cover 087-02 and fit the claws.

Apply a small amount of grease or lubricant to the gears to make them run more smoothly.

Fit the gearbox assembled in STEP 1 into the lifting device assembled in Stage 85.

When inserting the gearbox firstly insert camshaft 087-05 into the groove on slider 085-04.

Fit the gear 087-08 and the two gears 087-07 into the three shafts 087-03 inserted in 1 in this order from the side closest to the motor. Make sure that the small gear faces upward. Finally, fit gear 087-06 onto the camshaft 087-05 inserted in step 3 with the small gear facing down.
Fit the fitting component 083-04 (large) and 083-05 (small) that came with Stage 83 into the lifting device base 085-05, and secure in place with 4 x screws 085-08 that came with Stage 85.

Insert the power supply connector assembled in Stage 85 through the hole in the base and insert it into the adaptor 084-04. The power supply connector has a groove, so align it with the protrusion on the inside of the power connector 084-04.

STAGE COMPLETE
Stage 88: Installing the Engine, Canopy and Air Intake

In this stage we’ll attach the engine we assembled all the way back in stage 14 to the fuselage. We’ll also attach the canopy to the cockpit and an air intake to the engine.

**PARTS LIST**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>088-01</td>
<td>ABS resin</td>
</tr>
<tr>
<td>088-02</td>
<td>ABS resin</td>
</tr>
<tr>
<td>088-03</td>
<td>ABS resin</td>
</tr>
<tr>
<td>088-04</td>
<td>Die-cast</td>
</tr>
<tr>
<td>088-05</td>
<td>ABS resin</td>
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<td>088-06</td>
<td>ABS resin</td>
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<tr>
<td>088-08</td>
<td>ABS resin</td>
</tr>
<tr>
<td>088-09</td>
<td>Decals</td>
</tr>
</tbody>
</table>

You will also need: superglue
* 088-09 will not be used in this stage. Keep it in a safe place until required.
* Parts may differ slightly from those shown but this will not affect assembly.
**STEP 1** Installing the engine, canopy and air intake

Insert the engine assembled in Stage 14 into the aircraft. Insert the jack while inserting the engine protrusion 010-01 into the slit of the machine. At the same time, insert the pin of the cover 088-04 into the hole of the engine protrusion and fit it into the fuselage.

**STEP 2** Installing the canopy

1. Fit the canopy (front) 088-01, canopy (middle) 088-02, and rear cockpit cover 088-05 into the aircraft. The middle canopy should fit into the groove of the aircraft.

2. Fit the canopy (rear) 088-03 into the fuselage. Check that the middle canopy 088-02 can slide backwards.
**STEP 3**

Assembling and installing the air intake

1. **Apply a small amount of superglue to the side of the mesh 088-07 where the two protrusions are located, and glue them so that they fit into the two grooves of the air intake 088-06. Apply a small amount of superglue to both ends of cover 088-08 and glue it into the groove of air intake 088-06.**

2. **Insert the air intake port assembled in 1 into the bottom of the aircraft. Carefully insert the fuselage panel 072-01 that came with Stage 72.**

**STAGE COMPLETE**
Stage 89: Attaching the Mesh Cover and Assembling the Display Pedestal

In this stage we’ll be assembling a mesh cover and then fitting this into the display pedestal. When screwing the metal fasteners into the display pedestal make sure everything lines up perfectly.

You will also need: screwdriver

* 089-05 will not be used in this stage. Also, you will only need four of the 089-06 screws – keep the remaining four screws in a safe place.

* Parts may differ slightly from those shown but this will not affect assembly.
**Step 1** Assembling the display pedestal base frame

1. Align the metal fitting **089-01** with the pedestal, and fix in place with 2 x screws **089-06**.

2. Fit the mesh cover **089-03** into the pedestal frame **089-02**, fit the cover holder **089-04** on top, and fix in place with 2 x screws **089-06**.

3. Fit the grooved part of the pedestal frame assembled in 2 into the pedestal assembled in Stage 84.
Align the metal fitting 071-03 that came with Stage 71 with the pedestal frame parts 084-01 and 089-02, and fix in place with 4 x screws 071-07.

Align the metal fitting 079-07 that came with Stage 79 with the pedestal frame parts 084-01 and 089-02, and fix them in place with 2 x screws 079-09.

STAGE COMPLETE
Stage 90: Checking the Top Surface of the Left Wing

In this stage we’ll be checking the Rising Sun decals for the top panel of the left wing and other completed parts of the wings and fuselage. There’s no assembly in this stage but make sure you’ve got the correct number of decals.

There is no assembly in this stage. Keep everything in a safe place until required in a later stage.
Stage 91: Installing the Lifting Device and Power Supply

In this stage we’ll begin installing the circuit board which controls the lifting device in the display pedestal and joining up the power supply. Once done the lifting device should be capable of moving the aircraft up and down as well as firing off the various electronic features.

You will also need: screwdriver

* 091-01, 091-02, 091-03, 091-05, and 8 x 091-06 will not be used in this stage. Keep them in a safe place until required in a later stage.
STEP 1 Installing the power supply connector for the lifting device

1. Place the lifting device with power supply assembled in Stage 87 on the pedestal, paying attention to the orientation of the parts, and fix in place with 6 x screws 085-09 supplied with Stage 85.

2. Place the circuit board mount 091-04 on the pedestal and fix it in place with 4 x screws 091-06.

STAGE COMPLETE
Stage 92: Checking the Top Surface of the Right Wing

In this stage we’ll be checking the Rising Sun decals for the top panel of the right wing and other completed parts of the wings and fuselage. There’s no assembly in this stage but make sure you’ve got the correct number of decals.

Stage 92 Assembly
Upper Surface of the Right Wing

STAGE 92 PARTS

PARTS LIST

<table>
<thead>
<tr>
<th>Part</th>
<th>No</th>
<th>Material</th>
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</thead>
<tbody>
<tr>
<td>092-01</td>
<td>1</td>
<td>Die-cast</td>
</tr>
<tr>
<td>092-02</td>
<td>3 (1 spare)</td>
<td>Steel</td>
</tr>
<tr>
<td>092-03</td>
<td>2 sets (1 spare set)</td>
<td>Decal</td>
</tr>
</tbody>
</table>

There is no assembly in this stage. Keep everything in a safe place until required in a later Stage.