

MITSUBISHI A6MZERO FIGHTER



Pack 05 | Build Instructions

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 fifth model pack, you will assemble:

STAGE 37: INSTALLATION OF THE AILERON OPERATING MECHANISM

STAGE 38: INSTALLING THE FLAPS

STAGE 39: INSTALLING THE LEFT AILERON

STAGE 40: INSTALLING A LEFT WING PART & OUTER FRAME

STAGE 41: RIGHT MAIN LANDING GEAR BASE

STAGE 42: RIGHT MAIN LANDING GEAR BASE AND WHEEL

STAGE 43: ASSEMBLING THE RIGHT MAIN LANDING GEAR (1)

STAGE 44: RIGHT WING FRAME

STAGE 45: ASSEMBLING THE RIGHT WING



There are excellent videos showing how to build the Zero [here](#).

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.

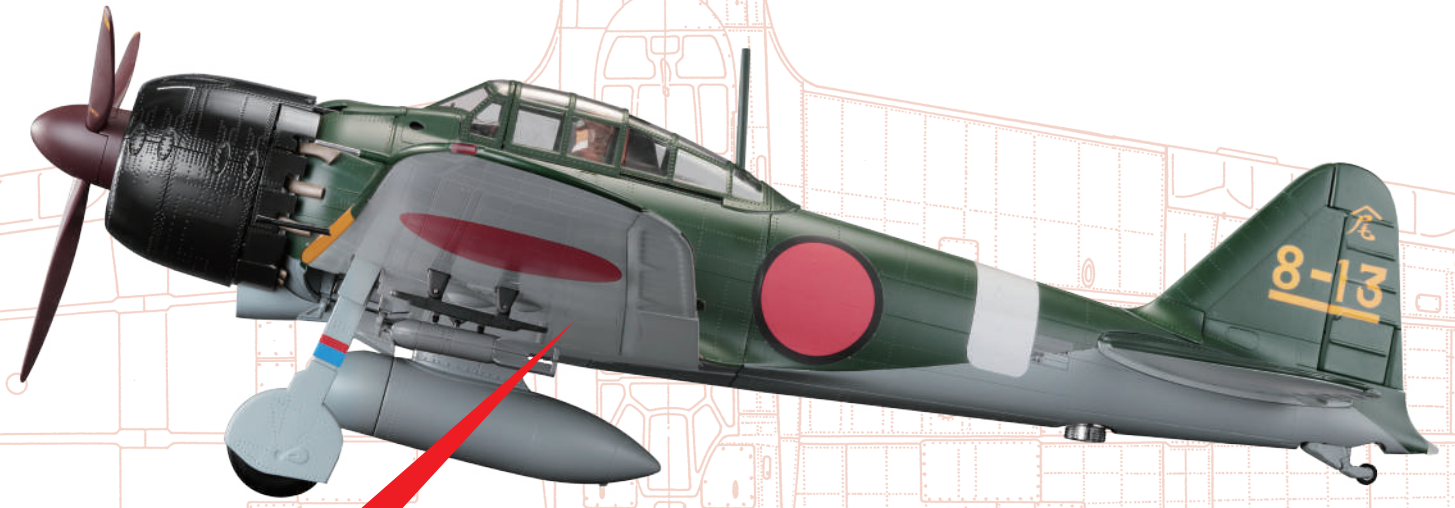
During the course of this build, you will receive many pieces that you will assemble immediately – following the instructions in the corresponding stage – and other pieces that you should store safely to one side, for use in future assembly stages.

When gluing parts together, glue may be applied to either of the two parts. Some experts find it easier 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.

Not suitable for children under the age of 14. This product is not a toy and is not designed for use in play. Keep the parts out of the reach of small children. Some parts may have sharp edges. Please handle them with care.

Stage 37: Installation of the Aileron Operating Mechanism



Stage 37 Assembly
 Aileron Operating Mechanism

In this stage we'll be installing the operating mechanism which moves the aileron up and down to the wing base. This part of the plane will have electrical parts attached at a later point, so take due care.

STAGE 37 PARTS

PARTS LIST

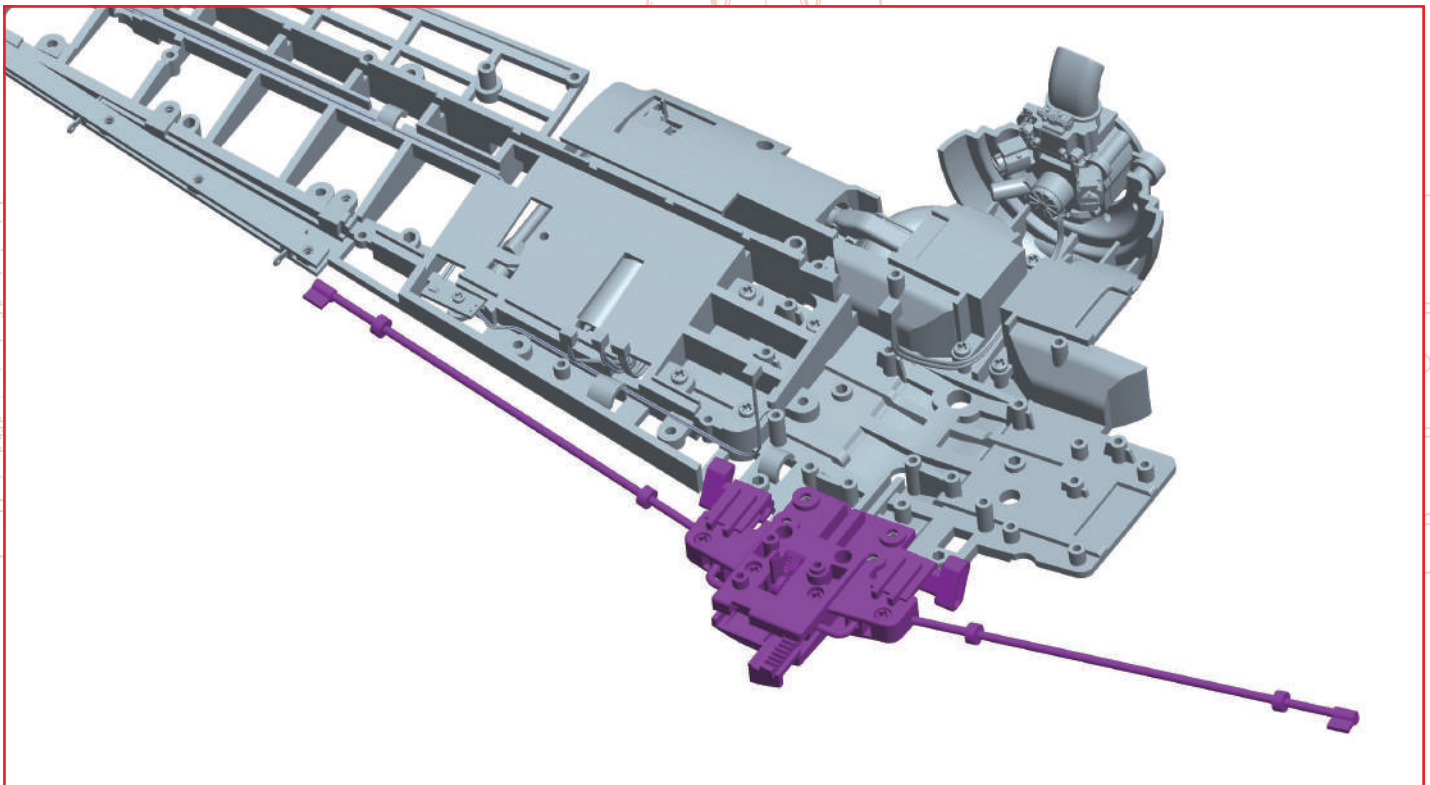
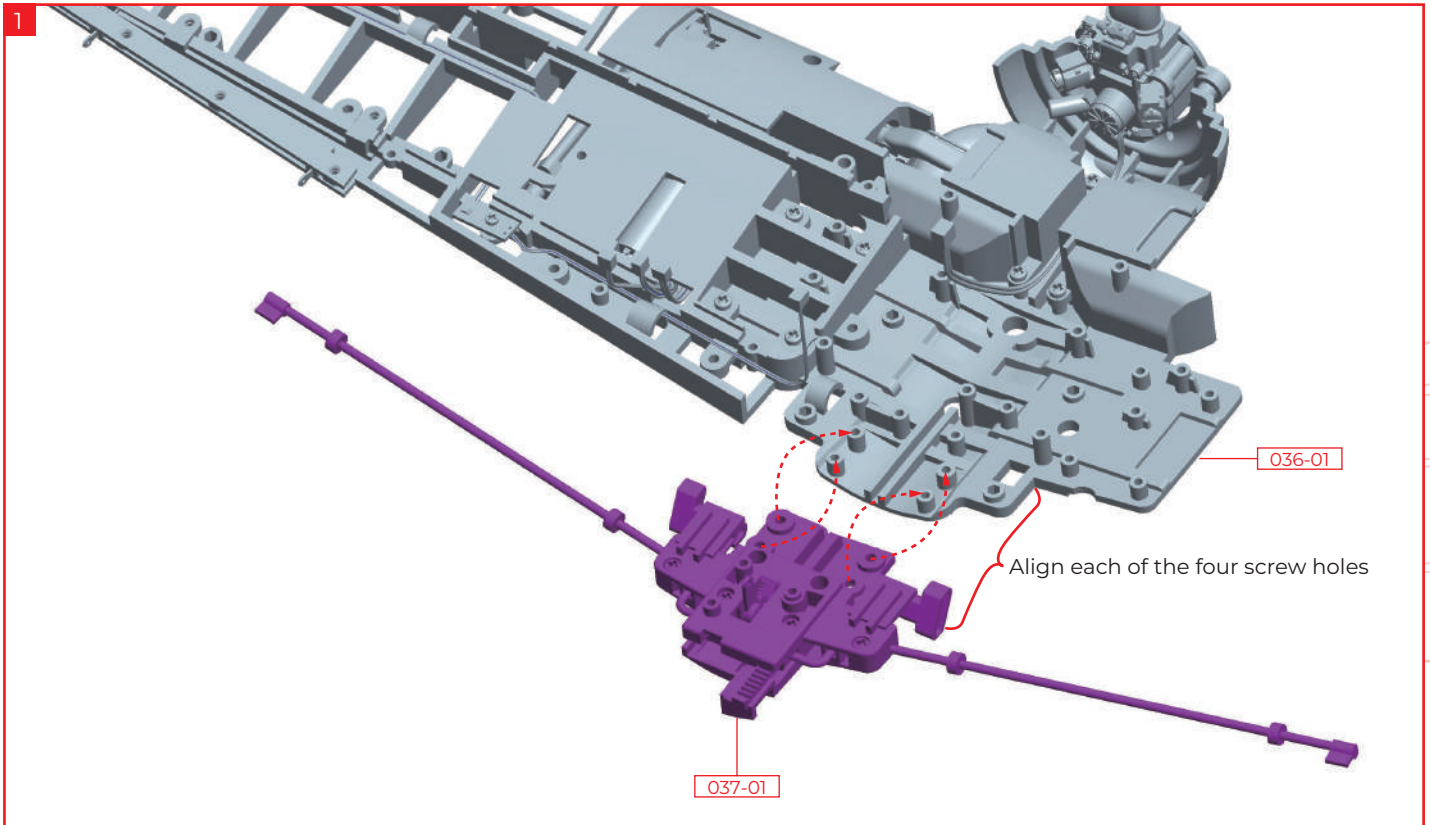
	Part	No.	Material
<input type="checkbox"/>	037-01	1	Aileron operating mechanism
<input type="checkbox"/>	037-02	5 (1 spare)	Steel

You will also need: screwdriver

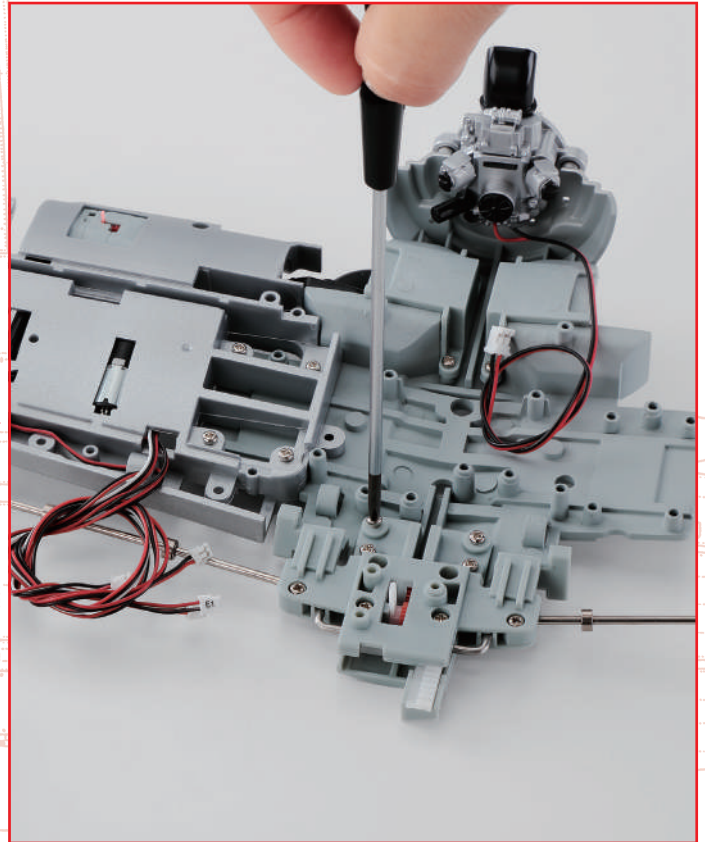
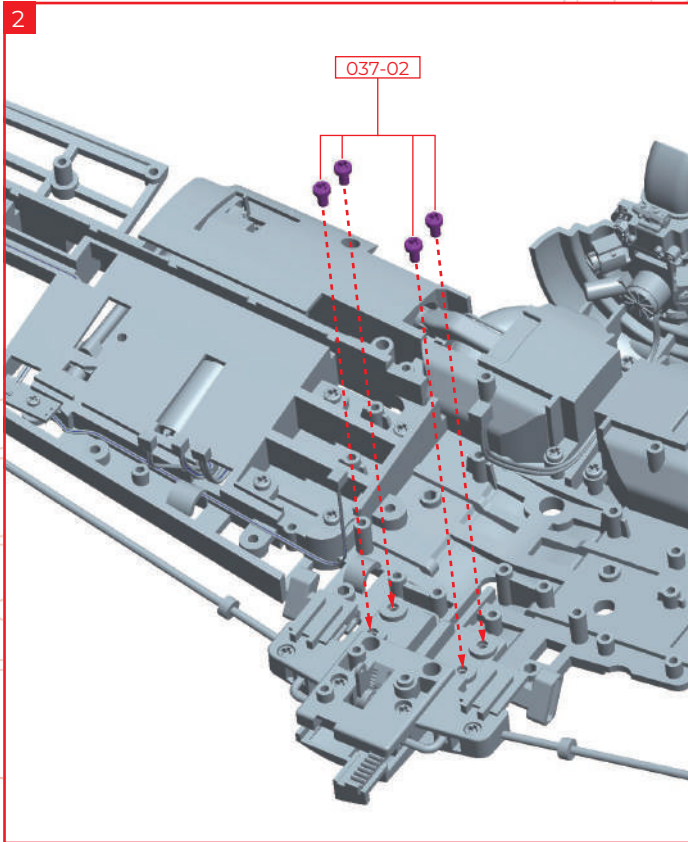
STEP 1

Installing the aileron operating mechanism

← : Glue
- - - : Don't Glue

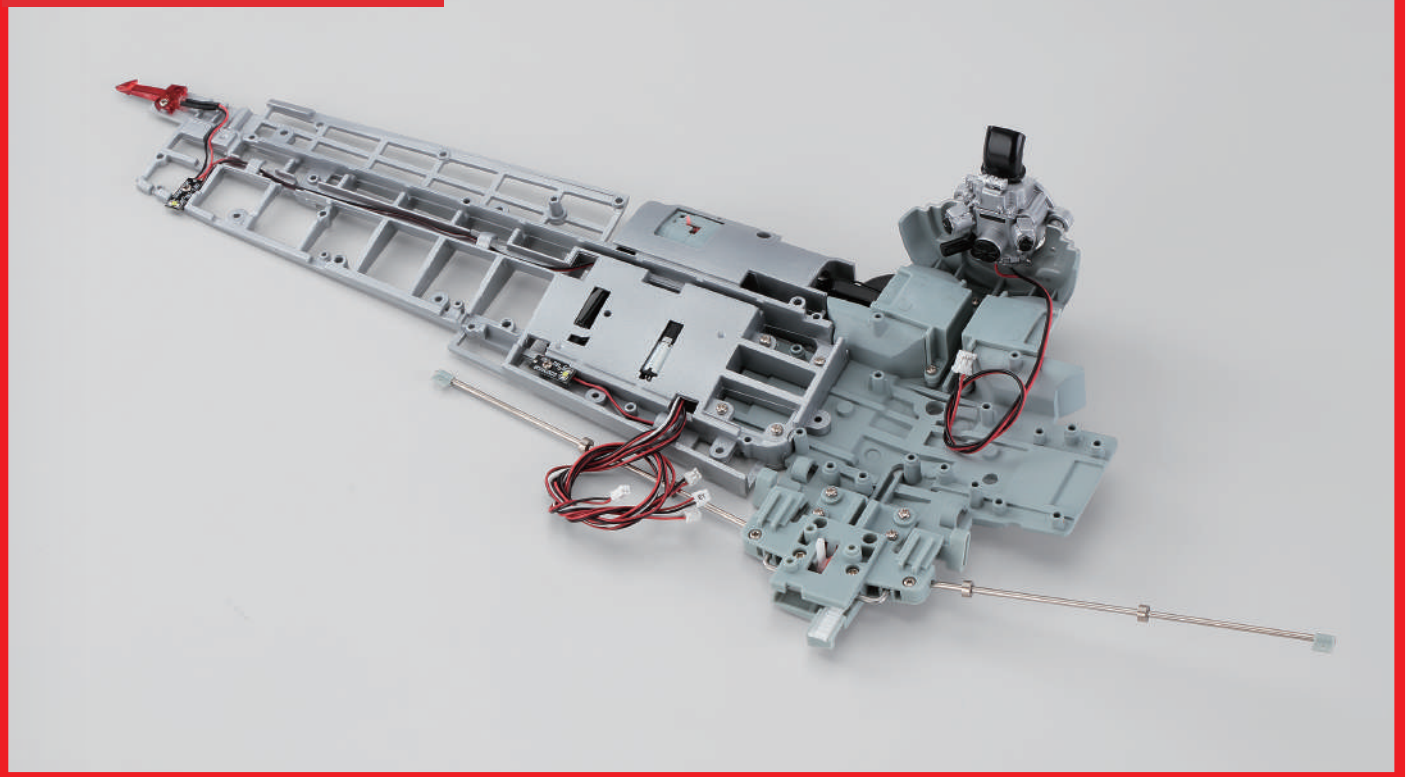


Fit the aileron operating mechanism 037-01 into the main wing base frame 036-01 assembled in stage 36.

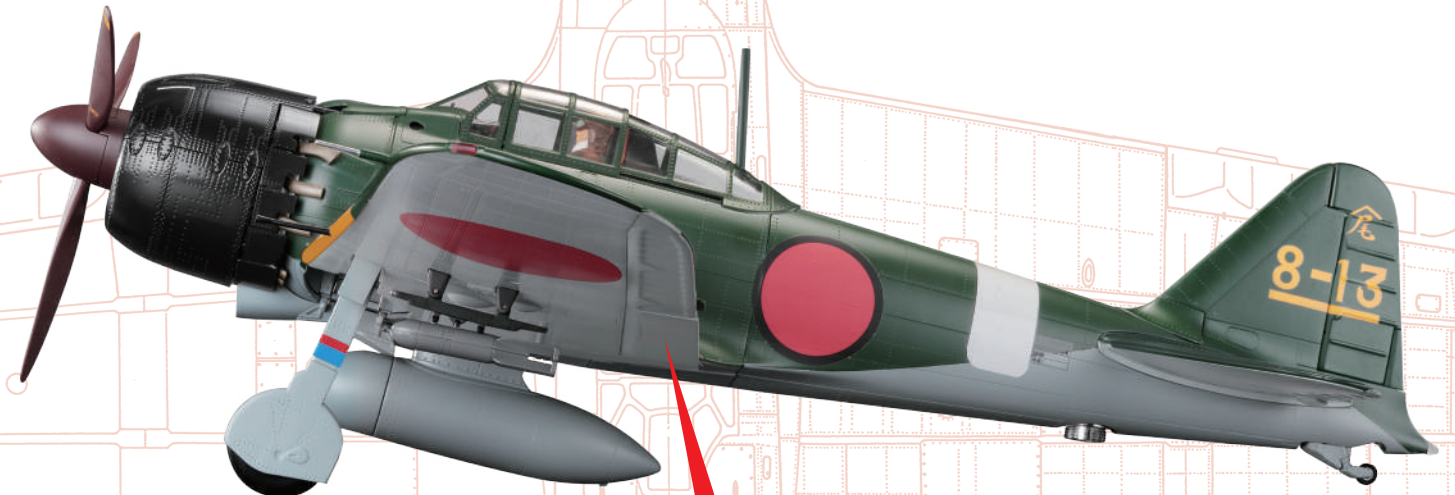


Secure the aileron operating mechanism 037-01 in place using 4 x 037-02 screws

STAGE COMPLETE



Stage 38: Installing the Flaps



Stage 38 Assembly
 Flaps

In this stage we'll be attaching the left and right flaps to the shaft of the aileron operating mechanism we put together in stage 37.

STAGE 38 PARTS

PARTS LIST

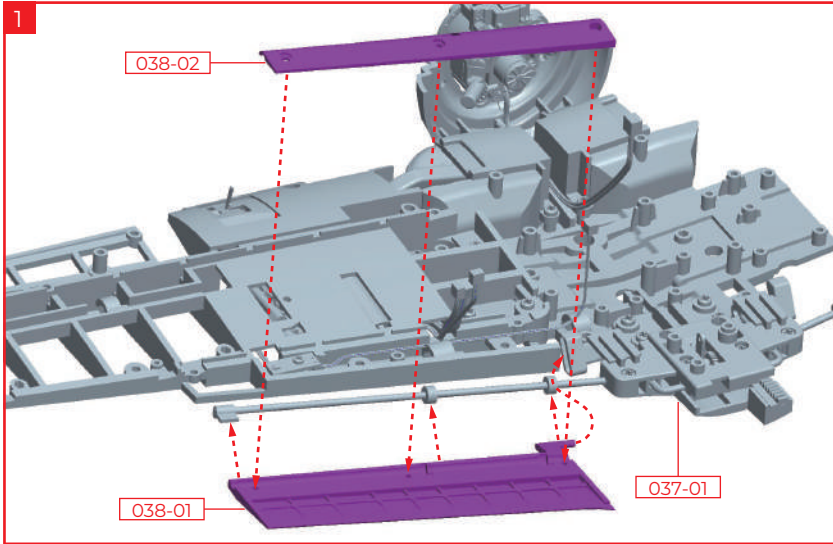
	Part	No.	Material
<input type="checkbox"/>	038-01	1	ABS resin
<input type="checkbox"/>	038-02	1	ABS resin
<input type="checkbox"/>	038-03	1	ABS resin
<input type="checkbox"/>	038-04	1	ABS resin
<input type="checkbox"/>	038-05	7 (1 spare)	Steel

You will also need: screwdriver, tweezers.

STEP 1

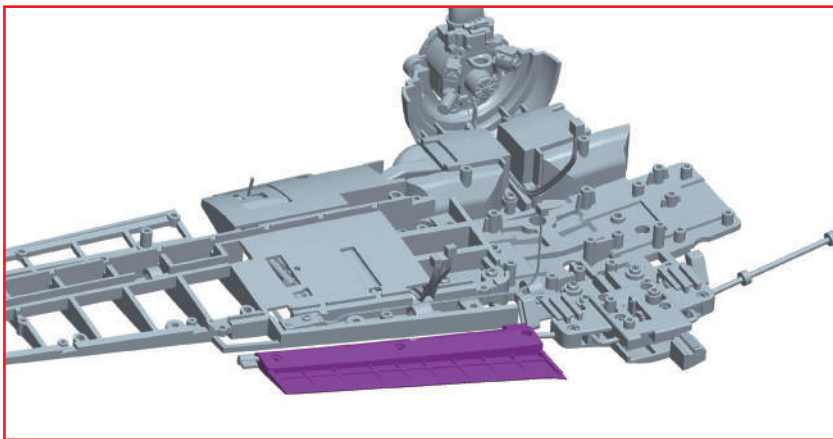
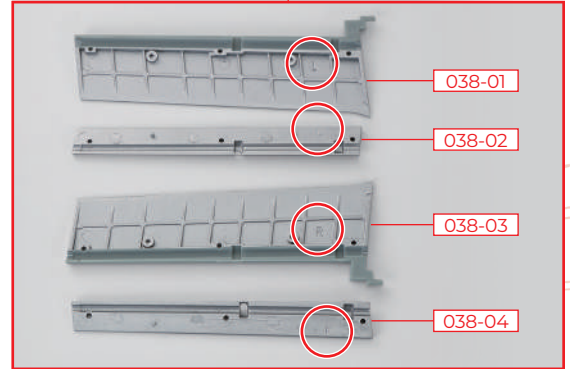
Installing the flaps

← : Glue
- - - : Don't Glue



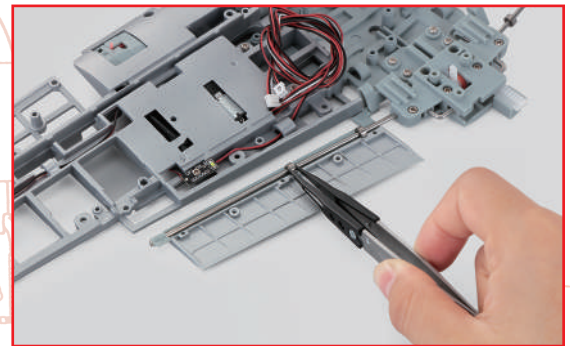
NOTE

The flaps and covers are marked left (L) and right (R). Check you have the correct part before fixing them in place.

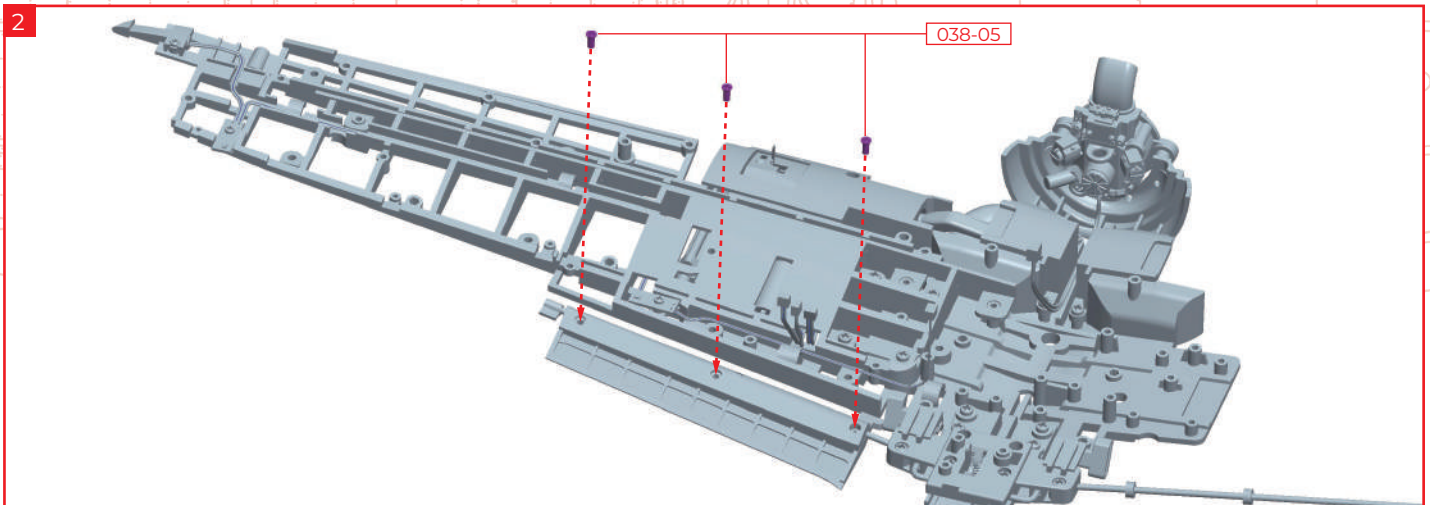


NOTE

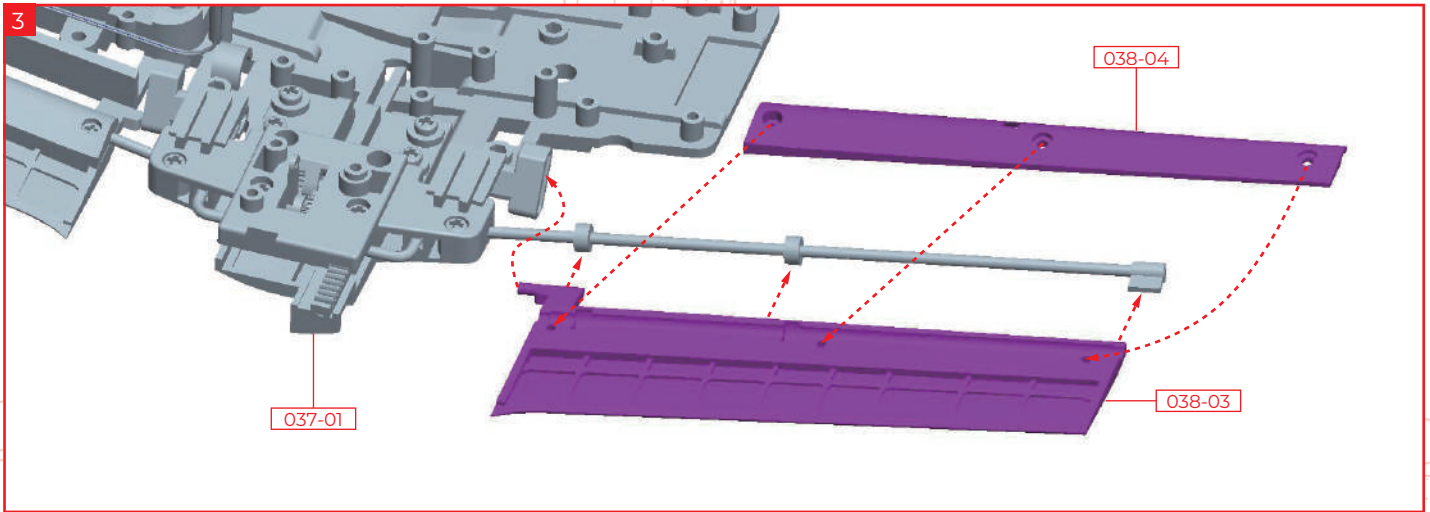
There are two bearings on the shaft of 037-01 that move. If necessary, these can be moved using tweezers to ensure the correct fit.



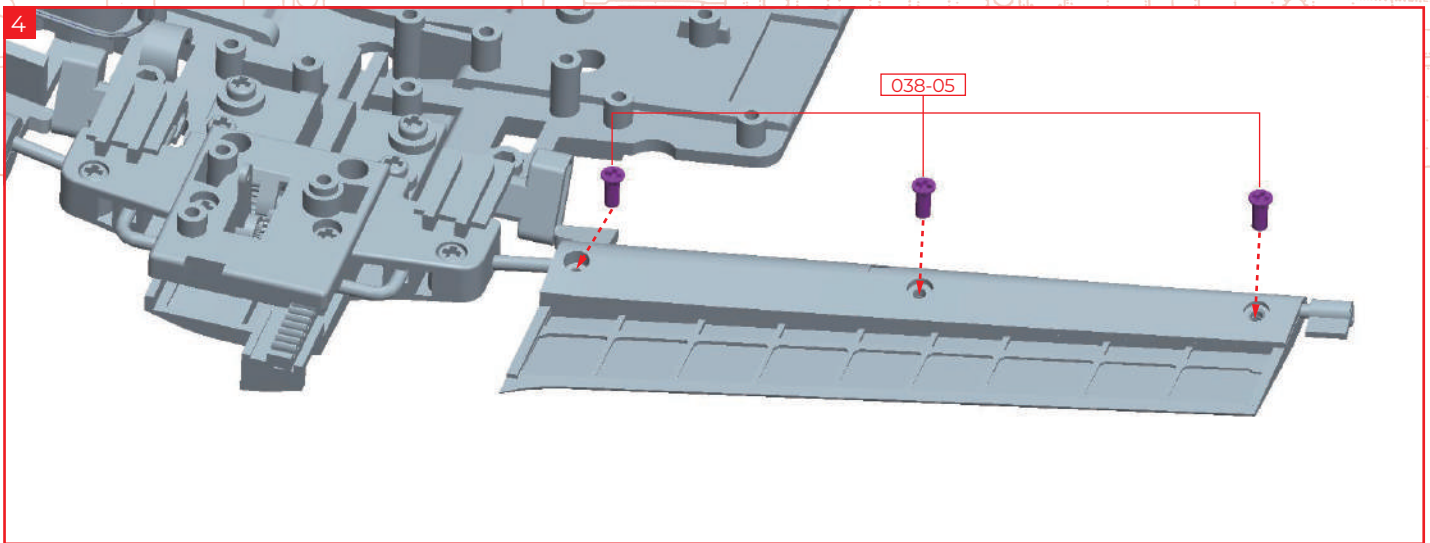
Fit the left flap 038-01 onto the aileron operating mechanism 037-01 installed in stage 37. At the same time, insert the pin on 038-01 into the groove on 037-01. Lower the cover 038-02 on top.



Fix the cover 038-02 in place using 3 x 038-05 screws.

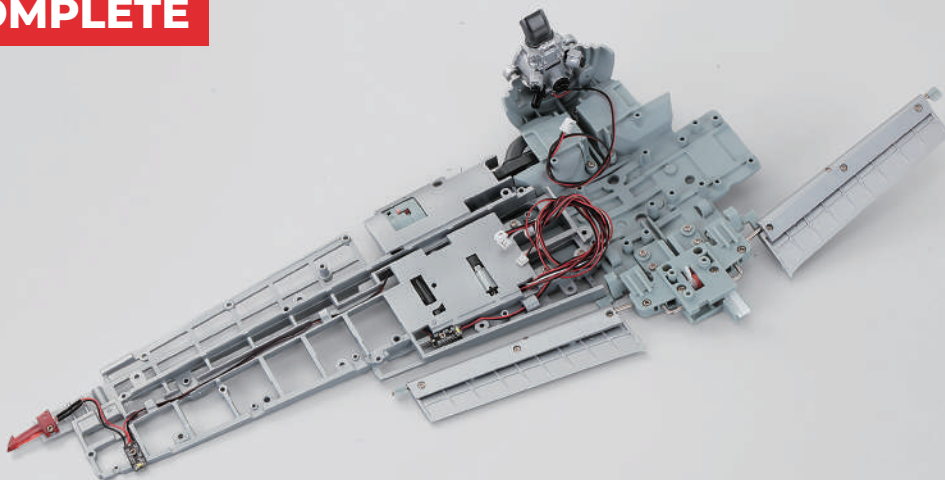


Fit the right flap 038-03 onto the shaft of the aileron operating mechanism 037-01. The pin on the end of 038-03 fits into the groove on 037-01. Lower the cover 038-04 on top.

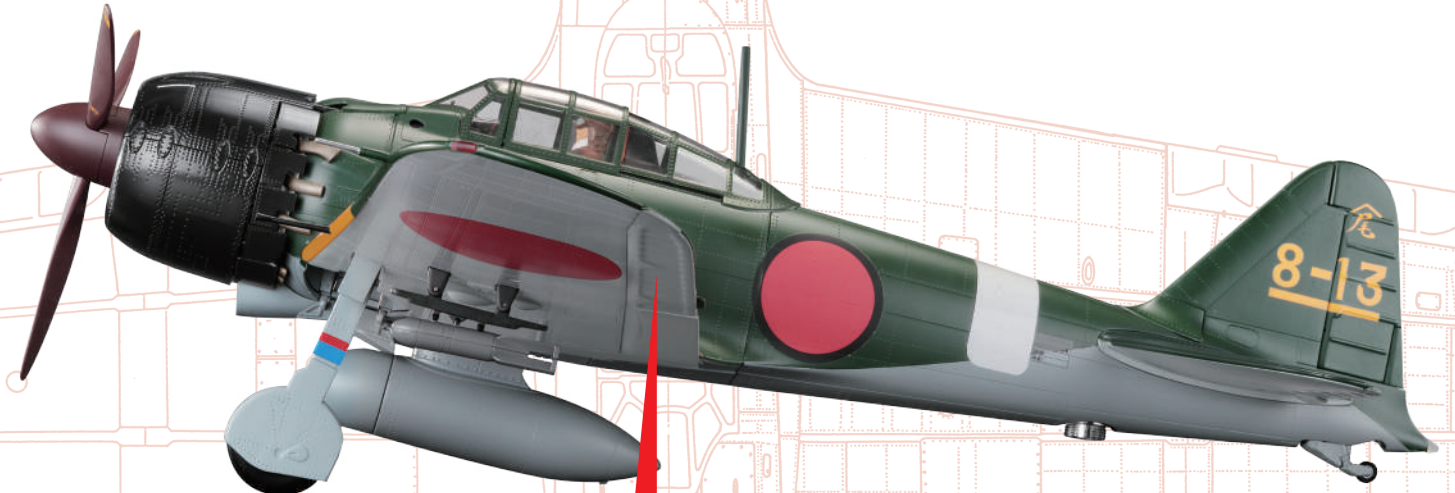


Fix the cover 038-04 in place using 3 x 038-05 screws.

STAGE COMPLETE



Stage 39: Installing the Left Aileron



Stage 39 Assembly
Aileron Base

In this stage we'll be installing the left aileron. Not inserting or fitting small parts properly or having them in a skewed position means the model won't work later on, so be careful.

STAGE 39 PARTS

PARTS LIST

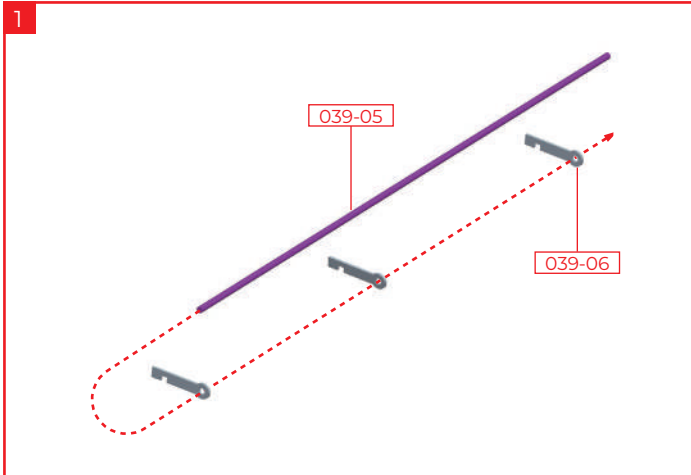
	Part	No.	Material
<input type="checkbox"/>	039-01	1	ABS resin
<input type="checkbox"/>	039-02	1	ABS resin
<input type="checkbox"/>	039-03	1	ABS resin
<input type="checkbox"/>	039-04	1	ABS resin
<input type="checkbox"/>	039-05	1	Steel
<input type="checkbox"/>	039-06	3	Steel
<input type="checkbox"/>	039-07	7 (1 spare)	Steel

You will also need: screwdriver, tweezers, superglue

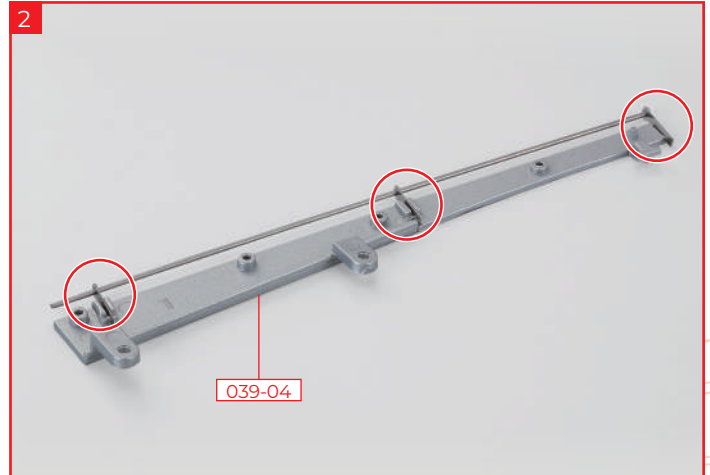
STEP 1

Installing the aileron base

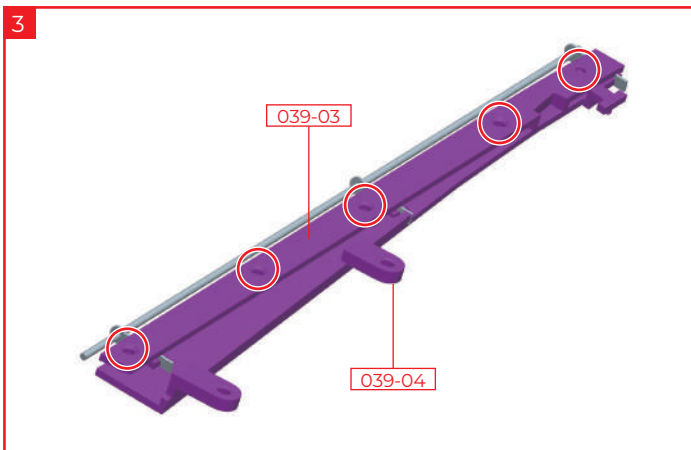
← : Glue
 - - - : Don't Glue



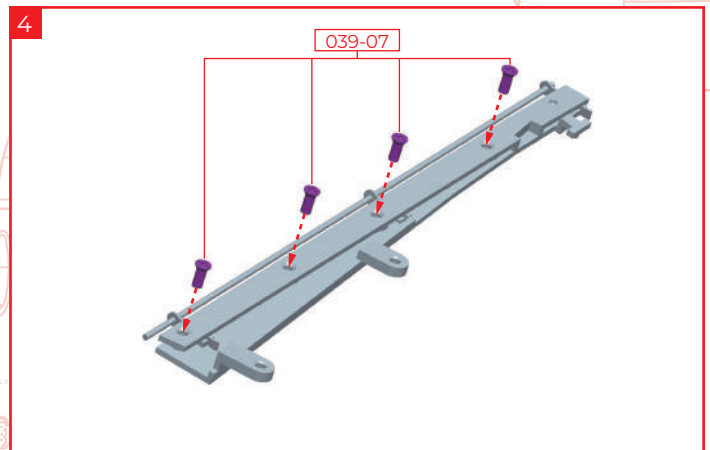
Thread three hinges 039-06 onto shaft 039-05.



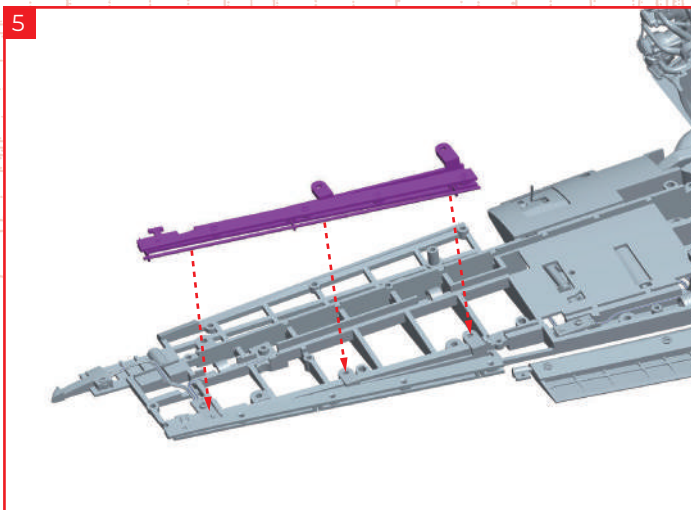
Fit the three hinges 039-06 assembled in 1 into the three grooves on the left aileron base 039-04.



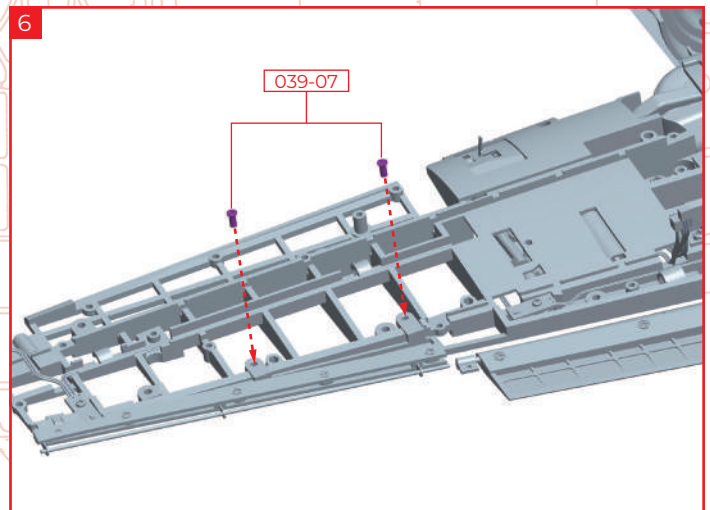
Align the five raised screw holes on the aileron base 039-04 with the corresponding holes on part 039-03. Check the hinges 039-06 are also aligned with the grooves on 039-03.



Fix in place using 4 x 039-07 screws.



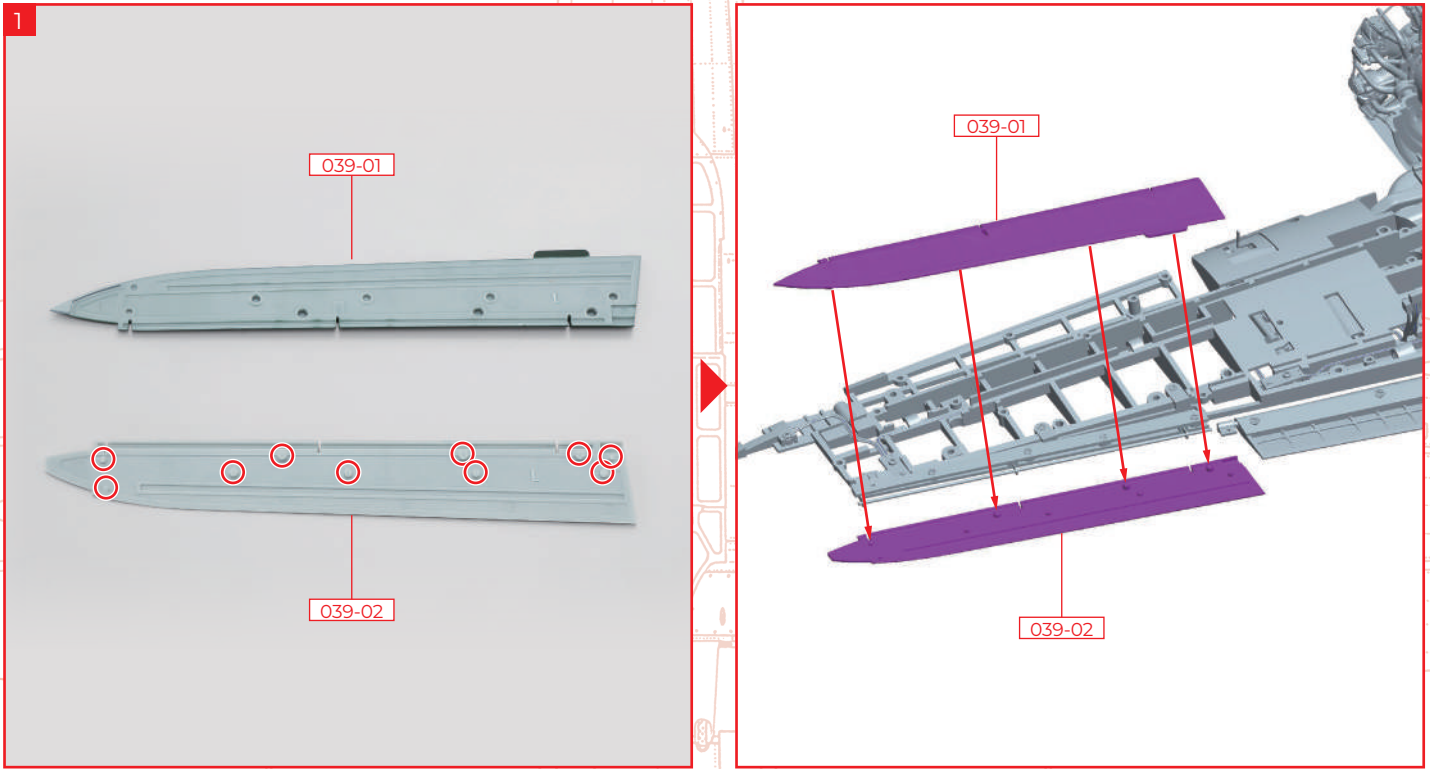
Align the screw holes and 'T'- shaped tab on the aileron base assembled in 4 to the left wing frame.



Fix together using 2 x 039-07 screws.

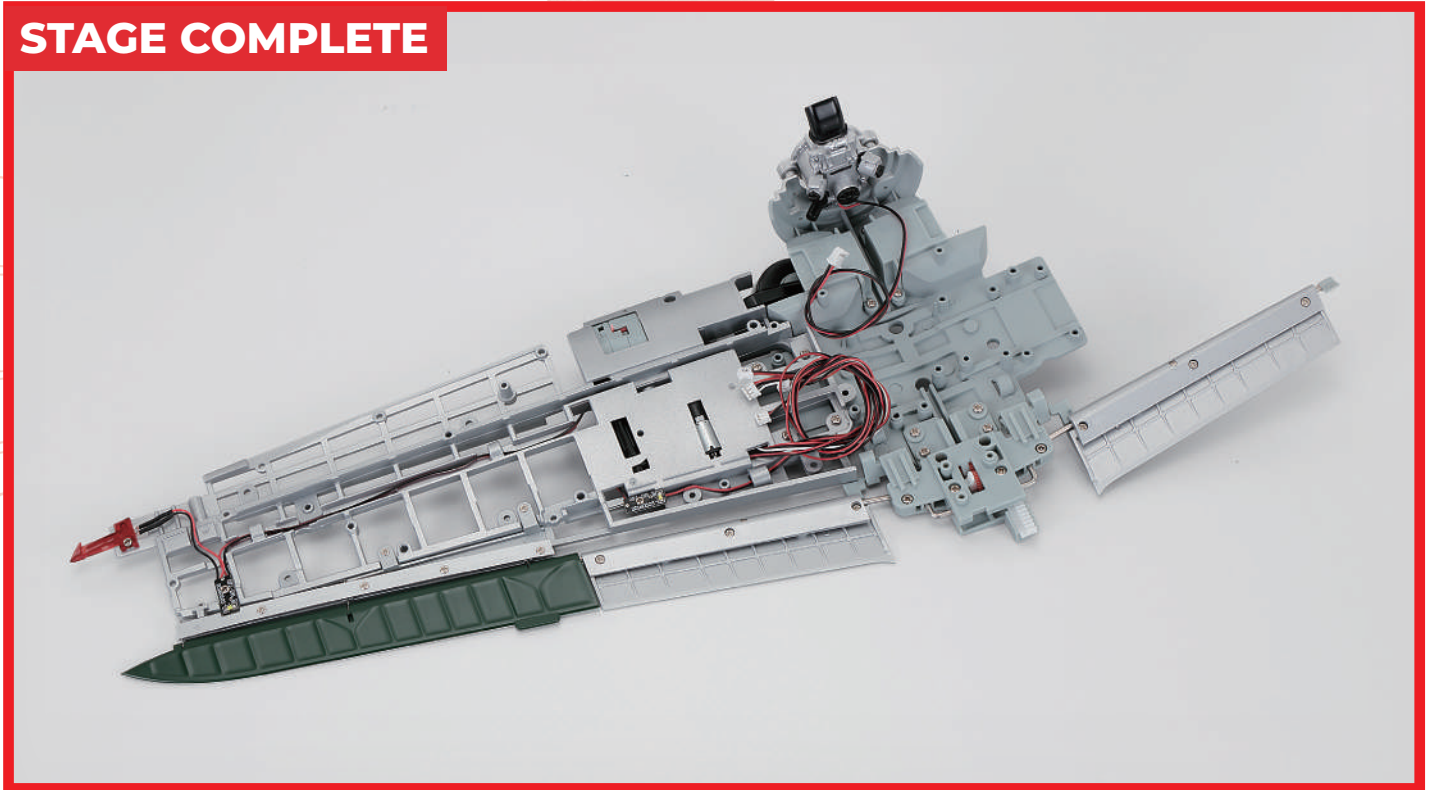
STEP 2

Installing the aileron

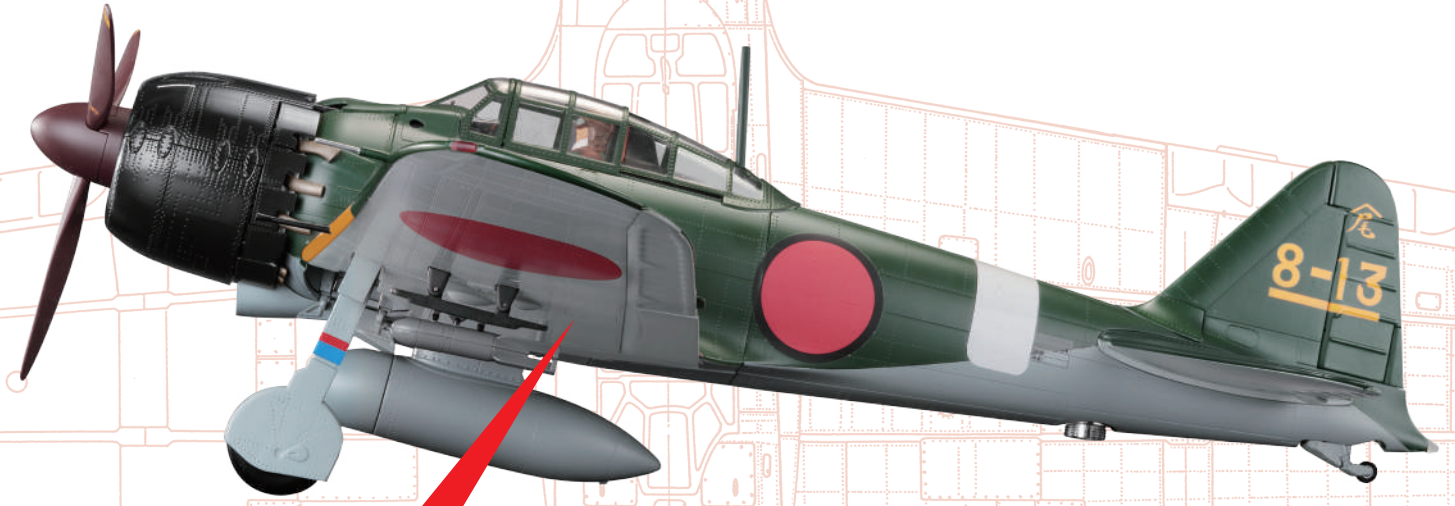


Position the lower surface of the aileron **039-02** underneath the aileron base so that the three hinges rest in the three grooves. Apply superglue to the ten lugs, then press the hinge with the small hole on the end of the control mechanism **037-01**, firmly into the square recess. Lower the upper surface of the aileron **039-01** on top and squeeze the parts together to fix.

STAGE COMPLETE



Stage 40: Installing Left Wing Support Fittings and the External Panel Frame



Stage 40 Assembly
 Left Wing Support & Frame

In this stage we'll be installing support fittings for the left wings as well as the frame we'll attach the external panels to later.

STAGE 40 PARTS

PARTS LIST

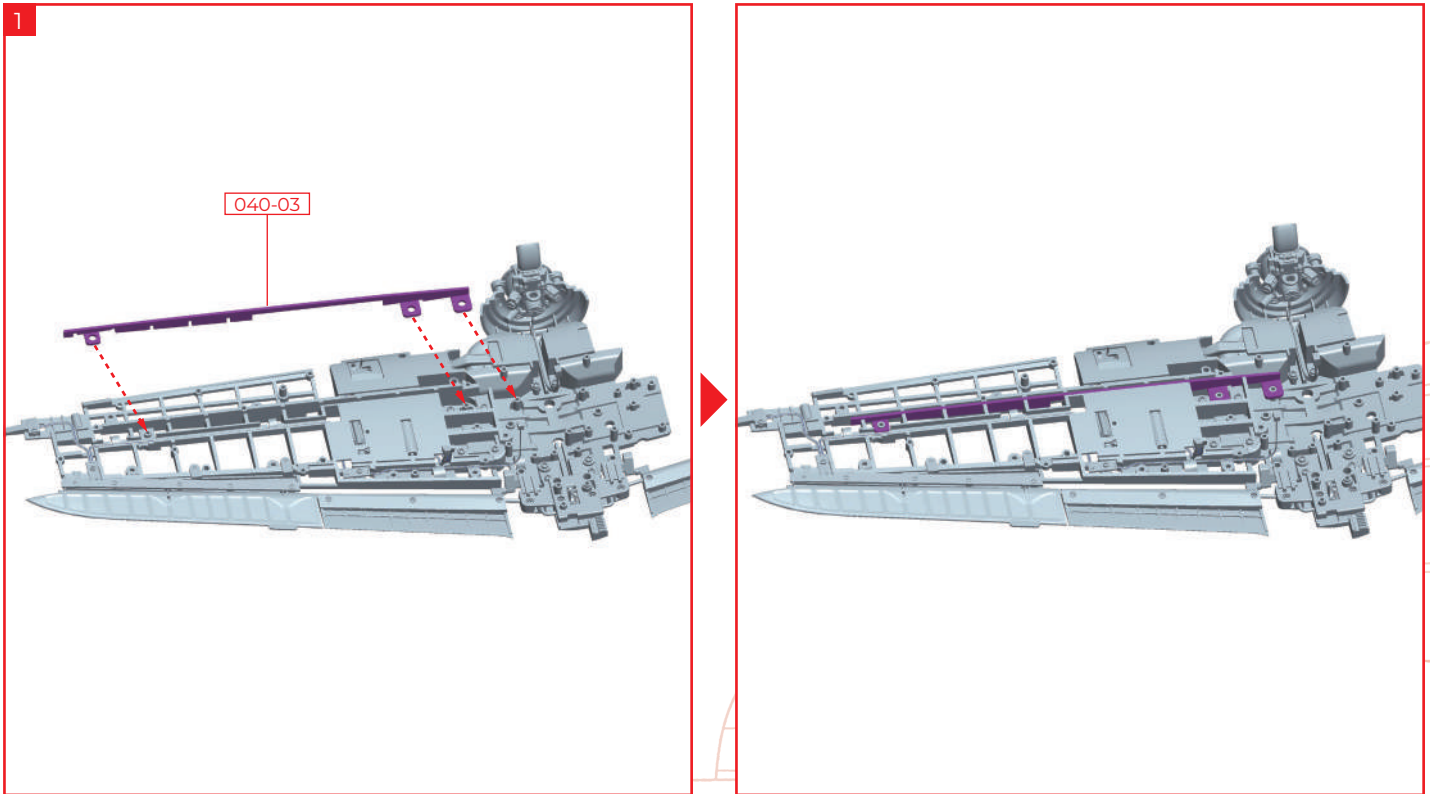
	Part	No.	Material
<input type="checkbox"/>	040-01	2 (1 spare)	Steel
<input type="checkbox"/>	040-02	3 (1 spare)	Steel
<input type="checkbox"/>	040-03	1	Steel
<input type="checkbox"/>	040-04	7 (1 spare)	Steel
<input type="checkbox"/>	040-05	1	ABS resin

You will also need: screwdriver

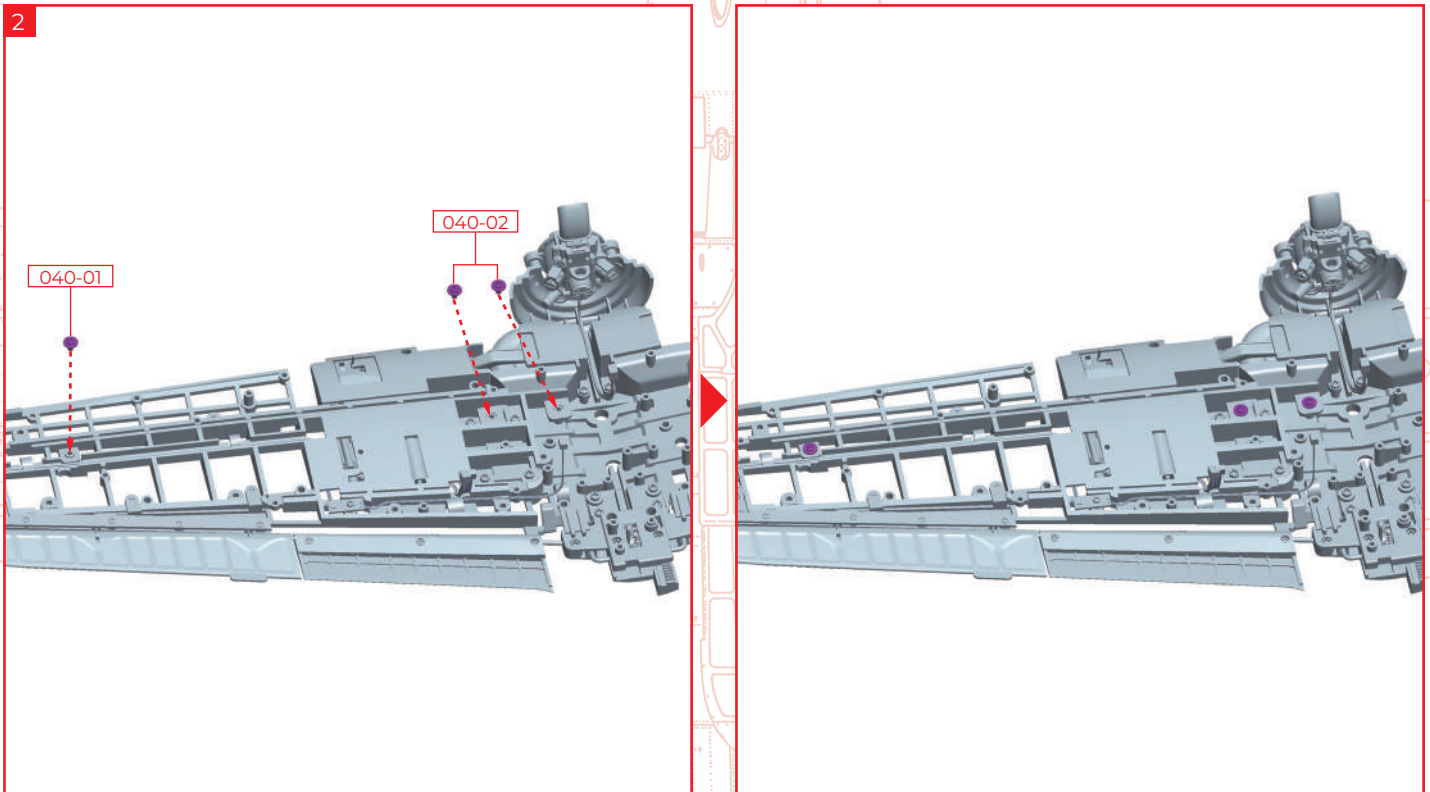
STEP 1

Installing the left wing support fittings

← : Glue
← : Don't Glue



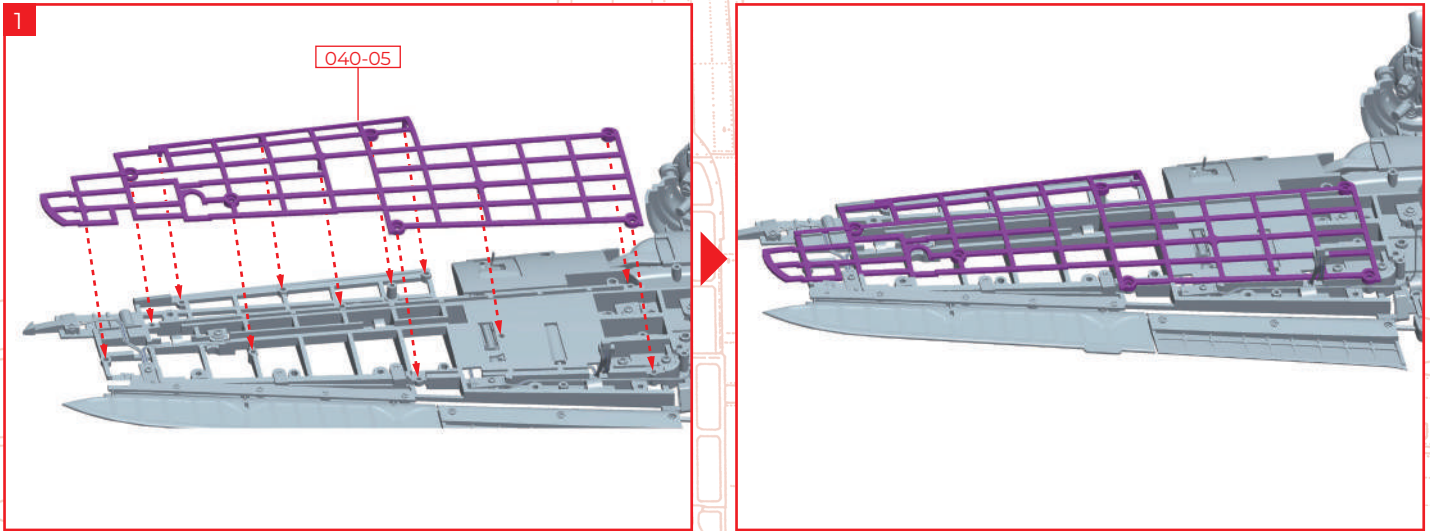
Align the left wing metal support bar 040-03 with the three screw holes on the left wing.



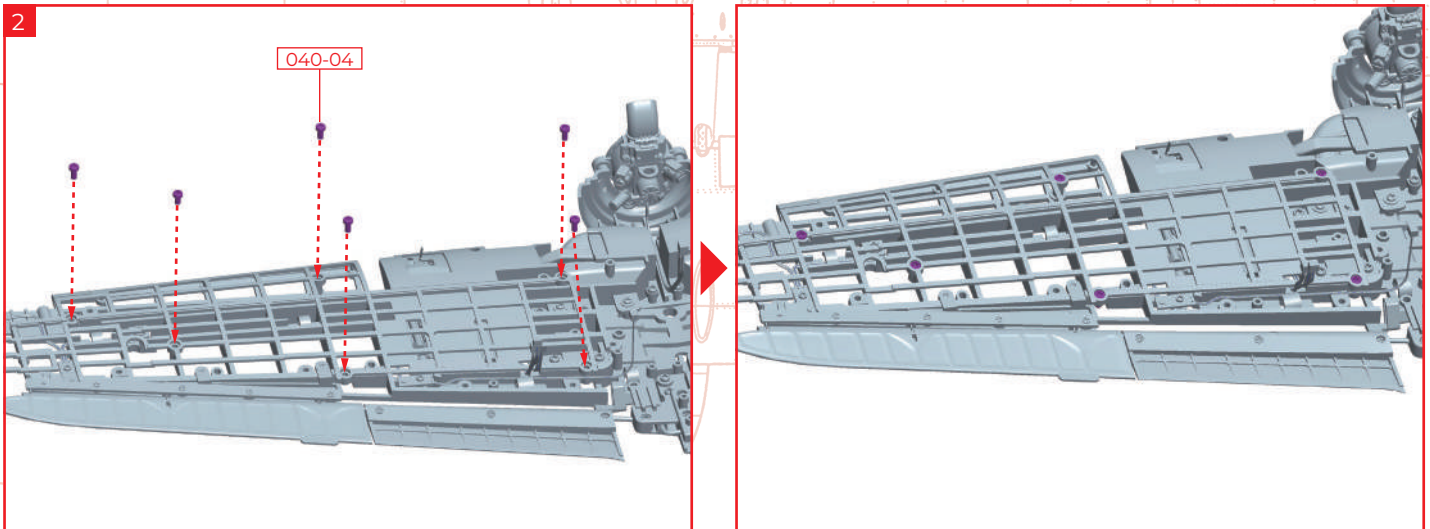
Fix in place using 1 x 040-01 screw and 2 x 040-02 screws

STEP 2

Installing the external panel frame

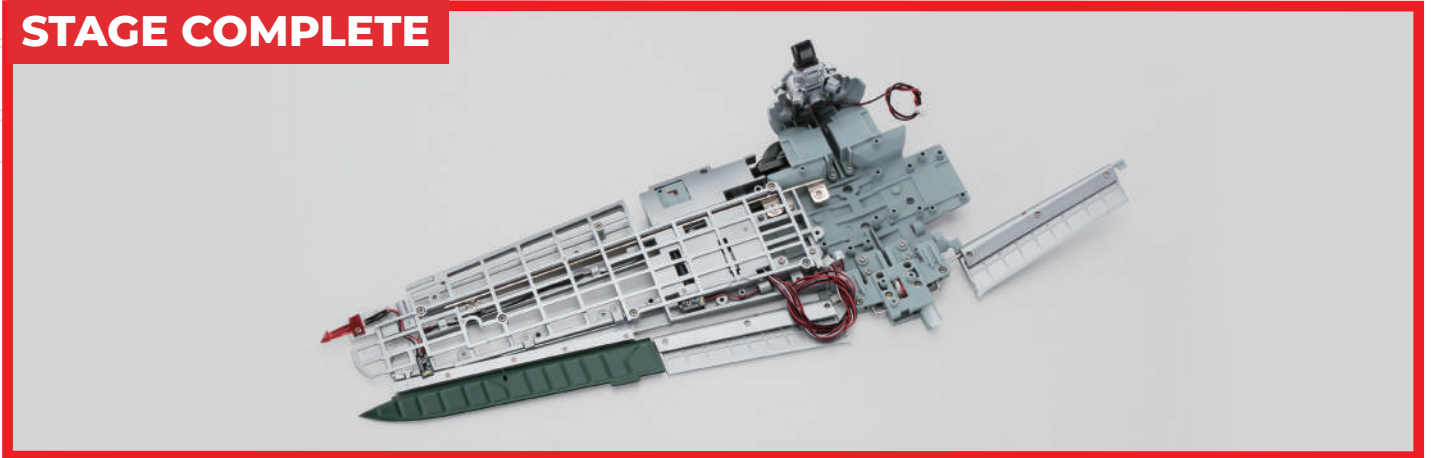


Lower the panel frame 040-05 onto the left wing, aligning the screw holes and pins.



Fix in place using 6 x 040-04 screws.

STAGE COMPLETE



Stage 41: Assembling the Base for the Right Landing Gear



In this stage we'll be assembling the base for the right landing gear. Setting the positional rod and gear will require a good deal of accuracy and precision.

Stage 41 Assembly
 Right Landing Gear Base

STAGE 41 PARTS

PARTS LIST

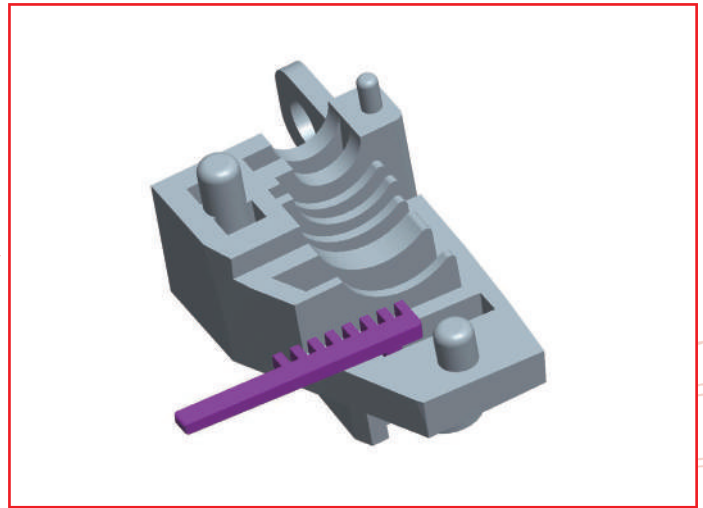
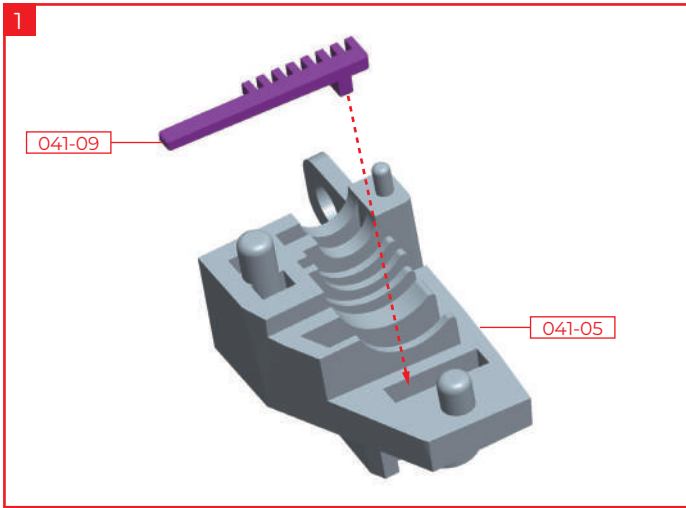
	Part	No.	Material
<input type="checkbox"/>	041-01	1	ABS resin
<input type="checkbox"/>	041-02	1	ABS resin
<input type="checkbox"/>	041-03	1	ABS resin
<input type="checkbox"/>	041-04	1	ABS resin+Steel
<input type="checkbox"/>	041-05	1	ABS resin
<input type="checkbox"/>	041-06	1	Plastic
<input type="checkbox"/>	041-07	1	Steel
<input type="checkbox"/>	041-08	1	ABS resin
<input type="checkbox"/>	041-09	1	Plastic
<input type="checkbox"/>	041-10	2 (1 spare)	Steel
<input type="checkbox"/>	041-11	3 (1 spare)	Washer
<input type="checkbox"/>	041-12	3 (1 spare)	Liner

What to prepare: screwdriver, tweezers.

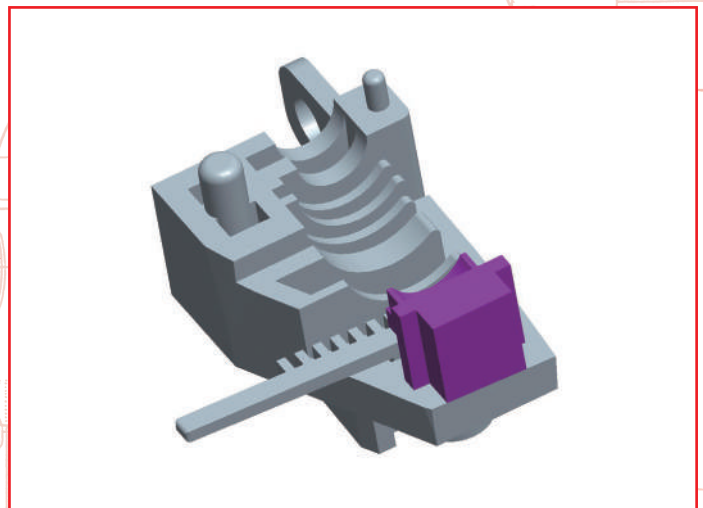
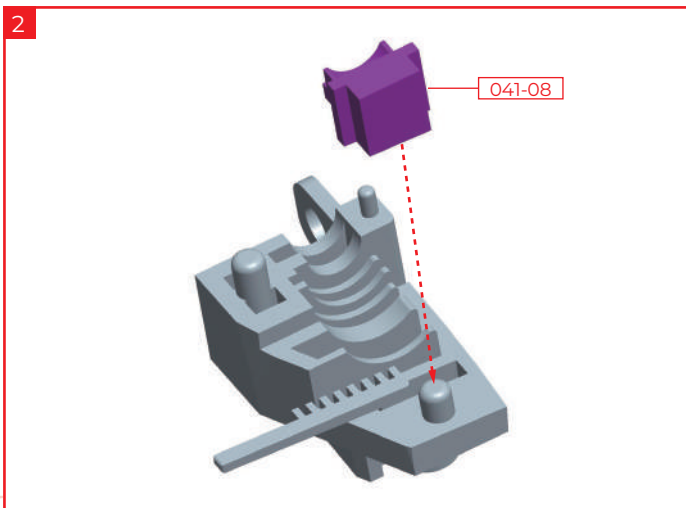
STEP 1

Assembling the right landing gear base

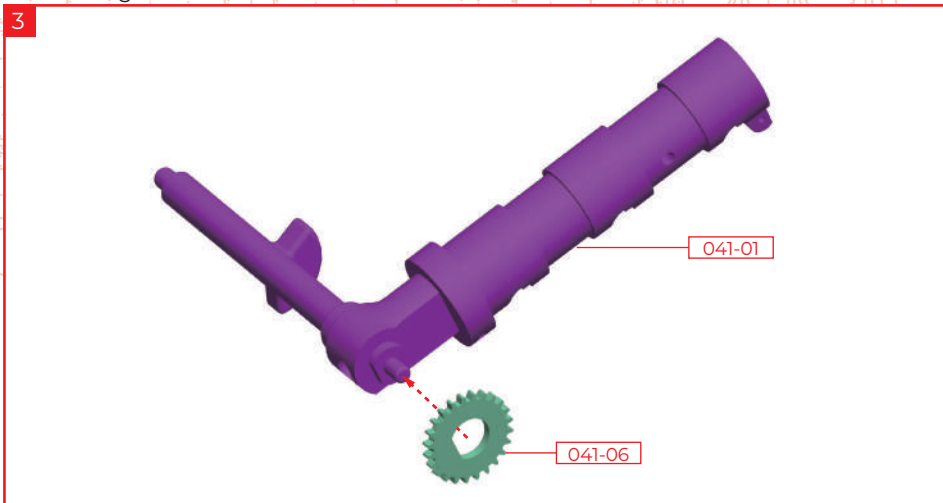
← : Glue
 - - - : Don't Glue



Insert the pin on the landing gear position indicator 041-09 into the shaft holder 041-05.

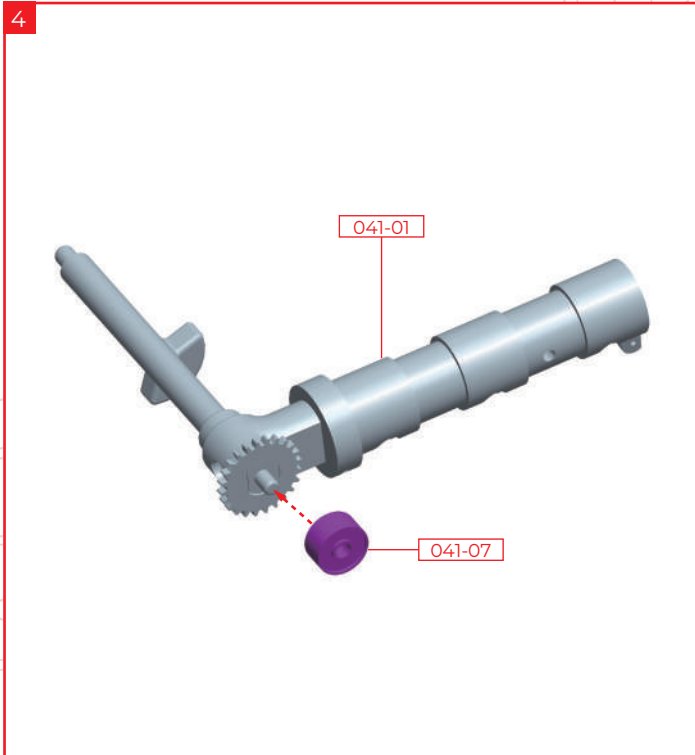


Push the shaft holder 041-08 onto the lug on 041-05 so that the landing gear position indicator 041-09 does not come off but can slide within the groove.

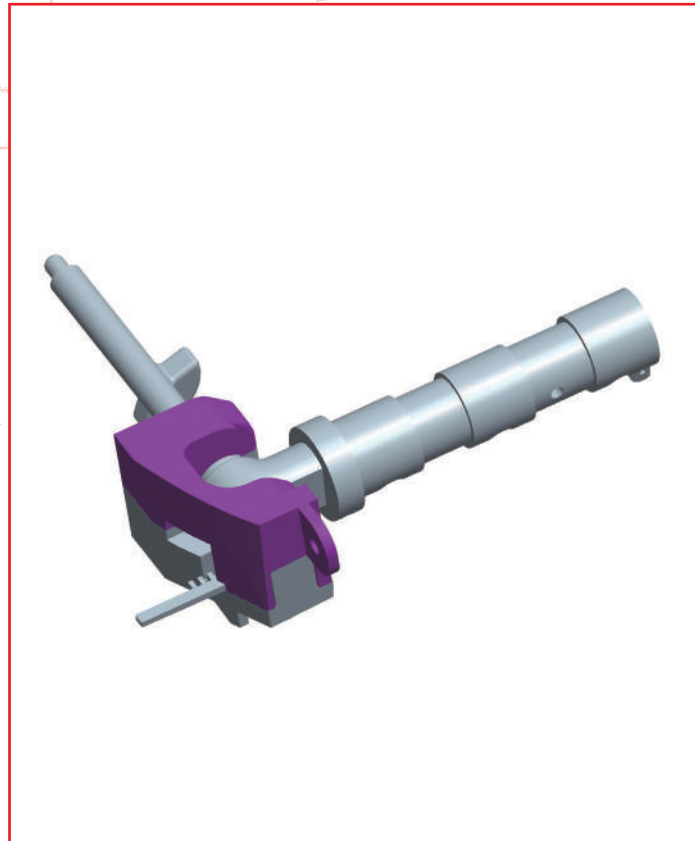
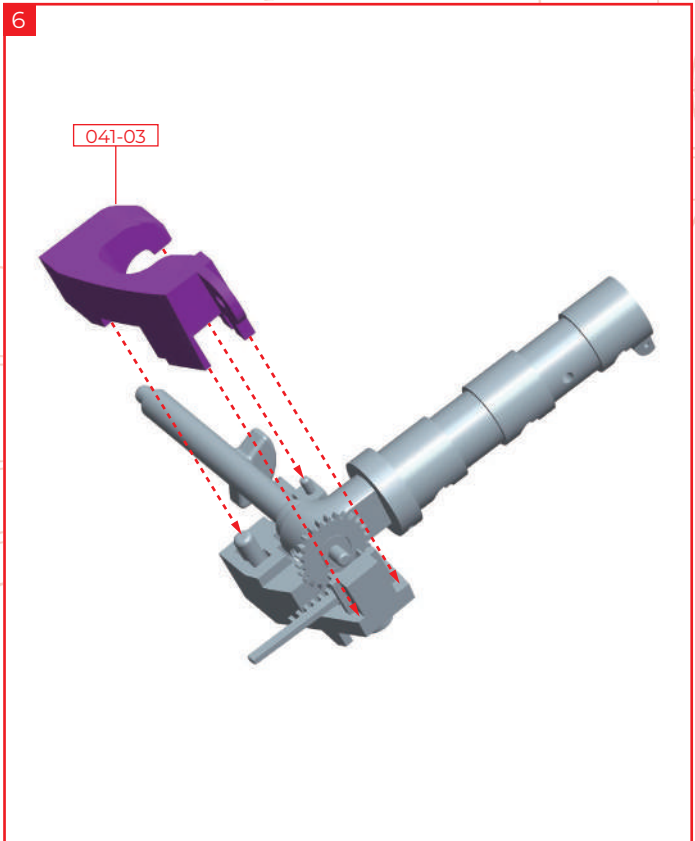


NOTE
 This is a 'D'-shaped hole to determine the correct fit.

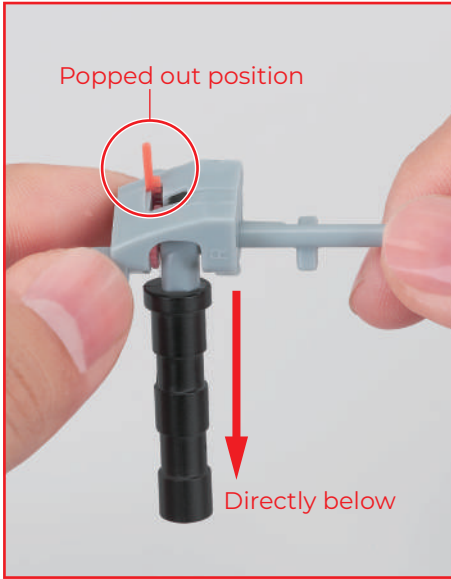
Fit the gear 041-06 onto the shaft of the shock absorber 041-01.



Fit the bearing 041-07 onto the shaft of the shock absorber 041-01. Fit the shock absorber assembly from 4 into the shaft holder 041-05 assembled in 2. The landing gear position indicator 041-09 should protrude as much as possible, and the shock absorber 041-01 should be in the horizontal position.

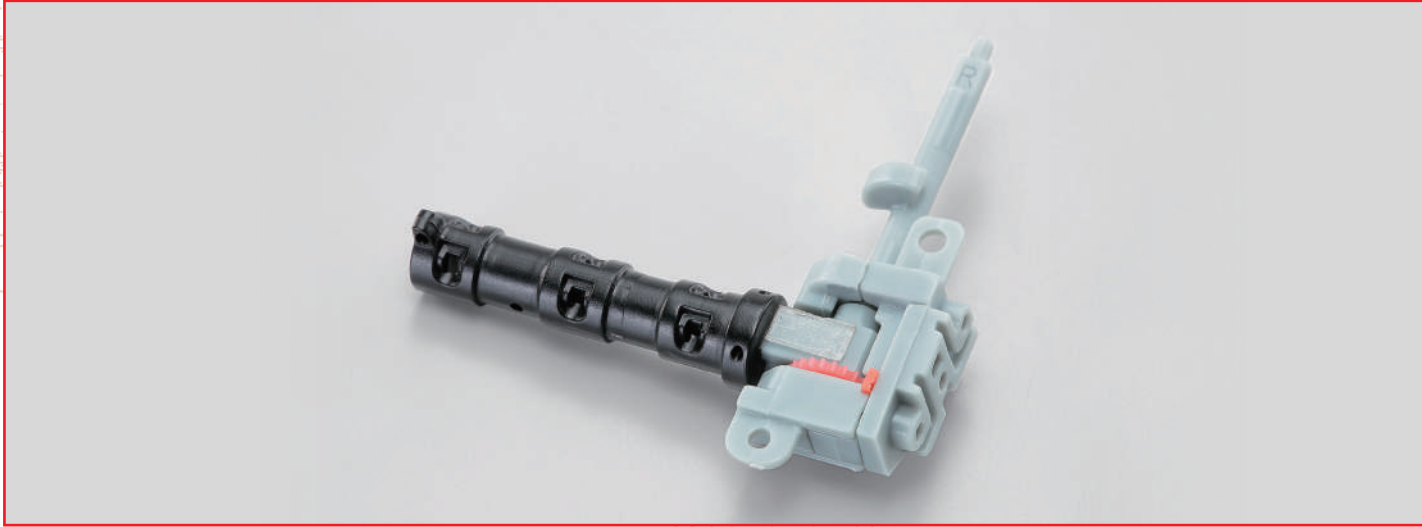
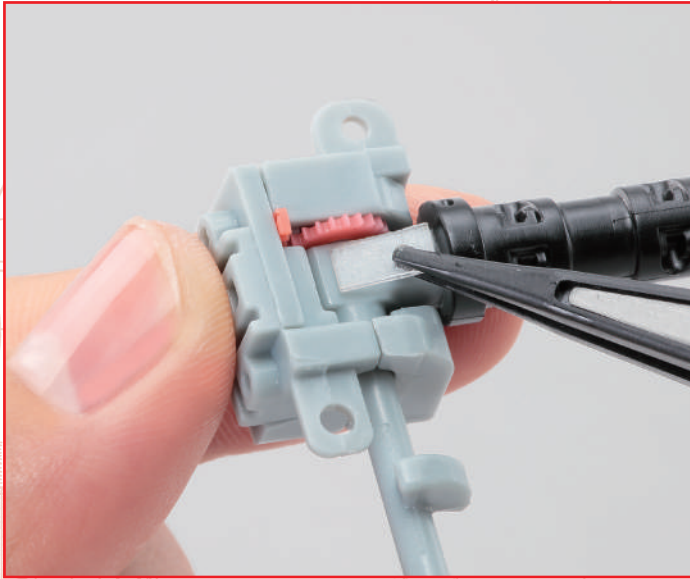
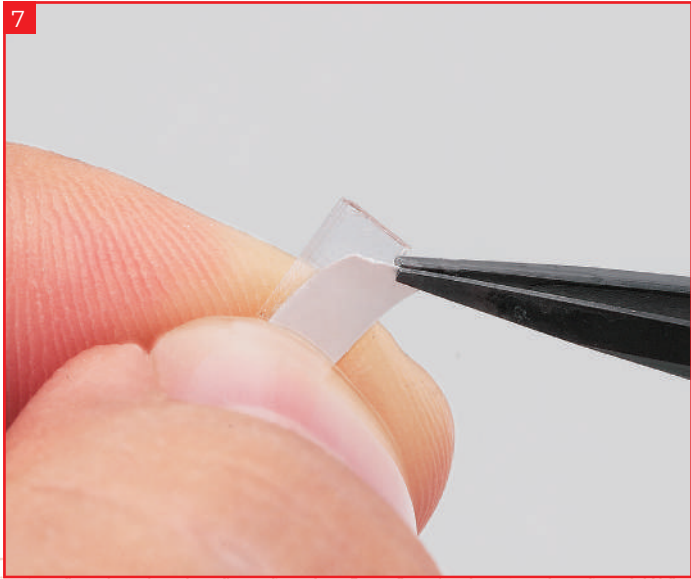


Fit the shaft bearing 041-03 onto the shaft holder 041-05.

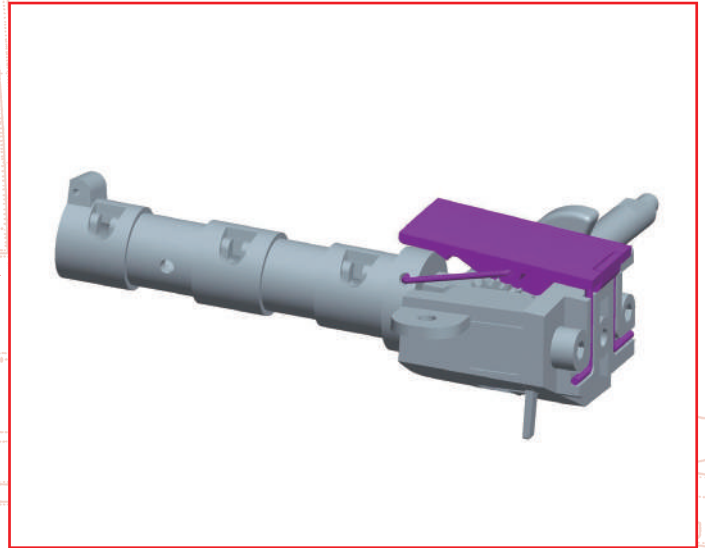
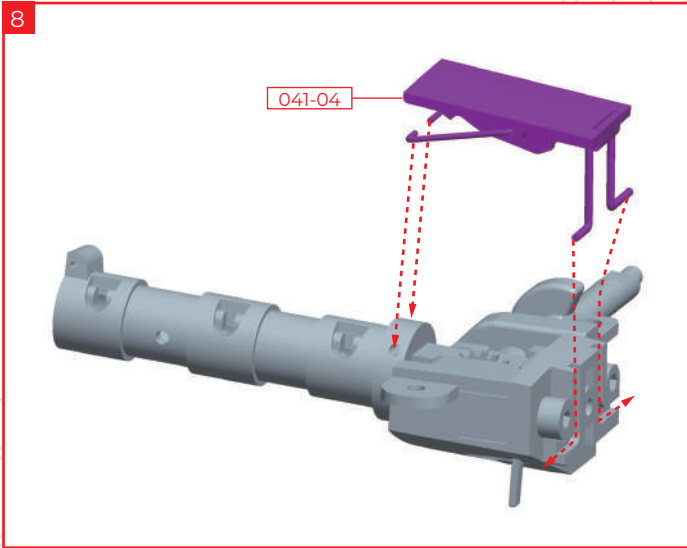


NOTE
The main landing gear is out. The landing gear position indicator 041-09 also pops out.

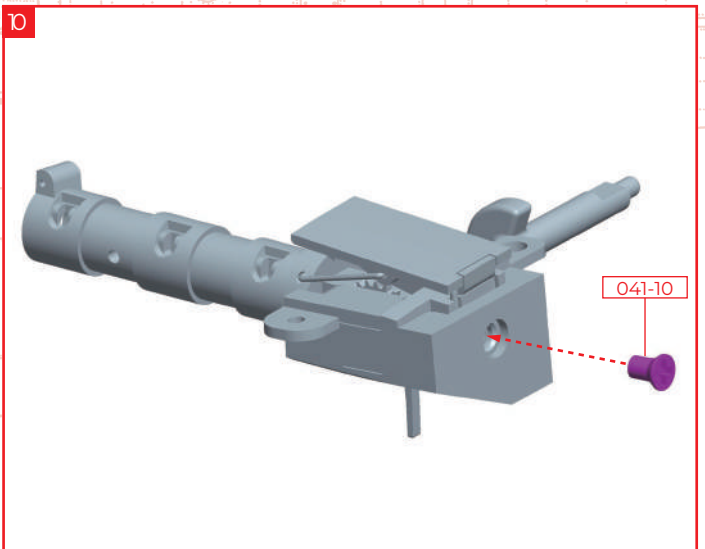
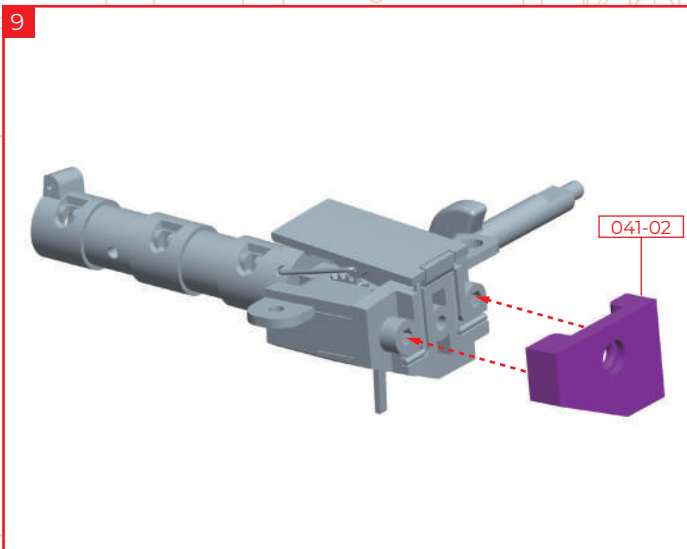
NOTE
When the shock absorber 041-01 is rotated 90 degrees, the landing gear position indicator 041-09 is pulled in.



Peel the backing off the liner 041-12 and position on the shock absorber 041-01 in the position shown.



Spread the metal fittings attached to the centre of the landing gear cover **041-04** and fit them into the holes on the shock absorber **041-01**. Next, fit the metal fittings attached to the end of the landing gear cover **041-04** into the grooves on the shaft holder **041-05**.



Fit the metal fitting holder **041-02** being careful not to move the fittings on the landing gear cover **041-04**.

Fix in place with 1 x **041-10** screw.

STAGE COMPLETE



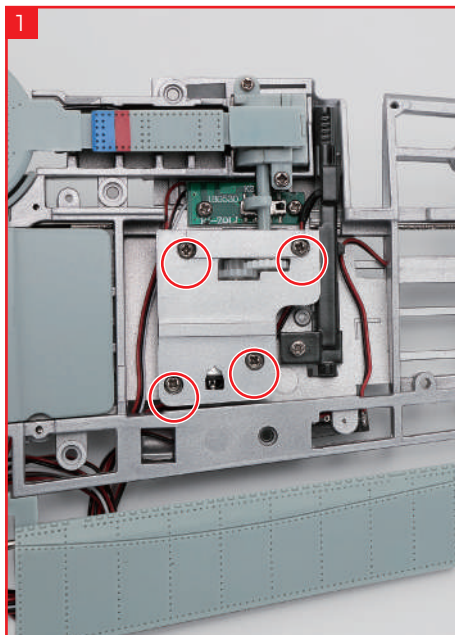
ADJUSTMENT OF LEFT MAIN LANDING GEAR AND SWITCH

When the left main landing gear assembled in Stage 28 is pulled out from the base, it may not be perpendicular to the ground. In addition, the left main landing gear switch installed in Stage 33 may not be completely pressed. Both may be adjusted with the parts in this stage as follows...

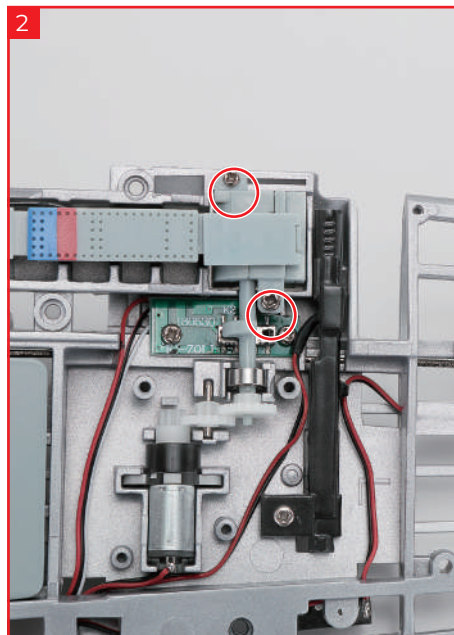
You will also need: screwdriver, tweezers.

STEP 1

Left main landing gear switch key

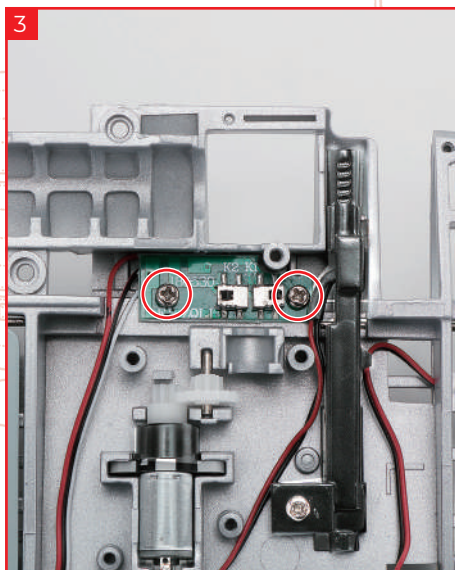
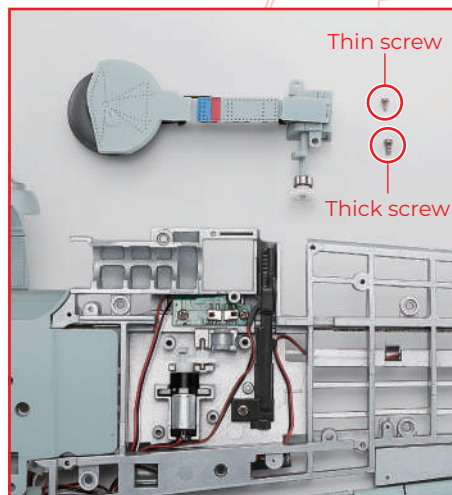


Remove the four screws that secure the left main landing gear motor cover **032-01** and remove the cover.

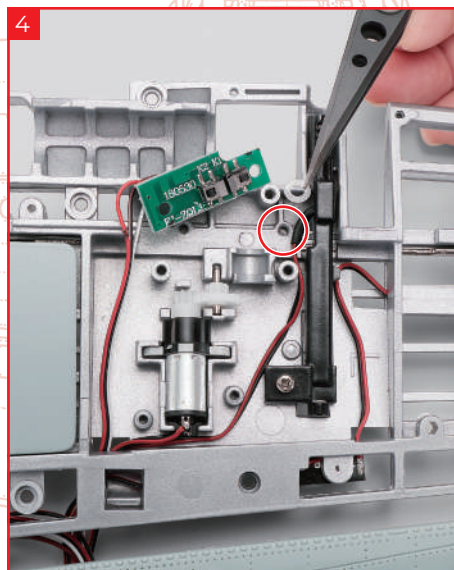


Remove the two screws that secure the left main landing gear and remove it.

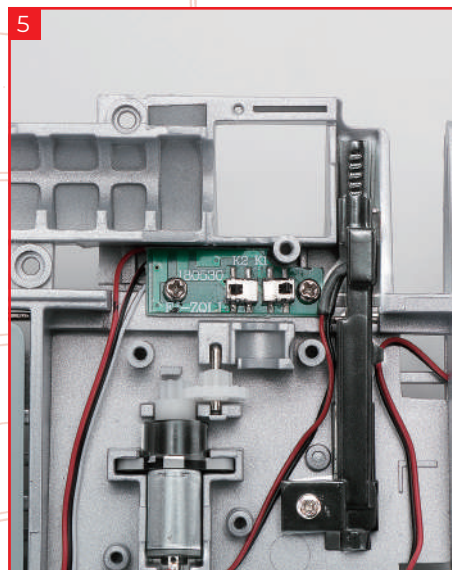
NOTE
 The two screws that secure the left main landing gear are different sizes, so be careful not to make a mistake when reattaching.



Remove the two screws fixing the left main landing gear switch **033-03**, and then gently lift up the switch to reveal the holes underneath.



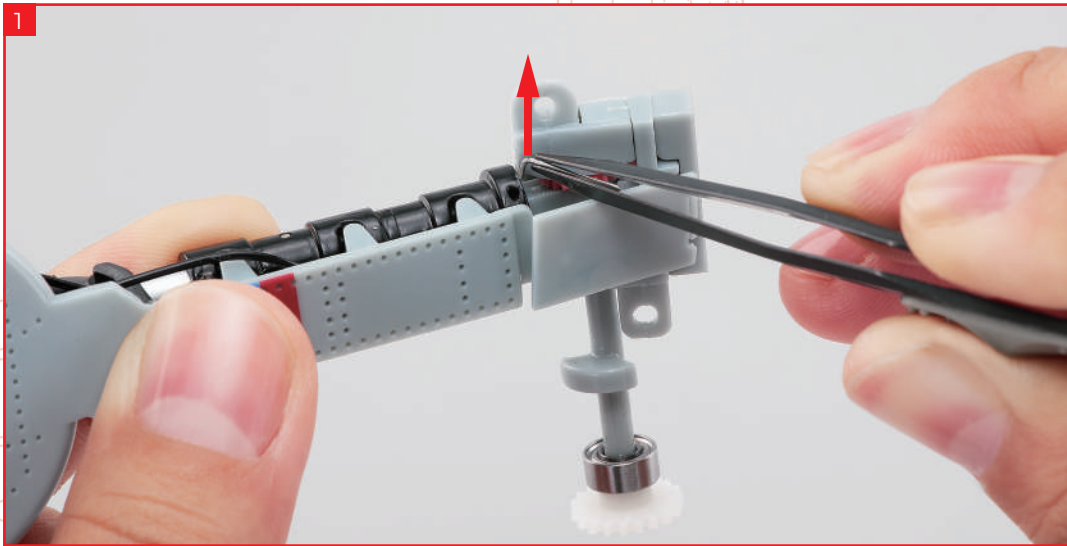
Place the washer **041-11** over the right screw hole. Replace the switch, carefully sandwiching the washer in place.



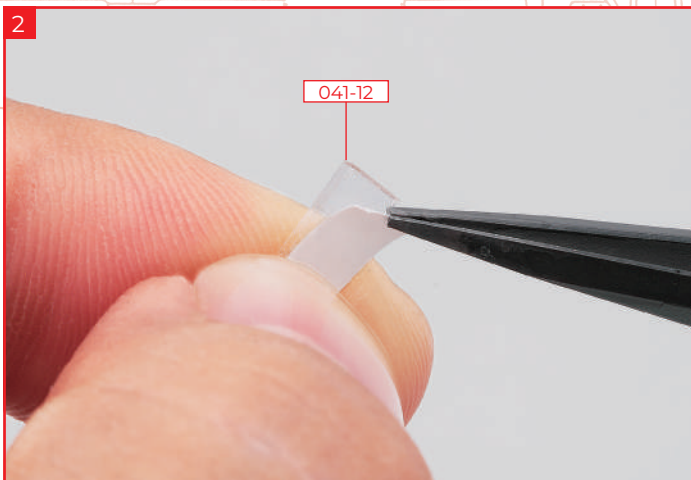
Re-fix the left main landing gear switch **033-03** with the two screws taking care not to shift the washer.

STEP 2

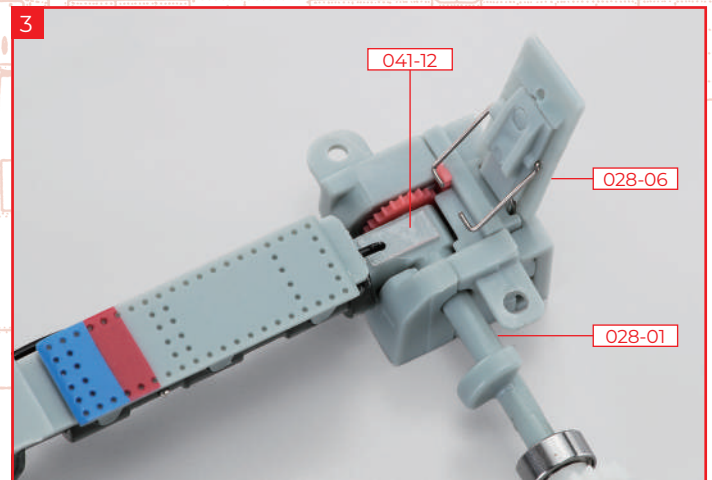
Adjusting the angle of the left main landing gear



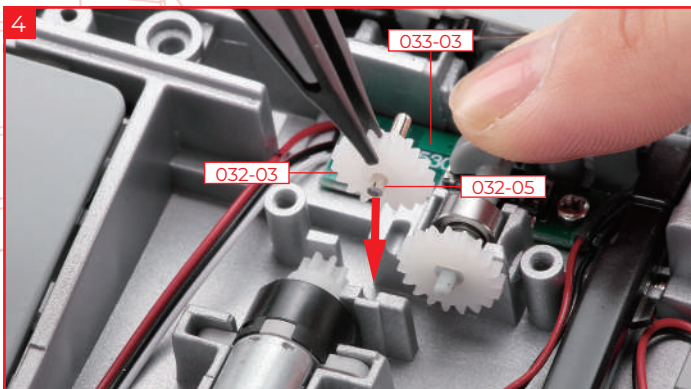
Taking the main landing gear removed in STEP 1, remove the metal fittings of the cover on both sides.



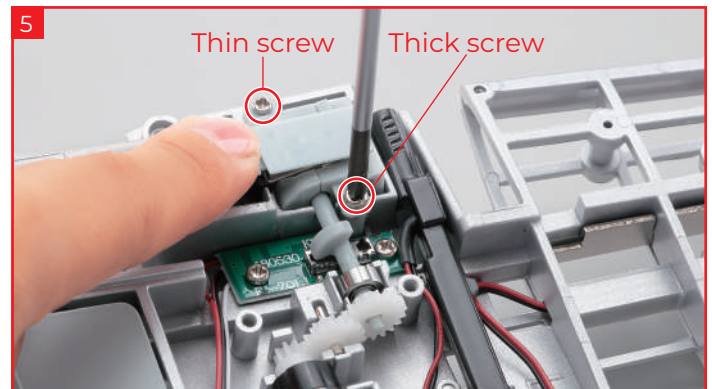
Remove the backing from liner 041-12 using tweezers.



Attach the liner 041-12 to the shock absorber 028-01 in the position shown and then replace the metal fittings removed in 1.



Fit the landing gear into its original position on the frame. If it isn't fitting correctly, remove the gear 032-03 and shaft 032-05, then fit the landing gear again before returning 032-03/032-05 to its position, pressing the shaft to ensure it comes into contact with the switch.



Hold the left main landing gear so that it doesn't float, and fix it with the two screws. Be careful not to make a mistake, as the front is a thin screw and the back is a thick screw.

Stage 42: Right Landing Gear Base and Wheel

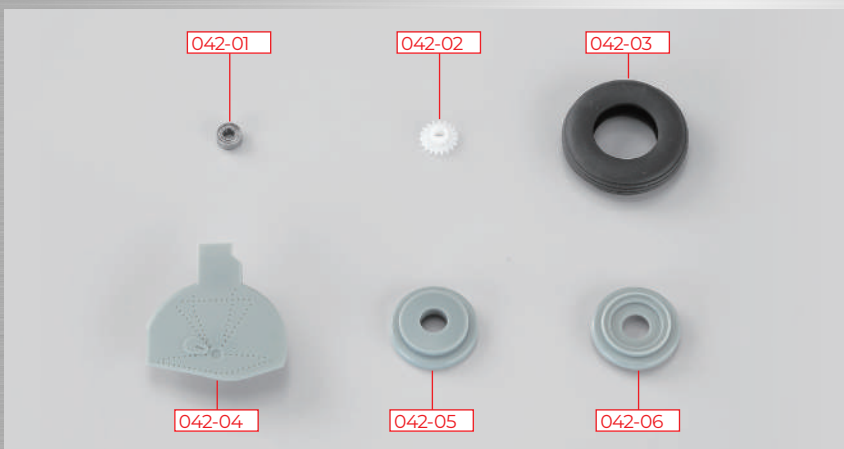


In this stage we'll add another gear to the right landing gear base and assemble the wheel. Looking at the exquisitely designed landing gear retraction system you really start to feel like you're looking at the real thing, even at this incomplete stage.

Stage 42 Assembly

Right Landing Gear Base & Wheel

STAGE 42 PARTS



You will also need: tweezers, superglue
 *042-04 will not be used in this stage. Keep it in a safe place until required at a later stage.

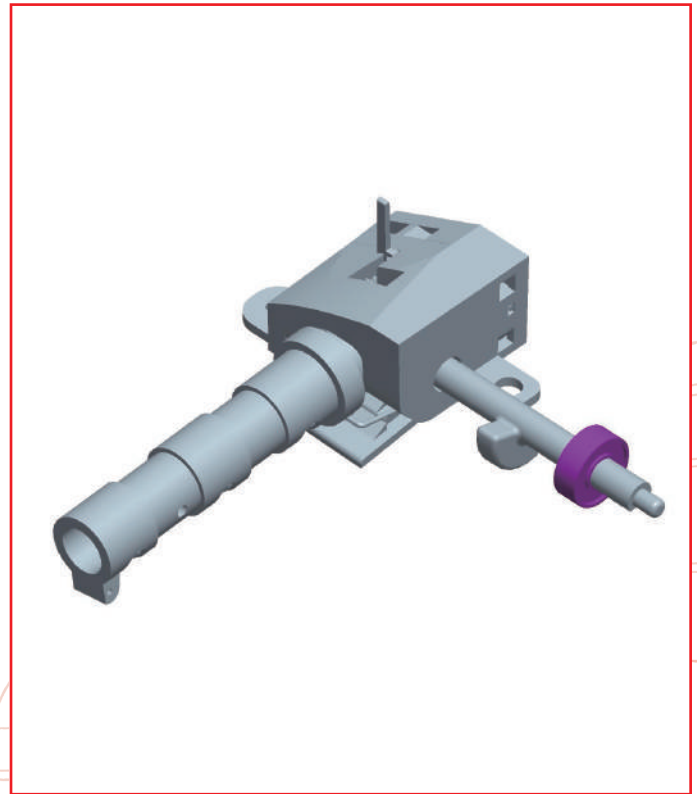
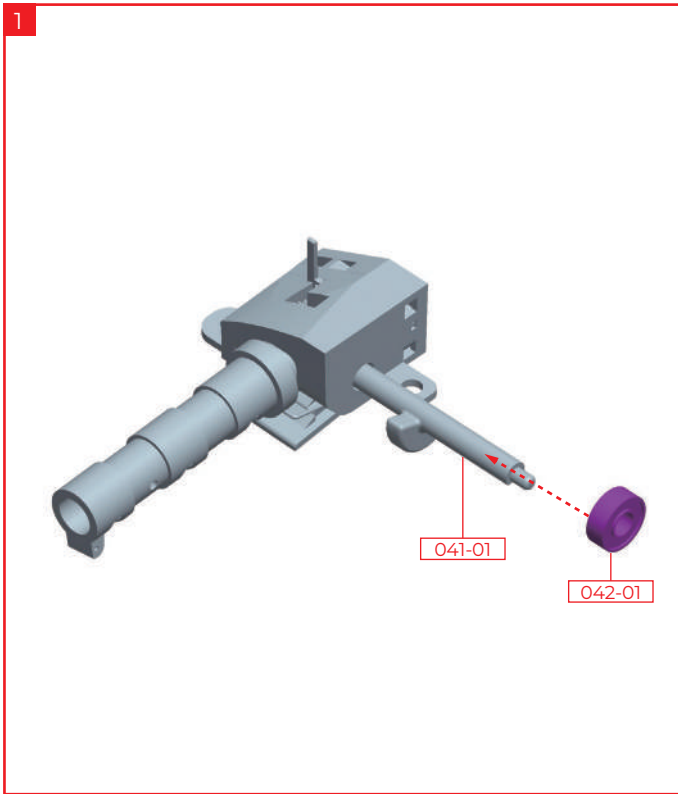
PARTS LIST

	Part	No.	Material
<input type="checkbox"/>	042-01	1	Steel
<input type="checkbox"/>	042-02	1	Plastic
<input type="checkbox"/>	042-03	1	PVC
<input type="checkbox"/>	042-04	1	ABS resin
<input type="checkbox"/>	042-05	1	ABS resin
<input type="checkbox"/>	042-06	1	ABS resin

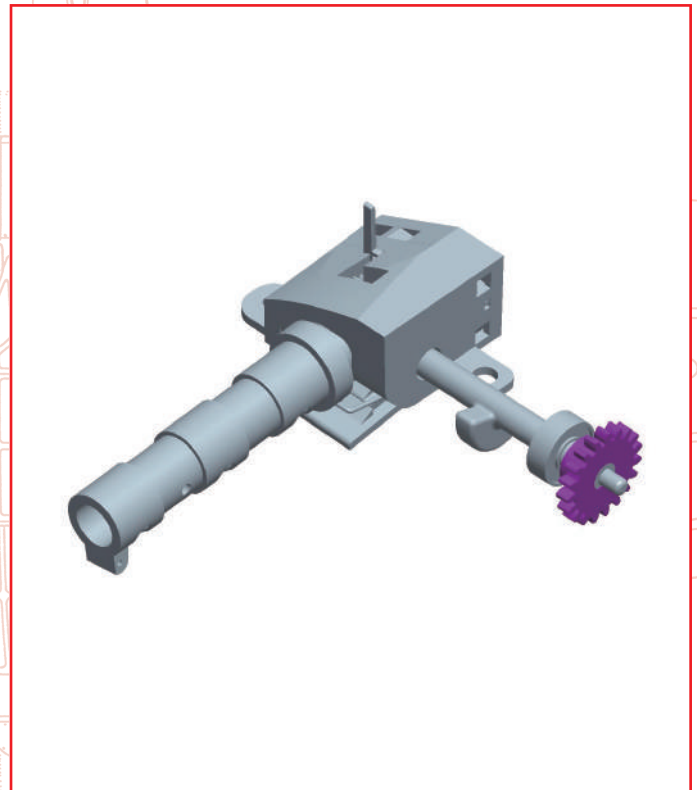
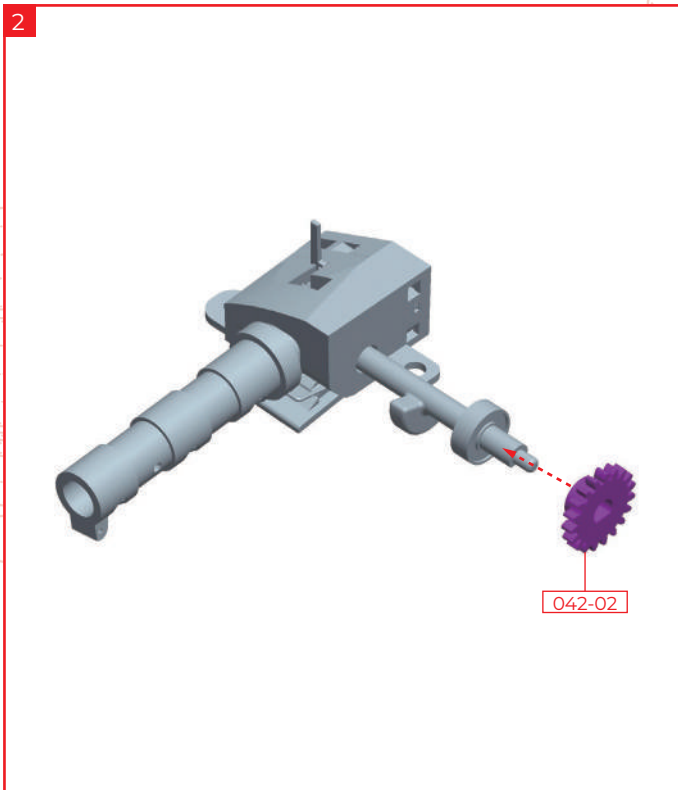
STEP 1

Assembling the right landing gear

← : Glue
- - - : Don't Glue



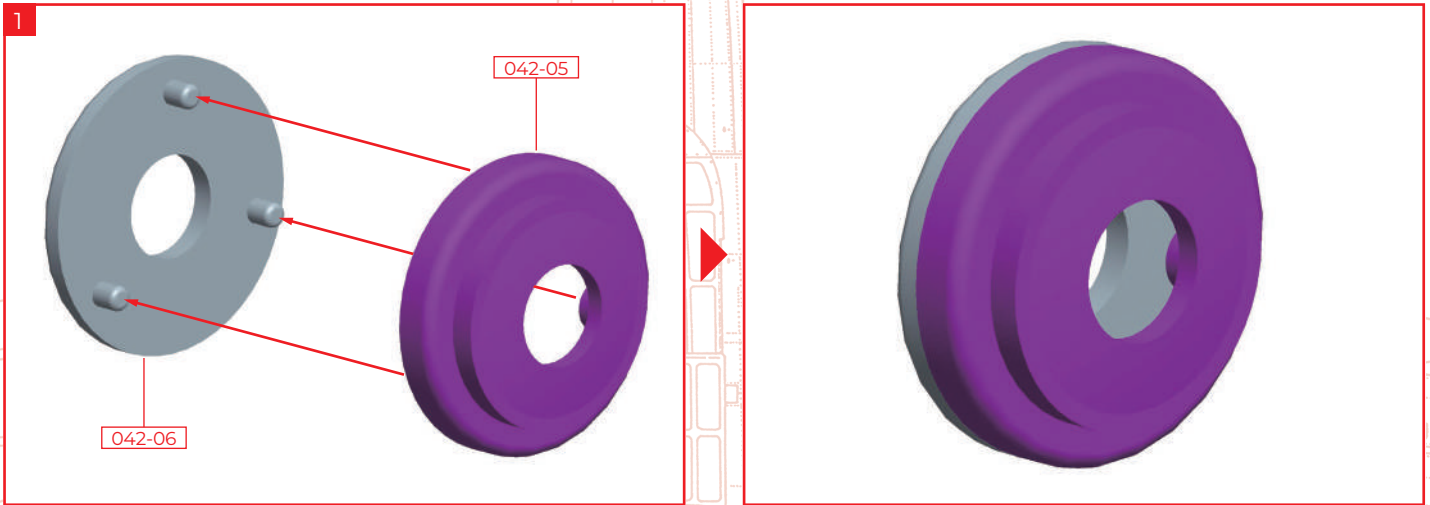
Fit the bearing 042-01 onto the shaft of the shock absorber 041-01 assembled in stage 41.



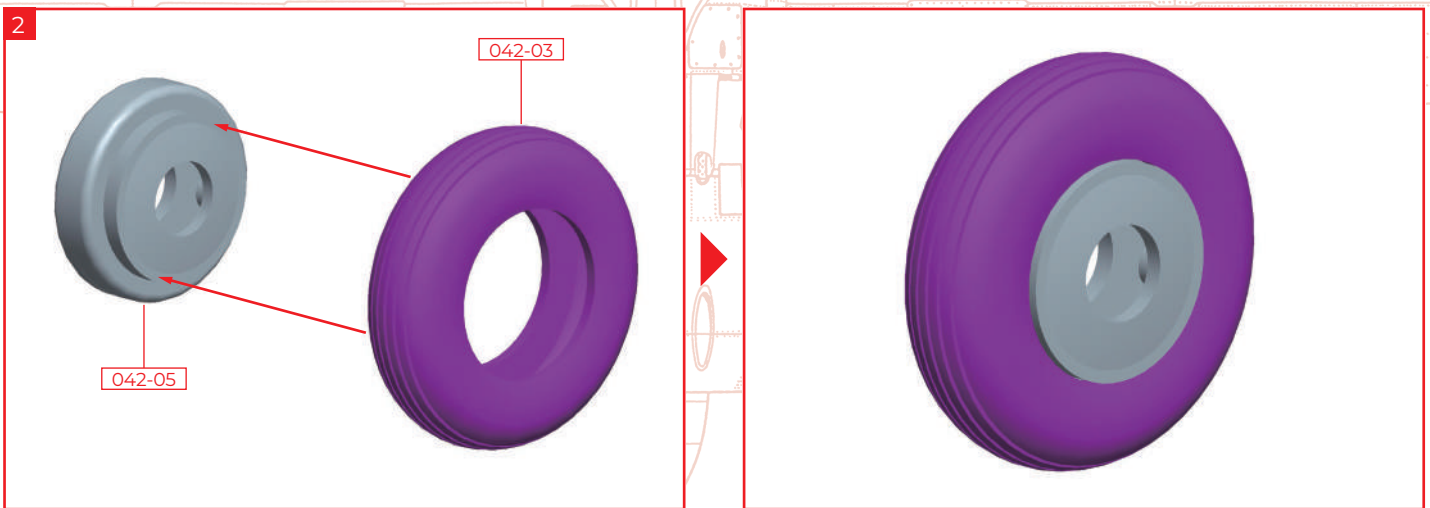
Fit the gear 042-02 onto the shaft 041-01.

STEP 2

Assembling the wheel

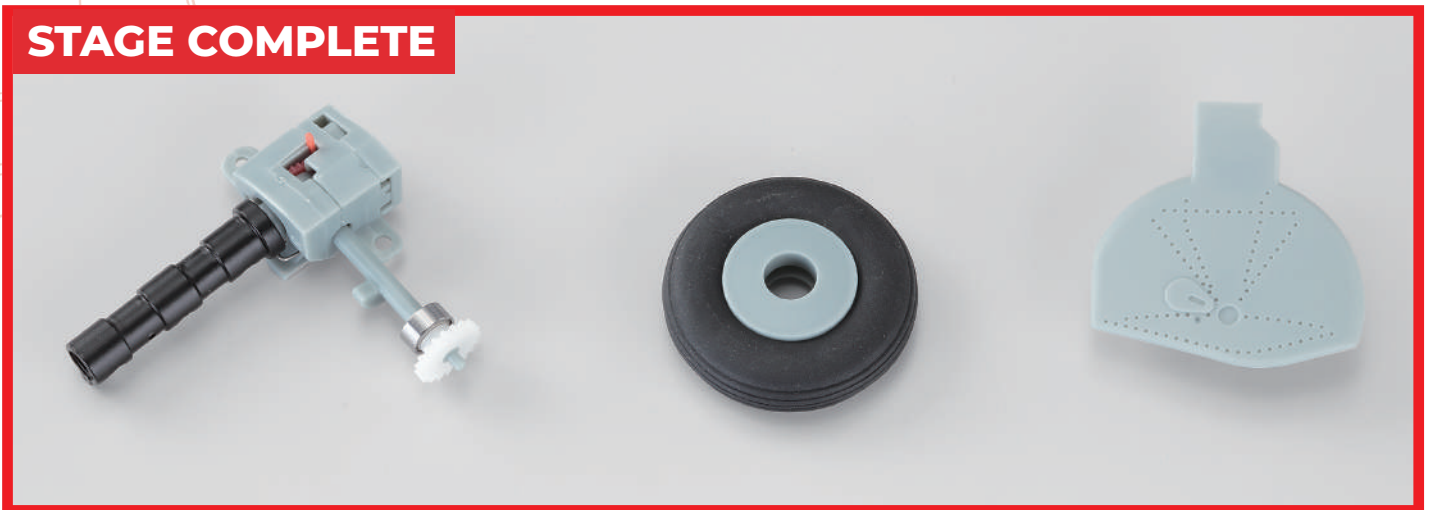


Align the pins on 042-06 with the holes on 042-05 and glue them together to form the wheel.



Fit the tyre 042-03 to the wheel assembled in 1.

STAGE COMPLETE



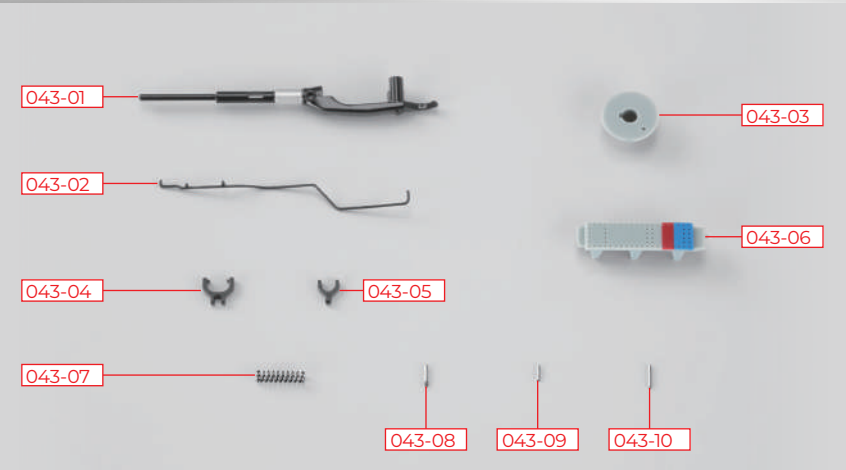
Stage 43: Assembling the Right Landing Gear (1)



In this stage we'll be assembling the part of the landing gear which absorbs the actual impact of landing the aircraft.

Stage 43 Assembly
 Right Landing Gear

STAGE 43 PARTS



PARTS LIST

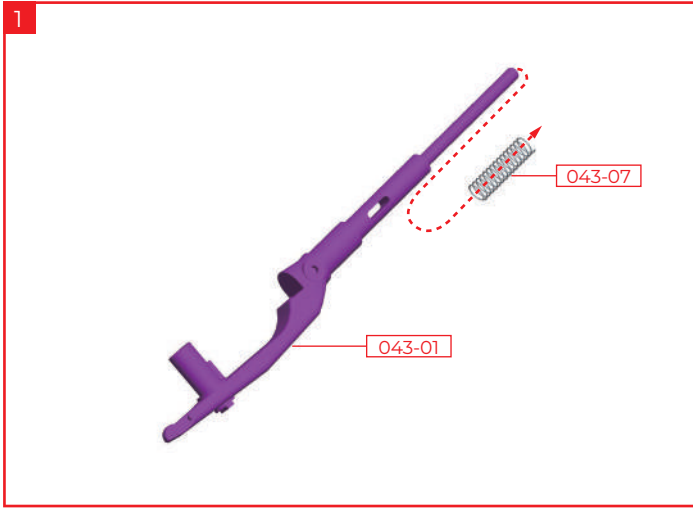
	Part	No.	Material
<input type="checkbox"/>	043-01	1	Die-cast
<input type="checkbox"/>	043-02	1	ABS resin
<input type="checkbox"/>	043-03	1	ABS resin
<input type="checkbox"/>	043-04	1	ABS resin
<input type="checkbox"/>	043-05	1	ABS resin
<input type="checkbox"/>	043-06	1	ABS resin
<input type="checkbox"/>	043-07	1	Steel
<input type="checkbox"/>	043-08	1	Steel
<input type="checkbox"/>	043-09	1	Steel
<input type="checkbox"/>	043-10	1	Steel

You will also need: superglue, tweezers.

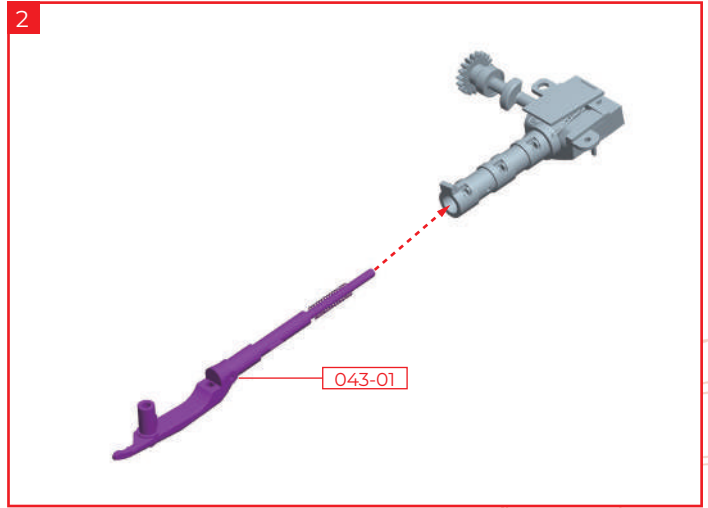
STEP 1

Assembling the right landing gear

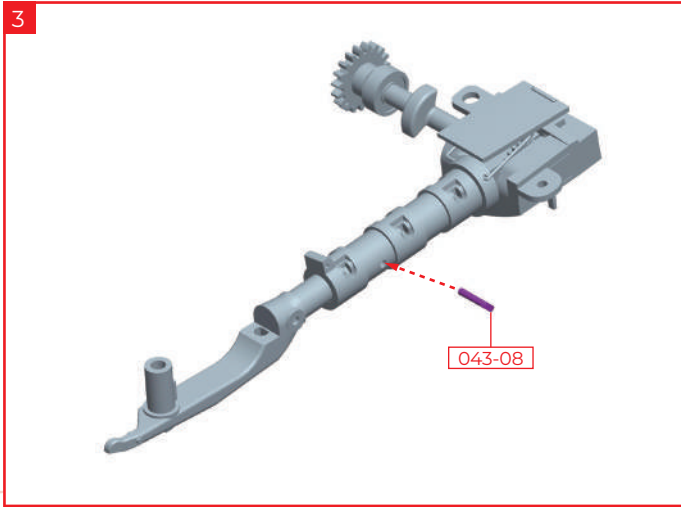
← : Glue
 - - - : Don't Glue



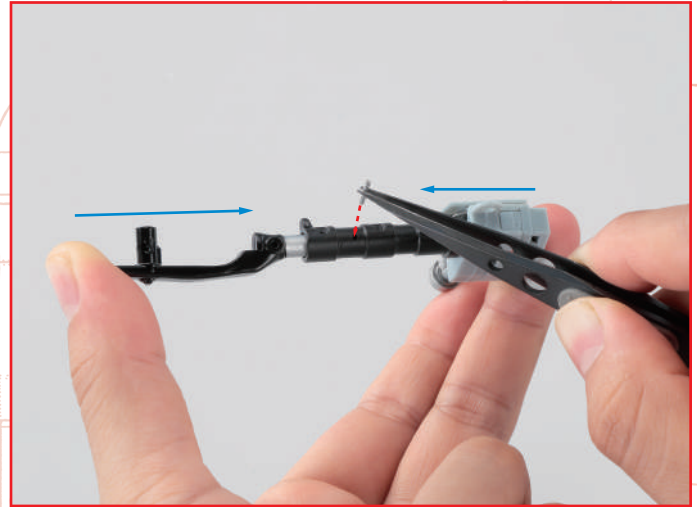
Push the spring 043-07 onto the support column 043-01.



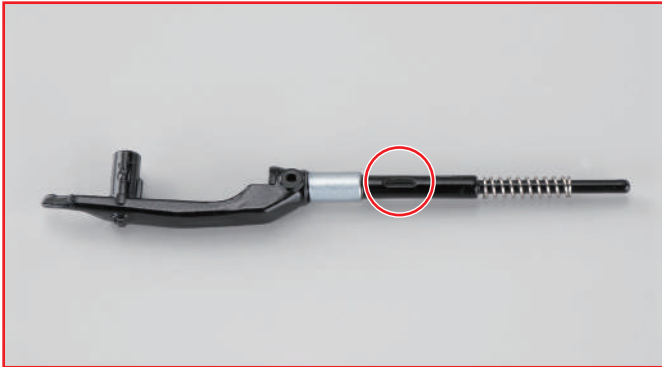
Insert the support assembled in 1 into the base of the right landing gear assembled in stage 42.



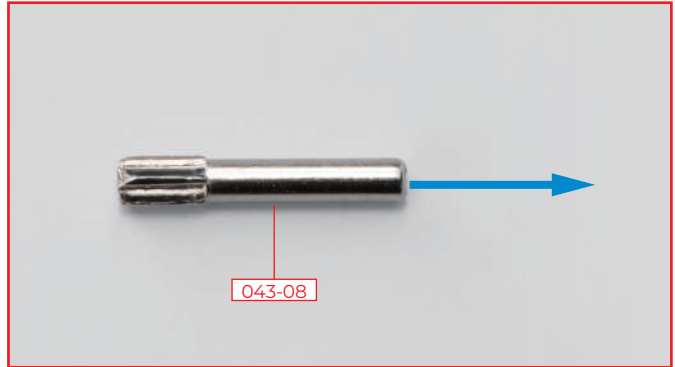
Push the parts together and insert the locking pin 043-08 into the hole at the base of the right landing gear.



NOTE

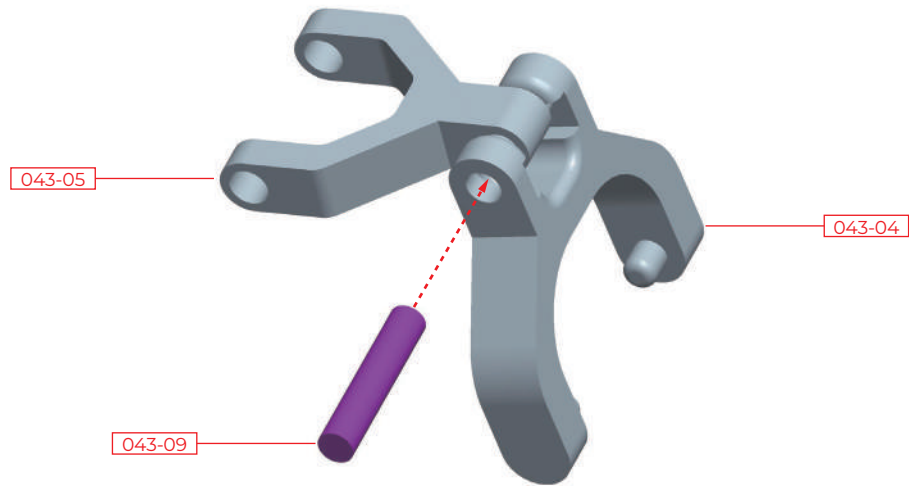


When the pin 043-08 is inserted into the groove on the right landing gear support 043-01, the support will not come off.



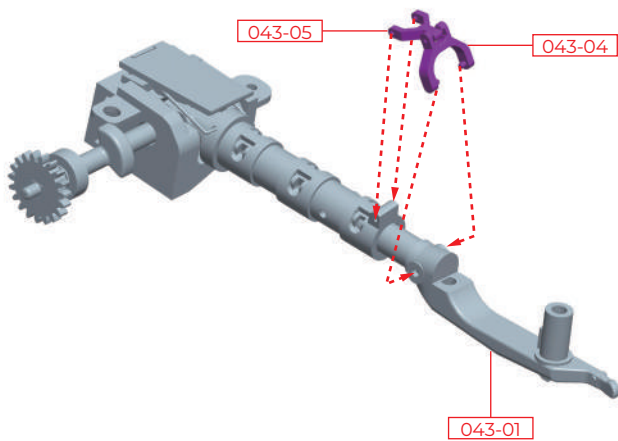
Insert the pin 043-08 with the smooth end first. Push until the pin is completely inside the hole.

4



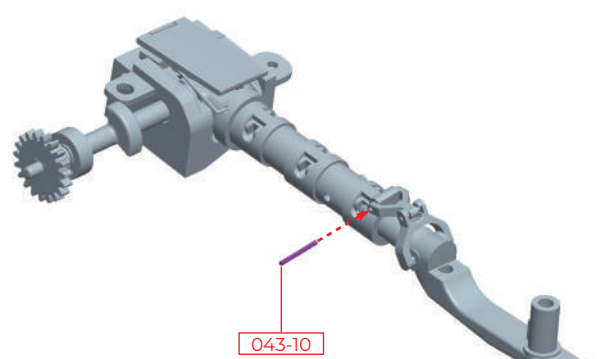
Combine the lower arm 043-04 and the upper arm 043-05 and fix them with pin 043-09.

5



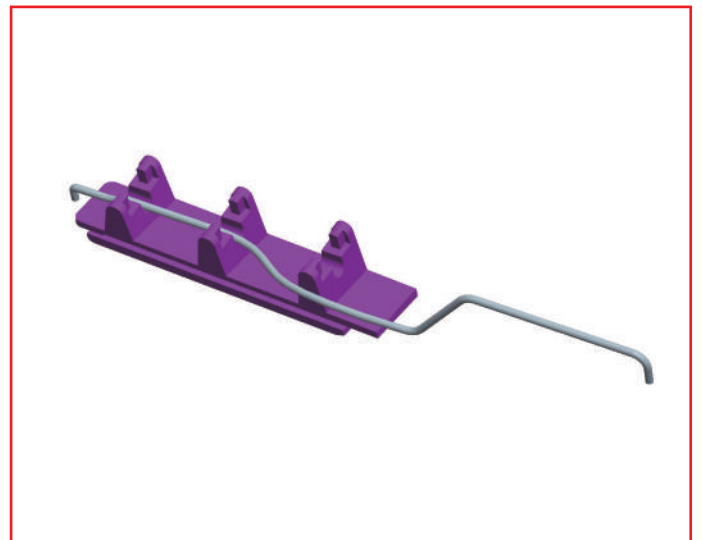
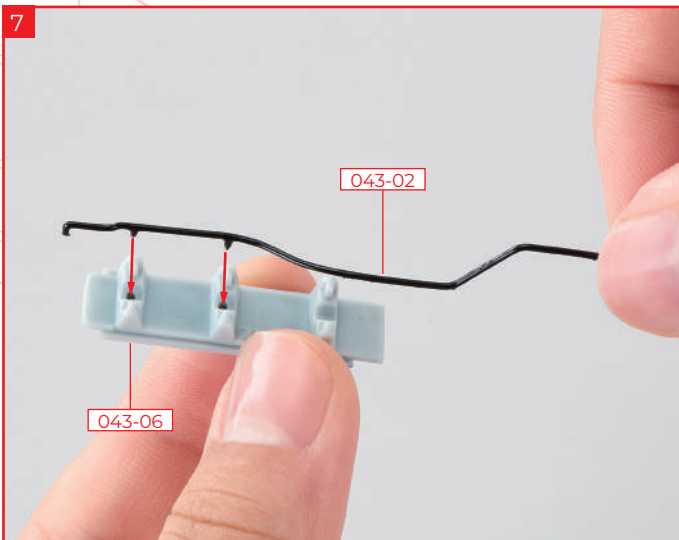
Fit the lower arm 043-04 of the arms assembled in 4, into the support column 043-01.

6

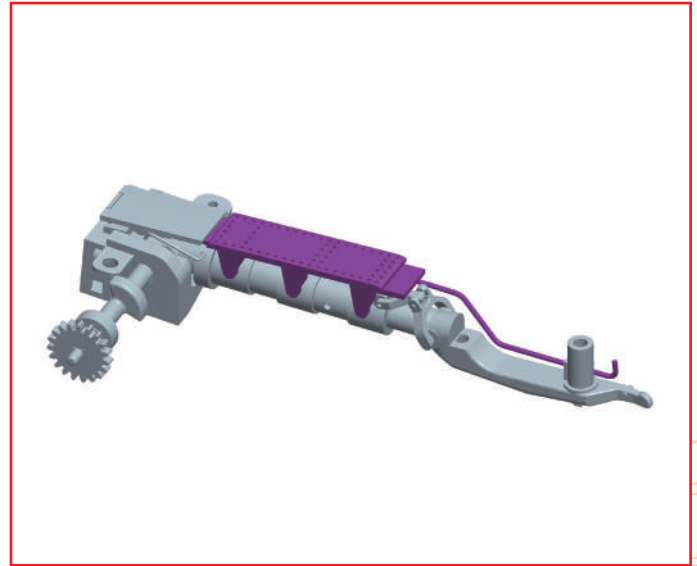
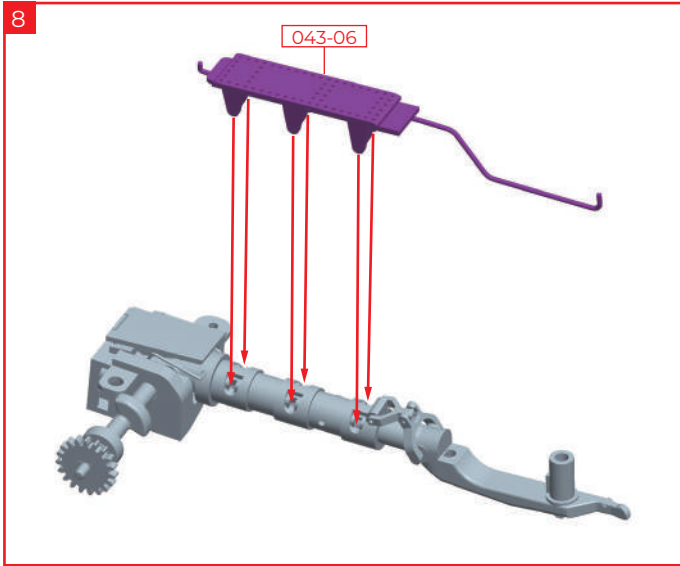


Fit the upper arm 043-05 into the tip of the right main landing gear and insert pin 043-10 to fix it.

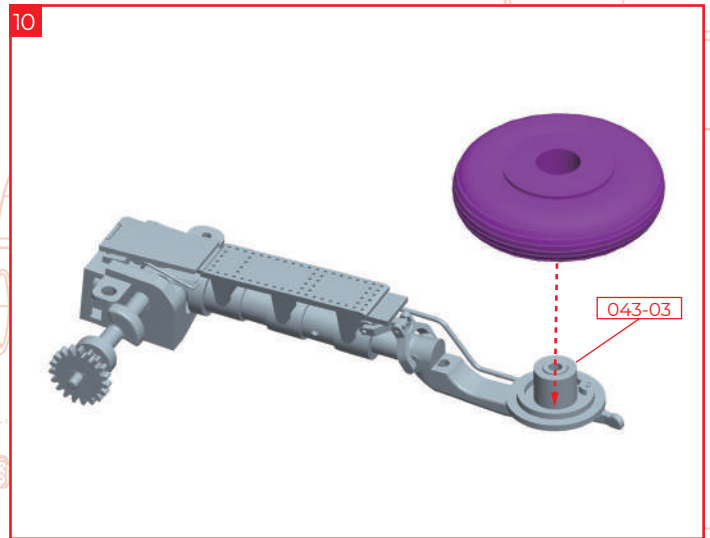
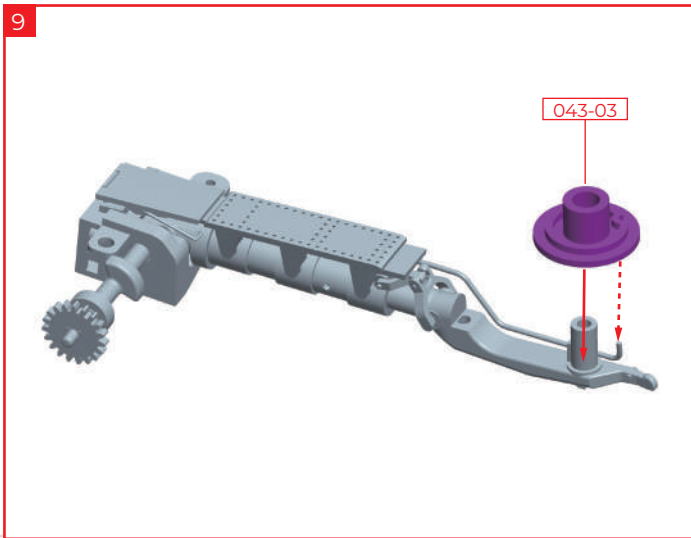
7



Glue the lugs on the brake line 043-02 to the two holes in the right landing gear cover 043-06.

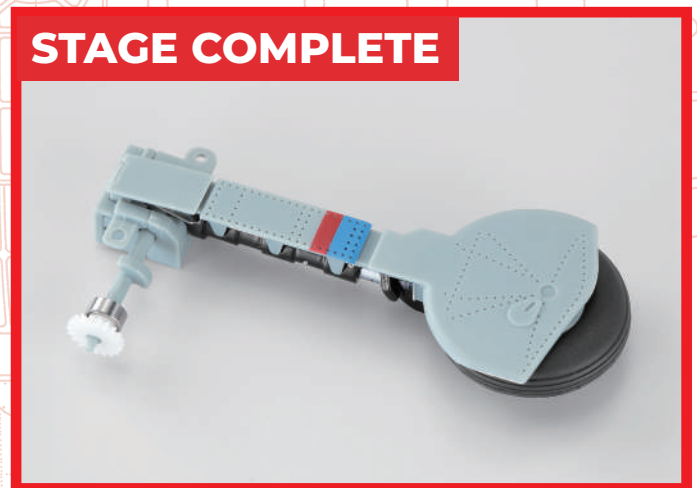
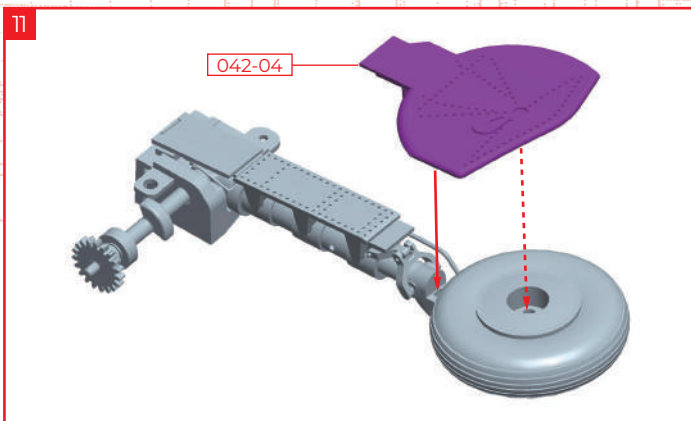


Glue the six lugs on the right landing gear cover **043-06** assembled in 7 to the right landing gear base.



Glue the right brake disc **043-03** to the support column **043-01**, and insert the tip of the brake line **043-02** into the hole on **043-03**.

Fit the wheel assembled in stage 42 onto the right brake disc **043-03**. Do not glue.



Glue the lugs on the right tyre cover **042-04** that came in stage 42 to the hole in the support column. Be careful not to glue it to the landing gear cover **043-06**.

STAGE COMPLETE

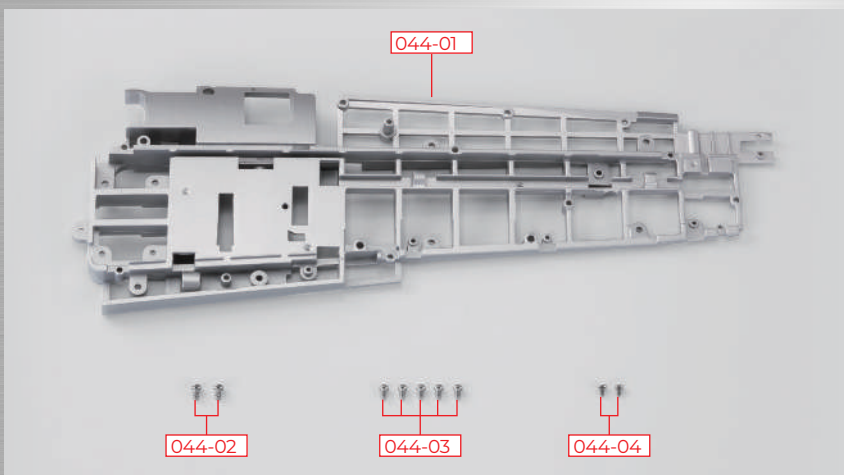
Stage 44: Right Wing Frame



Stage 44 Assembly
 Right Wing Frame

In the next stage we'll start assembling the right wing. We'll firstly attach the frame which will act as the skeleton for all of the future parts we'll attach.

STAGE 44 PARTS



PARTS LIST

	Part	No.	Material
<input type="checkbox"/>	044-01	1	ABS resin
<input type="checkbox"/>	044-02	2 (1 spare)	Steel
<input type="checkbox"/>	044-03	5 (1 spare)	Steel
<input type="checkbox"/>	044-04	2 (1 spare)	Steel

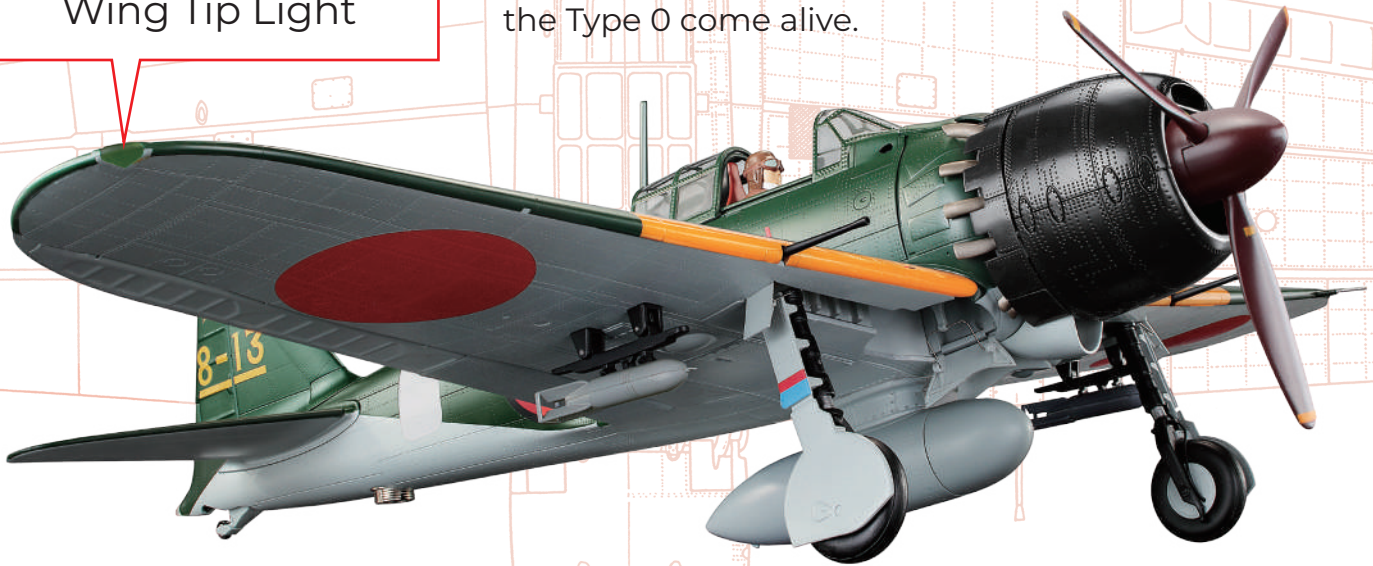
Unpack this part and move straight on to the next stage for assembly.

Stage 45: Assembling the Right Wing Tip Light

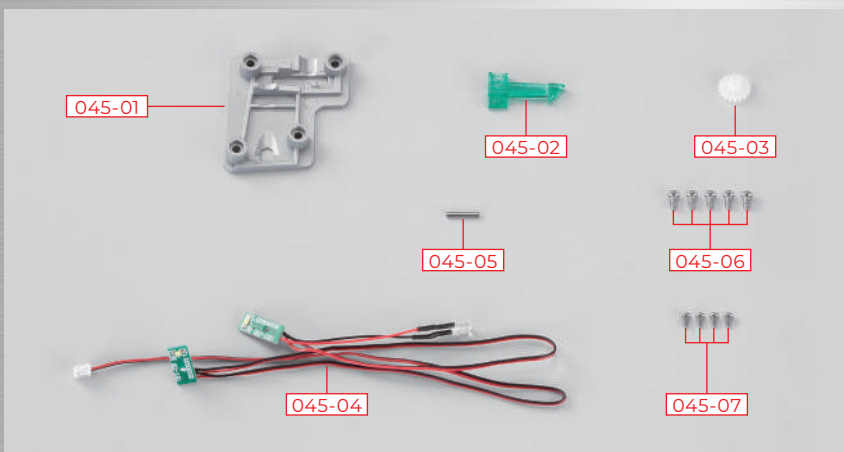
Stage 45 Assembly

Wing Tip Light

In this stage we'll carry on working on the right wing, inserting gears and adding the wing tip light. Be extra careful as this involves electronic components to make the Type 0 come alive.



STAGE 45 PARTS



You will also need: screwdriver, tweezers.

*045-01 & 045-06 will not be used in this stage. Keep them in a safe place.

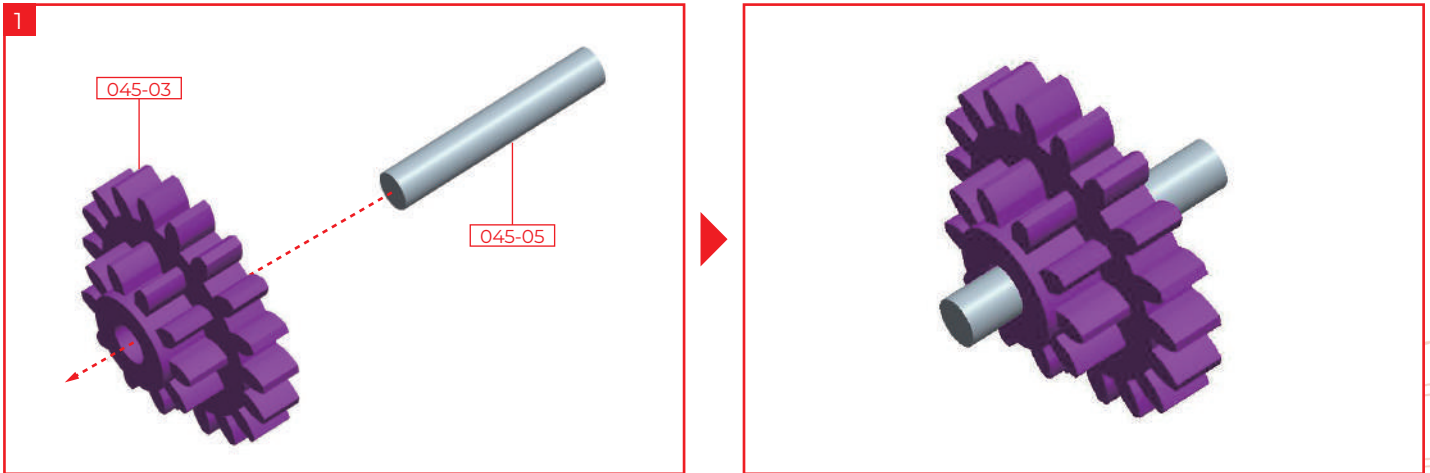
PARTS LIST

	Part	No.	Material
<input type="checkbox"/>	045-01	1	ABS resin
<input type="checkbox"/>	045-02	1	Plastic
<input type="checkbox"/>	045-03	1	Plastic
<input type="checkbox"/>	045-04	1	LED
<input type="checkbox"/>	045-05	1	Steel
<input type="checkbox"/>	045-06	5 (1 spare)	Steel
<input type="checkbox"/>	045-07	4 (1 spare)	Steel

STEP 1

Assembling the gear complex

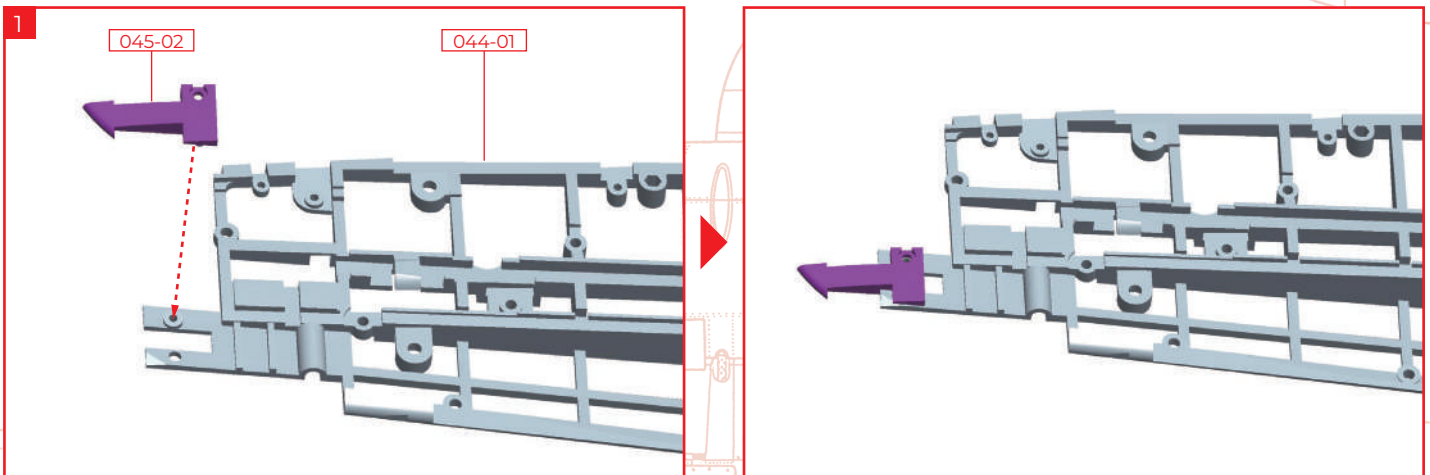
← : Glue
- - - : Don't Glue



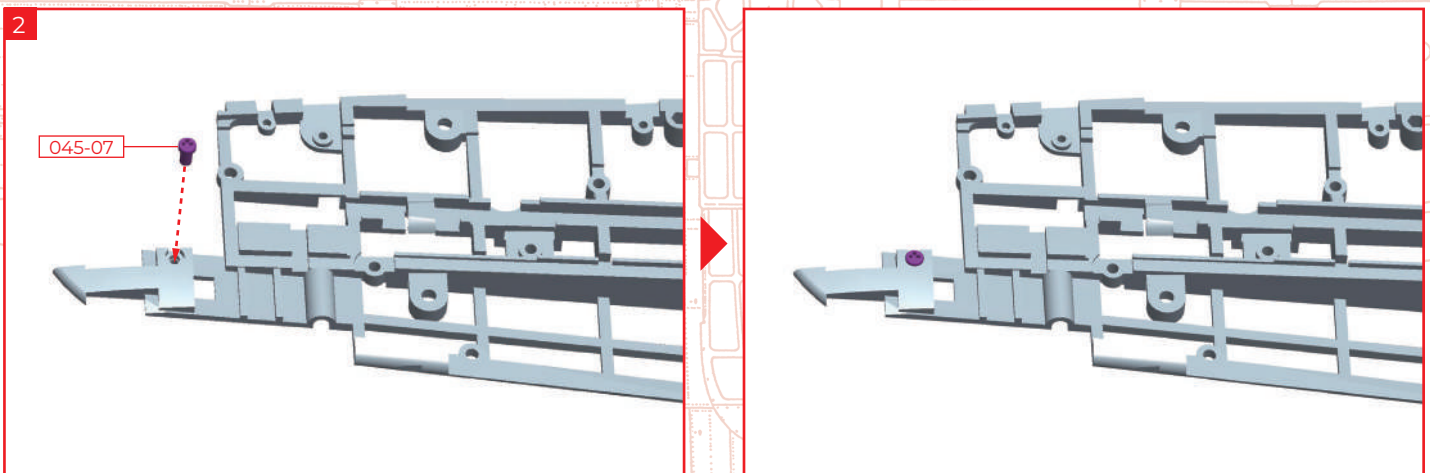
Insert the shaft 045-05 into the gear 045-03. Keep it in a safe place until required in a later stage.

STEP 2

Attaching the wing tip light (R)

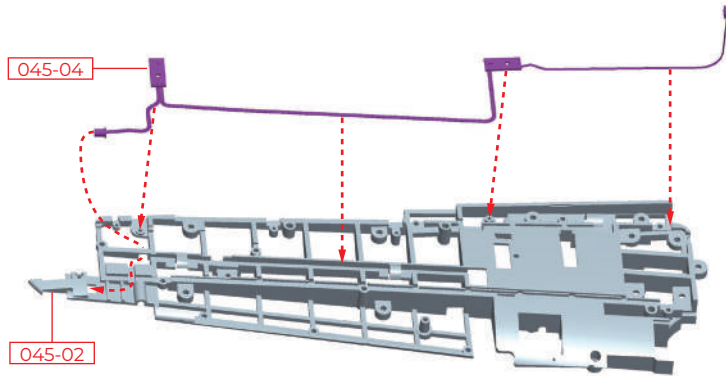


Fit the wing tip light 045-02 onto the right wing frame 044-01 that came with stage 44.

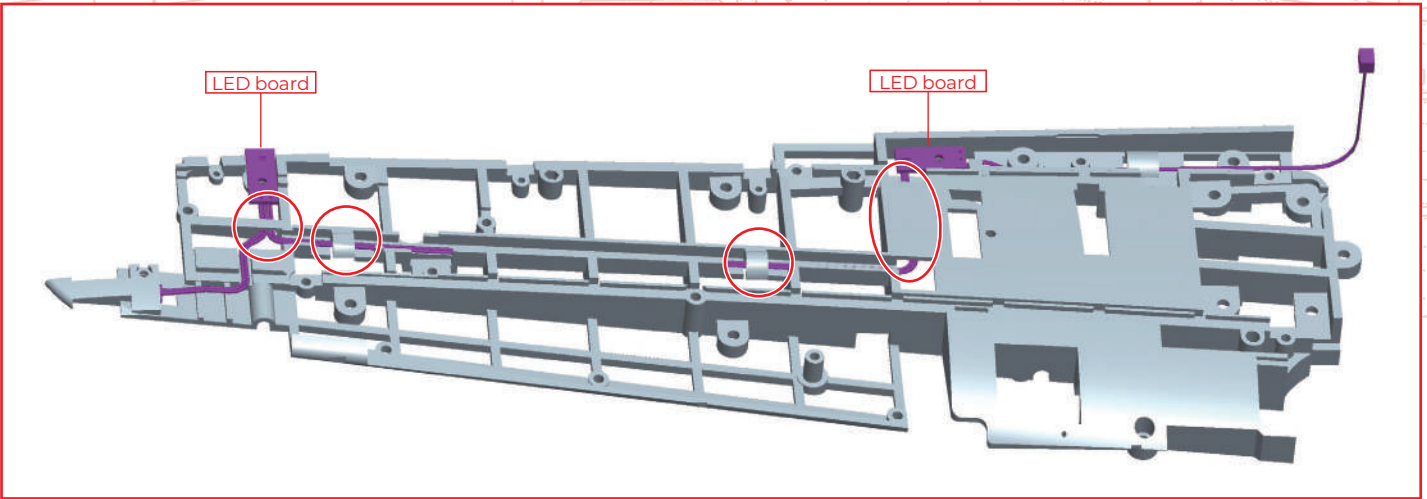


Fix in place with 1 x 045-07 screw.

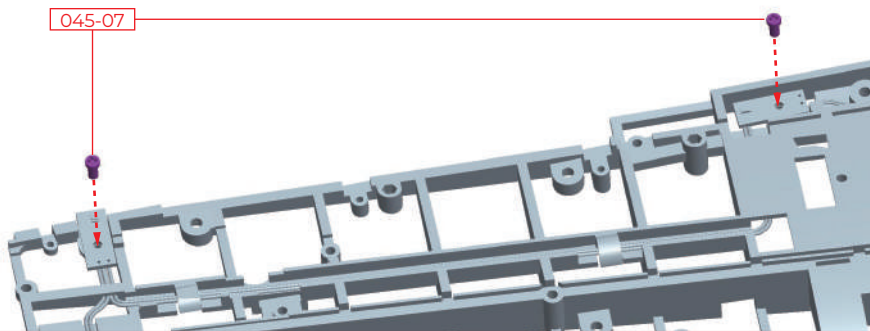
3



Pass the LED wire 045-04 through the wing frame and insert the LED at the end into the wing tip 045-02. The wire runs under the frame in four places, shown circled in the diagram below. Check that the wire runs around any screw holes.

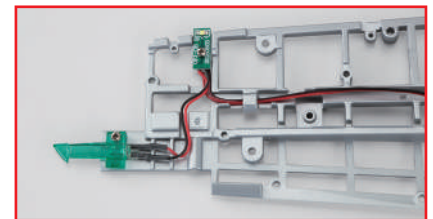


4



Fix the two LED boards on 045-04 in place using 2 x 045-07 screws.

NOTE



The two LED boards 045-04 should be attached with the writing facing upwards.

STAGE COMPLETE

