

MITSUBISHI A6M ZERO FIGHTER



Pack 04 | 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 fourth model pack, you will assemble:

STAGE 27: COCKPIT ASSEMBLY

STAGE 28: LEFT MAIN LANDING GEAR BASE

STAGE 29: LEFT MAIN LANDING GEAR BASE
AND WHEEL

STAGE 30: ASSEMBLING THE LEFT MAIN
LANDING GEAR (1)

STAGE 31: ASSEMBLING THE LEFT MAIN
LANDING GEAR (2)

STAGE 32: ASSEMBLING THE LEFT WING

STAGE 33: ATTACHING A TYPE 99 CANNON TO
THE WING

STAGE 34: INSTALLING THE LEFT MAIN MOTOR

STAGE 35: ASSEMBLING THE MAIN COVERS

STAGE 36: ATTACHING THE LANDING GEAR
COVERS



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.

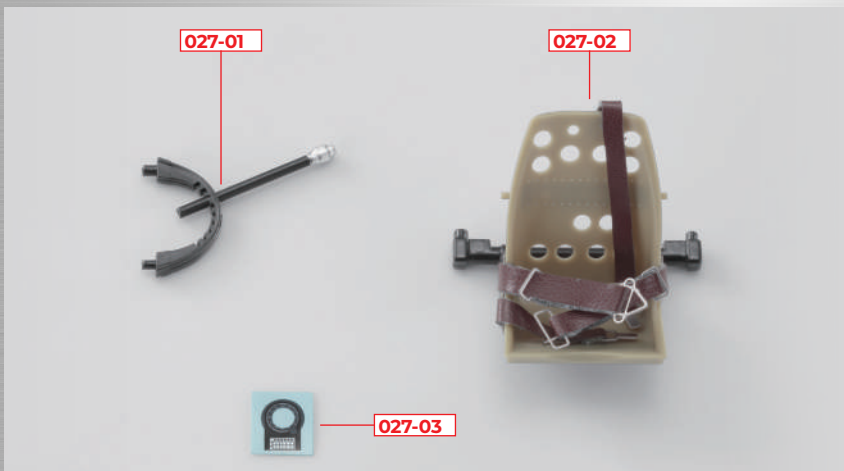
Stage 27: Cockpit assembly

: In this stage we'll be affixing the instrument panel decals. Then, after attaching the pilot seat and seat adjustment lever to the rear bulkhead we'll have finished assembling the

Stage 27 Assembly
 Cockpit



STAGE 27 PARTS



PARTS LIST

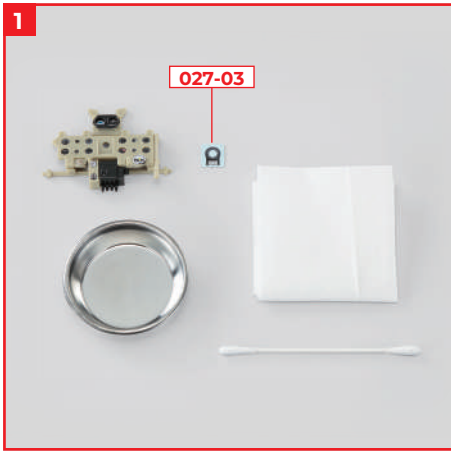
	PART	No.	MATERIAL
<input type="checkbox"/>	027-01	1	ABS resin
<input type="checkbox"/>	027-02	1	ABS resin Die-cast
<input type="checkbox"/>	027-03	1	Decal

You will also need: superglue, small dish of water, tissue, cotton bud, tweezers

STEP 1

Attaching decals

← : Glue
 - - - : Don't Glue



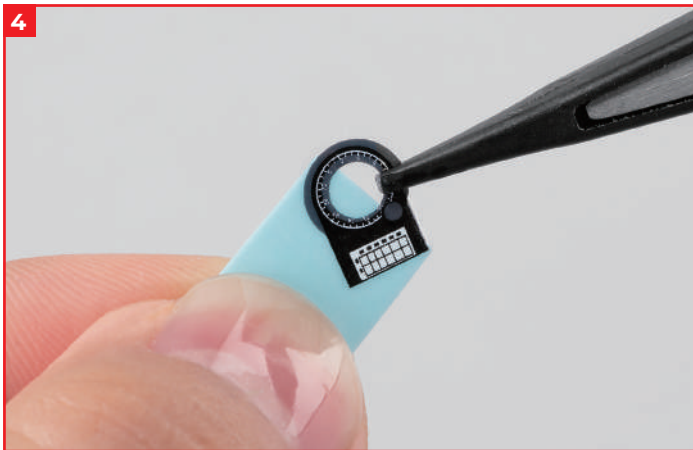
Attach decal **027-03** to the instrument panel assembled in stage 21. Prepare a small dish of water, a tissue, and cotton bud.



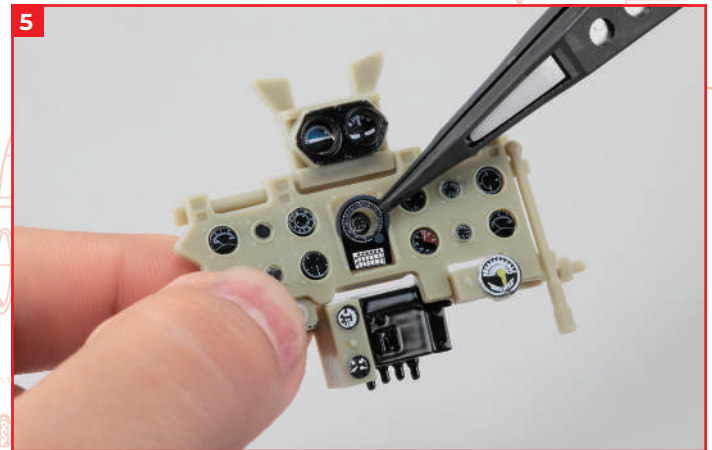
Float the decal **027-03** in the dish of water with the printed side facing up and wait for about 10 seconds.



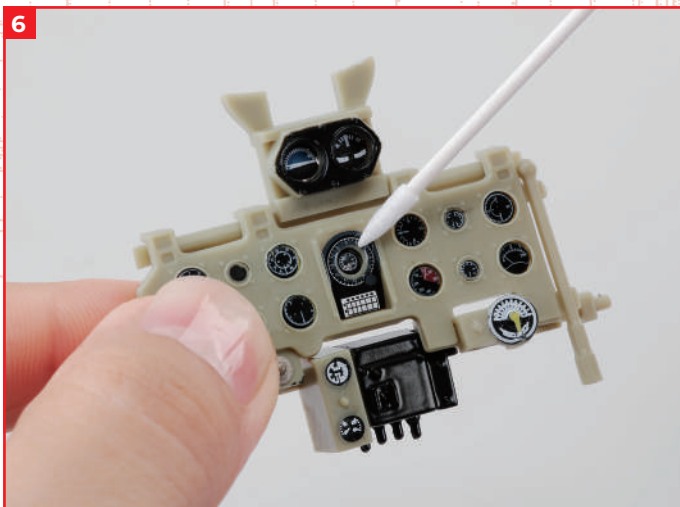
Remove the decal from the water using tweezers and place it on a tissue to absorb excess water.



Slide the decal with your finger and grab the part that comes off the mount with tweezers. If it's difficult to slide, the glue hasn't melted, so put it in water for a few seconds and try again.



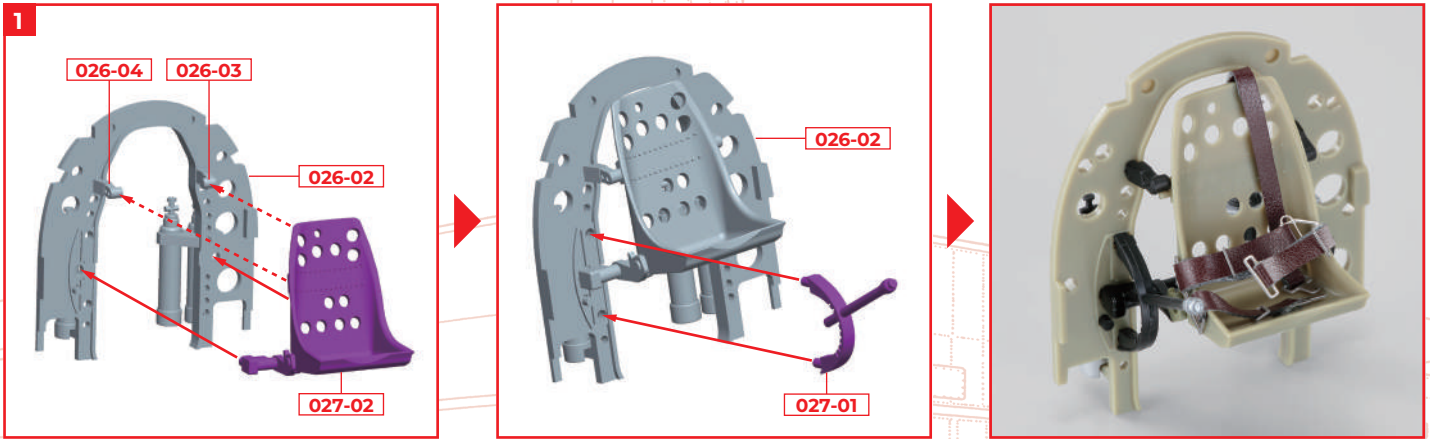
Attach decal **027-03** to the compass in the centre of the instrument panel.



Fine-tune the position with a cotton bud so that the compass is in the centre of the decal circle, and absorb excess water.

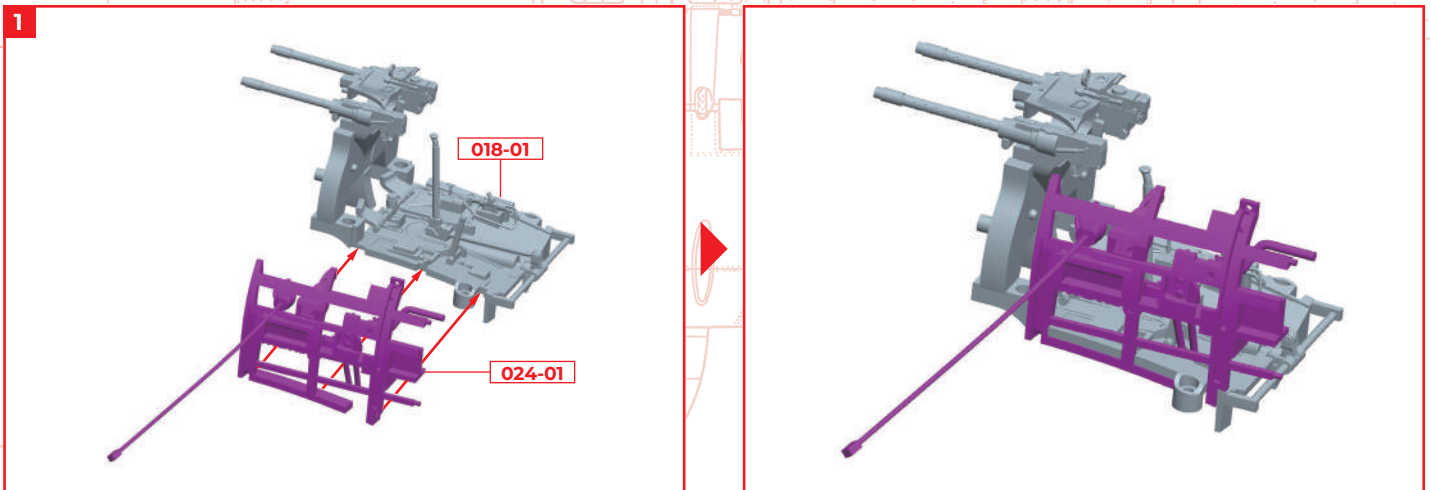


STEP 2 Installing the pilot seat and adjustment lever

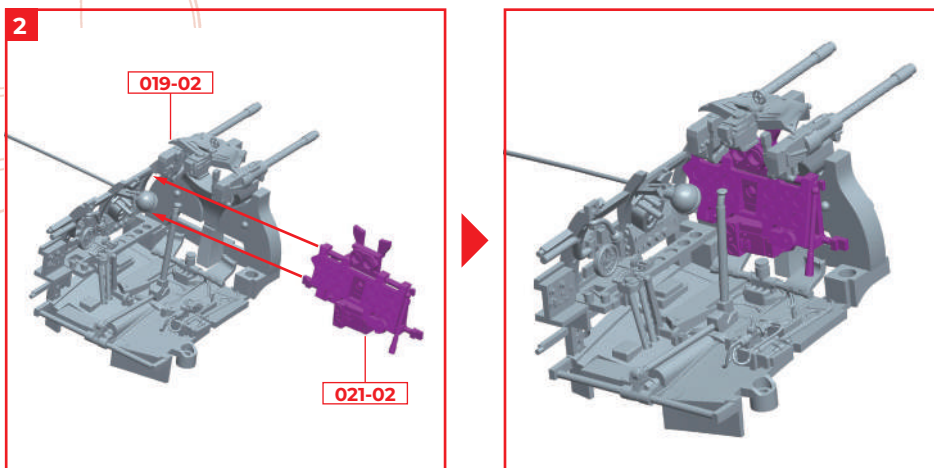


Insert the protrusions of seat **027-02** into the holes on the seat frames **026-03** & **026-04** assembled in stage 26, and glue the lower lugs into the cockpit partition. Then glue the seat adjustment lever **027-01** to the cockpit partition.

STEP 3 Assembling the cockpit frame



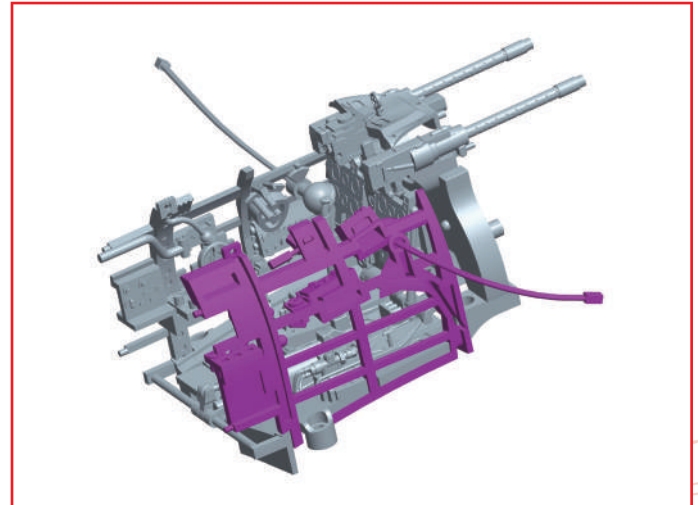
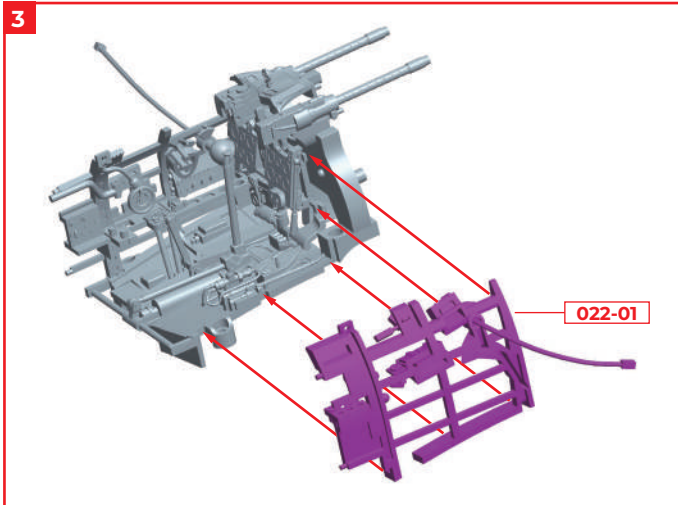
Glue the three tabs on the left side frame assembled in stage 25 to the three corresponding notches on the cockpit floor.



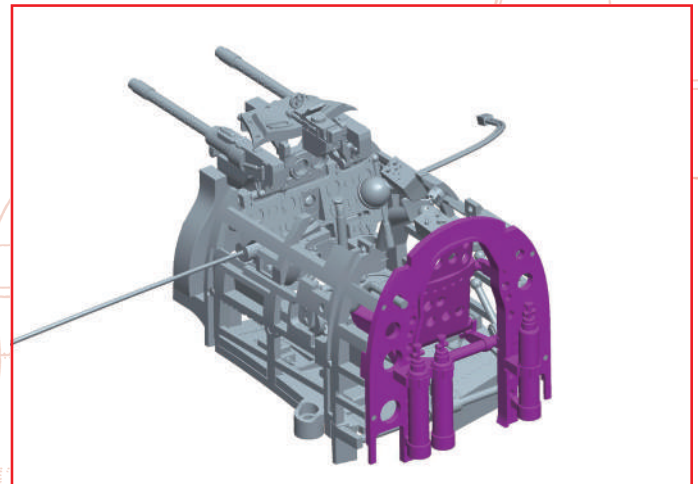
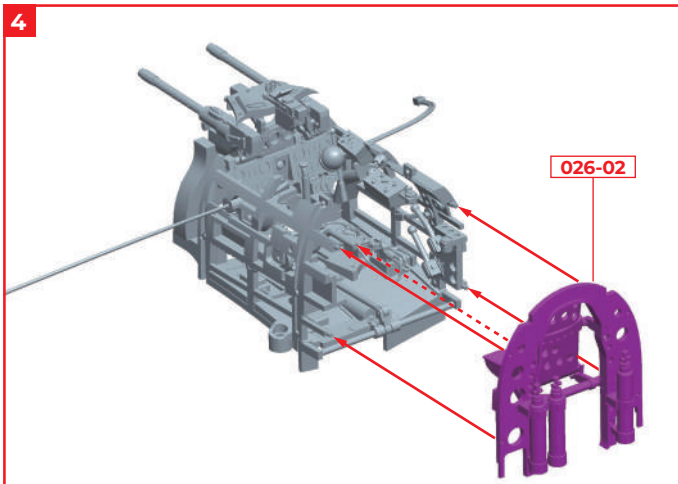
Glue the two lugs on the instrument panel completed in STEP 1 to the two holes on the left side frame of the cockpit.

NOTE

Push the two lugs on the instrument panel (circled right) into the two holes in the left cockpit frame (circled left).

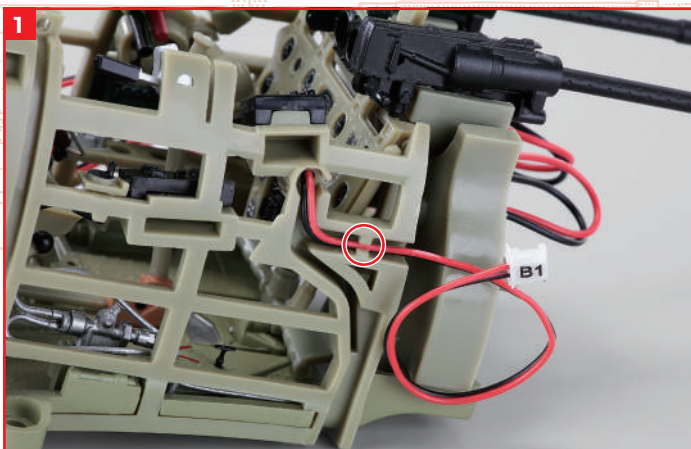


Glue the three tabs on the right side frame assembled in stage 24 to the three notches on the cockpit floor, and glue the two lugs on the instrument panel into the two holes on the right side frame.

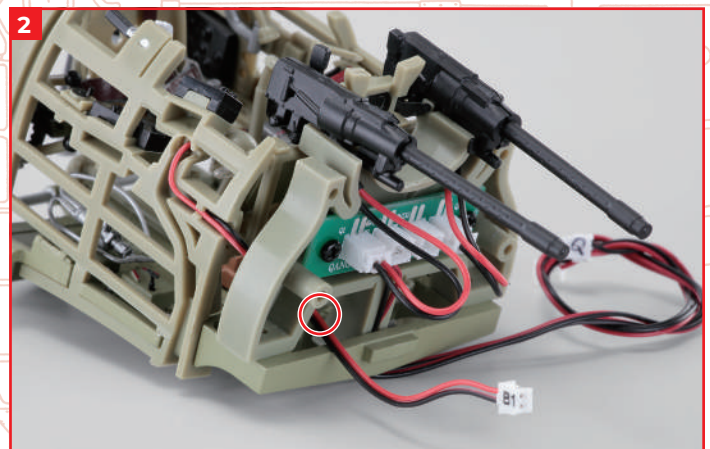


Align and glue the holes in the cockpit partition assembled in STEP 2 to the two protrusions on each of the left and right side frames. A little extra glue can be applied to adjoining surfaces in 1-4. Our video series shows you how and demonstrates the gluing technique. [Click here to watch.](#)

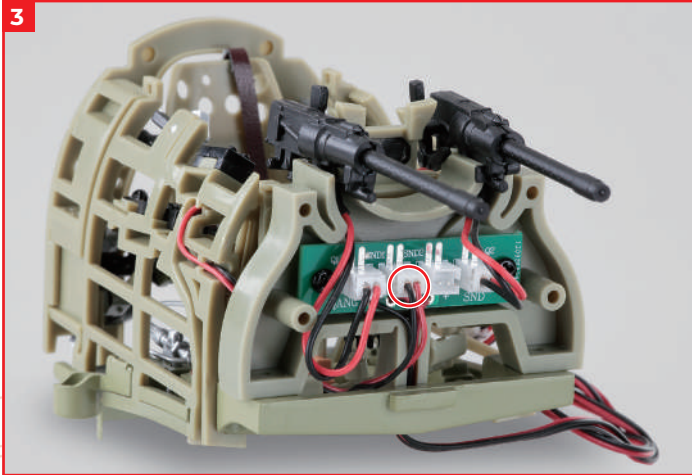
STEP 4 Wiring everything up



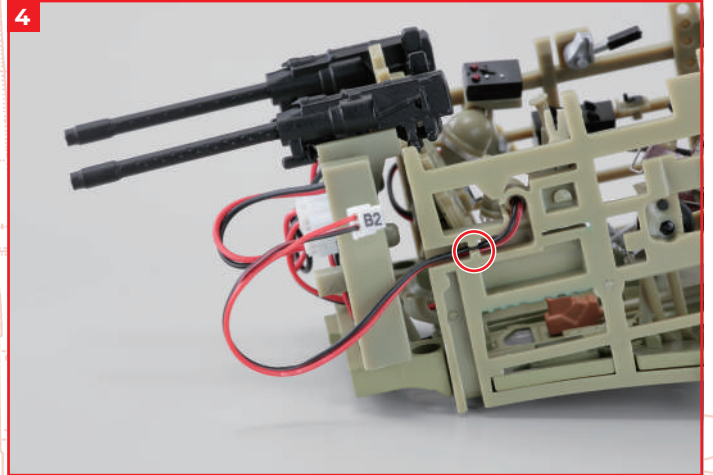
Pass the cord of the cockpit interior light **023-04** on the right side of the cockpit through the groove on the outside of the frame on the right side of the cockpit.



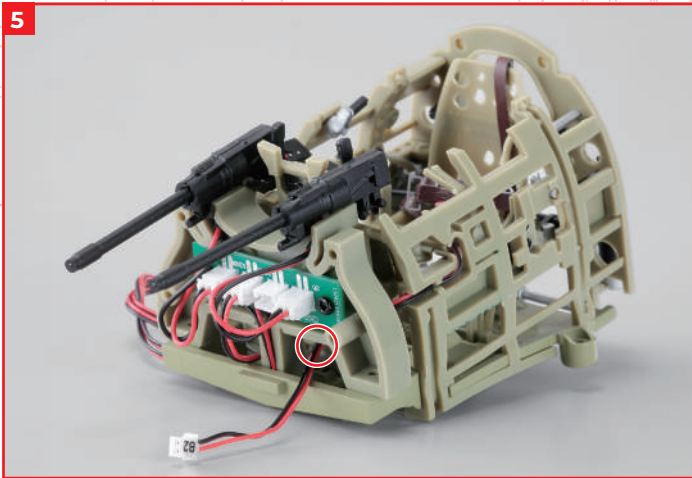
Pull the tip of the cockpit-light wire forward through the hole under the 7.7mm machine gun magazine.



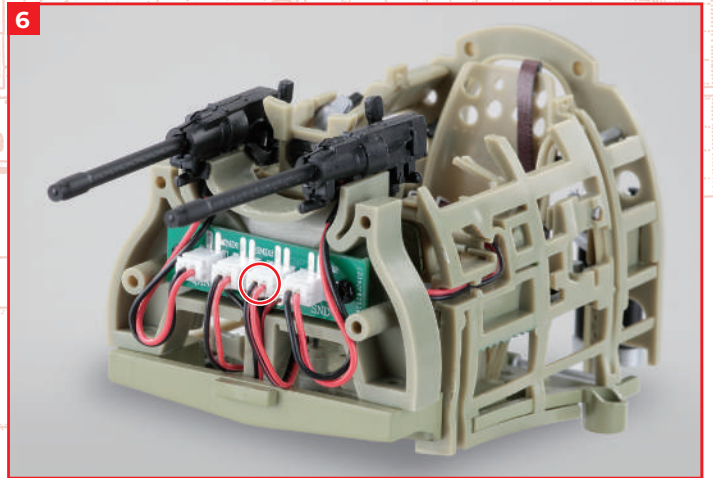
Insert the connector labelled B1 into the second socket from the left on the board of the 7.7mm machine gun magazine.



Pass the wire of the left interior light **025-04** through the groove on the outside of the frame on the left side of the cockpit.

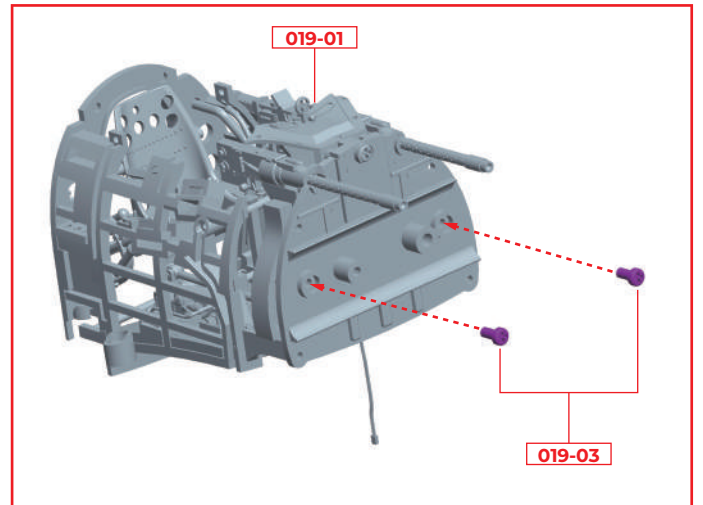
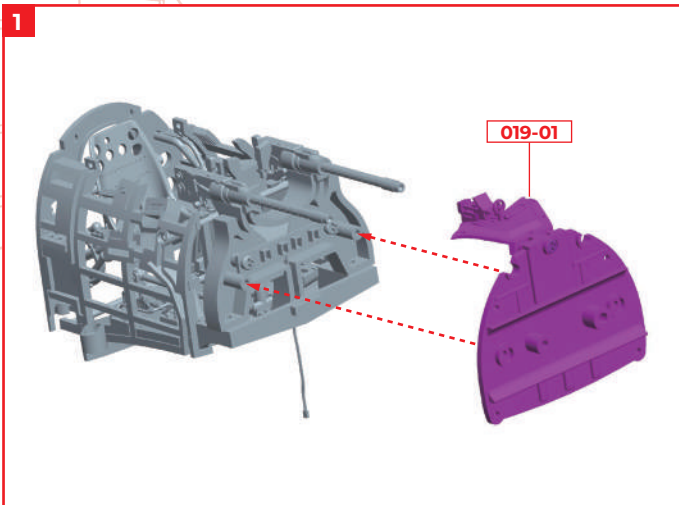


Pull the tip of the cockpit-light wire forward through the hole under the 7.7mm machine gun magazine.

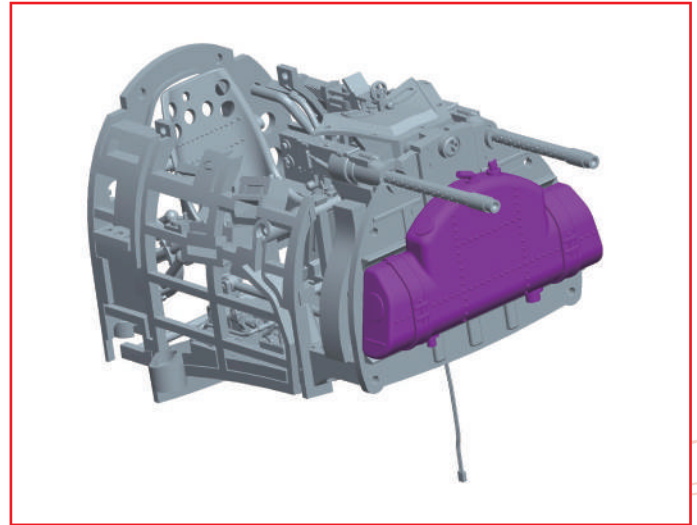
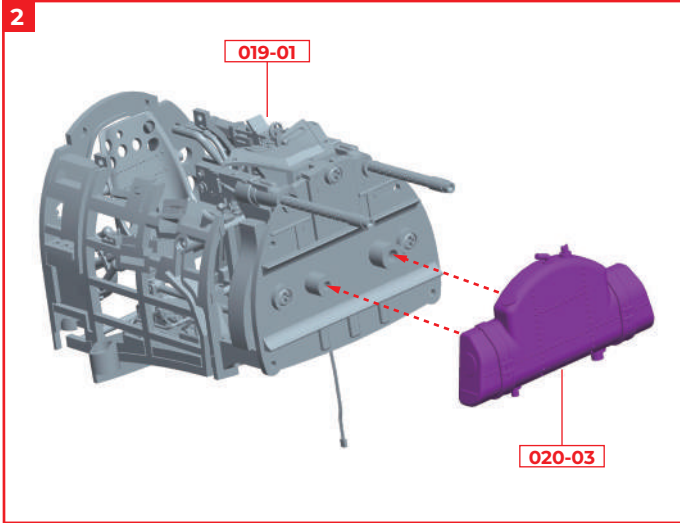


Insert the connector labeled B2 into the second socket from the right on the board of the 7.7mm machine gun magazine.

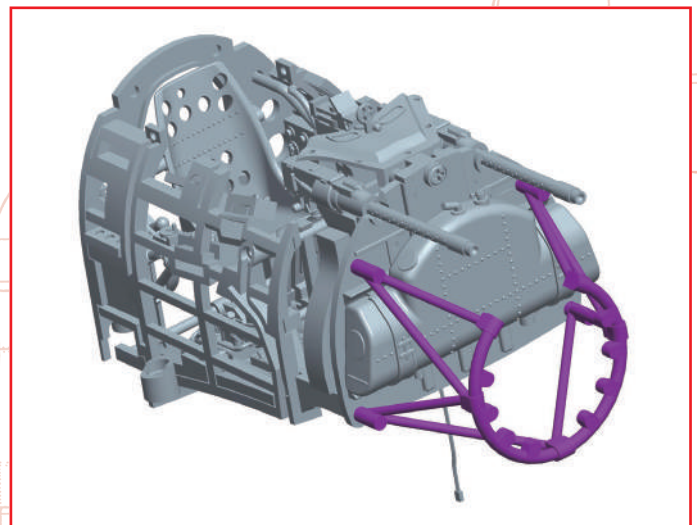
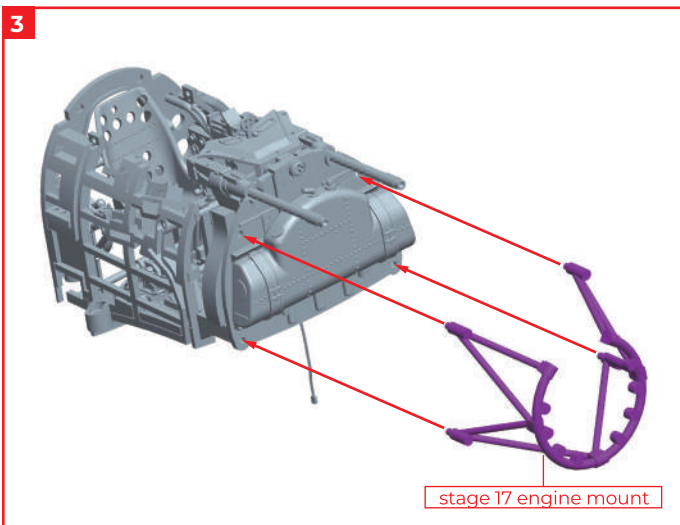
STEP 5 Attaching the front bulkhead and engine mount



Fix the partition wall assembled in stage 19 to the cockpit using the two screws **019-03** that came with stage 19. The machine guns fit into the semi-circular notches at the top of the partition.



Fit the oil tank **020-03** that came with stage 20 into the partition wall. It does not glue.

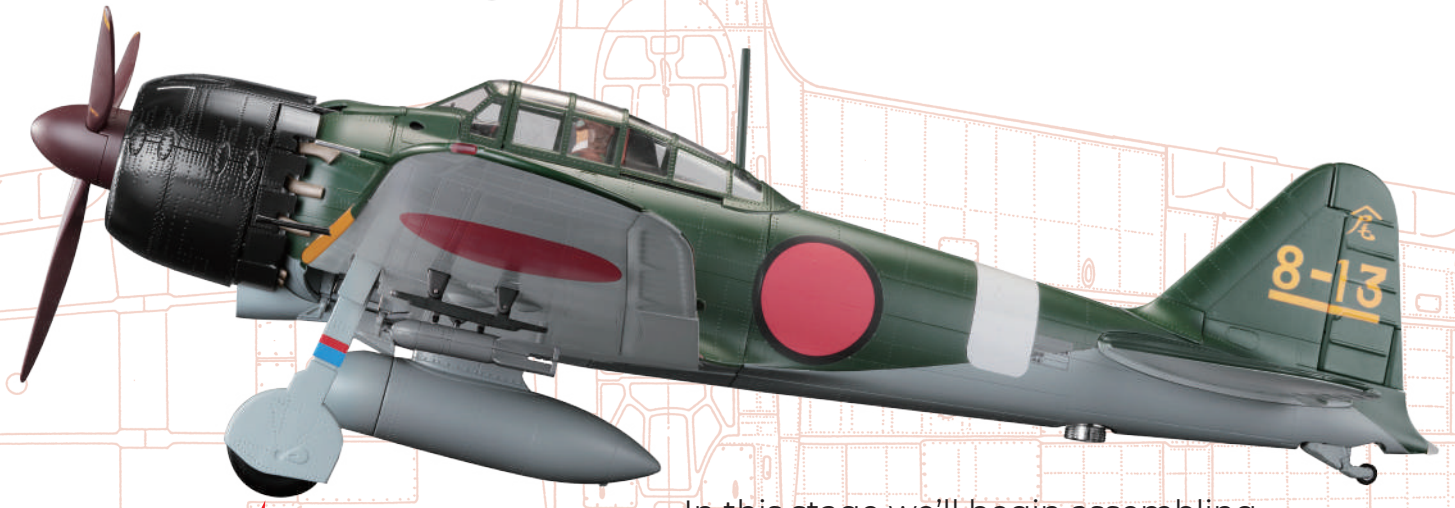


Align the pins on the engine mount frame assembled in stage 17 with the four holes on the partition wall and glue them together.

STAGE COMPLETE



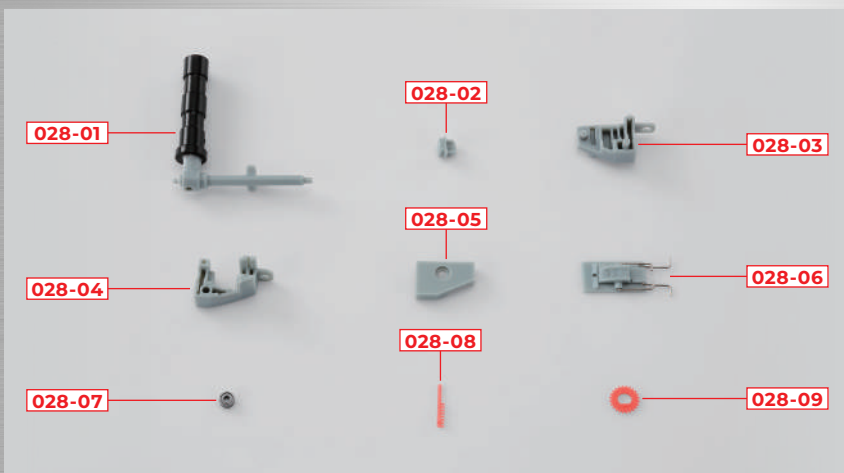
Stage 28: Left Main Landing Gear Base



Stage 28 Assembly
 Left Main Landing Gear Base

In this stage we'll begin assembling the base for the left landing gear base. Setting the position indicator and gear will require a good deal of accuracy and precision.

STAGE 28 PARTS



You will also need: tweezers

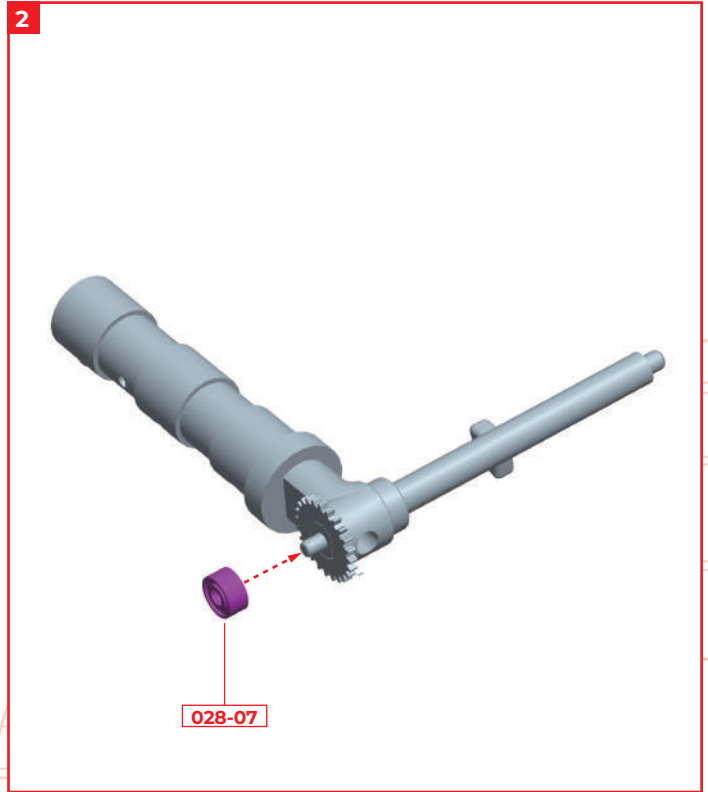
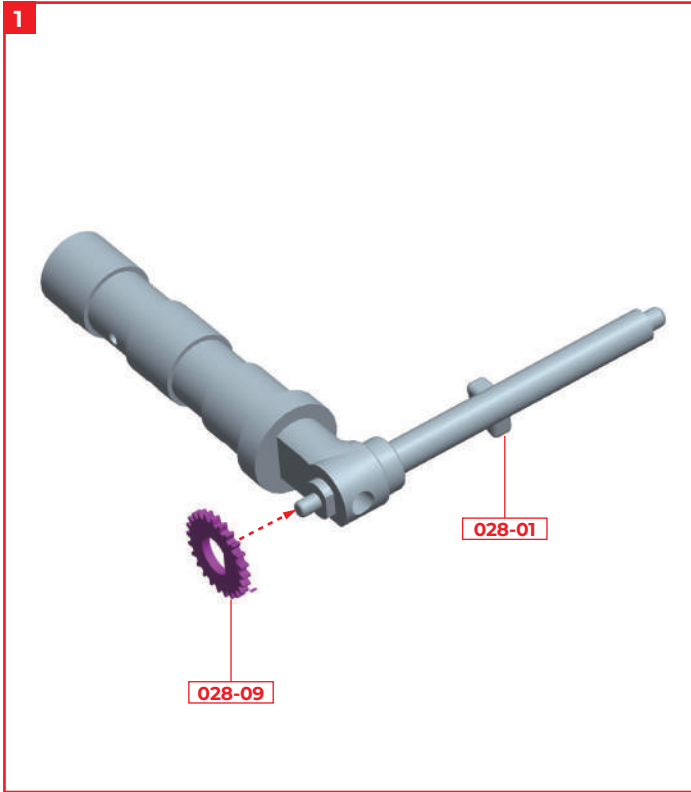
PARTS LIST

	PART	No.	MATERIAL
<input type="checkbox"/>	028-01	1	ABS resin
<input type="checkbox"/>	028-02	1	ABS resin
<input type="checkbox"/>	028-03	1	ABS resin
<input type="checkbox"/>	028-04	1	ABS resin
<input type="checkbox"/>	028-05	1	ABS resin
<input type="checkbox"/>	028-06	1	ABS resin
<input type="checkbox"/>	028-07	1	Steel
<input type="checkbox"/>	028-08	1	Plastic
<input type="checkbox"/>	028-09	1	Plastic

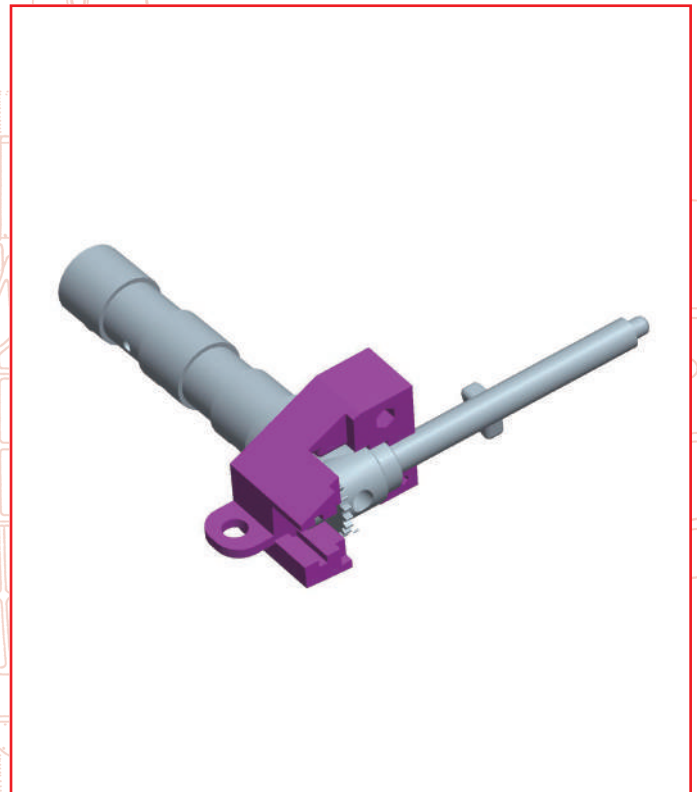
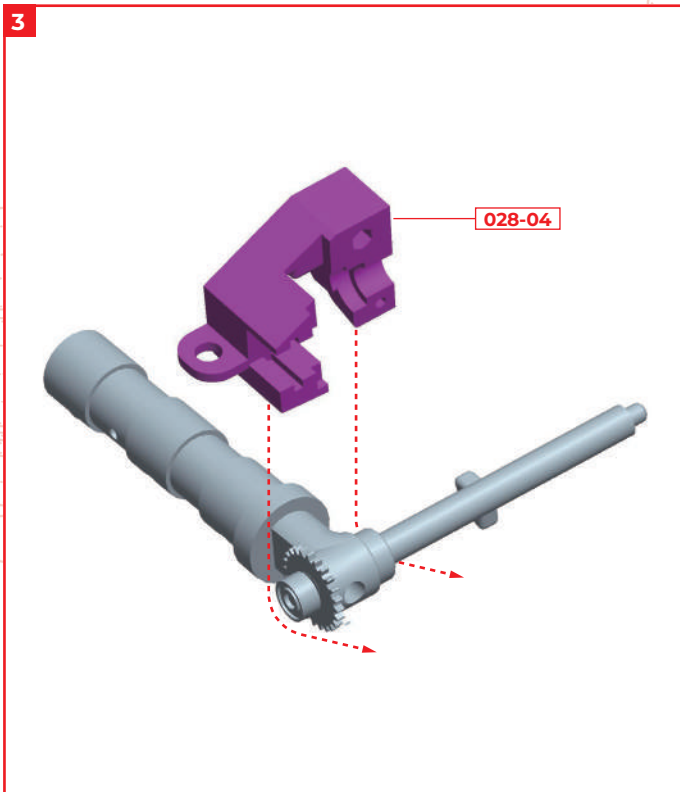
STEP 1

Assembling the left landing gear base

← : Glue
- - - : Don't Glue



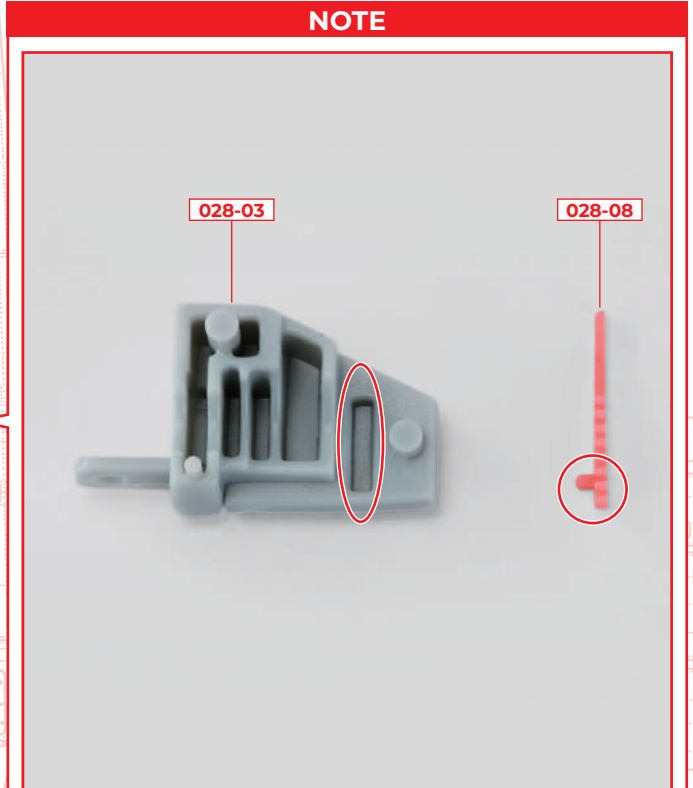
Fit the gears **028-09** onto the shaft of the shock absorber **028-01**. Fit the bearing **028-07** onto the shaft of the shock absorber **028-01**.



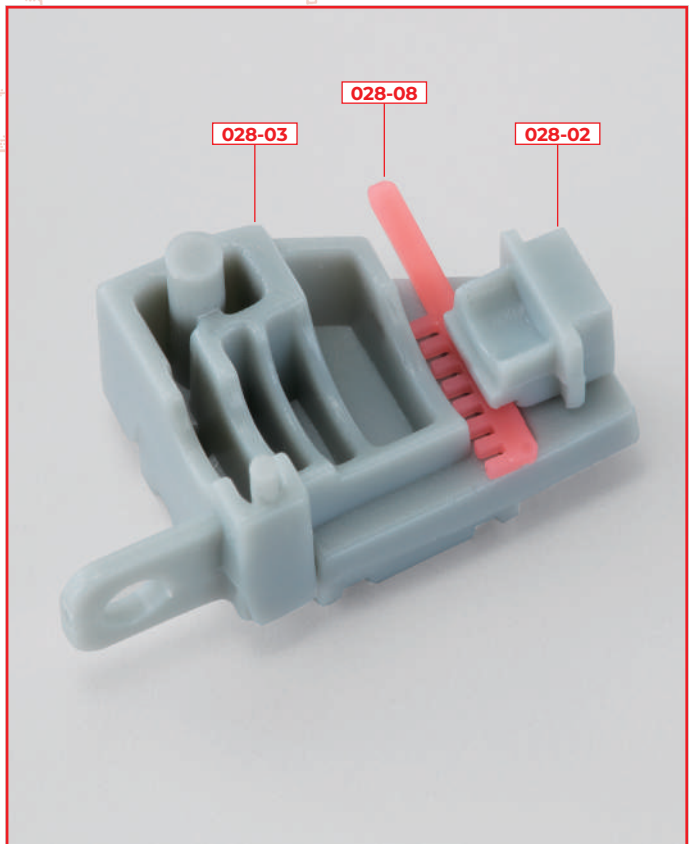
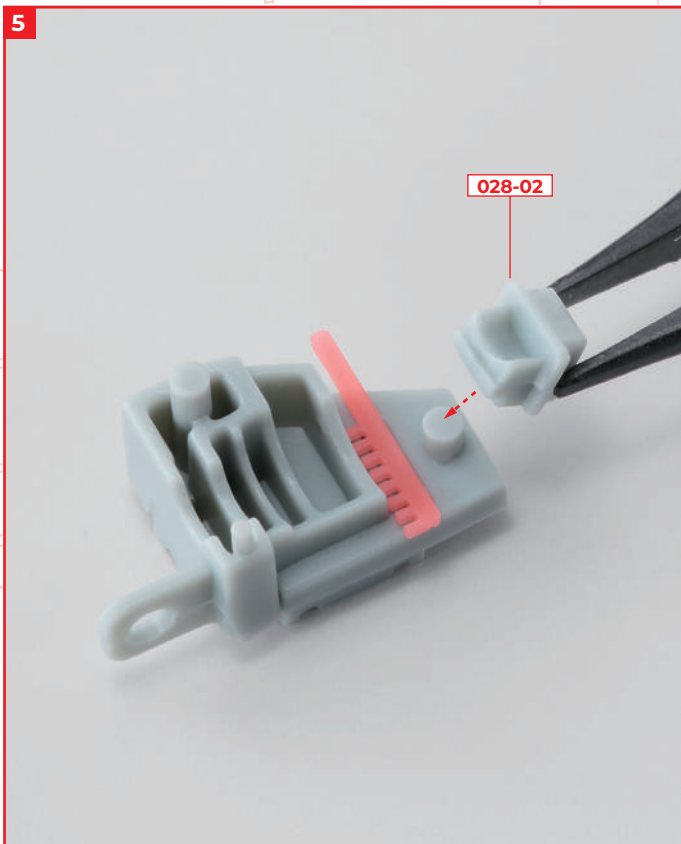
Fit part **028-04** onto the shock absorber **028-01**, keeping the shock absorber in a horizontal position.



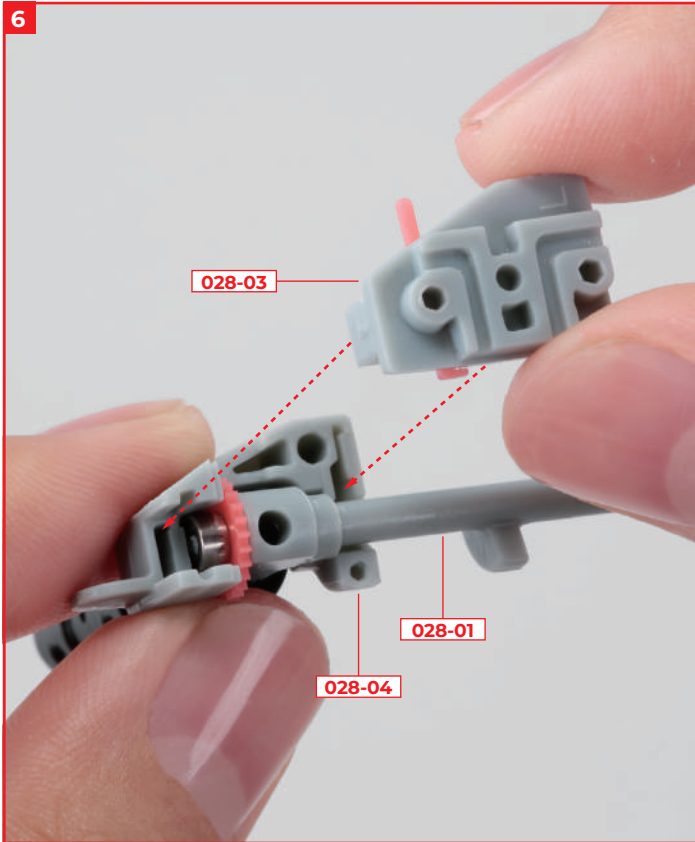
Insert the leg position pointer **028-08** into the shaft retainer **028-03**.



Align the pin on the leg position pointer **028-08** with the groove on the shaft retainer **028-03**.



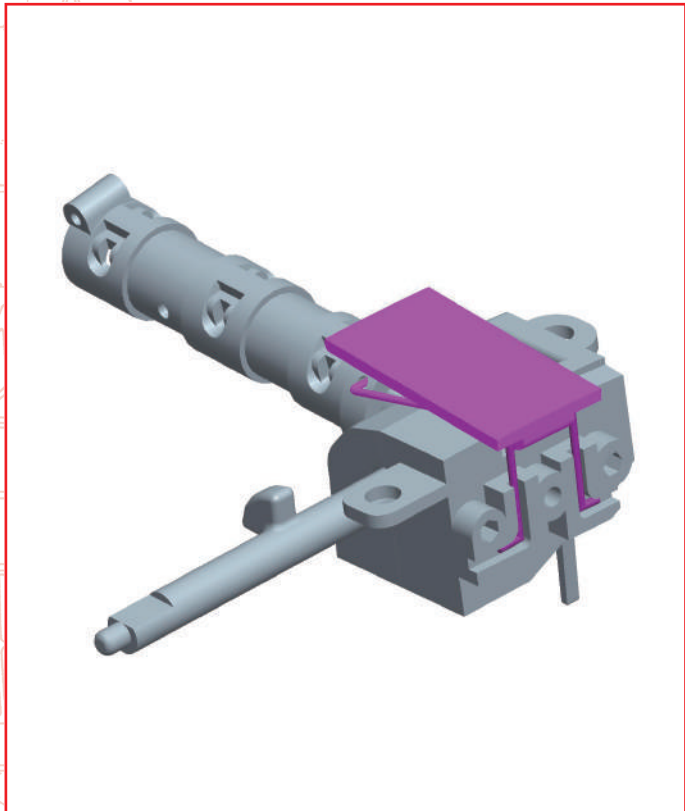
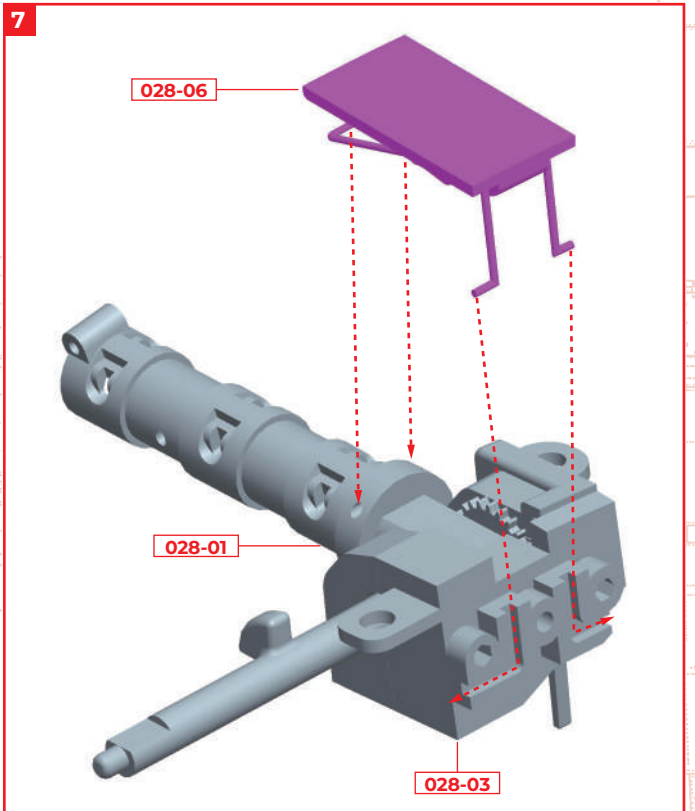
Push **028-02** onto the lug on **028-03** so that the leg position pointer **028-08** does not come off but can still slide within the groove.



NOTE

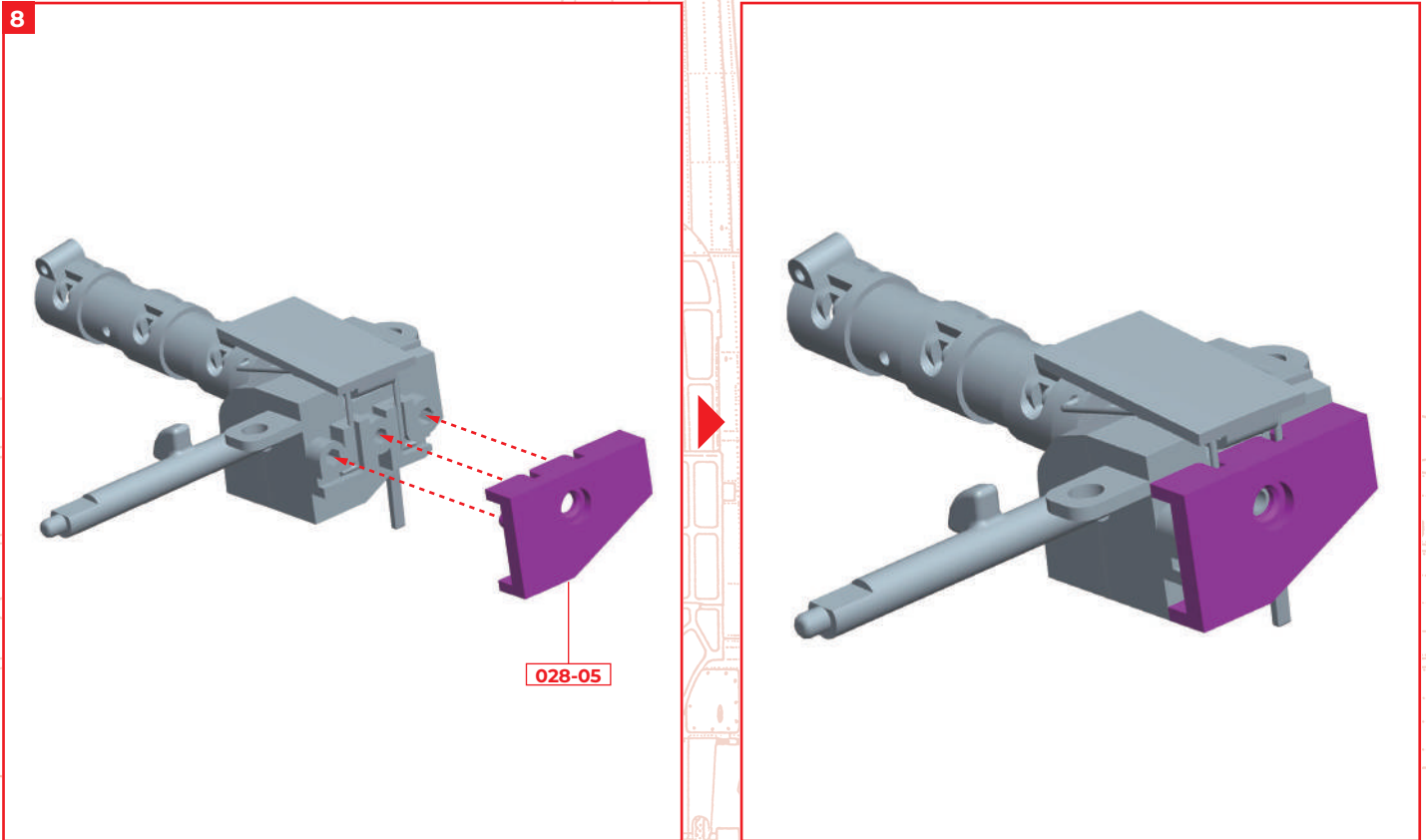
Keep the leg position pointer **028-08** in the lowest position when fitting.

Fit **028-03** assembled in 5 onto **028-04** assembled in 3. Work with the shock absorber **028-01** in the horizontal position.



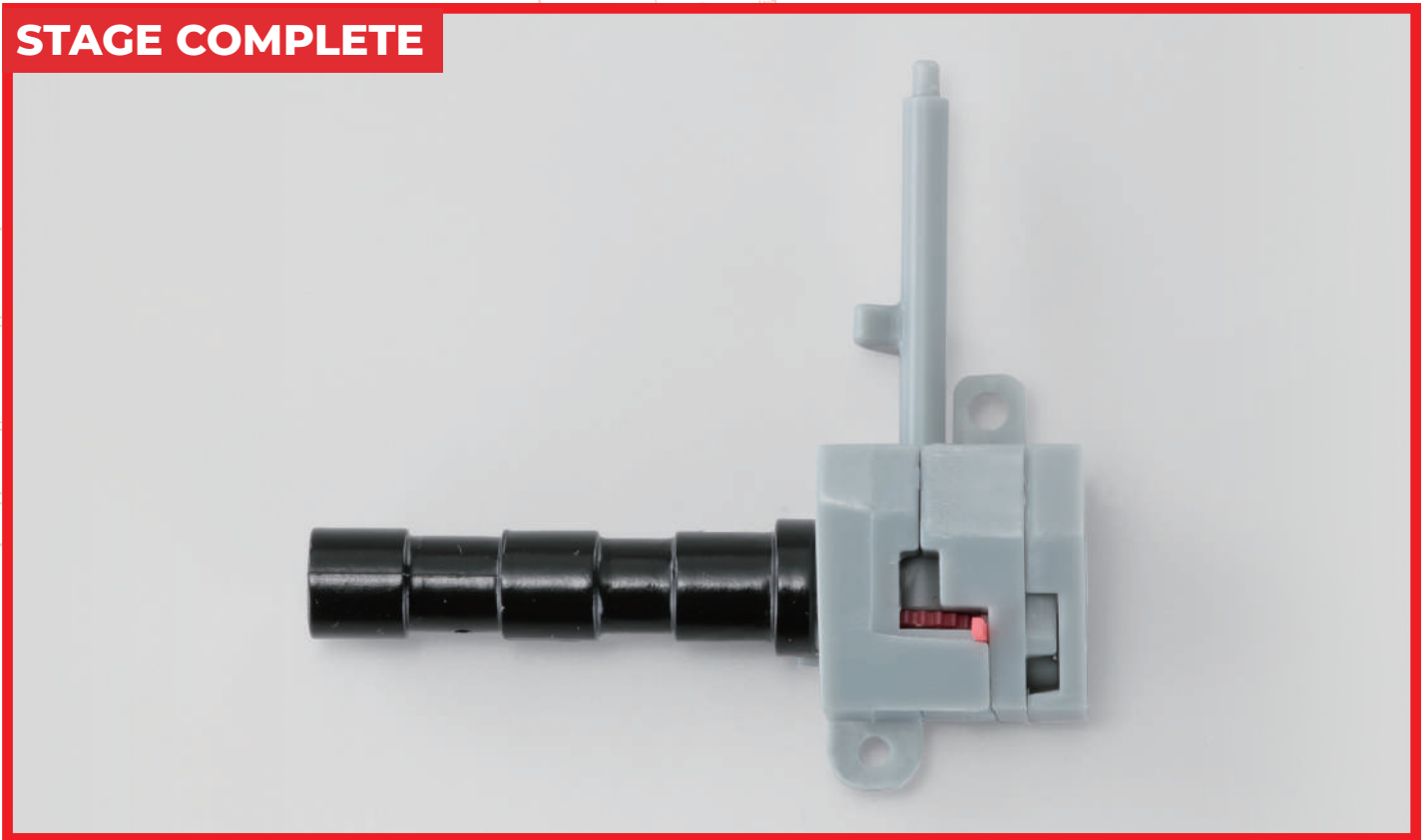
Spread the metal fittings attached to the centre of the main landing gear cover **028-06** and fit them into the holes on the shock absorber **028-01**. Next, fit the metal fitting attached to the end of the main landing gear cover **028-06** into the L-shaped grooves on the shaft retainer **028-03**.

8

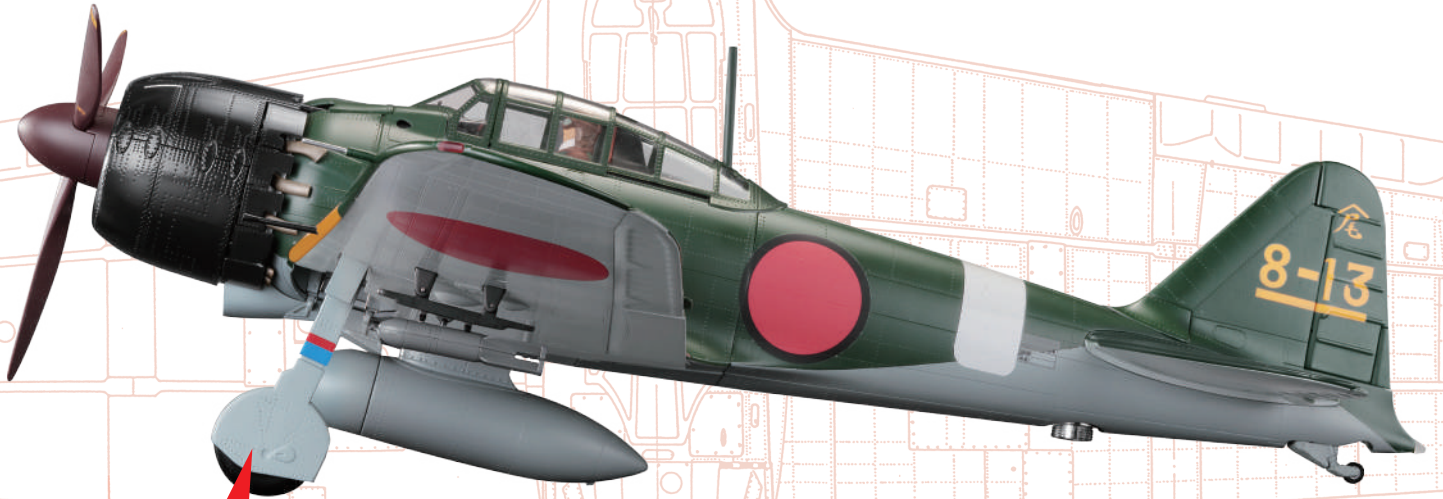


Fit the metal fitting holder **028-05** being careful not to move the metal fittings on the main landing gear cover.

STAGE COMPLETE



Stage 29: Assembling the Left Main Landing Gear Base and Wheel



Stage 29 Assembly
Landing Gear Base and Wheel

In this stage we'll add another gear to the left landing gear base and assemble the wheel as well. Looking at the exquisitely designed landing gear retraction system

STAGE 29 PARTS

PARTS LIST

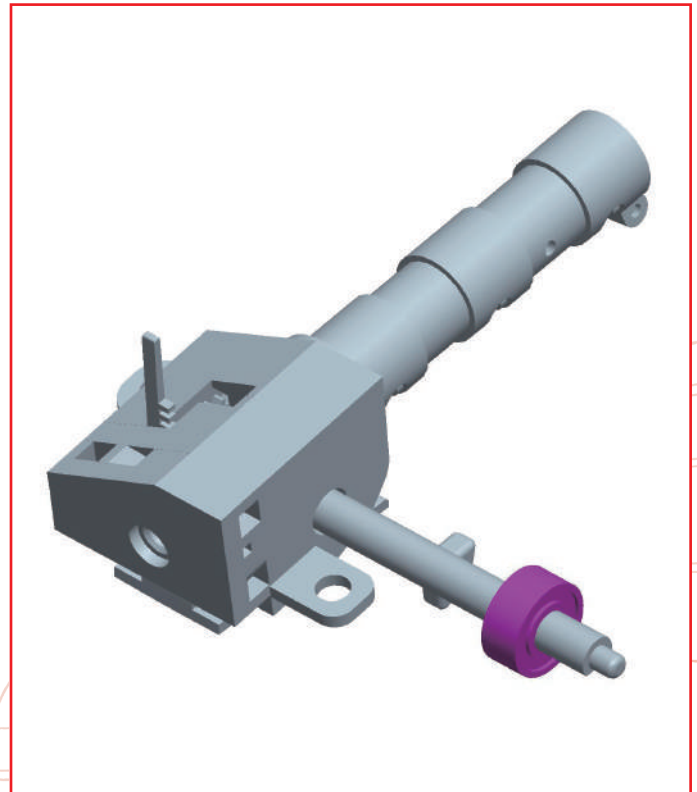
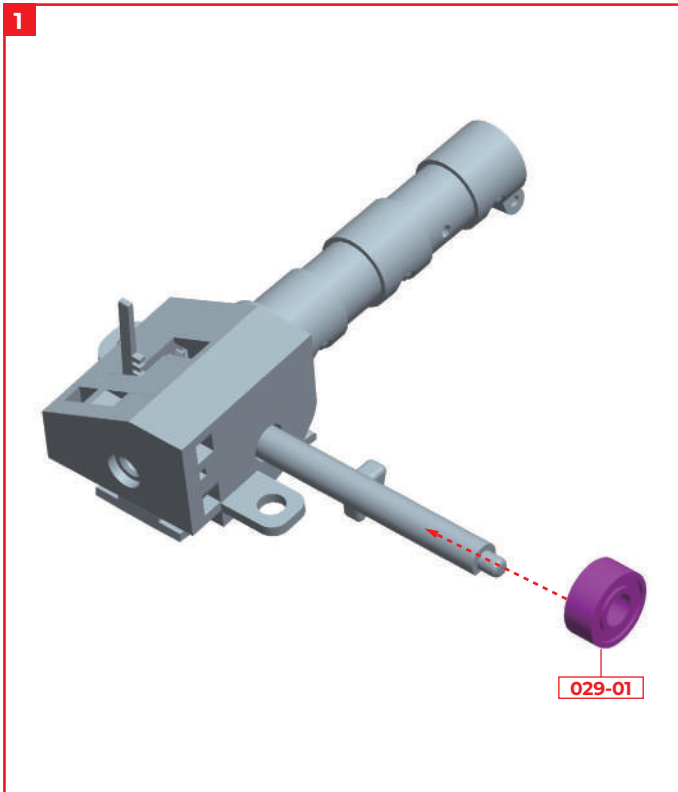
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<input type="checkbox"/>	029-01	1	Steel
<input type="checkbox"/>	029-02	1	Plastic
<input type="checkbox"/>	029-03	1	PVC
<input type="checkbox"/>	029-04	1	ABS resin
<input type="checkbox"/>	029-05	1	ABS resin
<input type="checkbox"/>	029-06	1	ABS resin

You will also need: tweezers
*029-04 will not be used in this stage. Keep it in a safe place until required.

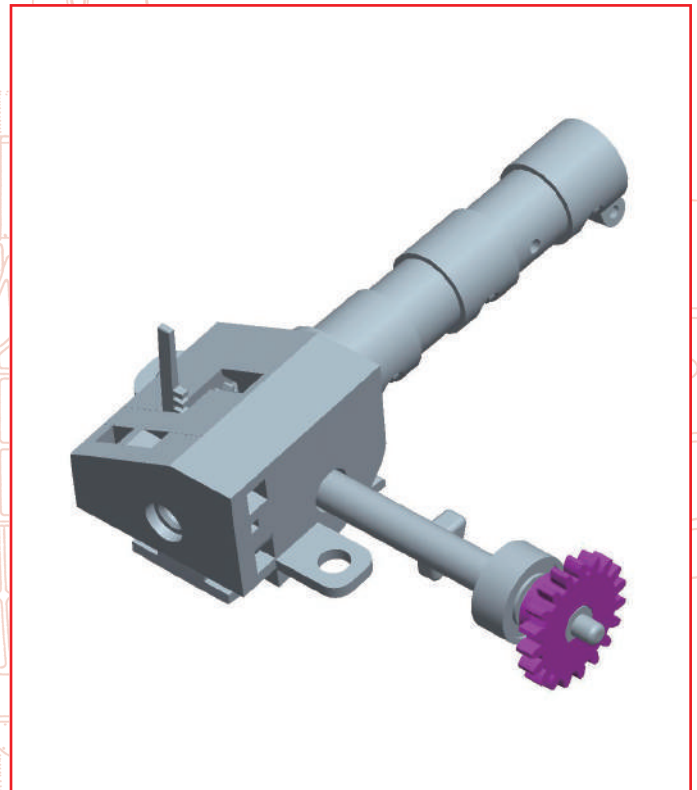
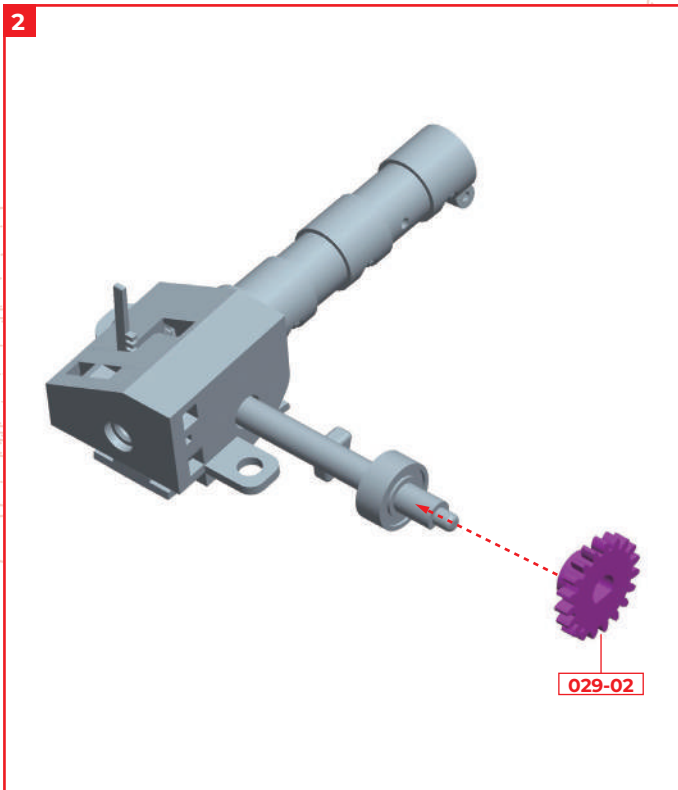
STEP 1

Assembling the left landing gear

← : Glue
- - - : Don't Glue



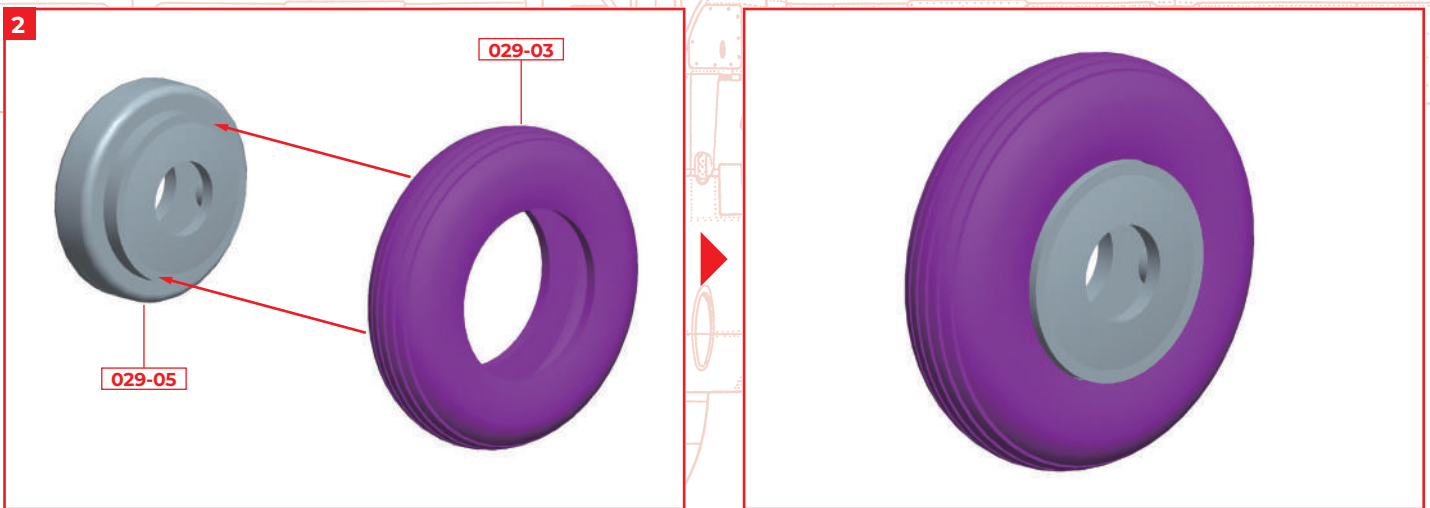
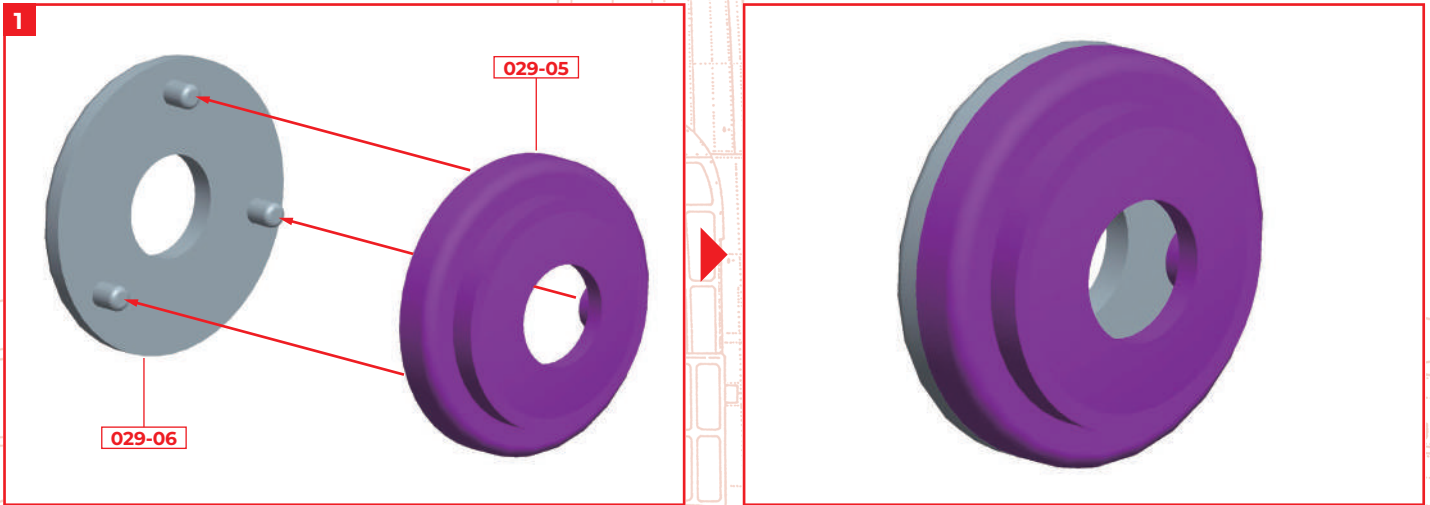
Fit the bearing **029-01** onto the shaft of the shock absorber assembly from stage 28.



Fit gear **029-02** onto the shaft of the shock absorber.

STEP 2

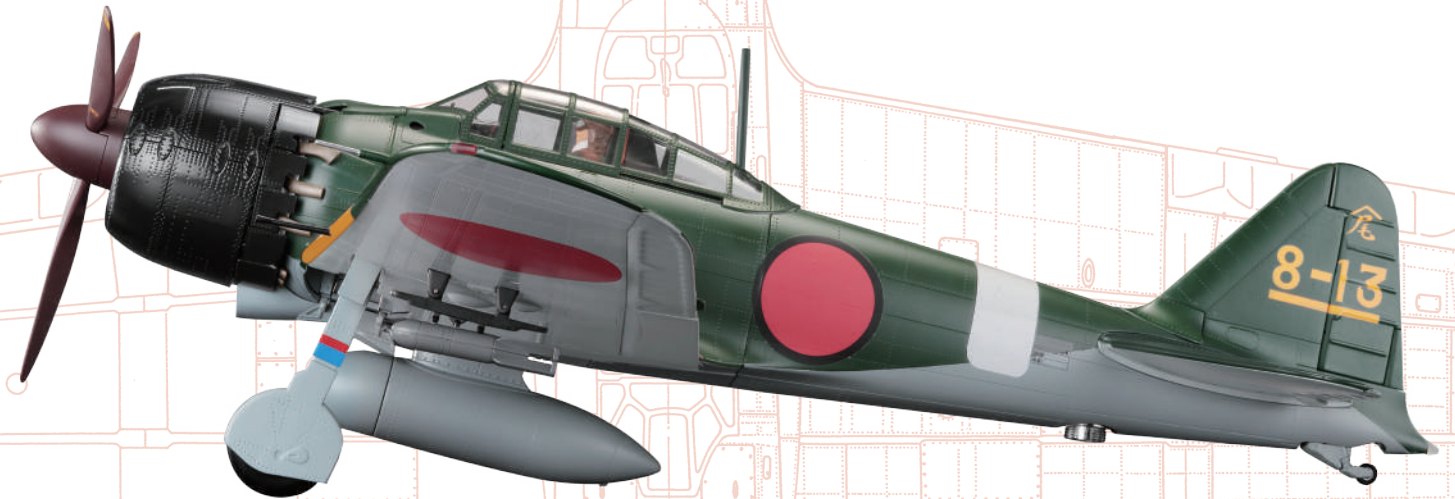
Assembling the wheel



STAGE COMPLETE



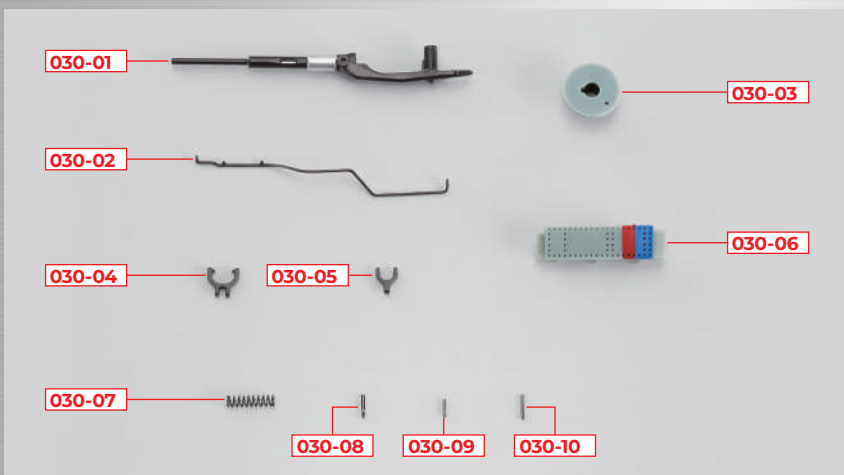
Stage 30: Assembling the Left Main Landing Gear (1)



Stage 30 Assembly
 Left Main Landing Gear

In this stage we'll be assembling the part of the landing gear which absorbs the actual impact of landing the aircraft. Look sharp as there's lots of small parts to handle here as well as points where it can be difficult to get everything in the right place.

STAGE 30 PARTS



You will also need: superglue, tweezers.

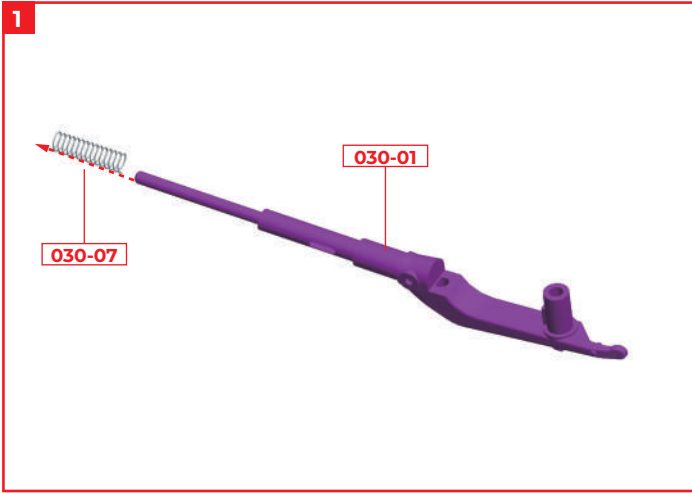
PARTS LIST

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<input type="checkbox"/>	030-03	1	ABS resin
<input type="checkbox"/>	030-04	1	ABS resin
<input type="checkbox"/>	030-05	1	ABS resin
<input type="checkbox"/>	030-06	1	ABS resin
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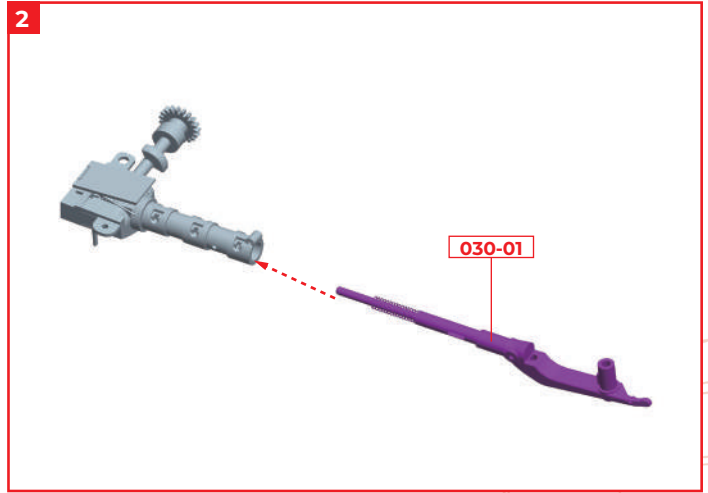
STEP 1

Assembling the left landing gear

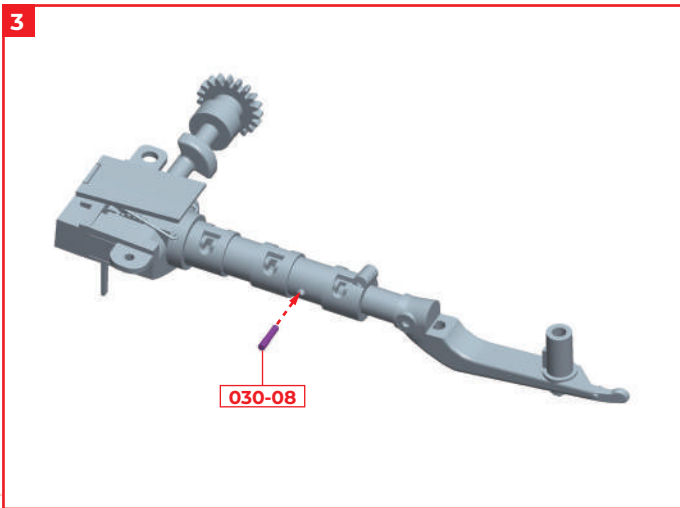
← : Glue
- - - : Don't Glue



Insert the left main landing gear support **030-01** into the spring **030-07**.



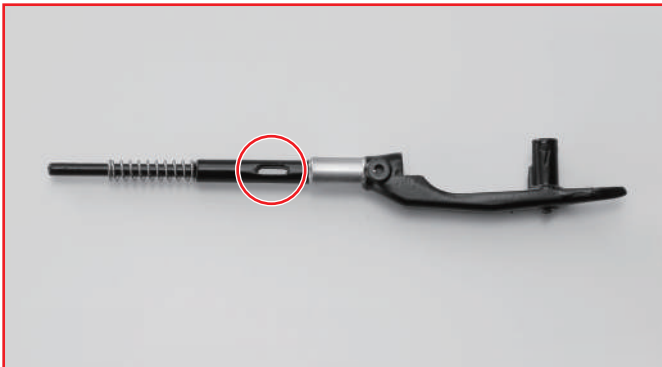
Insert the support assembled in 1 into the base of the left main landing gear assembled in stage 29.



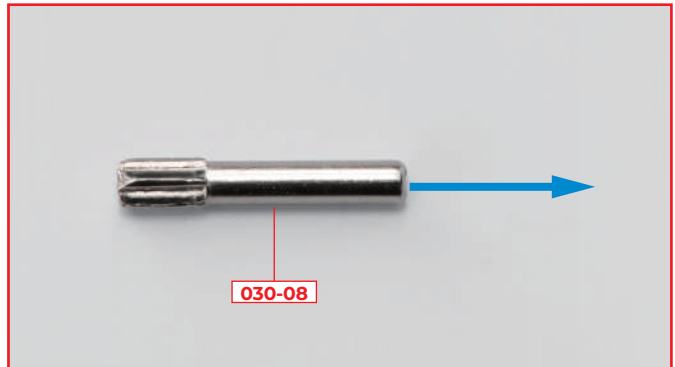
Push the parts together, and insert the pin **030-08** into the hole in the base of the left main landing gear.



NOTE

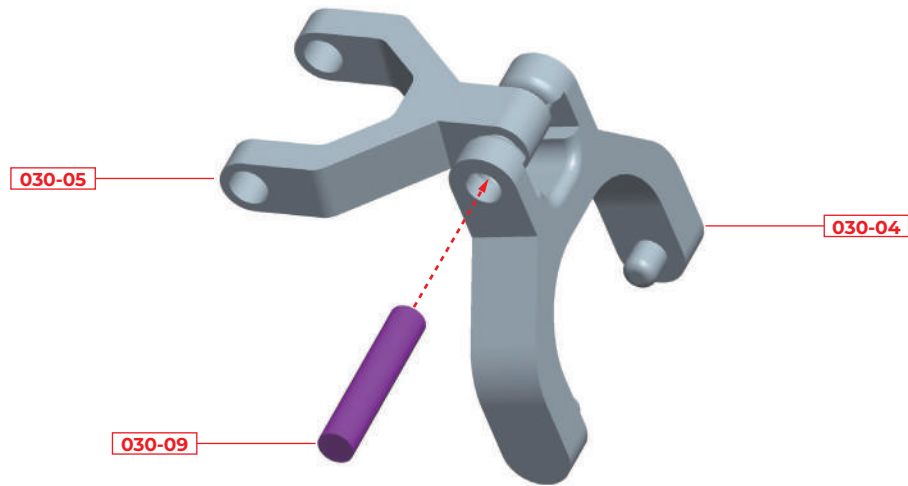


If the pin **030-08** is inserted into the groove on the left main landing gear support **030-01** the support will not come off.



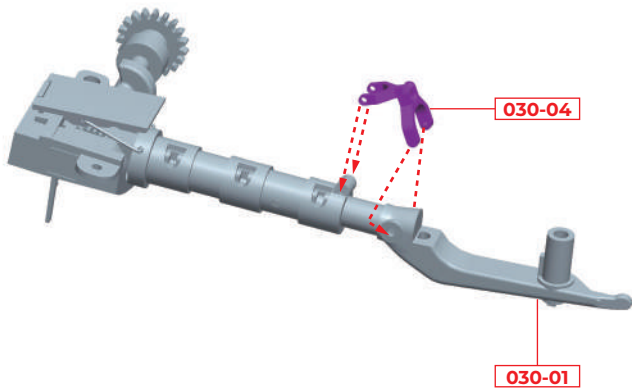
Insert the pin **030-08** with the smooth end first. Push until the pin is completely inside the hole.

4



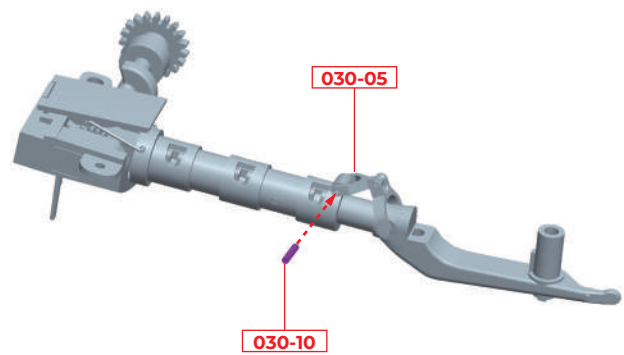
Combine the lower arm **030-04** and the upper arm **030-05** and fix them with pin **030-09**.

5



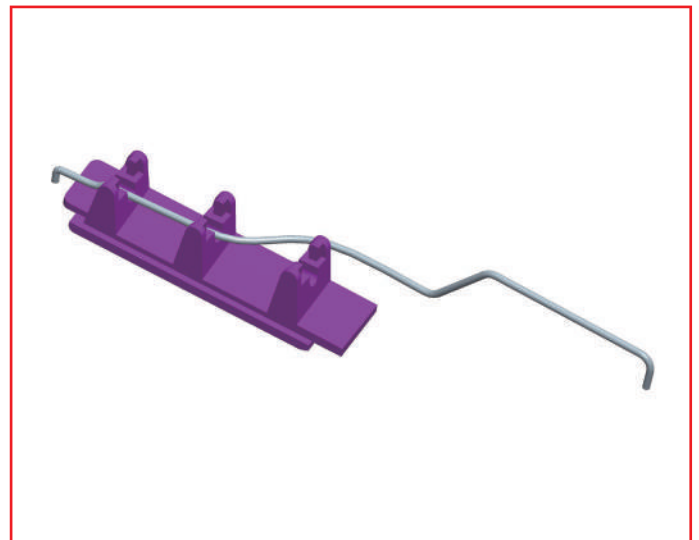
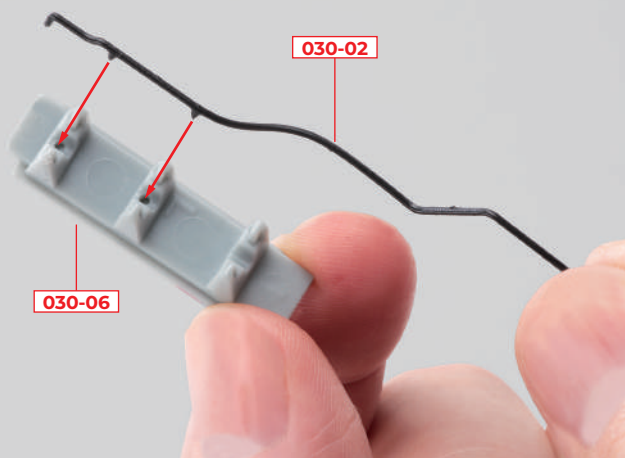
Insert the lugs on the lower arm **030-04** of the arm assembled in 4 into the holes on the left main landing gear support **030-01**.

6

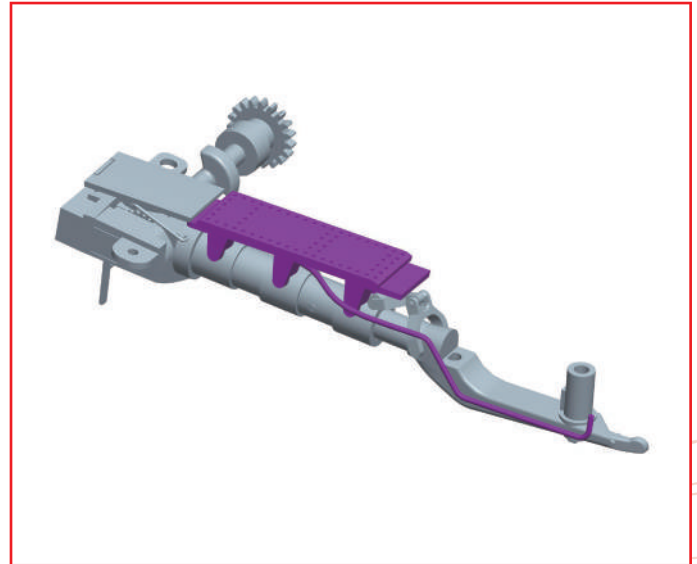
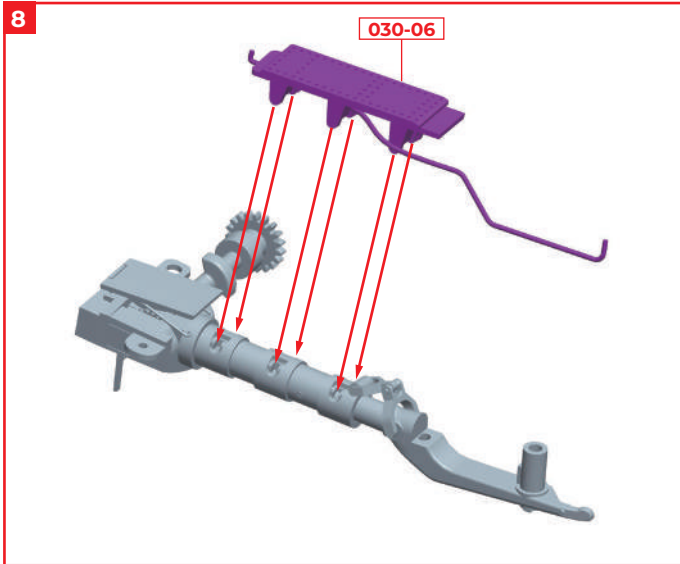


Fit the holes on the upper arm **030-05** onto the tip of the left main landing gear base, and insert the pin **030-10** to secure it in place.

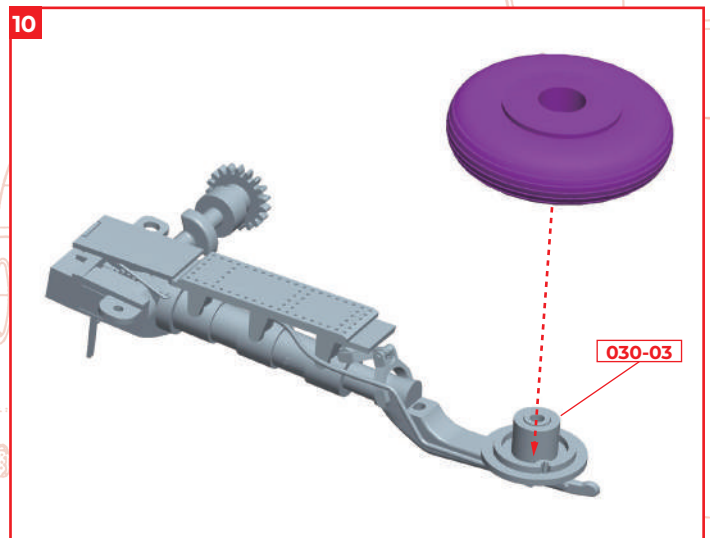
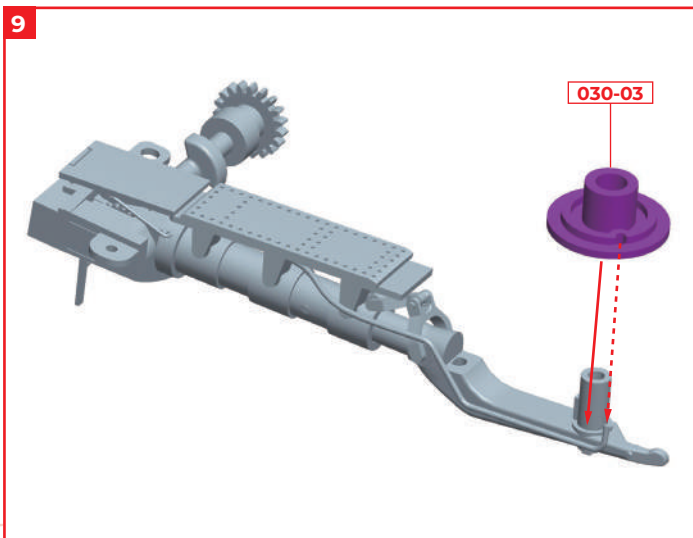
7



Glue the lugs on the brake line **030-02** to the two holes in the left main landing gear base cover **030-06**.

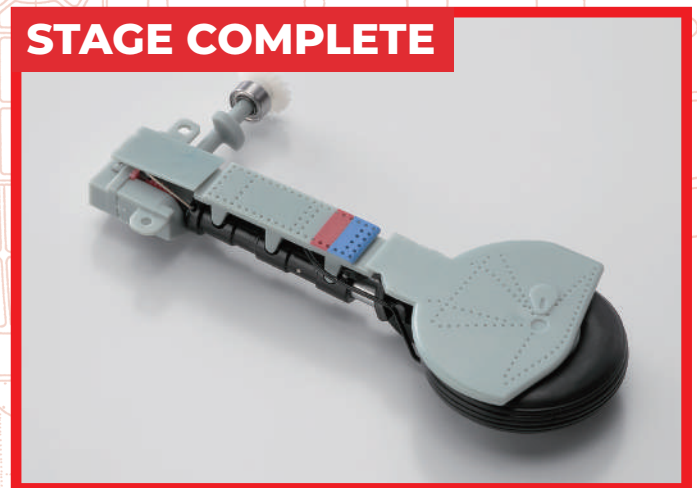
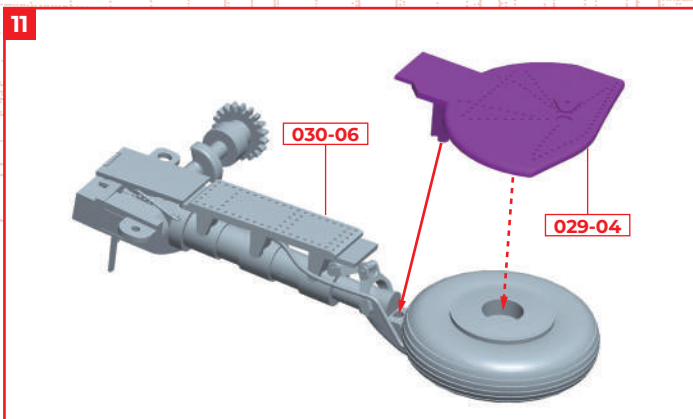


Glue the 6 lugs on the left main landing gear base cover **030-06** assembled in 7 to the left main landing gear base. Note that the brake line runs on the outside of the third pair of lugs.



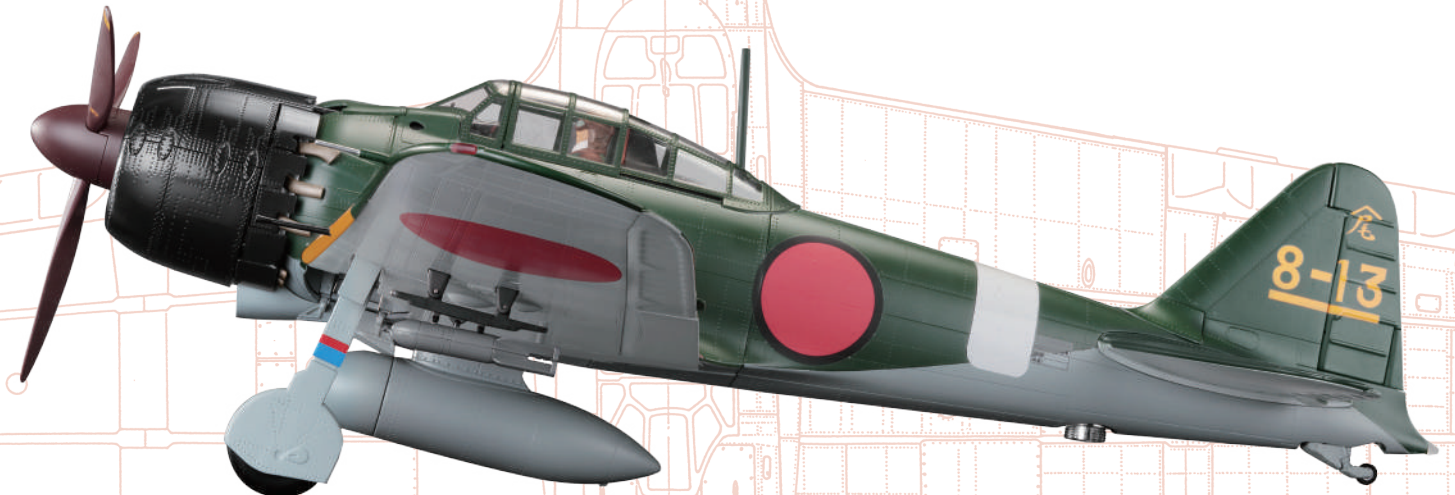
Glue the left brake disc **030-03** to the left main landing gear support **030-01**, and insert the tip of the brake line **030-02** into the hole on **030-03**.

Fit the wheel assembled in stage 29 onto the left brake disc **030-03**. Do not glue.



Glue the lugs on the left tyre cover **029-04** to the hole in the left main landing gear support. Be careful not to glue it to the left main landing gear base cover **030-06**.

Stage 31: Assembling the Left Landing Gear (2)

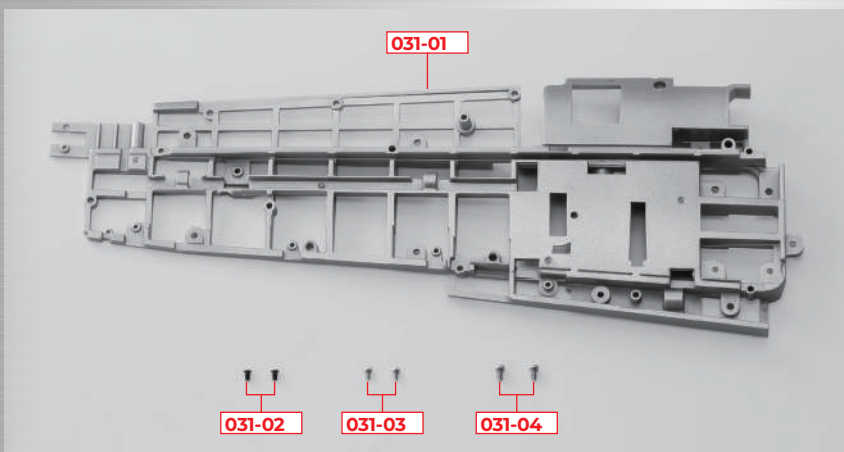


Stage 31 Assembly

Left Main Landing Gear

In this stage we'll finish up assembling the left landing gear.

STAGE 31 PARTS



PARTS LIST

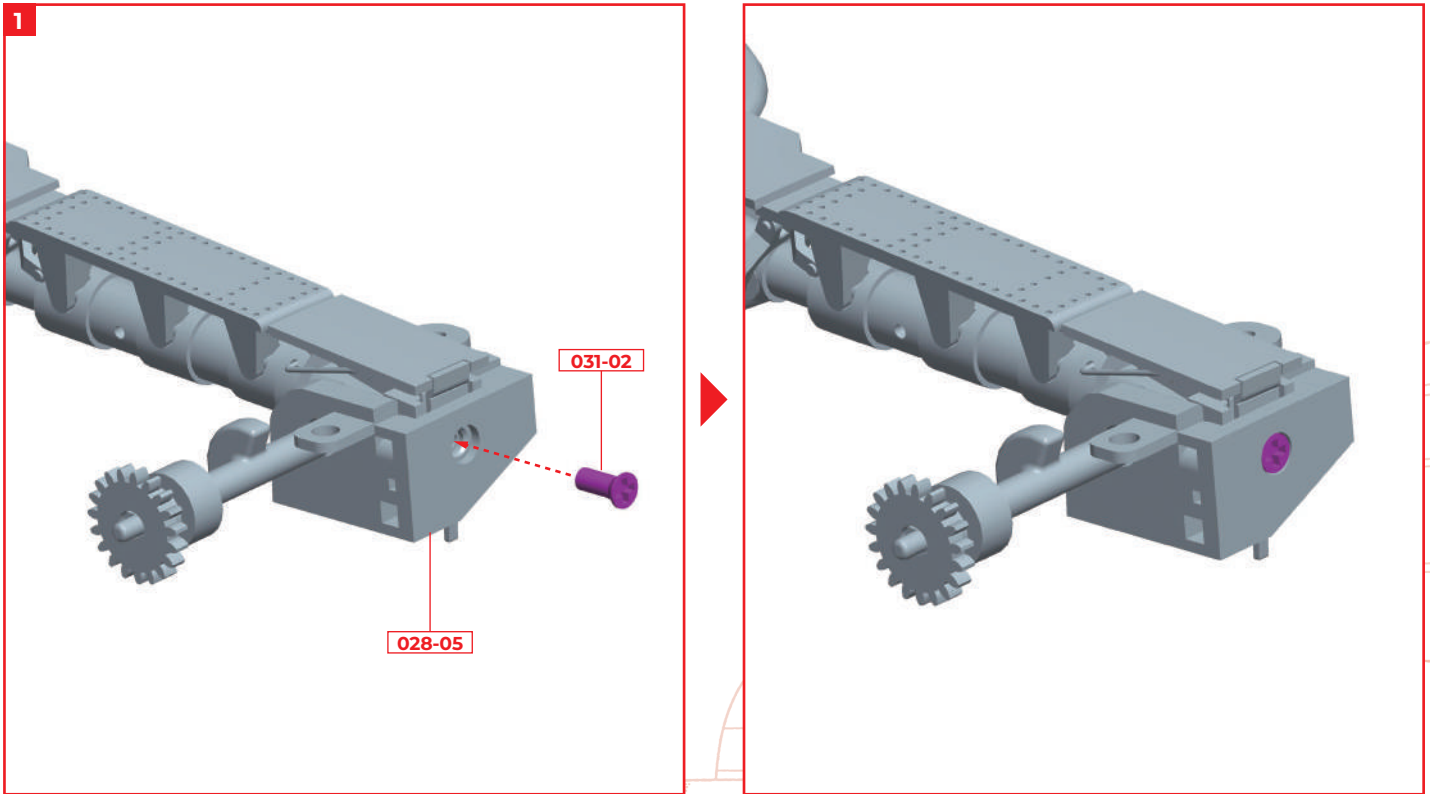
	PART	No.	MATERIAL
<input type="checkbox"/>	031-01	1	ABS resin
<input type="checkbox"/>	031-02	2 (1 spare)	Steel
<input type="checkbox"/>	031-03	2 (1 spare)	Steel
<input type="checkbox"/>	031-04	2 (1 spare)	Steel

You will also need: screwdriver.

* 031-01,031-03,031-04 will not be used in this stage. Keep them in a safe place.

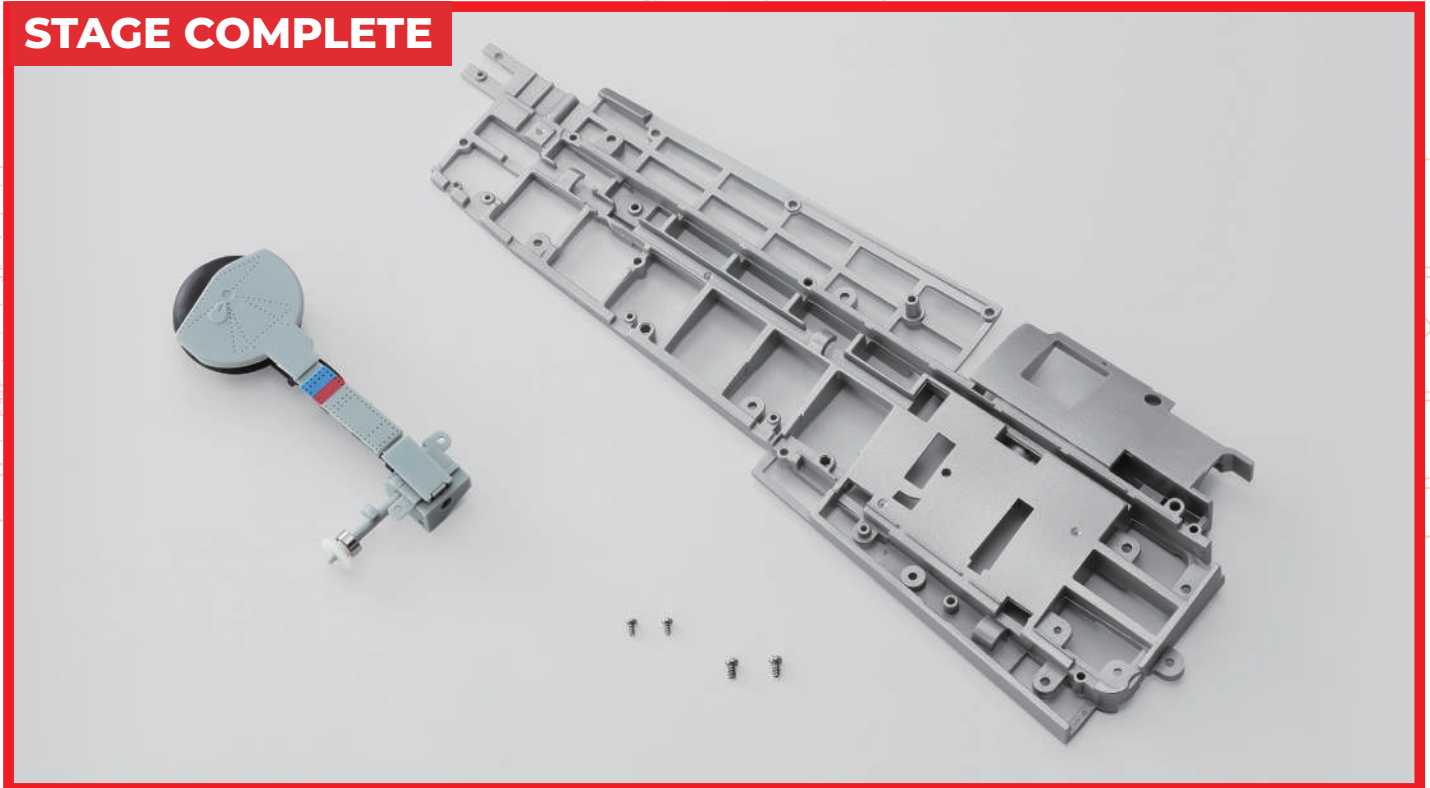
STEP 1

← : Glue
- - - : Don't Glue



Fix the metal fitting holder **028-05** assembled in stage 28 using screw **031-02**. Check the movement of the landing gear: the gear should turn to lift the landing gear and the wheel should push in. You can watch a video for a demonstration here.
[Click here to watch.](#)

STAGE COMPLETE

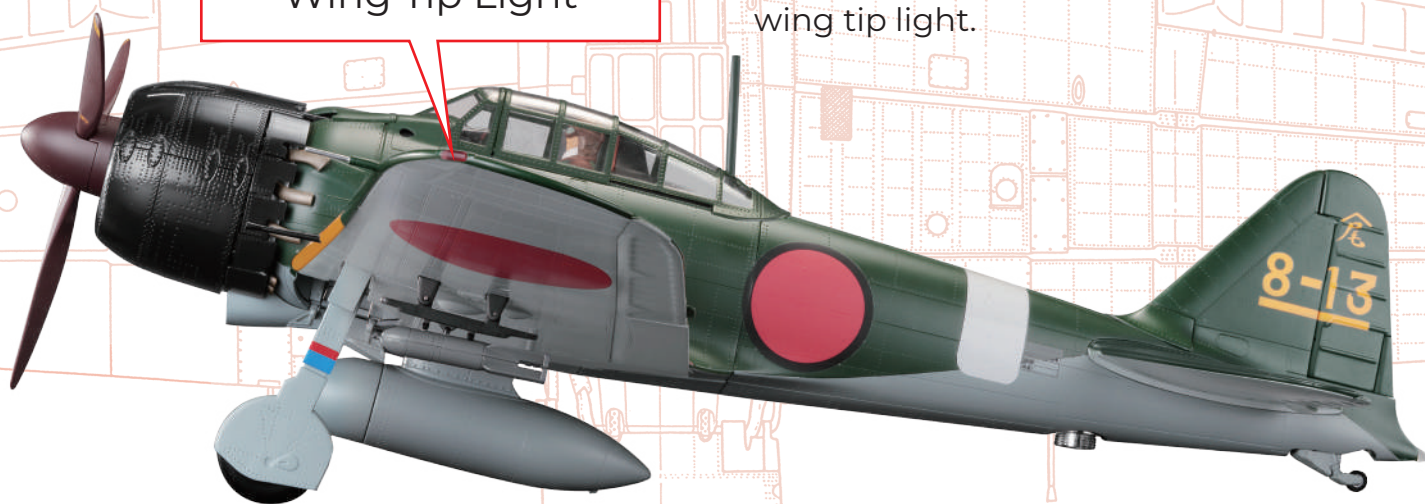


Stage 32: Assembling the Left Wing

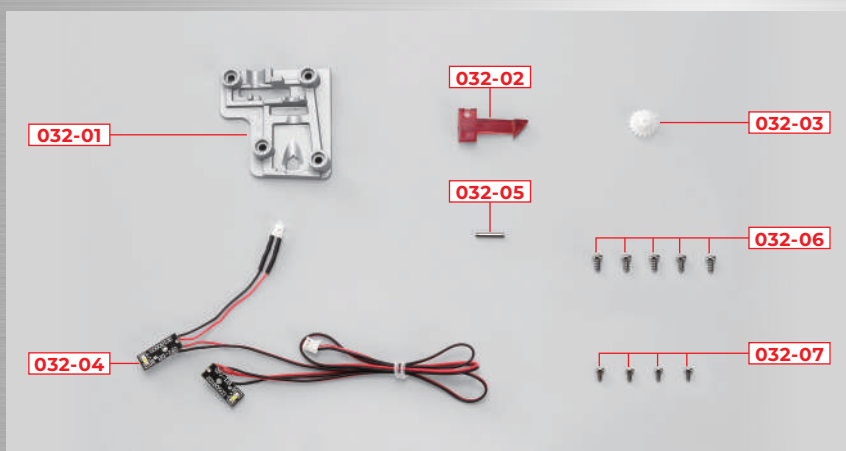
Stage 32 Assembly

Wing Tip Light

In this stage we'll carry on working on the left wing, inserting gears and adding the wing tip light.



STAGE 32 PARTS



You will also need: screwdriver, tweezers.

*032-01 & 032-06 will not be used in this stage. Keep them in a safe place.

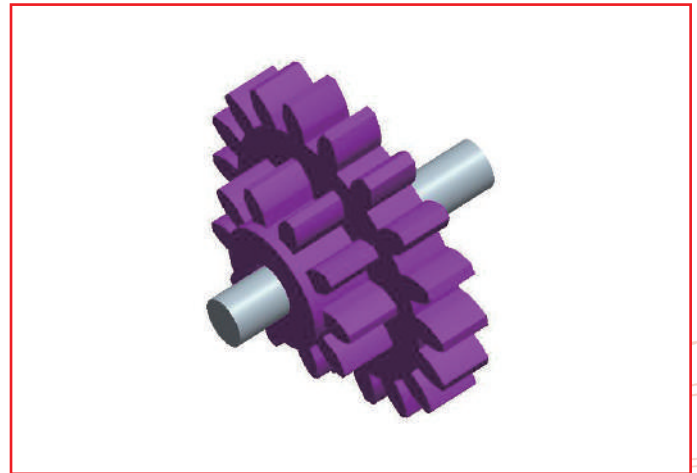
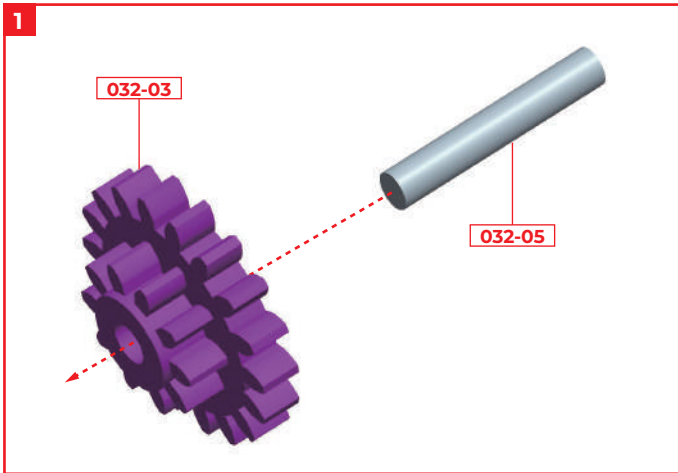
PARTS LIST

	PART	No.	MATERIAL
<input type="checkbox"/>	032-01	1	ABS resin
<input type="checkbox"/>	032-02	1	Plastic
<input type="checkbox"/>	032-03	1	Plastic
<input type="checkbox"/>	032-04	1	LED
<input type="checkbox"/>	032-05	1	Steel
<input type="checkbox"/>	032-06	5 (1 spare)	Steel
<input type="checkbox"/>	032-07	4 (1 spare)	Steel

STEP 1

Assembling the gear complex

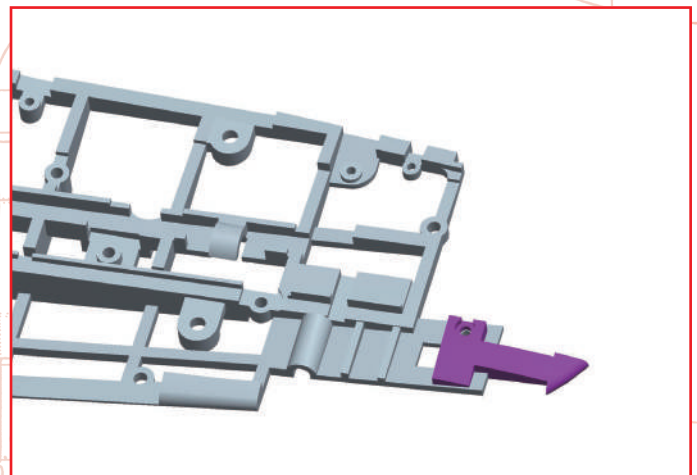
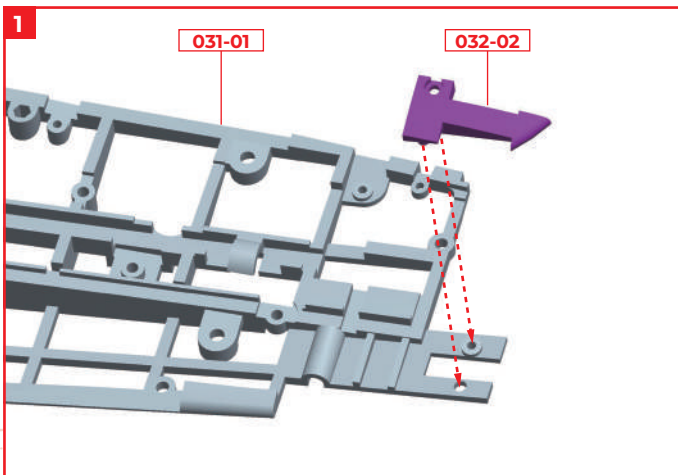
← : Glue
- - - : Don't Glue



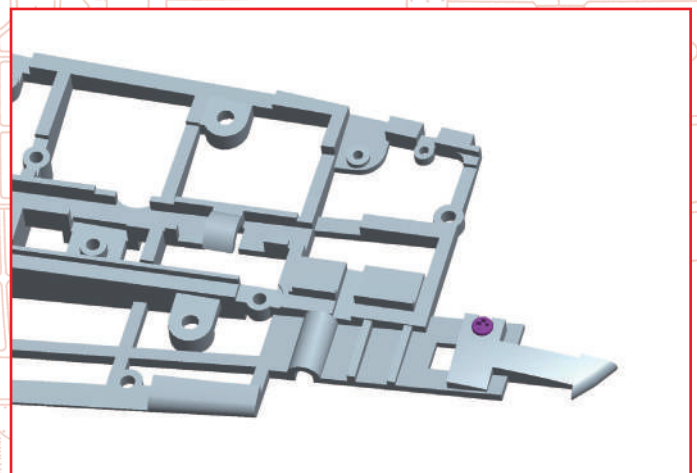
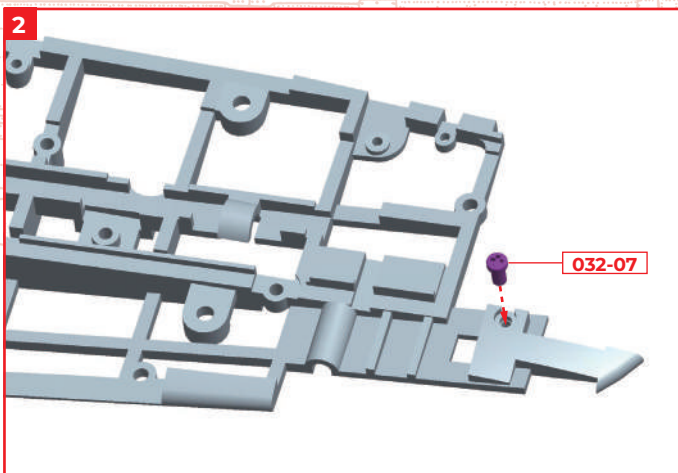
Insert the shaft **032-05** into the gear **032-03**. Keep it in a safe place until required in a later stage.

STEP 2

Attaching the wing tip light (L)

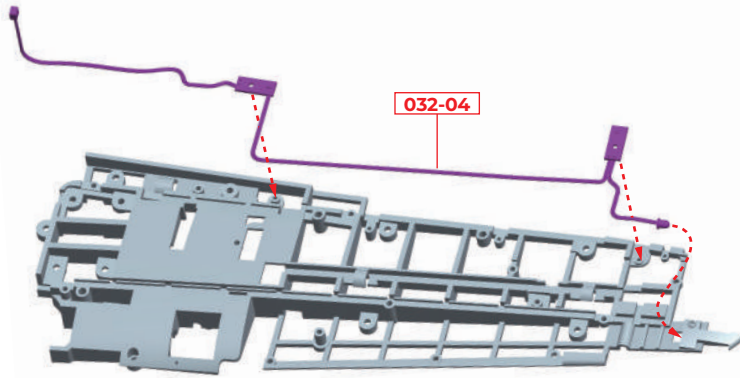


Fit the wing tip light **032-02** onto the wing frame **031-01** that came with stage 31.



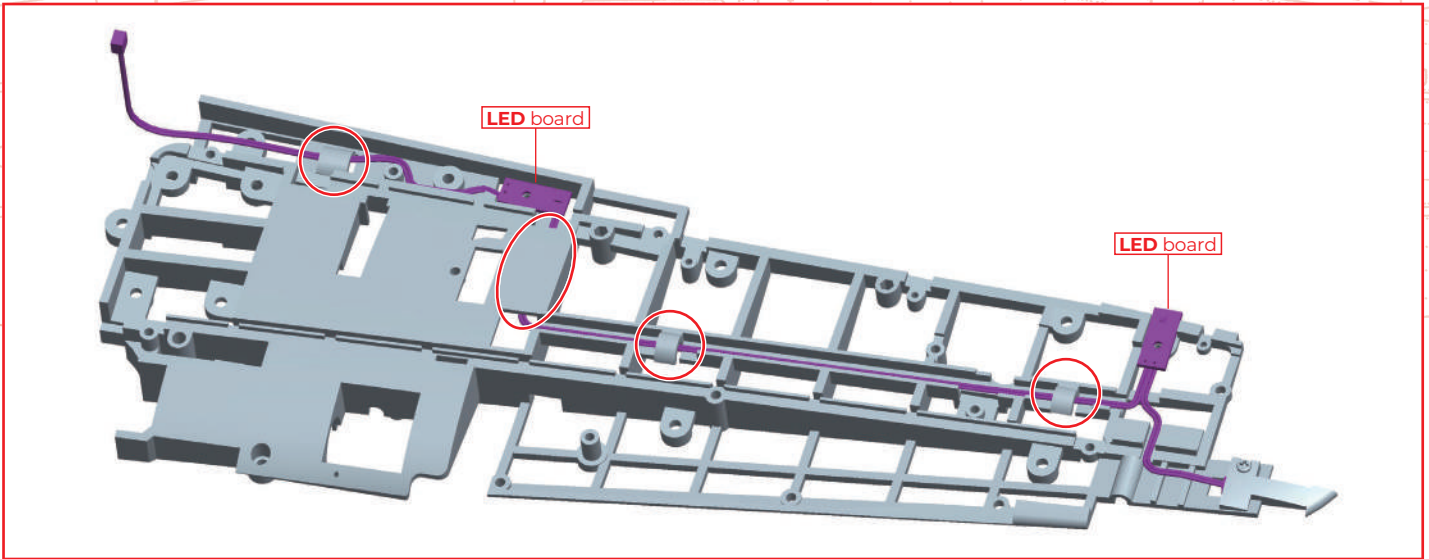
Fix the wing tip light **032-02** in place using a **032-07** screw.

3

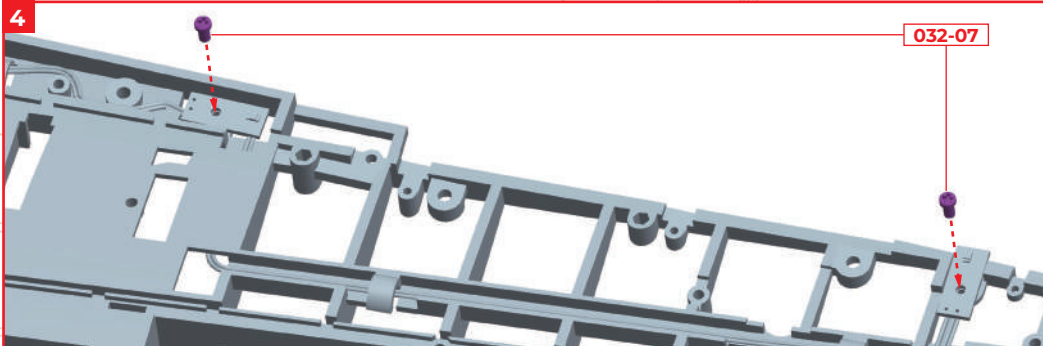


Pass the LED wire **032-04** through the wing frame and insert the LED at the end into the wing tip light **032-02**. The wire runs under the frame in four places, shown circled in the diagram below. Check that the wire runs around any screw holes.

This process can also be done in reverse, inserting the LED into the wing tip light before fixing the wire in the correct positions on the wing.

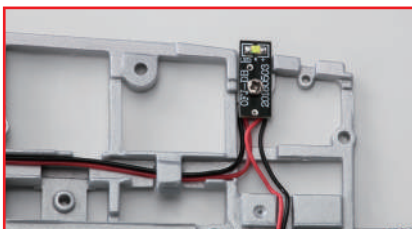


4



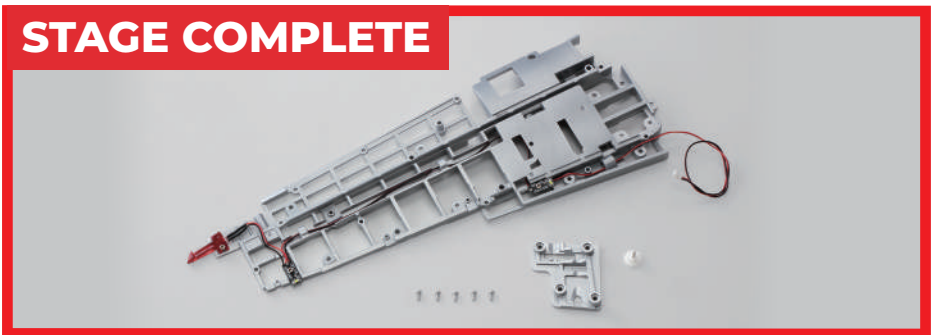
Fix the two LED boards on **032-04** in place using 2 x screws **032-07**.

NOTE



The two LED boards **032-04** should be attached with the writing facing upwards.

STAGE COMPLETE



Stage 33: Attaching a Type 99 mkII 20 mm Machine Gun

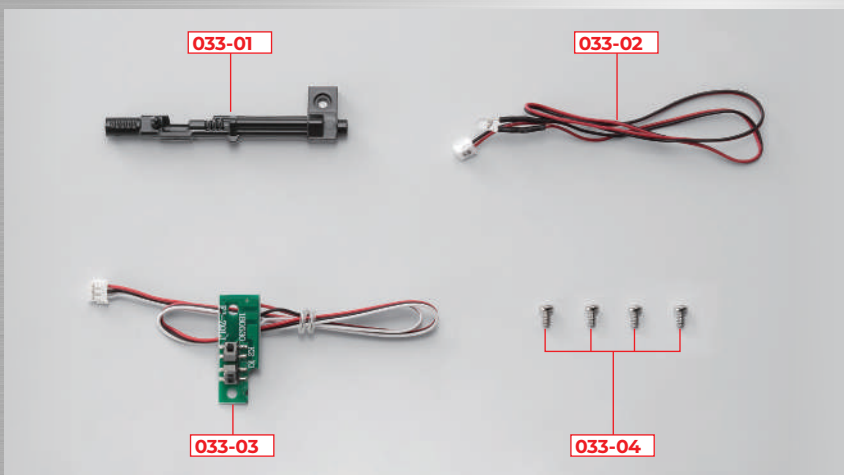
Stage 33 Assembly

Type 99 mkII 20 mm Machine Gun

In this stage we'll be installing the landing gear limit switch as well as assembling the Type 99 mkII 20 mm machine gun and then attaching this to the landing gear frame.



STAGE 33 PARTS



You will also need: screwdriver, long-nose pliers

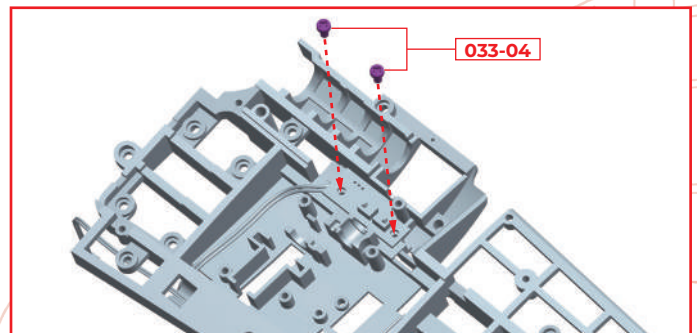
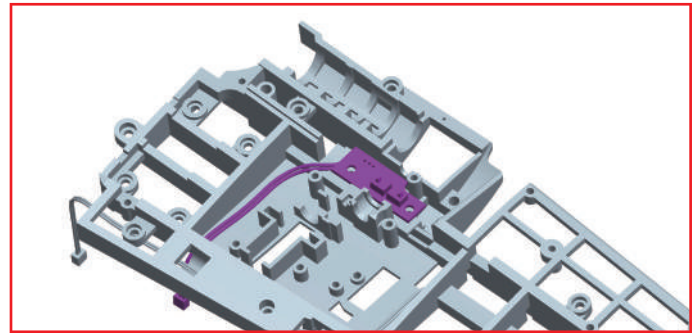
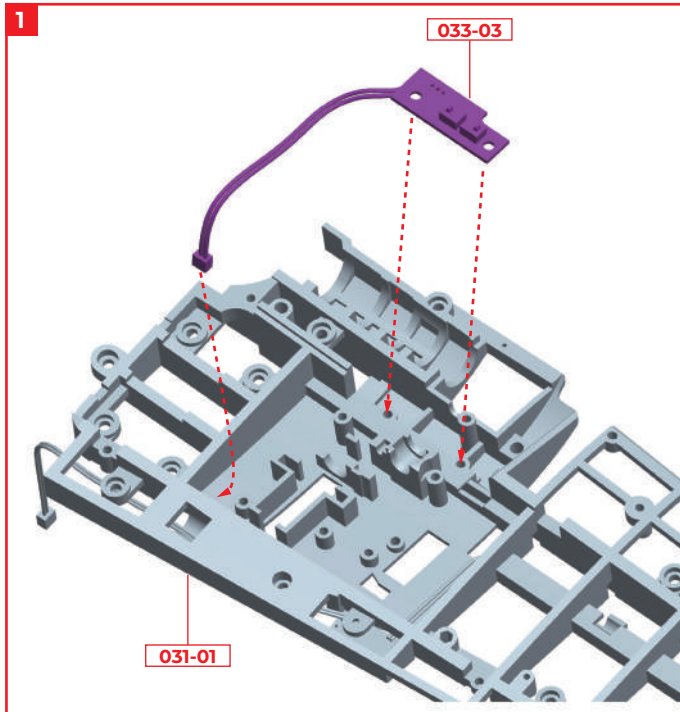
PARTS LIST

	PART	No.	MATERIAL
<input type="checkbox"/>	033-01	1	ABS resin
<input type="checkbox"/>	033-02	1	LED
<input type="checkbox"/>	033-03	1	Circuit board
<input type="checkbox"/>	033-04	4 (1 spare)	Steel

STEP 1

Attaching the landing gear switch

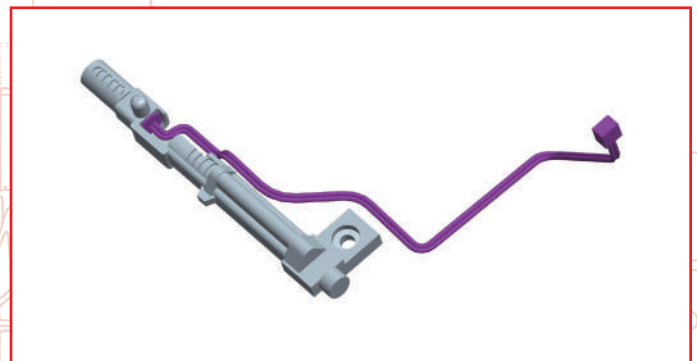
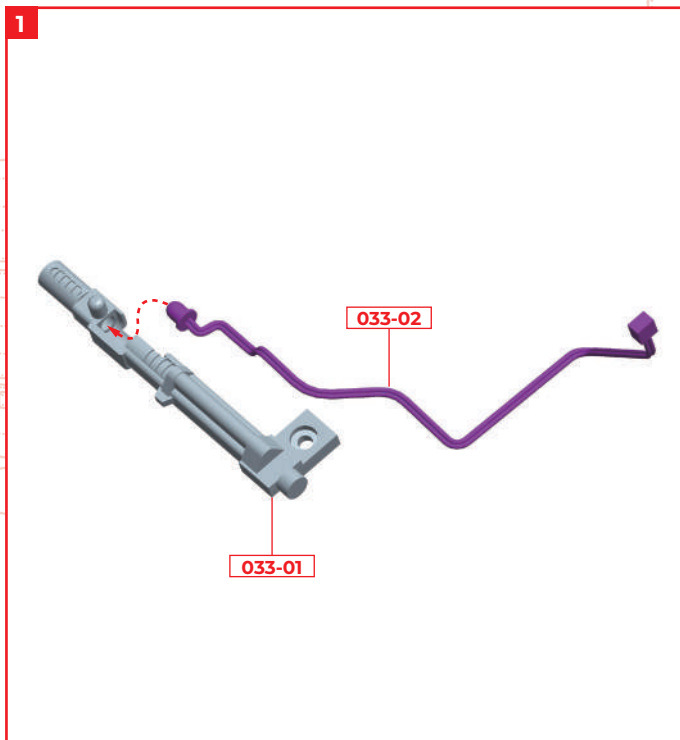
← : Glue
 - - - : Don't Glue



Fix the switch **033-03** to the frame **031-01** using 2 x **033-04** screws. Feed the end of the switch wire through the gap to the opposite side of the wing.

STEP 2

Assembling and attaching the Type 99 mkII 20 mm machine gun

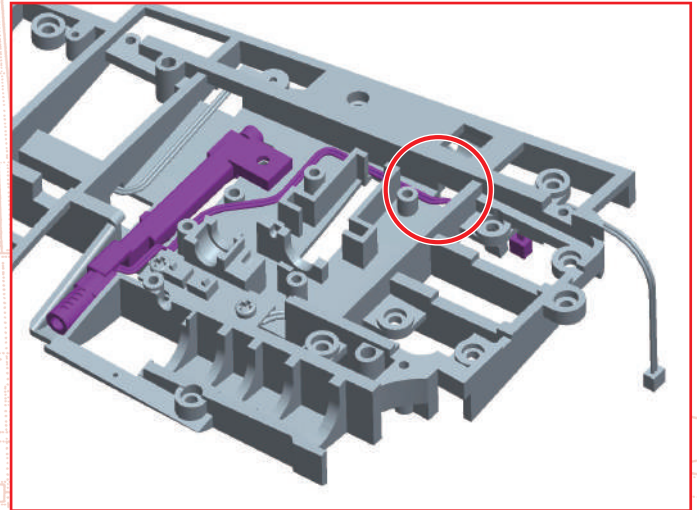
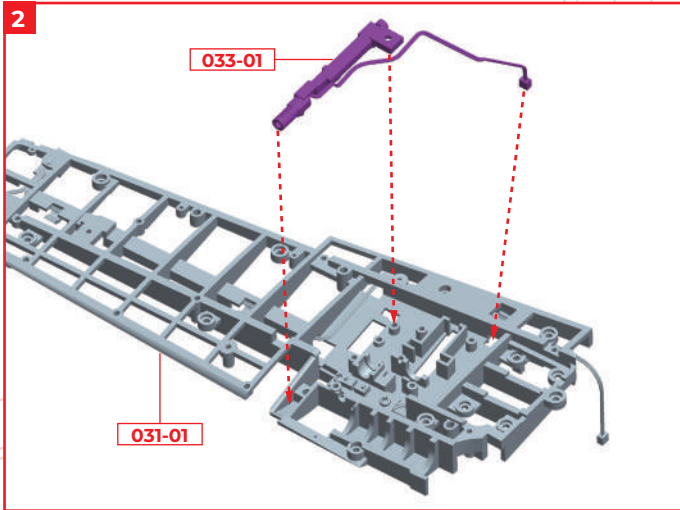


NOTE

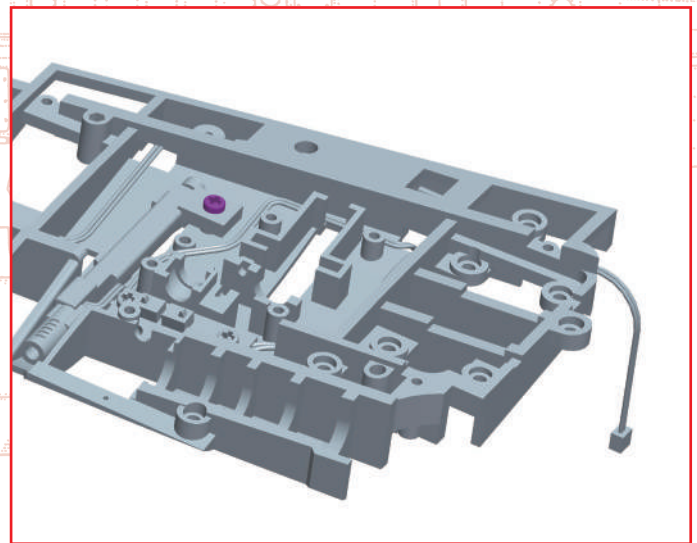
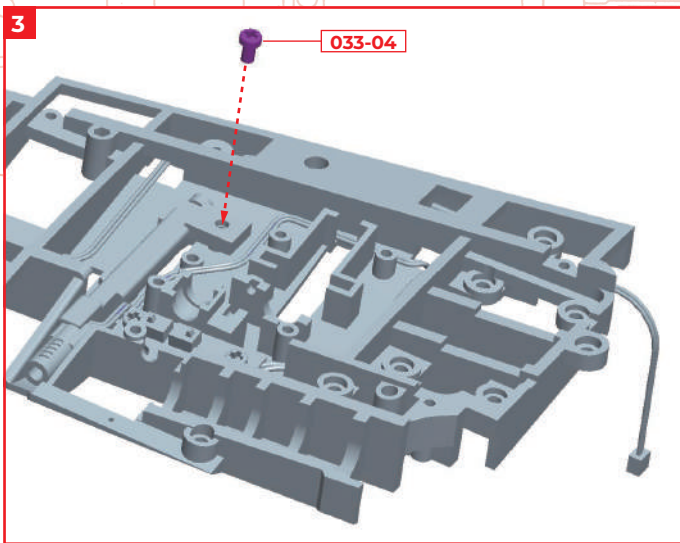


Before attaching the LED, hold the area just below the LED and gently bend the wire 90 degrees to create the correct angle for installation.

Insert the LED **033-02** into the 20-mm machine gun **033-01**, pushing it in place gently but firmly.

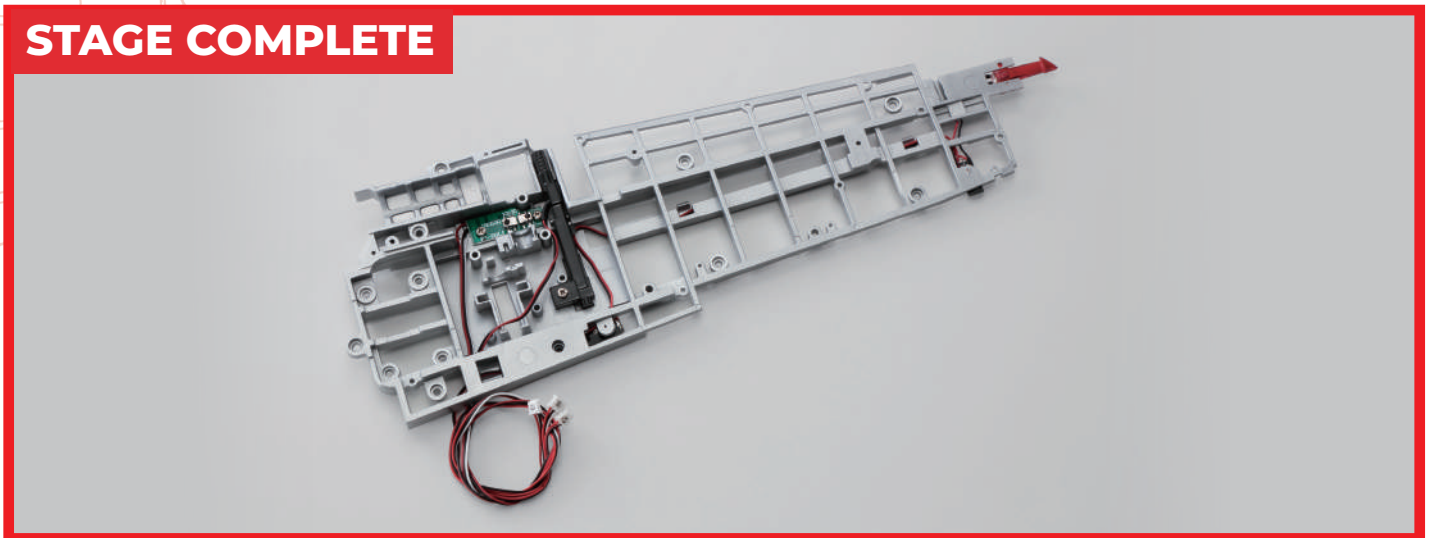


Lower the machine gun **033-01** assembled in 1 onto the main wing frame **031-01**. Feed the wire from LED **033-02** through the same hole as the switch **033-03**.

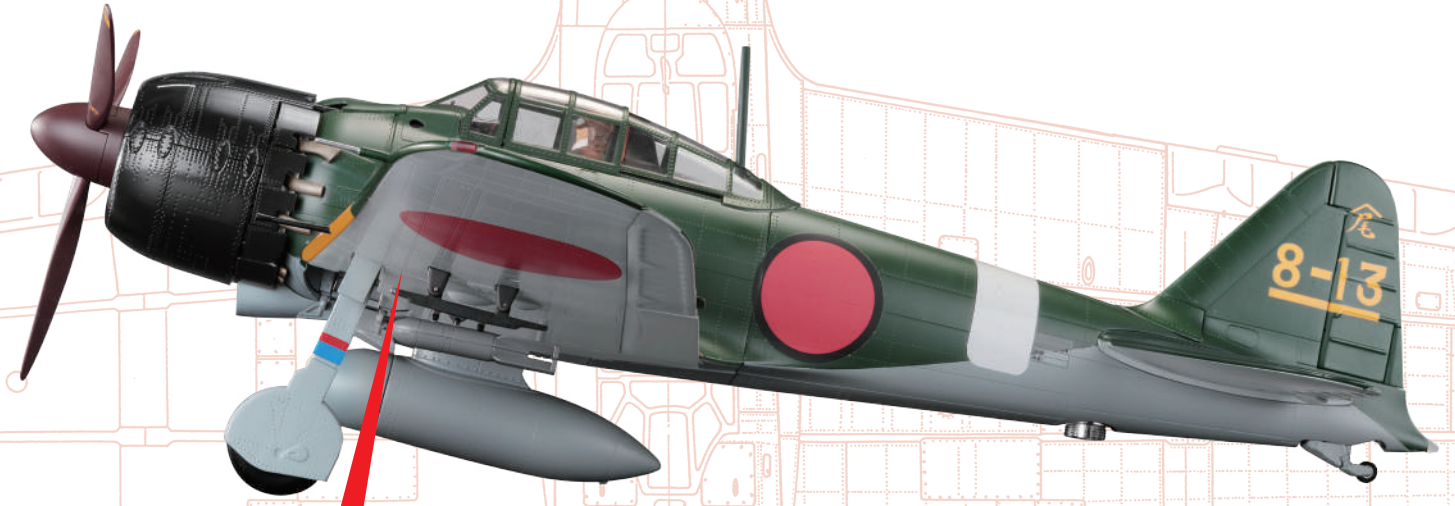


Fix the machine gun **033-01** in place using an **033-04** screw. Check that the wire is routed around any screw holes and fixings.

STAGE COMPLETE



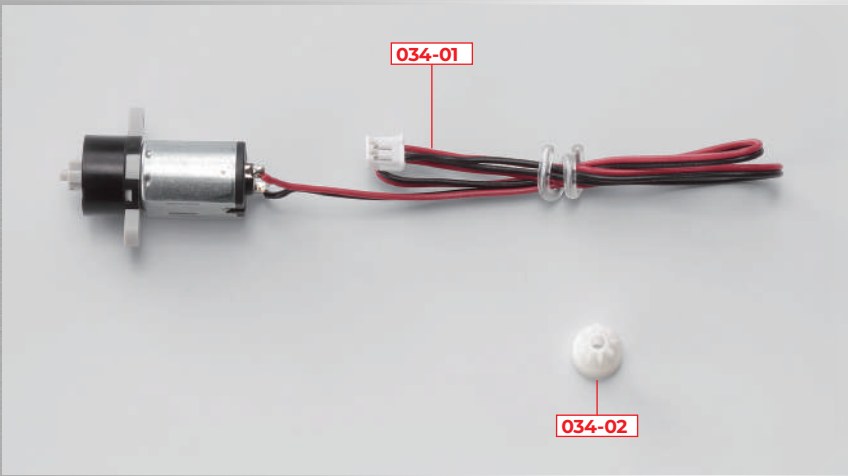
Stage 34: Attaching the Left Landing Gear & Motor



Stage 34 Assembly
Landing Gear / Motor

In this stage we'll attach the left landing gear as well as the motor (which drives this side forward) to the left wing frame.

STAGE 34 PARTS



PARTS LIST

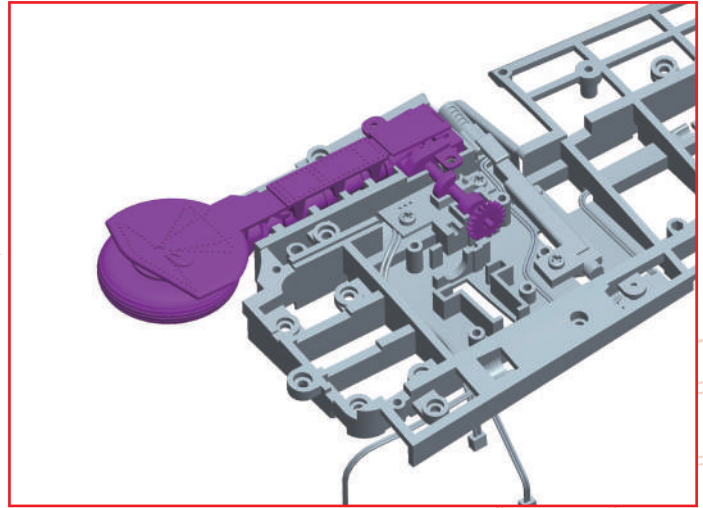
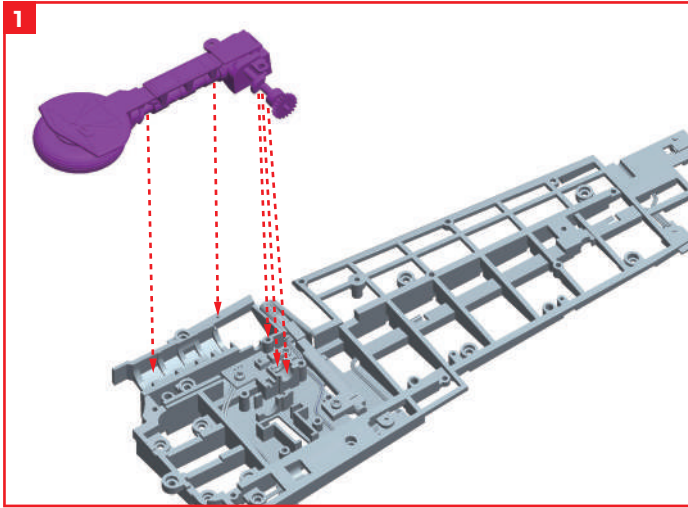
	PART	No.	MATERIAL
<input type="checkbox"/>	034-01	1	Motor
<input type="checkbox"/>	034-02	1	Plastic

You will also need: screwdriver.

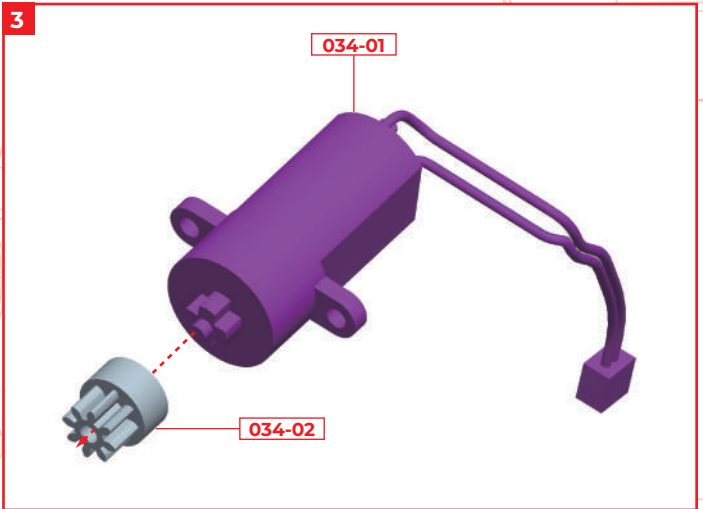
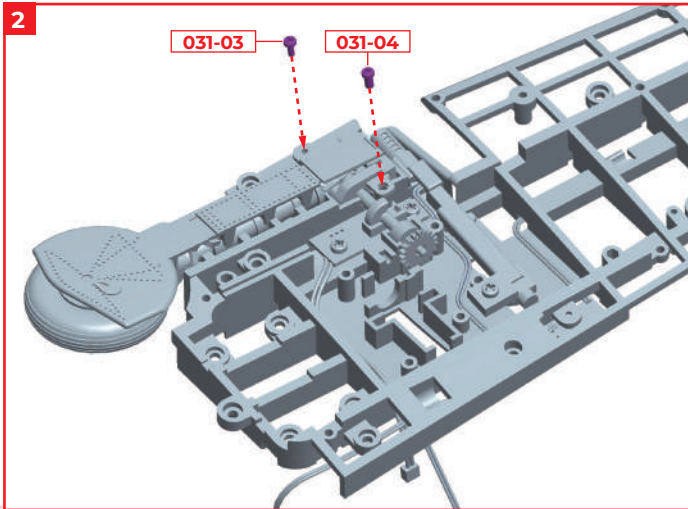
STEP 1

Attaching the left landing gear and motor

← : Glue
 - - - : Don't Glue

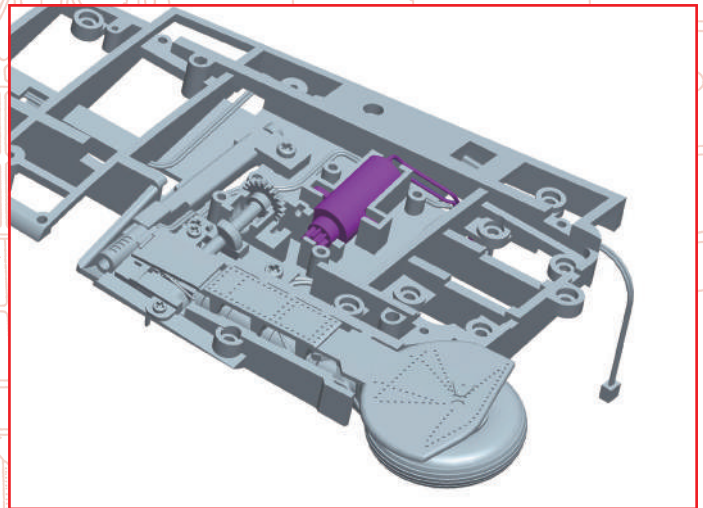
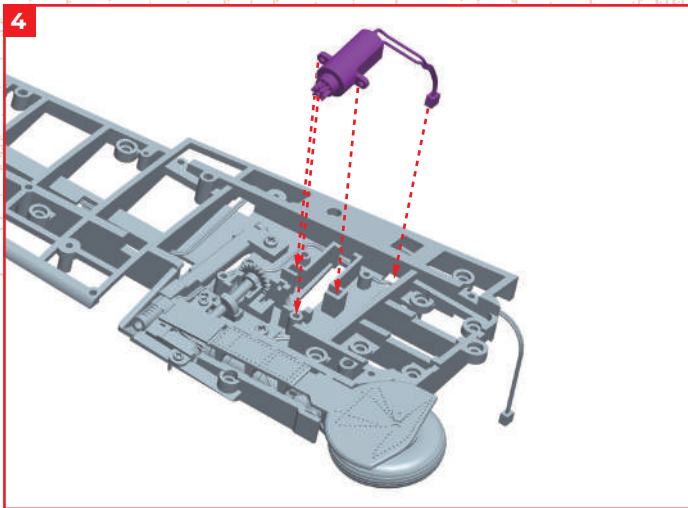


Fit the landing gear assembled in stage 31 to the main wing frame.



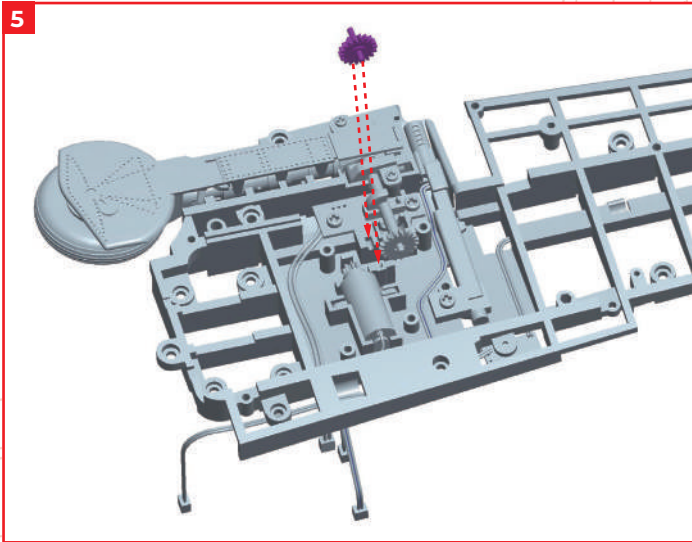
Secure the landing gear in place using the screws **031-03** & **031-04** that came with stage 31.

Fit the gear **034-02** to the motor **034-01**. Pay attention to the orientation of the gear.



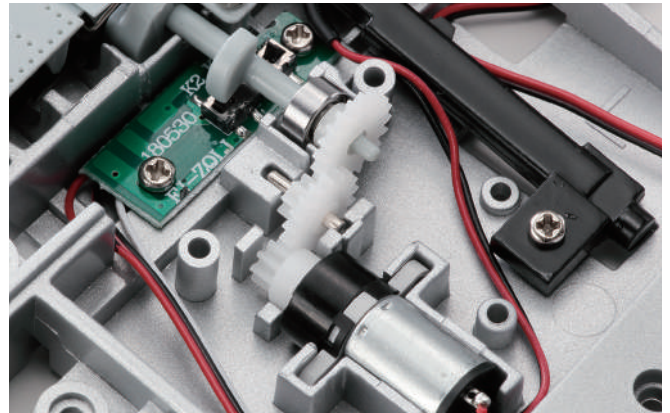
Fit the motor assembled in 3 to the wing frame. Pass the wire through the same hole in the wing as the previous two wires.

5



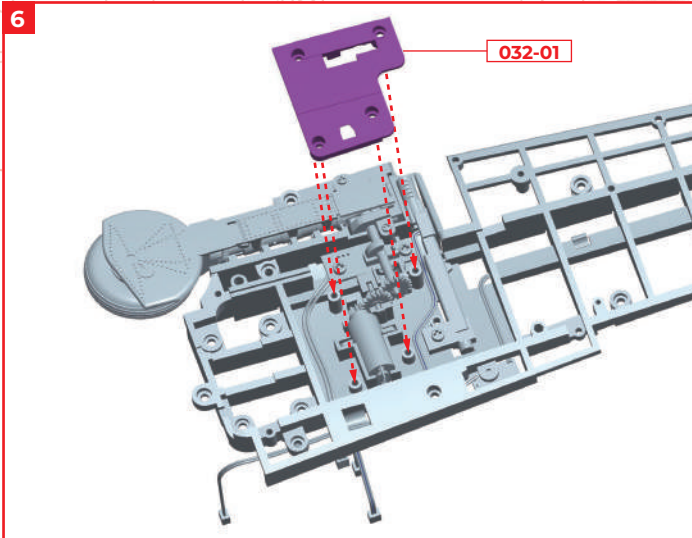
Fit the gear and shaft assembled in stage 32.

NOTE



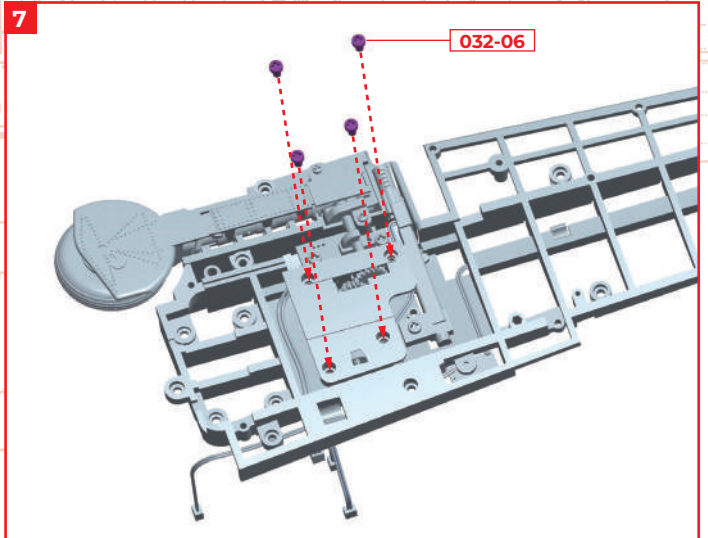
Make sure the landing gear and motor gear properly engage when installing these parts.

6



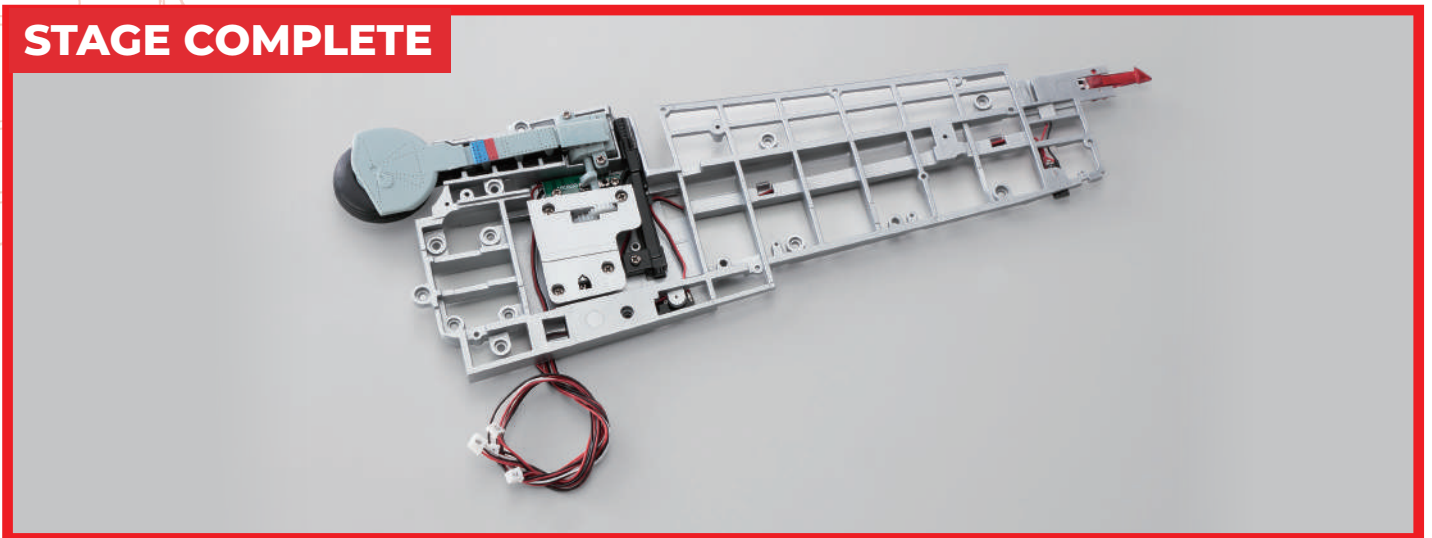
Fit the cover **032-01** that came with stage 32.

7

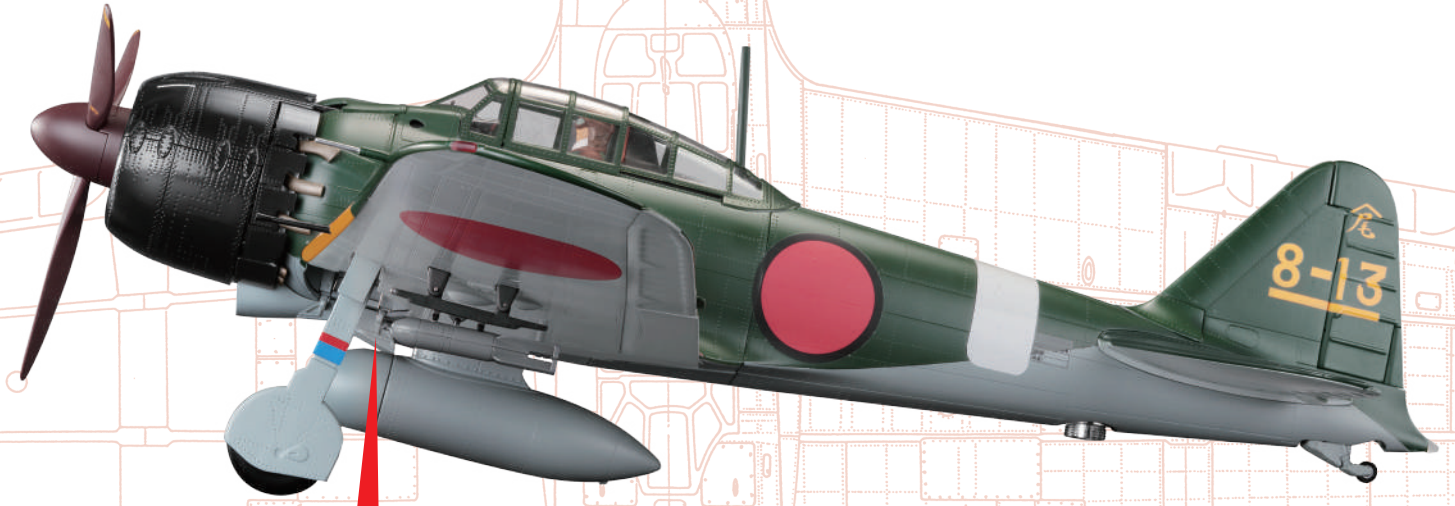


Fix the cover in place using four screws **032-06** that came with stage 32.

STAGE COMPLETE



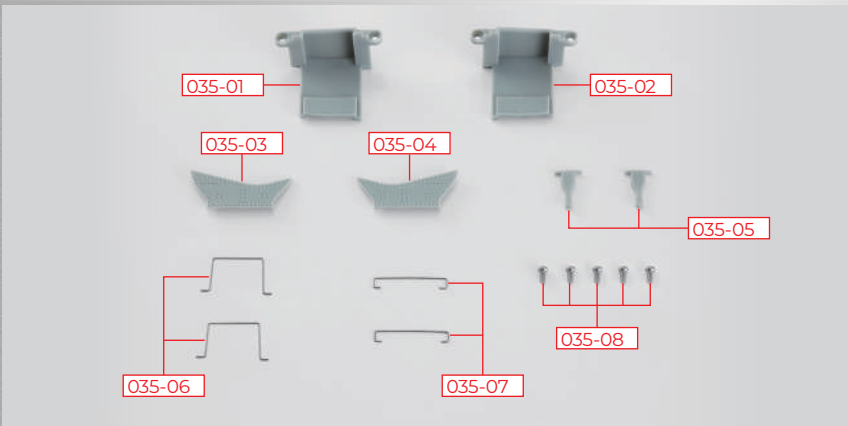
Stage 35: Assembling the Landing Gear Covers



Stage 35 Assembly
 Landing Gear Covers

In this stage we'll be assembling the cover parts for the landing gear when retracted into the wing when not in use.

STAGE 35 PARTS



You will also need: screwdriver.
 * 035-01, 035-02, 035-08 will not be used in this stage. Keep them in a safe place until required in a later stage.

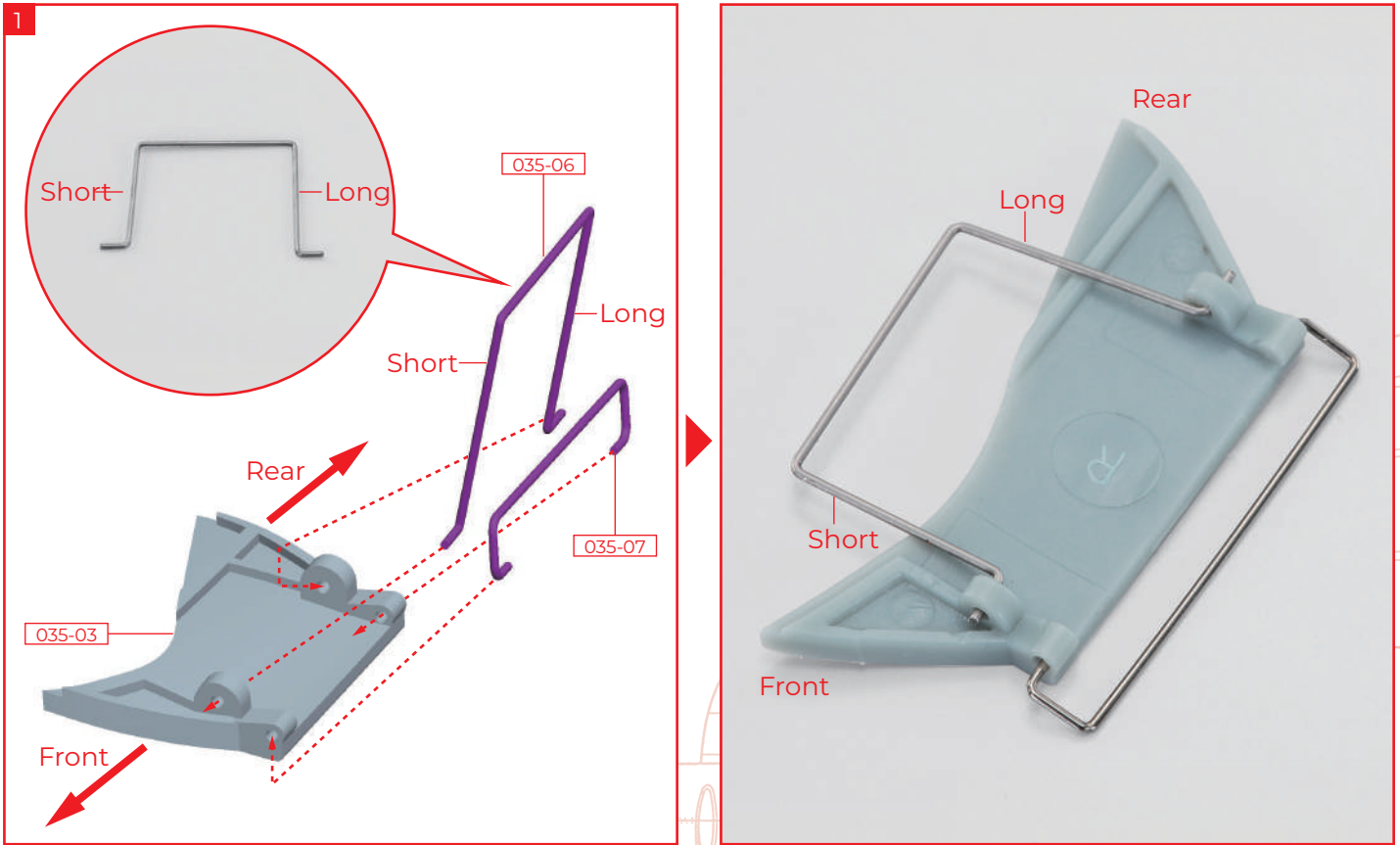
PARTS LIST

	PART	No.	MATERIAL
<input type="checkbox"/>	035-01	1	ABS
<input type="checkbox"/>	035-02	1	ABS
<input type="checkbox"/>	035-03	1	ABS
<input type="checkbox"/>	035-04	1	ABS
<input type="checkbox"/>	035-05	2	ABS
<input type="checkbox"/>	035-06	2	Steel
<input type="checkbox"/>	035-07	2	Steel
<input type="checkbox"/>	035-08	5 (1 spare)	Steel

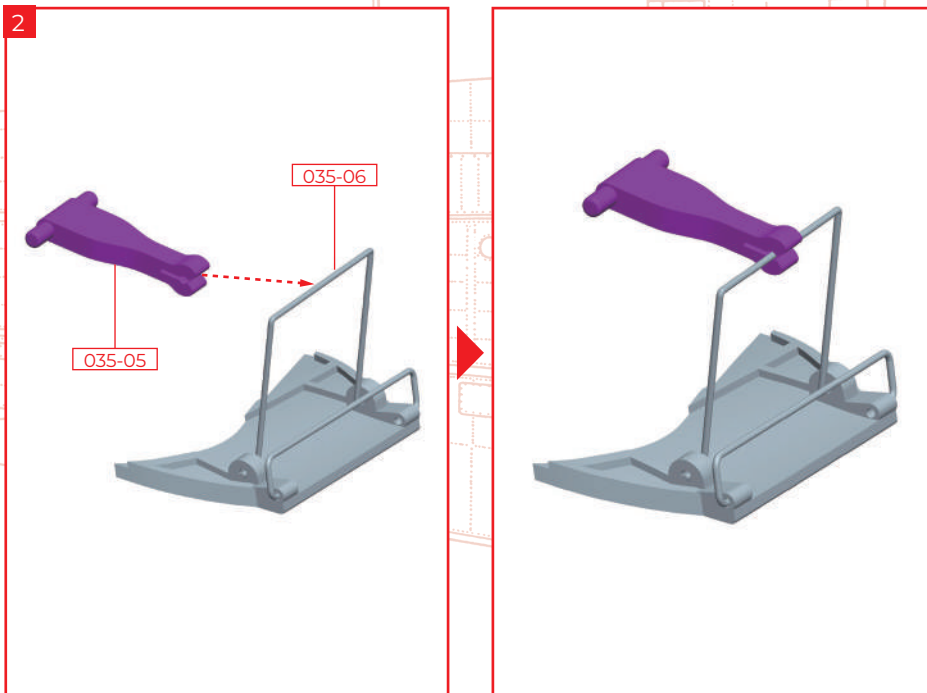
STEP 1

Assembling the right landing gear

← : Glue
- - - : Don't Glue



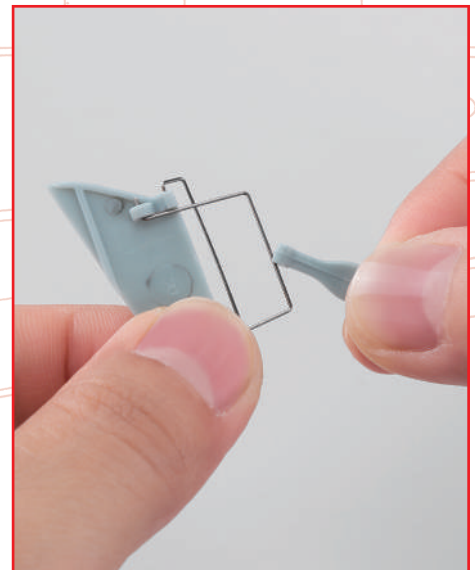
Attach the metal fittings **035-06** & **035-07** to the right landing gear cover. Study the picture to check you have the correct orientation: the short end of **035-03** faces the front, and the short arm of **035-06** faces the front.



Fit the connector **035-05** onto the metal fitting **035-06**.

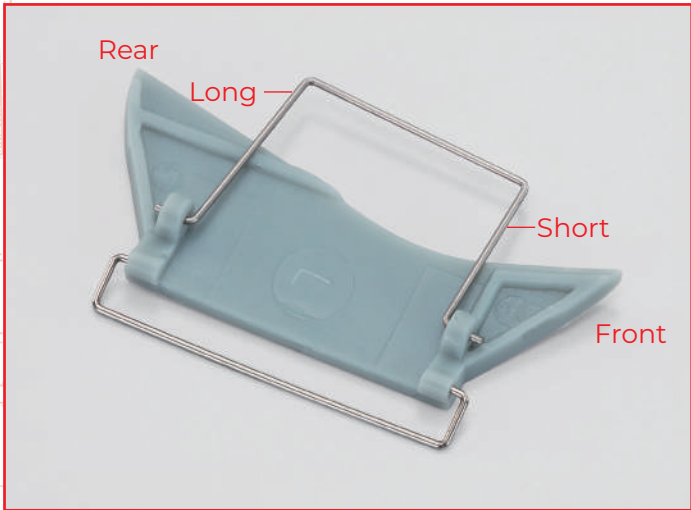
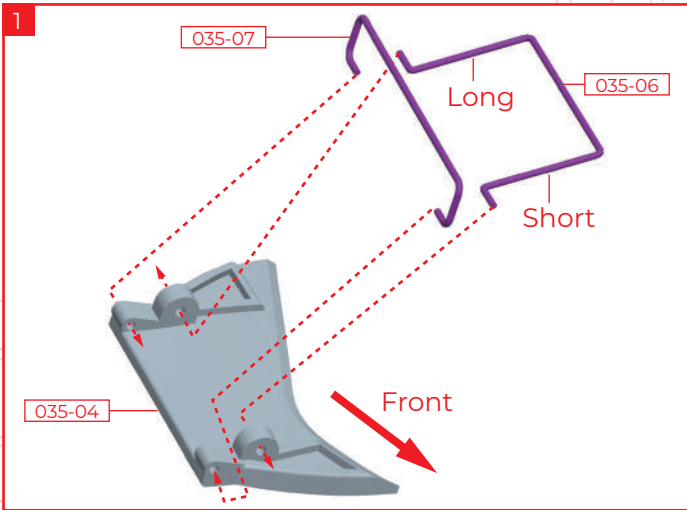
NOTE

It is easier to fit connector **035-05** by sliding it on diagonally from the corner.

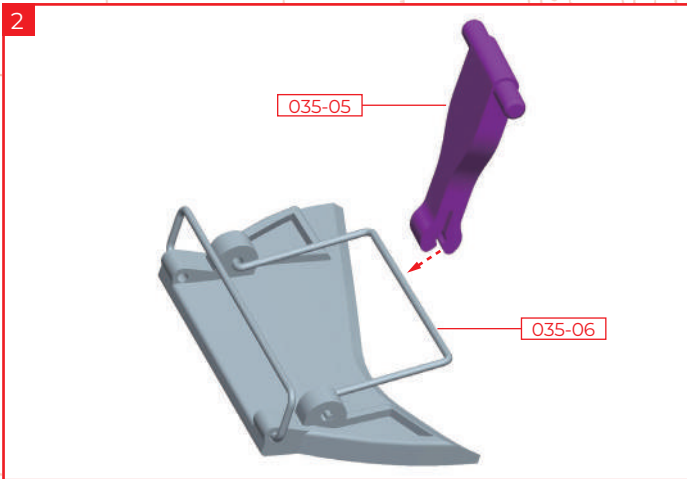


STEP 2

Assembling the left cover

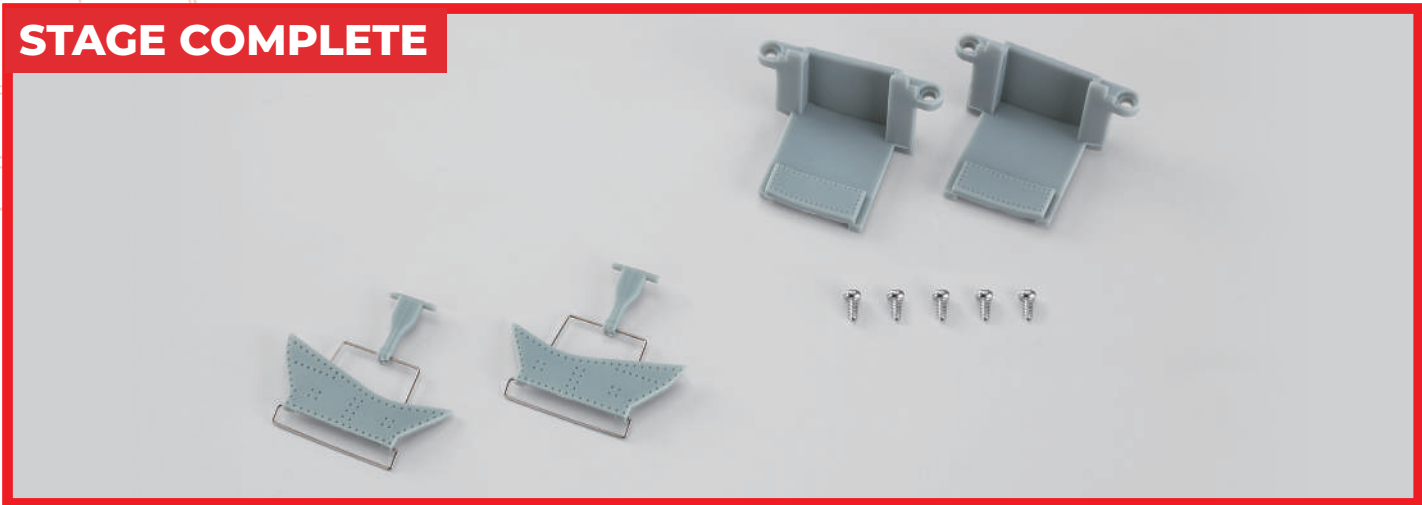


Attach the metal fittings **035-06** & **035-07** to the left landing gear cover **035-04**. The short end of **035-04** faces the front, and the short arm of **035-06** attaches to the front end.

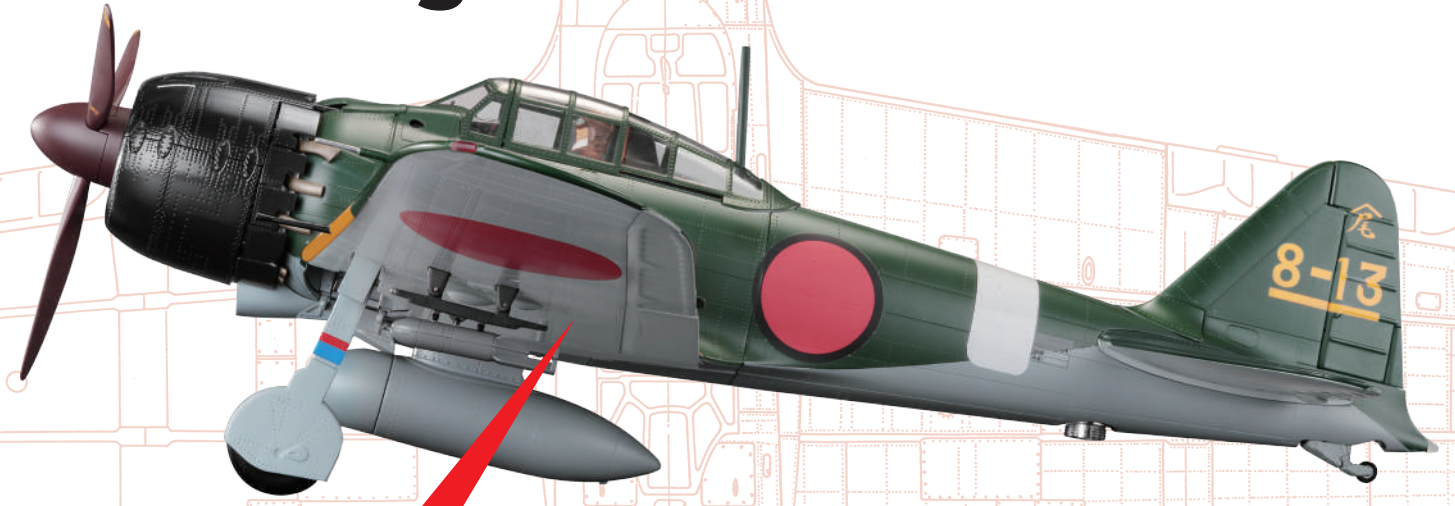


Fit the connector **035-05** onto the metal fitting **035-06**.

STAGE COMPLETE



Stage 36: Attaching the Landing Gear Covers and Wing Frame to the Wing Base Frame

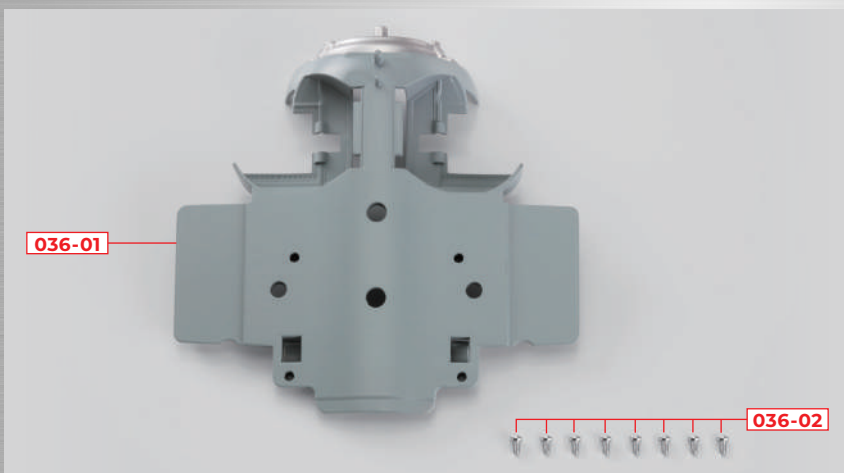


Stage 36 Assembly

Wing Frame

In this stage we'll be attaching the landing gear covers and left wing frame to the wing base frame. We'll also be attaching the carburettor and supercharger.

STAGE 36 PARTS



PARTS LIST

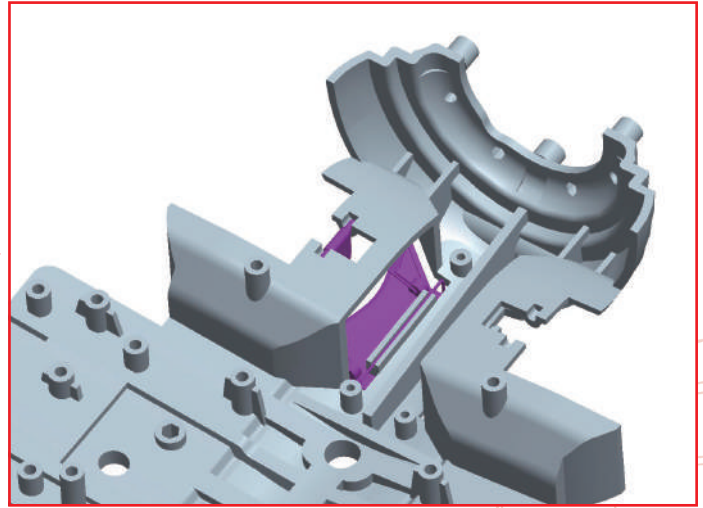
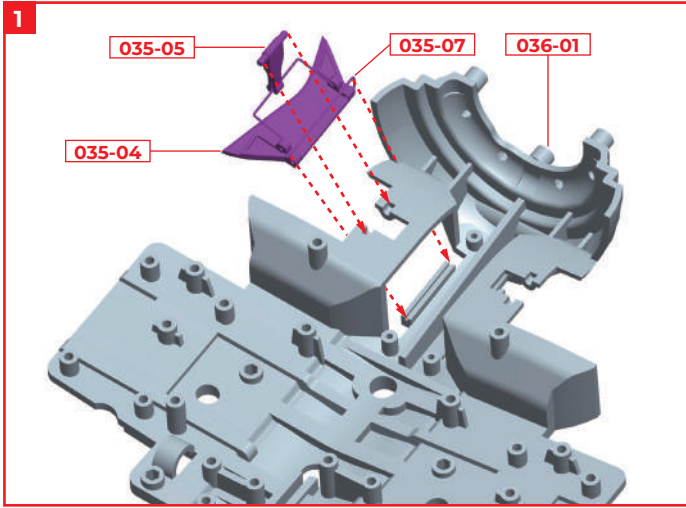
	PART	No.	MATERIAL
<input type="checkbox"/>	036-01	1	Die-cast
<input type="checkbox"/>	036-02	8 (1 spare)	Steel

You will also need: screwdriver.

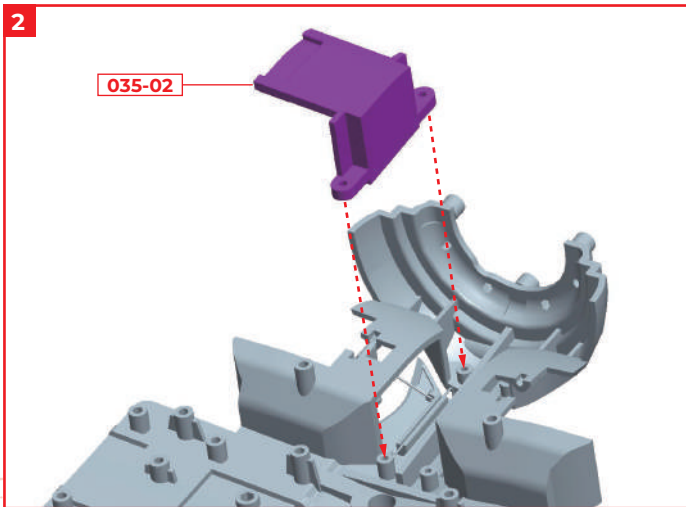
STEP 1

Attaching the left landing gear cover

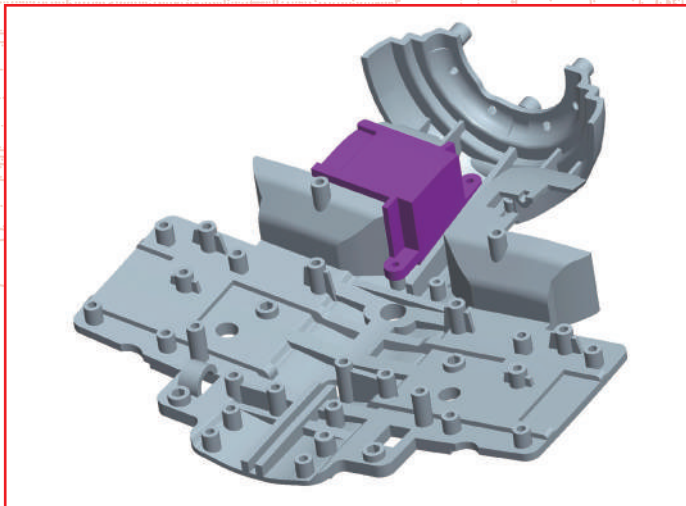
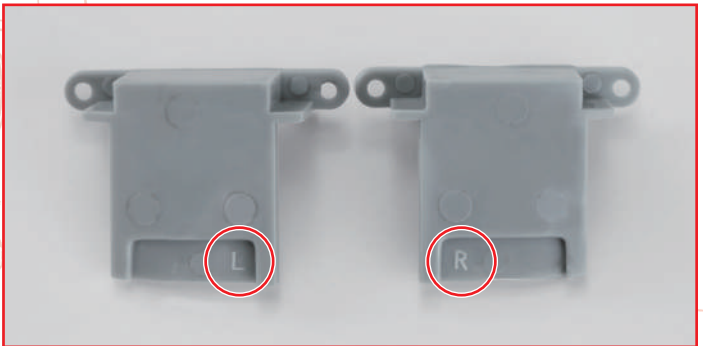
← : Glue
 - - - : Don't Glue



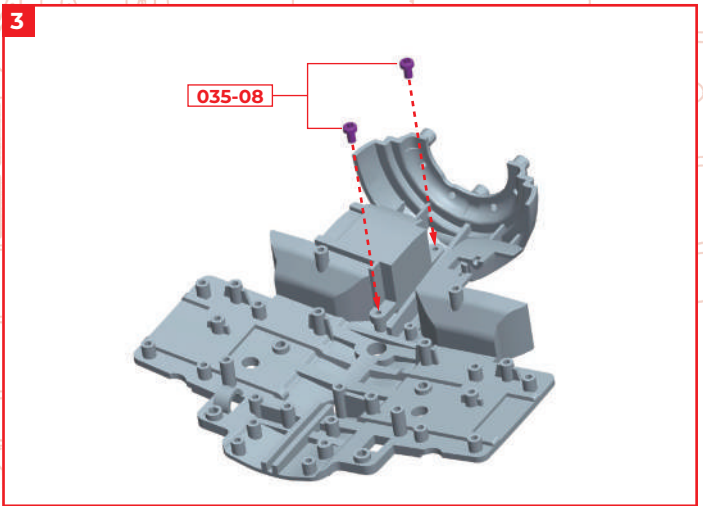
Fit connector **035-05** and metal fittings **035-07** that are attached to the left landing gear cover assembled in stage 35 to the main wing base frame **036-01**.



NOTE
 Support units **035-01** & **035-02** are marked left (L) and right (R). Check you have the correct part.



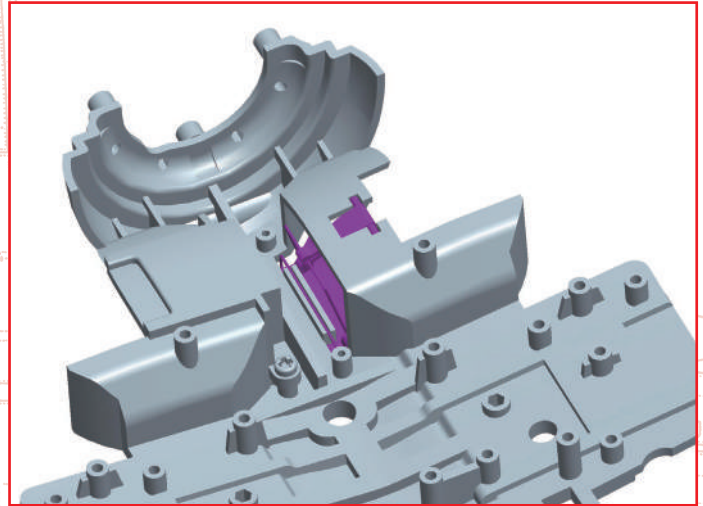
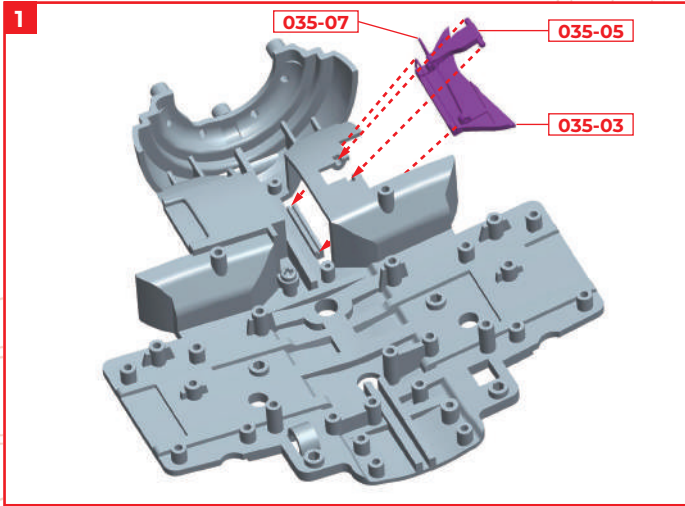
Attach part **035-02** (left).



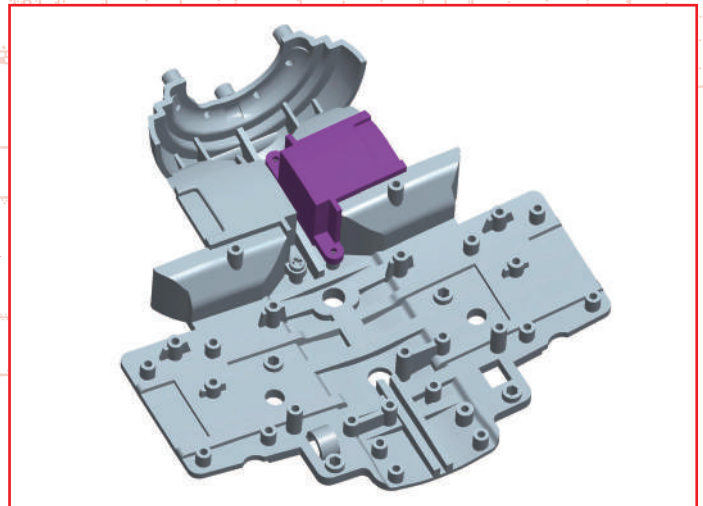
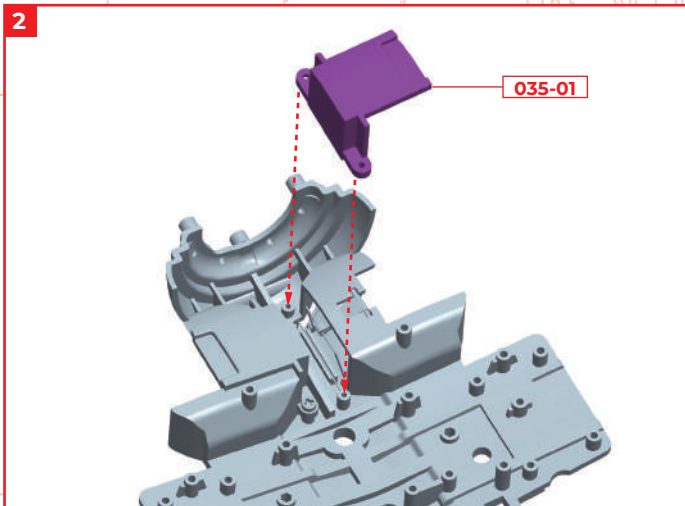
Fix part **035-02** in place using two screws **035-08** that came with stage 35.

STEP 2

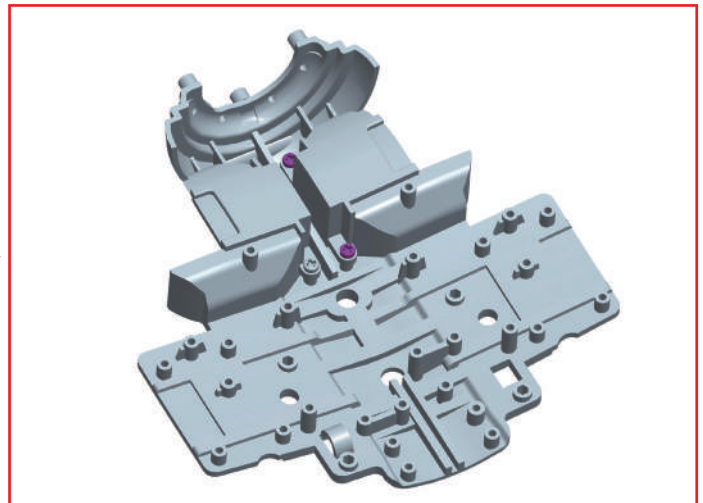
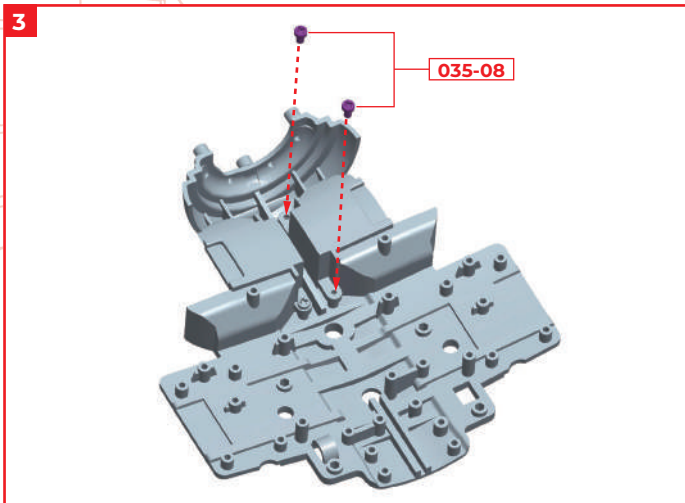
Attaching the right landing gear cover



Fit connector **035-05** and metal fittings **035-07** that are attached to the right landing gear cover assembled in stage 35 to the main wing base frame **036-01**.



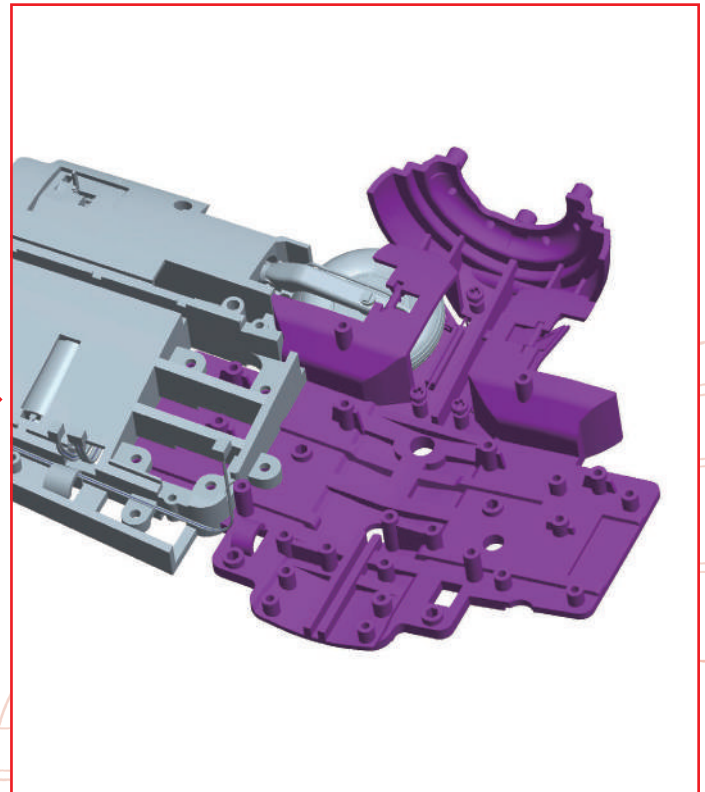
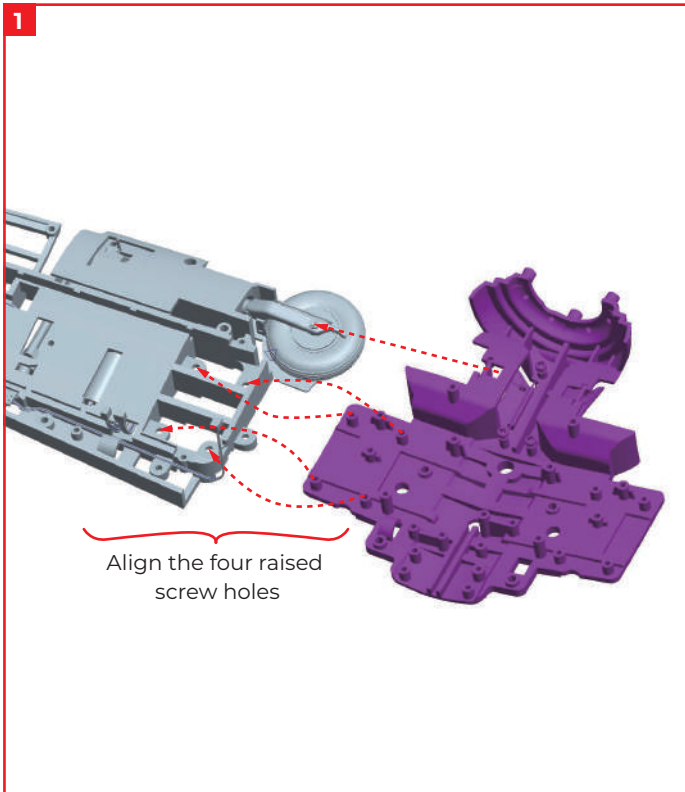
Attach support unit **035-01** (right).



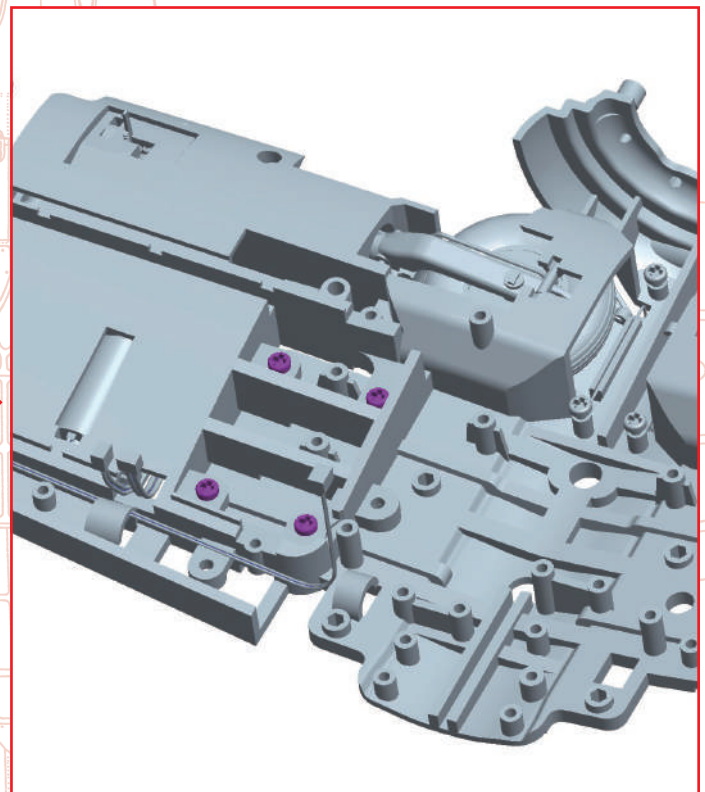
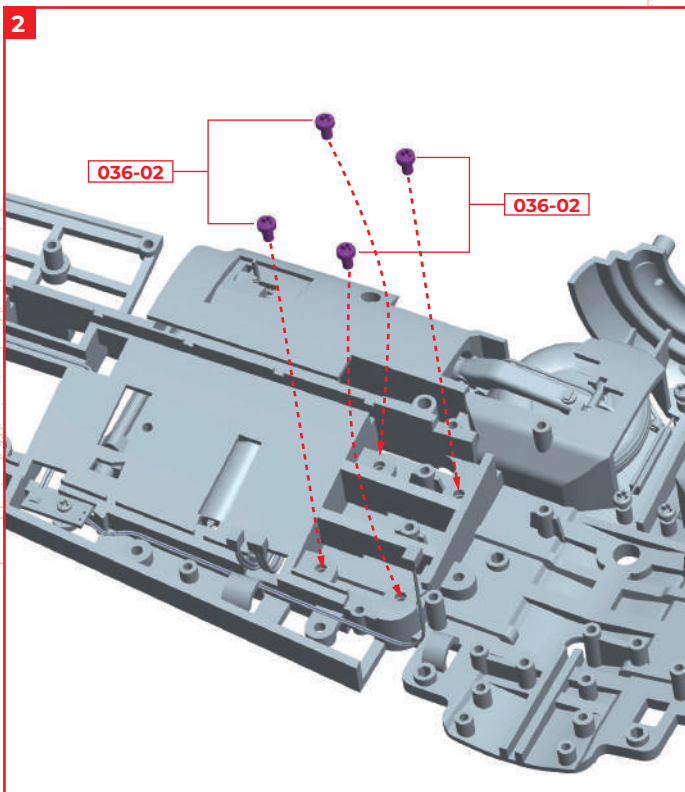
Fix support unit **035-01** in place using two screws **035-08** that came with stage 35.

STEP 3

Attaching the wing frame



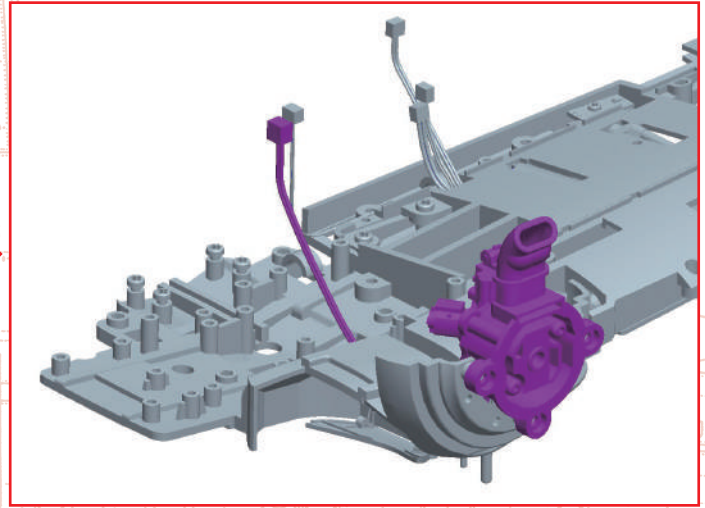
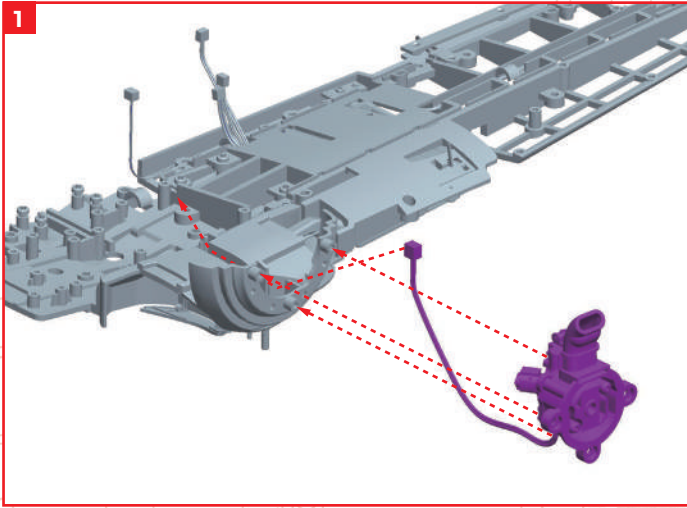
Align the left main wing frame assembled in stage 34 with the main wing base frame **036-01** assembled in STEP 2.



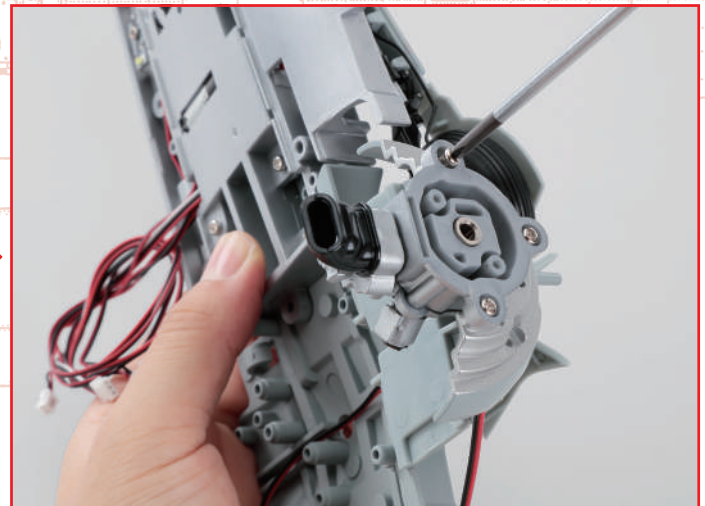
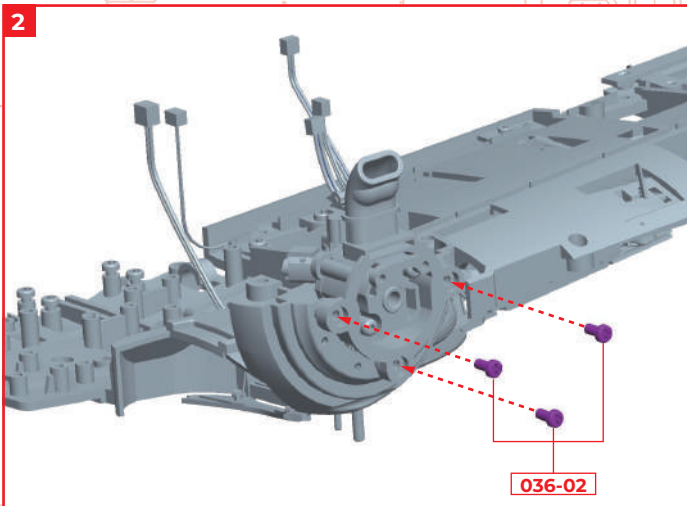
Fix the main wing frame in place using four **036-02** screws.

STEP 4

Installing the carburettor and supercharger



Fit the carburettor and supercharger unit assembled in stage 15 to the main base frame **036-01**.



Secure in place using three **036-02** screws.

STAGE COMPLETE

