FERRARI 312 T4

THE LEGENDARY 1970s F1 FERRARI

PACK 01

STAGES 1-6

SCALE 1:8

FERRARI 312 T4

SCALE 1:8

Contents

AGORA MODELS

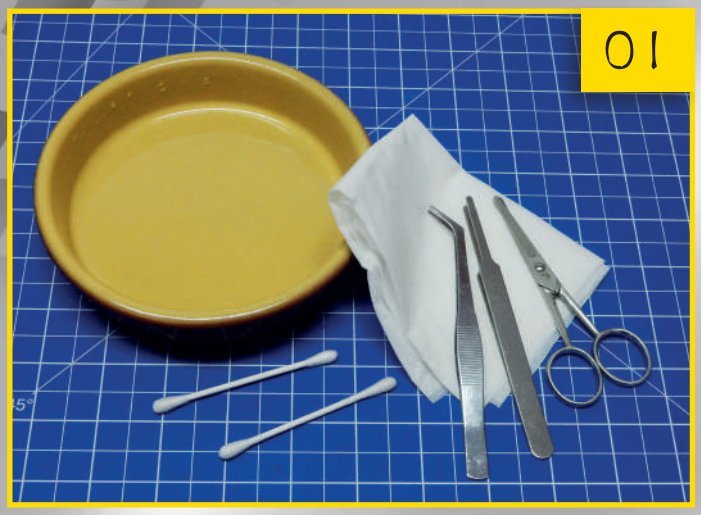
WARNING: NOT SUITABLE FOR CHILDREN UNDER THE AGE OF 14. THIS PRODUCT IS NOT A TOY AND IS NOT DESIGNED OR INTENDED FOR USE IN PLAY.
ITEMS MAY VARY FROM THOSE SHOWN.

FRONT SPOILER OF THE 312 T4

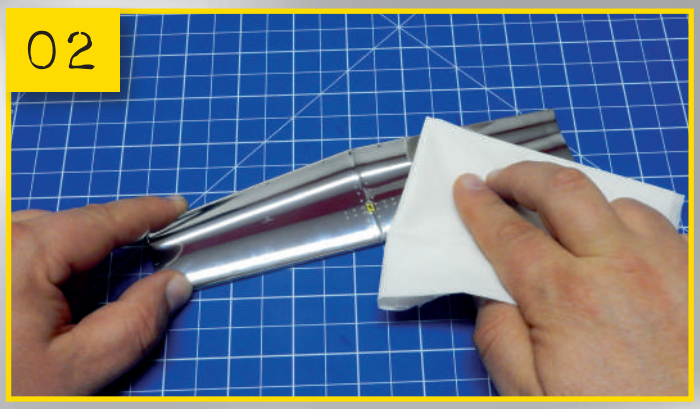
THE FRONT SPOILER OF THE FERRARI 312 T4 HAD AN IMPORTANT FUNCTION: TO IMPROVE THE TRACTION AND STABILITY OF THE CAR. IN THIS ASSEMBLY SESSION, YOU WILL COMPLETE THE SPOILER AND DECORATE IT WITH DECALS OF THE SPONSORS' LOGOS.

LIST OF PARTS

1. Front spoiler
2. Right-hand spoiler bracket
3. Left-hand spoiler bracket
4. Decals



01-01 Place a shallow bowl, a soft cloth, two pairs of tweezers, a pair of small scissors, and two cotton buds on a clean work surface.



01-02 Using the cloth, carefully clean the front spoiler of your model. Having removed all marks, you will now prepare the surface ready to take the decals.

01-03 The decal sheet has a small protective overlay. Remove it carefully, without damaging the decals underneath.

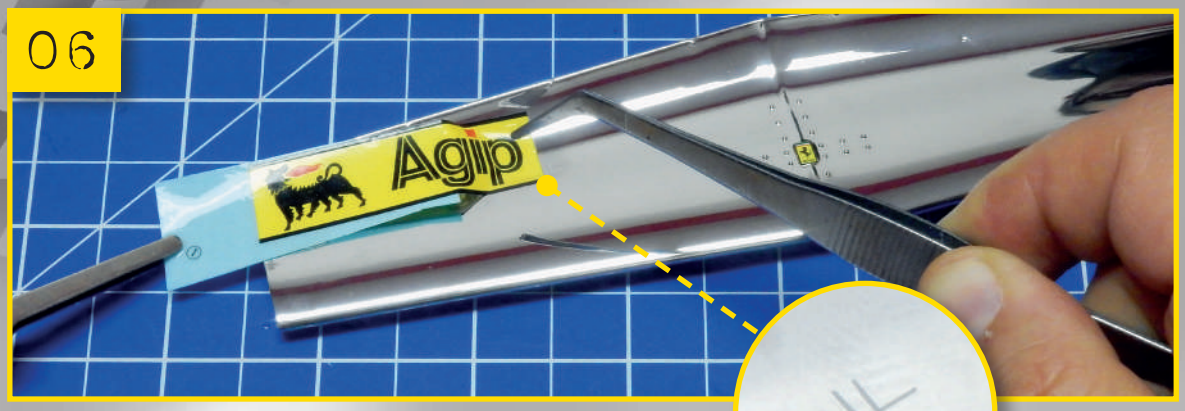
01-04 Using the scissors, cut out decals 1, 2 and 3 (the reference number is in a circle next to the decal), leaving a small margin.

ADVANCED TECHNIQUE

DECAL SOFTENER

This liquid product is applied with a brush, and is particularly useful when decals are to be placed on uneven, curved surfaces or have small details that must remain visible once they have been placed. The softener lets the decal lie perfectly on the surface to which it is applied, eliminating wrinkles, creating an extremely realistic effect. Decal softeners are available from model shops. They must always be used in small quantities, and only after excess water has been eliminated.

01-05 Fill the bowl with warm water and submerge the decal marked with the number 1. Leave it submerged for about 30 seconds, until the thin decal begins to separate from its backing sheet.

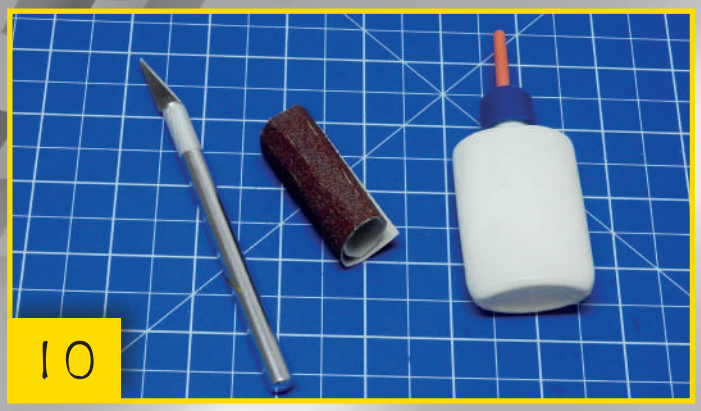


01-06 Using the tweezers to help you, place the decal on the spoiler whilst sliding it away from its backing sheet. To find the correct position, use the small reference angles on the spoiler as a guide (see detail).

01-07 When you are happy with the position of the decal, gently dab it with the cloth to remove excess water. If you still need to move the decal slightly, use a cotton bud - not your fingers.

01-08 Following the same procedure, position the central decal. Again, use a cotton bud to move it. If you want to, you can use a decal softener (see box on page 2) to bring out the minutest details, as shown in the detailed image above.

01-09 Now you only need to position the decal identified by the number 3. Before proceeding, wait for the decals to dry completely (as a rule, this should take several hours).

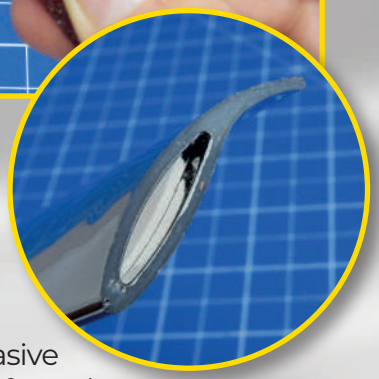


01-10 When the decals are dry, prepare everything you will need for the second phase of the assembly: the spoiler. You will need a modelling knife, a small amount of abrasive paper, and plastic glue.

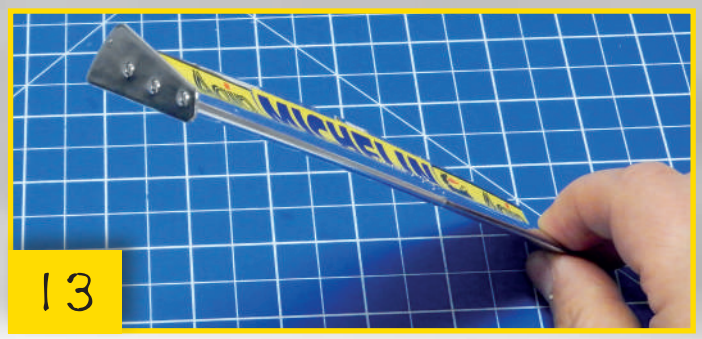
01-12 First dry-fit the couplings between the brackets and the spoiler, and then proceed by applying a thin layer of plastic glue.

In the next stage

The nose, the front spoiler bracket, one front tyre with its wheel, and screws.



01-11 Plastic glue does not adhere to chrome surfaces, like those of the spoiler. The chromed layer must therefore be removed from the sides of this component using abrasive paper and, using the knife, from the mounting pins of the supports. Do this extremely carefully to avoid damaging the decals or the surfaces of the components. In the circle above you can see what the side of the spoiler looks like after the chrome layer has been removed.



01-13 Also apply glue to the bracket fitting points and then join the two pieces together. All that remains is to glue the second bracket to the front spoiler.

FINAL RESULT

In this first assembly session you have completed the front spoiler of your model. Put it somewhere safe, ready for use at a later stage of the build

FIRST TYRE AND THE NOSE

YOUR MODEL CAR IS FITTED WITH FOUR SLICK TYRES, WHICH ARE DESIGNED TO GIVE MAXIMUM PERFORMANCE ON DRY TRACKS. HOWEVER IN THIS ASSEMBLY SESSION YOU WILL BE WORKING ON THE FRONT PART OF THE CAR: JOINING TOGETHER THE NOSE AND SPOILER.

1

2

3

2 type A screws

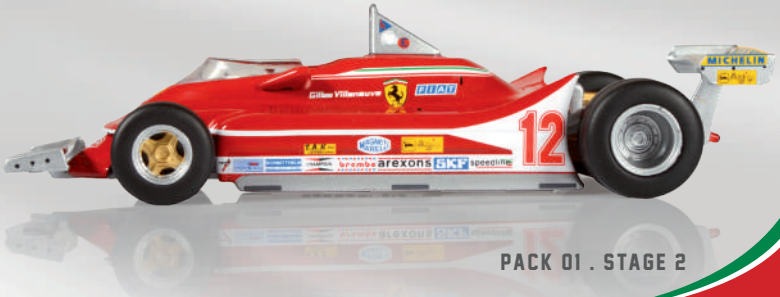
2 type B screws

LIST OF PARTS

1 Front tyre with filling
2 Nose
3 Front spoiler bracket

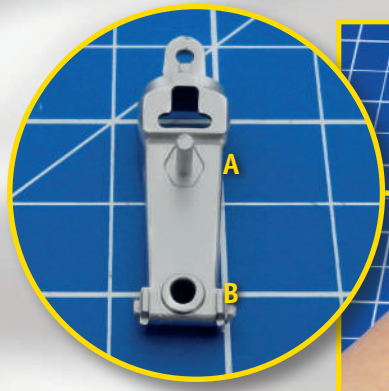
SCREWS

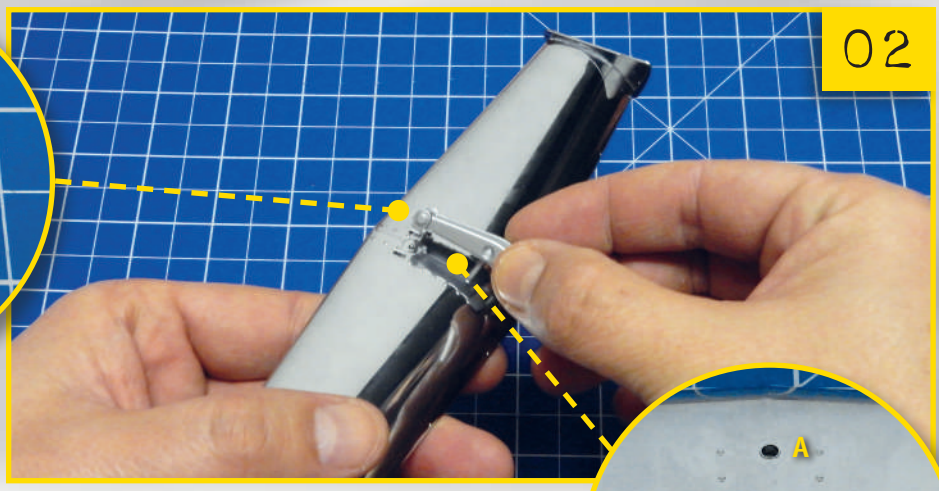
Two type A screws
Two type B screws

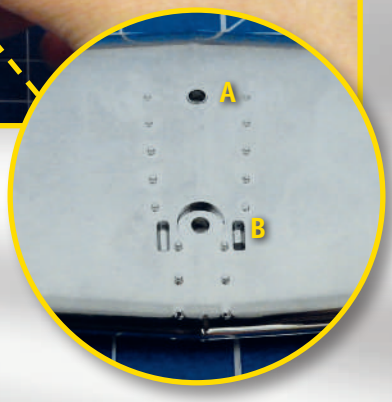


02-01 Place everything you need on the work surface, ready to carry out the assembly session shown on these pages. You will need the nose, a type A screw, a type B screw, the front spoiler bracket, and the spoiler that you received with Stage 1, to which you have already applied the decals. Also have ready a medium Phillips screwdriver.

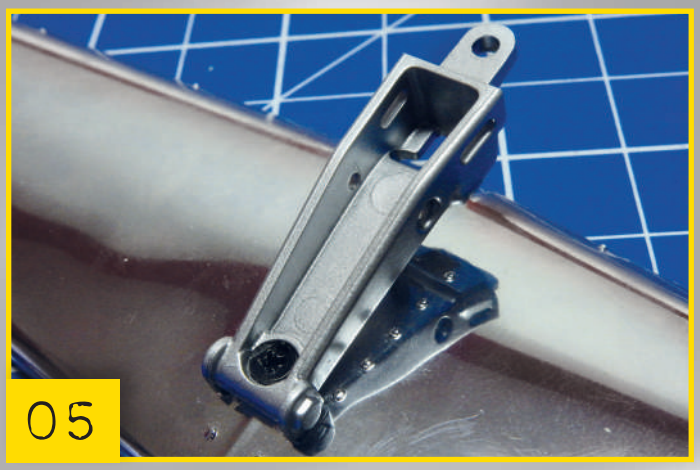
02-02 Turn over the front spoiler and locate holes A and B (inset below). Now join the bracket to the spoiler by inserting pin A (photo on the left) into the corresponding hole in the spoiler and marrying up the holes of the two parts marked with the letter B.





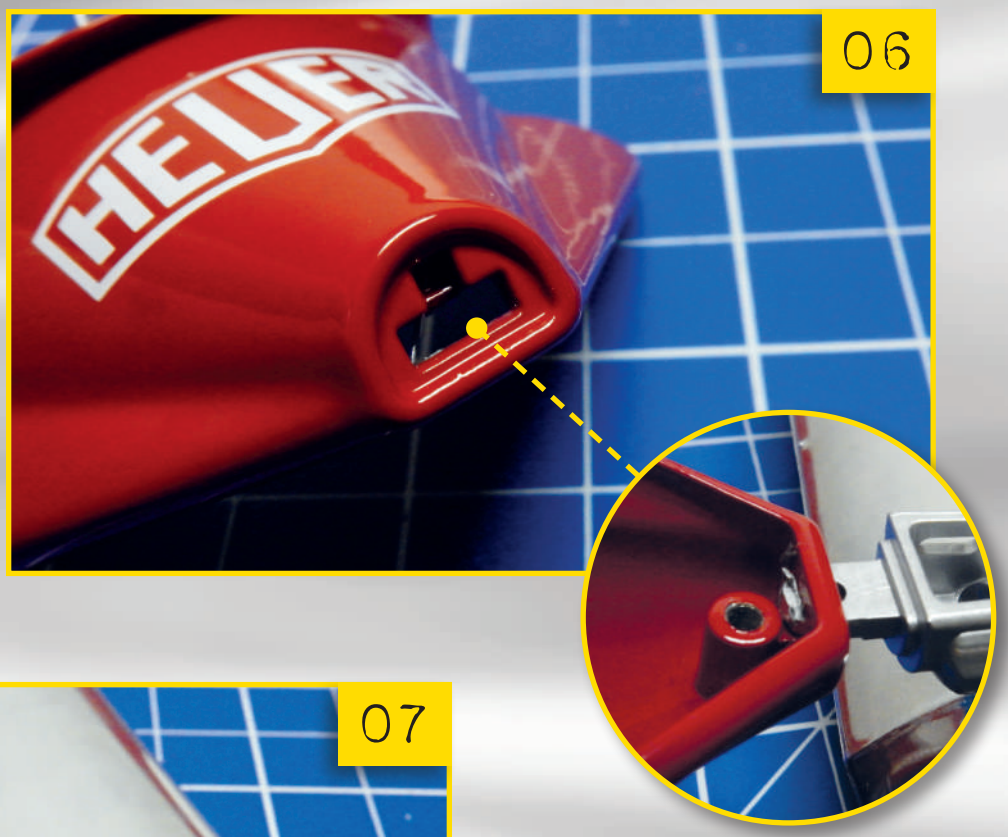


02-03 This is what the front spoiler and its bracket look like when they are correctly coupled.



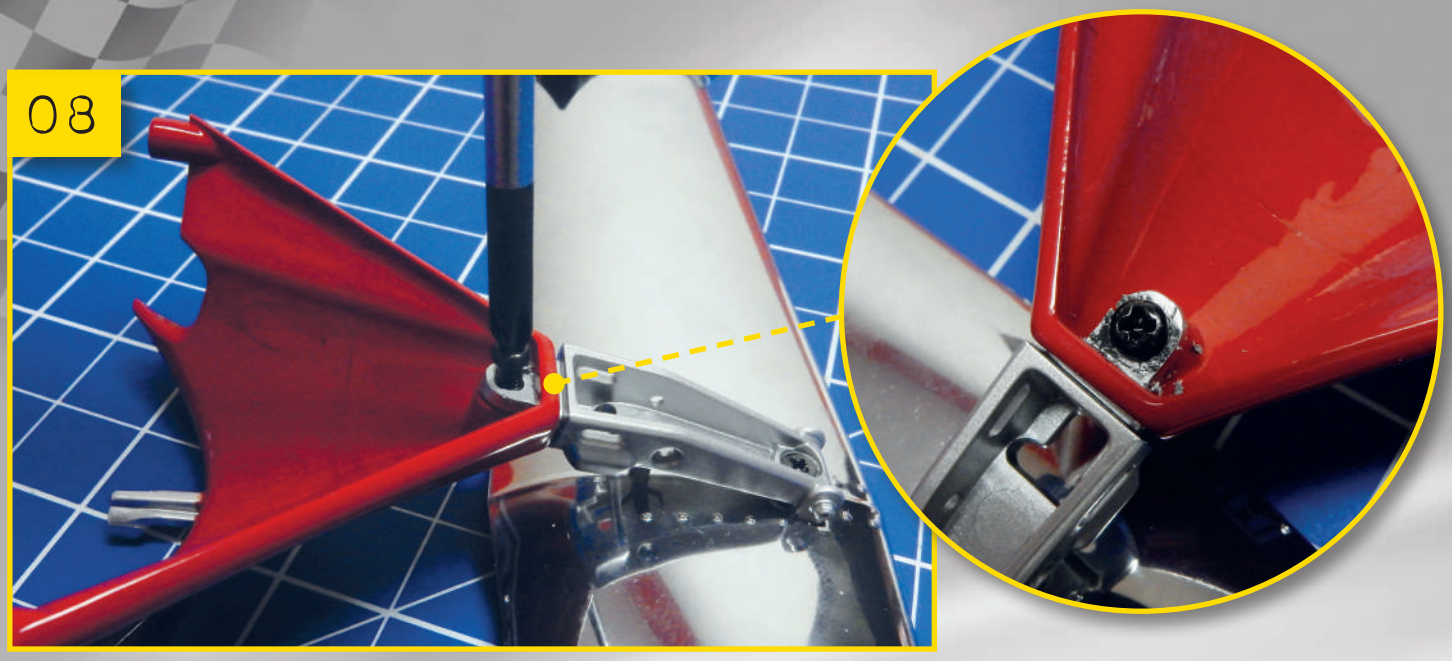
02-05 The spoiler and its bracket are now securely joined together.

02-04 Now insert the type A screw into the hole, as shown in the photograph. Tighten it fully with the Phillips screwdriver.



02-06 Insert the free end of the front spoiler bracket into the nose. The nose has a specially shaped opening (photograph on the left).

02-07 Slide the front spoiler support into the nose until the mounting holes of both parts match up.



02-08 Insert the type B screw into the union holes in the spoiler bracket and the nose. Use the screwdriver to tighten it as required.

FINAL RESULT

You have now firmly connected the front spoiler to the nose of your 1:8 scale Ferrari 312 T4. Very carefully put the finished assembly aside.

In the next stage

The brake caliper, brake cylinder assembly, beadlock with its bolts, wheel rim, air intake, and various screws.

WHEEL RIM AND BRAKE

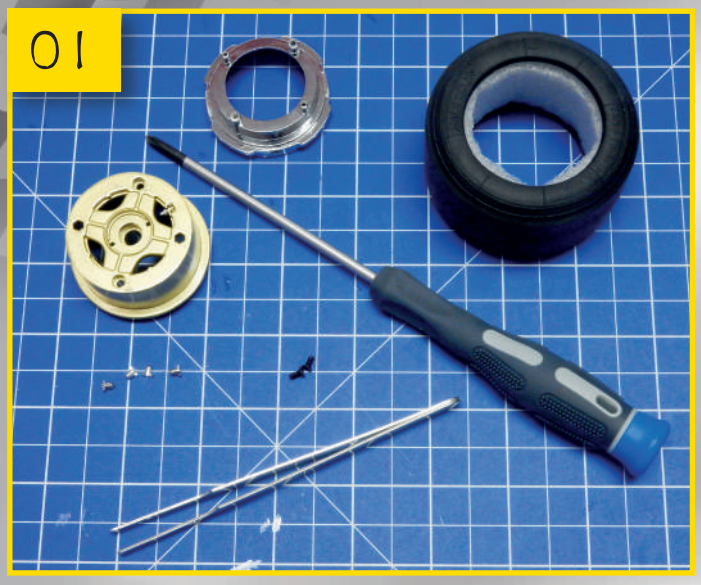
USING THE COMPONENTS YOU HAVE RECEIVED YOU CAN NOW FINISH ASSEMBLING THE FIRST WHEEL OF YOUR 1:8 SCALE FERRARI 312 T4. YOU WILL ALSO ASSEMBLE THE BRAKE CALIPER AND THE AIR INTAKE DUCT WHICH, IN THE REAL CAR, HELPED TO COOL THE DISC.

LIST OF PARTS

1 Wheel rim
2 Five beadlock bolts
3 Beadlock
4 Brake caliper
5 Brake cylinder assembly
6 Air intake (outer part)
7 Air intake (inner part)

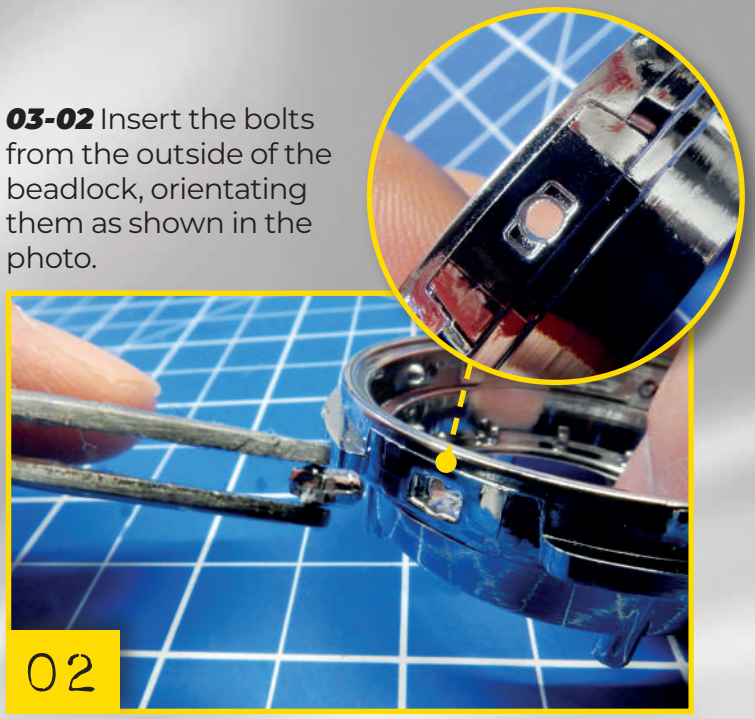
SCREWS

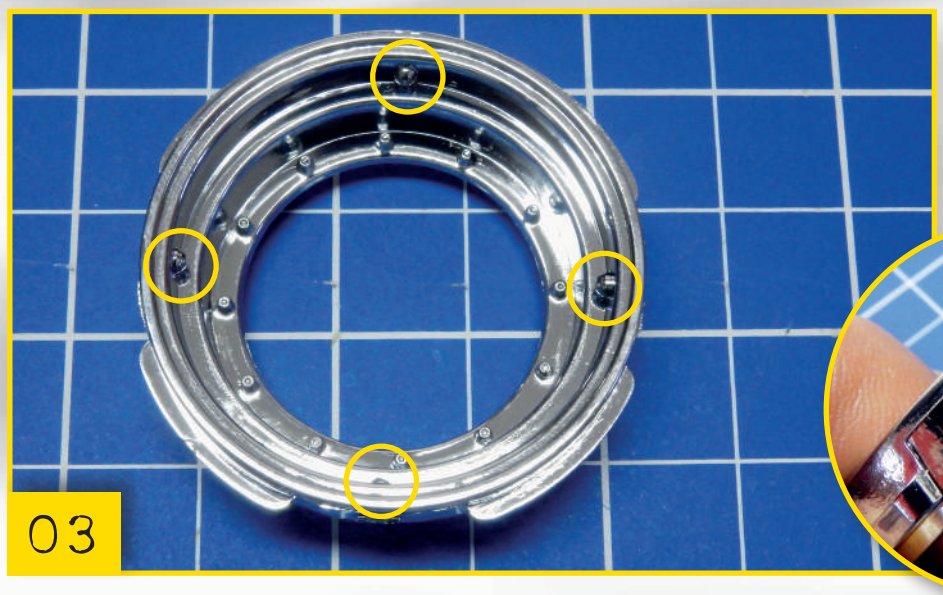
Three type A screws



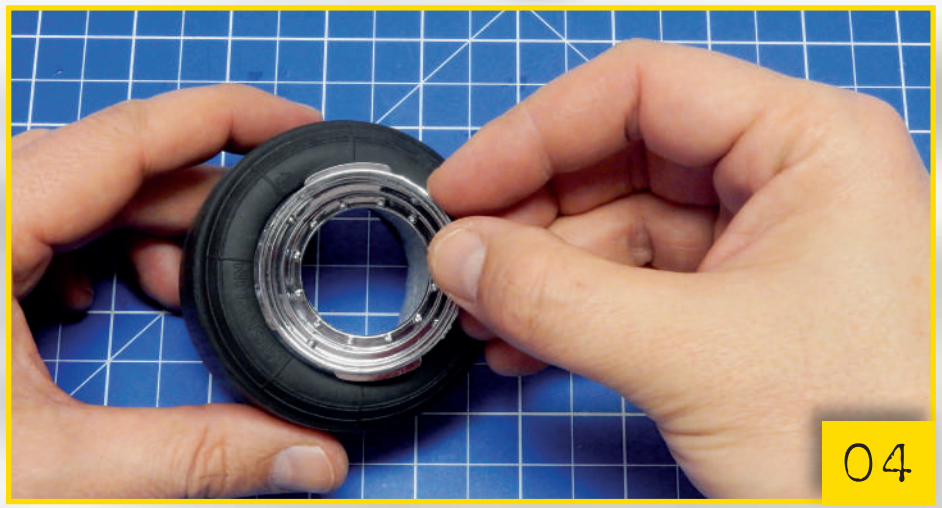
03-01 You will need the wheel rim, the beadlock with four bolts, two type A screws, the tyre with the wheel, tweezers, and a Phillips screwdriver.

03-02 Insert the bolts from the outside of the beadlock, orientating them as shown in the photo.

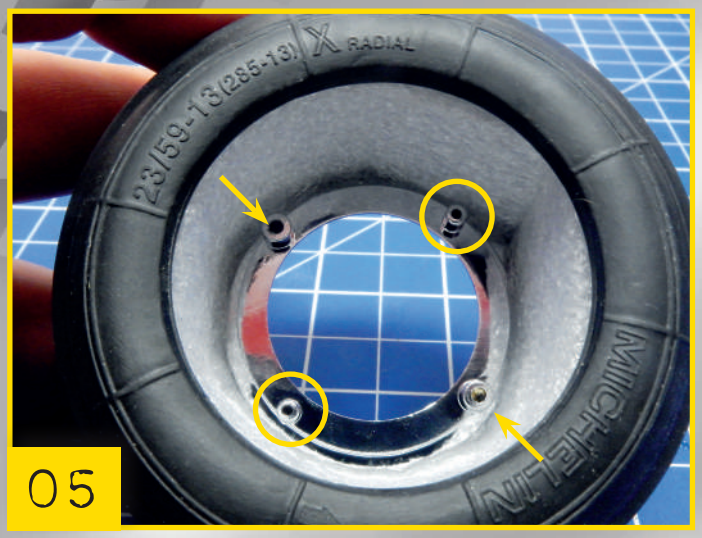




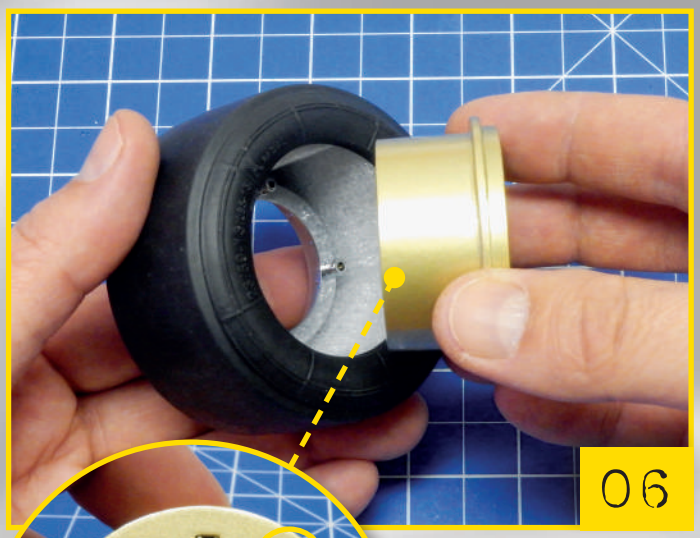
03-03 The rear part of each bolt, which is almost rectangular, should fit into a seating in the beadlock (photo in the circle). The "bolt heads" (circled in yellow in the larger image) will then appear on the inner side of the beadlock.

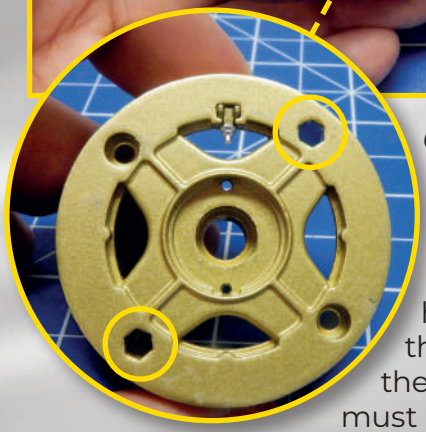


03-04 Then couple the beadlock with the tyre. The four outermost tabs must fit into the lips of the tyre.



03-05 Turning the wheel over, you will immediately see the two interlocking pins (yellow circles) and the two seatings of the fixing screws (yellow arrows).





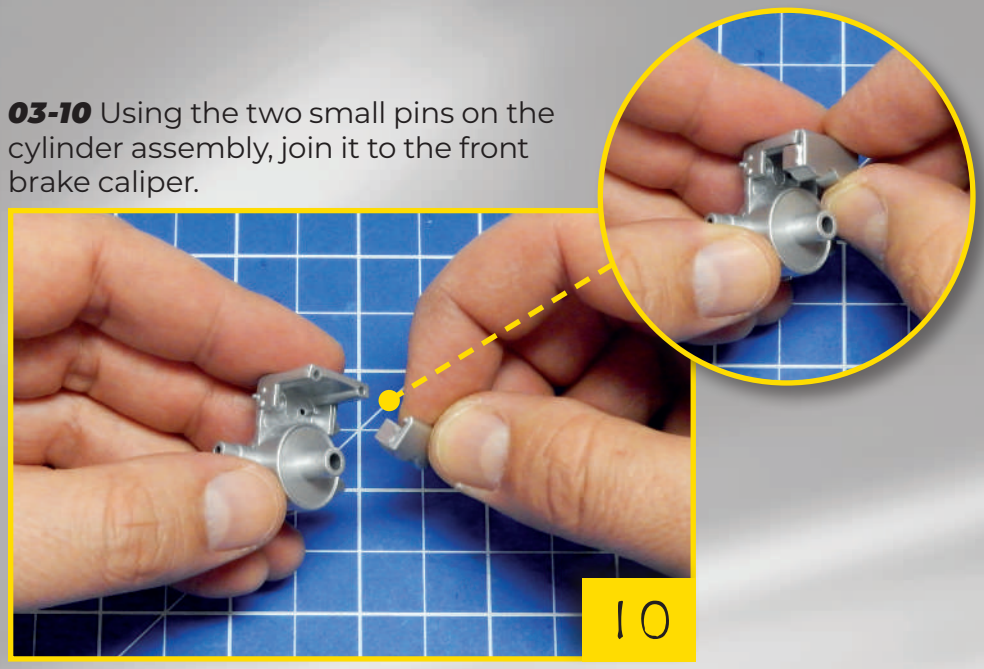
03-06 Insert the wheel rim into the tyre until it connects with the ring. Caution: the holes indicated by the yellow circles in the photo alongside must match up with the interlocking pins of the beadlock.

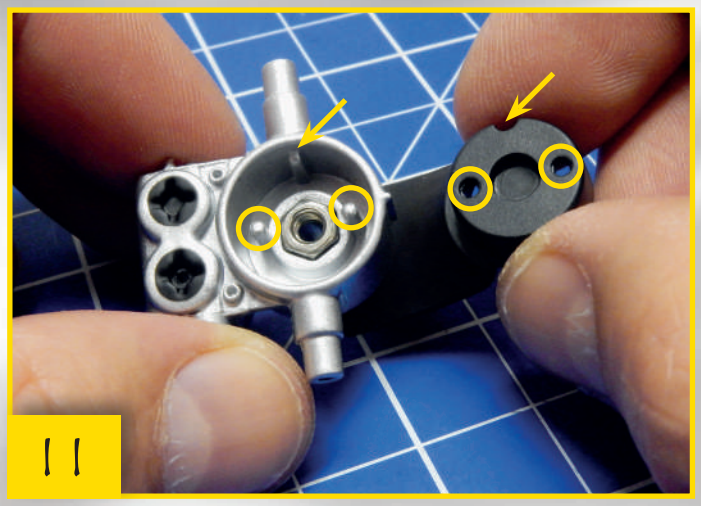
03-07 Now insert the two type A screws into the holes that are left free. Fully tighten them with the screwdriver. In this way, the wheel rim and the beadlock will be firmly joined together and locked around the lips of the tyre.

03-08 On both sides of the wheel, check that the lips are aligned with the beadlock and the wheel rim as shown. This completes assembly of the first front wheel.

03-09 Now take the brake caliper, the cylinder assembly, and both parts of the air intake.

03-10 Using the two small pins on the cylinder assembly, join it to the front brake caliper.





03-11 Use the two interlocks (yellow circles) to attach the internal part of the air intake to the brake caliper. A designated centering notch (yellow arrow) is included to ensure the correct assembly position.

03-12 All that remains is to position the external part of the air intake on the part previously installed. Press firmly to join the two parts firmly together.

FINAL RESULT

You have now assemled the first front wheel and its brake unit.

In the next stage

The seat structure and backrest.

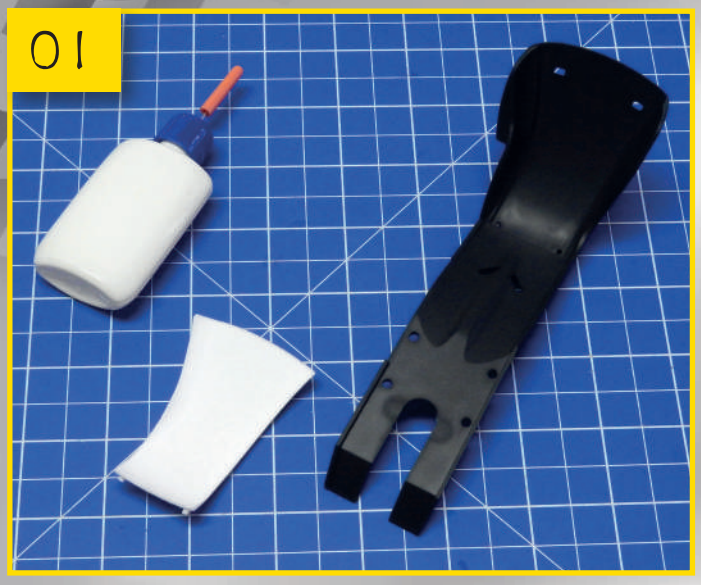
GILLES VILLENEUVE'S SEAT

THE FERRARI 312 T4 SEAT HAD BACK PADDING, DESIGNED TO ENSURE MAXIMUM DRIVING COMFORT. THIS IS ACCURATELY REPRODUCED IN YOUR 1:8 SCALE MODEL.

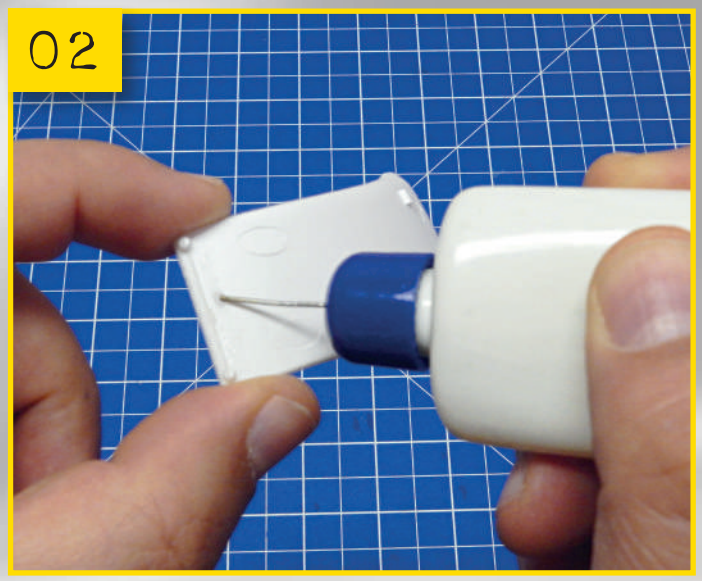
LIST OF PARTS

1 Seat structure

2 Backrest



04-01 Begin by assembling the seat: you will need the seat structure, the backrest, and some super glue.



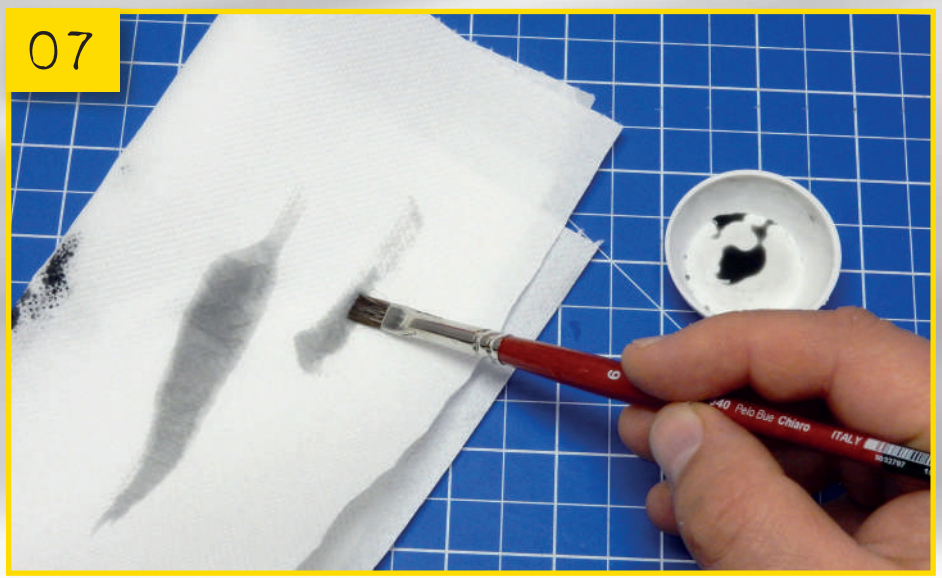
04-02 Place a small amount of glue inside the back, particularly at the lower and upper extremities.

04-03 Press the backrest against the seat structure, taking care to align the reference tabs with the corresponding holes (highlighted with the yellow circles in the inset image).

04-04 The finish of the backrest is very realistic but if you wish, you can further improve the result by slightly "ageing" it. For this you will need a jar of matt black acrylic colour, a wide-tipped brush, an absorbent paper towel, several bowls, and a small amount of clean water.

04-05 Put a small amount of the black acrylic paint in one of the small bowls. Don't overdo it: you will only need a minimum quantity.

04-06 Dip the brush in the water and dilute the colour in another bowl. Use plenty of water; the coloured pigment must be really minimal.



04-07 Before you start work on the backrest, carry out a few tests on the paper towel; the colour left by the brush must be light grey and very diluted.

04-08 With the brush still wet, begin applying the colour to the backrest: you should obtain a fairly uniform tint, in a light grey shade.

09

04-09 To correct any excess colour and create shadows and highlights, dab the backrest with the brush dipped in water, and the paper towel.

FINAL RESULT

This is the final result: as can be seen, the backrest now has some slightly shaded areas, which make it more realistic.

In the next stage

The left-hand side of the front axle: the brake disc and the first suspension components.

LEFT-HAND SUSPENSION

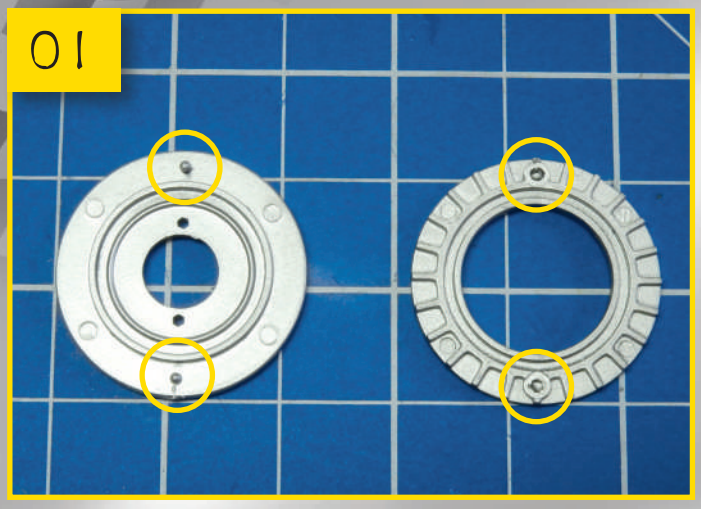
USING THE NEW PARTS THAT YOU RECEIVE WITH STAGE 5, YOU CAN BEGIN ASSEMBLING THE LEFT FRONT SUSPENSION, WITH ITS TRANSVERSE QUADRILATERAL CONFIGURATION, A FEATURE THAT MADE THE F312 T4 A RACE-WINNING CAR.

LIST OF PARTS

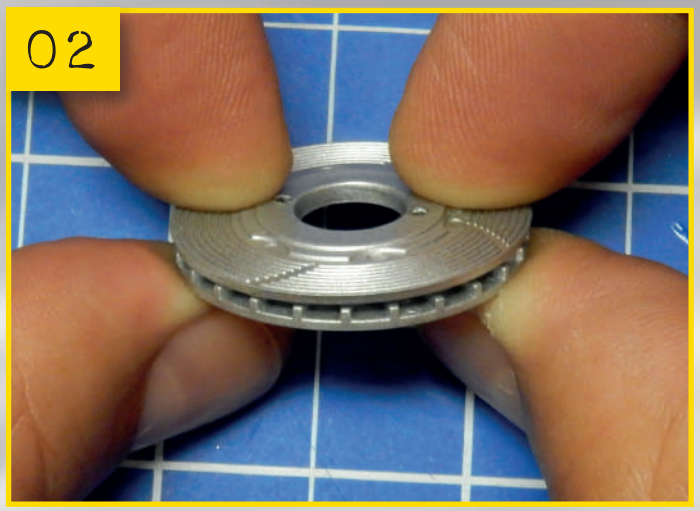
1 Upper arm
2 Lower arm
3 Steering tie rod
4 External brake disc
5 Internal brake disc

SCREWS

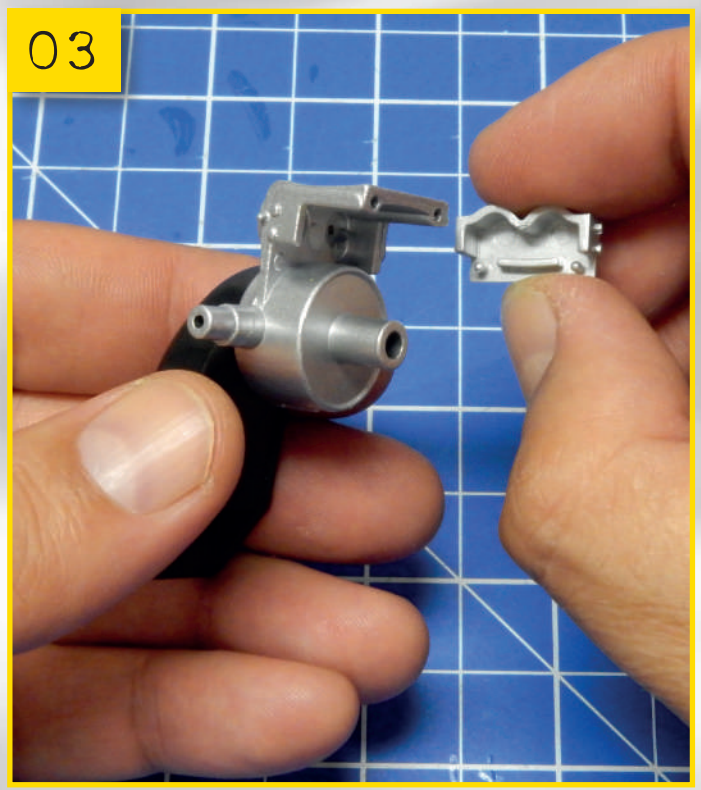
Four type C screws



05-01 Look at the two parts of the brake disc. The external part (on the left) has two pins that must be inserted into the corresponding holes in the internal part (on the right).

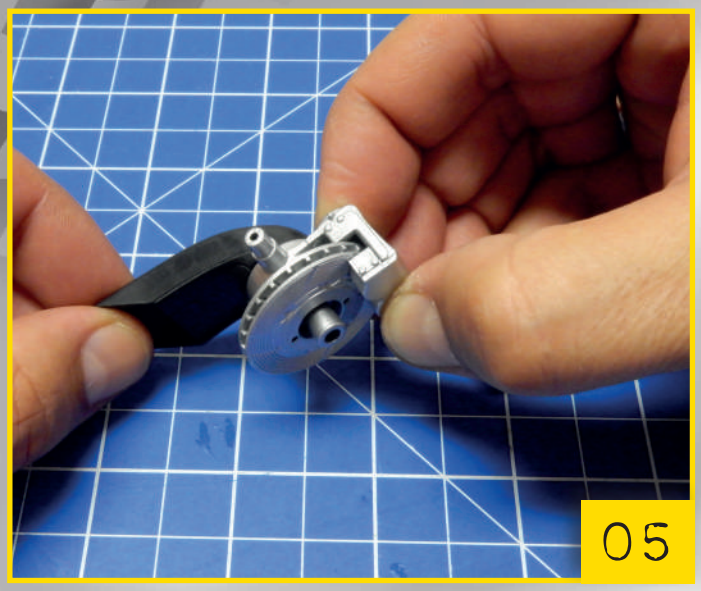


05-02 Fit the two parts of the brake disc and press them together with your fingers tightly.



05-03 Get the brake caliper air intake that you built in stage 3. Remove the cylinder assembly.

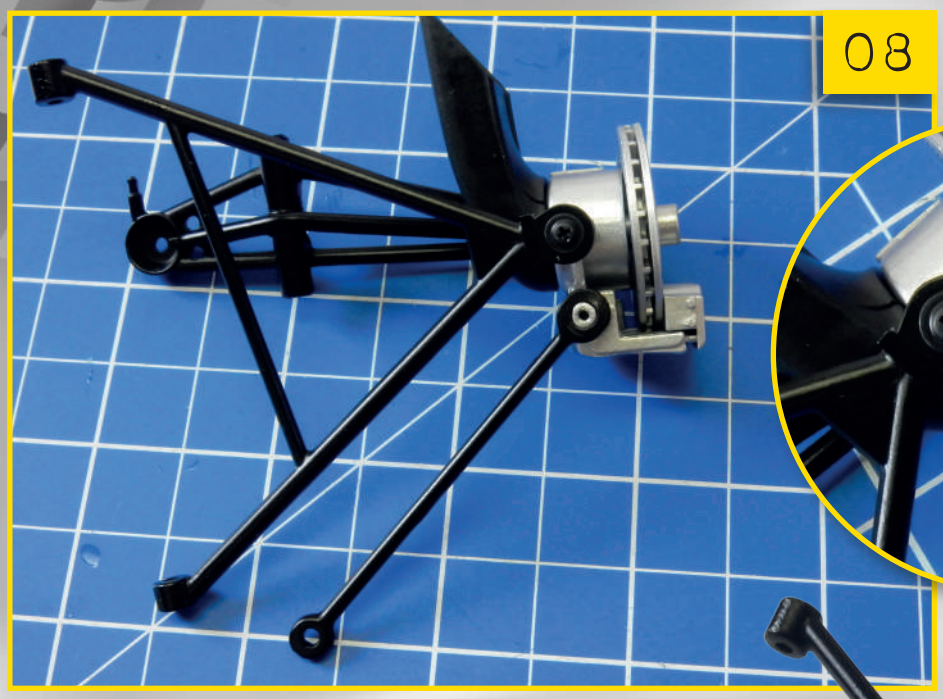
05-04 Position the brake disc on the air intake, orientating it as shown in the photo. At the moment there will be too much play in the disc: don't worry about it because the remaining parts will be provided in a later stage to finish the assembly.



05-05 Now put the cylinder assembly back in place, to close the brake caliper on the disc.

05-06 Orientating the components as shown in the photo, join the upper arm to the brake assembly. To keep them firmly connected, use a type C screw.

05-07 Now it's time for the lower arm. Again, use the photos as a reference to see how to correctly orientate the parts. Use a type C screw to fix the lower arm (inset).



05-08 Finally, add the steering tie rod and secure it with another type C screw.

FINAL RESULT

The left front suspension of your model is taking shape. Carefully set aside your completed work, ready to continue assembling your F312 T4 using the parts in the next stage.

In the next stage

The components required to complete the left front suspension.

FIRST SHOCK ABSORBER

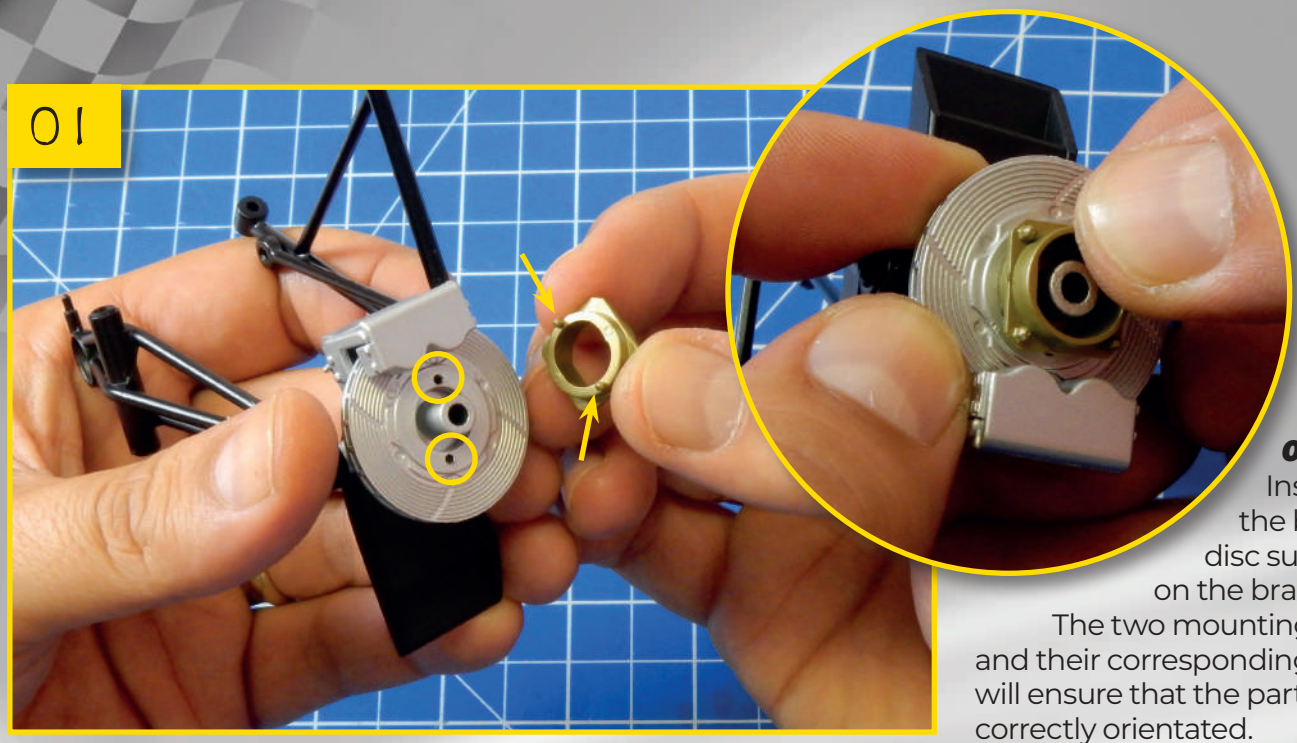
USING THE ENCLOSED COMPONENTS YOU CAN NOW FINISH ASSEMBLING THE LEFT FRONT SUSPENSION OF YOUR FERRARI 312 T4, COMPLETE IN EVERY DETAIL.

LIST OF PARTS

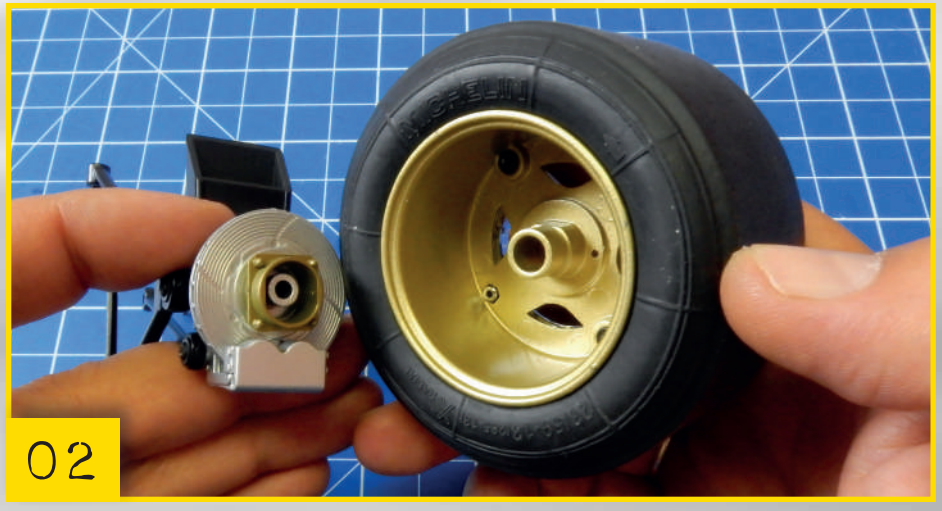
1 Shock absorber
2 Rear link
3 Front link
4 Brake disc support
5 Hexagonal head screw
6 Hubcap

SCREWS

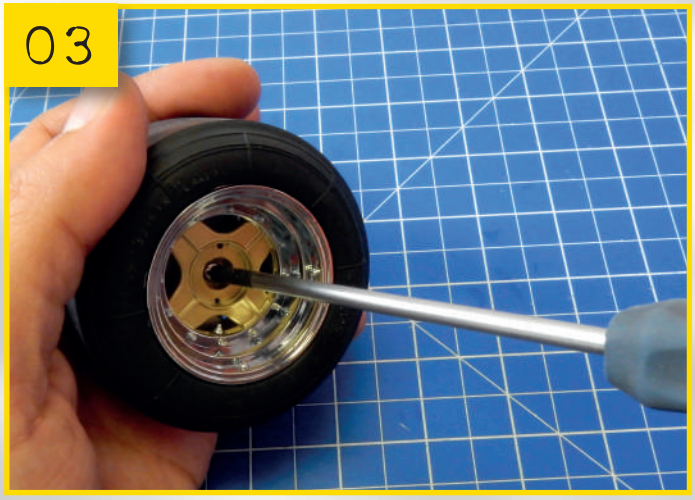
Two type D screws
Two type L screws



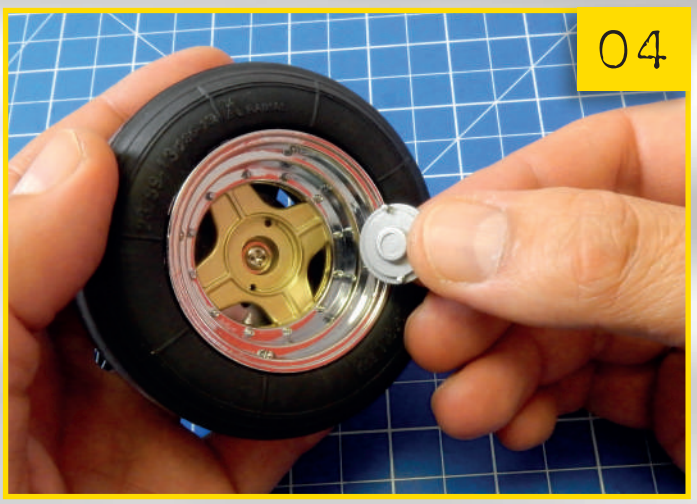
06-01 Install the brake disc support on the brake disc. The two mounting pins and their corresponding holes will ensure that the parts are correctly orientated.



06-02 Now fit the complete wheel on to the left front suspension assembly.

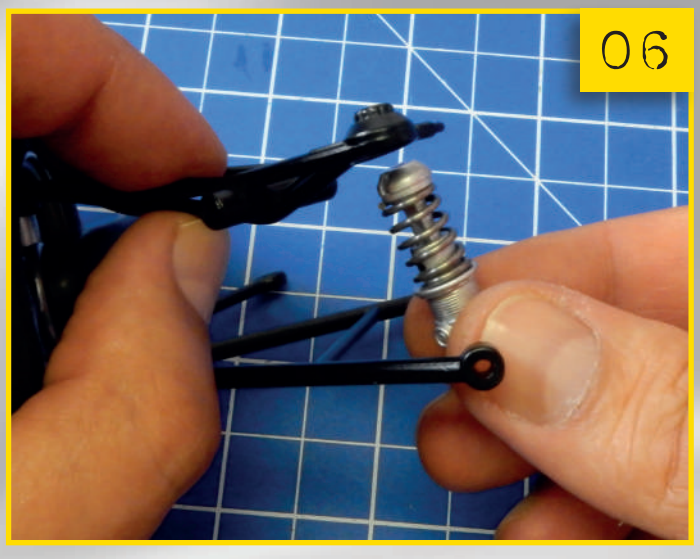


06-03 Secure the wheel with a type L flanged screw. After tightening it fully, loosen it by half a turn so that the wheel can rotate.

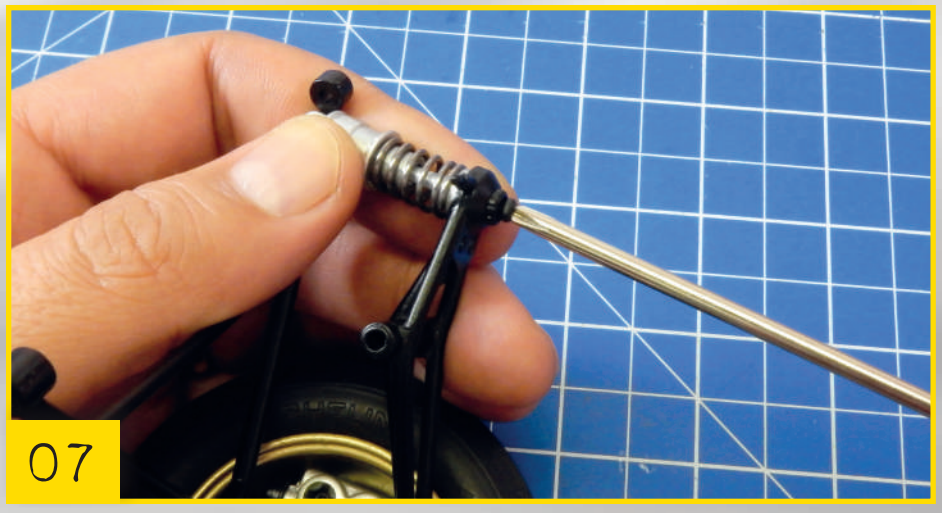


06-04 Fit the hubcap. The mounting pins and holes will ensure that the parts are correctly orientated and securely assembled.

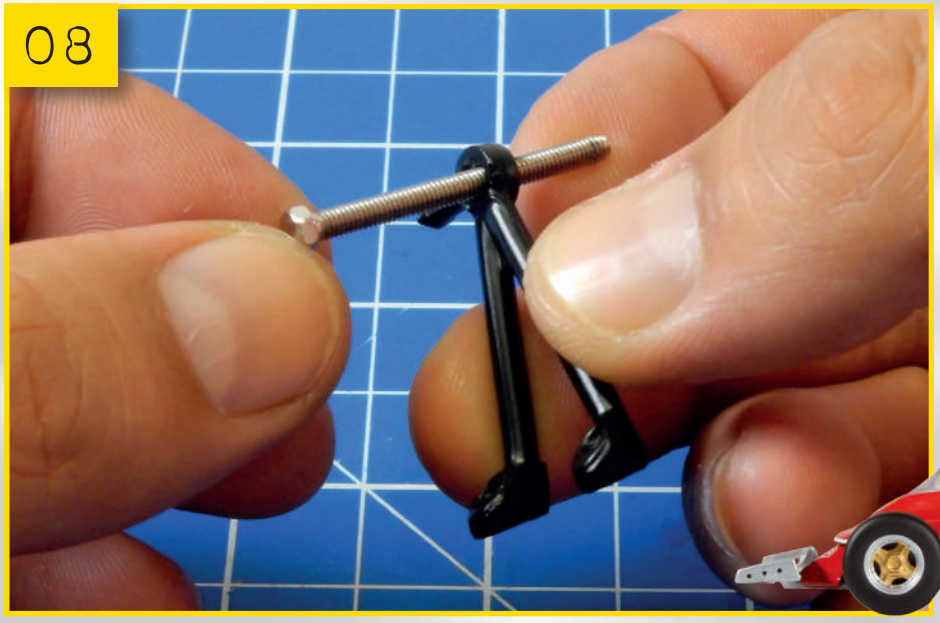
06-05 The left front wheel has been fitted to its suspension.



06-06 Bring the shock absorber close to the free end of the upper arm of the suspension, working as shown in the photograph.



06-07 To fix the shock absorber to the upper arm, use a type D screw.



06-08 Insert the hexagonal screw into the slot of the front link, as shown.

06-09 Insert the hexagonal screw into the cylindrical cavity in the upper arm of the suspension.

06-10 Finally, fit the rear link on to the free end of the screw and tighten the whole assembly.

In the next stage

The first components of the left-hand cylinder block of the engine.

FINAL RESULT

The left front suspension is now complete in every detail. Put it aside carefully, ready to fit to the model you are assembling.