



Build the

# Beetle

## *1303 Cabriolet*

**Pack 2**



 **DEAGOSTINI**  
**MODELSPACE™**  
[www.model-space.com](http://www.model-space.com)

Build the  
 **Beetle**  
*1303 Cabriolet*

## STAGE

## PAGE

6	Left front hub, brake and shock absorber	25
7	The left front wheel	29
8	The driver's door	33
9	Driver's door window and hinges	37
10	Driver's door card and internal fittings	41
11	Driver's seat cushion and recliner mechanism	45
12	Front subframe	49
13	Anti-roll bar and front suspension	53
14	Front track control arms	57

Editorial and design by Continuo Creative, 39-41 North Road, London N7 9DP.

Published in the UK by De Agostini UK Ltd, Battersea Studios 2, 82 Silverthorne Road, London SW8 3HE.

Published in the USA by De Agostini Publishing USA, Inc., 121 E. Calhoun Street, Woodstock, IL 60098.

All rights reserved © 2019

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.

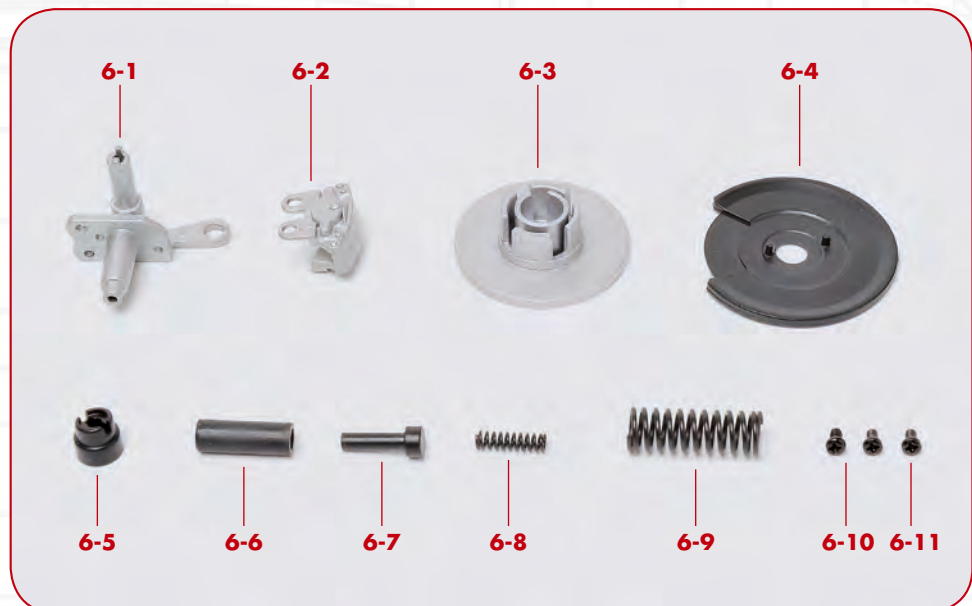


# Stage 6: Left front hub, brake and shock absorber

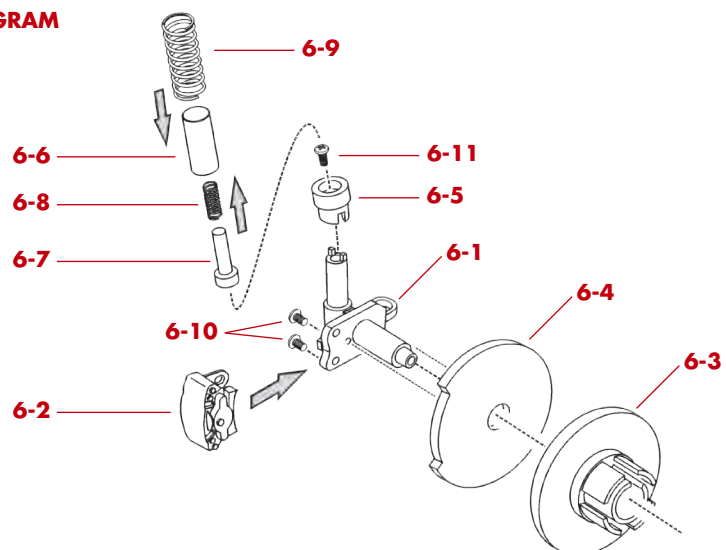
The parts supplied allow you to assemble the left front brake disc and hub. You also have shock absorber parts to start making the front left suspension.

## PARTS

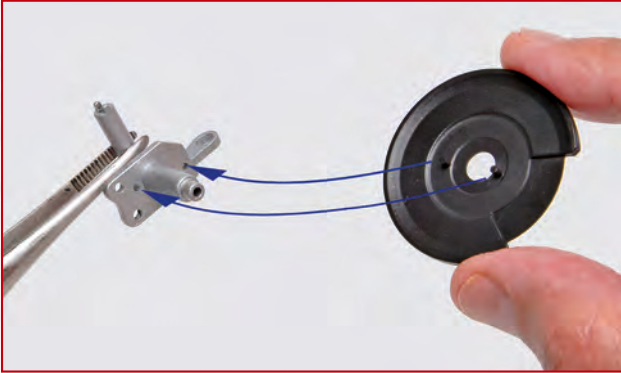
- 6-1** Steering knuckle
- 6-2** Brake caliper
- 6-3** Brake disc
- 6-4** Brake backplate
- 6-5** Shock absorber base
- 6-6** Shock absorber body
- 6-7** Shock absorber piston
- 6-8** Internal damper spring
- 6-9** Front suspension spring
- 6-10** SD01 screws
- 6-11** SD04 screw



## PARTS DIAGRAM



NOTE: The appearance of the parts you receive may be slightly different from the parts pictured in these pages.



### STEP 6-A

The flange of the brake backplate (6-4) has two pins on either side of the central hole. These pins fit into the indicated holes on the steering knuckle (6-1) and are offset so that the backplate fits in a set position on the steering knuckle.



### STEP 6-B

The backplate and steering knuckle should look like this after assembly.



### STEP 6-C

Now fit the brake disc (6-3) by inserting the axle of the steering knuckle through the central hole.



### STEP 6-D

Fit the caliper (6-2) over the brake disc and the recessed portion of the backplate.



### STEP 6-E

Screw the two lugs of the caliper to the two holes in the steering knuckle using two SD01 screws.



### STEP 6-F

Position the shock absorber base (6-5) on the shaft projecting from the steering knuckle, so that the two pins on the steering knuckle fit into the slots in the shock absorber support. Check that the shock absorber support is slightly inclined away from the brake backplate, as shown in the inset.



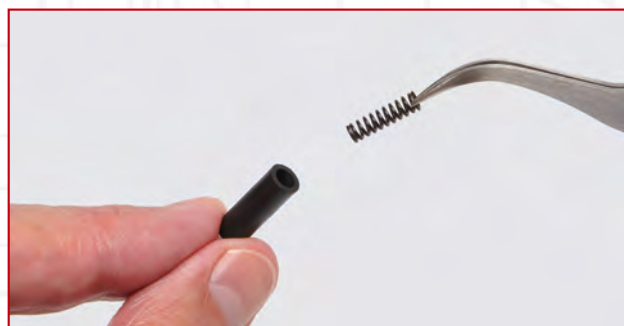
### STEP 6-G

Fix the shock absorber base to the steering knuckle with an SD04 screw.



### STEP 6-H

Place the shock absorber piston (6-7) on the shock absorber base, this way up.



### STEP 6-I

Fit the internal damper spring (6-8) into the shock absorber body (6-6).



### STEP 6-J

Fit the assembly from Step 6-I over the shaft of the shock absorber piston.



### STEP 6-K

Fit the front suspension spring (6-9) over the shock absorber.



### PARTS TO RETAIN

As the shock absorber and the suspension spring are not fastened together, after checking that all the parts fit together correctly (Steps 6-H to 6-K), it is advisable to remove the parts and keep them safely until the suspension is assembled later on.



That completes the assembly of the left front brake.

### STAGE COMPLETE





# Stage 7: The left front wheel

Now you can assemble the left front wheel of your VW Beetle and fit it onto the front disc brake that you put together in Stage 6.



## TIP

As before, to make it easier to fit the tyre onto the rim, gently warm the tyre with a hair dryer. There is no need to get it very hot. Thanks to the quality of the material from which it is moulded, the tyre softens quite easily. You can test its flexibility by squeezing it as in the lower photograph.

## PARTS

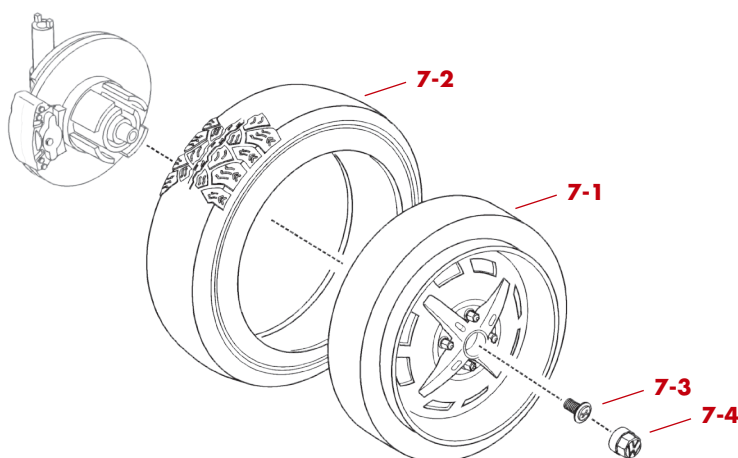
7-1 Wheel

7-3 VW badge

7-2 Tyre

7-4 SD02 screw

## PARTS DIAGRAM



NOTE: The appearance of the parts you receive may be slightly different from the parts pictured in these pages.



### STEP 7-A

Soften the tyre as shown in the Tip box, then insert the solid portion around the rim of the wheel into one side of the tyre.



### STEP 7-B

Go round the tyre, working it over the rim.



### STEP 7-C

Check that the tyre beads are perfectly seated on the rim all the way round.

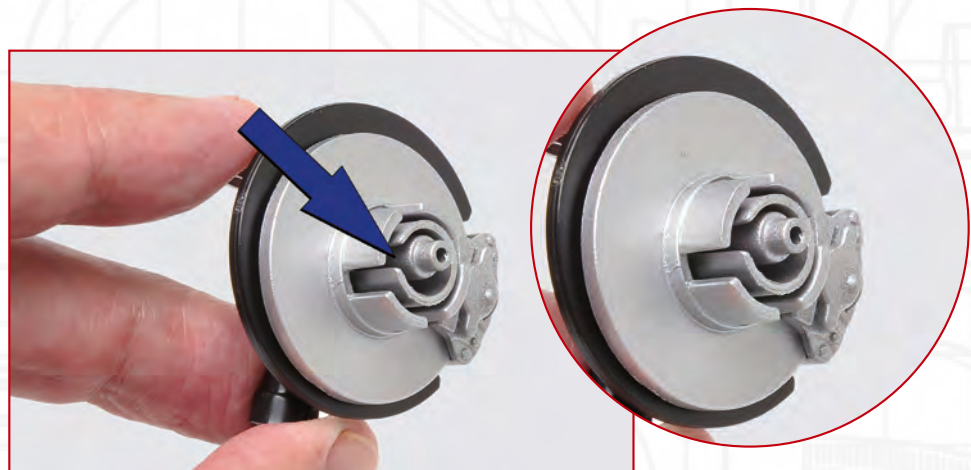


### STEP 7-D

If necessary, rotate the wheel, pressing on the tyre so that it is perfectly positioned on the rim.

### STEP 7-E

Take the brake assembly from Stage 6. Look for the single notch in the central section indicated by the arrow.







### STEP 7-F

The inner side of the wheel has a tab on one side of the hub. This is designed to lock into the matching slot in the brake disc, while the four longer ribs lock into the four matching slots on the outer ring.



### STEP 7-G

Fit the wheel so that the spindle of the steering knuckle goes through the central hole, and the tab and ribs lock into the slots in the brake disc.



### STEP 7-H

Fix the wheel to the spindle with a flanged SD02 screw.



### STEP 7-I

Fit the VW badge into the hole in the centre of the wheel, and press it firmly into place.



That completes the assembly of the left front wheel and brake.

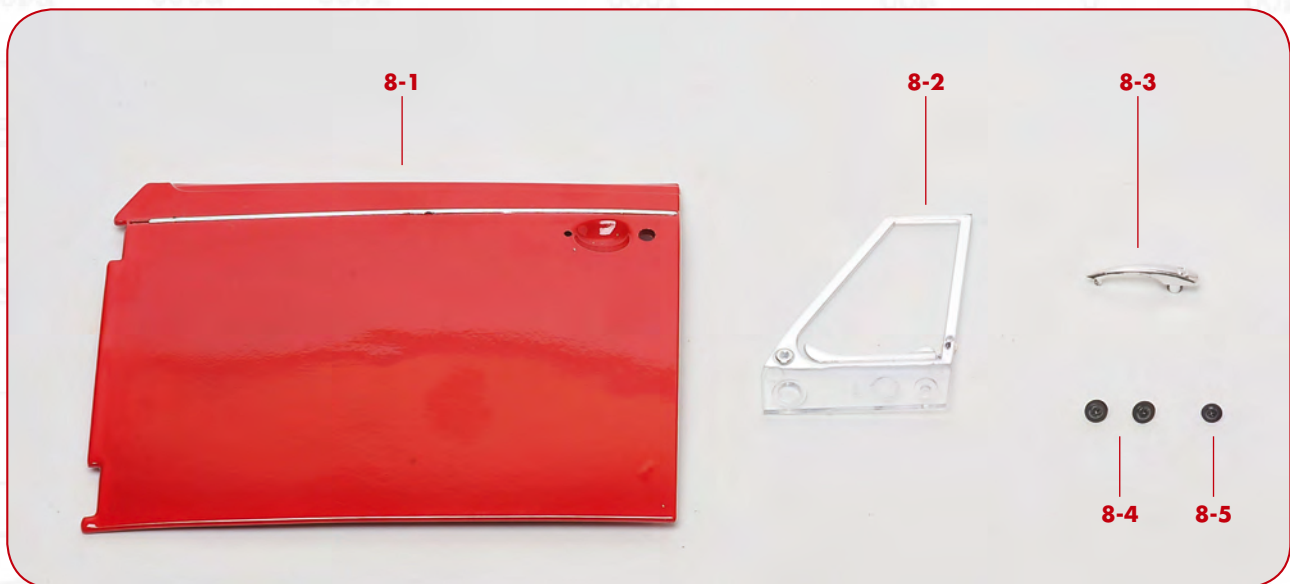
### STAGE COMPLETE



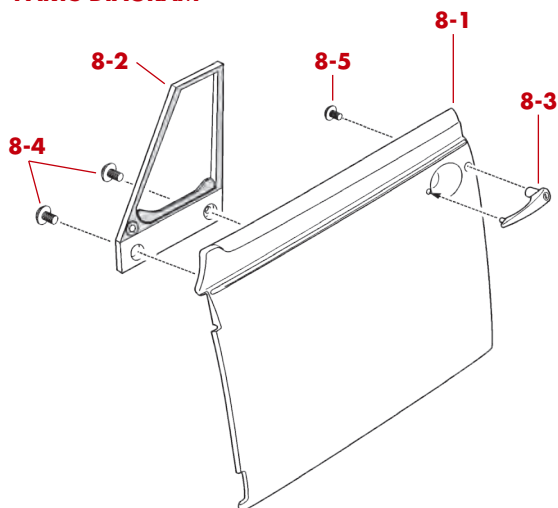


# Stage 8: The driver's door

In this stage, you start assembling the driver's door by fitting the quarterlight and handle. You will also see how to put a registration mark on the number plate you fitted in Stage 3.



## PARTS DIAGRAM



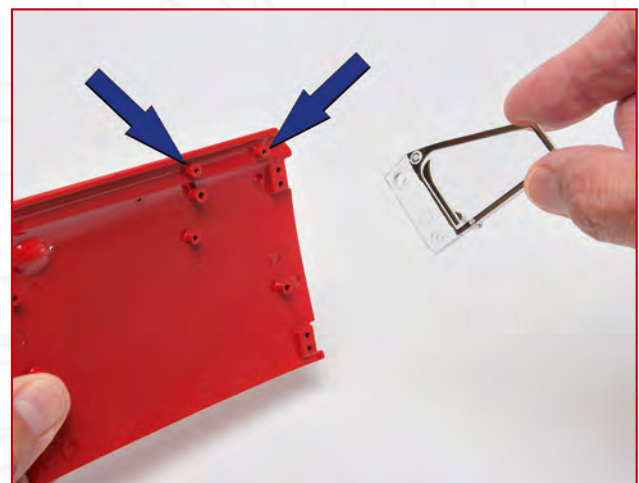
## PARTS

- 8-1** Driver's door panel
- 8-2** Left quarterlight
- 8-3** Door handle
- 8-4** SD05 screws
- 8-5** SP06 screw

NOTE: The appearance of the parts you receive may be slightly different from the parts pictured in these pages.

## STEP 8-A

Align the quarterlight (8-2) with the inside of the door panel (8-1), so that the two holes in the bottom match up with the two mounting lugs indicated.





### STEP 8-B

Press the quarterlight into position.



### STEP 8-C

Fix the quarterlight to the door panel with two SD05 screws.



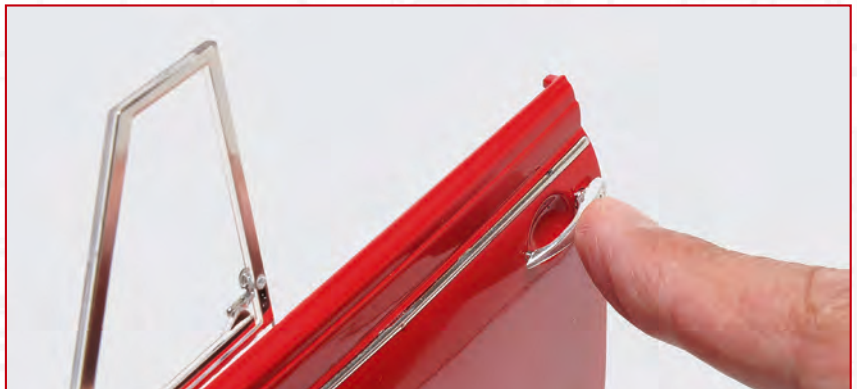
### STEP 8-D

Now match up the door handle (8-3) with the holes in the door panel. One hole is larger than the other, so the door handle will only fit one way round.



### STEP 8-E

Press the door handle into place.





## STEP 8-F

Turn the panel over and secure the handle with an SPO6 screw.

That completes the door assembly.

## STAGE COMPLETE



0001



## ADDING STICKERS TO THE NUMBER PLATE

Stage 3 came with a set of stickers for you to add to the rear number plate. This demonstration shows how you can add Volkswagen's model designation (1303), but you can personalise the registration as you wish by using other numbers and letters.



**STEP 8-A2.** Take the engine cover you assembled in Stage 3, together with the stickers supplied. Before using the stickers, clean the number plate with a cloth moistened with a little alcohol (such as methylated spirits) to ensure the best adhesion.



**STEP 8-B2.** To remove a sticker from the backing, bend the backing slightly until one end of the chosen character rises. Then, carefully pick up the letter or number with the tip of a sharp craft knife.



**STEP 8-C2.** Carefully position the character on the number plate, making sure it is straight and that it will leave space for the other characters.



**STEP 8-D2.** After positioning all the characters, gently rub over them with a soft cloth to ensure they are stuck firmly.



That completes the number plate.

### WHY USE A CRAFT KNIFE?

The stickers are very delicate, and while it is possible to pick them up with a pair of finely pointed tweezers, you need to take care that the adhesive does not stick to the tweezers, or the sticker will tear. Using the tip of a sharp blade makes this much less likely to happen, and because only the underside of the sticker is resting on the tool, it is easier to see where you are positioning the number or letter as you lay it in place.

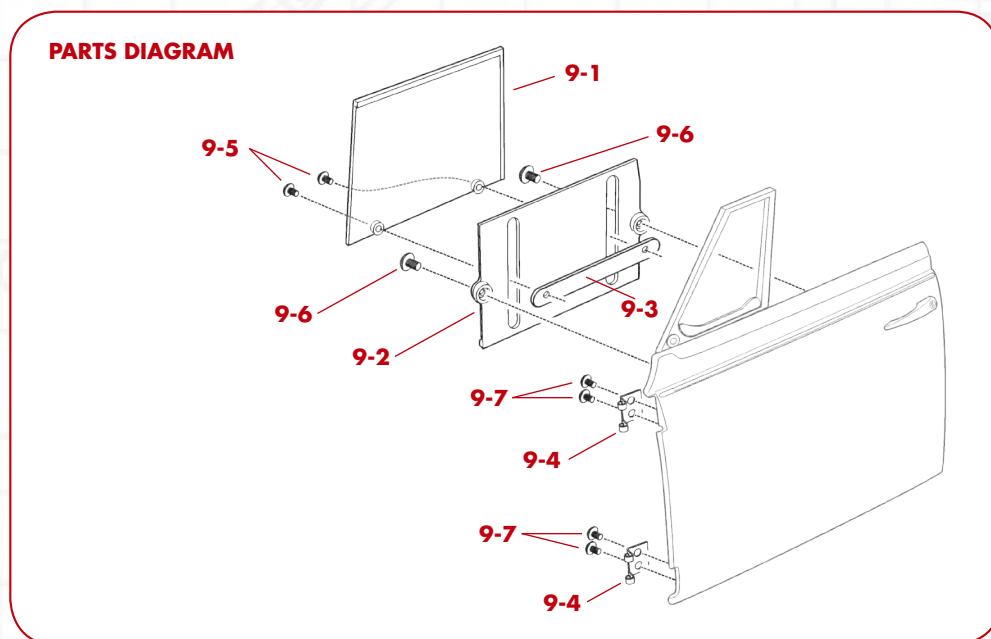
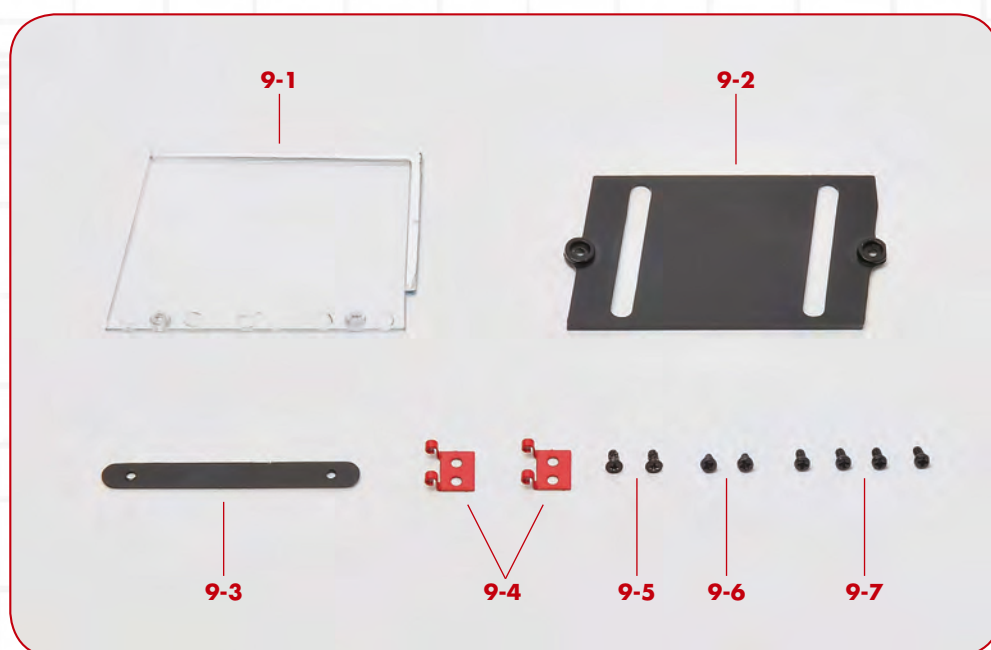


# Stage 9: Driver's door window and hinges

This stage continues the assembly of the door by fitting the main window and adding the hinges.

## PARTS

- 9-1 Window
- 9-2 Window regulator
- 9-3 Window retainer
- 9-4 Hinges
- 9-5 SP07 screws
- 9-6 SDO6 screws
- 9-7 SDO7 screws

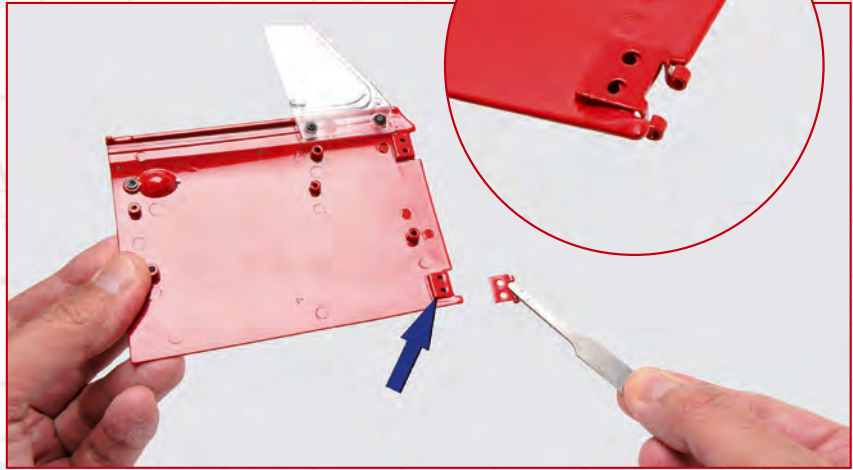


NOTE: The appearance of the parts you receive may be slightly different from the parts pictured in these pages.



### STEP 9-A

Take the door assembly from Stage 8 and fit one of the hinges (9-4) to the bottom of the door panel as shown, noting which way up the hinge goes.



### STEP 9-B

Fix the hinge to the door with two SD07 screws.



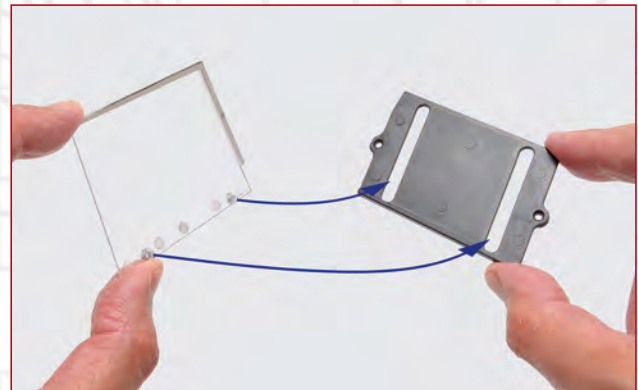
### STEP 9-C

Fit the other hinge to the top of the door in a similar way, using two more SD07 screws.



### STEP 9-D

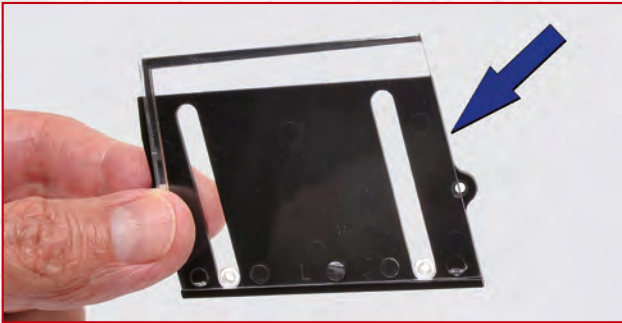
Check that the two hinges are aligned as shown.



### STEP 9-E

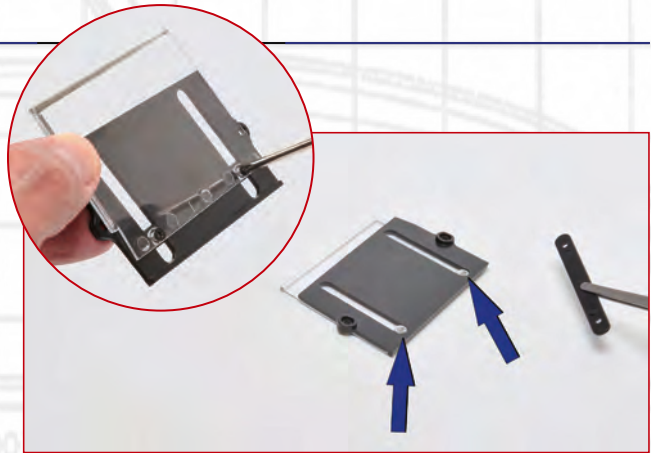
Now fit the window (9-1) into the regulator (9-2), so that the rib running along the edge of the regulator is at the bottom and the two lugs at the bottom of the glass fit into the long slots in the regulator.





### STEP 9-F

Check that the straight side of the glass is aligned with the regulator, as shown.



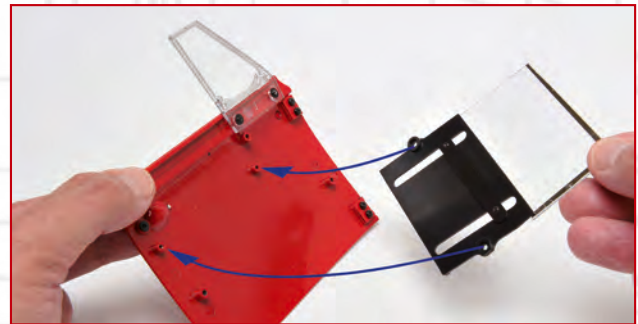
### STEP 9-G

Fit the window retainer (9-3) over the two lugs of the window, lining up the holes. Turn the assembly over and fasten the retainer to the window with two SP07 screws.



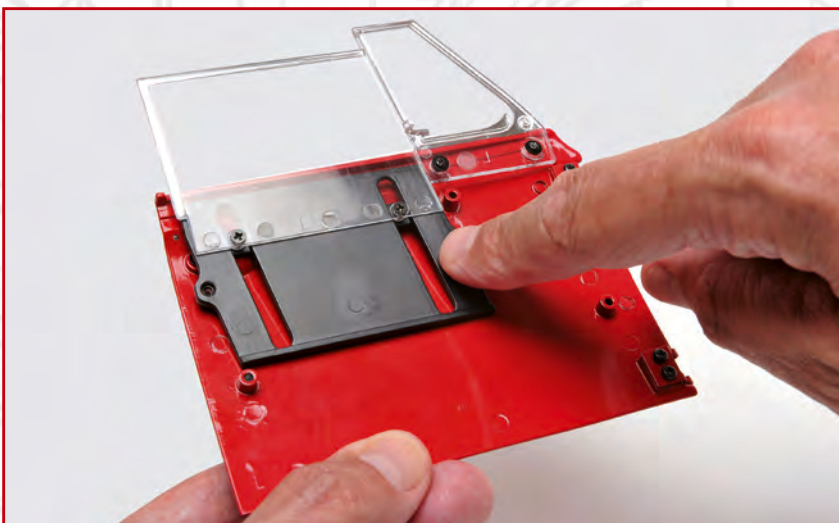
### STEP 9-H

Check that the window slides smoothly up and down the slots in the regulator.



### STEP 9-I

With the window in the raised position, align the assembly with the inside of the door panel so that the two lugs on the regulator will fit over the mounting holes indicated.



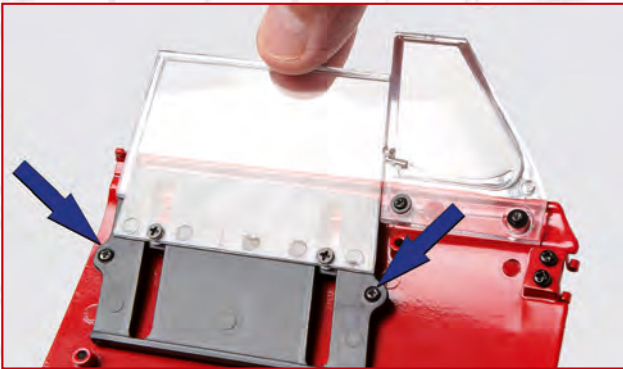
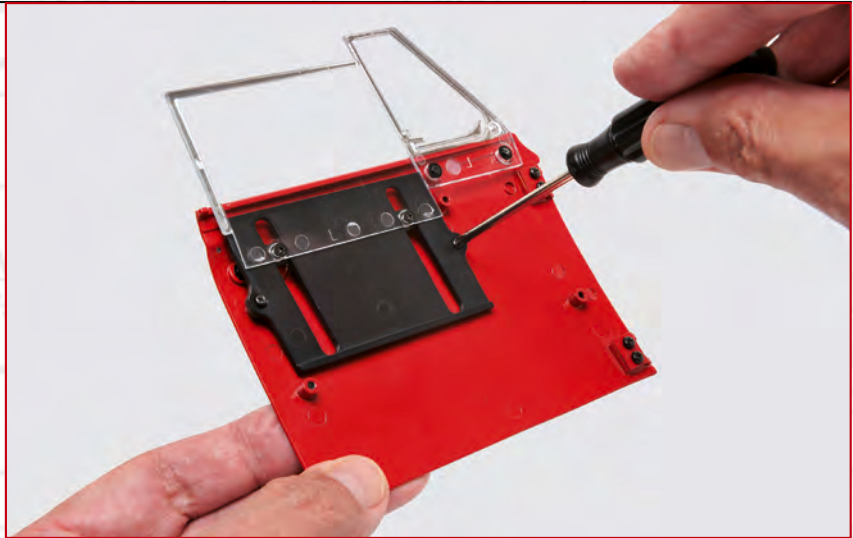
### STEP 9-J

Press the assembly into place.



### STEP 9-K

Fasten the regulator to the door panel with two SDO6 screws. (It is only possible to do this when the window is in the raised position.)



### STEP 9-L

Ensure that the screws are driven all the way in to prevent the heads from scratching the window.



### STEP 9-M

Check that the window slides freely, and aligns with the quarterlight you fitted earlier.



After assembly, the driver's door should look like this.

### STAGE COMPLETE



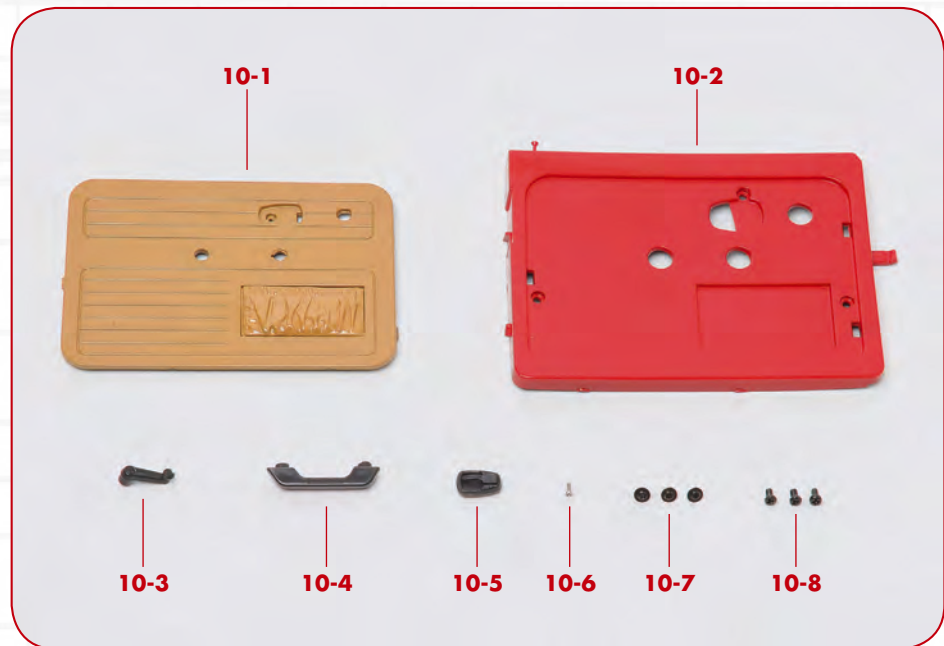


# Stage 10: Driver's door card and internal fittings

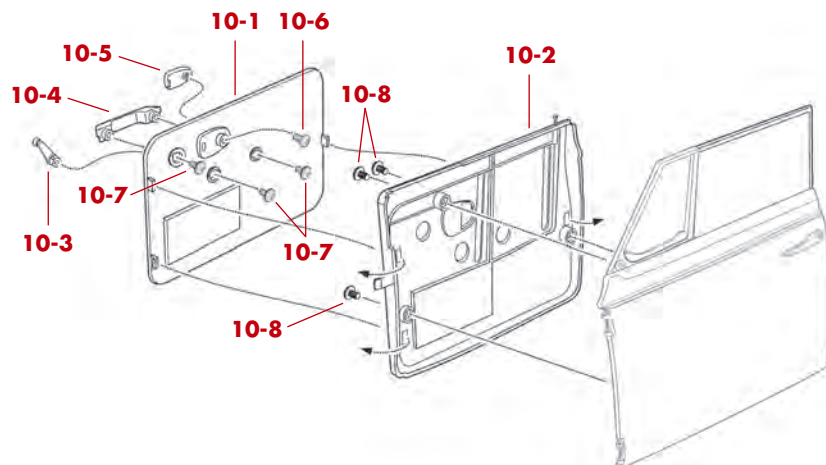
In this stage, you fit the inner door panel and the door card, followed by the window winder, handle, and door pull.

## PARTS

- 10-1** Driver's door card
- 10-2** Inner door panel
- 10-3** Window winder handle
- 10-4** Door pull
- 10-5** Door handle
- 10-6** SP08 screw
- 10-7** SP09 screws
- 10-8** SD04 screws



## PARTS DIAGRAM



NOTE: The appearance of the parts you receive may be slightly different from the parts pictured in these pages.



### STEP 10-A

Begin by mounting the window winder handle (10-3) on the door card (10-1). The handle has a small lug that fits into a notch in the upper right corner of the mounting hole. This ensures it is fitted at the correct angle.



### STEP 10-B

Press the handle into place, then turn the door card over and secure the handle with an SPO9 screw.



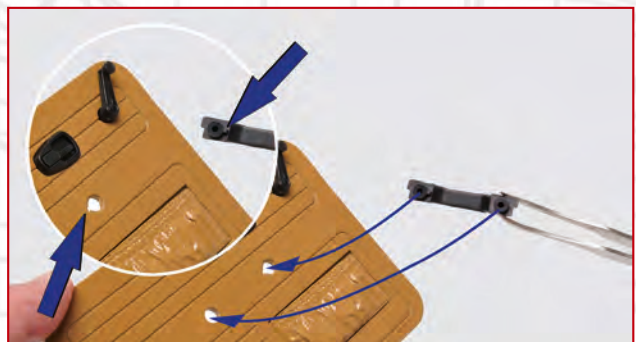
### STEP 10-C

The door handle (10-5) fits into a matching recess in the door card (10-1). The handle has round and rectangular lugs on the back that fit into the matching holes in the door card.



### STEP 10-D

Press the handle into place, then turn the door card over and secure the handle with an SPO8 screw.



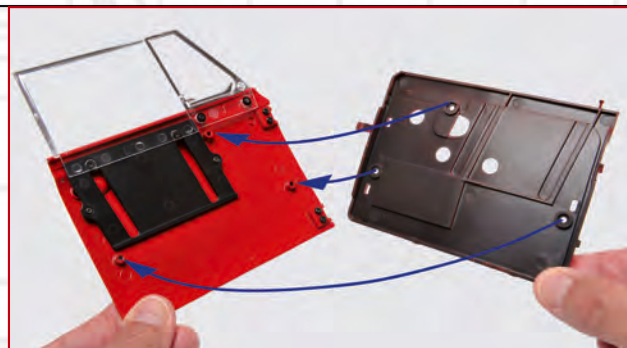
### STEP 10-E

Finish fitting the accessories by positioning the door pull (10-4) in the two remaining holes in the door card. Note that the hole on the right has a notch which matches the indicated lug on the back of the door pull. This ensures that the door pull will only fit the correct way round.



### STEP 10-F

Press the door pull into place, then turn the door card over and secure the pull with two SP09 screws.



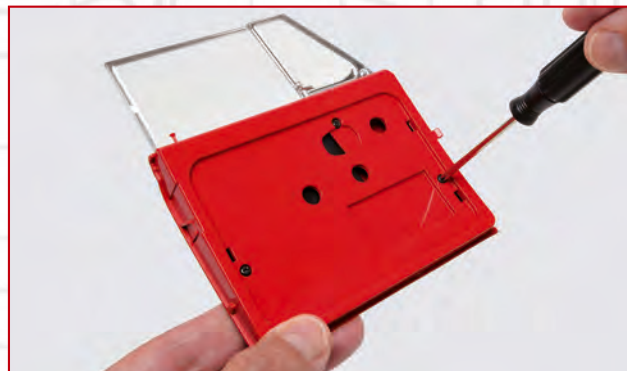
### STEP 10-G

Take the door from the previous stage and mount the inner panel (10-2) as shown above, matching the three mounting holes with the three lugs inside the door.



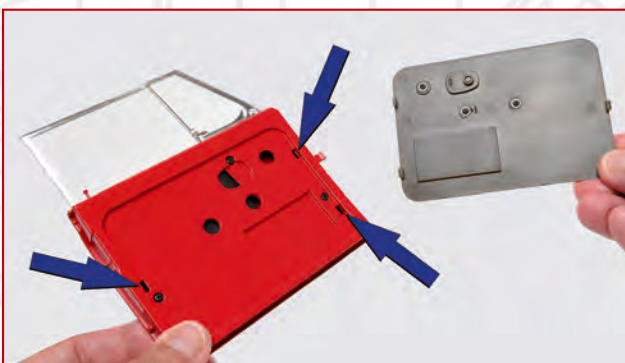
### STEP 10-H

Press the inner panel into place and check that it is correctly aligned.



### STEP 10-I

Fix the inner panel to the door with three SD04 screws.



### STEP 10-J

Now take the door card from Step 10-F and match up the three tabs on the back with the indicated slots on the inner panel of the door.



### STEP 10-K

First, fit the two tabs on the right into the matching holes.



### STEP 10-L

Then press the remaining tab into the remaining hole in the panel and check that the card is properly aligned with the inner panel.

The completed driver's door should look like this.

### STAGE COMPLETE



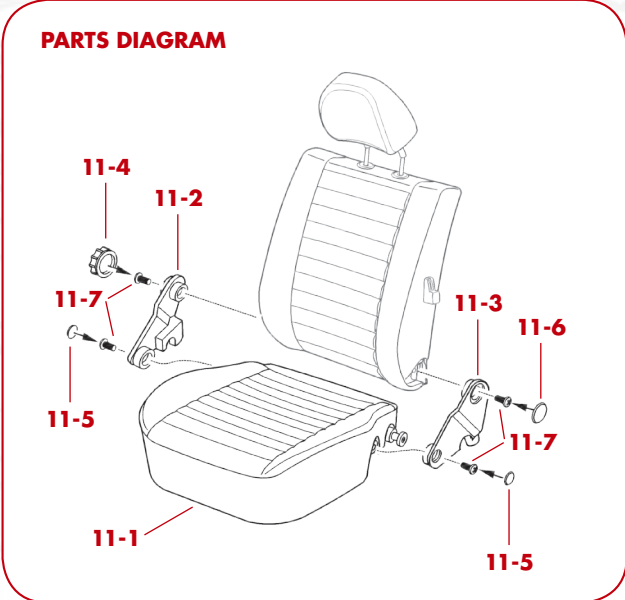


# Stage 11: Driver's seat cushion and recliner mechanism

In this stage, you complete the driver's seat, which tips up to allow passengers to reach the back seats, just like the real car.

**PARTS**

- 11-1** Driver's seat base
- 11-2** Right recliner mechanism
- 11-3** Left recliner mechanism
- 11-4** Recliner knob
- 11-5** Small screw covers
- 11-6** Large screw cover
- 11-7** SP10 screws



**STEP 11-A**

Take the seat back you assembled in Stage 5.

NOTE: The appearance of the parts you receive may be slightly different from the parts pictured in these pages.



**STEP 11-B**

Fit the left recliner mechanism (11-3) into the recess at the base of the seat back as shown, inset.

**STEP 11-C**

Fix the recliner mechanism in place with an SP10 screw.



**STEP 11-D**

Fit the large screw cover into the recess in the recliner mechanism and press it into place to conceal the screw head.

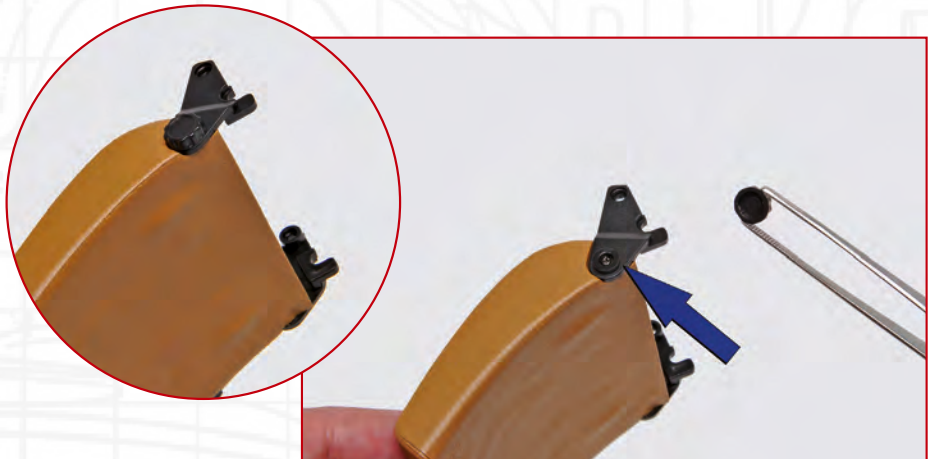


**STEP 11-E**

Fit the right recliner mechanism (11-2) to the other side of the seat back and fix it in place with an SP10 screw.

**STEP 11-F**

Fit the recliner knob into the recess in the recliner mechanism and press it into place to conceal the screw head.







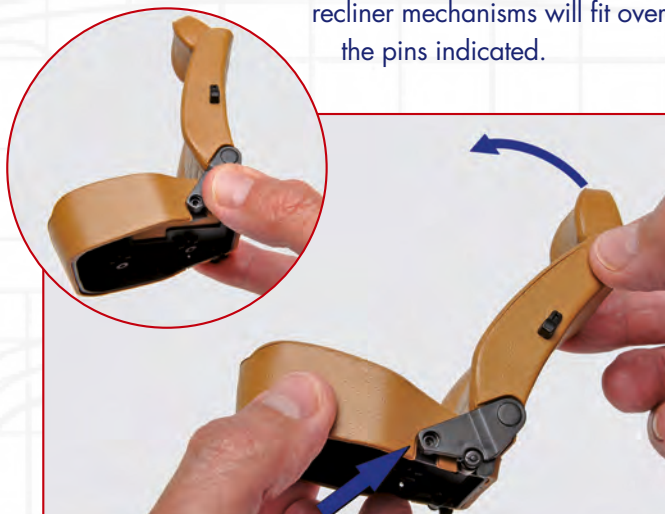
### STEP 11-G

Align the seat back with the seat base (11-1), so the recliner mechanisms will fit over the pins indicated.



### STEP 11-H

Fit the recesses in the recliner mechanisms over the pins, as shown.



### STEP 11-I

Pivot the seat back on the pins until the holes at the front of the recliner mechanisms line up with the holes in the seat base.

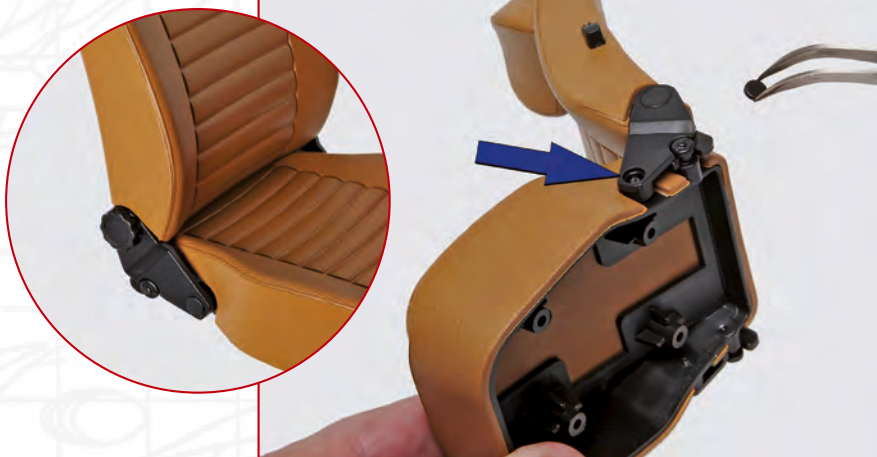


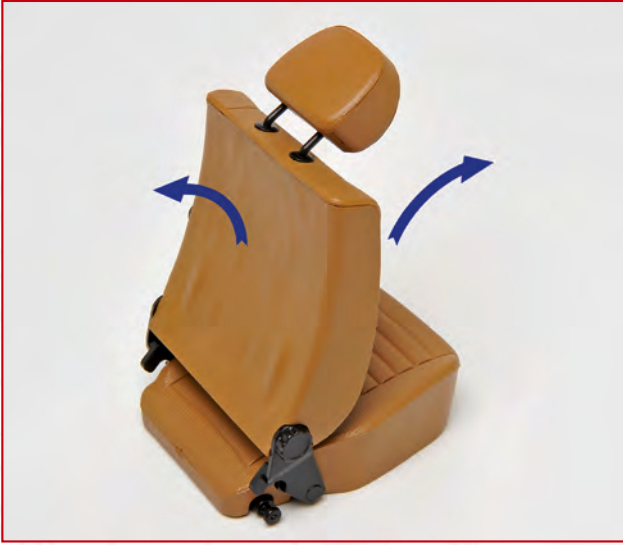
### STEP 11-J

Fix the arms of both recliner mechanisms to the seat base with two SP10 screws.

### STEP 11-K

Finish off by fitting the two small screw covers into the recesses over the screw heads from Step 11-J.





### STEP 11-L

Check that the seat back tilts forward, as on the real car, to allow access to the rear seats.

That completes the assembly of the driver's seat.

### STAGE COMPLETE



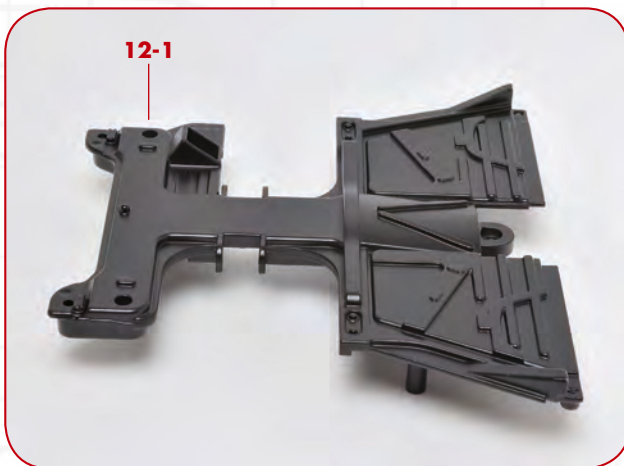


# Stage 12: Front subframe

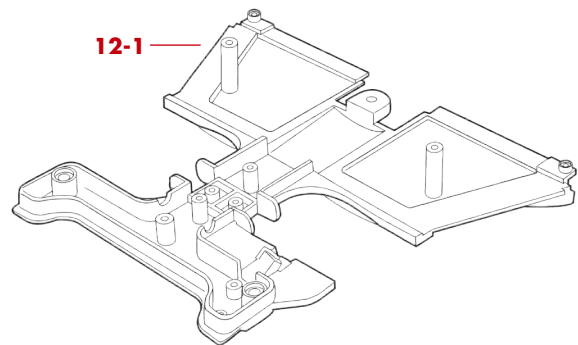
This stage provides the subframe on which you will be mounting the front suspension and steering of your VW Beetle. Before doing so, you have the chance to add some painted details that will enhance the appearance of the finished model – although this is entirely optional.

## PARTS

12-1 Front subframe



## PARTS DIAGRAM



NOTE: The appearance of the parts you receive may be slightly different from the parts pictured in these pages.

## WHERE THE PART WILL GO





## CUSTOM-PAINTING THE WHEELS AND EXHAUST

These pages show you some simple tips for custom-finishing your Beetle's front wheel balance weights and the clamps on the exhaust system. These are purely optional enhancements, but more tips will be given in future packs.



**STEP 12-A.** Take the front wheels you assembled in Stages 2 and 7. Using a very fine brush and mid grey paint, pick out the balance weight on the rim as shown. It is very important to use very little paint on the brush to avoid marking the rim next to the weight.

This shows the finished result, which suggests the lead material used for the weight.

### PAINTS AND BRUSHES

It is not essential to paint your model, but if you want to add the custom details suggested here, you will need several colours of model-making paint and small brushes of different sizes. You can buy them from ModelSpace or model shops. The picture on the right shows you a selection that can be used if you wish to make the suggested changes throughout the assembly, but for the steps in this stage, only the mid grey, silver and gold paint are used.



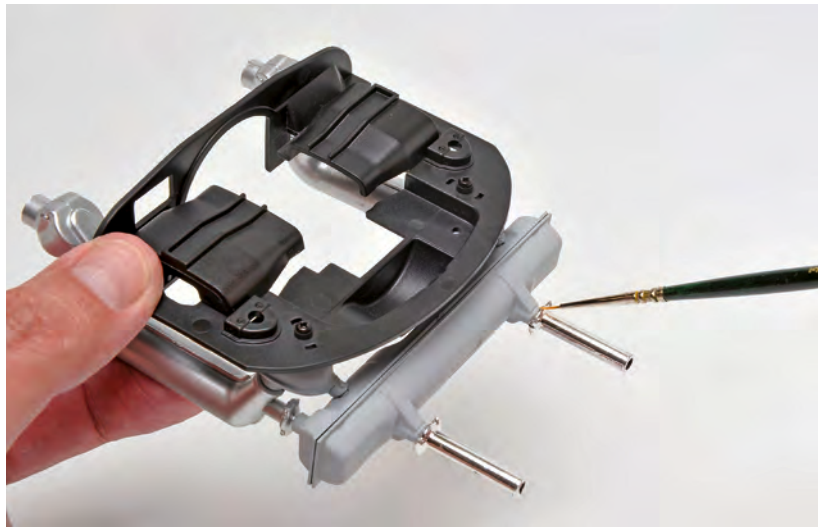
#### Useful colours

- Matt black
- Gloss black
- Dark grey
- Aluminium
- Mid grey
- Copper
- Silver
- Gold

#### Brushes

- Very fine point (for flanges and small details)
- Small flat tip (for screw heads)

**STEP 12-B.** Now take the exhaust system assembled in Stage 4. It is possible to pick out the flanges at the base of the exhaust pipes with the same mid grey paint used for the wheels. It is also important to use a very fine brush and very little paint.



**STEP 12-C.** This shows the difference between the painted and unpainted flanges. Now paint the second flange.



**STEP 12-D.** The two tubes connected to the silencer also have flanges that can be painted in the same way.





**STEP 12-E.** This shows the result after painting both flanges.



**STEP 12-F.** Now paint the clamping screws. Mix a little silver paint and gold paint to get a shade that looks like brass. With a small flat brush, take a very small amount of this and paint the heads of the screws.



Here is the finished result of painting all four flanges and screws.

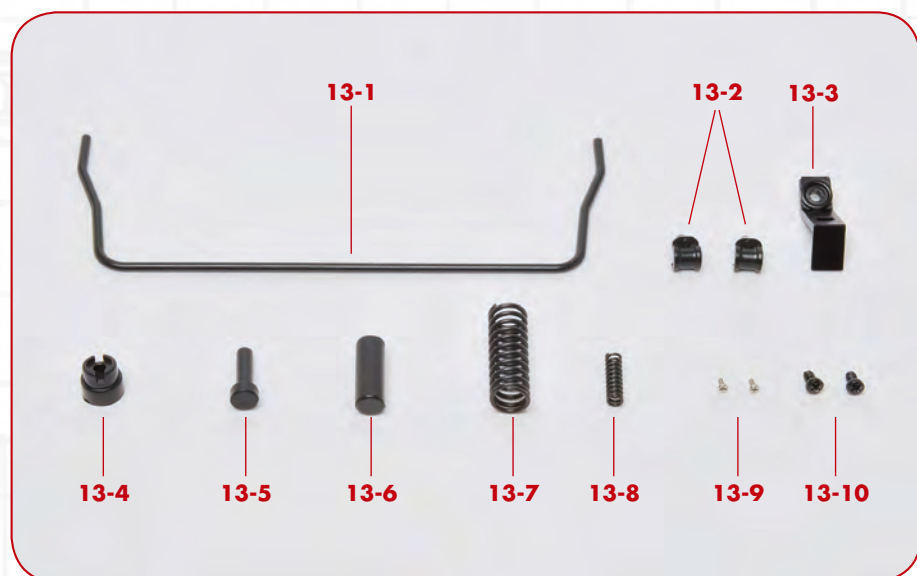


# Stage 13: Anti-roll bar and front suspension

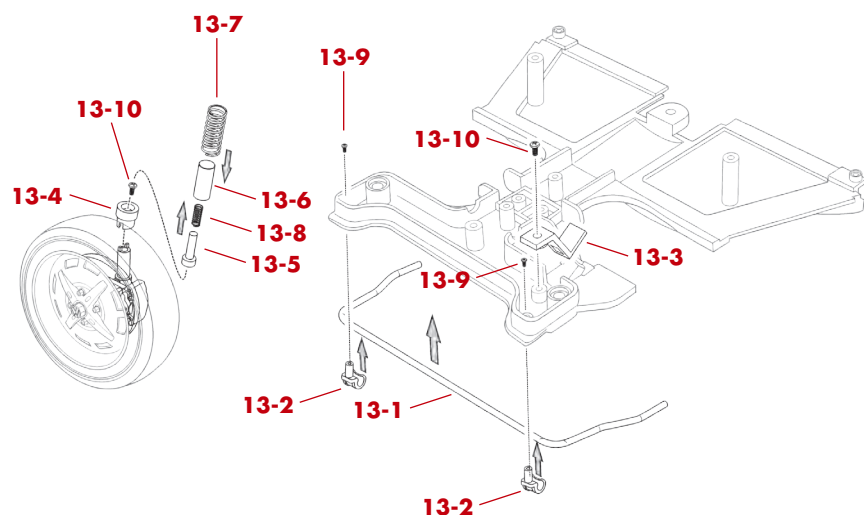
In this stage, you fit the anti-roll bar to the front subframe and start assembling the front suspension by fixing the shock absorber support to the front wheel.

## PARTS

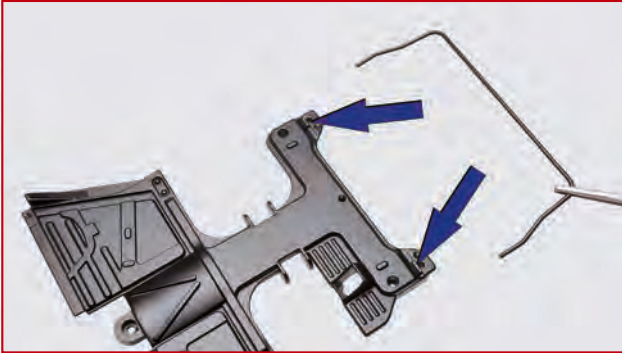
- 13-1** Anti-roll bar
- 13-2** Anti-roll bar supports
- 13-3** Steering column bracket
- 13-4** Shock absorber base
- 13-5** Shock absorber piston
- 13-6** Shock absorber body
- 13-7** Front suspension spring
- 13-8** Internal damper spring
- 13-9** SP11 screws
- 13-10** SD04 screws



## PARTS DIAGRAM

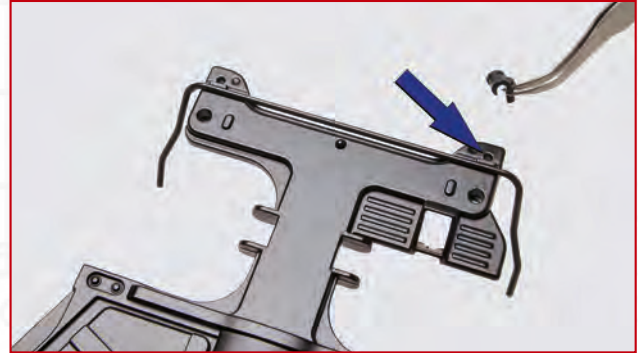


NOTE: The appearance of the parts you receive may be slightly different from the parts pictured in these pages.



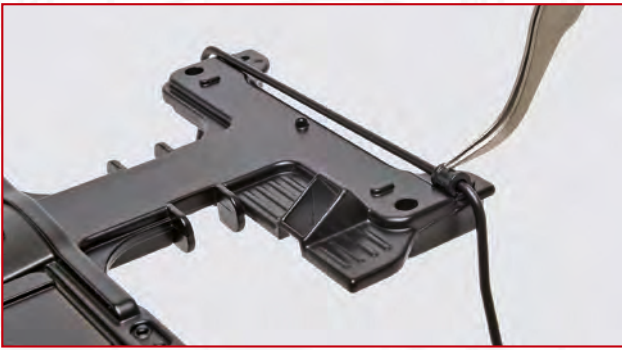
### STEP 13-A

Place the anti-roll bar (13-1) on the underside of the front subframe provided with Stage 12, fitting it into the two grooves indicated.



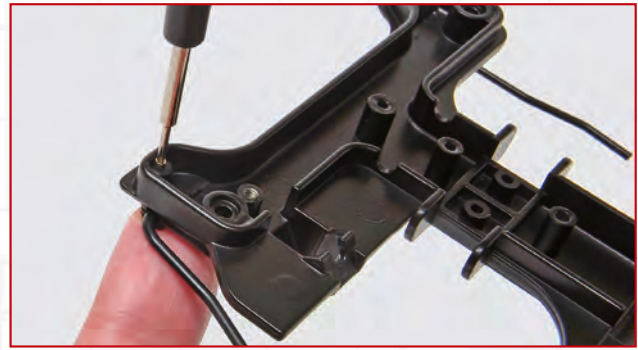
### STEP 13-B

Then fit one of the anti-roll bar supports (13-2) by inserting its pin into the indicated hole in the subframe.



### STEP 13-C

Press the support into position.



### STEP 13-D

Turn the assembly over and fix the support with an SP11 screw.



### STEP 13-E

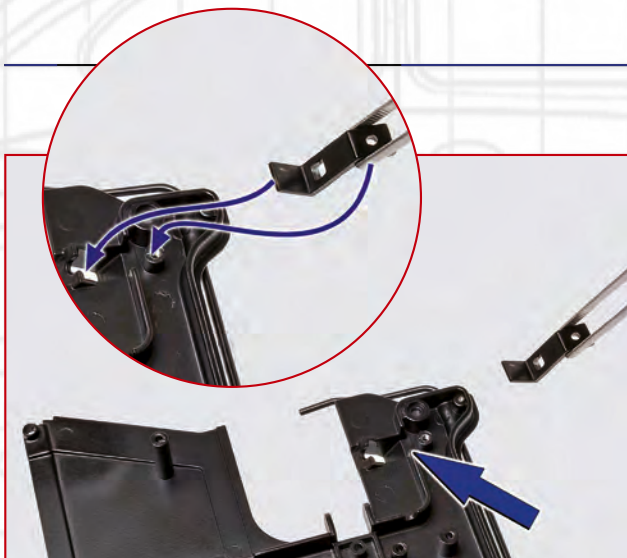
Repeat Steps 13-B to 13-D on the other side of the subframe.



### STEP 13-F

After fixing both supports, check that the anti-roll bar is free to pivot up and down as shown.





### STEP 13-G

Fit the steering column bracket (13-3) into the rectangular housing on top of the front subframe. This is recessed to match the shape of the bracket.



### STEP 13-H

Check that the bracket fits all the way into the housing and fix it in place with an SD04 screw.



### STEP 13-I

Take the right front wheel assembly (Stage 2) and position the shock absorber base (13-4) on the shaft projecting from the steering knuckle, so that the two pins on the steering knuckle fit into the slots in the shock absorber support.



### STEP 13-J

Check that the shock absorber support is slightly inclined away from the brake backplate, as shown (inset).



### STEP 13-K

Fix the shock absorber base to the steering knuckle with an SD04 screw.



The front subframe and wheel assemblies should now look like this.



**PARTS TO RETAIN**

As the shock absorber and the suspension spring cannot be fastened together yet, keep parts 13-5, 13-6, 13-7 and 13-8 safely until the suspension is assembled in a later stage.

**STAGE COMPLETE**



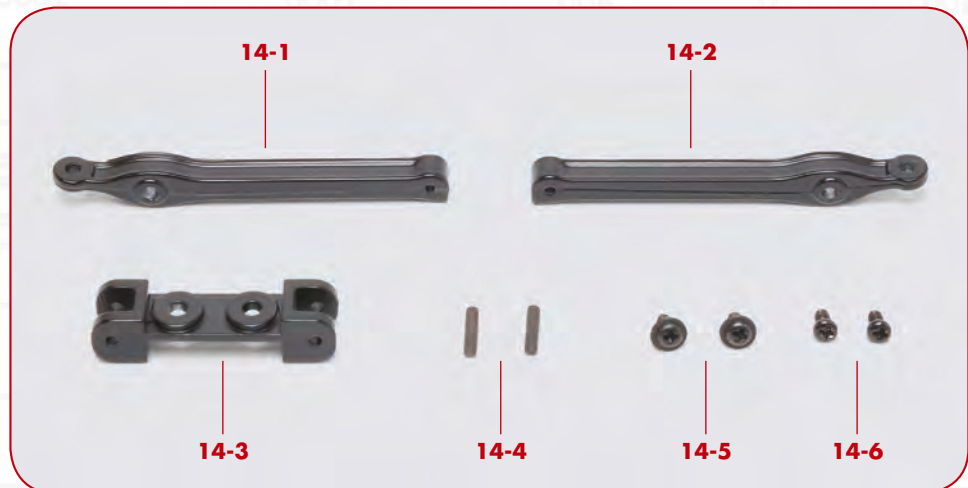


# Stage 14: Front track control arms

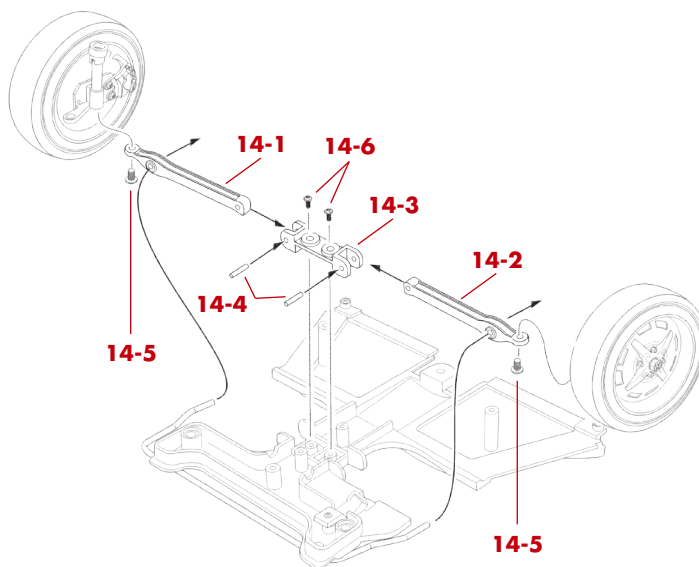
The track control arms form a key stage in the assembly of the front suspension, as they connect to the anti-roll bar and the subframe to allow the front wheels to be mounted.

## PARTS

- 14-1** Right front track control arm
- 14-2** Left front track control arm
- 14-3** Track control arm pivot mounting
- 14-4** Pivot pins
- 14-5** SD08 screws
- 14-6** SD04 screws



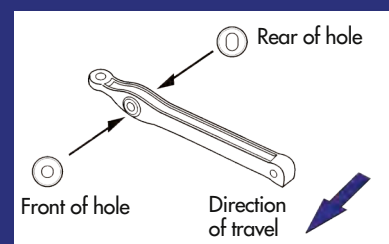
## PARTS DIAGRAM

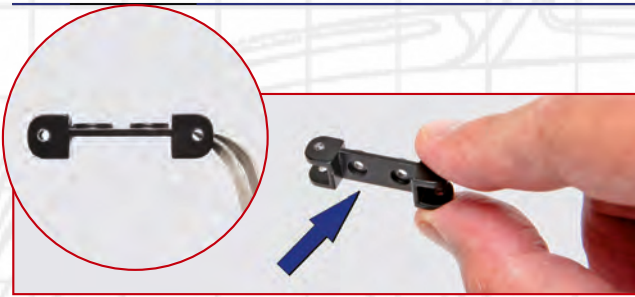


NOTE: The appearance of the parts you receive may be slightly different from the parts pictured in these pages.

## TIP

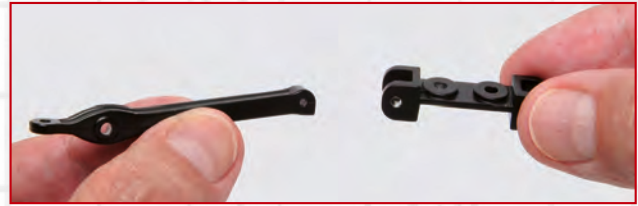
To mount the track control arms properly, it is important to check the shape of the hole at the end of the arm. The forward side of the hole is circular, while the back of the hole is oval. This difference is essential because the anti-roll bar, which is fitted into the front part of the arm, needs some clearance at the rear to allow the suspension to go up and down. This illustration shows the right front track control arm (14-1).





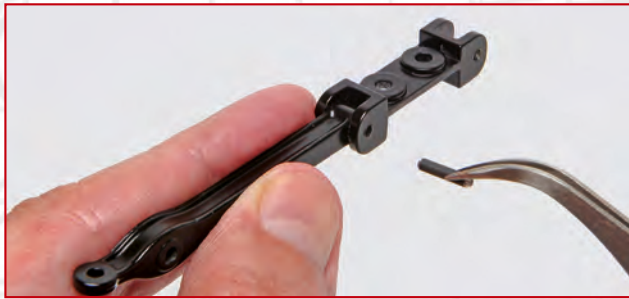
### STEP 14-A

Start by making sure you have the track control arm (14-1) into the pivot mounting (14-3) the correct way up. The central part has two fixing holes, which are raised on the upper side and recessed on the underside.



### STEP 14-B

Fit the right front track control arm (14-1) into the forked end of the support (14-3), making sure it is the correct way round (see the Tip on page 57).



### STEP 14-C

Fit one of the pivot pins (14-4) through the holes in the support and the track control arm to hold the assembly together.



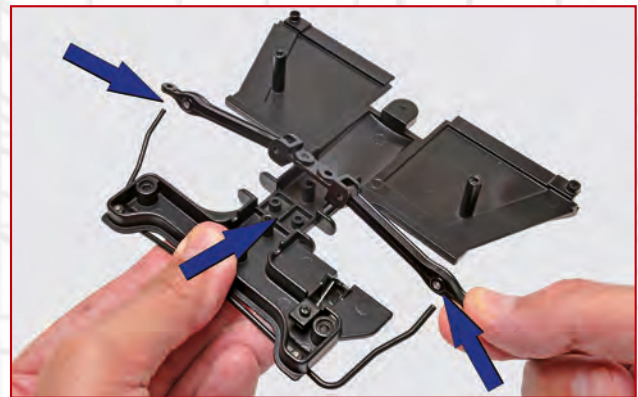
### STEP 14-D

Repeat Steps 14-B and 14-C to fit the left front track control arm (14-2).



### STEP 14-E

After attaching the arms, check that they go up and down freely, then leave them in the position shown on the small picture to facilitate mounting the anti-roll bar.



### STEP 14-F

Check that the arms are mounted correctly (see the Tip on page 57), then position the assembly on the subframe so that the recesses you identified in Step 14-A fit over the two mounting points indicated on the subframe, fitting the ends of the anti-roll bar into the holes in the track control arms as you do so.



### STEP 14-G

Press the assembly into place, and check that the anti-roll bar is correctly fitted.



### STEP 14-H

Fix the pivot mounting to the subframe with two SD04 screws.



### STEP 14-I

You are now ready to mount the front wheels on the suspension arms. Lay the subframe and wheels on a flat surface, making sure they are all aligned as shown. Position the wheels so that the steering knuckles point forwards (with the brake calipers to the rear).



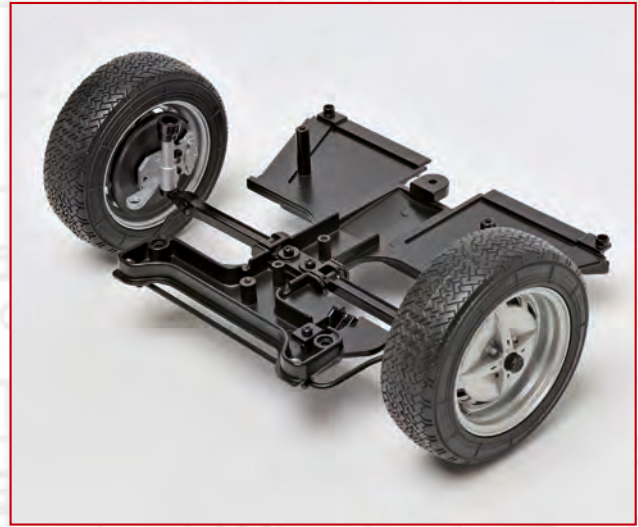
### STEP 14-J

Place the bottom of the left steering knuckle on the end of the left track control arm.



### STEP 14-K

Turn the assembly over and secure the track control arm with an SD08 screw.



### STEP 14-L

Repeat Steps 14-J and 14-K to secure the right wheel with another SD08 screw.

The front subframe assembly should now look like this. Be careful not to strain the screws holding the wheels to the track control arms before you assemble the rest of the suspension.

### STAGE COMPLETE

