

## **SR-71 Full Chute Set**

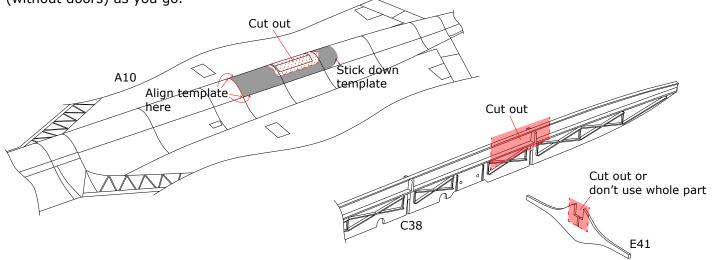
(for Revell SR-71)

## **HMR 48047**

Wash contents in soapy water or wipe down with isopropyl alcohol. Remove the printed parts from their supports with a fine razor saw and good quality sprue cutters. Work top to bottom (i.e. cut at the part end first, then at the base end), outside to inside, freeing up space moving along. Remove cast resin parts by scoring the parting line lightly and repeatedly with a sharp, fresh hobby knife blade. Glue with CA or epoxy glue.

1. Preparation of the Revell parts.

Use the provided vinyl template to the mark location and shape of the required cutout. The template aligns exactly at the forward position with one cross and two longitudinal panel lines. The plastic is quite thick so I recommend scribing the outline first and then chain-drill a series of holes a bit away from the perimeter. Cut through, remove the centre bit of plastic and then file/sand up to the final outline. Test fit the resin bay (without doors) as you go.

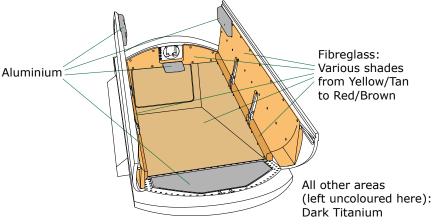


Cut the marked portion from Revell spine part C38 and bulkhead E41. Alternatively, leave out E41 entirely.

2. Build sequence:

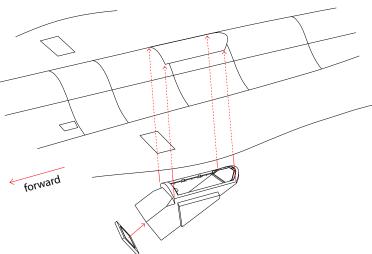
After a successful dry fit and clean-up of the resin parts I recommend painting of all four individual parts prior to assembly.

Painting guide:

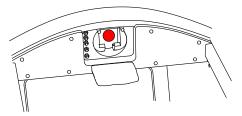


## 3. Installation:

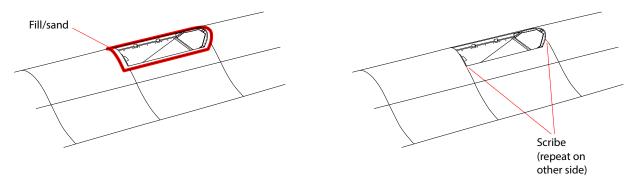
Glue the container end cap in and install the (painted) assembly in the fuselage, ensuring a step free fit on all sides.



Ensure a strong and secure bond from the inside, I recommend reinforcing the edge with 2-part epoxy glue. Make sure the chute mounting hole remains open! It should sit just under the edge of the kit plastic.

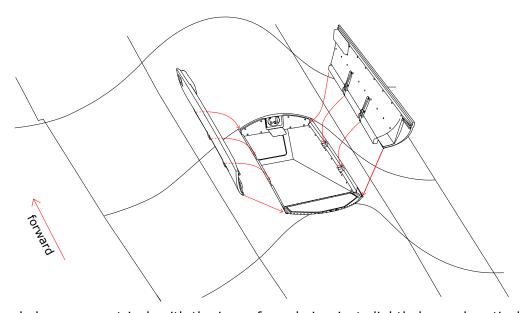


Fill the gap around the edges of the container and sand smooth. Rescribe the missing ends of the panel lines.

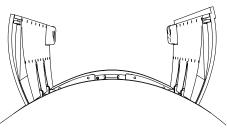


Build and paint the model according to the Revell instructions

Installation of the bay doors. Do this either now or leave this until after the chute risers are installed.

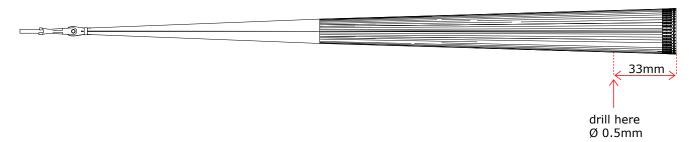


Align the doors as below: symmetrical, with the inner faces being just slightly beyond vertical.



Installation of the chute riser lower bundle and shackle.

The casting seam is on the bottom of the riser bundle. Clean this up and drill a 0.5mm hole into the bottom (on that centre line), as illustrated below. This is for the provided metal rod that helps propping up the riser bundle.

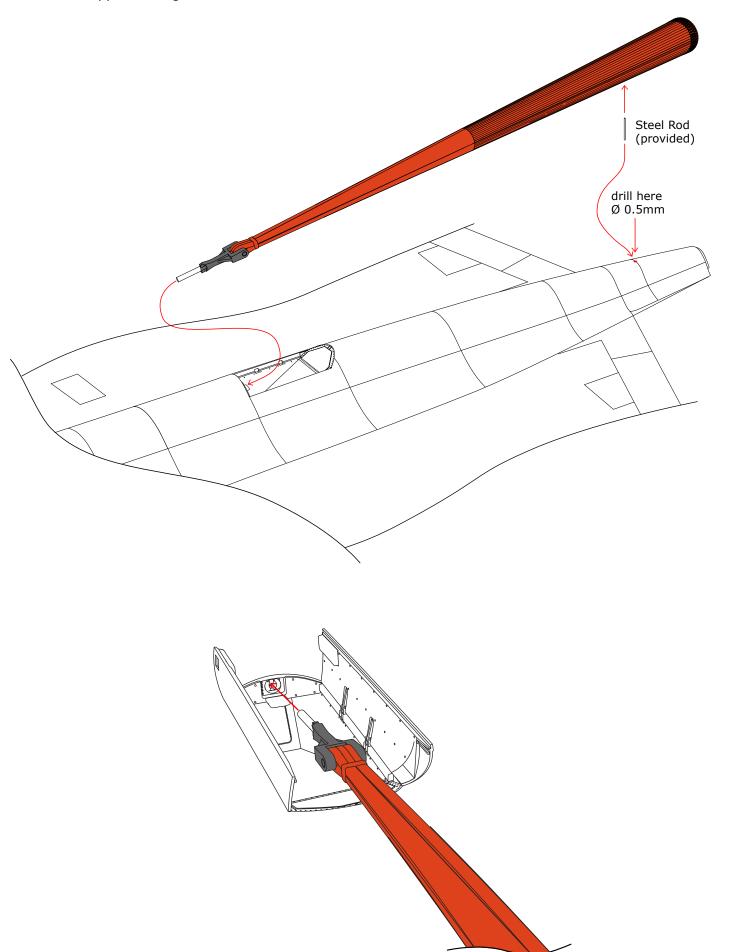


Paint the risers. International Orange (FS 12197) is a good colour match. Paint the shackle dark natural metal. Paint the steel prop-up rod the same colour as the fuselage (black or off-black).

(Alternatively, use a transparent plastic rod.)

Drill a hole in the upper fuselage tail end, as illustrated below. In the panel line, in the fuselage centre although it's not a problem to get it a little off-centre.

Carefully push the carbon fibre rod into the attachment point in the bay and settle the prop-up rod into the holes in the upper fuselage and riser.



Building and rigging the canopy.

Remove all print supports and remnants from the inside of the chute and the edge of the skirt. Remove all print supports from the 3D printed riser "fan-out" piece.

For building the individual riser lines you have several options:

- a) use the provided carbon fibre rods for all 44 risers (most stable and most advisable solution)
- b) use only a few carbon fibre rods, such as 5 or 6 and build the remaining risers from:
  - elastic string (provided)
  - dental floss string (provided)
  - stretched sprue, other kind of plastic rod or metal wire (max. 0.5mm diameter)
  - other kind of string or elastic rigging material

(difficult to make stable and look right, but can look better and more realistic or "natural" than the 44 carbon rods)

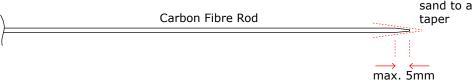
c) use no carbon fibre rods at all but only use "soft" rigging material, stabilised by tension in the end (extremely difficult to do, but may look most realistic)

The length of the risers between "fan-out" and chute skirt is <u>250mm</u>.

The "fan-out" part has 44 small holes to either feed through soft rigging material/strings or mount hard rods such as the provided carbon fibre rods.

If you use the provided rods for partial or complete rigging, my advice is to start by using just three rods to build a "pilot tripod". Getting a high number of rods all aligned to the correct length is difficult, especially when you add them one by one. Therefore starting with just three rods works best as a tripod automatically adjusts itself.

Before using the carbon fibre rods, thin one end on each rod to a taper, this helps with aligning them in the "fan-out" piece, removing any tensions and possible bowing in or out. This also allows for some play to adjust the length.



Count the mounting holes and mark the position of your three rods with a small dot of white or silver paint. Make a dot, count 15 holes, make the next dot, count another 15 and make the third dot (the next distance will of course be 14).

Make the same markings on the chute skirt, bearing in mind that the count is a mirror image of the "fan-out"!

Set the chute canopy upside down on a stable/padded surface and connect the rods, one by one. My advice is to use a tiny bit of superglue to "tack" the rods in place and once you have a stable 3-rod "tripod" use 2-part epoxy glue to reinforce the joint at the chute end.

After this, proceed with your preferred method. Install the rest of the carbon fibre rods, or any other chosen rigging material.

The "fan-out" end, with three rods (for a five-rod assembly in this example):



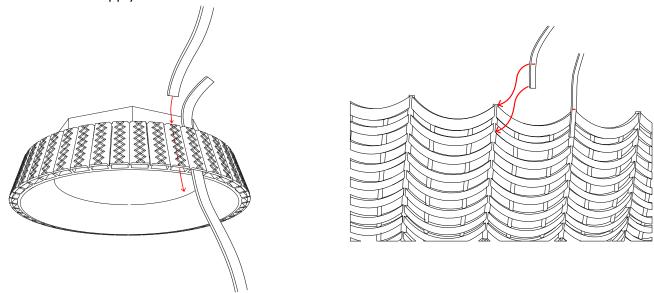
The canopy end, with three rods (for a five-rod assembly in this example):



If using any soft rigging material, thread the string through the "fan-out" from the rear side (the side facing away from the canopy), each of the 44 holes has a funnel design inside, making it easy for the string to feed through.

Then glue the bottom end to the chute and finally pull a little back to apply some tension to the material. Cut off any excess at the top (the rear side).

CAUTION: do not apply too much tension as otherwise the carbon rods will start to bow!



The included dental floss is the best scale representation for the real riser lines, being flat in cross section. The biggest problem with it is that is tends to curl, not lie flat and is not elastic so tension is difficult to apply. If using it, I recommend preparing 1 or 2 Metre lengths of material and impregnate it with CA glue. This will help stiffen it up and remove a bit of the curling. Painting it beforehand would also help.

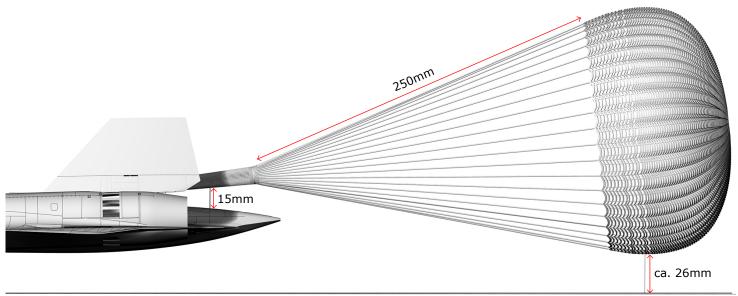
Paint the whole assembly inside and out, (same orange colour as the riser bundle before, like FS 12197).

## Final assembly:

With the SR-71 itself and the canopy complete, dry-fity the canopy, upper risers and fan-out to the lower riser bundle.

This is a tricky operation and why I regard the construction with 44 carbon rods as the most practical solution as it's the most stable.

The chute canopy needs to be supported off the ground, either with two or three metal rods or clear plastic rods. Or perhaps a larger clear plastic "base" underneath the canopy. The estimated height off the ground is about 25-27mm, but you may also try deforming the bottom part of the chute a little (flattening or even denting inwards), as often seen on the real thing. In that case the distance is a little more.



Ground Level