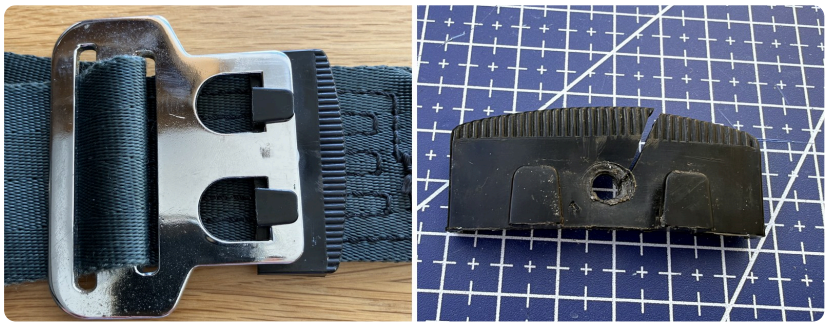
CASE STUDY

Keeping the original look on a Classic Mini's new seatbelts

> A Classic Mini owner fitting new seatbelts wanted to keep the original Britax belt hangers. We rebuilt a broken one from a 3D scan, checked every detail against the original part, then refined it through testing on the car.

On the original Britax seatbelts in a Classic Mini, a small plastic hanger riveted to the webbing holds the steel latch plate when the belt isn't in use. This owner was fitting new belts and wanted to keep the hangers. They posted us one, which had split as it came off the old belt, along with some webbing and a latch plate. New ones are no longer made.



Left: the original hanger on the old belt, with the steel latch plate hooked onto it (owner's photo). Right: the hanger as it reached us, split from the fixing hole to the ribbed edge.

The challenge

The hanger is only 55 mm wide, but it does three jobs at once, and the new one had to do them all on the new belt:

- two hooks on the front that hold the 3 mm steel latch plate when it is dropped in from above;
- two clips on the back that wrap around the 4 mm webbing and grip it, so the hanger doesn't slide down the belt;
- the ribbed top edge and overall shape that give the original its look.

Our approach

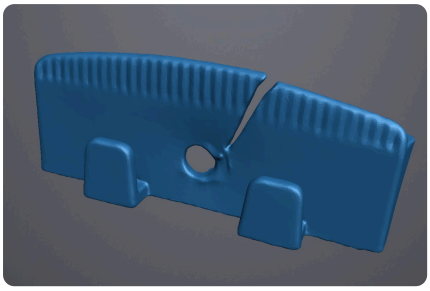
01 **Scan and measure.** We 3D-scanned the broken hanger. The latch plate and webbing the owner sent gave us the sizes for the hook and clip gaps.

02 **Rebuild it properly.** Rather than copying the cracked part, we modelled a clean new hanger in professional CAD. The first version matched the scan with a median difference of 0.28 mm.

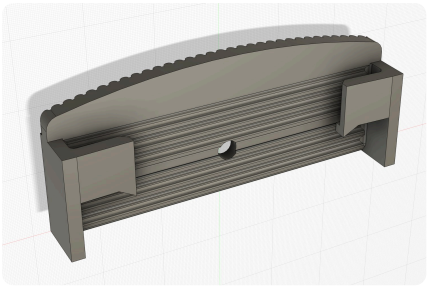
03 **Check it, then test it.** With the original hanger, latch plate and webbing on our bench, we checked every detail of the model against them, from the half-sunk grip ribs to the pointed tooth on each clip. Test prints then went on the car, and the feedback shaped each revision.

We use AI alongside our own engineering judgement to align the scan, measure the original and build the model. It handles the slow number-crunching, so development time drops sharply and you get your part sooner.

From broken original to the car



The broken original, captured with a 3D scanner.



The revised design: angled clip lips, a tooth point and grip ridges on the back.



The new hanger on the car, holding the latch plate (customer's photo).

Refined on the car

Each round of feedback from the car shaped the design. Angled clip lips that pinch the webbing, a point under each clip's tooth and rounded ridges across the back now hold the hanger firmly, and a thicker 2.5 mm plate stops the ends flexing.

We also opened the hook gap from 3.0 to 3.6 mm and added a lead-in, so the 3.1 mm latch plate drops straight in without pushing the hanger down the belt, and filleted every inside hook corner for strength.

	ORIGINAL PART	NEW DESIGN
Body	Split from the fixing hole to the edge	One piece, 2.5 mm, crack designed out
Material	Moulded plastic	Tough, flexible 64D TPU
Rear clips	Sprung open and chipped	Angled lips, tooth point, back ridges
Front hooks	Hold the latch plate	Lead-in and filleted corners
Fitting	Riveted through the webbing	Clips on, or pop-riveted like the original

The result

A replacement Britax-style hanger, printed in tough, flexible 64D TPU, that grips the new webbing firmly and holds the latch plate, so the Mini's new seatbelts keep their period look. It clips onto the webbing as it is or, where the car's original belts had riveted hangers, it can be pop-riveted in place like the original.

Now available on eBay: ebay.co.uk/itm/198799756049

OBSOLETE ISN'T THE END.

Got a part that can't be replaced?

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