

Fitting Tillet Seats into the Lotus Elise/Exige using EBS brackets

Fits cars manufactured prior to 2017 – VIN serial number 1457



Formerly EB4

The EBS brackets are designed to allow an uncompromised seating position when fitting Tillett B6, B7, B6-43 XL Screamer, B8-43 and B9-43 seats into the Lotus Elise, Exige, 211, 340R and the VX220. The steel EBS brackets can be used on either side, in both left and right hand drive versions. They also have hip mounting points for a race harness or the OEM seat belts. (there are a few models where the receptors that come with the car are too long and may miss align with the bottom of the hip hole. The seat belts must pass through the hip holes and must not go over the top.) There is a difference in the available space between LHD and RHD cars. This is because the centre console is moved around 25mm to the right in a LHD version. This restricts the passenger side space and limits the positional possibilities. Therefore, there is a guide on this PDF to advise on where to initially place the passenger seats. We have included a separate guide for each Screamer seat type to more easily enable the brackets to line up with the captive floor fittings on the Lotus floor pan.



The EBS bracket allows adjustment of the leg length by having a U section channel, in which the bracket upright can be moved up to 90 mm forwards and backwards. It is important to identify this desired position before bolting the seat in. The bracket also has multiple holes for angle adjustment. When looking at the floor without the seat in place you will see an uneven number of captive M8 threaded holes in the tub of the car. These are all suitable to be used for mounting the seat. The spacing of these for use in the drivers side is 405 mm across, However, the narrower passenger space will require a different configuration as the front holes only have a 390 mm spacing. It will be necessary to use the offset joggle on the EBS pointing under the seat on the front outside. The rear holes have a restricted depth so please use the provided 22 mm bolts (F), a longer bolt will bottom out in the blind hole of the rear mountings. To get a good understanding of which holes in the floor are best to pick up on, loosely place the U channels in the seating area, lining up four positions with the captive threaded holes. try to achieve side to side hole centres of 405 mm, using the joggle to do this on the passenger side. Then bolt the bracket uprights onto the seat, again loosely, at an average angle using the special hex bolts (E).

A common problem for tall drivers can be the position of roll bars. The harness bar can restrict the amount the seat can be pushed rearwards and sometimes the seat must be shifted to one side to avoid contact with the side of an intrusive roll bar. The EBS has an offset tab on one end of the U channel. By flipping this U channel around and using the extra mounting point to your advantage, coupled with varying the thickness of the supplied nylon spacers (A), you can move the seat freely within the available space. This ability to manipulate the seat sideways means that even the wider B6-43 XL Screamer, B8 and B9 seats have enough space to be fitted in either side. With these wider seats, the versions with the rolled edges left on are difficult to fit, therefore it is advised to use the B6-43 XL Screamer, the B8-43 and B9-43 which are the cut edge versions.

Using the hex bolts allows you to tighten the sides of the seat as the last job. A ratchet 10 mm spanner is advised for this task. It is important not to scratch the powder coating on the brackets by bolting up too tightly, as you may decide to change the angle later. **(Tip: Before you start, cover the door sill with a thick blanket to prevent damage as the seat is moved in and out.)**

The first task is to identify which of the floor holes are best to use and subsequently how many nylon spacers (A) will be needed at each mounting point between the seat and brackets. You will require more spacers in the standard B6/B7 seats than the B6-43 XL, B8-43 and B9-43. You will use up to 12 mm in the standard seat and sometimes none at all in the wider seats. It is desirable to use as few spacers as possible for strength. The next step is to bolt the U channels down (Again, not tight at this stage) and then ascertain how many spacers you will require to get the uprights to the exact width of the U channels. There are slots in the U channels to help with moving them hard up against the gearbox tunnel and to allow some degree of tolerance. Once the seat is able to rest in the U channels try to ascertain the leg length needed. Take note where each of the uprights sit in the U channel. If you have twisted the seat they may not be in the same position on both sides but this is not an issue. With the brackets possibly being slightly staggered, it is best to look at each U channel and see the gap between the back of the bracket and the bolting hole of the U channel.

With the seat sitting in the U channel you can carefully test the seat and see if the angle is to your liking. If you are happy with the angle and have taken note of the amount of gap remaining behind each upright, everything can be removed for assembly. The U channels are bolted to the uprights using the special male and female stainless fittings (B). At this point you will see that the available bolting holes change as you slide the U channel along the upright. You have adjustment possibilities every 5 mm. Don't forget to use the support spacer (C) as you put these in. These fittings are deliberately a tight tolerance so any excess powder coating might need to be removed to fit these in, Occasionally the 12.5 mm support spacer will need a very small amount filed off to make it fit inside the inner bracket. Once the U channel and the upright are fixed together, the hip point fixings for the seat belts must be fitted. These have to be attached before the bracket uprights are attached to the seat.

This is more difficult with an OEM three point belt and the outside attachment point will need to be fixed and the bracket attached whilst in, or next to the car. Sitting the seat on something like 150 mm of hard foam sheets in the cockpit space will lift it clear of the door sill and allow the belt and bracket to be fixed without damaging the surrounding car. With the M8 stainless hex bolts (E) still finger tight in the sides of the seat. Use two 5 mm allen keys to fully tighten the U channel to the upright, using the special M8 stainless bolts (B) and central support spacer (C). The hip part of the race harness should also be fitted at this stage. You will need to remove the upright from the seat to do this. The belt mounting (D) is an M10 special two part stainless fitting which needs two allen keys to tighten. Use the longer half of the fitting on the inside of the bracket. Use the provided spring (G) on the inside and the Lotus buckle on the outside.

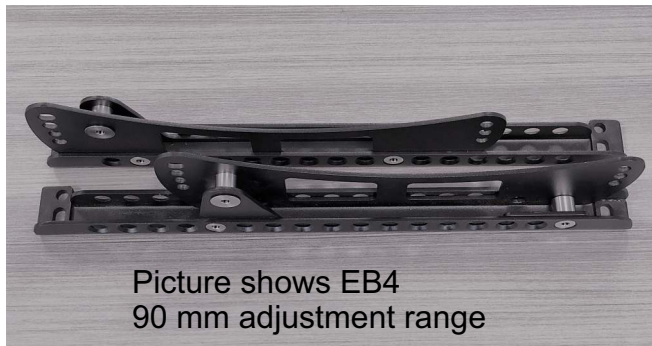


At this stage the M8 seat mounting bolts (E), should remain finger tight after fitting the completed bracket and seat belt back on the seat. Offer the whole assembly into the car and check that all the floor holes line up accurately with the holes in the U channel. Also check for the seat fouling on parts of the car. For example, the gearbox tunnel and roll bars. If they do not line up, ascertain if an upright needs to be moved further along the U channel on one side, or if spacers need to be added or subtracted to move the channel in or out. If using OEM seat belts reconnect the seat belt warning wire before bolting the seat down.

The next stage is to spin the floor bolts (**F**) into the M8 captive threads, through the U channel section. Ideally these should be hand spun in. If this is not possible due to the restricted access, great care is needed not to cross thread the captive fittings. A flexible extension or ball end hex socket can help get the thread started. You are advised to spend more time making the holes align correctly, than forcing a bolt in the captive fittings at an angle, therefore ruining the delicate and difficult to replace thread. Carpets, if fitted, can also cause issues with cross threading if they partially block the hole.

Once all four bolts are comfortable in their threads they can be tightened, use the long extension with a 6 mm Allen socket for the rear and a regular 6 mm allen key for the front or a ball end socket on a 1/4 inc drive. Make sure parts of the seat belts are not trapped under the brackets as you bolt down. Lastly using the 10 mm spanner, tighten the M8 hex bolts (**E**) into the side of the seat.

The seat should then be rigidly mounted.



Picture shows EB4
90 mm adjustment range

Recommended tools

- 1 x 5 mm allen keys
- 1 x 6 mm allen key
- 1 x 5 mm allen key socket
- 1 x 6 mm ball end allen key socket
- Torque wrench
- Socket wrench
- Long 250 mm extension bar for socket wrench
- Flexible extension for the 6 mm allen key socket
- 1 x 10 mm ratchet spanner

Spacer and fitting kit for EBS brackets

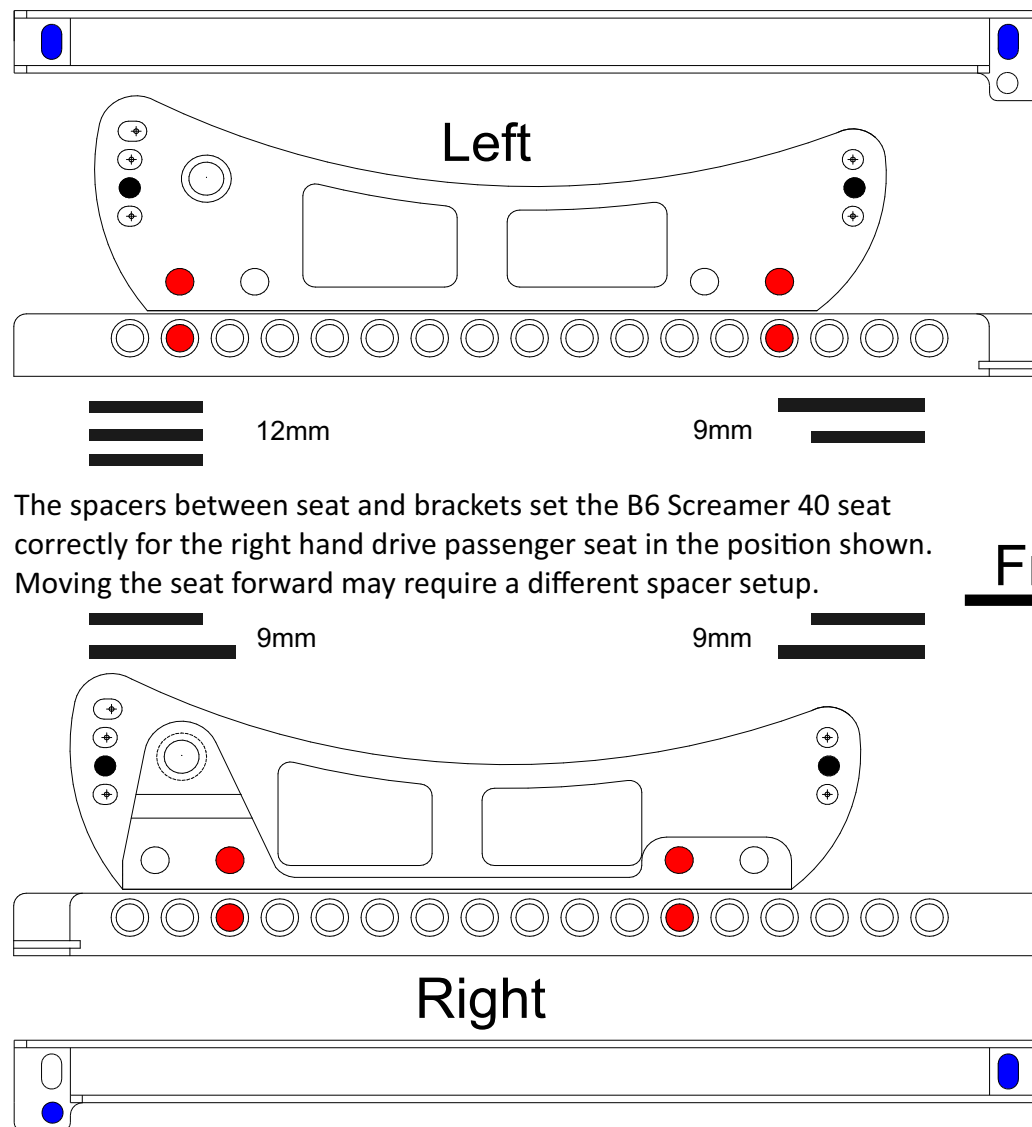
- A** 4 x Nylon 40 mm diameter x 2 mm thick spacers
- A** 6 x Nylon 40 mm diameter x 4 mm thick spacers
- A** 4 x Nylon 51 mm diameter x 5 mm thick spacers
- B** 4 x special stainless steel M8 male and female U channel fittings
- C** 4 x U channel support spacers
- D** 2 x special stainless steel M10 male and female seat belt hip mounting point fittings
- E** 4 x special stainless steel hex bolts 30 mm long
- F** 4 x 12.9 cap head bolts x 22 mm
- G** 1 x seat belt buckle positioning spring



Suggested starting point for fitting the B6 40 Screamer, into the Elise/Exige passenger side RHD using EBS brackets. Fits cars manufactured prior to 2017 – VIN serial number 1457

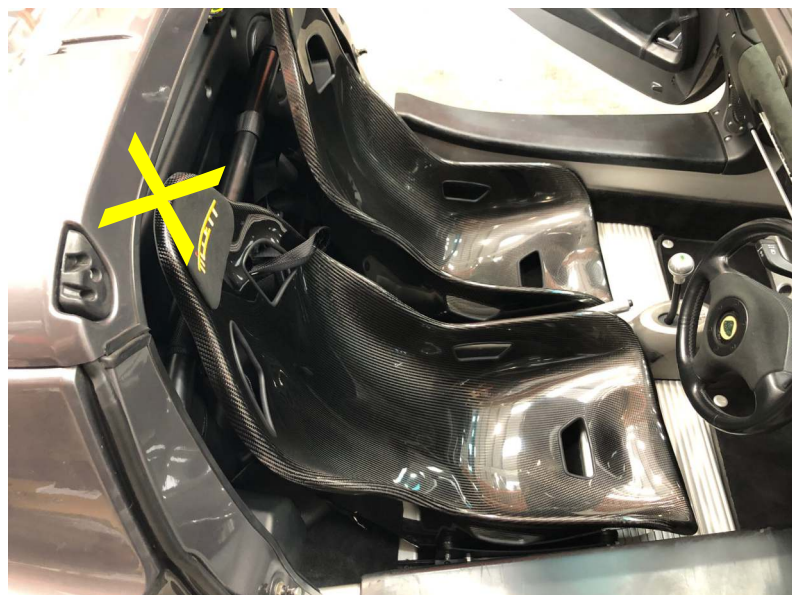
Due to the offset nature of the Elise floor mounting points it is sometimes necessary to offset the brackets. This page helps you line up the B6 40 Screamer passenger seat. This seat position relates to using the 2nd hole up on each upright for angle adjustment.

Please make sure when setting the seat in its rearmost setting that the head cannot come into contact with roll bar cover bottom edge. On some Elise/Exige models it may be necessary to either tip the seat more upright, bring the seat to a further forward, or create a thicker head pad, in order to prevent the head contacting this edge.
(See yellow cross on photo)



The spacers between seat and brackets set the B6 Screamer 40 seat correctly for the right hand drive passenger seat in the position shown. Moving the seat forward may require a different spacer setup.

Suggested upright fixing positions are shown by red dots. Please take note of which holes are used in the floor U channels by using the blue dots as a guide.

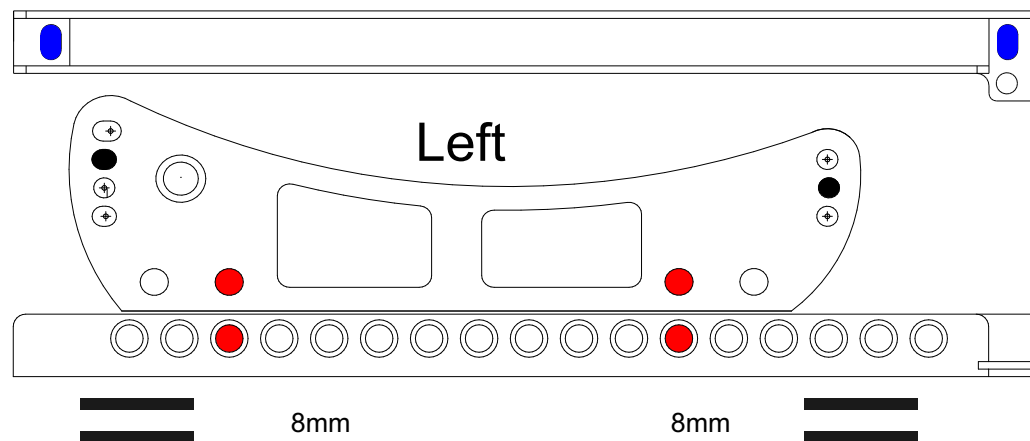


Suggested starting point for fitting the B6 Screamer 44, with rolled edges left on, into the Elise/Exige passenger side RHD using EBS brackets. Fits cars manufactured prior to 2017 – VIN serial number 1457

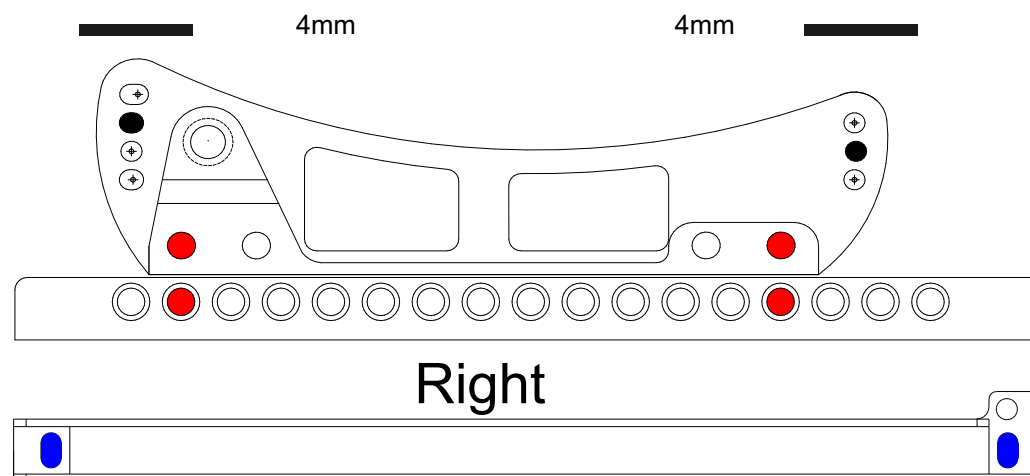
Due to the offset nature of the Elise floor mounting points, it is sometimes necessary to offset the brackets. This page helps you line up the B6 44 Screamer passenger seat. This seat position relates to using the 2nd hole up on each upright for angle adjustment.

Please note that fitting the “edges on” standard 44 width Screamer into the Lotus Elise/Exige passenger side RHD is possible, but handbrake access is restricted.

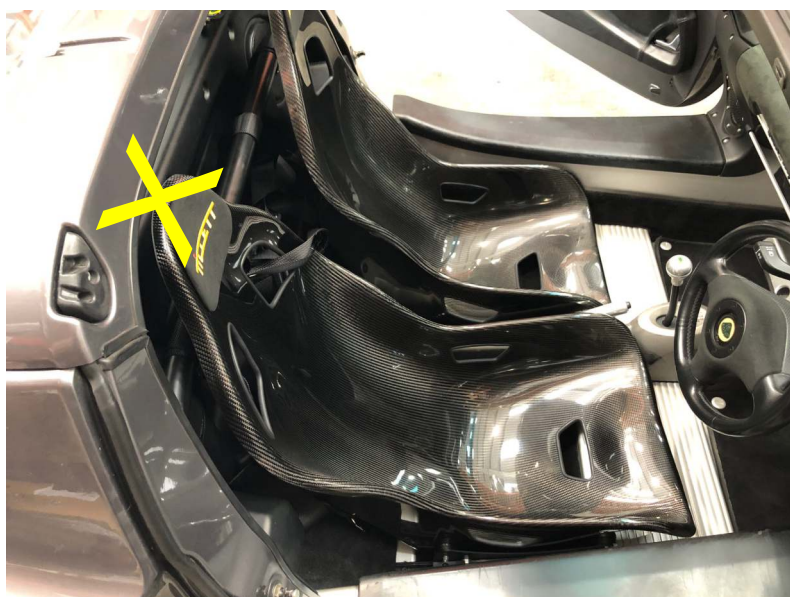
Please make sure when setting the seat in its rearmost setting that the head cannot come into contact with roll bar cover bottom edge. On some Elise/Exige models it may be necessary to either tip the seat more upright, bring the seat to a further forward, or create a thicker head pad, in order to prevent the head contacting this edge.
(See yellow cross on photo)



The spacers between seat and brackets set the B6 Screamer 44 seat correctly for the right hand drive passenger seat in the position shown. Moving the seat forward may require a different spacer setup.



Suggested upright fixing positions are shown by red dots. Please take note of which holes are used in the floor U channels by using the blue dots as a guide.



Suggested starting point for fitting the B6 40 Screamer, into the Elise/Exige

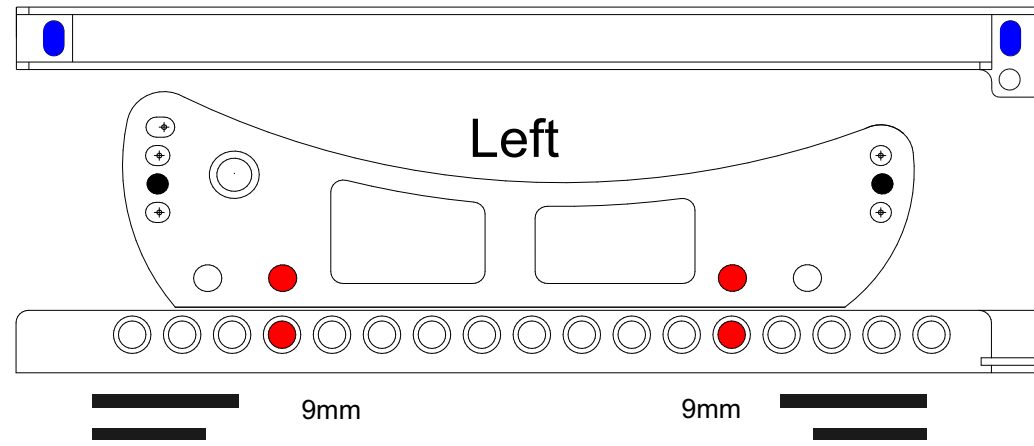


passenger side **LHD** using EBS brackets. Fits cars manufactured prior to 2017 – VIN serial number 1457

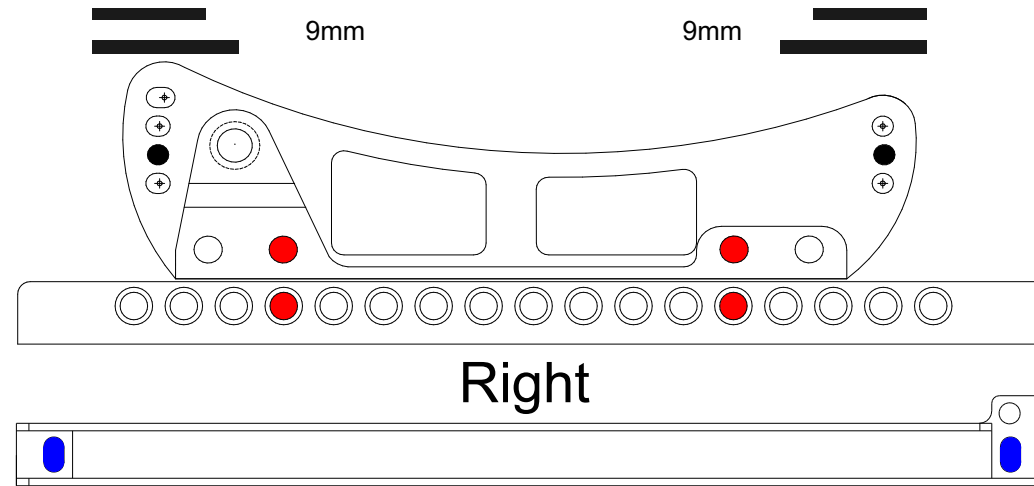
Due to the offset nature of the Elise floor mounting points it is sometimes necessary to offset the brackets. This page helps you line up the B6 40 Screamer passenger seat. This seat position relates to using the 2nd hole up on each upright for angle adjustment.

Please make sure when setting the seat in its rearmost setting that the head cannot come into contact with roll bar cover bottom edge. On some Elise/Exige models it may be necessary to either tip the seat more upright, bring the seat to a further forward, or create a thicker head pad, in order to prevent the head contacting this edge.

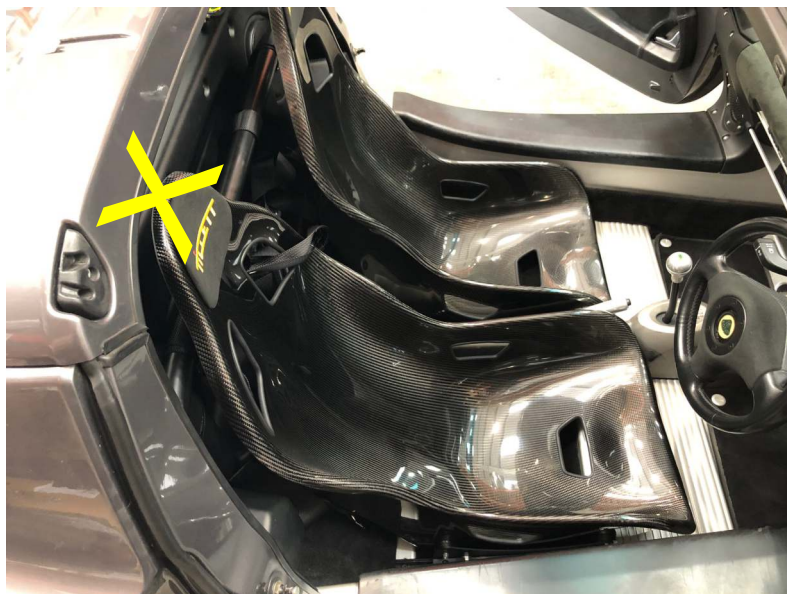
(See yellow cross on photo)



The spacers between seat and brackets set the B6 Screamer 40 seat correctly for the left hand drive passenger seat in the position shown. Moving the seat forward may require a different spacer setup.



Suggested upright fixing positions are shown by red dots. Please take note of which holes are used in the floor U channels by using the blue dots as a guide.

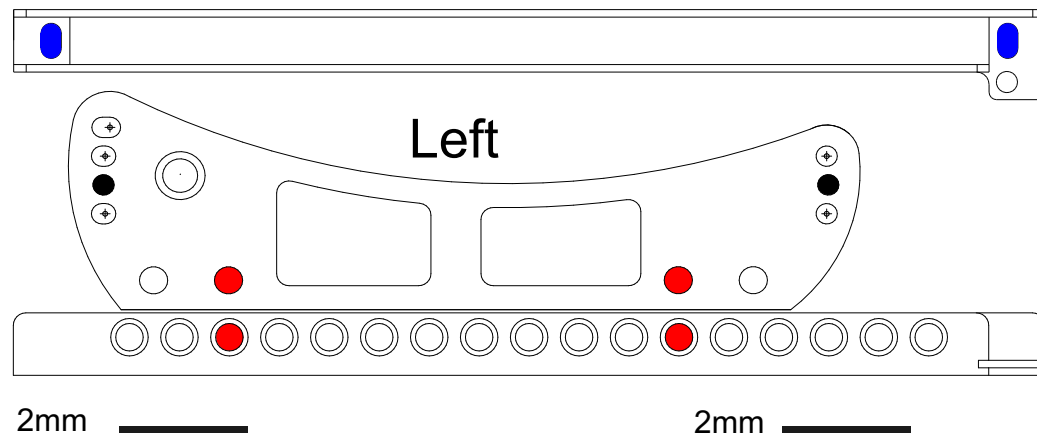


Suggested starting point for fitting the B6 43 XL Screamer, into the Elise/Exige passenger side RHD using EBS brackets. Fits cars manufactured prior to 2017 – VIN serial number 1457

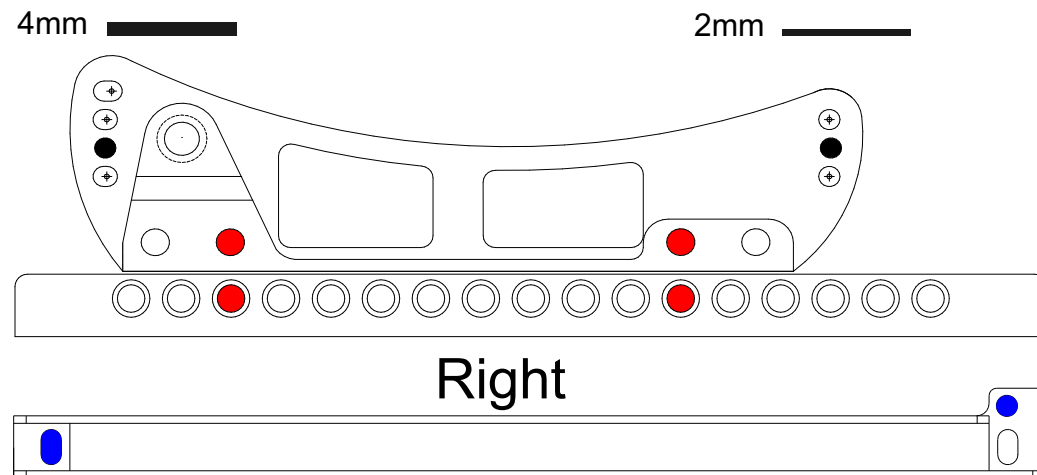
Due to the offset nature of the Elise floor mounting points it is sometimes necessary to offset the brackets. This page helps you line up the B6 43 XL Screamer passenger seat. This seat position relates to using the 2nd hole up on each upright for angle adjustment.

Please make sure when setting the seat in its rearmost setting that the head cannot come into contact with roll bar cover bottom edge. On some Elise/Exige models it may be necessary to either tip the seat more upright, bring the seat to a further forward, or create a thicker head pad, in order to prevent the head contacting this edge.

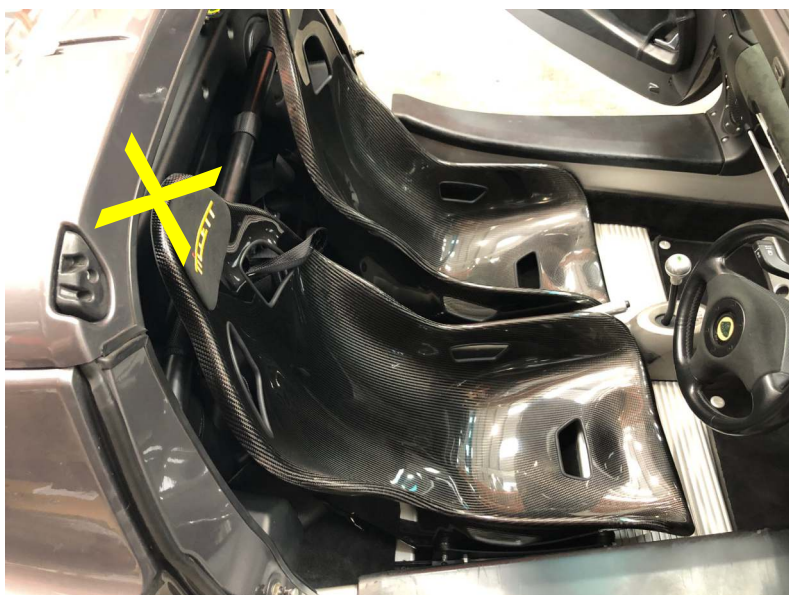
(See yellow cross on photo)



The spacers between seat and brackets set the B6 Screamer 43 XL seat correctly for the right hand drive passenger seat in the position shown. Moving the seat forward may require a different spacer setup.



Suggested upright fixing positions are shown by red dots. Please take note of which holes are used in the floor U channels by using the blue dots as a guide.

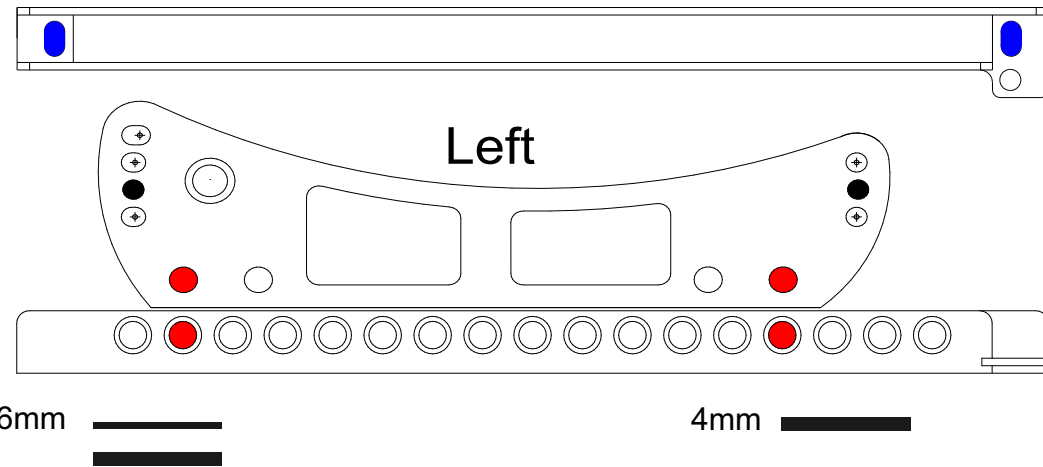


Suggested starting point for fitting the B6 43 XL Screamer, into the Elise/Exige passenger side **LHD** using EBS brackets. Fits cars manufactured prior to 2017 – VIN serial number 1457

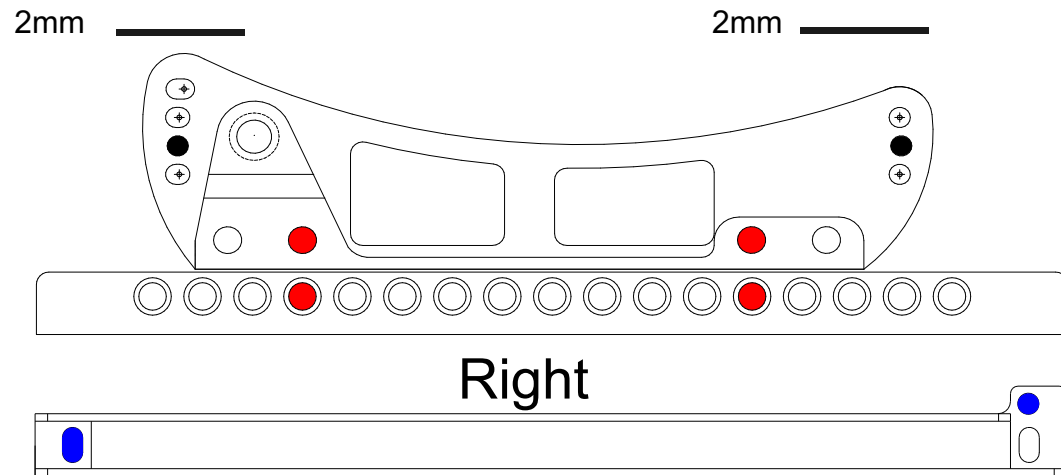
Due to the offset nature of the Elise floor mounting points it is sometimes necessary to offset the brackets. This page helps you line up the B6 43 XL Screamer passenger seat. This seat position relates to using the 2nd hole up on each upright for angle adjustment.

Please make sure when setting the seat in its rearmost setting that the head cannot come into contact with roll bar cover bottom edge. On some Elise/Exige models it may be necessary to either tip the seat more upright, bring the seat to a further forward, or create a thicker head pad, in order to prevent the head contacting this edge.

(See yellow cross on photo)



The spacers between seat and brackets set the B6 Screamer 43 XL seat correctly for the left hand drive passenger seat in the position shown. Moving the seat forward may require a different spacer setup.



Suggested upright fixing positions are shown by red dots. Please take note of which holes are used in the floor U channels by using the blue dots as a guide.

