STBi/VTBi

STBi/VTBi bracket fitting advice

Here are some helpful pointers which will contribute to a safe and secure fitting of the STBi or VTBi brackets onto the following models of Tillett car seats for road and race track use.

B6-40, B6-44 side mount version B6-44 Screamer, B6-40 Screamer FIA seats B6-43 XL Screamer, B6-47 XL Screamer XL FIA seats B7-40, B7-44, B7 XL FIA seats C1-41, C1-44, C1-43 XL, C1-47 XL FIA seats B8-43, B8-44.5, B9-43, B9-44.5



The STBi and VTBi are the same shape but made from aluminium or steel. Our Standard Tillett Bracket inward STBi is a 5 mm thick aluminium bracket. The VTBi (Value Tillett Bracket inwards), is made from 3 mm steel. These both point inwards under the seat. The difference is cost and weight, the STBi is 1 kg and the VTBi is 1.8 kg. To reduce the width at the base to the minimum and create rigidity, the seats all have a 2° positive camber on the sides and these brackets have a 92° angle to match this. The slots in the base of the brackets are used to take up this change as you move the bracket to the various hole choices on the vertical section. Because the brackets are not 90°, if you point the brackets outwards, the horizontal element will meet a flat floor at an angle. If you need the brackets turned outwards we recommend using either the STBO, VTBO or TBFIA bracket sets. The lowest holes in the bracket are seldom used unless the seat is sitting in a dropped floor depression, or sitting on adjustment runners with a requirement to skim the floor. The lower holes and slots may be used if the seat is to be set at either a very reclined position, or set more upright than standard.



Because most of the load will go through the rear fixings, the brackets should be set so that the slots are at the front of the seat.

(Please note that seat runners are not recommended in a race car)

Due to differences amongst the models, you will find that to make the base of the seat dome skim the floor, you will need to use different hole arrangements to achieve the lowest position. It is also important to understand the correct spacer setup required to stop the front portion of the bracket hitting the protruding leg support area on some models. Should the setup require the use of the lower front holes, extra spacers may be. The brackets have a series of lower slot positions which enable a small amount of leg length adjustment and extra choices for different runners or base mounts. needed to avoid the bracket impacting the leg bulge.

With all models but particularly with the XL versions, as the lower two front holes are used, ally or nylon spacers are required to avoid the leg bulge of the seat coming into contact with the top of the bracket.





B6 side mount, B6 Screamer, B7, * B10, C1

Set on second hole down without spacers, the A dimension can be between 30 to 32 cm using the slots to give adjustment.

*(The standard B10 requires 2 additional 4 mm ally spacers at the front for the brackets to be parallel)

B6 XL side mount, B6 Screamer XL , B7 XL, B8, B9, *B10 XL and C1 XL

Set on the second hole down without spacers, the A dimension can be 33 to 35 cm using the slots to give adjustment. Set to skim the floor on the third hole up and with 2 mm of spacers between the seat and brackets.

*(The standard B10 requires 2 additional 4 mm ally spacers at the front for the brackets to be parallel)

The **B** dimension on the brackets is 315 mm when using Tillett adjustment runners. 345 mm with many aftermarket runners or 300mm with MX5 NA and NB OEM runners.



Showing the VTBi/STBi on the lowest setting to skim a flat floor.

It is recommended to use as few spacers as possible to reduce twisting forces on the bolts. Please ensure that the bolting points in the floor of the car are suitably strong and strengthen them substantially if not. High quality M8 bolts and steel washers should be used for all mounting points and we recommend a torque setting of 35nm when fitting the bracket to the side mounting points.



Adjust your low point out of the car. The picture above shows the STBi brackets on a B7 XL with the bolt positions two down at the front and three at the rear, giving a gap of 5 mm shown by the washer placed in the picture above.

These brackets have additional combinations of base slots, to enable them to not only fit the Tillett STRi and PTRi seat adjustment runners but also other runner brands that use a 345 mm hole spacing. In addition, a 300 mm choice is also available. This enables them to be used directly on the OEM runners of the NA Mk 1 and NB 2/2.5 Mazda Miata/MX5.

When you need to be in a low driving position but are sitting the seat brackets onto runners, the lowest setting requires use of hex head M8 bolts to fit the runner to the bracket. The bracket ideally needs fitting to the runner before fitting to the seat, as the gap between the bracket and the seat base is very tight in this low front situation. With the varied spacers that may be used make sure there is at least 10 mm of M8 bolt passing into the captive seat thread. Care must be taken with the B8 and B9 as the front holes are blind and bolt threads penetrating any longer than 22 mm into the captive fitting could damage the inner skin.

Optional TK8 pegged spacer kit

As an option the Tillett pegged aluminium spacer kit TK8 fills the slot above the one used, for extra strength in rearward impacts. The kit has 2 x 40 mm diameter x 4 mm thick pegged aluminium spacers, 2 x 40 mm diameter x 4 mm thick plain aluminium spacers, for the rear mounts and 4 x 40 mm diameter x 2 mm thick Nylon spacers. These spacers also help to fit the seats on the lower front hole settings by moving the bracket outwards avoiding the leg support.



