

■ RACING SEATS

TILLET



2013



WORLD CHAMPIONSHIP WINNING SEATS AND RIB PROTECTORS

Dear Customer,

Here is your 2013 Tillett Racing Seats product brochure. We thank all of our customers from 2012 and wish you well for the coming season.

Tillett products once again dominated the podium in 2012 from KZ1 through KF2, KF3 and Rotax Max.

New products include a carbon Honda chainguard and a new updated T-board seat fitting device.

Best regards - Steve Tillett



Major results for Tillett seats in 2012

2012 CIK FIA Karting World Championship

2nd Tom Joyner using a T11VG on a LH kart and a special personalised Tillett composite rib protector.
3rd Felice Tiene using a T11t on a CRG and a special personalised Tillett composite rib protector

2012 CIK FIA World Under 18 Championship - 1st Henry Easthope driving a Sodikart fitted with a T11VG seat

2012 CIK FIA KF2 World Cup - 1st Felice Tiene using a CRG chassis with a T11t seat and special Tillett composite rib protector

2012 CIK FIA KZ1 European Championship - 1st Jorrit Pex on a CRG kart fitted with a T11t Tillett seat and composite rib protector.

2012 CIK FIA KZ2 European Championship - 1st Simas Juodvirsis using an Energy kart fitted with a T11 Tillett seat and composite rib protector

2012 CIK-FIA ASIA PACIFIC KF3 CHAMPIONSHIP Macau - 1st Jehan Darvala using a T11t Tillett seat on his Alonso kart

2012 CIK FIA KZ2 World Cup - 1st Jordan Lennox Lamb using a T11 with his CRG kart

2012 Senior Euro Max Championship - 1st Sean Babington using a T11VG on an Alonso kart

2012 WSK KF3 Champion - 1st Alex Palou on a CRG with a T11t

2012 WSK KF2 vice Champion - 2nd Felice Tiene on a CRG with a T11t and a Tillett composite rib protector

2012 WSK KZ1 Champion - 1st Jorrit Pex on a CRG with a T11t and Tillett composite rib protector

2012 WSK KZ2 Champion - 1st Simas Juodvirsis on an Energy kart with a T11 seat and Tillett composite rib protector

2012 WSK Masters Series overall champion in KF3
1st Callum Iloft on a Zanardi kart fitted with a T10 seat.

2012 WSK Masters Series overall champion in KZ2
1st Jordan Lennox Lamb on a CRG with a T11t seat.

2012 Trofeo Andrea Margutti KF2 - 1st Felice Tiene CRG with a T11t seat and Tillett composite rib protector



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Sustained results over many years conclusively prove that Tillett products are used to win at the very highest level of karting. The huge variety of shape and rigidity options, together with product consistency and quality, has a positive benefit on handling and set-ups, whatever makes of chassis are used. This is proven by the fact that Birel, CRG, Energy, Gillard, Intrepid, Maranello, PCR, Sodikart, Swiss Hutless, Tonykart and Zanardi chassis have shared the major honours using Tillett Seats.

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T8

The T8 and T8 1/4 are the most popular seats made by Tillett Racing Seats. The shape of the T8 is very similar to that of the T7; both have the same 63 degree driving angle and the same excellent comfort and depth. The only difference between the two shapes is that the T8 is slightly smaller at the top and slightly bigger at the bottom. The T8 was the first kart seat to be made using the RTM production method. This system makes strong fibreglass mouldings with uniform quality and thickness, the process also speeds up production, keeping the T8 price below that of the handmade models. There are two rigidity options - standard and soft. The standard seat can be ordered with white, black or silver fibre finish as well as the economic T8 clear version. The composite quality of the T8 is perfect and the two smooth sides keep a clean professional image throughout the life of the seat.

The T8 can be ordered either uncovered, with a 1/4 or 1/2 partial cover, or a full cover. All T8 Soft seats are white fibre.

The super strong XL T8 Rental is available for the corporate market (see Rental section).

T8 SPECIFICATIONS

Sizes: Injected T8 is available in C, XS, S, MS, ML, L and XL.

Cover colours: Fire Red, Royal Blue, Jet Black, and Charcoal Grey.

Composite colours: Clear uncovered only. White, silver and black fibre is used for covered and uncovered.

Rigidities:	T8 Standard	T8 Soft Flexible
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T8 Clear

Black

T8 HAND

As used by Max Verstappen to become the 2010 WSK KF3 Champion

The fixed thickness of the injected T8 moulding does enable small variations in rigidity but for professional drivers it is important to have the ability to make a wide variety of specifications. The flexibility of the handmade process of manufacture allows a complete range of T8 rigidity and weights to match the ones available in the other handmade shapes such as the T10 or T11. In the smaller sizes some have the letters "cd" after the size. This "cd" indicates a cut down, low back version.

T8 HANDMADE SPECIFICATIONS

T8 Handmade sizes: *Ccd, C, XScd, XS, Scd, S, MScd, Manetti, MS, ML, L and XL.

*The Ccd size is for Bambino drivers from 5 to 7 years old.

Cover colours: Fire Red, Royal Blue, Jet Black, and Charcoal Grey.

Composite colours: Handmade T8, are only available in clear or natural carbon KEVLAR®.

T8 1/4

T9

As used by Bas Lammers to win the 2009 CIK European KZ1 Champion

The T9 shape is the same as the T8 but with a 58 degree seating angle, this drops the head and shoulders giving a very low centre of gravity and better aerodynamics. This is especially important for taller drivers. The T9 is another seat shape which we make by hand; it is made like this to give the many variables requested by the top racers.

T9 SPECIFICATIONS

T9 Sizes: S, MS, ML, L and XL.

Cover colours: Fire Red, Royal Blue, Jet Black, Charcoal Grey.

Composite colours: Handmade T9 and T9.5 seats are only available in clear or natural carbon KEVLAR®.

T9

T9.5

Rigidities:	T8 Hand Standard	T8R Hand Rigid	T8VG Hand Flexible	T8XR Hand Extra Rigid
	T9 Standard	T9R Rigid	T9VG Flexible	T9XR Extra Rigid
Lightweight	T8K Hand Standard	T8CR Hand Rigid	T8KG Hand Flexible	T8CXR Hand Extra Rigid
	T9K Standard	T9CR Rigid	T9KG Flexible	T9CXR Extra Rigid

T9.5

As used by the T9.5 2005 CIK World FSA Champion Oliver Oaks

The T9.5 is again a handmade seat and is an even more inclined 48 degree version of the T9.

T9.5 Sizes: MS, ML, L and XL

Cover colours: Fire Red, Royal Blue, Jet Black, Charcoal Grey.

Composite colours: Handmade T9 and T9.5 seats are only available in clear or natural carbon KEVLAR®.

T7

The first "Tillett Seats" were designed as fully covered seats and the T7 remains our most popular seat of this type. It is a slightly deeper seat, which gives more support, not only for the ribs but also for the legs. The cover gives a non-slip surface and the thin but effective padding below the surface protects the body from damage. The T7 has a flat area on the base to help get the seat low in the chassis and the front edge has 2 cm removed to enable more seat movement within the chassis. The extra side depth makes it a good choice for someone with rib problems. The T7 shape also lends itself to pro karts, where endurance racing requires the greater comfort of the T7 and the gap between the two Honda engines sometimes restricts the fitting of L and XL seats. In the smaller sizes some have the letters "cd" after the size. This "cd" indicates a cut down low back version of the XS, S and MS seat sizes. For junior drivers, the "cd" sizes allow better upper body and arm movement and therefore better control of the kart. Two extra sizes available in this shape are the Mini, which fits a small child from 5 to 7 years old and the XXXL, which is 8 cm wider than a XXL.

T7 SPECIFICATIONS

Sizes: Mini, C, XScd, Scd, S, MScd, MS, ML, L, XL, XXL and XXXL.

Cover colours: Fire Red, Royal Blue, Jet Black and Charcoal Grey.

Composite colours: Standard T7 seats are available in Black, Red and Blue.

Flexible T7VG seats come in clear resin with white fibre.

T7 seats made with KEVLAR® carbon are only available with visible KEVLAR® - carbon.

Rigidities:	T7 Standard	T7R Rigid	T7VG Flexible
Lightweight	T7K Standard	T7CR Rigid	T7KG Flexible



T7



T5

T5

The fully covered T5 is developed in 1990 from the original 'Tillett' seat and was the first kart seat to ever feature the now familiar "flat bottom". The flat bottom is set at 63 degrees, which helps achieve a low centre of gravity whilst still retaining the more upright driving position. In this seat your head will be 2 cm lower than when measured in a T10. The fixed cover with integral padding makes the seat super comfortable and stops the driver from sliding around during cornering.

T5 SPECIFICATIONS

Sizes: T5 seats are in sizes S, Manetti, MS, ML, L and XL.

Cover colours: Fire Red, Royal Blue, Jet Black, Charcoal Grey

Composite colours: Standard fully covered T5 seats are available in Red, Blue, and Black. Flexible T5 VG seats come in clear resin with white fibre.

Rigidities:	T5 Standard	T5R Rigid	T5VG Flexible
Lightweight	T5K Standard	T5CR Rigid	T5KG Flexible



T5 Reverse

WORLD CHAMPION 2003

This was the seat used by Wade Cunningham to win the 2003 World Championship. Unlike the fully covered T5, the T5 Reverse has a smooth inside, which allows uncovered ¼ and ½ covered seats to be produced in the popular T5 shape. The XScd T5 Rev is very popular with the 10 to 11 year old Cadet or Minikart drivers. Now there is also a new C size available for tall thin Cadets and a Ccd T5 Rev for the shorter cadet driver who wants to use a flat bottomed seat.

Because the T5 Reverse shape was made off the back of the original T5 (made for a full cover), equivalent sized T5 Rev seats will be slightly larger than the standard T5 moulding. For example; the size of a ML T5 Rev falls in between the ML and L sizes in other shapes. Drivers with wide hips often prefer the T5 Rev shape.



T5 Reverse

T11

As used by the 2013 KF2 World Cup Champion Felice Tienne

The T11 is the seat most often used by the professional teams. With young drivers growing ever taller, there was a need to lower the body weight. We designed the T11 range to obtain an even lower driving position than the T5, whilst at the same time keeping an upright shoulder position which allows the drivers to retain full control of their karts without upsetting the weight distribution through the corners. The flat area on the bottom of the seat is larger than the T5 and the back angle has been changed to 58 degrees. All the usual rigidity specifications are available in the T11 and these options are also mostly available in the lightweight carbon Kevlar® versions.

The T11 standard and T11VG flexible versions are the most popular types of this seat. Now we have also introduced the T11VTi and the T11t material specifications. The T11VTi is made to give the most diagonal flexibility possible in the chassis. The T11t is specifically designed to fit the rigidity gap between the VG and the standard T11. The VTi and "t" specs are available in the other handmade shapes too. The T11 range now has many sizes in a "wt" wide top version, which helps to fit drivers who either have narrow hips and a wide chest, or happen to use a very thick rib protector, such as our personalised composite rib protector. There is also a new lower back T11 Scd size.



T11

T12

The perfectly moulded T12 seat is based on the T11 shape but is made by injection, which keeps the quality consistent. Therefore the performance will be totally predictable and the two smooth sides will keep a professional look throughout its life. The T12 is available with all the usual covering options. Also in the range is the T12 soft, which is the flexible version of the T12 and for a small additional charge, you can order a black fibre version. The T12 was revamped in 2009 to reduce the weight and increase the strength and at the same time tweak the stiffness to match the needs of the current chassis available.

The standard seat is now made using a white fibre. You can also order a silver or black fibre version. From January 2012 all covered seats have used the white, silver or black fibre. All Soft T12 seats are made with the white fibre.



T12 Black

T11 / T12 / T5 REVERSE SPECIFICATIONS

T5 Reverse: Ccd, C, XScd, XScd WT, S, Man. MS, ML, L and XL.

T11: C, XS, Scd, S, Swt, S (Ital) *, Harvey, Manetti, Manetti WT, MS, MSwt, ML, MLwt, L and XL.

T12: S, Manetti, MS, ML, L and XL.

"cd" = low back or cut down back for short drivers. "wt" = wide top, or one size bigger at the top.

(Ital) = a S with the taller height of the MS T11.

Cover colours: Fire Red, Royal Blue, Jet Black, Charcoal Grey.



T12 White



T12 Silver

Rigidities:	T11 Standard	T11R Rigid	T11VG Flexible	T11XR Extra Rigid
	T12 Standard		T12 Soft Flexible	
	T5 Rev Standard	T5R Rev Rigid	T5VG Rev Flexible	T5XR Rev Extra Rigid
Lightweight	T11K Standard	T11CR Rigid	T11KG Flexible	T11CXR Extra Rigid
	T5K Rev Standard	T5CR Rev Rigid	T5KG Rev Flexible	T5CXR Rev Extra Rigid

T10

The T10 is the seat that was used by Nyck De Vries to win the 2011 CIK FIA World Championship and Jake Dennis used it to win the 2010 CIK FIA World Under 18 Championship

The T10 avoids positioning problems that can occur in some types of chassis. Fixed front seat stays sometimes limit the space for the seat. When moving the seat a long way forward, (e.g. when there is exceptional grip at the rear) the seat will rise up on the front stays as it's pushed forward, therefore making it impossible to mount the seat forward and low. The T10 has a smaller dimension A than our other types, thus allowing dimension B to be large enough to allow the weight to be distributed correctly for the conditions or chassis type. This seat would be popular in classes where the engine is heavy and there is a need to take the weight off the rear. Some drivers prefer this shape and like the extra comfort from the round base.

The T10 also has one of the most extensive size ranges and includes a very good set of sizes for juniors, the C, XScd, Scd and S being particularly popular.

T10 SPECIFICATIONS

Sizes: C, De Vries, XSlb (Stroll3) XScd, XS, Scd, S, Manetti, MS, ML, L, XL and XXL.

XSlb (Stroll 3) is a special extra low back XS T10.

De Vries is a C T10 with 1 cm extra overall width and 1 cm extra back height.

Cover colours: Fire Red, Royal Blue, Jet Black, Charcoal Grey.

Composite colours: Clear. T10 seats made with KEVLAR® or carbon are only available with visible KEVLAR® - carbon.



T10 1/4

T250

Used to win the 2008 CIK FIA European Superkart Champions

The T250 seat is made especially for the high speeds of the long circuit gearbox classes. The T250 keeps the driver low and the headrest is designed not to disrupt the airflow over the wing. The covering prevents the driver sliding in the seat while the removal of the cover from the base lowers the driver and helps in the wet. Top 250 driver Mark Owen was instrumental in the design and development of this product and has been vital in tuning the seat to meet the requirements of these high speed karts.

T250 SPECIFICATIONS

Sizes: MS, ML, L, XL and XXL

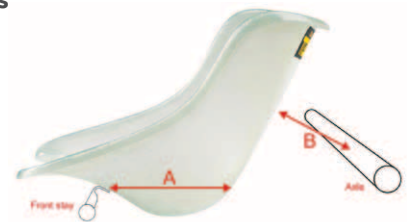
Rigidities: The T250 GRP model is only available in a standard rigidity.

Lightweight KEVLAR® carbon: Flexible T250KG, Standard T250K or Rigid T250CR.

Cover colours: Fire Red, Royal Blue, Jet Black, Charcoal Grey.

Composite colours: Red, Blue, Black. Available in all colours to special order.

Seats made with KEVLAR® or carbon are only available in the natural KEVLAR® - carbon fibre colours.



T10



T10VG



T10KG



T250KG



The R4 Ribtec C€



Tillett rib protectors have been **DEVELOPED OVER MANY YEARS** by the leading drivers in the World and European Championships. **The R4 Ribtec helps drivers cope with the most demanding rubber covered tracks which place exceptional forces on the ribs and body.**

The R4 improves on the protection given by the previous Ribtec 2 and P1 versions due to multiple layers of different materials. This panel construction spreads the load in such a way that it keeps individual ribs from moving independently. At the same time the R4 does not dig into the driver at the edges and does not create any extra pressure points due to its smooth comfortable towelling layered interior. The most significant improvement is that the R4 has been developed to be much better at protecting rear 3/4 and bottom rib injuries. It is very light and is also the thinnest hard shell rib protector available. The R4 has an adjustable rear angle to match the many different chest angle shapes a driver may have and the front has a Velcro attachment strap for convenience, including elastic which aids breathing and comfort. In the 2013 model the elastic quality has been improved for longevity and the straps have been strengthened. The black plastic outer skin on the R4 helps avoid race suit damage which is a problem for most other composite panelled rib protectors.

The R4 Ribtec is available in 6 Sizes; C, XS, S, M, L and XL.

The R4 Ribtec is available in a Ladies version, there are three sizes XS, S and M.

To find your size please refer to the chart below.
Chest measurements should be taken with a measuring tape pulled tight around the chest.

Ladies should measure just under the bust and sizes available are highlighted in red.

CHEST SIZE

C	22" - 26"	56 - 66 cm
XS	26" - 32"	66 - 81 cm
S	32" - 36.5"	81 - 93 cm
M	36.5" - 40"	93 - 102 cm
L	40" - 44"	102 - 112 cm
XL	44" - 48"	112 - 122 cm



The Ladies R4 Ribtec

Comfort Pads

These ultra-soft low compression EPDM self-adhesive foam pads can be used on the Original Ribtec or the R4. They give an additional level of comfort and stop any rubbing that may occur. In 2 sizes; Junior or Adult.

The Ribtec Harness

If a driver's chest is angular or V shaped, it is possible they will experience movement of the original Ribtec belt. The Ribtec Harness is the simple and effective answer. All original Ribtec belts are supplied with the slots moulded in to take the straps. Please Note: The Ribtec Harness does not fit on the Ladies Ribtec but it does fit the new R4 Ladies and comes as standard with all R4 belts. In 2 sizes; Junior or Adult

Chest Protector

Made for juniors, the Ribtec chest protector fits on a standard C or XS sized Ribtec or R4 and provides extra protection against damage by the steering wheel. Junior Chest Protector will fit on the C and XS sized Ribtec or the R4. Please state either Ribtec or R4 when ordering.

Tillett rib protectors can help protect you when driving, although Tillett Racing Seats accepts no liability against personal injury. C€



Chest Protector



THE ORIGINAL RIBTEC - The first ever Rib protector to offer real protection against rib injury.

The choice of the 2011 World Cup KZ1 Champion Jonathan Thonon.

The Ribtec was originally developed using the direct help of F1 drivers Jenson Button, Vitantonio Liuzzi and Anthony Davidson whilst they were competing in karts. There are 7 sizes to suit all drivers from 8 years old, to a man of 100kg. It has a slim design which is only 5mm thick so seat size is unaffected. The Ribtec has an absorbent towelling lining and foam interior for added comfort. It is ultra-lightweight at around 300gm and it can be adjusted to your shape as it is easily modified with a pair of scissors.

The Ribtec is also excellent for rental use and has been used continuously in tough corporate conditions by Buckmore Park for the past 13 years.

"When using the Ribtec to protect all of our corporate customers, we have been amazed to find that this year, rib problems have been reduced by an astonishing 98%."

Quote from Bill Sisley in 1999, owner of Buckmore Park Kart Circuit.

Ribtec C, XS, S, MS, ML, L and XL
Ladies Ribtec sizes XS, S, MS, ML

CHEST SIZE

C	26" - 29"	65 - 74 cm
XS	29" - 31"	74 - 78 cm
S	31" - 34"	78 - 86 cm
MS	34" - 36"	86 - 92 cm
ML	36" - 39"	92 - 99 cm
L	39" - 42"	99 - 107 cm
XL	42" - 46"	107 - 117 cm



To attain your correct size, chest measurements should be taken with a measuring tape pulled tight around the chest just under the arms. Women should measure directly under the bust line.

Tillett rib protectors can help protect you when driving, although Tillett Racing Seats accepts no liability against personal injury.

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Ribtec with harness



The Ladies Ribtec

The Ladies Ribtec is very different to the standard Ribtec.

The shape has been modified to allow for the bust and, because kart seats are always made for men, extra thickness has been added to the sides to compensate for the more petite female frame.





RIBCAGE - Body Support System. Composite support panels that when fitted add extra depth to the sides of the seats.

Kart seats are available in many different shapes and sizes but they are not depth or height adjustable, which means that the fit of the seat is nearly always a compromise. The Ribcage body support system comprises of two "bolt on" rigid, yet comfortable panels that give extra lateral support for the upper body.

Traditionally the only way to achieve this was to either use a seat with deepened sides, or to produce a wrap-around seat that curved around the body. The problem with these ideas is that a deeper seat fouls the arms and a wraparound seat could damage the ribs if a driver were thrown from a kart; even worse injury could occur if the seat were to trap the driver in, rather than let them be thrown clear. If a driver should be thrown forward or out of the kart when using the Ribcage panels, they are flexible enough to release the driver from the kart.

A good tight fit around the chest is essential to help protect the ribs and hip bones from damage. By using the Ribcage panels you can choose the perfect height and depth for your chest shape. By using the optional Ribcage Spacer Kit, the width around the rib area is also adjustable. The Ribcage Spacer Kit contains 6 x M8 long seat bolt sets and 18 x 4mm nylon spacer washers.

The Ribcage does not alter the properties of the original seat by changing the rigidity and therefore will only have a positive effect on the lap times. If a seat with rib padding is to be used the use of a 40 mm diameter x 4 mm thick nylon spacer between the seat and Ribcage is recommended. This ensures that the bolts can be tightened sufficiently by crushing the foam completely.



Ribcage Body Support System



Ribcage Spacer Kit



Nylon Plastic Guard



Composite GRP Guard



Carbon Guard



Honda Carbon Guard



Tillett Racing Seats Chainguard

Enclosed chainguards are mandatory on all karts racing in the UK and in CIK classes. The Tillett Chainguards are safer than a plastic strip during normal operation and accidents; they are quality made to last. Tillett Chainguards are all wide enough to allow the use of sprocket protectors and have an adjustable midpoint that allows the sprocket to run centrally in the guard. They are easy to cut and modify to fit most engine / kart combinations, smooth on the inside and have no unnecessary ridges or holes in which to trap oil and dirt. Each guard includes a universal fitting kit; this allows the guard to be completely removed in seconds which makes it easier and cleaner to work on the kart.

The Tillett range of enclosed chainguards include 3 constructions Nylon, GRP and Carbon Kevlar®, they are all sturdy and rigidly mounted. The guards are available to fit RHD, LHD and KF engines with a longer version for Rotax Max. There is also a Honda variety for a GX160.

The tough **nylon** chainguard is suitable for the Rotax Max and new KF engines. The plastic TAG guard is available in black or red and has a long bracket kit as standard. The long brackets fix high up on the guard keeping it more rigidly located and this also helps move the fixings above the exhaust of the Max, making access to the removal nuts easier. The guard weighs 402g in its uncut Rotax form.

The clear translucent **composite GRP** guards are strong and rigid and do not wobble due to the honeycomb core on the mounting side. They are available to fit RHD, LHD, KF engines with a longer version for Rotax Max, plus a **newly designed model for the Honda GX160** 4 stroke which weighs only 222 grams. The RHD/Rotax Max/ KF composite guard weighs from 300g to 365g. The bracket system is the same as the nylon guard but the brackets are shorter due to the more rigid nature of the composite. The Honda guard has its own new more rigid bracket system in steel.

The **Carbon Kevlar®** fibre Tillett Chainguard is ultra-light at 170g in a RHD/Rotax/TAG version and 138g when cut for the KF classes. Unlike many products that use carbon look materials the Tillett carbon guard uses genuine carbon fibre and is Kevlar® brand fibre lined for ballistic protection. Unlike many brittle copies that smash as soon as you throw a chain, this guard is tough. It also has two smooth sides making it easy to clean. The carbon Kevlar® guard comes with a long bracket fitting kit as standard. Lightweight carbon fibre mounting brackets are also available as an extra cost option. There is also a **new Honda carbon guard available at 170g.**

CARBON FIBRE FLOOR TRAYS

The main reason for using a carbon fibre floor tray over an aluminium tray is to save weight, however by using the different rigidity specifications available performance differences can be observed and used to your advantage.

Aluminium floor trays weigh 1100 g on average, by comparison **a Tillett carbon fibre floor tray can weigh as little as 330g** and it will still be less likely to crack than the aluminium version.

Changing the floor tray to save weight must be done with careful consideration, as a change to the rigidity of the tray could have a noticeable effect on handling. This is why we have developed **different rigidities**. Getting the rigidity correct will help the handling and lower your lap times. Use the standard carbon tray to get a rigidity which is comparable to the flexibility of aluminium floor trays found on most makes of karts.

Quality and looks are also common reasons for using the carbon trays. Our special manufacturing process that makes these trays gives two glossy, easy to clean surfaces and an almost perfect consolidation of the materials used. The fibre used is a special chequered weave carbon which increases rigidity over normal twill weave fibre and on the standard rigidity tray these are placed either side of a honeycomb centre to save weight. Depending on the popularity of the chassis, customers may need to supply a paper pattern with the outline of the shape. We have many patterns in stock but this is important information to get correct when ordering.

SEE PAGE 13 FOR ALL RIGIDITY ON FLOOR TRAYS

FITTING KITS, SEAT WASHERS AND SPACERS

Complete seat fitting kits, aluminium plates, special low profile aluminium washers, and CIK specification nylon seat protection washers and spacers can be purchased separately. Spacer kits include 10 x 2mm and 10 x 4mm hard nylon seat spacers.

The seat fitting kits conform to the new CIK and MSA seat mounting regulations, using the Tillett nylon 66 washers or Tillett aluminium reinforcing plates.



Carbon Brackets

RAIN MEISTER

Sometimes the only way to get grip from a cold, wet or slippery track surface is to put downward pressure on the two outside tyres. On these occasions lifting the seat up will help to get a higher centre of gravity and in certain conditions can help attain extra grip. The problem is that many small tweaks like this can't be achieved fast enough when it rains. The Rain Meister speeds up the task.

CARBON PARTS

Exhaust brackets - Lightweight carbon exhaust fixing brackets are available. There are both a 180 and a 150 mm long version. They are 8 mm thick and are ideally suited to fitting the Rotax Max exhaust. Typically they would normally be ordered in a pair for a Rotax Max, 1 long and 1 short.

Carbon chainguard bracket - A carbon chainguard holding bracket is also available. (You need two for one guard)

Carbon sprocket protector - Available to special order; these lightweight sprocket protectors stop a chain from coming off and prevents the sprocket from hitting curbs. Two sizes in 210 and 195 mm diameter.

Carbon starter switch bracket - A very light carbon bracket that holds the two starting switches for Rotax Max engines.

Seat Forward Brackets - A carbon bracket to move the seat forward of the main stays for very small juniors. These are also available in steel for those light drivers who need the extra weight. (.5 kg) Order these in pairs.

TRANSPONDER HOLDER

Designed to fit the AMB transponder on to the back of the seat.

NB: PLEASE QUOTE OLD or NEW VERSION OF TRANSPONDER WHEN ORDERING

SEAT PADDING

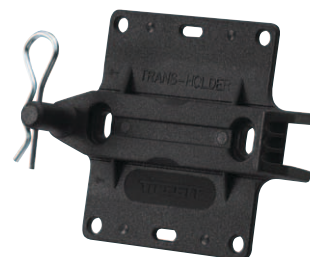
The moulded side protection foams as used in all covered Tillett Seats can be purchased separately. Also available are 330 x 375mm sheets of closed cell foam in 5mm or 9mm thick with a self adhesive backing. This is useful stuff to have in the van and enables the drivers to custom fit the seat to their requirements.



RAIN MEISTER



Rain Meister



Transponder Holder



Fixing Kits

2006 CIK Regulation: (All seats must also comprise a metal or nylon reinforcement at all the anchorage points of the seat between the seat supports and the seat. Reinforcement must have a minimum thickness of 1.5mm and a minimum surface of 13sqcm or a minimum diameter of 40mm. All supports must be bolted or welded at each end.)

V PAD

The suede covered V pads are made from lightweight firm foam and are used to size a drivers' chest to the seat correctly. They are also useful when used with a hard shell rib protector. This is because they cover the bolt heads and stop them from damaging the race suit and protector. With the addition of a little more self-adhesive backed Velcro they can be moved if you need to use another chassis.

V H Hip Pad

The suede covered V H pads are used to size the drivers' hips to the seat correctly. With the common use of thick rib protectors some drivers end up in seats that fit across the chest but are too big for them at the hips and it has become necessary to reduce the width at the hips for these drivers. The Tillett VH pads take up this gap using firm foam and a durable suede outer layer. They fit using self-adhesive Velcro so they can be re-used in multiple karts.



Suede Covered Velcro Pads

CORPORATE - RELIABLE HIGH QUALITY CORPORATE KART SEATS AND EQUIPMENT

XL INJECTED RENTAL SEAT

The injected XL seat for the corporate market has built on 24 years' experience in the kart seat business. Development of this product included an extensive computerised FEA analysis combined with practical track testing at Buckmore Park, one of the busiest rental tracks in the UK. During the testing we have carefully crafted the seat to give the best combination of size and shape to enable it to cope with wide range of driver sizes.

XL T8 RENTAL

The T8 Rental is a very popular, super strong, composite rental seat which does not flex even when hot. It can cope with the extra grip and speed of faster karts, whilst continuing to give the reliability of the plastic seats, making it ideal for outdoor rental use. It is available made with black or silver fibre at extra cost.

XL AND XXL VAC FORMED PLASTIC RENTAL

The vacuum formed Tillett plastic rental seats have 8mm thick edges to keep them rigid and they are made from almost indestructible HD Polypropylene. They are perfect for indoor or outdoor use. The XXL size was our first digitally mastered seat, which means it is totally symmetrical and accurate in every dimension.

RACE SEAT INSERT

small driver in a big seat. The important benefit with this product is that the driver is still sitting on the base seat which keeps the feel and feedback from the kart intact. This type of insert is used in endurance racing where more than one person is to drive the kart and a fast changeover is necessary. It is also very popular in Club 100 "Arrive and Drive" rental racing in the UK, where the kart comes with an XL base seat and there is no chance of changing it. The insert is typically ordered in one of 4 sizes S, MS, ML and L. There is also a choice of colour in red, black, charcoal grey or blue. When ordering the options are; to either have it supplied with the external hard lightweight foam factory fitted to match the large base seat of your choice, or supplied with sticky foam sheets for the customer to fit themselves. This last option is typically taken when lead is to be fitted to the insert by the customer. The insert has a strap fitted across the bottom to stop it riding up the drivers back. It is also padded for comfort and the non-slip covering stops unnecessary movement.

CALIBA SRS RENTAL SEAT INSERT

These popular rubber rental seat inserts are fitted quickly and reduce a Tillett XL or XXL sized rental seat down to an MS.

SEPARATE BACK AND CUSHION FOAM SEAT INSERTS

Seat inserts help smaller drivers comfortably control a kart without stretching for the steering wheel and pedals.

They also stop the driver from sliding around in the seat, which aids the concentration and helps prevent injury. Using these simple, cheap seat foam inserts moves a driver 40mm or 24mm further forwards and if necessary, up.



XXL Plastic Rental



Race Seat Insert



Caliba SRS Rental Seat Insert



LIGHTWEIGHT CARBON FIBRE SEATS

It is easy to make a seat light; it is not so easy to make a lightweight seat that can hold a driver securely without breakage during an accident. Using a carbon-aramid fabric is almost irrelevant if the resin and curing processes do not compliment the expensive fibres, most of the seat strength can be lost and fracturing will occur. All Tillett seats made from KEVLAR® carbon are built to be on the limit of weight and strength but the materials used are never compromised to save cost, you are always buying the best materials we can find. Other makes of kart seats in the market that are sold as containing carbon, are almost always glass fibre with one cosmetic top layer of expensive fibre. Tillett seats are never made to fool the customer in this way.

The lightweight KEVLAR® Carbon seats can be as stiff or as soft as all our other types. The rigidity that matches our standard T5, T7, T8, T9, T10, T11 T12 seats and most other original equipment, is designated "K", an example of this would be T8K. To match the flexible VG seats use the letters "KG", for example T10KG. Ultra-light and flexible seats are designated with the letters "KP" and for a lightweight, rigid seat, use "CR" after the usual T shape designation. For an extra rigid seat use a CXR. The CR and extra rigid CXR models are mostly made with carbon fibre to give the required stiffness. The KP, KG, K specifications are made with a mixture of KEVLAR® with other fibres including carbon to make them flex differently.

Seat Type	Cover Type	Average Weight
T5KP Rev. T8KP, T9KP, T10KP and T11KP	Uncovered	.6kg
T5KG Rev. T8KG, T9KG, T10KG and T11KG	Uncovered	.8 kg
T5VTi Rev. T8VTi, T9VTi, T10VTi and T11VTi	Uncovered	1 kg
T5VG Rev. T8VG, T9VG, T10VG and T11VG	Uncovered	1.1 kg
T5 Rev. T8 hand, T9 , T10 and T11	Uncovered	1.4 kg
T5R Rev. T8R hand, T9R, T10R and T11R	Uncovered	1.7 kg
T5XR Rev. T8XR hand, T9XR, T10XR and T11XR	Uncovered	1.9 kg
T8 and T12	Uncovered	1.6 kg
¼ Covers on the above uncovered seats weigh an additional .2 kg		
½ Covers on the above uncovered seats weigh an additional .3 kg		
Full covers on the above uncovered seats weigh an additional .4 kg		
T5,T7KG	Full	1.2 kg
T5,T7K	Full	1.4 kg
T5,T7CR	Full	1.6 kg
T5 or T7	Full	2.2 kg
T5VG or T7VG	Full	1.7 kg
T250 KG	Part Covered	1.7 kg
T250	Uncovered	2.25 kg
Race seat insert with foam backing	Full	1.4 kg

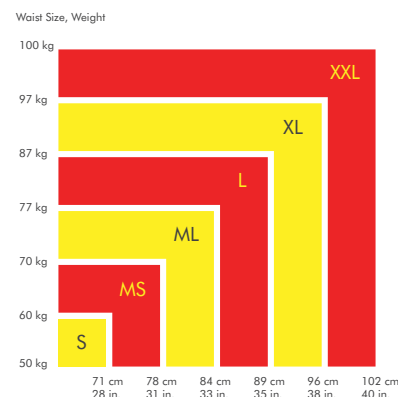
RIGIDITY OF A KART SEAT

Changing the seat rigidity alters the amount of weight transferred to the outside front tyre, it is also partly responsible for the amount the inside rear wheel is able to lift through the corners. This gives you the ability to balance a chassis that may not be perfectly adjusted for the track surface, driving style or weather conditions. To make sure that the seat you buy this year will be the same as one you buy next, Tillett Racing Seats are made to set specifications. The standard seats supplied with karts are often inconsistent in rigidity and strength. Tillett Kart Racing Seats are unique in that they can be bought in 7 different rigidities plus the hybrid VGR.

The rigidities which are available in each shape are shown on the size / rigidity guide.
See right hand page.



For our range of lightweight sports, race and track day car seats, including the new FIA homologated B6 F and B7, please see our separate brochure.



The injected T8 and T12

T8 and T12 seats are injected into a predetermined cavity and the edges are cut by robot. Therefore, by changing the materials, they can have different performance characteristics which are always consistent. There are two options of flexibility, the T8 or T12 (standard) and T8 soft/T12 soft (flexible). Should you want more variance in this shape, the T8 Hand (Handmade) version is available to give a full range of rigidities in the injected T8 shape; the T11 will give the same options for the T12.

T5, T5 REV, T7, T8 HAND, T9, T9.5, T10 and T11 shapes. We offer all of these seat models in 7 rigidities (See guide).

Flexible VTi, and VG

The flexible V seats are a favourite with the Rotax Max drivers. V seats are made of non-standard composite materials, they are light in weight and we find that many people use the "VG" seat to good effect in all sorts of different classes. Using the same material specifications, there is also the ultra-flexible VTi and this is ordered by customers determined to get the most flexible seat possible.

The "t"

This was developed for the recent karts in KF and Rotax but is a useful rigidity option for many karts falling in between the most popular Standard and VG rigidities. The T11t spec won the 2009 European title for KF2 and the Junior Rotax title in 2010.

Standard Rigidity

This is based around the majority of karts basic uncovered seats. The standard rigidity model of each shape only has the letter T plus its number, for example the T8.

Rigid "R"

A thicker, stiffer version of the standard seat is shown by including the letter "R" after the T number.

Extra Rigid XR

Commonly known as 'The Rope Seat' it has enormous strength around the outside edge while it still allows the front to flex a little. This extra rigid specification is designated by placing the letters XR after the T + number. They have a dramatic effect on the chassis handling.

The Hybrid VGR

For those who want a rigid seat across the seat stays whilst still allowing some diagonal flex, we have the VGR. This is like a regular VG seat but is totally rigid across the top edge. It is possible to make this specification in T5 Rev, T8, T9, T9.5 T10 and T11 shapes.

KART SEAT SIZING

When fitting yourself or your customer into a new Tillett seat please take into consideration that it is usual for people just sitting in a stationary seat, to pick a seat that is too big. In a new seat, it is wise for them choose a tight fit that gives the same pressure up the whole side of the body. This will offer the best protection. With a loose fit, the chances of damaging the body are much higher. If in the course of an accident a driver moves towards the seat, the impact is much greater than if they were to start with their body firmly up against the side. In a similar way, people who are not wearing a seat belt during a car crash will damage themselves far more than someone instantly restrained by the belt. To check the size sit the driver in the seat and force your fingers down their side between their body and the seat. There should be a resistance to placing your fingers in this gap at the chest, hip and leg bones and it should be an even pressure. If any of these three areas are too loose then take up the gap by filling with the V/VH pads or using a sheet of hard foam to the correct thickness. Any gap, top or bottom, will damage the ribs or hip bones.

PLEASE NOTE:

The most accurate way to gauge someone's size over the telephone is by asking for his or her weight and waist size. The waist guide is the most definite measurement of the two, so when in doubt go by this. The graph is an approximate guide and may not work for people who are exceptionally tall or have wider than average hips. A driver with wide hipbones may order a seat with additional foam around the ribs. For this service there is no extra charge. (Specify either 5 or 10 mm extra foam, each side.) Please take into account when ordering that uncovered seats will be a little larger than the covered types due to the lack of foam and covering.

SIZING CHILDREN

For the younger drivers it is better to use age, as their size varies enormously. There are many choices and it is better to not get fixated on one particular shape but to select the model that best fits the child's proportions. The full range of rigidity choices is available in all the shapes and this should be the primary focus of any handling decisions.

Drivers up to 5 years old use the "Mini".

For drivers from between 5 to 8 use the Ccd T8 Hand.

For 8 to 10 year old children use C in shapes T5 Rev, T7, T8, T10 or T11 or the lower back Ccd T5 Rev. Which one you would choose would depend on the height and proportions of the child.

10 to 12 year old children use the XScd size in shapes T5 Rev, T7, T8, or T10. If they are exceptionally thin they could use the C T11.

12 to 13 year old drivers normally use a Scd T7, T8 hand, or if they are tall and thin the XS T11 then the next in line is the Scd T10 and finally the Scd T11.

T8	T8 HAND	T9	T9.5	T7	T5	T5 REV	T11	T12	T10	T250
C	Ccd	S	MS	MINI	S	Ccd	C	S	C	MS
XS	C	MS	ML	C	Manetti	C	XS	MAN	De Vries	ML
S	XS	ML	L	XScd	MS	XScd	XS WT	MS	XScd Stroll / XScd	L
MS	S	L	XL	Scd	ML	S	S	ML	XS	XL
ML	Scd	XL		S	L	Manetti	S WT	L	Scd	XXL
L	Manetti			MScd	XL	MS	S / S WT / S TB	XL	S	
XL	MScd			MS		ML	Harvy		Manetti	
	MS			ML		L	Manetti / Manetti WT		MS	
	MAN			L		XL	MS / MS WT		ML	
	ML			XL			ML / ML WH / ML WT		L	
	L			XXL			L		XL	
	XL			XXXL			XL		XXL	
				XXXXL						

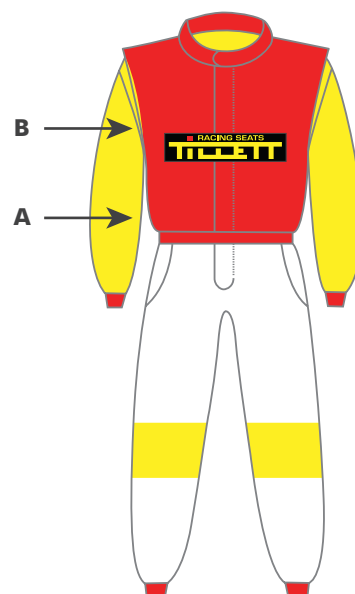
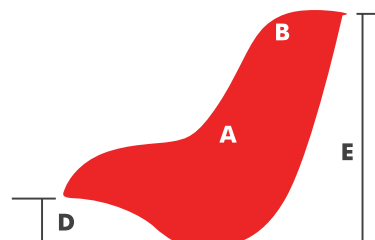
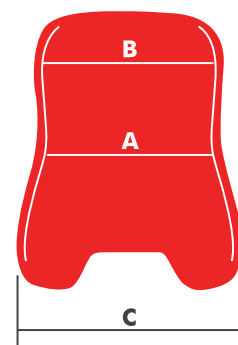
T8	T8 HAND	T9	T9.5	T7	T5	T5 REV	T11	T12	T10	T250
Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Soft flexible	R rigid	R rigid	R rigid	R rigid	R rigid	R rigid	R rigid	Soft flexible	R rigid	
	VG flexible	VG flexible	VG flexible	VG flexible	VG flexible	VG flexible	VG flexible		VG flexible	
	XR rigid	XR Ex rigid	XR rigid			XR rigid	XR rigid		XR rigid	
	VP very flexible	VP very flexible	VP very flexible			VP very flexible	VP very flexible		VP very flexible	
	VTi ultra flexible	VTi ultra flexible	VTi ultra flexible			VTi ultra flexible	VTi ultra flexible		VTi ultra flexible	
	VGR flex bottom,rigid top	VGR flex bottom,rigid top	VGR flex bottom,rigid top			VGR flex bottom,rigid top	VGR flex bottom,rigid top		VGR flex bottom,rigid top	

	K standard	K standard	K standard	K standard	K standard	K standard	K standard		K standard	KG flexible
	CR rigid	CR rigid	CR rigid	CR rigid	CR rigid	CR rigid	CR rigid		CR rigid	K standard
	KG flexible	KG flexible	KG flexible	KG flexible	KG flexible	KG flexible	KG flexible		KG flexible	CR rigid
	CXR rigid	CXR rigid	CXR rigid			CXR rigid	CXR rigid		CXR rigid	
	KP very flexible	KP very flexible	KP very flexible			KP very flexible	KP very flexible		KP very flexible	
	KGR flex bottom,rigid top	KGR flex bottom,rigid top	KGR flex bottom,rigid top			KGR flex bottom,rigid top	KGR flex bottom,rigid top		KGR flex bottom,rigid top	

SEAT DIMENSIONS

Shape	Size	A	B	C	D	E
T5	S	28	27.5	38	6.5	35
	Manetti	29.5	32	45	8	37
	MS	30	32.5	45.5	8	37
	ML	31	34	46	8	38.5
	L	33.5	36	45.5	9	37
	XL	35	37	47	8.5	37.5
T5 Rev	Ccd	25.5	25.5	37.5	8.5	26.5
	C	26	29.5	37.5	7	31
	XS	27.5	29.5	40.5	6.5	32
	XS WT (Dorian)	27.5	31.5	40.5	8	30.5
	S	29.5	31.5	42.5	6.5	34
	Manetti	31	34	44	8	36
	MS	31.5	34.5	45	8.5	36.5
	ML	33	36	45.5	9	37.5
	L	34.5	37.5	45	9	36
	XL	35.5	38.5	47	8.5	37
T7	Mini	20	19.5	33	4.5	23
	C	24.5	25.5	40	9	30
	XScd	25.5	25.5	40.5	9	32.5
	Scd	27.5	30	43.5	9	34.5
	S	28	30.5	44	9	37
	MScd	30	32	46	9	33.5
	MS	30	32	46.5	9	37.5
	ML	31	33	48	9	38
	L	32.5	36	48.5	9	39.5
	XL	34	37.5	50.5	9	40
	XXL	38	41	52	9.5	39
	XXXL	45.5	48	59	9	40.5
T8 *Only available in handmade	* Ccd	25	26	35	7.5	25
	C	25	26	36	9	30
	XS	27	27	39.5	9	31.5
	* Scd Hand	28.5	30.5	43.5	9	31
	S	29.5	31	44	9	37
	* Man. Hand	30	32	44.5	9	37
	* MScd Hand	31.5	32	45.5	9	33
	MS	30.5	32.5	46.5	9	37.5
	ML	32	33.5	48	9	38
	L	34	35.5	49	9	39.5
	XL	35	37.5	50.5	9	40
T9	S	29.5	27	44	9	33
	MS	30.5	32.5	45.5	9	34
	ML	31.5	33.5	47.5	9	34
	L	34.5	36	49	9.5	36
	XL	35.5	38	50.5	9.5	37
T9.5	MS	30	32.5	46	9	32.5
	ML	31	33.5	47	9	32.5
	L	34.5	36	49	9.5	34.5
	XL	35.5	38	50.5	9.5	35.5
T10	C	26	28.5	36.5	8	27
	De Vries	26.8	29.5	36.5	8	28
	Stroll 3	27.5	29.5	40.5	8.5	30.5
	XScd	27.5	29.5	40.5	9	34.5
	XS	27.5	30	40.5	9	35.5
	Scd	30	31.5	43	9	34.5
	S	30	33	43	9	36.5
	Manetti	30.5	33.5	42.5	9	37
	MS	31	34	44	9	37
	ML	32.5	35	45	9	37
	L	34.5	37	48	9	37.5
	XL	36	38	49	9	38
	XXL	39	41	50.5	9	39
T11	C	25	27	37.5	9.5	28
	XS	27.5	29.5	40.3	9.5	30
	XS WT	28.5	30	40.3	9.5	30
	Scd	29.5	31.5	42.5	10.5	28
	S	29.5	31.5	42.5	10	31
	S HB (Ital)	29.5	32	42.5	10.5	31.5
	S WT	30.2	32.8	42	10.5	30.3
	Harvey	30.7	33.9	43.8	10.5	31.7
	Manetti	31	34.5	44.3	10.5	31.5
	Manetti WT	31.5	35.4	44.3	10.5	31.5
	MS	31.5	35	45	8.5	34.5
	MS WT	32.1	35.8	44.5	9.5	33
	ML	32.5	36	46	10	33.5
	WH (Reagie)	34.9	36.3	45.5	11	32.5
	ML WT (Mansell)	34	37.5	46	10.5	31.5
	L	34.5	37.5	45	10	32.5
	XL	35.5	38.5	47	10	33.5
T12	S	30.5	31.5	42.5	10	31
	Manetti	31.5	33.5	44.5	9	33
	MS	32	34	44.5	8.5	34.5
	ML	32.7	35	45	10	33.5
	L	35.5	37	45.5	10	32.5
	XL	36.5	38.5	47.5	10	33.5
Plastic Rental	XL injected	36	38	50	10	37
	XL	36	38.5	51	10	36
	XXL	40	41.5	51.5	10	39
	XL 1/4	35	37	51	10	37
	XXL 1/4	38	39.5	51.5	10	39
T250	MS	31.5	34	42	9	72
	ML	33	35	43.5	9	72
	L	34	36.5	45	9	72
	XL	35	37.5	46.5	9	72
	XXL	40	42.5	51.5	9	72
Car Seats	B1	36.5	39.5	45	9	86
	B2	36.5	39.5	43	18.5	81
	B3 5	36	38	33	16	79
	B4 *	36	38	* 40.5 - 44	16	79
	B5	36	39	42	9	84
	B6 *	34	37	* 40.5 - 44	10	81
	B6 F*	34	37	* 41 - 44	10	81.5
	B7-40	34	37	40	10	81.5
	B7-44	34	37	44	10	81.5
	W1 *	34.5	37	* 40.5 - 44	9	48
	W2 *	36	42	* 42.5 - 45	9	48
	W3 *	34	37	* 40.5 - 44	9	35

* These seats are available with the rolled composite edge cut off to reduce the width at the front. All dimensions are in centimeters.



The dimensions **A** and **B** for **T5** reverse, **T8**, **T9**, **T10**, **T11** and **T12** shapes are taken from uncovered seats. Therefore, if your **T5** rev, **T8**, **T9**, **T10**, **T11** or **T12** seat has any covering, dimension **A** will be 6mm smaller and **B** will be 10 mm smaller than shown here.



Hoodie available in pink

Teamwear

INSTRUCTIONS TO HELP WITH ACCURATE SEAT FITTING

To accurately fit a kart seat, first place a flat sheet of plywood, or something similar on your kart stand, then space the chassis tubes from the wood with the correct ground clearance. **5 mm is the average distance that the seat base protrudes under the chassis tubes. This measurement is reduced from previous years as the chassis tubes of modern karts are now set lower.** Once it is placed on the wood, it is stable and easy to hold the ideal position. (Tip: A weight inside will help keep the seat upright.) At this stage please do not lay the seat too far back, this feels comfortable but is not always the best driving position. When using a seat of a different type to the one supplied with the kart, be extra careful with the seat position. It is important to make sure that the driver's back and therefore the majority of the weight in the kart, remains in the correct place. A common way that kart manufacturers supply seat fitting measurements is to give a 'front edge' measurement, taken from between the furthest forward edge of the seat and the front chassis tube, which is the place where a driver's heel would rest. This dimension will vary according to seat shape and size. Please note that the T7, T8 and T9 shaped seats have a different front edge measurement to the T5, T10, T11, T12 or standard fibreglass seat dimensions. Bolting a substantial amount of lead weight to the back of the seat can also make a difference to the seat position and this dimension. It forces you to position the seat further forward to achieve the same balance. The other measurement point given by the manufacturers is normally from the top edge of the seat down to the axle (Dim 1). This can be misleading as it assumes that all the back heights of the seats are the same when they are not. An XS is shorter than an XL.

The most accurate way of measuring the actual position of the drivers back is to take a 90° line (approx.) from one side of the spine, which runs down the back of the seat, and measure the shortest distance to the axle. This dimension is currently an average of 16.5 cm for an adult driver, (See diagram Dim. 2) you must not use the spine as this varies in depth too much between each type of seat. Using this measurement point with the distance the seat protrudes under the chassis tubes, should ensure that your new seat is fixed exactly in the same place as the old one. With the flat bottomed seats you can use the flat to give you the correct seating angle.

When you are confident of the positioning of your seat, bend the rear seat stays so that the flat of the stay is parallel to the side of the seat. Mark and drill these two holes. With a covered seat, try not to catch the foam rubber inside the cover.

Use a Tillet 40mm diameter CIK specification nylon washer, a 13 sq. cm metal plate or washer between the moulding and each seat stay. Additional spacers may be used but they must be rigid spacers, not rubber. Tighten the two bolts. Mark and drill the front holes. Again, bend the flat of the stay so that it is parallel to the surface of the fibreglass. There will usually be a distance between the seat and the front stays. Therefore, if necessary use hard spacers to fill this gap, then tighten the front bolts and re-tighten the rear ones until very tight. Extra seat stays can now be fitted if used. Once again the washers or plates must be used. Keep the head of the bolt away from the top edge of the seat. Fasteners that are fitted too near the top edge of the seat will bruise the ribs. When you are satisfied with the performance of the kart, record the position of your correctly fitted seat using the measurement points mentioned above. Do not forget to measure the amount that the seat shows below the chassis tubes and keep this dimension. To prepare the seat for wet weather, drill two holes for water drainage at the lowest point of the seat. Your seat is now ready for use. Please remember to consider that your rain tyre may be of a different diameter to the dry; therefore if you have the seat set lower than 5 mm, check that when they are fitted there is sufficient ground clearance.

VERY IMPORTANT When bolting through a cover, re-tighten the seat bolts after the first few laps. Initial testing results will be affected if the bolts have not fully compressed the material and foam.

CLEANING COVERED SEATS

Any normal carpet or upholstery cleaner can be used. For oil, grease and tyre rubber stains, the cover can be cleaned with paint thinner. Apply to a cloth and wipe the mark off.

T BOARD SEAT FITTING JIG

Seat fitting is without doubt one of the most time consuming jobs on the kart. Accurately positioning a seat (which if 5 mm out, will be detectable in the lap times) is difficult when you take into account the varying shapes, sizes and driver seating preferences. The T Board Seat Fitting Jig gives an accurate way of understanding where your seat is positioned in relation to the rear axle. The measurement point used on the rear of the seat allows different seating angles to be used, while keeping the centre of gravity in a similar position. Deliberately measuring to one side of the spine recess takes into account differing spine depths in the many varied types of seats. The seat position can be set, the three necessary dimensions recorded and then transferred into any other chassis as a starting point. Using the T Board, it is now possible to understand the optimum seat position of each type of kart, whilst also enabling you to easily mark and drill the seat fixing holes with greater accuracy.

FITTING USING THE "T" BOARD

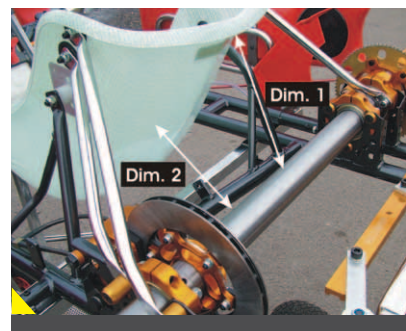
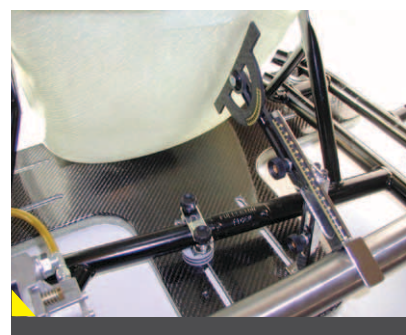
Determine how much of your seat hangs under the chassis tubes. 5 mm is now the average. Use the 4 and 2 mm spacers along with the 3 mm thick chrome clamps to give the correct distance. One 2 mm spacer is all you should need on most current chassis. Put the clamps into the T Board slots with the correct amount of nylon spacers underneath. Adjust the clamps and fix to the chassis. The seat is now held in position by the board and it cannot be accidentally set too low.

USING THE MEASURING DEVICE

Fix the measuring device into one of the back slots, while allowing the lower sliding adjustment to find its natural height between the T Board and the axle. Tighten the knob that sets the lower slider. Set the measuring device at 90 degrees to the axle. Extend the upper sliding rule forward and upward to get the correct dimension to the back of the seat. The current average of all adult karts and a good place to start with an average height driver is 16.5 cm. A shorter junior would be more like 18.5 cm. Then set the required angle using the protractor. Three dimensions should now be taken, the distance showing below the chassis tubes, the angle of the seat and the axle to seat dimension. With these three dimensions you can put any seat in any kart and the driver will always be exactly in the same position in relation to the rear axle.

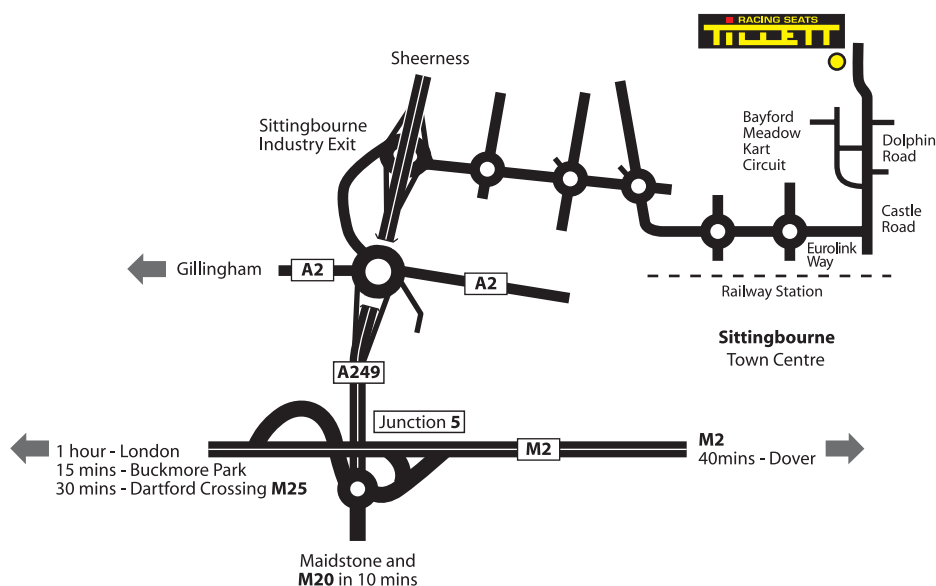


NEW UPDATED Seat Fitting Jig



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With a covered seat you can remove £2 from the listed price if a fitting kit is not required.

Type	Rigidity	Size	Composite Colour	Cover Colour (s)	Special Instructions	Quantity	Price

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