

RACING SEATS

TILETT



2008

WORLD CHAMPIONSHIP WINNING SEATS AND RIB PROTECTORS

Dear Customer,

Here is your new 2008 Tillett Racing Seat brochure.

In the past 22 years we have gone from one man in a garage to a company of 23 people making many thousands of kart seats each year. We are fortunate enough to be involved and help many of the world's top drivers. This has been one of the main factors that has driven development and kept Tillett Racing Seats ahead of the competition. In 2008 we will release a new nylon chainguard and our latest XL rental seat moulding which have both been extensively developed during 2007.

Best regards

Steve Tillett



Major results for Tillett seats in 2008

Junior European Champion

Congratulations to the new KF3 Junior European Champion Jack Harvey who wins using a Maranello fitted with a T11 seat Tillett Chainguard and P1 rib protector.

2nd Tom Grice on a Gillard fitted with a T10

European Champion KZ2

1st Thomas Knopper using a T11 in his PCR

2007 World Cup for KF2

1st Michael Ryall using a Birel fitted with a T10 seat

2nd Scott Jenkins using an Intrepid with a T11 seat

Winter Cup

1st KF1 Michael Christensen using a Gillard fitted with a T9 seat

1st KF2 Yannick Brabander using a Maranello fitted with a T10 seat

1st KF3 Victor Oberg using a Gillard fitted with a T10 seat

FA British Championships

Congratulations to Chris Rogers who won the Formula A British Championship using a T10 seat in his Octane chassis. This is the 16th year in succession that a Tillett seat has been used to win this championship.

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 Gillard, CRG, Birel, Sodikart and Swiss Hutless chassis have shared the major honours in recent years all using Tillett Seats.

Design right protection was introduced by the Copyright, Designs and Patents Act 1988. All Tillett LTD's original designs are the subject of design right protection. We thus have the exclusive right to reproduce our designs for commercial purposes and the action that we can take against any third parties who infringe our design rights is set out in Sections 229 to 235 of the Act.

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T8

The T8 was the first kart seats made using the latest RTM production methods. This system makes strong fibreglass mouldings with uniform quality and thickness. The process also speeds up production, keeping the price of the T8 below that of the handmade models. In addition to these benefits, the two smooth sides of the T8 keep a clean, professional image throughout the life of the seat. During 2006 the fibre content was changed to reduce weight, increase strength and reduce twisting.

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 1/4 is the most popular seat made by Tillett Racing Seats.

The super strong XL T8 Rental is used for the corporate market and is available in a clear and black version.



T8



T9



T9.5



T8 1/4

T8 SPECIFICATIONS

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

Rigidities:	T8 Standard	T8 Soft Flexible
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Cover colours: Fire Red, Royal Blue, Jet Black, Charcoal Grey.

Composite colours: All prices are for transparent clear seats. Translucent colours: Red, Blue, Green, Magenta, Orange and Yellow orders must contain at least 25 seats of each colour.

Covered Tillett seats can be bought without fitting kits or box, remove £2.00 from listed prices.

Uncovered seats are priced without a fitting kit.

T8 HAND

The fixed thickness of the injected T8 moulding does enable small variations in rigidity but with professional drivers it is important to have the ability to make a wide variety of specifications. Making the T8 by hand allows a complete range of sizes and rigidity. Making handmade moulds in the T8 shape also means that lightweight KEVLAR® carbon versions can also be made.

The new Ccd size is ideal for bambino karts.

T9

(World Champion 2005)

The T9 is also handmade to give the many variables requested by the top racers. The T9 shape is the same as the T8 but with a 58 degree seating angle, this creates a very low head position giving a low centre of gravity and better aerodynamics. This is especially important for taller drivers. Oliver Oakes won the 2005 World FA Championship using a T9 seat.

The T9.5 is a 48 degree version of the T9 in 2 sizes MS, ML, L and XL

T8 HANDMADE / T9 SPECIFICATIONS

Sizes: T8 Hand seats available in Ccd, C, XS, Scd, S, MScd, Manetti, MS, ML, L and XL.

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

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

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

Composite colours: Hand made T8, T9 and T9.5 seats are only available in clear or natural carbon KEVLAR®.

Covered Tillett seats can be bought without fitting kits or box, remove £2.00 from listed prices.

Uncovered seats are priced without a fitting kit.

Michael Christensen



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T7

The TILLETT SEAT was first designed as a fully covered seat and the T7 is 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 keeps 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. The letters "cd" indicates a cut down low back version of the MS, S and XS seat sizes. For junior drivers, the "cd" sizes allow better upper body and arm movement. Two extra sizes available are the Mini, which fits a small child from 5 to 7 years old and a XXXL, which is 8 cm wider than a XXL.

T7 SPECIFICATIONS

Sizes: Mini, C, XS^{cd}, Scd, S, MS^{cd}, MS, ML, L, XL, XXL and XXXL.

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

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

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

Flexible T7VG seats in clear and translucent colours; Translucent Red, Blue, Green, Magenta and Yellow. T7 seats made with KEVLAR® carbon are only available with visible KEVLAR® - carbon.

T7 Tillett seats can be bought without fitting kits or box, remove £2.00 from listed prices.

T7



T5

The T5 is a shape that fits some drivers just perfectly and they will use nothing else. The fully covered 63 degree T5 seat has a large flat on the bottom. In use this flat is usually set parallel to the ground, which drops the drivers centre of gravity nearer to the ground by 2 cm, something that is especially useful with high grip tyres.

T5 SPECIFICATIONS

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

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

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 and translucent colours: Red, Blue, Green, Magenta and Yellow.

T5 Tillett seats can be bought without fitting kits or box, remove £2.00 from listed prices.

T5



Chris Rogers

British FA Champion 2007



RACING SEATS
TILLETT

T5 Reverse - WORLD CHAMPION 2003

As used by Wade Cunningham at the 2003 World FA Championship. The T5 Reverse is an uncovered or part covered version of the T5. Unlike the fully covered T5, the Reverse moulded T5 has a smooth inside that allows uncovered, 1/4 and 1/2 covered seats to be produced in the popular T5 shape. The new size XS^{cd} T5 Rev. is proving very popular with the 10 to 11 year old cadet drivers.

Equivalent sized T5 Reverse seats will be larger than the fully covered T5 seat. For example the size of an ML T5 Rev. falls in between ML and L in other shapes. All the usual rigidity specifications are available in the T5 rev including lightweight carbon Kevlar® versions.

T11

- WORLD CHAMPION 2004/EUROPEAN CHAMPION 2005 KF3 JUNIOR EUROPEAN CHAMPION 2006/2007

This is the seat used by Jack Harvey to recently win the new KF3 2007 Junior European Championship. With drivers growing ever taller in recent years 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 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 including the lightweight carbon Kevlar® versions. The T11 standard and T11VG flexible versions are the most popular specifications of this seat.

T12

This incredibly clear and perfect 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 it will also keep a professional look throughout its life because the two smooth sides make it easy to clean. The seat is available with all the usual covering options. Also in the range is a soft flexible version and, at extra cost, a black fibre version.

T11 / T12 / T5 REVERSE SPECIFICATIONS

Sizes: T11 in XS, S, Man. MS, ML, L and XL. T12 in S, Man. MS, ML, L and XL.
T5 Reverse in XS^{cd}, S, Man. MS, ML, L and XL.

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

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

Covered Tillett seats can be bought without fitting kits or box, remove £2.00 from listed prices.

All uncovered seats are priced without a fitting kit.



The T12



T5 Reverse



T11



Thomas Knoppler
2007 European
KZ2 Championship

T10

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. The advent of the heavier KF engines may make these seats more popular as the need to take weight off the rear materialises. The T10 also has one of the most extensive size ranges and includes a very good set of sizes for juniors, the XScd, Scd and S being particularly popular.

T10i

The T10i seats set new standards in composite quality. Tough, unbelievably lightweight and with superb handling qualities. They have a gloss finish on both sides using high quality Carbon and KEVLAR® materials in the construction. Flexible (KG), Standard (K), Rigid (R) and Extra Rigid (XR) versions. Available only in sizes S, Man, MS and ML. Prices are the same as handmade T10 carbon KEVLAR seats.

T10 SPECIFICATIONS

Sizes: XScd, XS, Scd, S, Manetti MS, ML, L, XL and XXL.

Rigidities:	T10 Standard	T10R Rigid	T10VG Flexible	T10XR Extra Rigid
Lightweight	T10K Standard	T10CR Rigid	T10KG Flexible	T10CXR Extra Rigid

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.

Covered Tillett seats can be bought without fitting kits or box, remove £2.00 from listed prices.

Uncovered seats are priced without a fitting kit.

T250

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 is 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.

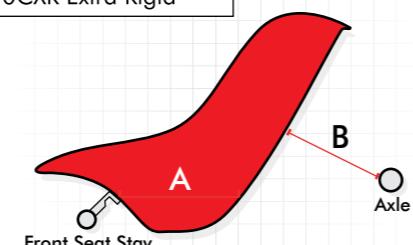
Composite colours: Red, Blue, Black. Available in all colours to special order. Seats made with KEVLAR® or carbon are only available in the natural KEVLAR® - carbon fibre colours.

Tillett seats can be bought without fitting kits, remove £2.00 from listed prices.

Uncovered T250 seats are priced without fitting kits.



T10 1/4



T10VG

T10iKG



T250KG

TILLETT RIB PROTECTION

The Choice Of World Karting Champions



THE P1 MADE WITH KEVLAR®

The P1 Ribtec can cope with the most demanding rubber covered tracks, which place exceptional forces on the ribs and body.

Ribtec rib protectors have helped many World FA Champions to success – The P1 Ribtec features KEVLAR® armoured panels made with a new moulding technology. The KEVLAR® side and front panels enable a small amount of flexibility whilst giving localised rigidity to spread cornering loads evenly. The P1 weighs on average 0.5 kg and has ultra thin side sections so as not to disrupt the seat fit. It has a tough new type of faux suede exterior, absorbent towelling interior and newly developed foam to deaden impacts and improve comfort. It has a thin back plate with soft foam for better seat feel, and removable chest protection as standard. Available in seven sizes to fit 5 year old children and above. To account for different chest angles it is adjustable at both the front and rear and has shoulder straps for height adjustment. Dealers please note when storing, that KEVLAR® brand fibre will darken in colour when exposed to sunlight for long periods.

P1 SIZE GUIDE

The P1 Ribtec is available in 7 Sizes; C, XS, S, MS, ML, L and XL. To find your size please refer to the chart below. Chest measurements should be taken with a measuring tape pulled tight just under the arms.

C	21" - 26"	54 - 66 cm
XS	26" - 30"	66 - 76 cm
S	30" - 34"	76 - 87 cm
MS and ML	34" - 39"	87 - 99 cm
L	39" - 43.5"	99 - 110 cm
XL	43" - 48"	110 - 122cm

Please note that the MS and ML sizes have the same circumference but different chest depths.

KEVLAR is a trade mark of Du Pont Nemours and Company

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



Oliver Rowland



THE ORIGINAL RIBTEC

The first ever Rib protector to offer real protection against rib injury. The choice of the 2001 and 2002 World Champions.

The Ribtec was developed using the direct help of F1 drivers Anthony Davidson, Jenson Button and Vitantonio Liuzzi 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. Ultra lightweight at approximately 300gm. The Ribtec has an absorbent towelling lining and foam interior, for added comfort. It can be adjusted to your shape as it is easily modified with a pair of scissors.

[Ladies version available.](#)

The Ribtec is also excellent for rental use

"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, 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

Chest measurements should be taken with a measuring tape pulled tight around the chest. Women should measure directly under the bust line.

Ribtec Harness and Comfort Pads

2 sizes Junior and Adult Junior fits C, XS and S, adult fits MS, ML, L and XL

Please Note: The Ribtec Harness does not fit on Ladies ribtec
Junior Chest Protector fits C or XS.

Chest Protector

Made for juniors, the Ribtec chest protector fits on a standard C or XS sized Ribtec and provides extra protection against damage by the steering wheel.

Rib protector comfort pads

Special low compression EPDM self-adhesive foam pads, for the inside of the Ribtec or the P1. The special foam moulds itself to the ribs adding an extra degree of comfort and safety. Available in a Junior or Adult version.

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

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U.S. PATENT NO. 6,209,145, EUROPEAN PATENT PENDING
(EP 98309712.2)

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The Ribtec Harness

If a driver's chest is angular or V shaped, it is possible they will experience movement on the belt, the Ribtec Harness is the simple and effective answer. All Ribtec belts are supplied with the slots moulded in to take the straps. However, the straps will not fit to the Ladies Ribtec.



The Ladies Ribtec

To our knowledge this is the only rib protector specifically made for women kart racers. The shape has been modified to allow for the bust and because kart seats are always designed for men, extra thickness has been added to the sides to compensate for the more petite female frame.



M Cozzaglio



RIBCAGE - Body Support System

Patent pending.

For a kart driver the traditional way of gaining upper lateral support is to either use a seat with deepened sides, or to produce a wraparound seat that curves around the body. RIBCAGE panels give extra support without creating damage from the hard edge of the seat, particularly if a driver is thrown forward or out of the kart. Kart seats are available in many different shapes and sizes but they are not depth or height adjustable, which means that the seat is nearly always a compromise in some way. RIBCAGE allows the driver to choose the perfect height, depth and width around the rib area. A good tight fit around the chest is essential to help protect the ribs and hipbones from damage.

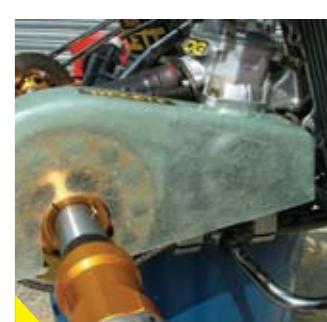
RIBCAGE does not alter the properties of the original seat by changing the rigidity and therefore will only have a positive effect on the lap times. RIBCAGE is delivered with 2 M6 fixings. Normally the panels are fitted using the existing seat bolts. The two M6 fittings are for fitting to karts without extra seat stays. To fit the panels away from the seat, as shown in the photo above, you will need to purchase the additional spacer kit.



RIBCAGE Body Support System



RIBCAGE Spacer Kit



The new Rotax Max version



The Chainguard sticker set keeps all the chain spray out of view and adds impact strength. Available in black, red, white or blue. Fits all chainguards except LHD version.



Honda GX160 Chain Guard

The new Tillett Honda guard mounts solidly to the engine and is wide enough to allow sprocket protectors.

The guard is made from lightweight composite and weighs only 350 grams including the bracket system. It is simply removed with two 6 mm nuts.

Carbon Kevlar® Tillett Chain Guard

The New Carbon Kevlar® Tillett chainguard is the lightest on the market at 170 gm in a RHD/Rotax version and is 138 gm when cut for the KF classes. Unlike many products that cosmetically use carbon look materials the lightweight Tillett guard uses genuine carbon and is Kevlar® brand fibre lined for ballistic protection against a thrown chain. It also has two smooth sides making it easy to clean. Also in development are lightweight carbon fixing brackets due for release during 2008.



David Fore

CARBON FIBRE FLOOR TRAYS

The main reason for using a composite floor tray is to save weight. Aluminium floor trays weigh 1100 gm on average. By comparison a Tillett carbon composite floor tray can weigh as little as 330 gm.

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 three rigidities. Get the correct rigidity and it will help the handling and lower your lap times.

A highly technical manufacturing process produces the two glossy surfaces, which makes them easy to clean and allows almost perfect consolidation of the materials. Quality and looks are other reasons for using the carbon/composite trays. The Carbon trays are made using a special chequered weave fibre which increases rigidity over normal twill weave carbon fibre and these are placed either side of a honeycomb centre to save weight. When ordering a floor tray, customers may need to supply a paper pattern with the outline of the shape. The necessity to do this depends on the popularity of the chassis as we have many patterns already in stock. The split level trays for the latest models of Birel have to be made by hand which means that unlike other models these trays will only have one glossy side.

Floor tray	Approximate weight
Type and rigidity	according to shape
Aluminium Standard	1100 gm
Carbon Rigid	795 gm
Carbon Standard	540 gm
Carbon Flexible	330 gm
Composite Rigid	890 gm
Composite Standard	640 gm
Composite Flexible	440 gm



Carbon Fibre Floor Tray



Fitting Kits

SEAT ACCESSORIES AND OPTIONS:

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.

Modified 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.)

RAIN MEISTER

Sometimes the only way to get grip from a cold, wet or slippery track surface is to put downward pressure on the 2 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.

CONNECTOR STRAPS

Endurance racers and drivers of different sizes sharing a single kart will benefit from the extra security of Tillett Seat Connector straps.

They enable a small seat to be attached mechanically into a large seat with a quick release facility.

TRANSPONDER HOLDER

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



Ben Cooper
European Rotax
Max Champion

SEAT PADDING

The moulded side protection foams as used in all covered Tillett Seats can be purchased separately.

Also available are 300 x 330mm sheets of closed cell foam in 5 or 9mm thick with a self adhesive backing. This enables the drivers to custom fit the seat to themselves.

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 like the P1. 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



HIP PADS



SUEDE COVERED VELCRO PADS

XXL PLASTIC RENTAL



NEW XL INJECTED RENTAL SEAT

XL INJECTED RENTAL SEAT

This new XL seat for the corporate market has been in development for over a year and builds on the experience of 22 years in the kart seat business. The development 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

Very popular super strong composite rental seats. The T8 rental does not flex even when hot and 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.



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 is our first digitally mastered seat, which means it is totally symmetrical and accurate in every dimension.

SEAT INSERTS

Seat inserts help smaller drivers comfortably drive 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.



FULL SEAT INSERTS

The full seat rental insert comes in two thicknesses 24 or 40mm. The carefully crafted shape fits easily into an XL Tillett seat and can be fitted in an instant. This insert is light and tough.

SEPARATE BACK AND CUSHION FOAM INSERTS

Using these simple, cheap seat foam inserts moves a driver 40mm or 24mm further forwards and, if necessary, up. This helps a smaller driver to adequately control a kart that has a large seat fitted.

XL T8 RENTAL

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 the Tillett seats made from KEVLAR® carbon are built to be on the limit of weight and strength but the materials 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. For a lightweight, rigid seat, use the letters "CR" after the usual shape designation. For an extra rigid seat use a CXR. The T10iK, CR and extra rigid CXR models are mostly made with carbon fibre to give the required stiffness. The T10KG, T10K and T10iKG are made with a mixture of KEVLAR® with other fibres including carbon.

Seat Type	Cover Type	Average Weight
T5KG Rev. T8KG, T9KG, T10KG and T11KG	Uncovered	0.8 kg
T10iK	Uncovered	0.9 kg
T10iCR	Uncovered	1.1 kg
T10iCXR	Uncovered	1.3 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
1/4 Covers on the above uncovered seats weigh an additional .2 kg		
1/2 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	1.1 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
Carbon/ B1 race car seat	Part Covered	2.75 kg
Carbon B2 race car seat	Uncovered	2.75 kg
Carbon/glass B4 car seat	Uncovered	4.5 kg
Ally Brackets for B1,B2 and B4	N/A	1 kg
W1 car seat with backframe	Uncovered	3.36
W1 car seat	Uncovered	2.36
W2 car seat	Uncovered	3.25 kg

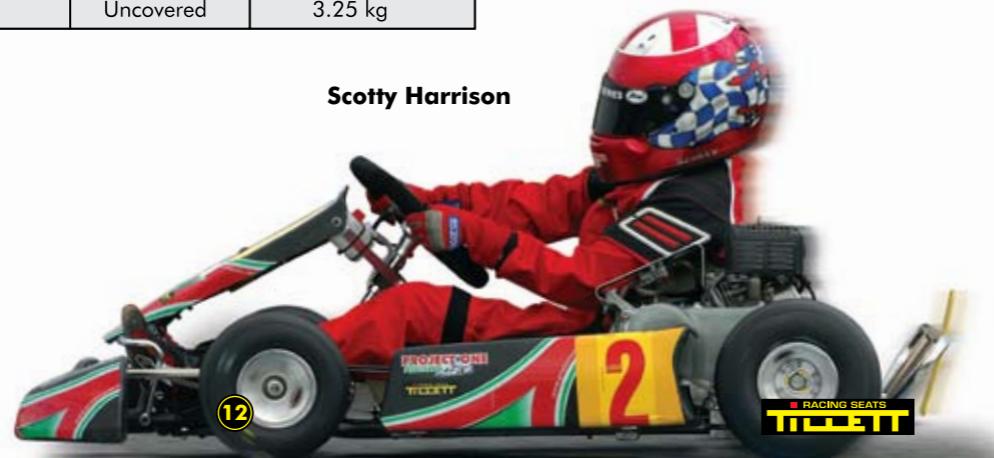
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Scotty Harrison

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 various rigidities.

THE T5, T5 REV. T7, T8 HANDMADE, T9, T10 AND T11

We offer all of these seat models in 4 rigidities.

Standard: This is based around the majority of karts basic uncovered seats.

Rigid: A thicker, stiffer version of the standard seat is shown by including the letter "R" after the T number. e.g. T10R.

Extra Rigid: 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 T10, T5 etc. shape. They have a dramatic effect on the chassis handling.

Flexible: 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 are also "VP" and "VB" rigidities, The "VP" is very thin and flexible and is only ordered by customers determined to get the most flexible seat possible. The "VB" is close to the Standard rigidity but using the more exotic V seat materials.

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, the T8 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 a harder seat of this shape, the handmade T8 version is available to give a full range of rigidity to the T8 shape and the T11 will do the same for the T12.

KART SEAT SIZING

When fitting your customer into a new Tillett seat please take into consideration that it is usual for people 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.

Waist Size, Weight



Laura Tillett



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

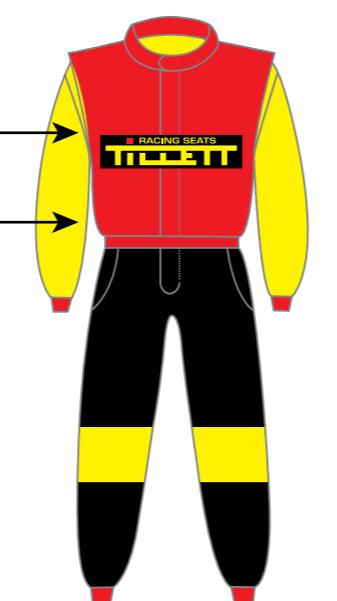
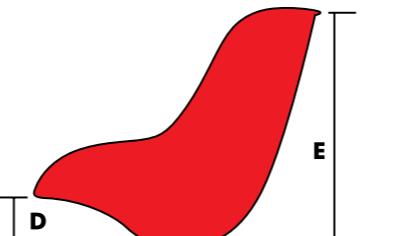
For the younger drivers it is better to use age, as their size varies enormously. 8 to 10 year old children use T8 or T7 size C. 10 to 12 year old children use T8, T5 Rev, T10 or T7 XS. 12 to 13 year old drivers normally use a T11 XS, T7 or T10 S.

SEAT DIMENSIONS

Shape	Size	A	B	C	D	E
T5	S	28	30	44	6.5	35
	Man	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
T5 Rev	XL	35	37	47	8.5	37.5
	XS	27.5	29.5	40.5	6.5	32
	S	29.5	31.5	42.5	6.5	34
	Man	31	34	44	8	36
	MS	31.5	34.5	45	8.5	36.5
T7	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
	Mini	25	26	35	7.5	25
	C	24.5	25.5	40	9	30
T8	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
T8	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
T9	*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
T9.5	*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
	XL	34	35.5	49	9	39.5
T10	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
T11	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
	XScd	27.5	29.5	40.5	9	34.5
T10	XS	27.5	30	40.5	9	35.5
	Scd	30	31.5	43	9	34.5
	S	30	33	43	9	36.5
	Man	30.5	33.5	42.5	9	37
	MS	31	34	44	9	37
T11	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
	XS	27	29.5	40	10	30
T12	S	29.5	31.5	42.5	10	31
	Man	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
Plastic Rental	XL	36.5	38.5	47.5	10	33.5
	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
T250	XXL 1/4	38	39.5	51.5	10	39
ON THE SEATS BELOW DIMENSION E IS TO THE TOP OF THE HEADREST						
MS	31.5	34	42	9	72	
ML	33	35	43.5	9	72	
L	34	36.5	45	9	72	
Car Seats	XL	35	37.5	46.5	9	72
	XXL	40	42.5	51.5	9	72
	B1	36.5	39.5	45	9	86
	B2	36.5	39.5	43	18.5	81
	B4	36	38	40	16	79
W1	W1	34	37	40	9	48
	W2	36	42	42.5	9	48
	W3	31.5	36	40	9	48

ALL DIMENSIONS ARE IN CENTIMETRES

Teamwear



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

INSTRUCTIONS TO HELP WITH ACCURATE SEAT FITTING

To accurately fit a kart seat 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. 10 mm is the average distance that the seat base protrudes under the chassis tubes. 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 be careful not to 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. 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. This 'front edge' measurement is 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. Bolting a substantial amount of lead weight to the back of the seat can also make a difference to the seat position. It forces you to position the seat further forward to achieve the same balance. 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 18.5 cm, (See diagram Dim. 2) you must not use the spine as this varies in depth too much between each type of seat. Using this method should ensure that your new seat is fixed exactly in the same place as the old one. The average measurement between the surface of the axle and the top edge of the seat is 25 cm. (See drawing Dim. 1). 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 the nylon washers provided between the moulding and the main side seat stays. 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 gap between the seat and the front stays. Therefore, if necessary use hard spacers to fill the gaps. Now tighten the front bolts and re-tighten the rear ones until very tight. Extra seat stays can now be fitted if 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. The usual measurements to keep a record of are; from the front of the seat to the main chassis rail, where your heel would normally rest, and from the axle up to the top edge of the seat. (See diagram Dim. 1) Also 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 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.

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. 10 mm is the average. Use the 4 and 2 mm spacers to give the correct distance. Put the clamps into the T Board slots. 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

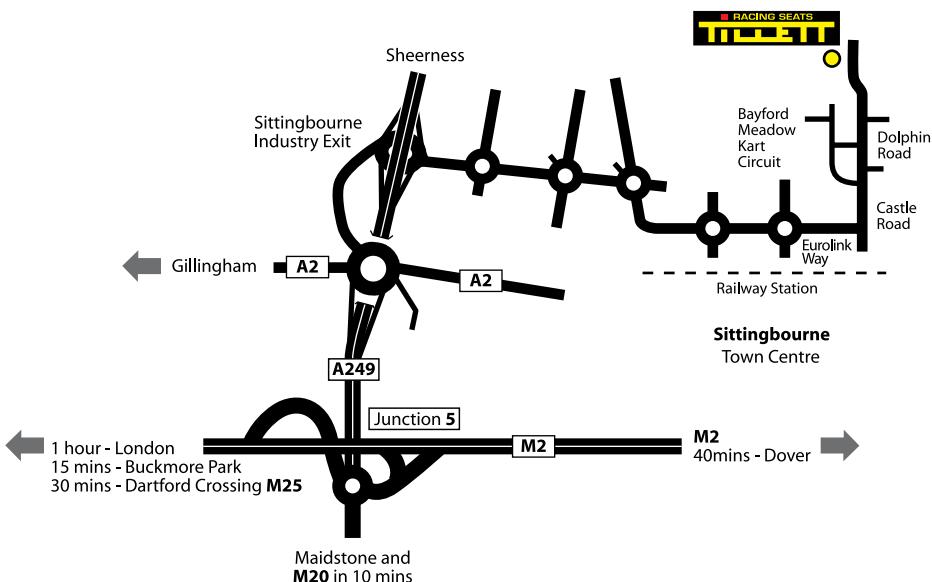
Fix the measuring device into one of the back slots, while allowing the lower sliding rule to find its natural height between the T Board and the axle. Tighten the knob that sets the lower rule. Set the measuring device at 90 degrees to the axle. Extend the upper rule forward and upward to get the correct dimension to the back of the seat. The average of all 100 cc karts and a good place to start is 18.5 cm. Then set the 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.



Max Goff

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Cheques should be made out to: Tillett Ltd.

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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