The racing chair
A racing wheelchair is specially designed for competing on the track and road. Much longer than a day chair or sports chair, they are made using lightweight materials such as aluminium, titanium and carbon fibre. Chairs can be built for the individual’s width, height and seating preference, or to fit the general requirements of a ‘typical starter racer’ for club and group use. The chair may have a footplate or a kneeling configuration. Whilst, it is usual for adjustable strapping to be used for new and younger athletes to allow small modifications (the seat width is set), the more experienced athletes will often use a ‘solid’ kneeling cage, lined with a thin layer of foam.

Specialist gloves are used to protect the hand and to hold the hand in a good position for striking the push rim. The wheels use bicycle type technology including low profile high pressure racing tyres. Athletes usually start on spoke wheels but may progress onto more expensive carbon wheels (£1,400) and tubular tyres (£20-100+ each) as they develop experience and performance.

To assist with getting around the track, the compensator acts like a rudder, holding the steering for the straight and bend so that the athlete’s arms can keep the power on. This also assists with ‘compensating’ the effects of camber on the road. Apart from a brief hit on the ‘compensator’, steering by the steering handle is seldom used by athletes on the track. The handles provide the location for a brake lever which activates the brake on the front wheel.

Opportunities
Competitions range from 100m through to 10,000m on the track and from 1 mile to the marathon (and beyond) on the road. Wheelchair racing is also an element of para-triathlon alongside swimming and handcycling. Wheelchair racing training can be in a mixture of group and individual workouts, on track, cycle paths and roads.

There is a summer track season – April to September – but road races all year round. Training continues whatever the (British) weather, so it is an ideal sport for outdoor athletes! During the winter months indoor training rollers provide some respite, and also complement regular training programs.

Seat Cage: usually in a ‘sitting’, ‘tucked’ or ‘kneeling’ position.
Steering / Handlebar: for general steering and quicker direction changes
Brake Lever
Footplate: used in ‘sitting’ frame design
Compensator: For steering straights and bends on the track, and for fine adjustment and steering compensation for camber, wind direction etc on the road

Pushrim: used by athletes to propel the chair
1 x small front wheel
2 x large rear wheels with axle between
Around the UK there are a number of opportunities to try out the sport through clubs, organisations and individuals with spare chairs. There are also events providing wheelchair racing opportunities and advice organised by WheelPower, British Wheelchair Racing Association, British Athletics and Home Countries Athletics Associations.

It is strongly recommended that any new athlete should:

- Try wheelchair racing first before committing to purchasing expensive equipment. If possible get advice from a training group, experienced athlete or a coach. Correct seating position and pushing technique make a big difference.

- Check classification eligibility (please see below) in accordance with IPC rules. Classification is required to compete in most track and major road events, especially as one progresses in the sport. Classification is coordinated by British Athletics:
  
  - T32 – T34 Cerebral Palsy (Diplegia /Quadriplegia)
  - T51 – T54 Principally Spinal Cord Injury (Tetraplegia & Paraplegia) but also Amputees, Limb Deficiency, Brittle Bones etc.

- Track athletes need to be affiliated to an athletics club in order to compete at competitions.

Classification & Eligibility

Classification for wheelchair racing is coordinated by British Athletics nationally. This includes the British Athletics / IPC Master List of athletes.

A classification (or confirmation of eligibility) is required to enter all Parallel Success competitions and also major road races such as London Marathon. It is also needed for results to be recognised on the British Athletics Rankings (www.thepowerof10.info). Classification involves both testing of muscle power, coordination and impairment and also practical observation. A classification in another sport (i.e. wheelchair basketball) doesn’t guarantee eligibility for wheelchair racing. For more information contact classification@uka.org.uk or visit: www.paralympic.org/Athletics/RulesandRegulations/Classification

Equipment & Suppliers

A custom built racing chair alone will usually cost over £2,000 and the lead time varies considerably between suppliers; some may take up to four months. A more generic chair which can be used by clubs as a starter chair and at development events offers easier transfer access, but tends to be slightly lower in cost. Motivation market a reduced specification ‘generic’ chair (around £590) in four sizes.

The second hand market can be a good starting point with chairs typically much less than £1000 depending on condition and specification. Aim for a second hand chair which has an element of adjustment; a new racer’s position may evolve as the strength, physique and technique develops with training – weight can be lost and muscle tone can increase.

Note: whenever someone takes delivery of a new (to the individual) chair, he/she should ensure that the chair fits well and conforms to the agreed specifications and condition.

UK Suppliers are:

- Bromakin Wheelchairs, Loughborough* www.bromakin.co.uk
- Draft Wheelchairs, near Huntingdon* www.draftwheelchairs.com
- Invacare (Top End), South Wales www.invacare.co.uk
- Motivation Wheelchairs www.sports.motivation.org.uk

*with UK manufacture

Others Suppliers:

- Eagles Sportchairs, USA www.eaglesportschairs.com
- Ox Engineering, Japan www.oxgroup.co.jp/oxgroup_site/wheelchair-lineup.html
- Sportaid, USA www.sportaid.com
- Harness Gloves, USA www.harnessedesigns.com
- Neuff Athletics Equipment, North Yorks www.neuff.co.uk

Jamie Carter
**Spares and Replacements:**
Spare tyres, inner tubes, brake blocks and other bicycle type equipment can be purchased through the larger bicycle component shops and suppliers very cost effectively. For more, wheelchair racing specific equipment (gloves, push rims, etc), shop around with the above suppliers.

**Funding**
Racing wheelchairs are expensive pieces of equipment which can break and need replacement through wear and tear, or if ill-treated. There are costs involved in the maintenance of the chair, wheels, tyres, gloves, as well as the costs of training and competition. This is the financial commitment which is faced by people contemplating getting involved in such an equipment based sport as wheelchair racing. It needs to be budgeted for.

Many people do fully fund the sport themselves as their hobby, pass-time and love. But for those less able to fully fund their sport, there are options available:

- **Sponsorship** – true sponsorship tends to be for established, high performing racers who are able to deliver publicity to the sponsor to support their part of the partnership,
- **Prioritisation** – making use (sale) of unused and unrelated assets from previous hobbies and activities to generate funds.
- **Charitable donation** – applying for support to the range of different charity, trust and grant giving bodies.

It is likely that a combination of self and assisted funding will be required. For example, many charitable bodies will not fully fund equipment, but will expect a contribution from the applicant. The time between applying and receiving funding can be long. It is often more likely that charities will fund the purchase of equipment, rather maintenance and general costs of the sport.

The charitable bodies will have procedures for application and applicants will be expected to show commitment to their long term involvement in the sport.

**Commitment & Eligibility**
References from a coach or governing body are often required alongside an application for sporting equipment demonstrating:
- Personal contribution
- Dedication to training – using borrowed or second hand equipment
- Evidence of performances – competitions to date
- Membership of an Athletics/Racing Club
- Classification/eligibility – confirmed or pending

**Conditions of Funding**
Funded racing chairs may remain the property of the charity or organisation. Once an athlete retires or gets a new racing chair, old equipment should be returned or passed on, for example to a local club for new athletes, with the funding organisations permission. This is essential to maintain growth and accessibility of the sport.

All funded chairs should be returned to charities or donated to a local group – and not sold on privately. If you have any equipment to pass onto a group, please contact disability@englandathletics.org. This includes chairs, gloves, spare wheels and tyres.

**Funding Sources and Opportunities**
Below is a list of charities and organisations to research if you need assistance in purchasing a racing wheelchair. The below list is not exhaustive so ensure that you investigate all the options first.

- **Adam Millichip Foundation**
  Individuals looking to improve their quality of life by taking up a new venture. Athletes new to the sport, not for competition purposes.
  www.adammillichipfoundation.org

- **Aspire**
  Supporting people with a spinal injury. Part funding for new equipment only.
  www.aspire.org.uk/1aspire-grants.aspx

- **Barchester Charitable Foundation**
  Adults with a physical disability. £1,500 to £5,000.
  www.bhcfoundation.org.uk/Default.aspx

- **Boparan Charitable Trust**
  Young people under 18 years
  www.theboparancharitabletrust.com
**Information, Equipment and Funding: Wheelchair Racing**

**Cash4Kids**  
Regional  
[www.cashforkids.uk.com](http://www.cashforkids.uk.com)

**Caudwell Children**  
Young people under 18 years. Means-tested.  
[www.caudwellchildren.com](http://www.caudwellchildren.com)

**Cerebra**  
Young people up to 16 years with neurological disability (i.e. CP, brain damage). Up to 80%.  
[www.cerebra.org.uk/English/gethelp/grants](http://www.cerebra.org.uk/English/gethelp/grants)

**Children Today**  
Up to 25 years.  
[www.childrentoday.org.uk](http://www.childrentoday.org.uk)

**Challenged Athlete Foundation**  
IPC eligible – i.e. must have UKA classification. Applications open: 1st September - 1st December. Max $2,500  
[www.challengedathletes.org](http://www.challengedathletes.org)

**Children's Hope Foundation**  
[www.childrenshopefoundation.org.uk](http://www.childrenshopefoundation.org.uk)

**Dickie Bird Foundation**  
Young people under 18 years.  
[www.thedickiebirdfoundation.co.uk](http://www.thedickiebirdfoundation.co.uk)

**Dream It Believe It Achieve It**  
[www.dreamitbelieveitachieveit.com](http://www.dreamitbelieveitachieveit.com)

**Elifar Foundation**  
Young people and adults.  
[www.elifarfoundation.org.uk](http://www.elifarfoundation.org.uk)

**Family Fund**  
Young people under 18 years. Means-tested.  
[www.familyfund.org.uk](http://www.familyfund.org.uk)

**Get Kids Going**  
Young people up to 26 years  
[www.getkidsgoing.com](http://www.getkidsgoing.com)

**Lord Taverners**  
Young people aged 8 to 25 years. 50% of cost up to £1,500. Applications by Sports Club, Association or School.  
[www.lordstaverners.org/sports-wheelchairs](http://www.lordstaverners.org/sports-wheelchairs)

**READY Charity**  
Young people under 21 years  
[www.readycharity.org](http://www.readycharity.org)

**Richard Overall Trust**  
Young people & Students  
[www.richardoveralltrust.co.uk](http://www.richardoveralltrust.co.uk)

**Roald Dahl Charity**  
Up to 25 years with an acquired brain injury (i.e. stroke etc). Up to £500.  
[www.roalddahlcharity.org](http://www.roalddahlcharity.org)

**SF Charity**  
Disabled people – all ages. Up to £1,000 suggested limit.  
[www.sfcharity.co.uk](http://www.sfcharity.co.uk)

**Variety**  
Young people up to 18 years  
[www.variety.org.uk](http://www.variety.org.uk)

**Wheel Appeal**  
Priority will be given to:  
- Adults aged 18 and over who became disabled within the last two years  
- Adults aged 18 and over who have never owned a sports wheelchair  
- Disabled young people who have never owned a sports wheelchair  
- Individuals wounded in the service of our country  

**WhizzKidz**  
Young people under 18 years  
[www.whizz-kidz.org.uk/gethelp/getequipment](http://www.whizz-kidz.org.uk/gethelp/getequipment)

**Women’s Sport Trust**  
Individuals and organisations can apply for grants of £500-£5000 to support female racers  
[www.womenssporttrust.com](http://www.womenssporttrust.com)

Also local Lions Clubs, Rotary International, Round Table etc

**Funding for Clubs & Groups**

**Sported**  
[www.sported.org.uk](http://www.sported.org.uk)

For clubs looking to establish new training groups and provide chairs for athletes to try wheelchair racing there are a number of government and regional organisations that help. Your local County Sport Partnership should be able to help provide latest funding information and guidance whilst your Club and Coach Support Officer will be able to support you with the basic requirements for setting up a group. Advice from experienced athletes and coaches should be sought when purchasing racing wheelchairs.

Club chairs provide the opportunity for inductions and support new athletes getting started. It is important they are kept in good condition, safe to use and available for when new recruits arrive. Once involved, athletes should seek their own racing chair when appropriate to support the growth of the club by enabling the club chairs to be used new members.

Thank you to Wheelpower, British Wheelchair Racing Association and Job King for their support in creating this document.