

K9 ORTHOPAEDIC LEG TROLLEY



+ In place of crutches
for lower leg injuries,
gives easy mobility
with hands free.



K9 IS MANUFACTURED BY:

**John Reid & Sons
(Structsteel) Ltd**

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Patent: 8602025

Load tested to:

180 Kilograms

396 Pounds

28.3 Stone



K9 ORTHOPAEDIC LEG TROLLEY

This device was designed by the MD of John Reid & Sons (Strucsteel) Ltd to help him after he suffered a very bad foot injury over 20 years ago. He had little thought of putting it into production at the time, but enthusiasm and insistence from Orthopaedic Surgeons persuaded him. Since then it has been regularly ordered by hospitals, private individuals and doctors and surgeons themselves.

It can be used instead of crutches in the following cases:

- + Ruptured Achilles tendons.
- + Broken / disabled feet.
- + Lower leg amputations.
- + Broken / sprained ankles.
- + Diabetics' trophic plantar ulcers.
- + Rheumatic feet.
- + Gout.
- + Bunions.
- + Heel operations.
- + Most lower leg injuries / disabilities.

- + It provides mobility without crutches and with little more effort than walking.
- + Hands and arms are left free for normal use.
- + It can be steered with the knee and becomes a sort of substitute lower leg.
- + It becomes a useful footrest when the user is seated.
- + It is adjustable for height for users from about 4'6" (1.42m) tall upwards.
- + It weighs only 6kg.
- + It has been load tested to 180kg (396lbs, 28.3 stones).

A CLINICAL TRIAL by Mr Paul Roberts FRCS and Susan Carnes at the Royal Orthopaedic Hospital, Birmingham, established that this device required 25% less energy expenditure than crutches. It is also much more comfortable than crutches.

The whole unit is easily demountable for packing and transportation.





A comparison of energy expenditure when walking with crutches and when walking with the trolley by Paul Roberts and Susan Carnes at the Royal Orthopaedic Hospital, Birmingham.

Sixteen fit volunteers with an age range of 21 to 40 years (mean 25), familiarised themselves with walking non-weight bearing on one limb on a treadmill using axillary crutches, elbow crutches and the orthopaedic scooter. Each volunteer then walked at three kilometres an hour for five minutes on each device in random order. During this period their gas exchange was monitored using an Oxycon-4 gas analyser and they were asked to give their rating of perceived exertion (RPE) each minute.

The RPE is a score determined by how hard the subject finds the exercise; a score of 7 represents 'very, very light' work up to a score of 19 'very, very heavy' work. (Borg and Noble 1974)

RESULTS

The energy expenditure and the mean RPE for normal walking and walking using each device are presented in Tables 1 and 2. Using the paired t-test there was a highly significant difference in both the energy consumption and the mean RPE between using the orthopaedic scooter and either type of crutch ($p < 0.0001$).

The scooter required 25% less energy expenditure than crutches!

Method of Walking	Mean Expenditure Kcal/Kg/hr (s.d.)	% of Normal Expenditure		Method of Walking	Mean score (s.d.)
Normal	2.8 (0.54)	100		Normal	6.7 (0.6)
K9 scooter	4.8 (1.01)	171		K9 scooter	10.3 (1.3)
Elbow crutches	6.6 (1.63)	236		Elbow crutches	13.0 (1.8)
Axillary crutches	6.5 (1.23)	232		Axillary crutches	12.6 (1.6)

Table 1. Energy expenditure whilst walking

There was no significant difference in energy consumption ($p = 0.44$), or mean RPE ($p = 0.31$) between the two types of crutch

Table 2. Rating of Perceived Exertion (Borg and Noble 1974)

DISCUSSION

Beath, Bahrke and Balke (1974) showed that axillary and elbow crutches required similar energy expenditures. Our study confirms this and demonstrates that both the actual and the perceived work of walking are significantly reduced using the orthopaedic scooter. It also has other advantages: the hands are free for other uses, the injured foot is elevated and not dependent as it is with crutches, body-weight is distributed through both legs and the proximal muscles of the injured leg are used extensively which may help to preserve muscle bulk and bone strength. The scooter is particularly valuable in the rehabilitation of patients with ankle and foot injuries who must remain non-weight-bearing.

It has also been used successfully in the treatment of patients with diabetic plantar ulcers as an alternative to bed-rest or contact plasters (F. I. Tovey, personal communication).

K9 TESTIMONIALS

Here are just a few of the comments we have received:

“ I have been lent a K9 by the Eastbourne District Hospital for use during 3 months non weight bearing following an operation on my ankle. I would like to thank everyone involved in the invention and production of K9 as it has been an invaluable aid to me. I am 73 years old and was dreading the inactivity and subsequent weakening of muscles which I associated with the difficult use of crutches. I have been able to whiz round my kitchen cooking and baking bread and, due to the stability of K9, found it easy to bend down to use the washing machine and pick up dropped objects from the floor. ”

Pat Hart

“ I bought the K9 9 days ago and have rarely been off it since. Just to let you know for your database that I have walked more than 1 mile, half of it uphill. Tip for users is to use an arm crutch when outside as this makes up and down hills very easy (I know you do not recommend this!) and makes use a lot more stable. So far I can prepare and clear up a meal; fill and empty the dishwasher; fill and empty the washing machine; garden including pruning; take the bins out; clean windows; sweep leaves. I am doing everything in the house that I was before apart from dashing up and down stairs. Along the High Street I am faster than most other pedestrians. The K9 is much safer than crutches on smooth floors as in a supermarket. Before I started using it I had 2 falls after coming in from the rain outside onto such floors. I went to fracture clinic this week and was worried I would be lynched and the K9 stolen from me as the other patients struggled on crutches. ”

Dr Graeme MacKenzie

“ I've never much liked the idea of hands-free phones, but hands-free walking is wonderful. Without the K9 a slow recuperation would have been much slower – and duller. ”

Andrew Marr

BBC journalist after rupturing his Achilles tendon.

“ I returned from hospital yesterday and want to tell you that Rover (my K9) is MARVELLOUS. Absolutely fantastic! I'm very sorry that Mr Reid had his mishap which caused him to need to invent the K9—but SO very grateful that he did invent it and make it available to others. Perhaps you could kindly pass on my very heartfelt thanks to him please? I took my crutches and Rover with me to hospital for my op on Tuesday. The Physio's had heard of K9 but not actually seen one and were most interested in him (as was everyone). The likely time for me to be in plaster has been increased from 13 weeks to 5 months!! The thought of only having mobility by crutches for 5 months appals me but with Rover it is a COMPLETELY different picture. It's marvellous. Thanks so much for making it available. ”

Donald Morton

K9 TESTIMONIALS

“ I am an orthopaedic surgeon at the Royal Orthopaedic Hospital in Birmingham and last week ruptured my Achilles tendon whilst playing squash. Fortunately I had to spend only one day on crutches and an unpleasant day it was too. After a morning on wards and an afternoon in the clinic I had blisters on my hands and chest wall and was exhausted. Since then I have been using K9 and it has proved to be a revelation. I have done ward rounds, clinics and a full day operating (including major spinal surgery) with only minimal discomfort and inconvenience. ”

P. Roberts F.R.C.S

“ Ode to John Reid aka Hotspur.

As I whizz up and down on my little K9,

I bless Mr Reid's name time after time,

O dear John Reid! O sweet K9!

My spirits are high & my heel will be fine! ”

Susannah York, Actress.

“ I am writing to thank you much for sending up a K9. As with all the previous users, I found this invaluable in that it enabled me to work whilst wearing a non-weight bearing plaster for my ruptured Achilles tendon. As well operating and doing out-patients, I was able to do some home decorating and even attend a dance, during which I achieved a Gay Gordons with the trolley, which raised a few eyebrows! I am looking forward to being able to use it for one of my patients and congratulate you on inventing what is an ingenious and invaluable piece of equipment. ”

J.G.B MacLean, F.R.C.S (Orth.)

Consultant Orthopaedic Surgeon

“ Just a note to say thank you for the efficiency of your service. The K9 arrived at about 3pm this afternoon after ordering it yesterday. My mother in law is completely blind and had a fall a couple of weeks ago, breaking some bones in her foot. Unable to put weight on her left foot has rendered her completely inactive and she has found first crutches and then a Zimmer frame completely impossible. Today, when I delivered her the K9, she immediately took to it, and was very quickly scooting round the house and was able to stand, with her hands free, could get into the garden for the first time in 2 weeks and was able to make herself tea and wash dishes! I just hope that she doesn't get too over confident too quickly!

I was a very early user of a prototype of the K9, 26 years ago after I broke my leg, and I remember at the time, that I was strangely disappointed when my leg was better and I had to stop using it! I was even Best Man at my brother's wedding – on the K9! I am impressed with how the product has developed since then – I just wish that everyone with a lower leg injury knew about it – as they would find life infinitely easier. ”

Aaron Gershfield

K9 ORTHOPAEDIC LEG TROLLEY



HANDLE TO ASSIST WITH STEERING WHEN NEEDED

HANDS FREE OPERATION IS EASILY POSSIBLE WITH A LITTLE PRACTICE

FOAM PADDED & SHAPED SHIN CRADLE

SPLAYED LEG ARRANGEMENT FOR MAXIMUM STABILITY

HANDWHEEL HEIGHT ADJUSTMENT SYSTEM

360° FULLY ROTATING CASTORS FOR EASE OF MANOEVR

Load tested to:
180 Kilograms
396 Pounds
28.3 Stone



K9 USAGE GUIDELINES



- + It is a wheeled device to aid those who have lower leg, ankle or foot injuries or disabilities.
- + Provides mobility without crutches with little more effort than walking.
- + Hands and arms are free for normal use.
- + Can be steered with the knee and becomes a sort of substitute lower leg.
- + Very manoeuvrable, turns in its own length.
- + Scoots 2 or 3 metres at one push.
- + Becomes a footrest when seated.
- + Weighs only 6kg and can be dismantled in 4 pieces for easy packing and transportation.
- + It is height adjustable to suit individual requirements and is suitable for persons of 1.42m (4ft8") upwards.
- + It is load tested up to 180kg (28 stones).
- + It should not be used on stairs or escalators, on slopes or on boats or aircraft. Not suitable for use over rough ground or on beaches (sand or gravel).



All sale of goods are subject to our standard terms and conditions of sale - please see overleaf. If you are exempt from VAT we can supply K9 zero rated. If required we will supply a suitable form for completion.

To order or for further information please telephone on +44 (0) 1202 483333 or visit our website at

www.walk-aid.co.uk

K9 SALE TERMS & CONDITIONS

B to C - Standard terms and conditions for sale of goods of John Reid & Sons (Structsteel) Ltd

1 DEFINITIONS

In this document the following words shall have the following meanings:

- 1.1 "Buyer" means the person who buys Goods from the Seller;
- 1.2 "Consumer" shall have the meaning ascribed in section 12 of the Unfair Contract Terms Act 1977;
- 1.3 "Goods" means the articles that the Buyer agrees to buy from the Seller;
- 1.4 "List Price" means the list of prices of the Goods maintained by the Seller as amended from time to time;
- 1.4 "Seller" means John Reid & Sons (Structsteel) Ltd, Reid Street, Christchurch, Dorset, BH23 2BT, England.
- 1.5 "Terms and Conditions" means the terms and conditions of sale set out in this document and any special terms and conditions agreed in writing by the Seller.

2 GENERAL

- 2.1 These Terms and Conditions shall apply to all contracts for the sale of K9 Orthopaedic Leg Trolley Goods by the Seller to the Buyer and shall prevail over any other documentation or communication from the Buyer.
- 2.2 All orders for Goods shall be deemed to be an offer by the Buyer to purchase Goods pursuant to these Terms and Conditions and are subject to acceptance by the Seller. The Seller may choose not to accept an order for any reason.
- 2.3 Acceptance of delivery of the Goods shall be deemed conclusive evidence of the Buyer's acceptance of these Terms and Conditions.
- 2.4 Any variation to these Terms and Conditions shall be inapplicable unless agreed in writing by the Seller.
- 2.5 Nothing in these Terms and Conditions shall affect the Buyer's statutory rights as a Consumer.

3 PRICE AND PAYMENT

- 3.1 The price of the Goods shall be that stipulated in the Seller's current List Price/ on the Seller's website/as contained in the Seller's Quotation (as applicable) at the date of order or as agreed between the parties. The price is EXCLUSIVE of VAT and EXCLUSIVE of any delivery charges unless declared otherwise.
- 3.2 Payment of the total purchase price (including VAT and any delivery charges) must be made in full before dispatch of the Goods.

4 DELIVERY

- 4.1 Delivery of the Goods shall be made by the Seller notifying the Buyer that the Goods are available for collection at the Seller's premises or for delivery to such place and on such terms as agreed between the Seller and the Buyer at the time the order is placed.
- 4.2 All Goods, wherever possible, will be delivered within 30 days of the order being placed and the Buyer shall make all arrangements necessary to take delivery of the Goods whenever they are tendered for delivery.
- 4.3 The Seller shall use its reasonable endeavours to meet any date stated for delivery. In any event time of delivery shall not be of the essence and the Seller shall not be liable for any losses, costs, damages or expenses incurred by the Buyer or any third party arising directly or indirectly out of any failure to meet any estimated delivery date.
- 4.4 Some Goods may not be in stock at the time the order is placed. In the event that the Seller is unable to deliver the Goods within the time specified in Clause 4.2, the Seller will contact the Buyer to advise of the situation and the Buyer shall be entitled to cancel the order and receive a full refund or agree a later delivery date.
- 4.5 Title and risk in the Goods shall pass to the Buyer upon delivery of the Goods.

5 WARRANTY

The Seller warrants that the Goods will at the time of delivery correspond to the description given by the Seller.

6 CANCELLATION AND RETURNS

- 6.1 The Buyer shall inspect the Goods immediately upon receipt and shall notify the Seller within 7 days of delivery if the Goods are damaged or do not comply with any of the Contract.
- 6.2 The Seller shall not accept any responsibility for items which arrive damaged. Where a claim of defect or damage is made then it shall be the responsibility of the Buyer to send back faulty Goods. It is at the Sellers discretion as to whether the Buyer shall be entitled to replacement Goods or a full refund (including delivery costs, if applicable) plus any return carriage charges if the Goods are in fact defective.
- 6.3 Where returned Goods are found to be damaged due to the Buyer's fault the Buyer will be liable for the cost of remedying such damage.
- 6.4 Refunds are only given where an item is not as described when sold.
- 6.5 All orders online are final and cannot be cancelled.

7 GUARANTEES

In addition to the Buyer's statutory rights, the Seller guarantees all Goods against faulty workmanship and materials for a period of 30 days from the date of delivery.

8 LIMITATION OF LIABILITY

- 8.1 Nothing in these Terms and Conditions shall exclude or limit the liability of the Seller for death or personal injury, however the Seller shall not be liable for any direct loss or damage suffered by the Buyer howsoever caused, as a result of any negligence, breach of contract or otherwise in excess of the price of the Goods.
- 8.2 The Seller shall not be liable under any circumstances to the Buyer or any third party for any indirect or consequential loss of profit, consequential or other economic loss suffered by the Buyer howsoever caused, as a result of any negligence, breach of contract, misrepresentation or otherwise.

9 FORCE MAJEURE

Neither party shall be liable for any delay or failure to perform any of its obligations if the delay or failure results from events or circumstances outside its reasonable control, including but not limited to acts of God, war, terrorism, strikes, lock outs, accidents, fire, flooding, breakdown of plant or machinery or shortage or unavailability of raw materials from a natural source of supply, and the party shall be entitled to a reasonable extension of its obligations.

10 SEVERANCE

If any term or provision of these Terms and Conditions is held invalid, illegal or unenforceable for any reason by any court of competent jurisdiction such provision shall be severed and the remainder of the provisions hereof shall continue in full force and effect as if these Terms and Conditions had been agreed with the invalid, illegal or unenforceable provision eliminated.

11 GOVERNING LAW AND JURISDICTION

These Terms and Conditions shall be governed by and construed in accordance with the law of England and the parties hereby submit to the exclusive jurisdiction of the English courts.



K9 ORTHOPAEDIC
LEG TROLLEY

K9 IN USE

