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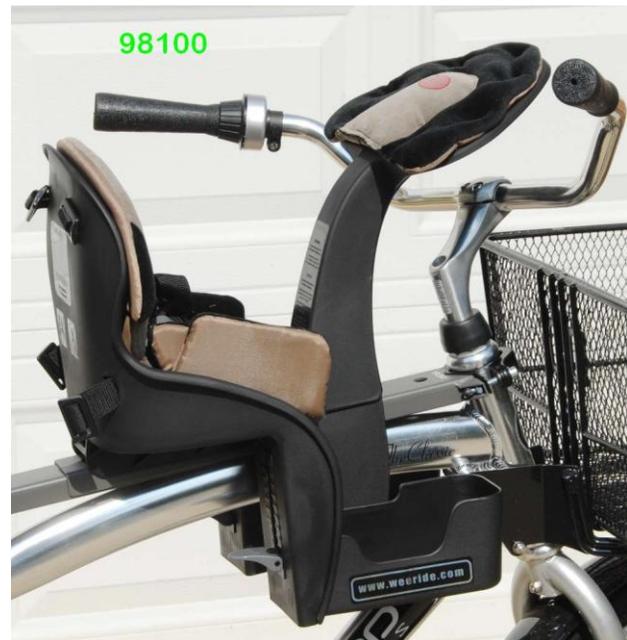
June 28, 2009

Arnold Kamler, President  
Kent International, Inc.  
60 East Halsey Road  
Parsippany, NJ 07054-3705

*Re: WeeRide Kangaroo Center-  
Mounted Child Carrier Testing  
Models: 98077 and 98100  
Our File No. 29.0101*

Dear Mr. Kamler:

In accordance with your request this firm has subjected two models of the WeeRide Kangaroo center mounted child carrier seat to safety and functional testing. The two models, depicted in the photos below, are similar, with 98077 offering a more "sporty" look and contrasted with a more "deluxe" appearance of model 98100.



## Assembly & Installation

Both models were accompanied by Instruction Manuals and two wrenches (the only tools required for assembly and installation). As packaged, the main seat assembly and its pedestal were separate and had to be joined by a single Allen head cap screw. An adjustable support bar served as the



interface between the assembled polymeric seat and the Owner's bicycle. The support bar, depicted in the photo below was comprised of front and rear halves, clamped to the bicycle head tube and seat post, respectively, with four bolts.



The front support bar clamp is shown at the darker **blue** arrow above. The rear support bar clamp is at the lighter **blue** arrow. Ends of the four attachment bolts are covered with rubber caps (**green** arrows) for protection. The support bar halves were joined near the center by another Allen head cap screw, forming a rigid steel structure. The seat assembly was then mounted astride the support bar and affixed with black thumbscrew (with integral molded knob) requiring no tools. The location of the knob is shown in the photo below at the **orange** arrow.



Once installed, the height of the child's foot rests could be individually adjusted utilizing a clever cam-lock (**yellow** arrow above) without having to resort to tools. In all, the assembly and installation of the unit required less than 15 minutes.

Both models were fitted with 5-point harness systems to restrain the child within the seat. The harnesses were deemed strong and durable, functioning in a manner akin to standard automobile child safety seat restraint systems.

## Safety Testing

Both center mounted child carriers are rated to carry up to 40 pounds. Currently, there is not a test standard for units of this innovative design. Accordingly, a test protocol was adopted that included strapping a 50 pound sack of play sand into the carrier in the child's seating position and the addition of 10 more pounds distributed in the two foot rests. The child carrier system was thereby overloaded by 50% and subjected to the Consumer Product Safety Commission (CPSC) cleared course test.<sup>1</sup> That test is normally employed as a "proof test" for completed bicycles and serves to impart repetitive vertical impacts to the bicycle/child carrier system. The child carrier exhibited no fracture, permanent deformation or degradation of its integrity or capabilities as a result of that test.

## Warnings & Instructions

Both models were provided with instruction manuals deemed sufficiently clear to permit proper assembly and installation. In addition, both manuals contained warnings and cautions appropriate for proper use of the devices. Significantly, both manuals contained the warnings considered mandatory for [rear mounted] child carriers.<sup>2</sup> In addition, the manuals were replete with practical suggestions and instructions for proper maintenance and use of the child carriers.

## Conclusion

Based upon the foregoing testing and analysis, it is the writer's opinion that the subject center-mounted bicycle child carriers were properly designed and manufactured in accordance with accepted engineering practice. Further, the tested equipment violated no known applicable codes or standards. The tested Kangaroo models 98077 and 98100 were, in the writer's opinion, reasonably safe for their intended use, presenting users with no inordinate hazard or safety compromising condition.

Kindly feel free to contact the writer should additional information or discussion be required.

Very truly yours,



David A. Mitchell, P. E.  
Engineering Consultant

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<sup>1</sup> "Requirements for Bicycles", United States Consumer Product Safety Commission, Washington, DC, 16 CFR 1512.18(p).

<sup>2</sup> "Standard Specification and Test Method for Rear-Mounted Bicycle Child Carriers", F1625-00, ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428.