

Eco-Bike Tornado

by **Cst. Nigel Keane, UK IPMBA Member**
Royal Parks Constabulary, Hyde Park, London (UK)

I have been using Eco-Bike electrically assisted bikes since 2001 when I was asked by my Inspector to test one to "see what you think." As a result of my test, we took delivery of a steel framed Hurricane in 2002 for use by the Community Liaison Constable (i.e., me), which was used extensively within the Central London Royal Parks before being replaced by a steel framed Tornado. Shortly thereafter, a second Tornado was obtained for the CLC at Richmond Park.

In June 2004, I borrowed a prototype alloy framed Tornado to show at the UK Police Seminar/IPMBA Conference at York. In January 2005, Dave Paddon, the Managing Director of Eco-Bike UK, suggested that I might like to have an upgraded version of the Tornado and so in March I took delivery of the latest model.

The new Tornado has an alloy frame and a lighter NiMh battery. In the UK, electrically assisted bikes are restricted to 200 watt motors and a top non-pedalled speed of 15mph. Otherwise they become classified as mopeds with all the problems of registration, etc. The motor is contained in the rear wheel and the battery is in a cradle on top of the down-tube. The bike has 21 speed Shimano gears with Revoshift grip shifts fitted as standard. The frame has full rear suspension provided by a Kindshock unit and Zoom 800 coil spring front forks. Stopping power is via a pair of Novatec cable operated disc brakes, which are very effective, considering that I weigh just over 250 lbs!

I have found the Tornado to be the ideal bike for a ten-hour tour of duty, as I spend nearly all my duty time on a cycle. The bike has on/off road Kevlar reinforced tires which means you are not restricted to following tracks within the park and highway use is no problem. During events within the park, I have had no difficulty in moving through dense crowds and climbing kerbs and descending steps (yes, we do have them in Hyde Park). I have had only favourable responses from the public whose main question is, "Where can I buy one?"

The motor automatically operates when you pedal; however, there is a thumb-operated throttle lever for no-pedal situations. Braking automatically cuts the power. Should the battery go flat whilst on patrol, the gearing permits easy non-powered riding.

Although the police version of the Tornado has blue strobe lights fitted, I found that they are only really effective in poor light or darkness. The electric horn, however, is louder than the one on my Harley Sportster and needs to be used with care so as not to alarm pedestrians.

Overall, I have found the Eco-Bike Tornado to be ideal for general policing duties. The extra weight of the battery is not noticeable even at slow speeds. One great advantage over an ordinary cycle that I have found is if you go to a situation in a hurry you do not arrive needing time to recover your breath but are ready for immediate action.

I would like to thank Eco-bike UK's Dave Paddon, Managing Director, and Dave Ebdon, Technical Manager, for providing the specifications.

Color	Silver
Frame	7005 series alloy tubing
Forks	Zoom Force 800 alloy with internal coil springs
Battery	36 volt 12 Ah NiMh
Motor	200 watt internal geared, brushed
Gearing	Shimano Derailleur TY 41 (21 Speed)
Chain wheel	42/32/22 TA-314
Shift	Shimano Revoshift twist-grips
Brakes	Novatec Cable operated discs front & rear
Chain	Shimano UG50
Handlebars	Alloy riser type
Fenders	Road or off road patterns available as required
Weight including battery	79 lbs
Battery pack	20lbs
Approximate price	£1,175 (depends on specs)

Constable Nigel Keane has been a member of the Royal Parks Constabulary (RPC) in London UK for over 32 years. He recently became, at the age of 58, one of the oldest officers to pass the IPMBA Police Cyclist Course. He has been involved in community policing and riding police cycles for the last 10 years and is currently serving at Hyde Park. He can be contacted at Hyde Park at either nkeane@royalparks.gsi.gov.uk or phone: 020 7061 9646.

© 2006 IPMBA. This review appeared in the Winter 2006 issue of *IPMBA News*.