



Performance & Sports Trike



Assembly Instructions

1.0 Introduction

Thank you for choosing KMX®!

When properly assembled and set up your KMX® will provide many years of enjoyment.

KMX Karts Ltd does its utmost to design and produce safe and fun products and so the utmost care has been used to ensure that your KMX® is strong, safe and durable.

This manual gives you instructions for assembling and maintaining your KMX®, as well as the guarantee conditions. Please take note of the directions for use, to ensure many years of service from your KMX®. Please keep this manual for future reference.

2.0 You Need to read this manual

Your KMX® has a long life span. It should be assembled by an adult, who should be aware of the safety instructions and maintenance schedule.

This manual ensures the best results from your KMX®. It is important for you to know the KMX®, its characteristics and use.

The KMX® is a fully functional Trike recumbent. This means your KMX® is allowed on the public roads, and complies with the European General Products Safety Regulations. It has also been tested to all relevant section of EN14764, the UK standard for bikes, and the CPSC for Bikes in the USA. For safety we recommend that an Adult should supervise any child using a KMX®.

Warning: Your KMX®, like bicycles, Roller Blades, Roller Skates, Skateboards, Cars, Boats or any other moving vehicle, can cause injury. Exercise caution when riding your KMX®. Pay attention to street signs, be courteous to pedestrians and road users and at all times obey the law. Ensure that both hands are on the handgrips and both feet are on the pedals at all times that the KMX® is in motion.

KMX Karts Ltd also recommends that you wear proper protection, such as a helmet and gloves while riding. Please bear in mind children's natural urge to play and that this could cause unexpected dangerous situations, for which the manufacturer and KMX Karts Ltd cannot be held responsible. Teach your children how to use the KMX® and point out possible dangers to them.

The KMX® is designed for riders taller than 1.5m and weighing less than 100kg for off road riding and 135kg for on road riding. Should you have any queries or problems, please contact your supplier or visit our Website: www.kmxkarts.com.

KMX Karts Ltd cannot be held responsible for any omission in this users' manual. Please always apply the highest safety precautions and follow these guidelines when the user is using it.

3.0 Assembly Instructions

1. Carefully lift all the items from the box and remove the protective packaging.
2. Stand the box on its open end and place the trike frame on top. (Photo 1)

FRONT WHEEL ASSEMBLY

3. Take the left front wheel assembly. Insert the spacers and attach to the frame using the M10 bolt, nut, washers and plastic cap provided. (Drawing 1). Ensure that the chain tubes are below the steering rod. (Appendix 1)
4. Repeat this process for right wheel.
5. Attach the right hand track rod end (Drawing 2)

REAR WHEEL ASSEMBLY

6. Insert the rear wheel and secure using the quick release clamp. (Photo 2)
7. **For Tornado F3 models only** – Insert the rear wheel into the frame ensuring that the axle is fully seated in the dropouts. Slide the torque arm over the axle and secure it using the nut and bolt provided. Attach the axle nuts and washers. (Photo 17 and 18)

MODELS WITH REAR BRAKE ONLY (TYPHOON AND COBRA)

8. Insert the left front brake cable into the double pull brake lever. (Photo 3).
9. Carefully cut the cable ties attaching the rear brake cable to the left handlebar. Attach the rear brake (Photo 4). Insert the brake cable into the plastic clips on the frame and secure it to the steering rod with the cable tie provided. (Appendix 1).

Note: For instructions on how to set up your brakes go to <http://www.bengalperformance.com.tw> click on “Downloads” and then your language of choice in the Mechanical Disc Brakes Section.

REAR DERAILLEUR

10. Carefully cut the cable ties securing the gear cable to the right wheel handlebar. Attach the rear derailleur to the gear hanger (Photo 5). Insert the gear cable into the plastic clips on the frame and secure it to the steering rod with the cable tie provided. (Appendix 1).
11. To assist chain attachment turn the right hand Grip Shift Gear changer to No. 1 (for the Venom model – pull the right hand Bar End shifter fully upwards).

Note: For instructions in how to set up the rear derailleur, go to:

http://techdocs.shimano.com/media/techdocs/content/cycle/SI/Tourney/RearDerailleur/SI-5V80A-En_v1_m56577569830612967.pdf

12. **For Tornado F3 models only** – Attach the Chain Tensioner (Rear Derailleur) to the gear hanger. Adjust the chain tensioner cable until the upper cog is directly in line with the drive cog on the rear wheel (Photo 19). Insert the cable clamp into the slot on the changer mechanism and clip the cable adjuster into the Fulcrum Lever (Photo 20). Insert the gear cable into the plastic clips on the frame and secure it to the steering rod with the cable tie provided (Appendix 1). **Note: On this model do not use the rear most cable clip on the frame.**

BOOM ASSEMBLY

13. Insert the boom into the front of the frame.
14. **For Models with Front Derailleur only** - Ensure the left hand twist grip shifter is in No. 1 position (for Venom model – move the bar end lever fully forward). Adjust the front derailleur until it is over the smallest front chain ring. Pass the front derailleur cable through the boom and into the derailleur clamp. (Photo 6) Clip the gear cable into the cable clips on the boom and frame. To assist chain attachment turn the Twist Grip Gear changer to No. 8 or 9 depending on which model you have. (For Venom model – pull the right hand bar end shifter fully upwards).

Note: For instructions on how to adjust the front derailleur, go to

[http://www.microshift.biz/driver/drivers/Front%20Derailleur%20\(MTB\)_microSHIFT.pdf](http://www.microshift.biz/driver/drivers/Front%20Derailleur%20(MTB)_microSHIFT.pdf)

15. Attach the pedals. Note the left pedal has a left hand thread.

SEAT ATTACHMENT

16. Slide the seat stays over the two seat stay adjuster rods attached to the rear of the frame. Insert an M6 bolt into the first threaded hole on each seat stay adjuster rod. (Photo 7)
17. Position the seat on the frame and assemble the sliding seat clamp. (Drawing 3).
18. Attach the rear mudguard to the top of the seat frame (Photo 8).

TRIKE SET UP

19. Place the trike on the floor.
20. Slide the boom into the shortest position.
21. Position the seat along the frame to give a comfortable angle when seated.
Sit in the seat and adjust the boom length so that your right leg is straight with no bend at the knee when the right pedal is at its furthest point and your heel is on the pedal (Photo 9). This will ensure that when you are cycling and you have the ball of your foot on the pedal, you will have a slight bend at the knee (Photo 10). If you cannot reach the pedal then move the seat forward by extending the seat stays and sliding the seat clamp forward on the frame. When you are happy with your final position, tighten the boom, seat stay and seat clamp screws.

Note: Never extend the boom beyond the Stop position mark.

22. The lumbar support position is adjustable. Loosen the two clamps at the rear of the seat and move them up or down the seat frame to give the most comfortable position.

HANDLE BAR SET UP

23. Sit in the seat and set the handlebars to a comfortable reach and angle, making sure your hands are clear of the tyres. Tighten the handlebar clamps

Note: The maximum extension of the handlebars is 40mm.

CHAIN CONNECTION

24. Place the trike upside down on the box. (Photo 11).
25. Starting from the rear of the trike and using Appendix 2 as a guide, insert the chain into the chain tubes and around the rear derailleur.
26. Pull the bottom of the derailleur forwards and temporarily secure it to the frame with the cable tie provided. (Photo 12)
27. Place the top chain through the front derailleur (if fitted) and around the largest front chain ring (see Appendix 2).
28. Overlap the two ends of the chain and remove the excess links at the position marked on Photo 13. You should end up with two "male" ends into which you can connect the quick link connector provided. (Photo 14). Cut the cable tie to release the rear derailleur.
29. **For Tornado F3 model only** - Place the top chain around the front chain ring and connect the two ends with the quick link connector provided. **Note: No chain length adjustment is required for this model.**

FRONT WHEEL ALIGNMENT

30. Refer to Photo 15. Place the trike on level ground and measure between the inside of the front tyres in the positions shown (A and B). Loosen the lock nuts at either end of the steering rod (1 x Left & 1 x Right hand thread). Turn the rod until the measurement between the front and rear of the tyres is equal. Now retighten the lock nuts.

FITTING THE FLAG

31. If required fit the Flag to the rear wheel axle by first loosening the quick release clamp or axle nut. Insert the flag bracket and tighten the clamp or axle nut. (Photo 16).



PHOTO 1



PHOTO 2



PHOTO 3



PHOTO 4



PHOTO 5

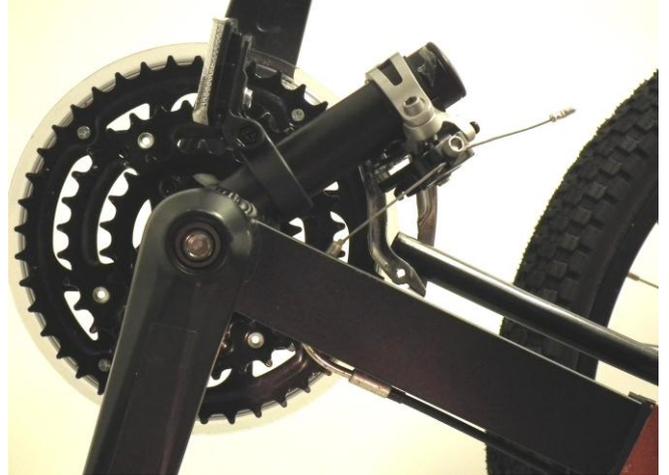


PHOTO 6



PHOTO 7



PHOTO 8



PHOTO 9



PHOTO 10



PHOTO 11



PHOTO 12



PHOTO 13



PHOTO 14

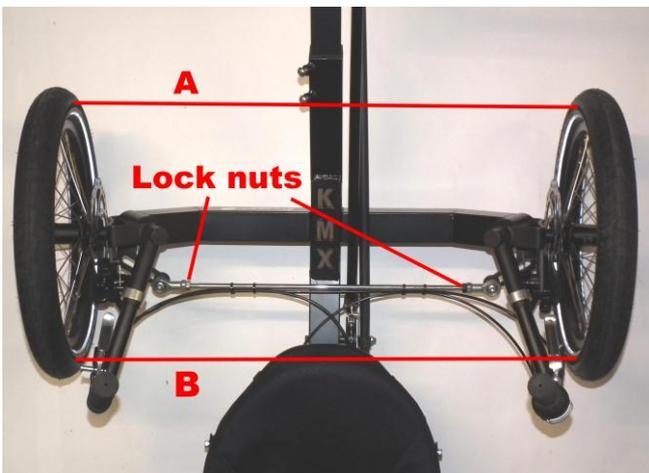


PHOTO 15



PHOTO 16

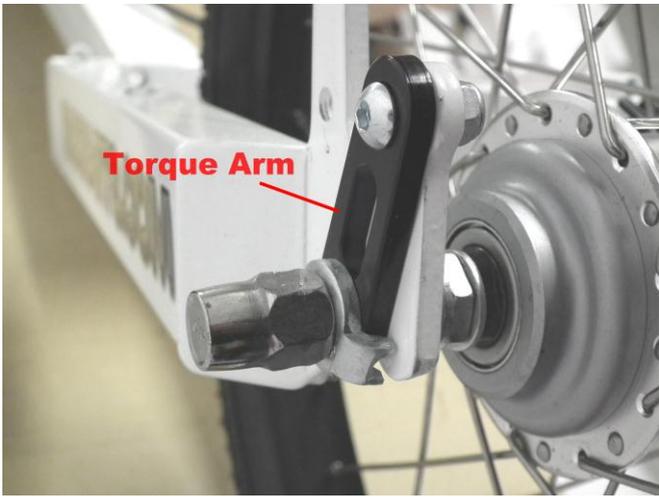


PHOTO 17



PHOTO 18



PHOTO 19

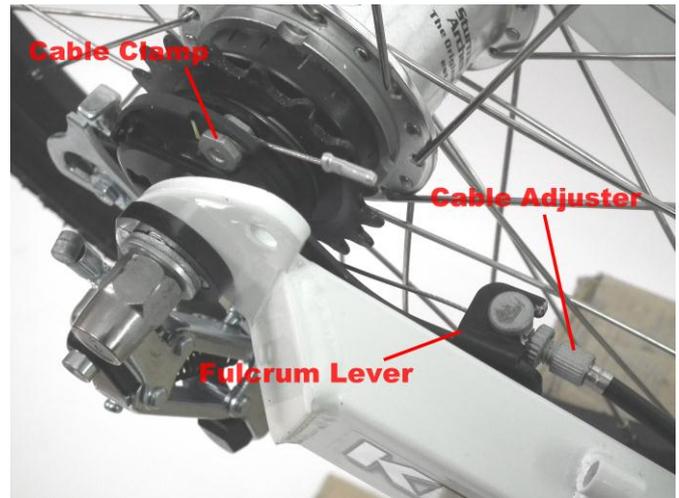
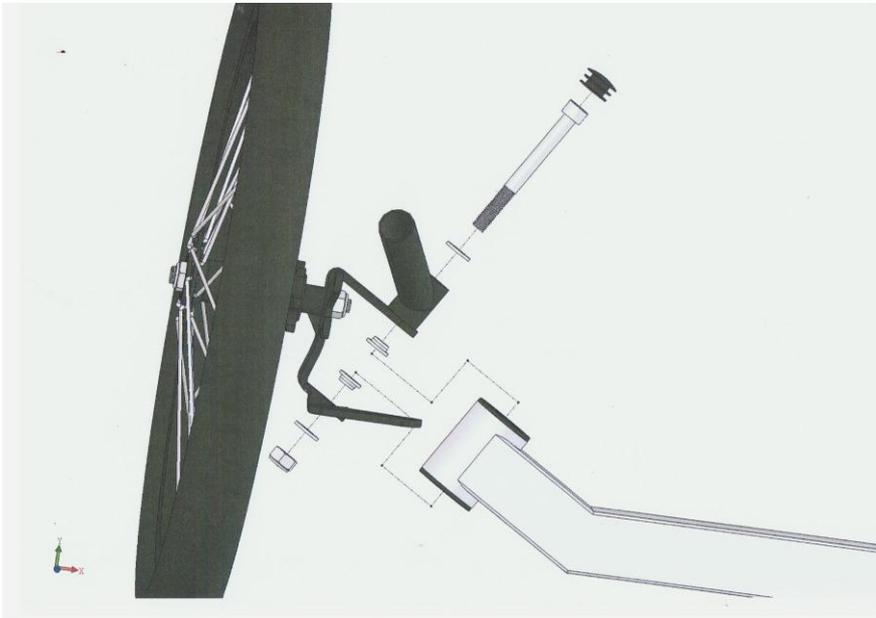
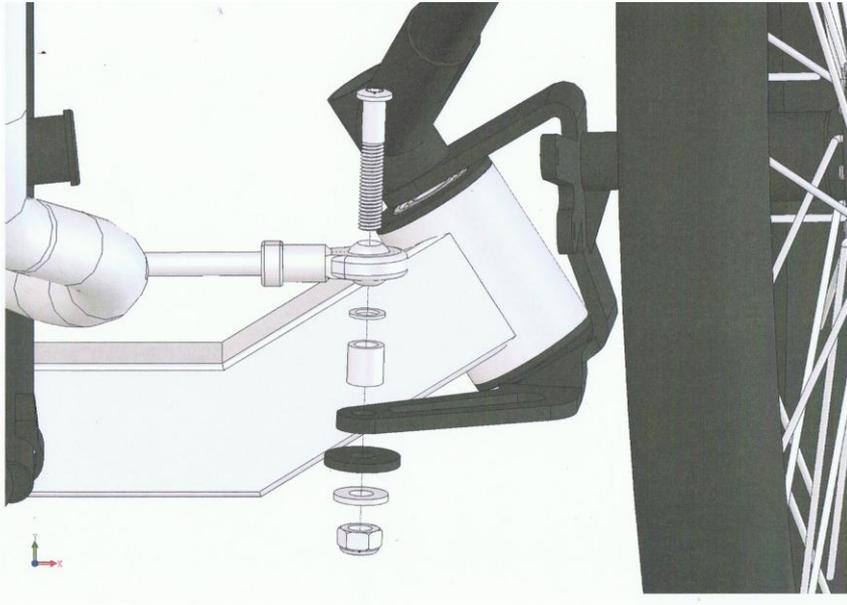


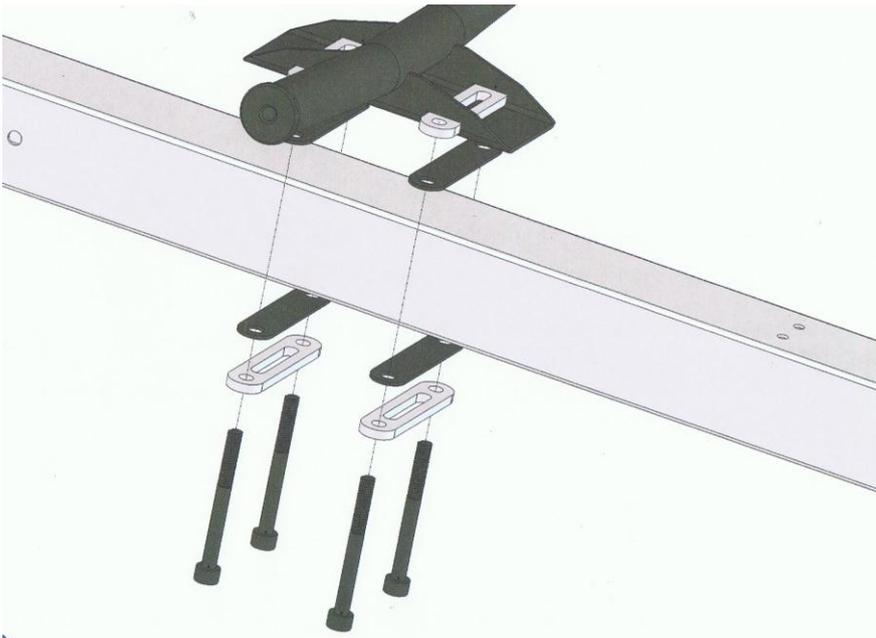
PHOTO 20



DRAWING 1.

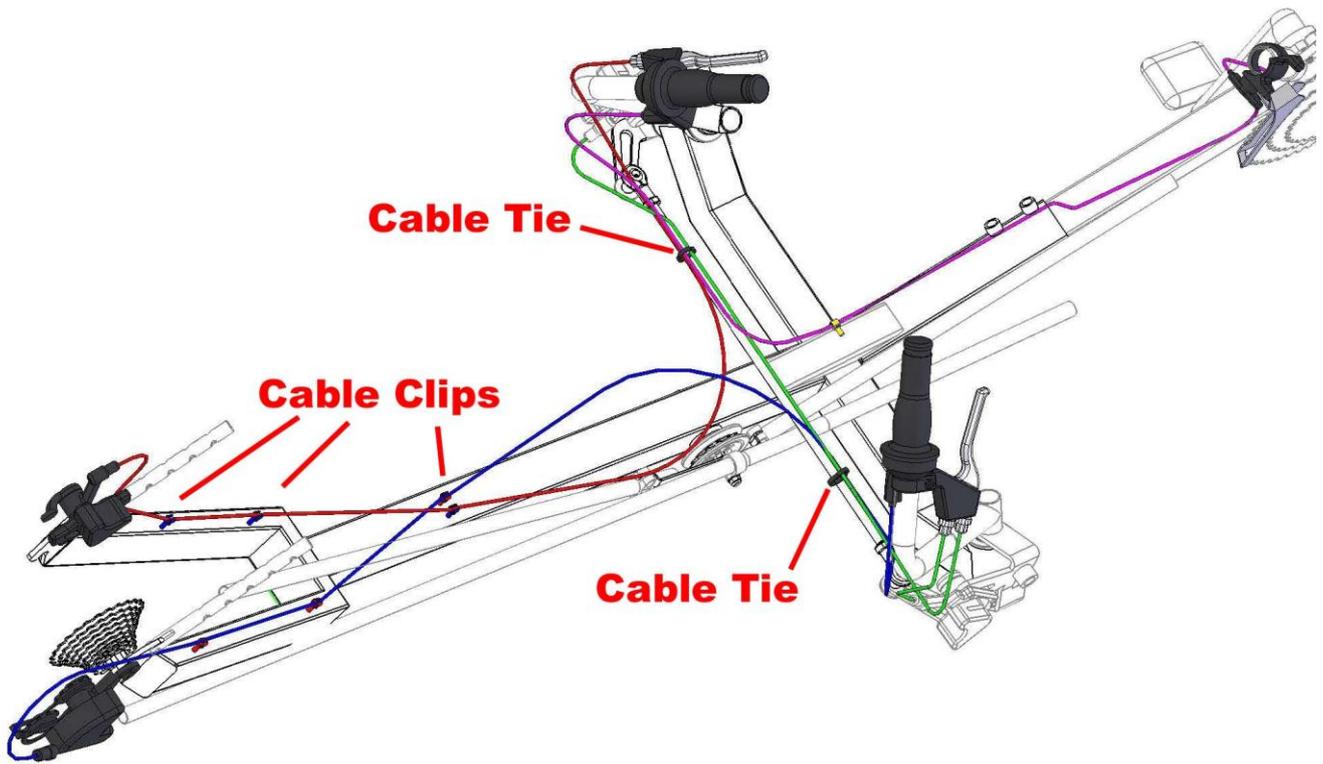


DRAWING 2.

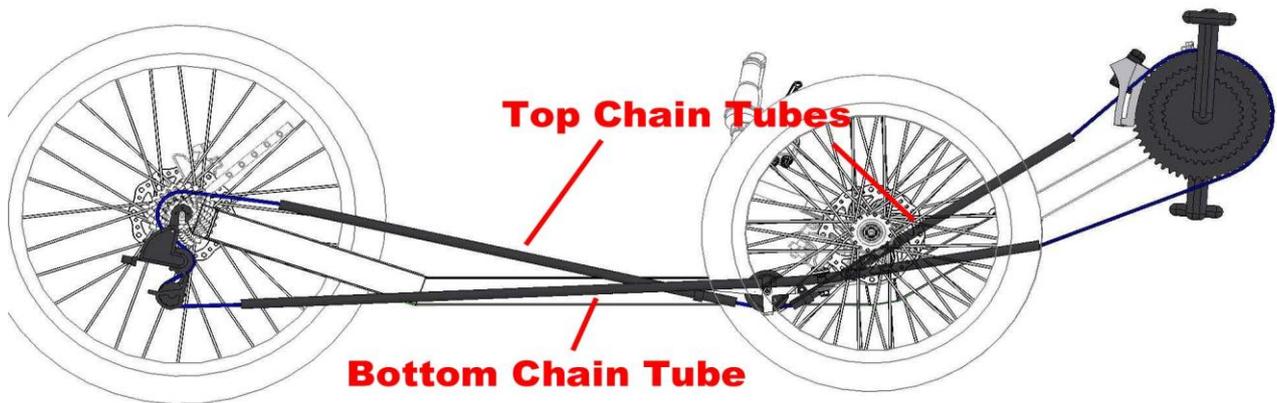


DRAWING 3.

APPENDIX 1



APPENDIX 2



4.0 Guidelines for safe use

Before using your KMX®, please check that it is in good working order, that all bolts and screws are tight and that tyre pressure is as it should be. Please also check the brakes.

The KMX® is classified as a fully functional Trike recumbent. This means your KMX® is allowed on the public roads, and complies with the European General Products Safety Regulations. It has also been tested to all relevant sections of EN14764, the UK standard for bikes, and the CPSC for Bikes in the USA.

Your KMX®, like bicycles, Roller Blades, Roller Skates, Skateboards, Cars, Boats or any other moving vehicle, can cause injury. Exercise caution when riding your KMX®. Pay attention to street signs, be courteous to pedestrians and road users and by all means obey the law. Ensure that both hands are on the handgrips and both feet are on the pedals at all times that the KMX® is in motion.

For safety we recommend that an Adult should supervise any child using the KMX®.

Adapt your speed always according to the prevailing conditions. Riding down a slope (at an angle,) the KMX® could topple. Riding downhill will build up a high speed, so please take note of a longer braking distance.

We advise that whilst riding the KMX® the rider wears proper protection, such as a helmet and gloves while riding.

Ensure that both hands are on the handgrips and both feet are on the pedals at all times that the KMX® is in motion.

The KMX® X Class is not suitable for riders less than 1.5m in height, or more than 100 kg in weight.

Do not take bends at a too sharp an angle; this could cause the KMX® to topple.

Check the tyre pressures regularly. See for the correct pressures chapter 3.

In case of improper use of your KMX® neither the manufacturer nor the dealer can be held responsible.

The KMX® cannot be used near staircases, swimming pools or any other water. Staircases should be shielded off, to avoid riders being able to ride up or down.

Engage the handbrake button on the rear brake lever to lock the rear brake before leaving the KMX® unattended.

Colliding and/or other stunts increase the chances of injury, and damage to your KMX®.

In this event, any damage cannot be reclaimed from the manufacturer or the dealer.

Do not place any unnecessary objects on or near the brake handles.

Clothes and limbs could get caught in rotating parts and/or hinge points. Avoid loose clothing like scarves, laces etc., as these could cause accidents.

Clothes could get soiled and/or damaged.

Avoid contact with the wheels whilst the KMX® is being driven.

This users' manual contains size indication guideline. However the owner is responsible for judging whether or not the KMX® is suitable for each rider, and that his or her size is appropriate.

A helmet is not compulsory, but in the interests of safety it is advisable.

Make sure that the seat and sliding boom is in the correct position, for safe use.

Do not let the user mount or dismount the KMX® whilst in motion.

Do not let the user drive in the dark without lighting.

Only one person can ride the KMX® at any time. Do not overload your KMX®.

The maximum loading is 100kg for off road riding and 135kg for on road riding.

Do not attach an engine or any other unapproved attachments to the KMX®.

Do not allow your KMX® to be pulled by any other vehicle.

KMX Karts Ltd, the suppliers of the KMX® and/or the manufacturer do not accept any liability for any injury or any other damage sustained and any incurred costs as a result of (wrongfully and/or inappropriate) use of the KMX®.

5.0 Maintenance

Every time before you ride:

Approx. time: 4
minutes.

Inflate tires to correct pressure.
Replace tyres if worn.
Test Brakes for correct operation.
Check bolts on both seat and front boom
to insure they are tight.
Inspect tires for damage.

Every week: (in addition to above).

Approx. time: 2
minutes.

Quickly wipe frame down and inspect for
cracks.
Check bolts and screws are fastened
tight.
Test brakes and shifting for adjustment.
Inspect seat clamps and boom clamps
for cracks and insure adequate tightness.

Every month or after your KMX® gets wet. (In addition to above).

Immediately after riding:

Approx. time: 30
minutes.

Dry bike with towel; pedal the drive train with your hands while lifting the rear wheel to spin water out of rear bearing surfaces, cog set, chain, etc.
Wash bike completely with soap and water. Dry bike, spin wheels and cycle drive train to expel water.
Apply chain lubricant and wipe off excess. Apply lubricant to derailleur pivots and brake pivots.
DO NOT get lubricant on tires or wheel/rim braking surfaces.
Inspect wheels, hubs, steering set and bottom bracket adjustment and tightness.

If you stick to this maintenance schedule it is unlikely you will ever have a serious maintenance problem or major mechanical malfunction during a ride.

6.0 Guarantee conditions

The KMX® owner can only claim under the guarantee by showing the original purchase receipt together with the completed guarantee certificate.

The owner of the KMX® can claim the following guarantee with the acceptance of the following restrictions:

- One year from date of purchase on the frame (regular use);
- All wear and tear parts (for example chain, crank, chain guides, tyres etc.) are not covered by the guarantee.
- The guarantee only applies for material/construction errors of the KMX® and/or parts thereof.

The guarantee expires in the following situations:

- The KMX® has been handled without due care, has been involved in an accident, or when non- KMX® approved parts have been fitted.
- The KMX® has not been assembled as per instructions and/or not correctly maintained.
- Technical repairs of the KMX® are not executed professionally.
- Parts fitted afterwards do not match technical specifications of the KMX® or no original KMX® parts have been used and/or are not fitted correctly.
- Deficiencies due to climate, like rust, cracks in the rubber or usual weathering of the coatings.
- The KMX® is used for rental and/or otherwise used by non-specified users.

All claims under the guarantee for the KMX® have to be accompanied by a copy of the guarantee certificate.

The guarantee certificate needs to be completed and should contain the following details:

- Name and address of the owner
- Date of Purchase
- Description of parts for which a claim is being made under the guarantee.

The final decision whether or not the broken/damaged parts falls under the guarantee is made by an approved KMX® engineer.

In case the guarantee request does not apply to the repair, all costs have to be paid by the owner.

7.0 Guarantee certificate

GUARANTEE CERTIFICATE (Purchaser copy)

Date of Purchase:

Type/Model KMX®:

Colour:

Signature buyer:

GUARANTEE CERTIFICATE (KMX Karts COPY)

Date of Purchase:

Type/Model KMX®:

Colour:

Retailer KMX®:

Name:

Date of Birth:

Address:

Town/City:

Postal-code:

Country:

Signature purchaser:

Send to: KMX Karts Ltd
c/o Safestore, Unit 6a,
Pompey Centre
Fratton Way
Southsea, Hampshire,
PO4 8ER
United Kingdom