



KARMA MEDICAL PRODUCTS CO., LTD.

Manual Wheelchair Owner's Manual

KM-BT10



ISO 9001



Lead the way, all the way!

GENERAL WARNING

IMPORTANT

Do not attempt to use the wheelchair before a qualified person has explained to your satisfaction how to operate it without risk to yourself or others.

Due to the change of design, some illustrations and pictures in this owners manual may not correspond to the wheelchair that you purchased. KARMA reserves the right to make design modifications without further notice.



WARNING:

- Do not operate this wheelchair before first reading and understanding this owner's manual. If you are unable to understand the warnings, cautions and healthcare professional or technical instructions, contact a dealer, personnel if applicable before attempting to use this wheelchair—otherwise, injury or damage may occur. If any procedures other than those described in this owner's manual, it must be carry out by a qualified technician.

OPERATION INFORMATION

- **DO** maintain your chair well. Especially check the tyre pressure because it may affect the efficiency of the brakes if using pneumatic tyres.
- **DO** make sure both brakes (e.g. Parking brake and Attendant brake) are applied in the condition of getting in/ out and being not pushed/ used of the wheelchair.
- **DO** take care when climbing kerbs, going upward / downward of slopes.
- **DO** avoid steep or uneven surfaces that may cause the chair to tip over.
- **DO** avoid soft surfaces because the castors may bog down.
- **DO** look ahead to anticipate hazards as far as possible. Such as furniture, doors, potholes, slopes, kerbs, doorways, etc.
- **DO** make sure both feet and clothing of disabled individual are on the footrests and tucked out of the way safely, which is a very important step that can avoid being tangled in the wheels.
- **DO** keep both hands on the push handles to control the chair, if you are the attendant.
- **DO** check the frame and components regularly and refer to this owner's manual during and after the warranty period.
- **DO** tighten the upholstery or replace it when becoming loose.
- **DON'T** use with an unconscious patient.
- **DON'T** let the wheelchair to overload under any circumstances.

-
- **DON'T** stand on the footplates when getting in or out of the chair.
 - **DON'T** allow one or more users on the wheelchair simultaneously.
 - **DON'T** use other transportations to drag the wheelchair.
 - **DON'T** go too fast or turn too quick.
 - **DON'T** do "wheelies" because you may fall or tip over backwards and suffer a severe injury.
 - **DON'T** cross a slope whose angle is greater than 7 degrees.
 - **DON'T** go down slopes forward. If needing to go down, the attendant must walk backwards until the user is on level ground.
 - **DON'T** attempt to lift the wheelchair by any removable (detachable) parts. Lifting by means of any removable (detachable) parts of the wheelchair may result in injury to the user, attendant or damage to the wheelchair.
 - **DON'T** use the wheelchair when the backrest is folded. This alters the centre of gravity and may cause the wheelchair to tip backwards. The backrest should only be folded in the situation for storage or transport of the wheelchair.
 - **DON'T** hang any heavy stuff on the backrest joint or the back of the wheelchair. It could let the backrest fold suddenly, unstable and hurt the user or the attendant, particularly when negotiating inclines.

YOU AND YOUR KARMA SERVICE PROVIDER

- No tools are required for assembly. Your wheelchair must be installed from your authorized KARMA dealer, who is also your service provider. Unauthorized repairs, upgrades and add-ons will nullify your warranty and may lead to injury. Any adjustment for the rear wheel position should be carried out from your authorized KARMA service provider, who has the necessary service/maintenance manual for your wheelchair.
- If you have any defective or missing parts, please contact your service provider for repairing or replacement. Always use the parts authorized by KARMA. Any using of unauthorized parts will nullify your warranty.
- In order to acquire all repairs and scheduled maintenance, customers should order parts through their dealer.
- Customers should go to their dealership for all service needs to guarantee their warranty is not nullified. Procedures differ from those described in this manual must be performed by a qualified technician. They also have the service manual with a complete list of maintenance

required to keep your KARMA wheelchair in good working order. Check the warranty section of this manual to find out what KARMA guarantees, maintenance and parts you should have to pay for.

- KARMA does not have an official list of service providers at this time. Please contact your authorized KARMA dealer for service. If you can't contact your dealer, please try to find another ones. If it doesn't work out, please contact us and we will arrange for a service repair. Please note that there will be a charge for collection and delivery of your wheelchair.

CE MARKING




- Wheelchair in this owner's manual complies with the requirements of the Medical Devices Directive 93/42/EEC.

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1. PREFACE

- 1.1 Please read this owner's manual carefully before using the wheelchair. Any improper use of the wheelchair may result in harm or injury.
- 1.2 This owner's manual includes operation, unfolding/ folding instructions and how to prevent possible accidents for the aspects of the wheelchair.
- 1.3 This owner's manual is written for KARMA wheelchair: KM-BT10.
- 1.4 The symbols used in this manual are explained below. Pay special attention to the parts marked with them.

 WARNING:	Improper use could lead the user to severe injury or death.
 CAUTION:	Improper use could lead the user to severe injury and/or damage to your wheelchair.
 SUGGESTION:	Follow these instructions to keep the wheelchair in good condition.

- 1.5 This manual includes a inspection and maintenance chart as well as details of your warranty.
- 1.6 If someone uses the wheelchair, make sure that you have given him or her this owner's manual for reference.
- 1.7 Due to the change of design, some illustrations and pictures in this manual may not correspond to the wheelchair that you purchased. KARMA reserves the right to make design modifications without further notice. This manual will be updated regularly. Please refer to the KARMA website for the latest version.
- 1.8 If you use carefully and sparingly, your wheelchair's life could be effectively extended.



CAUTION:

- For safety, KARMA has installed the safety belts, anti-tippers to avoid any risk due to the user's movement in the wheelchair or other environmental factors that might cause the wheelchair to tip or the person on the wheelchair to fall off (e.g. amputee). Besides, KARMA also recommends you choose additional accessories for safety enhancement.

2. SAFETY

2.1 BEFORE USING

The user and attendant must be familiar with the operation of the wheelchair before using. Pedestrian traffic rules apply to the wheelchair. Please be safe.

2.2 WHILE MOVING

Please always keep these safety guidelines as follows in mind.

2.2.1 DOORWAYS

2.2.1.1 The safest way to operate the wheelchair is on level floors that are free of obstacles. If possible, always use a ramp to enter or exit a facility. Keeping your hands on the push rims will allow you to maintain the maximum balance.

2.2.1.2 DON'T try to force yourself over an obstacle and use the sides of a doorway to pull yourself through a passageway.

2.2.2 LEANING AND STANDING

DON'T lean over the side, stand or play on the wheelchair because it may let you lose balance and fall down. (See Figures 2.1 and 2.2)



Figure 2.1



Figure 2.2

2.2.3 NAVIGATING INCLINES

2.2.3.1 Always navigate inclines with an attendant as far as possible.

2.2.3.2 When pushing a wheelchair, the attendant must go straight up a slope. If needing to go down, the attendant must walk backwards until the user is on level ground. (See Figures 2.3 and 2.4)



Figure 2.3



Figure 2.4

2.2.3.3 DO avoid stopping on an incline, it may let you lose the control of the wheelchair.

2.2.3.4 DON' T use the parking brakes to slow down or stop the wheelchair, otherwise the accident as mentioned above may occur.

2.2.3.5 Operating limits: DON' T attempt to go down inclines without any assistance, whose angle is greater than 7 degrees.

2.2.4 STREETS AND KERBS

2.2.4.1 Always be careful when crossing streets. If you paste

reflecting signs on the wheelchair and/or your clothing, you will be seen more easily from drivers.

2.2.4.2 Keep away from potholes and rough terrain that might cause the castors to get stuck. (See Figure 2.5)

2.2.4.3 DO avoid huge impacts when descending a kerb. A huge impact could probably damage the wheelchair.



Figure 2.5

2.2.4.4 Never try to climb/ descend a kerb that exceeds a normal height (30-50mm).

2.2.4.5 Always be careful and never move up or down a kerb in reverse without an attendant.



WARNING:

- Any improper use of the wheelchair could cause severe injury or death.
- For increasing your safety, please make sure that you have realized those guidelines as mentioned previously.
- ALWAYS follow The Use of Invalid Carriages on Highways Regulations outdoors and the guidelines written in this owner's manual.

2.3 MAXIMUM USER WEIGHT LIMIT

2.3.1 The maximum user weight limit for KM-BT10 is 250kg. For detail information, refer to section 8. SPECIFICATIONS.

2.3.2 Please note that loads exceeding maximum capacity can damage your wheelchair and cause malfunctions, which leads to a safety hazard. The warranty does not include damage caused by improper operation of the wheelchair.

2.4 LABELLING

Please carefully read all the labelling on the wheelchair before using it. **DO NOT** remove them and protect them for future reference.



Model:	
Order No.:	
Delivery Date:	
Sewing No.: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6	
Seat Width	Seat Depth
<input type="checkbox"/> 13	<input type="checkbox"/> 13
<input type="checkbox"/> 14	<input type="checkbox"/> 14
<input type="checkbox"/> 15	<input type="checkbox"/> 15
<input type="checkbox"/> 16	<input type="checkbox"/> 16
<input type="checkbox"/> 17 <input type="checkbox"/> 0	<input type="checkbox"/> 17 <input type="checkbox"/> 0
<input type="checkbox"/> 18 <input type="checkbox"/> 5	<input type="checkbox"/> 18 <input type="checkbox"/> 5
<input type="checkbox"/> 19	<input type="checkbox"/> 19
<input type="checkbox"/> 20	<input type="checkbox"/> 20
<input type="checkbox"/> 21	<input type="checkbox"/> 21
<input type="checkbox"/> 22	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
KARMA	Unit: Inch 108-90099



3. INTENDED USE & PARTS

3.1 INTENDED USE

- 3.1.1 The KM-BT10 is a self-propelled or transit wheelchair. That is, it can either be propelled by an attendant (transit) or by the user (self-propelled).
- 3.1.2 The KM-BT10 is suitable for users up to 250kg in weight.
- 3.1.3 The KM-BT10 is an adjustable wheelchair. The detachable parts are easy to operate.
- 3.1.4 Although having an extremely durable aluminium alloy frame with tough accessories, it does not suffer in dramatic extremes of temperature.
- 3.1.5 The castors have PU tyres for greater durability.
- 3.1.6 Spoke rear wheels are 24 inches in diameter for standard equipment.
- 3.1.7 As attaching anti-tippers, the KM-BT10 could let full, partial amputees (above or below knee, single or double) or other conditions easily maintain their natural centre of gravity, which could avoid tipping over backwards effectively.
- 3.1.8 There is a kind of armrest in the KM-BT10 for optional: Flip-back & height adjustable armrest.

3.2 KM-BT10 Parts Description



1. Push Handle

2. Attend Brake

3. Side Panel

4. Rear Wheel

5. Anti-tippers

6. Brake

7. Cross Brace (Cross Bar)

8. Casto

9. Backrest Cushion

10. Armrest

11. Seat Cushion

12. Calf strap

13. Footplate

4. OPERATION

4.1 Preparing For Use

4.1.1 UNFOLDING

While unfolding the KM-BT10, follow these instructions as listed below:

- 4.1.1.1 Stand at the side of the wheelchair as you prefer, hold the armrests and pull outwards. (See Figure 4.1)
- 4.1.1.2 Put your two hands on the seat pan and press it down until it is fully lowered, be careful not to get your fingers caught. (See Figure 4.2)
- 4.1.1.3 Pull up the rigidifying push-bar (See Figure 4.3)
- 4.1.1.4 Lift up the rear part of the wheelchair lightly, and use your stronger foot to tread on the cross bar until it is fixed and doesn't shake. (See Figure 4.4)
- 4.1.1.5 Flip the footplates down. (See Figure 4.5)
- 4.1.1.6 Attach the calf strap. (See Figure 4.6)
- 4.1.1.7 Place the back and seat cushion on the wheelchair.
- 4.1.1.8 Ready for action!



Figure 4.1



Figure 4.2



Figure 4.3



Figure 4.4



Figure 4.5



Figure 4.6

WARNING:

- The primary function of the rigidifying push-bar is to maintain and avoid deforming of the backrest, which could cause the user to be discomfort.
- Never use the rigidifying push-bar to push or pull the wheelchair, or it may lead to fracture and cause severe injury of the user.

4.1.2 FOLDING

While folding the KM-BT10, follow these instructions as listed below:

4.1.2.1 Separate the back and seat cushions from the wheelchair.

(See Figure 4.7)

4.1.2.2 Detach the calf strap. (See Figure 4.8)

4.1.2.3 Flip up the footplates. (See Figure 4.9)

4.1.2.4 Release the knob bolt at the middle, then push down the rigidifying push-bar. (See Figure 4.10)

4.1.2.5 Lift up the front part of the wheelchair lightly, grasp the middle lever of the seat pan, apply an upward force and simultaneously use your stronger foot to tread on the cross bar until the wheelchair is fully closed. (See Figure 4.11)

4.1.2.6 Folding is now completed. (See Figure 4.12)



Figure 4.7



Figure 4.8



Figure 4.9



Figure 4.10



Figure 4.11



Figure 4.12

CAUTION:

- Be careful not to get your fingers caught when folding the wheelchair.

4.1.3 ADJUSTMENTS

4.1.3.1 ARMREST

4.1.3.1.1 Standard: FLIP BACK AND Detachable armrest

Armrest flips back by releasing the knob bolt located at the front base of the armrest. After completing the step, you can lift the armrest backwards. (See Figures 4.13 and 4.14) .



Figure 4.13



Figure 4.14

4.1.3.1.2 OPTIONAL: FLIP BACK, DETACHABLE AND HEIGHT ADJUSTABLE ARMREST

- Unscrew the knob bolt.
- Adjust the armrest to the desired height.
- Tighten the knob bolt. (See Figure 4.15 and 4.16)



Figure 4.15



Figure 4.16

4.1.3.2 BACKREST

4.1.3.2.1 BACKREST HEIGHT

To adjust the backrest height, follow these instructions as listed below:

- Detach the armrest and backrest upholstery first.
- Use the KARMA tool provided to loosen the screws at the both bottom sides of the backrest frame.
- Adjust the backrest to the desired height.
- Tighten the screws, attach the armrest and backrest upholstery to the original condition.
- Backrest height adjustment is now completed. (See Figure 4.17 and 4.18)



Figure 4.17



Figure 4.18

4.1.3.2.2 BACKREST ANGLE ADJUSTMENT

To adjust the backrest angle adjustment, follow these instructions as listed below:

- Detach the armrest and backrest upholstery first.
- Use the KARMA tool provided to loosen the screws at the both bottom sides of the backrest frame.
- Remove the screw and backrest adjustable plate
- Adjust the backrest forward or backward to the position as you desired.
- Put screw and backrest adjustable plate back.
- Tighten the screw and put armrest and backrest cushion

back to the seat.

- Backrest angle adjustment is now completed. (See Figure 4.19 and 4.20)



Figure 4.19



Figure 4.20

4.1.3.3 SEAT

4.1.3.3.1 SEAT DEPTH

To adjust the seat depth, follow these instructions as listed below:

- Remove the two rear wheels, and put the frame down gently.
- Remove the two rear wheel bases, and then use the KARMA tool provided to loosen the screws at the bottom of the seat bracket.
- Use the KARMA tool provided to loosen the screws at the bottom of the armrest base.
- Adjust the seat bracket and the armrest base forwards/backwards to the desired position.
- Tighten the screws, attach the armrest and backrest upholstery to the original condition.
- Seat depth adjustment is now completed. (See Figure 4.21 and 4.22)



Figure 4.21



Figure 4.22

4.1.3.4 REAR WHEEL

Your wheelchair could be supplied with quick-release wheels for optional. If so, please follow these instructions as listed below.

4.1.3.4.1 REAR WHEEL REMOVAL

To remove the rear wheel, follow these instructions as listed below:

- Ensure that the brake is in the unlocked position first.
- Support the weight of the chair with one hand by holding the push handle.
- Depress the hub cover and hold down the quick-release mechanism.
- Remove the wheel. (See Figure 4.23)

4.1.3.4.2 REAR WHEEL ATTACHMENT

Ensure that the brake is in the unlocked position first. Take up the assembled wheel and axle and depress the button in the centre of the axle as mentioned above. This retracts the ball bearings that will allow you to push the axle into the wheel bracket that is located on the lower rear frame of the wheelchair. When you remove your thumb from the button on the axle, the ball bearings should be visible protruding from the axle at the back of the wheel bracket. This will secure the wheel safely in the frame. (See Figure 4.24 at the next page)

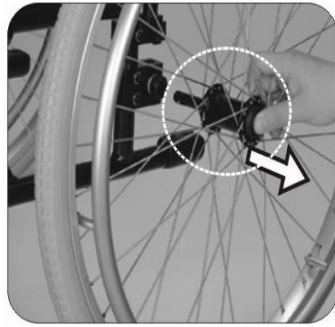


Figure 4.23

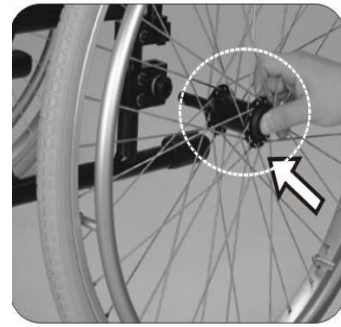


Figure 4.24

 **CAUTION:**

- You must make sure that the axle is fully located in the wheelchair bracket and that the ball bearings are fully open and have positively attached the wheel in the frame.
- The rear wheel can be mounted at different positions on the frame to alter the seat height and overall stability of the chair. Changing the wheel position should be carried out by authorized dealer or qualified therapist.

4.1.3.4.3 IMPORTANT DO' S AND DON' TS

- DO keep axles clean and lubricated with light oil or maintenance spray.
- DO maintain correct tyre pressure if using pneumatic tyres.
- DON' T try to remove the wheels while the wheelchair is occupied even when using anti-tippers.

4.1.3.5 FOOTREST

Footrests can swing away, which makes transferring out easier.

4.1.3.5.1 To remove the footrest, press the release pin first and rotate the footrest until it faces outwards.

4.1.3.5.2 To attach the footrest, locate it on the frame plug at about 90 degrees (perpendicular) to the side of the frame and rotate inwards until you hear a “click” sound, which means the footrest is fixed on the frame.

4.1.3.5.3 The footplate height must be more than 5cm. From the ground level (See Figure 4.25)



Figure 4.25

4.1.3.6 ELEVATING FOOTREST (OPTIONAL)

4.1.3.6.1 You can elevate the footrest directly and stop anywhere you desired. (See Figure 4.26)

4.1.3.6.2 When you want to go down, press the release lever. (See Figure 4.27)

4.1.3.6.3 To adjust footplate height use the Karma tool provided to loosen the bolt at the side of the footrest arm.

4.1.3.6.4 Adjust to required height and re-tighten. (See Figure 4.28 and 4.29)



Figure 4.26



Figure 4.27



Figure 4.28

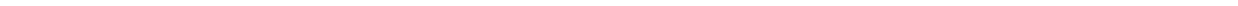


Figure 4.29



SUGGESTION:

- Make sure that the footplate height is adjusted properly according to the user's calf length to reduce pressure on the body.
- The footplate height must be more than 5cm. (See Figure 4.25)



4.1.3.7 FOOTPLATE

4.1.3.7.1 HEIGHT

To adjust the footplate height, follow these instructions as listed below:

- Use the KARMA tool provided to loosen the bolt at the end of the footrest arm.
- Adjust to required height and tighten. (See Figure 4.30)
- Make sure that the footplate height is adjusted properly according to the user's calf length to reduce pressure on the body.



Figure 4.30



Figure 4.31

4.1.3.7.2 LONGITUDINAL (FORE/AFT) POSITION

To accommodate the occupant's leg position and flexibility, follow these instructions as listed below:

- Remove the footplate fastener bolts on each plate.
- Adjust the plate position on the footplate support tube below as desired and,
- Re-attach the footplate fastener bolts. (See Figure 4.31)

4.1.3.7.3 LATERAL (SIDEWAYS) POSITION

To open or close the gap between the footplates, follow these instructions as listed below:

- Loosen the footplate fastener bolts on each plate.
- Adjust the plate position as desired and re-tighten the footplate fastener bolts. (See Figure 4.32)



Figure 4.32



Figure 4.33

4.1.3.7.4 DORSIFLEXION AND PLANTARFLEXION

For occupants who have the symptoms of Dorsiflexion and Plantarflexion, follow these instructions as listed below to allow for foot angle. The range adjustment is +/- 90 degrees. (See figure 4.33)

- Loosen the footplate fastener bolts on each plate.
- Adjust the plate angle as desired and re-tighten the footplate fastener bolts.

4.1.3.8 SAFETY BELT

To adjust the safety belt, follow these instructions as listed below.

4.1.3.8.1 For KM-BT10, safety belt is the standard equipment.

4.1.3.8.2 To adjust the length of the safety belt, identify the required length.

4.1.3.8.3 Push the two parts of safety belt through the buckle to make the safety belt longer or shorter. (See Figure 4.34)

4.1.3.8.4 Pull the two parts of safety belt to tighten.

4.1.3.8.5 Push the buckle up to the plastic clip so that the safety belt cannot slip out of position. (See Figure 4.35)

4.1.3.8.6 Please check that there is no gap between the clasp

and buckle.
4.1.3.8.7 KM-BT10 also provides the extension safety belt part to suit the user who has a large body type, just follow the previous step and you can easily attach them. (See Figure 4.36)



Figure 4.34



Figure 4.35



Figure 4.36

 SUGGESTION:

- We recommend that the safety belt should be fitted quite tightly around the pelvis. Please tighten until you can just get your fingers between user and safety belt. Please check that the safety belt is fastened correctly as recommended. If this is not possible please consult with your supplier.

4.1.3.8.1 OPERATION

- When you sit on the wheelchair, always fasten the safety belt.
- Adjust the safety belt and make it fit your body for comfort and security.
- When you don't use it and be in motion, please fasten the safety belt to avoid dropping into rear wheels.

4.1.3.8.2 MAINTENANCE

It does not require any maintenance but should be inspected every time when use to ensure that the edges are not frayed and weekly to make sure that it correctly fits the user. If there are any signs of

deterioration, please replace it immediately.

4.1.3.9 ANTI-TIPPERS

4.1.3.9.1 The function of anti-tippers is to avoid user falling backwards when sitting on the wheelchair.

4.1.3.9.2 To avoid attendant stumbling when pushing it forwards/ backwards, be sure to put the anti-tippers away by treading in clockwise/ counterclockwise directions. (See Figure 4.37 and Figure 4.38)



Figure 4.37



Figure 4.38

4.1.4 TRANSPORTATION AND STORAGE

Make sure the wheelchair is fully folded when store.

i SUGGESTION:

- Please store the wheelchair in a location where it is out of direct sunlight, rain and dew. For more details, consult with your KARMA dealer.

⊘ WARNING:

- Don't put anything on the wheelchair while it is in storage. Storing goods on a folded wheelchair will cause damage and is not covered under warranty. (See the right Figure)



4.2 Transferring In and Out

4.2.1 TRANSFERRING IN

4.2.1.1 Engage both sides of the parking brakes.

4.2.1.2 Turn the footplates up and swing them to the side.

4.2.1.3 Lower the user into the seat, allow them to use the armrests for support.

4.2.1.4 Turn the footplates back down, so that the user can place feet on them.

4.2.1.5 Ensure that the heels rest against the heel supports to prevent direct contact from the castors.



CAUTION:

- Always ensure that the front castors are in line with the rear wheels and pointing forwards and that the back of the chair is secure either against a wall or firmly held by an attendant.

4.2.2 TRANSFERRING OUT

4.2.2.1 Make sure that the wheelchair is near your final destination.

4.2.2.2 Back the wheelchair sufficiently to ensure that the castors are pointing forward, i.e. in line with the rear wheels and usually with the castor forks pointing forward. Ensure that, where possible, the rear of the wheelchair is against a wall or, if not, it must be firmly held by an attendant.

4.2.2.3 Engage both parking brakes.

4.2.2.4 Turn the footplates up and swing them to the side.

4.2.2.5 Slide forwards on the seat.

4.2.2.6 Place one foot firmly on the ground with the knee at a right angle and the other foot slightly apart and further back.

4.2.2.7 Place your hands on the front of the armrests and moving your weight forward, bring your head and shoulders up over your knees as you push yourself up.

4.2.2.8 DON'T stand on the footplates or do side transfer when getting in or out of the chair. (See Figure 4.39 and Figure 4.40)



Figure 4.39



Figure 4.40



Figure 4.41

4.3 General Use

4.3.1 ATTENDANT PUSHING AND SELF PROPELLING

4.3.1.1 Ensure that the brakes are always locked when the chair is not being pushed. (See Figure 4.41)

4.3.1.2 Always make sure that both feet are safely on the footplates and that clothing is safely tucked out of the way and cannot get caught in the wheels. (See Figure 4.42)



Figure 4.42



Figure 4.43

4.3.1.3 Always use both hands on the push handles to control the chair. (See Figure 4.43)

4.3.1.4 Always avoid steep or uneven surfaces because the chair may tip over. (See Figure 4.44)

4.3.1.5 Always avoid soft surfaces because the castors may get bogged down. (See Figure 4.45)



Figure 4.44



Figure 4.45

4.3.1.6 Always be careful not to go too fast or turn too quickly and try to achieve a smooth steady ride.

4.3.1.7 Before crossing the road, please stop completely and look both ways.

4.3.1.8 Cross tracks or ruts at right angles to avoid your castors getting stuck.

4.3.1.9 Please keep your hands and arms inside the wheelchair when going through doorways.

4.3.1.10 Please keep in contact with the person in the chair. If you stop to look in shop windows or talk to people, remember to turn the chair so that the person in the chair does not have to turn.

4.3.1.11 Never lock the brakes too suddenly as this may tip the user out of the wheelchair.

4.3.4 GOING DOWN KERBS

Please note that it is always better to avoid kerbs where possible by using ramped kerbs or slopes and this operation is best attempted with the aid of an attendant.

4.3.4.1 GOING DOWN KERBS FORWARDS WITH AN ATTENDANT

4.3.4.1.1 Position the wheelchair so that the front castors are near the edge of the kerb and make sure that the road is clear.

4.3.4.1.2 Move the wheelchair slowly and carefully forwards while tilting it back slightly. Be ready to take the weight when the rear wheels cross the kerb edge. Ensure that both rear wheels touch the ground at the same time to avoid tipping the wheelchair.

4.3.4.1.3 Gently lower the front castors. **AVOID JARRING THE USER.**



CAUTION:

- This is the more difficult method and can jar the user but allows a better view of traffic.
- Be careful that the anti-tipper does not get caught on the kerb causing the user to fall.
- **NEVER ALLOW THE CHAIR TO TIP FORWARDS WHEN GOING DOWN A KERB.**

4.3.4.2 **GOING DOWN KERBS BACKWARDS WITH AN ATTENDANT**

4.3.4.2.1 Back the wheelchair to the kerb edge and be careful that the back wheels are equally near the edge.

4.3.4.2.2 Grasping the push handles, gently lower the rear wheels onto the road. Be prepared to control the weight as it descends and ensure that the back wheels touch ground at the same time.

4.3.4.2.3 Tilt the wheelchair back slightly and pull the tilted wheelchair far enough into the road so that the castors and footrests can be lowered clear of the kerb.



CAUTION:

- This is the easier and smoother method, but it requires the attendant to step backwards into the road.

4.3.5 GOING UP KERBS

Please note that this operation is best attempted with the aid

of an attendant and the best method is to go up kerbs forwards as this maintains the direction of travel and is physically less demanding for the attendant.

4.3.5.1 GOING UP KERBS FORWARDS WITH AN ATTENDANT

4.3.5.1.1 As the footrests nearly touch the kerb tilt the wheelchair.

The wheelchair should be tilted just high enough to allow the front castors to roll smoothly onto the pavement.

4.3.5.1.2 Push the wheelchair forward until the rear wheels are touching the kerb. Then, continuing the movement, lift at the push handles while moving the wheelchair forwards.

4.3.5.2 GOING UP KERBS BACKWARDS WITH AN ATTENDANT

Please note that for safety's reason we don't recommend using this method.



CAUTION:

- As KM-BT10 is designed for people of significant size and weight, we recommend the attendant to use lift instead of going up and down by stairs.
- Never try to adjust any adjustable parts by yourself, for example, the adjustment of gravity, etc.
- Please contact your service dealer or distributor if needed.

5. INSPECTION AND MAINTENANCE

5.1 General Check

- 5.1.1 Check the following items before moving. If you find anything abnormal, visit your KARMA wheelchair dealer for further inspection before using it.
- 5.1.2 Examine brakes, checking for wear, damage and misalignment. The authorized dealer should carry out these actions, such as replacing or adjusting of the brakes.
- 5.1.3 Check that the handgrips are not damaged and securely bonded to the push handles.
- 5.1.4 Check anti-tippers are not damaged and are securely attached.
- 5.1.5 Check that the wheels of the anti-tipper and frame are not damaged and are securely mounted.
- 5.1.6 When the wheelchair has been used for a while, the user needs to check whether the bolts and nuts are tight or not.
- 5.1.7 Check all parts for damage or wear and have a qualified technician replace it if necessary.
- 5.1.8 Check all parts for proper adjustment.
- 5.1.9 Inspect brakes for proper operation.
- 5.1.10 The wheels and tyres should be checked periodically for cracks and wear, and should be replaced by a qualified technician.
- 5.1.11 A qualified technician can be found with an authorized KARMA dealer.



CAUTION:

- Visit a KARMA wheelchair dealer for inspection and maintenance if you find anything abnormal.

5.2 Regular Maintenance Record

In order to make sure your wheelchair is in good condition, visit your KARMA wheelchair dealer regularly for maintenance and keep records accordingly every six months after purchasing.

A maintenance/service fee may apply.



SUGGESTION:

- Even if you don't use the vehicle for a long time, the wheelchair should still be maintained annually.

ITEM	WEEKLY	MONTHLY
GENERAL		
● Wheelchair rolls straight (no excessive drag or pull to one side)		V
FRAME AND CROSS BARS		
● Inspect frame structure for small cracks/fissures		V
● Inspect for bent frame or cross bars		V
BRAKES		
● DON'T interfere with tyres when rolling		V
● Pivot points free of wear and looseness	V	V
● Easy to engage	V	
● Prevent chair from moving when engaged		
SEAT & BACKREST		
● Inspect for rips or sagging	V	
● Inspect for loose or broken hardware, such as the frame and etc.		V
CASTORS		
● Inspect the castors for smooth rotation		V
● Inspect the castor for wear in the bearings/mountings and for tyre wear or damage		V
REAR WHEELS		
● Quick-release axles lock properly; lubricate if necessary (Quick-release rear wheel only)	V	
● No excessive side movement or binding when lifted and spun	V	V
● Inspect for cracked, bent or broken spokes		
ARMRESTS		

ITEM	WEEKLY	MONTHLY
<ul style="list-style-type: none"> ● Inspect the detachable armrest button for effective locking ● Make sure the armrest detaches and flips back properly 		V V
FOOTRESTS		
<ul style="list-style-type: none"> ● Inspect the footplate height adjustment screws are securely tightened ● Inspect the swing-away footrest release lever for effective locking 		V V
ANTI-TIPPERS		
<ul style="list-style-type: none"> ● Check anti-tippers are not damaged and are securely attached. 		V
TYRES		
<ul style="list-style-type: none"> ● Inspect for flat spots, cracks and wear ● If pneumatic tyres, check for proper inflation. For KM-BT10, the pneumatic tyre pressure is 35-45psi (240-310kPa) ● Check tyre tread depth is more than 1mm ● Check tyre pressure; tyre pressures are located on the side of the tyre 	V V V	V
SAFETY BELTS		
<ul style="list-style-type: none"> ● Check safety belts are rigidly fixed and have no sharp edges to let the user's skin be tore and bruised 		V



CAUTION:

- Never disassemble or modify the wheelchair frame structure. Otherwise, injury or damage may occur. This will nullify the warranty.
- As with any wheelchair, the wheels and tyres should be checked periodically for cracks and wear, and should be replaced. Failure to keep tyres at the correct pressure will reduce the braking efficiency.

6. ACCESSORIES

	
<ul style="list-style-type: none"> ● I.V. Pole ● Height adjusts from 130cm (51") to 200cm (78"). 	<ul style="list-style-type: none"> ● Oxygen Holder ● Standard size attaches to the back of wheelchairs. ● Attaches to all KARMA manual wheelchairs.
	
<ul style="list-style-type: none"> ● Folding Drink Holder ● Collapses and adjusts to the size of the container (6-10cm). ● Attaches to all KARMA manual wheelchairs. 	<ul style="list-style-type: none"> ● Seat Cushion ● Seat Height 7.5cm (3")

CAUTION:

- Attaching accessories may alter the overall stability and centre-of-gravity of the chair. Thus, this should be performed by an authorized dealer/ technician or qualified therapist.

7. TROUBLESHOOTING

You can inspect the following steps before taking your wheelchair to a KARMA wheelchair dealer.

PROBLEM	CHECKING POINTS AND CORRECTIVE ACTION
Chair Veers Right/Left	<ul style="list-style-type: none">● Check tyres for correct and equal pressure● Check castor bracket angle● Check that rear wheels are equally spaced from the seat frame
Sluggish Turn or Performance	<ul style="list-style-type: none">● Check tyres for correct and equal pressure● Check for loose nuts and bolts
Castor Flutter/Wobble	<ul style="list-style-type: none">● Check tyres for correct and equal pressure● Check for loose nuts and bolts● Check castor bracket angle
Squeaks and Rattles	<ul style="list-style-type: none">● Check for loose nuts and bolts
Looseness in Chair	<ul style="list-style-type: none">● Check for loose nuts and bolts

If you cannot solve the problem by yourself, contact your KARMA wheelchair dealer for help.

8. SPECIFICATIONS

MODEL	KM-BT10
DESCRIPTION	
Overall Length (mm)	1210
Overall Width (mm)	855
Overall Height (mm)	865-915
Total Weight (kg)	31.8
Seat Width (inch) (Adjustable)	26 (22, 24, 28, 30)
Seat Depth (inch) (Adjustable)	20 (18, 20, 24)
Seat Height (inch)	16.5
Backrest Height (inch)	17
Armrest Height (mm)	250
Calf Length (mm)	320-370
Overall Folded Length (mm)	1210
Overall Folded Width (mm)	438
Overall Folded Height (mm)	890
Maximum User Weight (kg)	250

Please be noted that all the above measurements are basis on 26" seat width wheelchair.



CAUTION:

- **DON'T** cross a slope whose angle is greater than 7 degrees.
- **DON'T** attempt to go down inclines without any assistance, whose angle is greater than 5 degrees.

9. CLEANING & RECYCLING

9.1 CLEANING

9.1.1 In order to lengthen the life of your wheelchair, it is suggested that you clean the wheelchair periodically (if not daily), especially after it is used in the rain or snow.

9.1.2 If possible, don't use your wheelchair in the conditions as mentioned above.

9.1.3 When getting caught in the rain, try to find shelter. If you can't find it, keep proceeding to your destination.

9.1.4 Although the frame of your wheelchair is aluminium, some parts, such as screws, nuts and spokes of wheels still get rusted if exposing to the humid environment. Always keep it dry and clean.

9.1.5 FRAME

Wipe with a damp cloth. **DON'T** clean with an abrasive material.

9.1.6 UPHOLSTERY

9.1.6.1 When cleaning the upholstery, use warm water and a mild soap.

9.1.6.2 Upholstery cleaner/foam can also be used. Other cleaning solvents are excluded.

9.1.3 STORAGE

Store the wheelchair in a dry place.

9.2 RECYCLING

9.2.1 POST-CONSUMER RECYCLING

9.2.1.1 A post-consumer recycling plan should follow the

Environmental Protection Administration's regulations. Items listed below are only for reference.

MATERIAL	PART NAME	METHOD
Aluminium-alloy	Frame	Recyclable
Plastic	Modular Components	Recyclable
Paper	Owner's Manual	Recyclable

9.2.1.2 You can find a lot of organizations in many countries by Internet, which accept used goods for charity. This could help less fortunate individuals and protect our planet for our descendants. If you have no Internet, use your local phone directory, ask for operator assistance or go to your local government centre for more information. Earth Day is every day.

9.2.1.3 Check with your local recycling centre on where and how to recycle your wheelchair as this information varies from region to region.

10. WARRANTY

10.1 SERIAL NUMBER

To ensure after-sale service and warranty, please record and fill in the serial number which can be found on the frame.

MODEL	KM-BT10
SERIAL NUMBER	

10.2 WARRANTY POLICY

10.2.1 CONTENTS AND DURATION OF WARRANTY

10.2.1.1 CONTENTS OF WARRANTY

- Repair will be provided free of charge if the problems are due to manufacturing or defective components within the warranty period (a repair of this kind will hereafter be called warranty repair).
- Warranty repairs can be carry out by authorized KARMA wheelchair dealers only.
- KARMA is not responsible for the transportation costs for repair and replacement.
- Replaced parts will be the property of KARMA.

10.2.1.2 WARRANTY DURATION

Please contact your local dealer.

10.2.2 ITEMS NOT COVERED BY WARRANTY

10.2.2.1 ITEMS NOT COVERED

The items list below are not covered:

- Consumable parts such as tyres, front castors, seat cushions, brake shoes or pads, upholstery and seating, braking cable, screws/ bolts and washers, lubricant and grease, etc.
- Those that do not affect the quality and function of the wheelchair such as noise or vibration.
- Wear and tear resulting from usage as well as conditions due to lapse of time (e.g. normal aging and deterioration of paint, plastic parts, etc).
- Damage due to a lack of maintenance or improper operation and storage.
- Fees resulting from routine inspections, adjustments, adding oil, cleaning and other maintenance.
- Any fees incurred as a result of warranty repair, loss or compensation because of the unavailability of the wheelchair (e.g. telephone use, shipping, car rental, travel costs, etc).

10.2.2.2 PROBLEMS NOT COVERED

Problems caused by the following reasons are not covered:

- Failure to carry out the regular inspection and maintenance recommended by this owner' s manual.
- Improper storage.
- Damage as a result of disobeying the Operation guidelines as outlined in Section 4 of this owner' s manual.
- Problems arising due to lack of inspection and/or maintenance as outlined in Section 5 of this owner' s manual.
- Installation or use of parts not manufactured by KARMA.
- Damage or surface corrosion from environmental factors such as airborne fallout (chemicals, tree sap, debris and so on), and

natural disasters, etc.

- Abuse or misuse not authorized by KARMA, such as addition, modification, or alteration, etc.

10.2.3 THE RESPONSIBILITIES OF THE USER

The following items are the responsibility of the user:

10.2.3.1 Proper use of the wheelchair in accordance with the owner's manual.

10.2.3.2 Performance of the regularly inspections and maintenance recommended by KARMA.

10.2.3.3 Keep a record of wheelchair in the back of this owner's manual.

10.2.4 THE RESPONSIBILITIES OF THE DEALER

The following items are the responsibility of the dealer:

10.2.4.1 Follow the directions in this owner's manual, and educate the wheelchair Owner/User in the safe usage and maintenance of the wheelchair.

10.2.4.2 Verify that the conditions of warranty have been met.

10.2.4.3 Provide KARMA with relevant warranty information and recommendation for improvements when requested.

10.2.5 WARRANTY EFFECTIVENESS

The warranty form must be completely filled out and stamped by the KARMA wheelchair dealership where the wheelchair was purchased.

10.2.6 TRANSFER OF WARRANTY RIGHTS

If you purchase a second-hand KARMA wheelchair while it is still in the warranty period, bring the owner's manual and the wheelchair to the dealership where the wheelchair was purchased for registration.

10.2.7 WARRANTY FORM (YOU MAY PHOTOCOPY THIS FORM)

FULL NAME:	
GENDER:	<input type="checkbox"/> Male <input type="checkbox"/> Female
DATE OF BIRTH:	MM/ DD/ YYYY / /
ADDRESS:	
MODEL:	KARMA KM-BT10
SERIAL NUMBER:	
DATE OF PURCHASE:	MM/ DD/ YYYY / /
PURCHASER SIGNATURE:	

10.2.8. DEALER' S DATA

NAME OF STORE:	
TELEPHONE AND ADDRESS:	

If you have any suggestions on how to improve our products, please do not hesitate to contact your local dealer to let us know what you think of your wheelchair.
