

KARMAN HEALTHCARE XO-55

INSTRUCTION MANUAL



Manual Stand-up Wheelchair

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XO-55 SERIES



01	Backrest	09	Armrest
02	Gas Spring-release lever	10	Armrest-release lever
03	Rear Wheel	11	Seat rest
04	Hand rim	12	Knee support
05	Suspension	13	Gas Spring
06	Wheel lock	14	Heel strap
07	Caster	15	Footrest
08	Safety belt		

Chapter 1. SAFETY TIPS

1-1. STANDING

Attention :

- Before using the standup wheelchair, you should be familiar with the operation and the function.
- Use only in standard household and hard even ground. Do not use on wet ground.
- In case of staircase, the standup wheelchair must be carried by two people.
- When entering or exiting the standup wheelchair, you should not put your foot on the footplate to avoid potential danger.

Warning: Maximum weight limit should not exceed

XO-55 Series - 250 lbs.

1-1.1. Stand up stresses your body in ways you may not be used to. Therefore, we recommend you consult your doctor or physical therapist before using the stand-up wheelchair.

1-1.2. Before standing up it is vital that the knee support, safety belt and Chest belt are fixed correctly.

1-2. WHEEL LOCKS

Check tire pressure weekly (pneumatic tires), Because it will affect the grip of the wheel locks. Wheel locks are not designed to slow the wheelchair down when it is moving. Wheel locks hold the wheelchair in place when it is at a complete stop. Always set both wheel locks when entering or stand-up or leaving the wheelchair.

1-3. REAR WHEEL

1-3-1. QUICK RELEASE AXLES

Do not mount the quick release rear axles with the release button positioned inside the frame. If the release button is inside the frame, the wheels will release

1-3-2. PNEUMATIC TIRES

Check pneumatic tires weekly for proper Inflation level, listed on tire sidewall.

1-3-3. CURBS, INCLINES AND RAMPS

Always practice with your Healthcare professional or attendant.

Before attempting to negotiate curbs, inclines or ramps alone.

It is important for you to develop a safe technique that is suitable to your abilities.

WARNING:

Doing a “wheelie” (tilting the wheelchair Backward to its balance point) can be dangerous.

Do not attempt this maneuver without an attendant.

1-4. MODIFICATIONS

Making any unauthorized modifications or using parts not supplied by technical personnel, may change the wheelchair structure and create an unsafe condition voiding the warranty.

Chapter 2. UNPACKING AND PREPARING THE STANDING WHEELCHAIR XO-55 SERIES FOR USE

2-1. THE ORIGINAL PACKAGE CONTAINS THE FOLLOWING COMPONENTS.

- Standing wheelchair Heel strap & safety belt
- Knee Support
- User manual, tool, and oil pot
- Option as ordered

2-2. UNFOLDING THE STANDING WHEELCHAIR, PLEASE PROCEED AS FOLLOWS:

- Remove any transport straps or transport guards.
- Depress the quick-release axles to assemble the rear wheel (Fig-1)



- Depress the quick-release axles to assemble the front caster. (Fig-1A)



- Grasp the wheelchair at the backrest and pull towards the back until it stops. (Fig-2~4)



Chapter 3. ADJUSTMENT

Should you require adjustments and alterations to the mechanism of the wheelchair, or any maintenance work, please contact qualified technicians.

3-1. ADJUSTING THE SEAT DEPTH

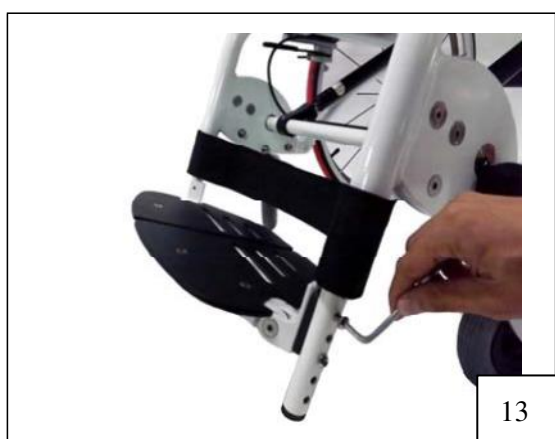
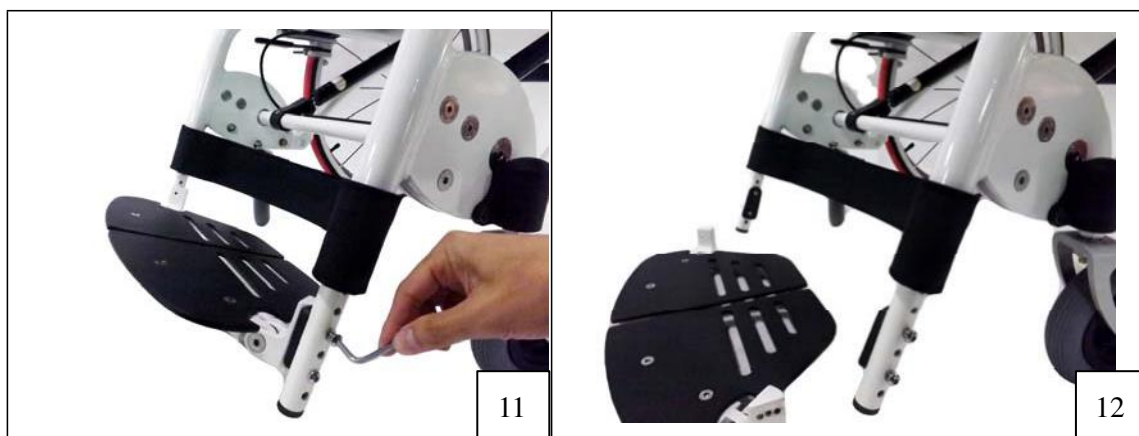
- (1) Push the gas spring release lever let the wheelchair frame rise over the rear wheel. (Fig-5)
- (2) After loosening the left (right), each side screws the seat depth can be adjusted using the different holes at 1" distance. (Fig-6~8)
- (3) Retighten the left (right) both side screws. (Fig-9 &10)





3-2. ADJUSTING THE FOOTREST HEIGHT

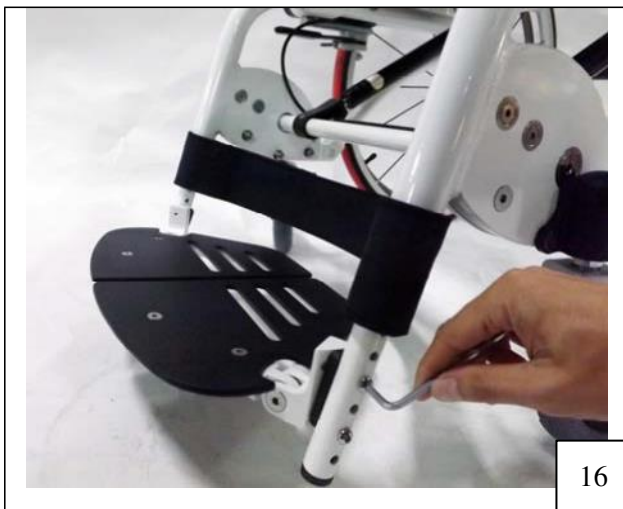
The height of the footrest is adjustable and should be altered in line with your body proportions to guarantee the best standing position possible. Footrest adjustment should also take account of your choice of seat cushion. (Fig-11~13)



- After loosening the screws, the Footrest height can be adjusted using the different holes at 1.8cm distance.
- Retighten the screws. Not too tight.

3-3. ADJUSTING THE FOOTREST ANGLE

- After loosening the screws the footplate angle can be adjusted using the different hole at 3 range incline angles. (Fig-14&15)
- Retighten the screws. (Fig-16)



3-4. ADJUSTING THE BACKREST HEIGHT

- (1) Remove the backrest padded and end cap. (Fig-17&18)
- (2) After opening the both screws (left & right), the backrest height can be adjusted.
(Fig-19~20)
- (3) Retighten the screws.



3-5. WHEEL LOCK

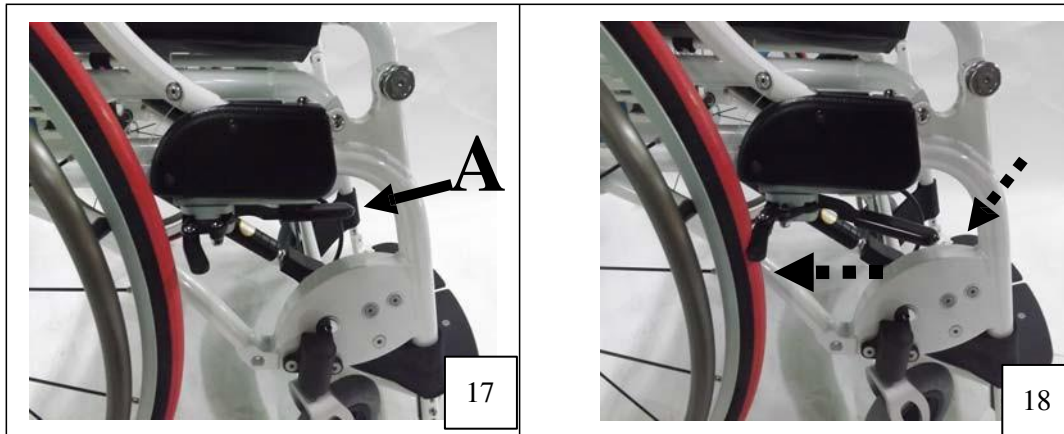
3-5-1. MANUAL BRAKES

The manual brakes are designed to secure the wheelchair during long stops. They are not intended to slow down the wheelchair or to be used as support during a transfer. They must be operated simultaneously.

In order to brake, push handle (A) inward to release the brake (Fig-17). The handle pulls outward to lock the **brake** (Fig-18). Once the brakes are engaged, the wheelchair should not move.

Note:

Brakes adjustment are based upon the diameter and type of the wheels. After repairing a flat tire or in the event of wear of the pneumatic or solid tire, you may need to adjust the brake(s).



3-6. THE KNEE SUPPORT AND SAFETY BELT

The most important safety features of the stand-up wheelchairs are the knee support & safety belt and chest belt. It is essential that these be correctly in place before you attempt to stand up.

3-6-1. THE KNEE SUPPORT

The knee support holds the knees in an extended posture and prevents you slipping out of the wheelchair while standing up.

Attach the two triangular clasps of the knee lock support to the double-head screws on either side of the wheelchair. (Fig-21)



Center the knee support in front of each knee using the Velour fasteners, then pull it until it is sitting firmly in place, just below (not right on) the kneecap and not too tight. (Fig-22)



3-6-2. THE SAFETY BELT (Fig-23)

- The safety belt holds the waist in place.
- Make sure that the safety belt is secure on the backrest of velour fastener.
- Lock the clasp on the safety belt and pull it and not too tight.
- To release the safety belt. Simply press the red button in the center of the catch.
- To slacken, hold the catch at a right angle to the belt and pull.



3-7. THE REAR WHEELS / CASTORS

- The rear wheels can be easily removed and set back in place with the quick-release axles. (Fig-24)
- Depress the release button in the center of the wheel, then pull off or re-mount the wheel.
- Having mounted the wheel, push and pull it several times to ensure the quick-release axle has locked in.

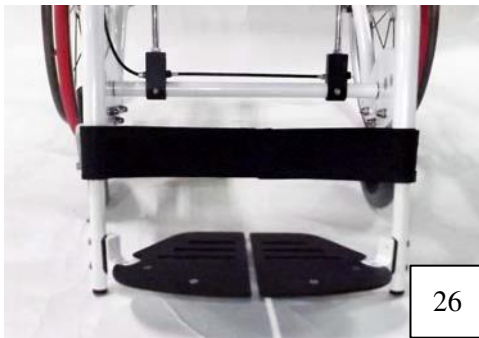


- To remove and attach the casters together with the front forks, depress the quick release axle from underneath then pull off the forks or push the forks. (Fig-25)



3-8. THE HEEL STRAP (Fig-26)

The purpose of the heel strap is to prevent the legs or feet slipping backwards. It is fitted behind the heels or higher. By making use of the Velcro fastening it is possible to alter the length of the strap and thus to ensure the ideal position for the feet on the footrest. Ideal positioning of the feet is vital in ensuring a good standing position.



3-9. GAS SPRING

The gas springs are specially designed to help hold your body weight in balance. With minimal arm work, i.e. pushing lightly on the armrests, you can stand yourself up. Similarly, by pulling lightly you can sit yourself back down in your seat, equally effortlessly. There is a range of spring strengths to suit the body weight of different wheelchair users.

Note:

Contents under pressure. Do not take apart puncture apply heat or fire.

The gas springs may be adjusted by qualified technician! Please contact your dealer!

Caution:

Do not bend or stretch the cables leading from the armrests to the gas springs as this may unintentionally trigger the stand- up mechanism (risk of accident)!

3-10. THE SEAT CUSHION

There is a choice of various seat cushions, governed by your individual needs. The Velcro fasteners fitted to the surface of your seat should allow you to attach the majority of seat cushions securely. The Velcro fasteners prevent the cushion from slipping out of place even when you are standing up. The height of the footrest should be adjusted to consider the height of a given seat cushion.

Once the knee support, safety belt is fitted correctly you are ready to stand up.

Chapter 4. OPERATING THE STANDING AND SITTING

Standing up stresses your body in ways you may not be used to. For this reason, **please consult your doctor or physical therapist before using the standing aid** to make sure you do not suffer from any conditions **(e.g. strong contractures or osteoporosis)** which make standing potentially harmful. The XO-55 may only be brought into the standing position on firm, level ground (risk of tipping over).

Note:

Before standing up, apply both brakes on the XO-55. Please beware of parts of the wheelchair where one might conceivably trap or catch parts of the body when standing up, in the space between the side panel / armrest and the seat as well as in the pivot of the side panel / armrest. Be sure to protect yourself and accompanying persons from possible injury.

The most important safety features of the stand-up wheelchairs are the knee support & safety belt and chest belt. It is essential that these be correctly in place before you attempt to stand up.

THE KNEE SUPPORT

The knee support holds the knees in an extended posture and prevents you slipping out the wheelchair while standing up.

Attach the two triangular form of the knee lock support to the double-head screws on either side of the wheelchair. (Fig-27)



Center the knee support in front of each knee using the Velour fasteners, then pull it until it is sitting firmly in place, just below (not right on) the kneecap and not too tight. (Fig-28)



THE SAFETY BELT (Fig-29)

- The safety belt holds the waist in place.
- Make sure that the safety belt is secure on the backrest of velour fastener.
- Lock the clasp on the safety belt and pull it and not too tight.
- To release the safety belt. Simply press the red button in the center of the catch.
- To slacken, hold the catch at a right angle to the belt and pull.

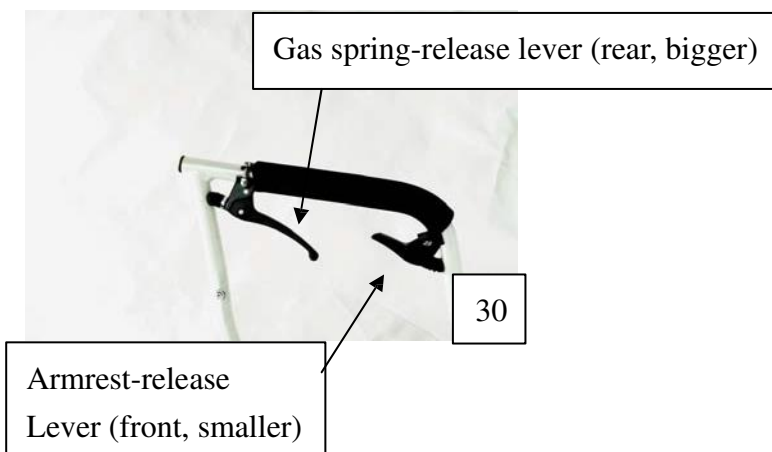


4-1. STANDING

The two armrests on either side of the seat serve not only as armrests, but also as part of the stand-up mechanism.

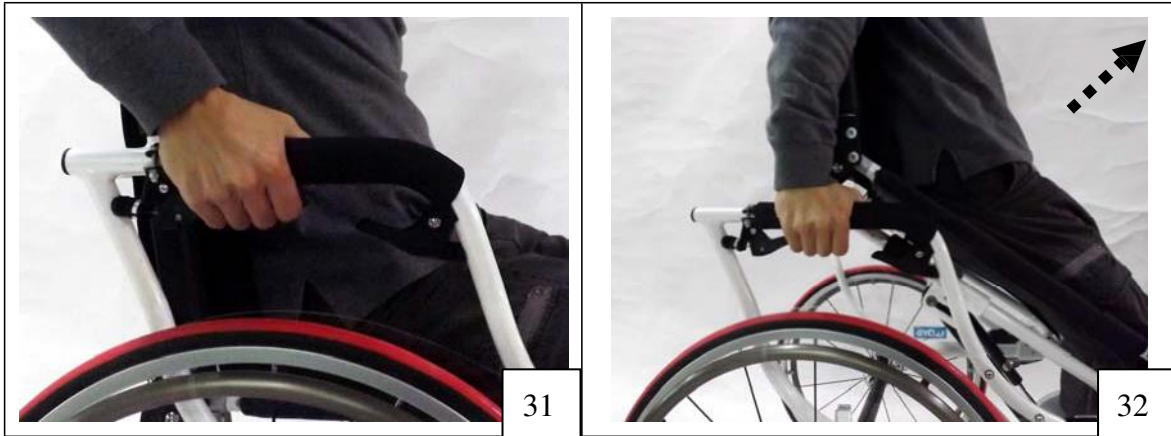
There are Three release levers. The bigger ones in the rear of the armrest are the gas spring-release levers. They release the gas springs which assist you as you raise yourself up by pushing down lightly on the side panels / armrest.

The two smaller ones towards the front of the armrest are the armrest-release levers. By using these levers, the armrests can be raised or lowered. (Fig-30)



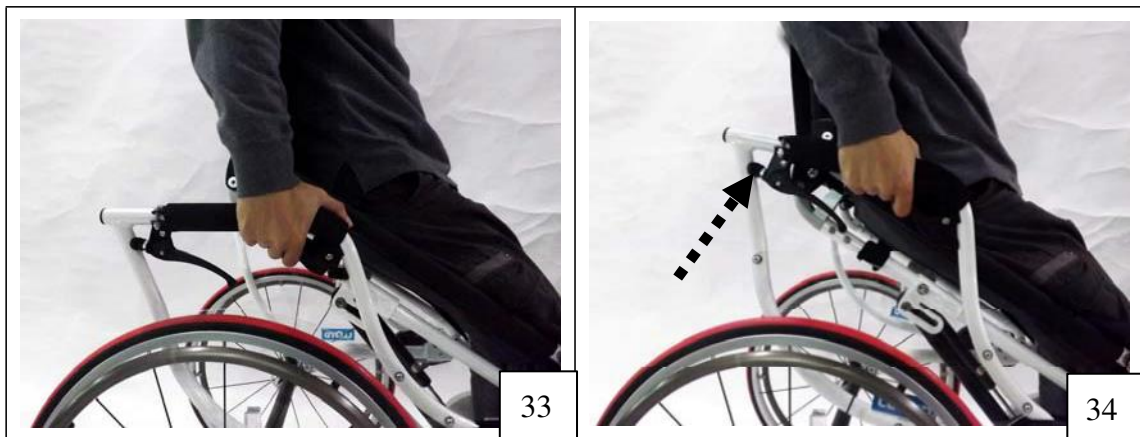
4-1-1. To release the gas springs, you should first push forward the little latch found on the gas spring-release levers, then pull the release levers themselves. (Fig-31)

4-1-2. Having raised yourself up as far as your arms will allow, let go of the gas spring-release levers to lock the gas springs once more in place. (Fig-32)



By using the two armrest-release levers found further toward the front of the armrests, you can bring the armrests up to the appropriate height.

4-1-3. Pull the two armrest-release levers, then lift the two armrests. Let go of the armrest-release levers and pull the two armrests up until they click in. (Fig-33&34)



4-1-4. Repeats points 4-1-1. ~ 4-1-3. (Fig 31~34) until you are standing fully upright.

4-2. SITTING DOWN

4-2-1. To unlock the gas springs again, first push backward the little latch found on gas spring - release levers, then pull the release levers themselves (Fig 31~34). Continue to hold down the release- levers as you use the armrests to pull yourself downwards.

4-2-2. Let go of the gas spring- release levers and, making use of the armrest- release levers, lower the armrests (Fig-31 ~ 34) into their intermediate position.

4-2-3. Repeat steps 4-2-1. and 4-2-2. (Fig 31~34) until you are once again able to resume your seat.

Attention:

Lower yourself slowly to the lowest seated position! (Risk of tipping over if not completed)

Chapter 5. STORAGE

5-1 FOLDING DOWN THE BACKREST

Your XO-55 is equipped with a folding backrest which allows you to cut down significantly on the space required to store the wheelchair away.

Simultaneously pull the chord and press the backrest lightly forward to fold the backrest (Fig-35~37)



5-2 THE QUICK-RELEASE AXLES

The quick-release axles enable you speedily to remove and re-mount the rear wheel of your XO-55, thus reducing the size and weight of the wheelchair. When removing a wheel, the wheelchair must be unoccupied. The wheelchair should be supported in such a way that it neither falls over nor rolls away after removing the wheel.

5-2-1. Depress the release button in the center of the wheel, then pull off or re-mount the wheel (Fig-38).



5-2-2. Having mounted the wheel, push and pull it several times to ensure the quick-release axle has locked in.

5-2-3 To remove and replace the casters together with the front forks, depress the quick-release axle from underneath then pull off the forks. (Fig-39)



Chapter 6. MAINTENANCE

When cleaning your **XO-55 series** use a dry or slightly moistened cloth to wipe the wheelchair down. For stubborn or oily stains, apply a mild detergent to the cloth. Do not hose down your **XO-55 series** with water.

According to frequency of use, check tire pressure between once a week and once a month. If necessary, pump up the tires in line with manufacturer's recommendations.

Check the state of the tread on the tires every one to six months. If a tire is heavily or unevenly worn, it should be replaced.

Every one to six months, check that the brakes still work cleanly. Having applied the brakes, the wheels should stop turning completely. If the brakes are ineffective, they should be tightened up.

According to frequency of use, to lubricate the joint between once a week and once a month. (Fig-40~45)

