Adjustable ASBA Seats

Adjustable ASBA Standard Seat

en  Adjustable ASBA Standard Seat
User Manual

This manual MUST be given to the user of the product.
BEFORE using this product, read this manual and save for future reference.
1 General

1.1 Symbols
Signal symbols and/or words are used in this manual and apply to hazards or unsafe practices which could result in personal injury or property damage. See the information below for definitions of the signal words.

DANGER!
- Danger indicates a imminently hazardous situation which, if not avoided, could result in death or serious injury.

WARNING!
- Warning indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION!
- Caution indicates a potentially hazardous situation which, if not avoided, may result in property damage or minor injury or both.

IMPORTANT
- Indicates a hazardous situation that could result in damage to property if it is not avoided.

Refer to wheelchair base user manual for additional safety and operation information.

Refer to the table below for part numbers of additional documents which are referenced in this manual.

<table>
<thead>
<tr>
<th>MANUAL</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>MK6i™ Electronics Programming Guide</td>
<td>1141471</td>
</tr>
<tr>
<td>Adjustable ASBA Service Manual</td>
<td>1143238</td>
</tr>
</tbody>
</table>

1.3 Restriction of Sale
Federal law restricts this device to sale by/on the order of a physician licensed by the law of the state in which he/she practices.

1.4 Intended Use
The intended use of the device is to provide mobility to persons limited to a sitting position.

1.5 Indications For Use
The indication for use of the Adjustable ASBA Standard Seat is to provide mobility to persons limited to a sitting position.

1.6 General Guidelines
The safety section contains important information for the safe operation and use of this product.
WARNING!
Risk of Death, Injury or Damage
Improper use of this product may cause injury or damage
- If you are unable to understand the warnings, cautions or instructions, contact a health care professional or dealer before attempting to use this equipment.
- DO NOT use this product or any available optional equipment without first completely reading and understanding these instructions and any additional instructional material such as user manual, service manuals or instruction sheets supplied with this product or optional equipment.

Continued use of the wheelchair with damaged parts could lead to the wheelchair malfunctioning, causing injury to the user and/or caregiver.
- Check all wheelchair components and carton for damage and test components before use. In case of damage or if the wheelchair is not working properly, contact a qualified technician or Invacare for repair.

WARNING!
Risk of Serious Injury or Damage
Use of non-Invacare accessories may result in serious injury or damage.
- Invacare products are specifically designed and manufactured for use in conjunction with Invacare accessories. Accessories designed by other manufacturers have not been tested by Invacare and are not recommended for use with Invacare products.
- DO NOT use non-Invacare accessories.
- To obtain Invacare accessories, contact Invacare by phone or at www.invacare.com

DANGER!
Risk of Death, Serious Injury, or Damage
Use of incorrect or improper replacement (service) parts may cause death, serious injury, or damage.
- Replacement parts MUST match original Invacare parts.
- ALWAYS provide the wheelchair serial number to assist in ordering the correct replacement parts.

WARNING!
Risk of Serious Injury or Damage
Attaching hardware that is loosely secured could cause loss of stability resulting in serious injury or damage.
- After ANY adjustments, repair or service and before use, make sure that all attaching hardware is tightened securely.

WARNING!
Risk of Serious Injury or Damage
Loss of power due to loose electrical connections could cause the wheelchair to suddenly stop resulting in serious injury or damage.
- ALWAYS ensure that all electrical connections are tightly connected so they don’t vibrate loose.
DANGER!
Risk of Death, Serious Injury, or Damage
Lighted cigarettes dropped onto an upholstered seating system can cause a fire resulting in death, serious injury, or damage.
Wheelchair occupants are at particular risk of death or serious injury from these fires and resulting fumes because they may not have the ability to move away from the wheelchair.
– DO NOT smoke while using this wheelchair.

WARNING!
Risk of Injury, Damage or Death
Improper mounting or maintenance may cause injury, damage or death due to ingestion or choking on parts or materials.
– Closely supervise children, pets, or people with physical/mental disabilities.

WARNING!
Risk of Injury or Damage
Improper mounting or maintenance of the Sip n’ Puff control including the mouthpiece and breath tube may cause injury or damage.
Water inside the Sip n’ Puff interface module may cause damage to the unit.
Excessive saliva residue in the mouthpiece/straw can reduce performance.
Blockages, a clogged saliva trap or air leaks in the system may cause Sip N' Puff not to function properly.
– Ensure moving parts of the wheelchair, including the operation of powered seating, DO NOT pinch or damage the Sip n’ Puff tubing.
– Saliva trap MUST be installed to reduce risk of water or saliva entering the Sip n’ Puff interface module.
– Occasionally flush the mouthpiece to remove saliva residue.
– The mouthpiece/straw MUST be completely dry before installation.
– If Sip n’ Puff does not function properly, inspect system for blockages, clogged saliva trap or air leaks. As necessary, replace mouthpiece, breath tube and saliva trap.

Contact your Invacare dealer/provider for more information about maintaining and troubleshooting the Sip n’ Puff system.
**WARNING!**
*Risk of Injury, Damage or Death*
Exposure to liquids may cause injury, damage or death.
- DO NOT expose electrical connections to sources of liquid or dampness. This includes, but is not limited to, water, body fluids or cleaning agents.
- DO NOT expose battery charger or other accessories to sources of liquid or dampness.
- Wheelchairs that are used by incontinent users and/or are frequently exposed to water/liquids may require replacement and inspection of electrical components more frequently than normal schedule dictates.
- Electrical components damaged by corrosion MUST be replaced immediately.

**CAUTION!**
*Risk of Damage*
Operating the wheelchair in rain or dampness may cause the wheelchair to malfunction electrically and mechanically; may cause the wheelchair to prematurely rust or may damage the upholstery.
- DO NOT leave wheelchair in a rain storm of any kind.
- DO NOT use wheelchair in a shower.
- DO NOT leave wheelchair in a damp area for any length of time.
- Check to ensure that the battery covers are secured in place, joystick boot is NOT torn or cracked where water can enter and that all electrical connections are secure at all times. DO NOT use if the joystick boot is torn or cracked. If the joystick boot becomes torn or cracked, replace IMMEDIATELY.

Leakage current has been tested in accordance to ISO 7176–14:2008.
Invacare has tested its power wheelchairs in accordance with RESNA Section 9 “Rain Test”.

THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

As a manufacturer of wheelchairs, Invacare endeavors to supply a wide variety of wheelchairs to meet many needs of the end user. However, final selection of the type of wheelchair to be used by an individual rests solely with the user and his/her healthcare professional capable of making such a selection. Invacare recommends working with a qualified rehab technology provider, such as an ATP, (Assistive Technology Professional).
1.6.1 Set Up

DANGER!
Risk of Death, Serious Injury, or Damage
Continued use of the wheelchair that is not set to the correct specifications may cause erratic behavior of the wheelchair resulting in death, serious injury, or damage.
– Performance adjustments should only be made by professionals of the healthcare field or persons fully conversant with this process and the driver's capabilities.
– After the wheelchair has been set up/adjusted, check to make sure that the wheelchair performs to the specifications entered during the set up procedure. If the wheelchair does not perform to specifications, turn the wheelchair Off immediately and reenter set up specifications. Contact Invacare, if wheelchair still does not perform to correct specifications.

WARNING!
Risk of Serious Injury or Damage
Moving the seating system from the factory setting may reduce driver control, wheelchair stability, traction and increase caster wear resulting in serious injury or damage.
– Move the seating system ONLY when necessary to fit the wheelchair to the user.
– If the seating system must be moved, ALWAYS inspect the wheelchair to ensure the front rigging DOES NOT interfere with the front casters.
– If the seating system must be moved, ALWAYS inspect to ensure the wheelchair DOES NOT easily tip forward or backward.

WARNING!
– DO NOT connect any medical devices such as ventilators, life support machines, etc. directly to the batteries used to power the wheelchair. This could cause unexpected failure of the device and the wheelchair.

DANGER!
Risk of Death, Serious Injury, or Damage
Missing attaching hardware could cause instability resulting in death, serious injury or damage.
– Ensure all attaching hardware is present and tightened securely.

WARNING!
Risk of Serious Injury
Sharp edges can cause serious injury.
– Be mindful that some parts may have sharp edges. Use caution when encountering these sharp edges.

WARNING!
Risk of Serious Injury
Hot surfaces can cause severe burns.
– Be mindful of potential hot surfaces and avoid touching.
WARNING!
Risk of Injury, Damage or Death
Improper routing of cord(s) may cause a tripping, entanglement or strangulation hazard that may result in injury, damage or death.
– Ensure all cord(s) are routed and secured properly.
– Ensure there are no loops of excess cable extending away from the chair.
– Close supervision and attention is needed when operating the wheelchair near children, pets or people with physical/mental disabilities.

WARNING!
Risk of Injury, Damage or Death
Pinched or severed cord(s) may be a shock or fire hazard and may cause injury, damage or death.
– Ensure all cord(s) are routed and secured properly.
– Inspect cord(s) periodically for proper routing, pinching, chafing or other similar wear.
– Replace any damaged cords immediately.

1.6.2 Transport in Vehicles
Refer to wheelchair base user manual for additional safety and operation information.

WARNING!
Risk of Injury, Damage or Death
Failure to observe and follow transport warnings and instructions may result in injury, damage or death.
– Wheelchair occupants should transfer into the vehicle seat and use the OEM (Original Equipment Manufacturer) vehicle-installed restraint system.
– Ensure wheelchair is secured using proper restraint systems. Use ONLY Wheelchair Tie-down and Occupant Restraint Systems (WTORS) which meet the requirements of the SAE (Society of Automotive Engineers) J2249 Recommended Practice during travel in a motor vehicle.
– Wheelchair-mounted accessories, including but not limited to IV poles, trays, respiratory equipment, backpacks, and other personal items should be removed and secured separately.
– Spill proof batteries, such as “gel cells”, should be installed on wheelchair to be used during travel in a motor vehicle.
– Contact Invacare Corporation with any questions about using this wheelchair for seating in a motor vehicle.

WARNING!
Risk of Injury, Damage or Death
Improper installation or service may result in injury, damage or death.
– Transport ready packages are not retrofittable to existing models and are not field serviceable.
– DO NOT overtighten hardware.
WARNING!
Risk of Injury, Damage or Death
Alteration or substitution may result in injury, damage or death.
– DO NOT alter or substitute product parts, components or systems.

WARNING!
Risk of Injury, Damage or Death
Damaged parts due to collision or impact may result in injury, damage or death.
– Seek immediate attention and service if wheelchair is involved in a collision or impact event. This includes, but is not limited to, vehicle accidents, mishandling and impact events where the wheelchair strikes something or is struck by something that may cause damage.
– Ensure your wheelchair is working properly and is inspected by a qualified Invacare technician if the wheelchair is involved in a collision or impact event.

Wheelchair Transport Brackets (TRBKTS)
TRBKTS includes four factory-installed wheelchair transport brackets.

As of this date, the Department of Transportation has not approved any tie-down systems for transportation of a user while in a wheelchair, in a moving vehicle of any type. It is Invacare’s position that users of wheelchairs should be transferred into appropriate seating in vehicles for transportation and use be made of the restraints made available by the auto industry. Invacare cannot and does not recommend any wheelchair transportation system.

WARNING!
Risk of Injury, Damage or Death
Improper use of wheelchair transport brackets (TRBKTS) may result in injury, damage or death.
– Use these transport brackets only to secure an unoccupied wheelchair during transport.
– Ensure wheelchair is secured using proper restraint systems. Wheelchair transport brackets have not been crash-tested in accordance with ANSI/RESNA WC Vol I Section 19 Frontal Impact Test requirements for wheelchairs.
– Only use the transport brackets for the purposes described in this manual.

ANSI = American National Standards Institute, RESNA= Rehabilitation Engineering and Assistive Technology Society of North America.
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Transport Ready Option (TRRO)

As of January 1, 2017, Transport Ready Option (TRRO) has been discontinued on this product. Please contact your dealer or Invacare for legacy information or to answer questions regarding TRRO.

As of this date, the Department of Transportation has not approved any tie-down systems for transportation of a user while in a wheelchair, in a moving vehicle of any type. It is Invacare’s position that users of wheelchairs should be transferred into appropriate seating in vehicles for transportation and use be made of the restraints made available by the auto industry. Invacare cannot and does not recommend any wheelchair transportation system.

⚠️ WARNING!
Risk of Injury, Damage or Death
Failure to observe and follow transport warnings and instructions may result in injury, damage or death.

- Use ONLY Wheelchair Tie-down and Occupant Restraint Systems (WTORS) which meet the requirements of the SAE (Society of Automotive Engineers) J2249 Recommended Practice during travel in a motor vehicle.
- The wheelchair MUST be in a forward facing position during travel in a motor vehicle.
- Only use the transport brackets included with TRRO for the purposes described in this manual.
- This wheelchair is equipped, and has been dynamically tested to rely on WHEELCHAIR-ANCHORED pelvic belts. If desired, VEHICLE-ANCHORED pelvic belts may be used.
- Use both pelvic and upper-torso belts.

TRRO includes four factory-installed transport brackets and a wheelchair anchored pelvic belt.

- The wheelchair has been tested for seating in a motor vehicle with the factory installed seating system only.
- This wheelchair has been dynamically tested in a forward-facing mode with the specified crash test dummy restrained by BOTH pelvic and upper-torso belt(s) (shoulder belts), and that BOTH pelvic and upper torso belt(s) should be used to reduce the possibility of head an chest impacts with vehicle components.
- TRRO has been crash-tested in accordance with ANSI/RESNA WC Vol 1 Section 19 Frontal Impact Test requirements for wheelchairs with a 130 lb (59 kg) crash test dummy, which corresponds to a person with a weight of 125 lb (57 kg) to 165 lb (75 kg) for Junior seat sizes or a 168 lb (76 kg) crash dummy, which corresponds to a person with a weight of 165 lb (75 kg) to 300 lbs (136 kg) for Adult seat sizes.
1.6.3 Repair or Service Information (Dealers and/or Qualified Technicians)

**WARNING!**
**Risk of Injury, Damage or Death**
Improper setup, service, adjustment or programming may cause injury, damage or death.
- Qualified technician MUST setup, service and program the wheelchair.
- DO NOT allow non-qualified individuals to perform any work or adjustments on the wheelchair.
- DO NOT setup or service the wheelchair while occupied except for programming or unless otherwise noted.
- Turn off power BEFORE adjusting or servicing the wheelchair. Note that some safety features will be disabled.
- Ensure all hardware is securely tightened after setup, service or adjustments.
- Warranty is void if non-qualified individuals perform any work on this product.

**DANGER!**
**Risk of Death, Serious Injury, or Damage**
Corroded electrical components due to water and/or liquid exposure, or incontinent users can result in death, serious injury, or damage.
- Minimize exposure of electrical components to water and/or liquids. Electrical components damaged by corrosion MUST be replaced immediately.
- Wheelchairs that are used by incontinent users and/or are frequently exposed to water/liquids may require replacement of electrical components more frequently.

**WARNING!**
**Risk of Injury, Damage or Death**
Improper installation or service may result in injury, damage or death.
- Transport ready packages are not retrofittable to existing models and are not field serviceable.
- DO NOT overtighten hardware.
2 Safety and Handling

2.1 Safety and Handling

Refer to wheelchair base user manual for additional safety and operation information.

DANGER!
Risk of Death, Serious Injury, or Damage
Misuse of the wheelchair may cause component failure and/or the wheelchair to start smoking, sparking, or burning. Death, serious injury, or damage may occur due to fire.

– DO NOT use the wheelchair other than its intended purpose. If the wheelchair starts smoking, sparking, or burning, discontinue using the wheelchair and seek service IMMEDIATELY.

DANGER!
Risk of Death or Serious Injury
Not wearing your seat positioning strap could result in death or serious injury.

– ALWAYS wear your seat positioning strap. Your seat positioning strap helps reduce the possibility of a fall from the wheelchair. The seat positioning strap is a positioning belt only. It is not designed for use as a safety device withstanding high stress loads such as auto or aircraft safety belts. If signs of wear appear, seat positioning strap MUST be replaced IMMEDIATELY.

WARNING!
Risk of Injury, Damage or Death
Use of the wheelchair while judgement or ability is impaired may result in injury, damage or death.

– DO NOT operate the wheelchair under the influence of alcohol, medications or other substances that impair judgement or function.

– Changing medications may affect your ability to operate the wheelchair. Discuss the impact on your ability to operate the wheelchair with a health care professional when changing medications.

– DO NOT operate the wheelchair under conditions where judgement or function may be impaired. This may include but is not limited to lack of sleep or poor sight.

– Always be aware of your surroundings.

WARNING!
Risk of Injury, Damage or Death
Misuse of wheelchair may result in injury, damage or death.

– DO NOT operate wheelchair on roads, streets or other roadways.

– DO NOT operate wheelchair when vision is impaired by poor lighting such as unlit rooms, during the night or similar situations.

– ALWAYS be aware of motor vehicles and your surroundings.

– DO NOT operate the wheelchair under the influence of alcohol, medications or other substances that impair judgement or function.
WARNING! Risk of Injury, Damage or Death
Conditions such as restlessness, mental deterioration, dementia, seizure disorders (uncontrolled body movement) or sleeping problems may cause injury, damage or death.
- Monitor patients with these conditions frequently.
- Close supervision and attention is needed when operating the wheelchair near children, pets or people with physical/mental disabilities.

WARNING! Risk of Injury or Damage
Improper operation may change the normal balance, center of gravity or weight distribution of the wheelchair causing injury or damage.
- Determine and establish your particular safety limits. Practice bending, reaching and transferring activities in several combinations in the presence of a qualified healthcare professional before attempting active use of the wheelchair.
- ALWAYS shift your weight in the direction you are turning. Shifting your weight in the opposite direction of the turn may cause the inside drive wheel to lose traction.

WARNING! Risk of Serious Injury
Impacting objects in the surrounding environment can cause serious injury.
- When maneuvering the wheelchair around, ALWAYS have assured cleared distance with all objects in environment.

WARNING!
Always check grips for looseness before using the wheelchair. If loose, contact a qualified technician for instructions.

WARNING! Risk of Injury or Damage
Unintended movement or operation of wheelchair may cause injury or damage.
- Turn power OFF BEFORE entering or exiting the wheelchair.
- Close supervision and attention is needed when operating the wheelchair near children, pets or people with physical/mental disabilities. Turn power off.
- Turn power off when near children, pets or people with physical/mental disabilities.
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2.1.1 Stability and Balance

WARNING!
Risk of Injury, Damage or Death
Improper use of wheelchair may cause instability and may result in injury, damage or death. The stability of the wheelchair is adversely affected by additional weight that shifts the center of gravity.
– This wheelchair has been designed to accommodate one individual. DO NOT operate with additional person(s).
– DO NOT carry heavy objects on your lap while operating the wheelchair.

WARNING!
Risk of Injury, Damage or Death
Damaged parts due to collision or impact may result in injury, damage or death.
– Seek immediate attention and service if wheelchair is involved in a collision or impact event. This includes, but is not limited to, vehicle accidents, mishandling and impact events where the wheelchair strikes something or is struck by something that may cause damage.
– Ensure your wheelchair is working properly and is inspected by a qualified Invacare technician if the wheelchair is involved in a collision or impact event.

2.1.2 Reaching, Leaning and Bending - Forward
Many activities require the wheelchair user to reach, bend and transfer in and out of the wheelchair. These movements will cause a change to the normal balance, center of gravity, and weight distribution of the wheelchair. To determine and establish your particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified healthcare professional before attempting active use of the wheelchair.
– DO NOT move beyond the center of gravity.
– DO NOT lean forward out of the wheelchair any further than the length of the armrests.
– DO NOT attempt to reach objects if you have to move forward in the seat or pick them up from the floor by reaching down between your knees.
– DO NOT shift your weight or sitting position toward the direction you are reaching.
– DO NOT stand on the frame of the wheelchair.
– DO NOT lean over the top of the back of the wheelchair.
2.1.3 Reaching, Bending - Backward

Engage motor locks and turn power off before reaching, leaning or bending only as far as your arm will extend without changing your sitting position. Position the casters so that they are extended away from the drive wheels and engage wheel locks/motor locks/clutches.

Position wheelchair as close as possible to the desired object. Position the casters so that they are extended away from the drive wheels to create the longest possible wheelbase, engage the motor locks and turn power off. Reach back only as far as your arm will extend without changing your sitting position.

2.1.4 Footplates and Front Rigging

WARNING!
Risk of Serious Injury or Damage
Operating the wheelchair with a ground clearance of less than 75 mm (3 inches) between the footplates and the ground/floor may cause serious injury or property damage.

– ALWAYS maintain a minimum of 75 mm (3 inches) between the bottom of the footplates and ground/floor to ensure proper ground clearance while the wheelchair is in motion. If necessary, adjust the footplates height to achieve proper ground clearance. After footplates height adjustment, if the wheelchair dips forward and the footplates touch the ground while in motion, please contact your dealer for an inspection and avoid use of the wheelchair if possible.

CAUTION!
Risk of Damage
Interference between footrests and front casters may cause damage.

– When determining the depth of the telescoping front frame tubes, make sure the rear of the footrests do not interfere with the movement of the front casters. Otherwise damage to the wheelchair may result or may impede proper operation.
2.1.5 Transferring To and From Other Seats

**WARNING! Risk of Serious Injury or Damage**
Improper transfer techniques may cause serious injury or damage.
  – Before attempting transfers, consult a health care professional to determine proper transfer techniques for the user and type of wheelchair.

**WARNING! Risk of Injury or Damage**
Misuse of footplate may cause injury or damage.
  – DO NOT stand on footplates.
  – Ensure the footplates are in the upward position or swung outward when getting in or out of the wheelchair.

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**FRONT VIEW**

![Front View Image]

**TOP VIEW**

![Top View Image]

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Adequate mobility and upper body strength is required to perform this activity independently.

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1. Transfer to and from the wheelchair in the presence of a qualified healthcare professional to determine individual safety limits.
2. Turn power button OFF BEFORE entering or exiting the wheelchair.
3. Reduce gap between transfer surface and wheelchair seat to the minimum distance necessary to perform transfer.
4. ALWAYS engage both motor locks and wheel hubs (if equipped) to prevent the wheels from moving before transferring into or from the wheelchair.
5. Align casters parallel to the drive wheels to improve stability during transfer.
6. Invacare strongly recommends ordering wheel locks as an additional safeguard if not present.
7. Flip up footplates or swing footrests outward.
8. Shift body weight into seat with transfer
   - During independent transfer, little or no seat platform will be beneath you. Use a transfer board if at all possible.

2.1.6 Pinch Points

**WARNING! Risk of Minor to Serious Injury**
Pinch points can cause minor to serious injury.
  – Be mindful of potential pinch points and use caution when using this product.
**WARNING!**
Risk of Injury
Pinch points can cause injury.
– Be aware that a pinch point A exists between the head tube cap and walking beam.
– Be aware that a pinch point B exists between the walking beam/head tube cap and telescoping tube when the wheelchair is at the lowest seat to floor height.
– Be aware that a pinch point C may occur when rotating the center mount front rigging assembly.

**WARNING!**
Risk of Injury
Pinch points can cause injury.
A pinch point D exists between the center mount footrest and casters.
There is limited clearance between center mount footrest and casters.
– The user’s feet MUST remain on the center mount footrest while operating the wheelchair. If the user’s feet are allowed to rest off the side of the center mount footrest they may come in contact with the caster possibly resulting in injury.

### 2.1.7 Storage

**WARNING!**
Risk of Injury, Damage or Death
Storage or use near heat sources and combustible products may result in injury or damage.
– DO NOT store or use wheelchair near open flames or other heat sources.
– DO NOT store or use wheelchair near combustible products.
2.1.8 Weight Training

**WARNING!**
Risk of Injury or Damage
Invacare DOES NOT recommend the use of its wheelchairs as a weight training apparatus. Invacare wheelchairs have NOT been designed or tested as a seat for any kind of weight training. Using said wheelchair for weight training could result in serious bodily injury to the user, damage to the wheelchair and surrounding property. Also, if occupant uses said wheelchair as a weight training apparatus, Invacare shall NOT be liable for bodily injury and the warranty is void.

– DO NOT use the wheelchair as a weight training apparatus.
3 Electromagnetic Compatibility (EMC) Information

3.1 Electromagnetic Interference (EMI) From Radio Wave Sources

Powered wheelchairs and motorized scooters (in this text, both will be referred to as powered wheelchairs) may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two way radios, and cellular phones. The interference (from radio wave sources) can cause the powered wheelchair to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the powered wheelchair’s control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each powered wheelchair can resist EMI up to a certain intensity. This is called its “immunity level.” The higher the immunity level, the greater the protection. At this time, current technology is capable of achieving at least a 20 V/m immunity level, which would provide useful protection from the more common sources of radiated EMI.

There are a number of sources of relatively intense electromagnetic fields in the everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. However, we believe that by following the warnings listed below, your risk to EMI will be minimized.

The sources of radiated EMI can be broadly classified into three types:

1. Hand-held Portable transceivers (transmitters/receivers with the antenna mounted directly on the transmitting unit. Examples include: citizens band (CB) radios, “walkie talkie”, security, fire and police transceivers, cellular telephones, and other personal communication devices).

   ❄ Some cellular telephones and similar devices transmit signals while they are ON, even when not being used.

2. Medium-range mobile transceivers, such as those used in police cars, fire trucks, ambulances and taxis. These usually have the antenna mounted on the outside of the vehicle.

3. Long-range transmitters and transceivers, such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

   ❄ Other types of handheld devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players, cassette players, and small appliances, such as electric shavers and hair dryers, so far as we know, are not likely to cause EMI problems to your powered wheelchair.

3.2 Powered Wheelchair Electromagnetic Interference (EMI)

Because EM energy rapidly becomes more intense as one moves closer to the transmitting antenna (source), the EM fields from handheld radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the powered wheelchair's control system while using these devices. This can affect powered wheelchair movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the powered wheelchair.
Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones can affect powered wheelchairs and motorized scooters.

FOLLOWING THE WARNINGS LISTED BELOW SHOULD REDUCE THE CHANCE OF UNINTENDED BRAKE RELEASE OR POWERED WHEELCHAIR MOVEMENT WHICH COULD RESULT IN SERIOUS INJURY.

WARNING! – DO NOT operate handheld transceivers (transmitters receivers), such as citizens band (CB) radios, or turn ON personal communication devices, such as cellular phones, while the powered wheelchair is turned ON;
– Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;
– If unintended movement or brake release occurs, turn the powered wheelchair OFF as soon as it is safe;
– Be aware that adding accessories or components, or modifying the powered wheelchair, may make it more susceptible to EMI (Note: There is no easy way to evaluate their effect on the overall immunity of the powered wheelchair); and
– Report all incidents of unintended movement or brake release to Invacare and note whether there is a source of EMI nearby.

3.3 Powered Wheelchair Electromagnetic Emissions

WARNING! Important Information
– 20 volts per meter (V/m) is a generally achievable and useful immunity level against EMI (as of May 1994) (the higher the level, the greater the protection);
– This device has been tested to a radiated immunity level of 20 volts per meter.
– The immunity level of the product is unknown.
– Modification of any kind to the electronics of this power wheelchair as manufactured by Invacare may adversely affect the EMI immunity levels.

CAUTION! Risk of Injury or Damage
EMC interference affecting other products may result in injury or damage.
To avoid impacting the operation and function of other products:
– Products not specified by Invacare that may be used on or near the wheelchair may be impacted by emissions from this product if they have a sensitivity level that is lower than the recognized standard and provided by this wheelchair. Refer to the manufacturer specifications for any electronic device BEFORE use near this product to determine its level of immunity and potential risk.
4 Label Locations

4.1 All Wheelchairs

DANGER!
Risk of Injury, Damage or Death
Missing or damaged labels may contribute to injury, damage or death.
– Ensure labels are present and legible.

Labels are subject to change without notice.

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<thead>
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<th>ITEM</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>See Note below</td>
<td>Weight Capacity Label</td>
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<tr>
<td>B</td>
<td>N/A</td>
<td>Serial Number Label</td>
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<tr>
<td>C</td>
<td>1114823</td>
<td>Repositioning Seat Label</td>
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Depending on the chair model, the part number for the weight capacity label will be one of the following: 1111016, 1111019, 1150751, 1150758, 1134858, 1134859
4.1.1 Wheelchairs with TRRO

<table>
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<tr>
<th>ITEM</th>
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<th>DESCRIPTION</th>
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<td>J</td>
<td>1134840</td>
<td>Pelvic Belt Warning Label</td>
</tr>
</tbody>
</table>
### 4.1.2 Wheelchairs without TRRO

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>11114832</td>
<td>Seat/Chest Positioning Strap Warning Label</td>
</tr>
</tbody>
</table>
## 5 Technical Data

### 5.1 Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Adjustable ASBA Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seat Width Range:</td>
<td>16 to 20 inches</td>
</tr>
<tr>
<td></td>
<td>or</td>
</tr>
<tr>
<td></td>
<td>20 to 24 inches</td>
</tr>
<tr>
<td>Seat Depth Range (1 inch increments):</td>
<td>16 to 22 inches</td>
</tr>
<tr>
<td>Back Height Range:</td>
<td>16 to 24 inches</td>
</tr>
<tr>
<td>Back Angle Range:</td>
<td>85° to 105° in 5° increments</td>
</tr>
<tr>
<td>Seat Pan Angle:</td>
<td>Adjustable Seat Angle (0° to 10°)</td>
</tr>
<tr>
<td>Armrests:</td>
<td>Flip Back, Fixed or Adjustable Height (Desk and Full Length)</td>
</tr>
<tr>
<td>Upholstery Options:</td>
<td>Nylon</td>
</tr>
<tr>
<td>Seat Cushion:</td>
<td>Cushion (Recommended)</td>
</tr>
<tr>
<td>Front Riggings:</td>
<td>Manual center mount, Swingaway, Manual Elevating</td>
</tr>
<tr>
<td>Footrests:</td>
<td>Telescoping Front Rigging Supports, 2-inch and 4-inch long Pivot Slide Tube</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>122 F (50 C) Maximum to -13 F (-25 C) Minimum</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>149 F (65 C) Maximum to -58 F (-40 C) Minimum</td>
</tr>
</tbody>
</table>

#### 5.1.1 Weight Capacity

Refer to wheelchair base user manual for additional safety and operation information.
WARNING!
Risk of Death or Serious Injury
Exceeding the weight capacity of the wheelchair/seating system could cause instability resulting in death or serious injury.
– DO NOT exceed the weight capacity.

If the seating system is mounted onto a power wheelchair that has a weight limitation greater than 275 lbs, the weight limitation of the power wheelchair is 275 lbs. Example: The power wheelchair has a 300 lb weight limitation, the seating system still has a weight limitation of 275 lbs, so the power wheelchair now has a 275 lb weight limitation.

Refer to the specifications in this manual and the manual shipped with the wheelchair base to determine the weight capacity (total combined weight of user and any attachments) of your wheelchair model.

<table>
<thead>
<tr>
<th></th>
<th>Adjustable ASBA Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Weight Limitation</td>
<td>Up to 400 lbs</td>
</tr>
</tbody>
</table>

**Adult seat weight based on 18 x 18 inch seat frame.

Weight limitation is total weight (user weight plus any additional items that the user may require [back pack, ventilator, etc.]). Example: If weight limitation of the wheelchair is 300 lbs and additional items equal 25 lbs, subtract 25 lbs from 300 lbs this means the maximum weight limitation of the user is 275 lbs.
6 Usage

6.1 Operation Warnings

**WARNING!**
**Risk of Injury, Damage or Death**
Improper setup, service, adjustment or programming may cause injury, damage or death.
- Qualified technician MUST setup, service and program the wheelchair.
- DO NOT allow non-qualified individuals to perform any work or adjustments on the wheelchair.
- DO NOT setup or service the wheelchair while occupied except for programming or unless otherwise noted.
- Turn off power BEFORE adjusting or servicing the wheelchair. Note that some safety features will be disabled.
- Ensure all hardware is securely tightened after setup, service or adjustments.
- Warranty is void if non-qualified individuals perform any work on this product.

6.2 Preparing the Joystick for Use

**WARNING!**
**Risk of Serious Injury or Damage**
Attaching hardware that is loosely secured could cause loss of stability resulting in serious injury or damage.
- After ANY adjustments, repair or service and before use, make sure that all attaching hardware is tightened securely.

**WARNING!**
**Risk of Injury, Damage or Death**
Malfunctioning or damaged joystick may cause unintended/erratic movement resulting in injury, damage or death.
- Ensure the joystick is securely connected to controller.
- DO NOT use if joystick does not spring back to the neutral position or becomes sticky or sluggish.
- DO NOT use if joystick boot is torn or damaged.
- DO NOT use with a broken or missing joystick knob.
- If unintended/erratic movement occurs, stop using the wheelchair immediately and contact a qualified technician.
- Ensure control knobs are secure before using the wheelchair. Stop using the wheelchair immediately and contact a qualified technician if control knobs are not secure.
The joystick is factory installed on the right side of the wheelchair. To reposition the joystick onto the left side of the wheelchair, refer to Repositioning the Joystick in the wheelchair base user manual.

1. Turn the adjustment lock lever A to release the adjustment lock from joystick mounting tube B.
2. Slide joystick mounting tube to the desired position.
3. Turn the adjustment lock lever to secure the adjustment lock to the joystick mounting tube.

### 6.3 About Front Riggings

**WARNING!**

Risk of Serious Injury or Damage

Operating the wheelchair with a ground clearance of less than 75 mm (3 inches) between the footplates and the ground/floor may cause serious injury or property damage.

- ALWAYS maintain a minimum of 75 mm (3 inches) between the bottom of the footplates and ground/floor to ensure proper ground clearance while the wheelchair is in motion. If necessary, adjust the footplates height to achieve proper ground clearance. After footplates height adjustment, if the wheelchair dips forward and the footplates touch the ground while in motion, please contact your dealer for an inspection and avoid use of the wheelchair if possible.

If the wheelchair is not moving, the front rigging must maintain a minimum of one inch ground clearance - otherwise personal injury and damage may result.

### 6.4 Raising/Lowering Elevating Front Riggings

1. Perform one of the following:
   - Raising - Pull back on the release lever A and raise front rigging to the desired height.
   - Lowering - Support front rigging with one hand away from the release lever. Push release lever downward with other hand.
6.5 Adjusting Calfpads

1. Rotate the calfpad A towards outside of the wheelchair.
2. Slide the calfpad up or down until the desired position is obtained.
   If one of the top two calf pad adjustment positions is being used, the legrest will need to be raised to avoid interference with the front stabilizers while going over obstacles or going up and down ramps.
3. Rotate the calfpad towards the inside of the wheelchair.

6.6 Positioning Flip Back Armrests

<table>
<thead>
<tr>
<th>Height Adjustment Lever</th>
<th>Armrest Release Lever</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locked (Vertical) Position</td>
<td>Unlocked (Horizontal) Position</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WARNING!**
- Make sure the flip back armrest release and height adjustment levers are in the locked position before using the wheelchair.
6.6.1 Positioning Flip Back Armrests for User Transfer

1. Unlock the flip back armrest A by position the armrest release lever B into the unlocked (horizontal) position.

   **WARNING!**
   – Armrest release lever MUST remain in the unlocked (horizontal) position during transfer, otherwise injury may result.

2. Pull up on the flip back armrest and remove the armrest from the front arm socket C.
3. Continue to pull up on the flip back armrest until the armrest is out of the way.
4. Repeat STEPS 1-3 for opposite flip back armrest, if necessary.

6.6.2 Positioning Flip Back Armrests for Use

1. Make sure the flip back armrest release lever B is in the unlocked (horizontal) position.
2. Install the flip back armrest A into the front arm socket C.
3. Lock flip back armrest by positioning flip back armrest release lever into the locked (vertical) position.
4. Lift up on flip back armrest to make sure the armrest is locked in place.
5. Repeat STEPS 1-4 for opposite flip back armrest, if necessary.
7 Setup Maintenance

7.1 Setup/Delivery Inspection

Setup/delivery inspection should be performed by dealer at time of delivery/set up.

Initial adjustments should be made to suit your personal body structure needs and preference. Thereafter weekly, monthly and periodic inspections should be performed by user/attendant between the six month service inspections. Refer to User/Attendant Inspection Checklist.

Every six months, and as necessary, take your wheelchair to a qualified technician for a thorough inspection and servicing.

Refer to wheelchair base user manual for additional safety inspection and troubleshooting information.

- Check all parts for shipping damage. In case of damage, DO NOT use.
- Ensure clothing guards are secure.
- Ensure arm guards are secure but easy to release and adjustment levers engage properly.
- Ensure adjustable height arm guards operate and lock securely.

7.2 Service Life

The expected service life is five years, presuming that the product is used daily and in accordance with safety instructions, maintenance instructions and intended use, stated in this manual.

7.3 Wear and Tear Information

General Information

Normal wear and tear items and components include but are not limited to: all upholstery items including seat and back upholstery, arm and calf pads, cushions, wheels, tires and casters, all types of batteries, joystick overlays and inductive rubberized protective boots.

Invacare reserves the right to ask for any item back that has an alleged defect in workmanship. Refer to the Warranty section in this manual for specific warranty information.

Refer to the Inspection Checklists for proper preventative maintenance schedule.

This is just a general guideline and does not include items damaged due to abuse and misuse.

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Product Wear and Tear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheelchairs</td>
<td>Wheels, Brake Assembly, Hand Grips</td>
</tr>
<tr>
<td>Mobility Hardware</td>
<td>Rubber Urethane Tires and Casters, Handgrips, Joystick Inductive Tops, Joystick Overlays, Motors and Gearboxes (if exposed to prolonged moisture, urine, etc.), Stability Lock</td>
</tr>
<tr>
<td>and Electronics</td>
<td></td>
</tr>
<tr>
<td>Upholstery and Seating</td>
<td>Arm pads, Seat Cushion Foam, Seat Cushion Covers, Back Cushion Foam, Back Cushion Covers, Headrest Foam, Headrest Covers, Footplate Covers, Calf Pad (if applicable) Foam and Cover</td>
</tr>
<tr>
<td>Batteries</td>
<td>Lead acid/Lithium, Coin cell (watch type), Gel (6 months)</td>
</tr>
</tbody>
</table>
7.4 **User/Attendant Inspection Checklists**

Every six months, and as necessary, take your wheelchair to a qualified technician for a thorough inspection and servicing.

Weekly, monthly and periodic inspections should be performed by user/attendant between the six month service inspections.

Regular cleaning will reveal loose or worn parts and enhance the smooth operation of your wheelchair. To operate properly and safely, your wheelchair must be cared for just like any other vehicle. Routine maintenance will extend the life and efficiency of your wheelchair.

Refer to wheelchair base user manual for additional safety inspection and troubleshooting information.

**DANGER!**

Risk of Injury, Damage or Death

Overinflation of tires may cause tires to explode.

- Inflate tire to the proper tire pressure (P.S.I. / kilopascals) listed on the side wall of the tire.
- Only use wheelchair with tires at proper pressure.
- The wheels and tires should be checked periodically for cracks and wear and should be replaced if necessary.

7.4.1 **Inspect/Adjust Weekly**

- Inspect all fasteners.
- Inspect TRRO/TRBKTS fasteners and hardware

7.4.2 **Inspect/Adjust Monthly**

- Clean upholstery and armrests.

- Inspect seat positioning strap for any signs of wear. Ensure buckle latches. Verify hardware that attaches strap to frame is secure and undamaged. Replace if necessary.

7.4.3 **Inspect/Adjust Periodically**

- Inspect all fasteners.
- Inspect TRRO/TRBKTS fasteners and hardware
- Ensure clothing guards are secure.
- Ensure arms are secure but easy to release and adjustment levers engage properly.
- Ensure adjustable height arms operate and lock securely.
- Ensure upholstery does not have any rips or tears.
- Ensure armrest pad sits flush against arm tube.
- Inspect foam handgrips for damage. If damaged, have them replaced by a qualified technician.
- Check center mount front riggings for loose fasteners. Replace/tighten if necessary.
- Check that all labels are present and legible. Replace if necessary.

7.5 **Service Inspection**

Every six months take your wheelchair to a qualified technician for a thorough inspection and servicing.

Service inspections MUST be performed by a technician.

Refer to wheelchair base user manual for additional safety inspection and troubleshooting information.
DANGER!
Risk of Injury, Damage or Death
Overinflation of tires may cause tires to explode.
- Inflate tire to the proper tire pressure (P.S.I. / kilopascals) listed on the side wall of the tire.
- Only use wheelchair with tires at proper pressure.
- The wheels and tires should be checked periodically for cracks and wear and should be replaced if necessary.

WARNING!
Risk of Serious Injury or Damage
Attaching hardware that is loosely secured could cause loss of stability resulting in serious injury or damage.
- After ANY adjustments, repair or service and before use, make sure that all attaching hardware is tightened securely.

The following are recommended items to inspect during regular service inspections performed by a qualified technician. Actual items to be inspected during the service inspection may vary according to the specific wheelchair:

7.5.1 Six Month Inspection
- Clean upholstery and armrests.
- Check that all labels are present and legible. Replace if necessary.
- Ensure clothing guards are secure.
- Ensure adjustable height arms operate and lock securely.
- Ensure upholstery does not have any rips or tears.
- Ensure armrest pad sits flush against arm tube.
- Ensure arms are secure but easy to release and adjustment levers engage properly.
- Inspect seat positioning strap for any signs of wear. Ensure buckle latches. Verify hardware that attaches strap to frame is secure and undamaged. Replace if necessary.
- Check center mount front riggings for loose fasteners. Replace /tighten if necessary.
- Inspect electrical components for signs of corrosion. Replace if corroded or damaged.
- Inspect all fasteners.
- Inspect TRRO/TRBKTS fasteners and hardware.
- Inspect foam handgrips for damage. If damaged, have them replaced by a qualified technician.

7.6 Cleaning

WARNING!
Risk of Injury, Damage or Death
Electrical shock may cause injury, damage or death.
- Always unplug the product from the electrical outlet before cleaning.
- Always unplug accessories from the electrical outlet before cleaning.

CAUTION!
Risk of Damage
Cleaning or maintenance may cause damage to carpeting or flooring.
- Place the wheelchair in a well ventilated area where cleaning or maintenance can be performed without risk of damage to carpeting or flooring.
**CAUTION!**

Risk of Damage
Exposure to liquids may damage components or accessories of wheelchair and electronics.
- DO NOT spray with any type of water or liquid.
- Electrical components damaged by corrosion MUST be replaced immediately.

**WARNING!**

Risk of Injury, Damage or Death
Excessive moisture or cleaning may reduce the flame retardancy of the upholstery and may result in injury, damage or death.
- Follow all cleaning instructions.
- Avoid excessive moisture or cleaning.

Regular cleaning will reveal loose or worn parts and enhance the smooth operation of your wheelchair. To operate properly and safely, your wheelchair must be cared for just like any other vehicle.

For upholstery that is severely stained or surface finish that is badly damaged, contact Invacare for further information.

1. Use the following instructions to clean this product unless otherwise specified.
   - Upholstery — Warm water and mild non-abrasive soap.
   - Metal — Hot water and mild non-abrasive soap. Car polish and soft wax may be used to remove abrasions and restore gloss.
   - Plastic — Hot water and mild non-abrasive soap.
2. Dry the surface with dry cloth.
3. DO NOT use solvents or kitchen cleaners.

### 7.7 Installing/Removing 70A°

1. Turn the footrest A to the side (open footplate is perpendicular to wheelchair).
2. Install the hinge plates B on the footrest onto the hinge pins C on the wheelchair frame.
3. Push the footrest towards the inside of the wheelchair until it locks into place.
   - The footplate will be on the inside of the wheelchair when locked in place.
4. Repeat STEPS 1-3 for other footrest assembly.
5. To remove the footrest, push the footrest release lever D inward, rotate footrest outward.
6. Adjust footrest height, if desired. Refer to 7.19 Footrest Height Adjustment, page 43.
7.8 Installing/Removing 70° Taper Footrest

1. Turn the footrest A to the side (open footplate is perpendicular to wheelchair).
2. Insert footrest mounting pin B into mounting tube C.
3. Push the footrest towards the inside of the wheelchair until it locks into place.
   - The footplate will be on the inside of the wheelchair when locked in place.
4. Repeat STEPS 1-3 for the other footrest assembly.
5. To remove the footrest, push the footrest release lever D inward, rotate footrest outward.
6. Adjust footrest height, if desired. Refer to 7.19 Footrest Height Adjustment, page 43.

7.9 Installing/Removing Elevating Legrests

7.9.1 Installing

1. Turn legrest A to side (open footplate is perpendicular to wheelchair).
2. Install the legrest hinge plates B onto the hinge pins C on the wheelchair frame.
3. Rotate legrest toward the inside of the wheelchair until it locks in place.
   - The footplate will be on the inside of the wheelchair when locked in place.
4. Repeat STEPS 1-3 for the opposite legrest.
5. After the user is seated in wheelchair, adjust footplate to correct height by loosening nut D and sliding the lower footrest E assembly up or down until desired height is achieved.
7.9.2 Removing

1. Push the legrest release handle \( \mathcal{F} \) toward the inside of the wheelchair (facing the front of the wheelchair) and swing the legrest to the outside of the wheelchair.
2. Lift up on the legrest \( \mathcal{A} \) and remove from the wheelchair.
3. Repeat STEPS 1-2 for opposite side of wheelchair.

7.10 Replacing Heel Loops

1. Note the position of hex bolt \( \mathcal{A} \), coved washers \( \mathcal{B} \) and locknut \( \mathcal{C} \) for reinstallation.
2. Remove the hex bolt, coved washers and locknut that secure the lower footrest \( \mathcal{D} \) to the footrest support \( \mathcal{E} \).
3. Remove the lower footrest.
4. Remove the phillips bolt \( \mathcal{F} \), spacer \( \mathcal{G} \) and locknut \( \mathcal{H} \) that secure the existing heel loop \( \mathcal{I} \) to the lower footrest.
5. Slide the existing heel loop off the lower footrest.
6. Replace heel loop.
7. Reverse STEPS 1-6 to reassemble.

When securing heel loop to lower footrest, tighten the phillips screw and locknut until the spacer is secure.

7.11 Removing/Installing the Manual Center Mount Footrest

7.11.1 Installing

1. Engage the release lever with one hand, hold the center mount footrest \( \mathcal{B} \) with the other, and insert the center mount footrest into the mounting bracket \( \mathcal{C} \) of the seat frame \( \mathcal{D} \).
2. Reinstall the rigging pivot pin \( \mathcal{A} \) to secure the center mount footrest to the mounting bracket of the seat frame.
Adjustable ASBA Seats

7.11.2 Removing

Release lever is not shown. It is located towards the front or center of seat frame.

1. Remove the rigging pivot pin A that secures the footrest B to the mounting bracket C of the seat frame D.

2. Hold the footrest with one hand and engage the release lever with the other while simultaneously pulling the center mount footrest out of the mounting bracket of the seat frame.

7.12 Adjusting/Replacing Telescoping Front Rigging Support

DETAIL “A” — MOUNTING POSITIONS FOR RECLINING SEATING SYSTEMS
7.12.1 Adjusting Telescoping Front Rigging Support

1. Remove the two cap screws (A), spacers (B) and threaded blocks (C) securing the telescoping front tube (D) to the side rail (E).
2. Slide existing telescoping front rigging support to one of six depth positions.
3. Use the existing two cap screws, spacers and threaded blocks to secure the telescoping front tube to the side rail.
4. Repeat steps 1 to 3 on the opposite side, if desired.

7.12.2 Replacing Telescoping Front Rigging Support

1. Remove the two cap screws (A), spacers (B) and threaded blocks (C) securing the telescoping front tube (D) to the side rail (E).
2. Remove existing telescoping front rigging.
3. Perform one of the following:
   - Reclining Seating Systems Only - Refer to Detail “A” and the list below to determine the mounting position for the new telescoping front tubes.
     - 16 inch and 19 inch Seat Depth (F)
     - 17 inch and 20 inch Seat Depth (G)
     - 18 inch and 21 inch Seat Depth (H)
     - 22 inch Seat Depth (I)
   - Non-reclining Seating Systems - The telescoping front tubes can be positioned using one of six mounting positions. Proceed to step 4.
4. Use the existing two cap screws, spacers and threaded blocks to secure the telescoping front tube to the side rail.
5. Repeat steps 1 to 4 on the opposite side, if desired.

7.13 Installing Adjustable Angle Flip-up Footplate Hinge

1. Position footplate hinge (A) on the footrest support tube (B) at the desired height.
2. Position mounting screw (C), washers (D), spacer (E), and locknut (F) on the footrest support as shown.
3. Flip the footplate hinge to the up position.

The footplate hinge will fall to the down position.
4. Tighten the mounting screw, washer, and locknut that secure the footplate hinge to the footrest support until the footplate hinge remains in the up position.

5. Check the up and down motion of the footplate hinge to make sure the user of the wheelchair can operate the footplates easily.
   - If footplate's motion is too tight, loosen the mounting screw and locknut approximately ¼-turn counterclockwise.
   - If the footplate's motion is too loose, tighten mounting screw and locknut approximately ¼-turn clockwise.

6. Adjust footplate. Refer to 7.20 Adjusting Adjustable Angle Flip-Up Footplates, page 44.

### 7.14 Installing Adjustable Angle Flip-up Footplates

1. Slide the half clamp A over the footplate hinge B.
2. Hand tighten the two flat screws C and locknuts D that secure the footplate E to the half clamp.
3. Adjust the footplates to the necessary angle and depth for the user. Refer to 7.20 Adjusting Adjustable Angle Flip-Up Footplates, page 44.

### 7.15 Removing/Installing Heel Loop on Composite Footplate

1. Remove the mounting screw A and coved washer B that secures the lower half of the footrest to the swingaway footrest assembly C.
2. Remove the lower footrest assembly.
3. Remove the mounting screw D, spacer E, and locknut F that secure the heel loop G to the footplate H.
4. Slide heel loop up and off of footrest assembly.
5. To install heel loop, reverse STEPS 1 through 4.
   - When securing heel loop to the footrest assembly, tighten mounting screw until the spacer is secure.

### 7.16 Removing/Installing Heel Loop on Articulating Footplate

1. Remove the two mounting screws A, washers B, and spacers C that secure the heel loop D to the articulating footplate E.
2. To install heel loop, reverse STEPS 1
   - When securing heel loop to the footrest assembly, tighten mounting screw until the spacer is secure.

#### 7.17 Removing/Installing/Adjusting the Adjustable Heel Loop

1. If the user’s physical or medical condition and health care provider allows, shoes should be worn when occupying the wheelchair.

#### 7.17.1 Removing the Adjustable Heel Loop

1. Remove the mounting screw A, spacer B, washer C (not used on deluxe flip up footplate) and cap nut D securing the adjustable heel loop E to the footplate F.
2. Pull to release the hook G and loop H strips securing the adjustable heel loop to the lower footrest tube I.
3. Remove the adjustable heel loop from the front rigging.
7.17.2 Installing the Adjustable Heel Loop

When installing the adjustable heel loop, wrap the hook and loop strips wrap around the front rigging tube as shown. This will ensure the hook strip is facing towards the rear of the wheelchair.

1. Using the mounting screw A, spacer B, washer (not used on deluxe flip up footplate) C and cap nut D secure the adjustable heel loop E to the footplate F.
2. Secure the hook G and loop H strips around the lower footrest tube (I). Refer to Adjusting the Adjustable Heel Loop.

7.17.3 Adjusting the Adjustable Heel Loop

1. If necessary, pull to release the hook G and loop H strips securing the adjustable heel loop E to the lower footrest tube I.
2. Determine the heel loop length and depth appropriate for the wheelchair user.
   - A red line J is included on the hook strip to help indicate when the hook and loop strips overlap by 1-1/2 inches (38 mm) K.
3. Ensuring at least 1-1/2 (38 mm) K inches of the loop strip connects to the hook strip, firmly press the hook and loop strips together to secure the adjustable heel loop around the lower footrest tube.
4. If necessary, repeat STEPS 1-3 to adjust the remaining adjustable heel loop.

7.18 Installing/Removing Flip Back Armrests

Armrest Release Lever

Locked (Vertical) Position  Unlocked (Horizontal) Position

WARNING!
- Make sure the flip back armrest release and height adjustment levers are in the locked position before using the wheelchair.
Flip back armrest release lever A MUST be in the unlocked (horizontal) position when placing the flip back armrest into the arm sockets.

### 7.18.1 Installing

1. Visually inspect to ensure flip back armrest release lever A is in the unlocked (horizontal) position.
2. Slide the flip back armrest B into the arm sockets (front socket C and rear socket D) on the seat frame E.
3. Install the quick-release pin F through the rear arm socket D and flip back armrest.
4. Lock the flip back armrest by pressing the flip back armrest release lever into the locked (vertical) position.
5. Repeat STEPS 1-4 for the opposite flip back armrest.

### 7.18.2 Removing

1. Unlock the flip back armrest B by positioning the flip back armrest release lever A into the unlocked (horizontal) position.
2. Remove the quick-release pin F that secures the flip back armrest to the rear arm socket D.
3. Pull up on the flip back armrest and remove the armrest from the arm sockets (front socket C and rear socket D).
4. Repeat STEPS 1-3 for the opposite flip back armrest, if necessary.

### 7.19 Footrest Height Adjustment

#### 7.19.1 70°

1. Remove any accessory from the footrest(s).
   - Lay the footrest on a flat surface to simplify this procedure.
2. Remove the footrest from the wheelchair. Refer to 7.7 Installing/Removing 70A°, page 35.
3. Remove the mounting screw A, washers B and locknut C that secure the lower footrest assembly D to the upper footrest support E.
4. Reposition the lower footrest to the desired height.
5. Reinstall the mounting screw, washers and locknut that secure the lower footrest to the footrest support and tighten securely.
6. Repeat STEPS 1-5 for the opposite wheelchair footrest, if necessary.
Adjustable ASBA Seats

7. Reinstall the footrest(s) onto the wheelchair. Refer to 7.7 Installing/Removing 70A°, page 35.
8. Reinstall any accessory onto the footrest(s).

7.19.2 70° Taper

1. Remove any accessory from the footrest(s).
2. Remove the footrest from the wheelchair. Refer to 7.8 Installing/Removing 70° Taper Footrest, page 36.
   - Lay the assembly on a flat surface to improve access to the hardware.
   - Note the position of the spacers before disassembly
3. Remove the mounting screw and coved spacer that secures the lower footrest assembly.
4. Position the footrest assembly to the desired height.
5. Secure lower footrest assembly with existing mounting screw and coved spacer. Securely tighten.
   - Make sure spacers are positioned properly when reassembling to prevent damage to the frame mounting tubes.
6. Reinstall the footrest(s) onto the wheelchair. Refer to 7.8 Installing/Removing 70° Taper Footrest, page 36.
7. Reinstall any accessory onto the footrest(s).

7.20 Adjusting Adjustable Angle Flip-Up Footplates

Angle Adjustment

Perpendicular and/or Inversion/Eversion Adjustment

1. Remove any accessory from the footrest(s).
2. Remove the footrest from the wheelchair. Refer to 7.8 Installing/Removing 70° Taper Footrest, page 36.
   - Lay the assembly on a flat surface to improve access to the hardware.
3. Remove the mounting screw and coved spacer that secures the lower footrest assembly.
4. Position the footrest assembly to the desired height.
7.20.1 Depth Adjustment

Observe the angle of the footplate for reinstallation.

The settings for positioning the footplates on the half-clamps may vary for each footplate.

1. Remove the two flat screws A, washers B and locknuts C that secure footplate D to the half clamp E.
2. Move footplate to one of four mounting positions.
   - If desired depth is still not obtained, rotate the half clamp 180° on the footplate hinge F.
3. Retighten the two flat screws, washers and locknuts.

7.20.2 Angle Adjustment

Observe the angle of the footplate for reinstallation.

The settings for positioning the footplates on the half-clamps may vary for each footplate.

1. Loosen, but DO NOT remove, the two flat screws A, washer B and locknuts C that secure the footplate D to the half clamp E.
2. Position the footplate to the necessary angle to accommodate the user.
3. Retighten the two flat screws, washers and locknuts.

7.20.3 Perpendicular and/or Inversion/Eversion Adjustment

It is not necessary to remove the footplate to perform this adjustment.

1. Insert a flathead screwdriver through the half clamp E on the footplate.
2. Slowly turn nylon adjustment screw G in or out until footplate is perpendicular to the footrest assembly or the desired inversion or eversion is obtained.
7.21 Adjusting the Height of the Manual Center Mount Footrest

**WARNING!**
**Risk of Serious Injury or Damage**
Operating the wheelchair with a ground clearance of less than 75 mm (3 inches) between the footplates and the ground/floor may cause serious injury or property damage.
– ALWAYS maintain a minimum of 75 mm (3 inches) between the bottom of the footplates and ground/floor to ensure proper ground clearance while the wheelchair is in motion. If necessary, adjust the footplates height to achieve proper ground clearance. After footplates height adjustment, if the wheelchair dips forward and the footplates touch the ground while in motion, please contact your dealer for an inspection and avoid use of the wheelchair if possible.

**WARNING!**
– PINCH POINT EXISTS BETWEEN CENTER MOUNT FOOTREST AND CASTERS - There is limited clearance between center mount footrest and casters. The user’s feet MUST remain on the center mount footrest while operating the wheelchair. If the user’s feet are allowed to rest off the side of the center mount footrest they may come in contact with the caster possibly resulting in injury.

1. Remove the two mounting screws A that secure the button head cleat B to the extension housing C.
2. Adjust the footrest extension tube D to the desired height.
3. Secure the extension tube to the desired height with the button head cleat and mounting screws. Securely tighten.
4. Repeat steps 1-3 for the other extension tube.
7.22 Adjusting the Angle of the Manual Center Mount Footrest

**WARNING!**

PINCH POINT EXISTS BETWEEN CENTER MOUNT FOOTREST AND CASTERS - There is limited clearance between center mount footrest and casters. The user’s feet MUST remain on the center mount footrest while operating the wheelchair. If the user’s feet are allowed to rest off the side of the center mount footrest they may come in contact with the caster possibly resulting in injury.

Release lever located towards the front or center of seat frame.

**WARNING!**

Risk of Serious Injury or Damage

Operating the wheelchair with a ground clearance of less than 75 mm (3 inches) between the footplates and the ground/floor may cause serious injury or property damage.

– ALWAYS maintain a minimum of 75 mm (3 inches) between the bottom of the footplates and ground/floor to ensure proper ground clearance while the wheelchair is in motion. If necessary, adjust the footplates height to achieve proper ground clearance. After footplates height adjustment, if the wheelchair dips forward and the footplates touch the ground while in motion, please contact your dealer for an inspection and avoid use of the wheelchair if possible.

1. Engage the release lever with one hand (not shown) and move the center mount footrest A to the desired angle with the other hand.
2. Disengage the release lever (not shown) to lock the center mount footrest in the new position.
Adjustable ASBA Seats

7.23 Adjusting the Footplate Width of the Center Mount Footrest

Narrow configuration shown (No Spacers)

1. Flip footplate A down
2. Remove the mounting screw B, nylon washer C, washer D and wave washer E securing the footplate to the extension tube F of the center mount footrest G.
3. Reposition the four 1/4 inch spacers H between the footplate and washer as necessary to achieve the desired footplate width
4. Using the mounting screw, nylon washer, washer and wave washer, secure the footplate to the extension tube.
5. Repeat STEPS 1 and 4 for the other footplate.

Medium Narrow (One Spacer)

Medium (Two Spacers)

Medium Wide (Three Spacers)

Wide (Four Spacers)
### 7.24 Adjusting the Footplate Angle

Manual Center Mount Footrest is shown for reference A.

Rear view of footplate C is shown for clarity.

1. Flip footplate up.
2. Rotate the adjustment screw B in or out until the desired angle is achieved.
3. Repeat STEPS 1 and 2 for the other footplate.

### 7.25 Adjusting the Tension of the Flip Up Footplate

The tension can be adjusted to increase or decrease the rotation effort of the flip up footplates A.

1. Loosen the mounting screw B on the front rigging angle hinge to decrease the rotation effort.

   DO NOT remove the footplate mounting screw.

2. Tighten the front rigging angle hinge mounting screw to increase the rotation effort.
3. Repeat STEPS 1 and 2 for the other footplate.
### 7.26 Adjusting the Angle of the Cantilever Arm

Access to the adjustment screw A is on the bottom of the arm tube B.

1. Adjust the cantilever arm C angle as necessary to accommodate the user.
   - To adjust the arm angle down, turn the adjustment screw clockwise.
   - To adjust the arm angle up, turn the adjustment screw counterclockwise.
2. Repeat STEP 1 to adjust the other cantilever arm (as necessary).

### 7.27 Adjusting the Back Angle

1. Loosen, but DO NOT remove, the two lower hex screws A securing the cane brackets B to the back canes C.
2. Remove the two upper hex screws D, washers E and locknuts F securing the cane brackets to the back canes.
3. Align the upper mounting holes in the back canes with the desired mounting holes in the cane brackets.
4. Install the two upper hex screws, washers and locknuts to secure the cane brackets to the back canes.
5. Torque the locknuts to 13 ft-lbs.
7.28 Repositioning Joystick

1. Turn the adjustment lock lever A to release the joystick mounting tube B from the joystick mounting bracket C.
2. Remove the joystick from the wheelchair.
3. Remove the three hex screws D and washers E that secures the joystick mounting bracket to the threaded mounting bracket F.
4. Reposition threaded mounting bracket on the inside of the opposite arm tube G as shown.
5. Using the three hex mounting screws and washers, secure joystick mounting bracket to the threaded mounting bracket.
6. Slide the joystick mounting tube through the joystick mounting bracket to the desired position.
7. Turn the adjustment lock lever to secure the joystick mounting tube into the mounting bracket.

7.29 Disconnecting/Connecting the SPJ+ Joysticks

7.29.1 Disconnecting the SPJ+ Joysticks
1. Hold the light grey collar portion A of the joystick connector B with one hand and the controller connector C on the wheelchair in the other and disconnect them by pulling them apart.

7.29.2 Connecting the SPJ+ Joysticks

**WARNING!**
- The joystick connector and controller connector fit together in one way only. DO NOT force them together.

1. Hold the light grey collar portion A of the joystick connector B with one hand and the controller connector C on the wheelchair in the other and align them.
2. Lightly push to engage the joystick connector and the controller connector.
7.30 Disconnecting/Connecting the CMPJ+ Joysticks

The joystick connector is located at the rear of the seat frame.

7.30.1 Connecting the CMPJ+ Joysticks

1. Ensure the latch is pulled away from the network connector.
2. Connect the network connector to the other connectors.
3. Top B and Bottom C Connectors - Install connector caps onto the network connector.
4. Push the latch in to secure the network connectors and caps.
5. If necessary secure excess cable using tie-wraps.

7.30.2 Disconnecting the CMPJ+ Joysticks

1. Pull the latch A away from the joystick connector.
2. Disconnect the joystick connector from the remaining connectors.

7.31 Replacing Seat Positioning Strap
7.31.1 Wheelchairs without TRRO Option

1. Remove the seat cushion from the seat pan.
2. Rotate the flip back armrests up, out of the way. Refer to 6.6 Positioning Flip Back Armrests, page 30.
3. Remove the two mounting screws A, washer B, and locknuts C that secure the quick-release pins D and seat positioning straps E to the seat frame F.
4. Remove the seat positioning straps.
5. Install the two new seat positioning straps inside of the seat frame as shown.
6. Secure the seat positioning strap and quick-release pin to the seat frame with the two mounting screws, washers, and locknuts. Torque to 75 in-lbs.
7. Reinstall the seat cushion onto the seat pan.
8. Lower the flip back armrests down, back into position. Refer to 6.6 Positioning Flip Back Armrests, page 30.

7.31.2 Wheelchairs with TRRO Option

To replace the seat positioning strap, refer to the wheelchair base user manual supplied with the wheelchair.

7.32 Removing/Installing/Adjusting Headrest

WARNING!
– If using a ventilator, verify headrest support does not interfere at all angles. Otherwise, injury or damage may occur.

7.32.1 Removing the Headrest

1. Loosen, but DO NOT remove, the thumb screw A that secures the headrest mounting tube B to the headrest mounting bracket C.
2. Remove the headrest mounting tube from the headrest mounting bracket.
7.32.2 Installing the Headrest

1. Make sure thumb screw A is loose.
2. Install the headrest mounting tube B until the headrest stop D sits on the headrest mounting bracket C.
3. If necessary, adjust the height, depth or direction of the headrest.

7.32.3 Adjusting Headrest Height

1. Loosen the set screw E on the headrest stop.
2. Loosen, but DO NOT remove, the thumb screw A that secures the headrest mounting tube B to the headrest mounting bracket C.
3. Position the headrest to the desired height.
4. Tighten the thumb screw that secures the headrest to the headrest mounting bracket.
5. Tighten the set screw on the headrest stop.
6. If necessary, adjust the depth or direction of the headrest.

7.32.4 Adjusting Headrest Depth/Direction

1. Loosen, but DO NOT remove, the three socket screws F that secure the offset fixture G to the slide tube H.
2. If necessary, reposition the headrest to the desired depth by sliding the headrest towards the front of the wheelchair or towards the rear of the wheelchair.
3. If necessary, reposition the headrest to the desired position (headrest will move in any direction).
4. While holding the headrest in the desired position, securely tighten the three socket screws.
5. If necessary, adjust the height of the headrest.

7.33 Replacing Headrest

Only one of two styles of headrests shown for clarity. Both styles of headrest attach the same way.

1. Remove the three socket screws A that secure the headrest B to the headrest mounting bracket C.
2. Position the new headrest on the headrest mounting bracket and secure with the existing three socket screws.
3. If necessary, adjust the height, depth or direction of the headrest.
7.34 Checking Seating System Mounting Position

Detail “A” — Swing Away Front Rigging

1. Determine mounting position:
   - Wheelchairs with Swing Away Front Rigging A —
     a. Rotate front casters B forward as if the wheelchair were moving in reverse.
        If wheelchair is equipped with composite footrests, point the front casters toward the footplate.
     b. Measure the gap C between the front caster and the footplate D. Perform one of the following:
        – Gap is 1 to 1½ inch Gap - Seating system is in the proper mounting position.
        – Gap is Greater than 1½ inches - Seating system is not in the proper mounting position. Proceed to Adjusting Seating System in next section.

Detail “B” — Center Mount Front Rigging

- Wheelchair with Manual Center Mount Front Rigging E -
  a. Position center mount front rigging to the lowest setting to position the footplate F as close as possible to the front shroud G.
  b. Measure the gap H between the footplate and the front shroud.
  c. Perform one of the following:
     - Gap is 1 to 1½ inch Gap - seating system is in the proper mounting position.
     - Gap is Greater Than 1½ inches - seating system is not in the proper mounting position. Proceed to Adjusting Seating System in next section.
7.35 Adjusting the Seat Frame Mounting Position

Removing/Installing the Seat Pan

1. Remove the seat cushion (not shown).
2. Remove the two socket screws \( A \) securing the seat pan \( B \) to the seat frame \( C \).
3. Remove the eight socket screws \( D \), ground washers \( E \) and four plates \( F \) securing the seat frame \( G \) to the seat-to-floor bracket \( H \).

Adjusting the Seat Frame Mounting Position

4. Perform one of the following to ensure the seating system is in the proper mounting position:
   - Some front rigging and seat depth combinations may not allow for the 1-inch gap. In this situation, position the seat frame as far back as possible.
   - Wheelchairs with Swing Away Front Rigging - Position the seat frame as far as possible towards the rear of the wheelchair. Leave 1 to 1½-inch of clearance between the front riggings and the front casters in all caster positions).
   - Wheelchairs with Manual Center Mount Front Rigging - Position the seat frame as far as possible towards the rear of the wheelchair. Leave 1 to 1½-inch of clearance between the center mount front riggings and the front shroud.

5. Secure the seat frame mounting brackets to the seat-to-floor brackets with the eight socket screws, ground washers and four plates. Torque to 13 ft-lbs ± 20%.
6. Position the seat pan onto the seat frame.
7. Secure the seat pan to the seat frame using the two socket screws.
8. Install the seat cushion (not shown).
8 Warranty

8.1 Global Limited Warranty (Excluding Canada)

PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.

This warranty is extended only to the original purchaser who purchases this product within any country excluding CANADA when new and unused from Invacare or a dealer. This warranty is not extended to any other person or entity and is not transferable or assignable to any subsequent purchaser or owner. Coverage under this warranty will end upon any such subsequent sale or other transfer of title to any other person. For product purchased in Canada, please refer to the Canada Limited Warranty.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

Invacare warrants the seat frame to be free from defects in materials and workmanship for a period of three (3) years from the date of purchase from Invacare or a dealer, with a copy of the seller’s invoice required for coverage under this warranty. Invacare warrants all electronics and electrical components (excluding batteries) to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase from Invacare or a dealer, with a copy of the seller’s invoice required for coverage under this warranty. Invacare warrants all remaining components (excluding all upholstered materials and padded materials) to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase from Invacare or a dealer, with a copy of the seller’s invoice required for coverage under this warranty. If within such warranty periods any such product component shall be proven to be defective, the product component shall be repaired or replaced, at Invacare’s option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Invacare’s sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the dealer from whom you purchased your Invacare product. In the event you DO NOT receive satisfactory warranty service, please write directly to Invacare at the address on the bottom of the back cover. Provide dealer's name address, date of purchase, indicate nature of the defect and, if the product is serialized, indicate the serial number. Do not return products to our factory without our prior consent.

Limitations and Exclusions: The foregoing warranty shall not apply to serial numbered products if the serial number has been removed or defaced, products subject to negligence, accident, improper operation, maintenance or storage, commercial or institutional use, products modified without Invacare's express written consent (including, but not limited to, modification through the use of unauthorized parts or attachments); products damaged by reason of repairs made to any component without the specific consent of Invacare, or to a product damaged by circumstances beyond Invacare's control, and such evaluation will be solely determined by Invacare. The warranty shall not apply to problems arising from normal wear and tear or failure to adhere to the product instructions. A change in operating noise, particularly relative to motors and gearboxes does not constitute a failure or defect and will not be repaired; all devices will exhibit changes in operating noise due to aging.
The foregoing express warranty is exclusive and in lieu of any other warranties whatsoever, whether express or implied, including the implied warranties of merchantability and fitness for a particular purpose, and the sole remedy for violations of any warranty whatsoever, shall be limited to repair or replacement of the defective product pursuant to the terms contained herein. The application of any implied warranty whatsoever shall not extend beyond the duration of the express warranty provided herein and Invacare shall not be liable for any consequential or incidental damages whatsoever; SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGE, OR LIMITATION OF HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE EXCLUSION AND LIMITATION MAY NOT BE APPLICABLE.

THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.

8.2 Canada Limited Warranty
This warranty is extended only to the original purchaser who purchases this product within Canada when new and unused from Invacare or a dealer. This warranty is not extended to any other person or entity and is not transferable or assignable to any subsequent purchaser or owner. Coverage under this warranty will end upon any such subsequent sale or other transfer of title to any other person.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

Invacare warrants the seat frame to be free from defects in materials and workmanship for a period of three (3) years from the date of purchase. Invacare warrants all electronics and electrical components (excluding batteries) to be free from defects in materials and workmanship for a period of two (2) years from the date of purchase from Invacare or a dealer, with a copy of the seller’s invoice required for coverage under this warranty. Invacare warrants all remaining components (excluding all upholstered materials and padded materials) to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase from Invacare or a dealer, with a copy of the seller’s invoice required for coverage under this warranty. If within such warranty periods any such product component shall be proven to be defective, the product component shall be repaired or replaced, at Invacare’s option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Invacare’s sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the dealer from whom you purchased your Invacare product. In the event you DO NOT receive satisfactory warranty service, please write directly to Invacare at the address on the bottom of the back cover. Provide dealer’s name address, date of purchase, indicate nature of the defect and, if the product is serialized, indicate the serial number. Do not return products to our factory without our prior consent.

Limitations and Exclusions: The foregoing warranty shall not apply to serial numbered products if the serial number has been removed or defaced, products subject to negligence, accident, improper operation, maintenance or storage, commercial or institutional use, products modified without Invacare’s express written consent (including, but not limited to, modification through the use of unauthorized parts or attachments); products damaged by reason of repairs made to any component without the specific consent of Invacare, or to a product damaged by circumstances beyond Invacare’s control, and such evaluation will be solely determined
The warranty shall not apply to problems arising from normal wear and tear or failure to adhere to the product instructions. A change in operating noise, particularly relative to motors and gearboxes does not constitute a failure or defect and will not be repaired; all devices will exhibit changes in operating noise due to aging.

The foregoing express warranty is exclusive and in lieu of any other warranties whatsoever, whether express or implied, including the implied warranties of merchantability and fitness for a particular purpose, and the sole remedy for violations of any warranty whatsoever, shall be limited to repair or replacement of the defective product pursuant to the terms contained herein. The application of any implied warranty whatsoever shall not extend beyond the duration of the express warranty provided herein and Invacare shall not be liable for any consequential or incidental damages whatsoever; some states do not allow the exclusion or limitation of incidental or consequential damage, or limitation of how long an implied warranty lasts, so the above exclusion and limitation may not be applicable.

This warranty shall be extended to comply with state/provincial laws and requirements.