9000 SERIES

9000SL

9000XT

9000XDT

9000XT RECLINER

SERVICE MANUAL

DEALER: KEEP THIS MANUAL. THE PROCEDURES IN THIS MANUAL MUST BE PERFORMED BY AN AUTHORIZED DEALER ONLY.
WARNING

DO NOT OPERATE THIS EQUIPMENT WITHOUT FIRST READING AND UNDERSTANDING THIS MANUAL. IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS, CAUTIONS, AND INSTRUCTIONS, CONTACT A HEALTHCARE PROFESSIONAL, DEALER OR TECHNICAL PERSONNEL IF APPLICABLE BEFORE ATTEMPTING TO USE THIS EQUIPMENT - OTHERWISE INJURY OR DAMAGE MAY RESULT.

SAVE THESE INSTRUCTIONS
TABLE OF CONTENTS

NOTE: The information in this owner’s manual applies to the 9000 SL, 9000 XT, 9000 XT RECLINER and the 9000 XDT wheelchairs except where specified.

SPECIAL NOTES ............................................... 4
SPECIFICATIONS .............................................. 5
SAFETY INSPECTION CHECKLIST ....................... 7
TROUBLESHOOTING/MAINTENANCE .......... 8
PROCEDURE 1 - GENERAL GUIDELINES ...... 9
PROCEDURE 2 - SEAT AND BACK .............. 11
  ADJUSTING BACK ANGLE - 9000XT
  ADJUSTABLE BACK MODEL
  WHEELCHAIRS ONLY .................................. 11
  ADJUSTING THE SEAT WIDTH ................... 12
PROCEDURE 3 - FRONT CASTERS .............. 14
  FRONT CASTER MOUNTING
  ADJUSTMENTS ......................................... 14
PROCEDURE 4 - SEAT-TO-FLOOR HEIGHT .. 15
  CHANGING SEAT-TO-FLOOR HEIGHT ...... 15
PROCEDURE 5 - RECLINER ...................... 21
  REPLACING THE RELEASE HANDLE ........ 21
  ADJUSTING THE TENSION OF THE
  CABLE ASSEMBLY .................................. 22
  REPLACING THE CABLE ASSEMBLY ........ 22
  DISCONNECTING/CONNECTING THE
  LOWER CABLE ASSEMBLY ....................... 23
  REPLACING THE THREADED SECTOR ........ 25
  REPLACING THE LOCKING ROD .............. 25
  REPLACING THE BACK TUBE ................. 26
  REMOVING/INSTALLING THE SPRING
  LIFT MECHANISM .................................. 27
  REPLACING THE RECLINER TUBE .......... 28
  ADJUSTING THE SEAT WIDTH ............... 29
LIMITED WARRANTY ...................................... 31
SPECIAL NOTES

WARNING/CAUTION notices as used in this manual apply to hazards or unsafe practices which could result in personal injury or property damage.

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

WHEELCHAIR USER
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.

WHEELCHAIR TIE-DOWN RESTRAINTS AND SEAT RESTRAINTS
Invacare recommends that wheelchair users NOT be transported in vehicles of any kind while in wheelchairs. 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 systems.

AS REGARDS RESTRAINTS - SEAT POSITIONING STRAPS - IT IS THE OBLIGATION OF THE DME DEALER, THERAPISTS AND OTHER HEALTHCARE PROFESSIONALS TO DETERMINE IF A SEATING RESTRAINT IS REQUIRED TO ENSURE THE SAFE OPERATION OF THIS EQUIPMENT BY THE USER. SERIOUS INJURY CAN OCCUR IN THE EVENT OF A FALL FROM A WHEELCHAIR.
## SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>9000SL</th>
<th>9000XT</th>
<th>9000XT RECLINER</th>
<th>9000XDT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Width:</td>
<td>23 or 25-inches</td>
<td>21, 22, 23, 25, 27 or 29-inches</td>
<td>23, 25, 27, 28, 29 or 31-inches</td>
<td>23, 25, 27 or 29-inches</td>
</tr>
<tr>
<td>Overall Depth (w/ riggings):</td>
<td>43-1/2-inches</td>
<td>43-1/2-inches</td>
<td>46-inches</td>
<td>45-1/2-inches</td>
</tr>
<tr>
<td>Seat Width:</td>
<td>16, 18, or 20-inches</td>
<td>14, 15, 16, 18, 20 or 22-inches</td>
<td>14, 16, 18, 19, 20 or 22-inches</td>
<td>16, 18, 20 or 22-inches</td>
</tr>
<tr>
<td>Seat Depth:</td>
<td>16 or 18-inches</td>
<td>16, 17 and 18-inches</td>
<td>16, 17 and 18-inches</td>
<td>16, 17, 18-inches or 19 and 20-inches</td>
</tr>
<tr>
<td>Seat-to-Floor</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Tall/Adult:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adult/Hemi:</strong></td>
<td>15-1/2, 16-1/2, 17-1/2, 18-1/2 and 19-1/2-inches</td>
<td>15-1/2, 16-1/2, 17-1/2, 18-1/2 and 19-1/2-inches</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Super Hemi:</strong></td>
<td>N/A</td>
<td>13-1/2 and 14-1/2-inches</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Back Style:</td>
<td>Sectional - 1-inch increments</td>
<td>Adjustable - 1-inch increments</td>
<td>Adjustable Angle - 85° to 110° range in 5° increments (Optional)</td>
<td>Reclining</td>
</tr>
<tr>
<td>Back Height:</td>
<td>15, 16, 17-inches -or- 17, 18, 19-inches</td>
<td>15, 16, 17, 18 and 19-inches</td>
<td>23-inches or 34-inches with Headrest</td>
<td>15, 16, 17, 18 and 19-inches</td>
</tr>
<tr>
<td>Arm Styles:</td>
<td>Swing Back, Space Saver, Desk/Full Length and Fixed/Adjustable Height (Desk Length, Swing Back, Fixed Height Arms - Standard)</td>
<td>Swing Back, Desk/Full Length, Space Saver/Conventional and Fixed/Adjustable Height (Desk Length, Space Saver, Fixed Height Arms-Standard)</td>
<td>Conventional, Desk/Full Length, and Fixed/Adjustable Height (Desk Length, Fixed Height Arms-Standard)</td>
<td>Swing Back, Desk/Full Length, Space Saver/Conventional and Fixed/Adjustable Height (Desk Length, Space Saver, Fixed Height Arms - Standard)</td>
</tr>
<tr>
<td>Front Riggings:</td>
<td>Swingaway Footrests and Elevating Legrests</td>
<td>Swingaway Footrests and Elevating Legrests</td>
<td>Swingaway Footrests and Elevating Legrests</td>
<td>Swingaway Footrests and Elevating Legrests</td>
</tr>
</tbody>
</table>

◆ Seat to Floor heights for the 9000XT Recliner are obtained through different size rear wheels and front caster mounting adjustments. Different frame styles DO NOT apply.
## SPECIFICATIONS (CONTINUED)

<table>
<thead>
<tr>
<th></th>
<th>9000SL</th>
<th>9000XT</th>
<th>9000XT RECLINER</th>
<th>9000XDT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rear Axle:</strong></td>
<td>Permanent (Standard) and Quick-Release</td>
<td>Permanent (Standard) and Quick-Release</td>
<td>Permanent Only</td>
<td>Permanent Only</td>
</tr>
<tr>
<td><strong>Rear Wheels:</strong></td>
<td>20, 22 and 24-inch Composite; Urethane, Pneumatic or Pneumatic-Flat Free Insert - (Standard: 24-inch Composite Urethane)</td>
<td>20, 22 and 24-inch Composite; Urethane, Pneumatic or Pneumatic-Flat Free Insert - (Standard: 24-inch Composite Urethane)</td>
<td>20, 22 and 24-inch Composite; Urethane, Pneumatic or Pneumatic-Flat Free Insert - (Standard: 24-inch Composite Urethane)</td>
<td>24-inch Composite; Urethane, Pneumatic or Pneumatic-Flat Free Insert - (Standard: 24-inch Composite Urethane)</td>
</tr>
<tr>
<td><strong>Handrims:</strong></td>
<td>Composite (Standard) and Aluminum</td>
<td>Composite (Standard), Aluminum, Pewter and Plastic Coated</td>
<td>Composite (Standard), Aluminum, Pewter and Plastic Coated</td>
<td>Chrome (Standard), Aluminum, Pewter and Plastic Coated</td>
</tr>
<tr>
<td><strong>Wheel Locks:</strong></td>
<td>Toggle Lock - Push or Pull</td>
<td>Toggle Lock - Push or Pull</td>
<td>Toggle Lock - Push or Pull</td>
<td>Toggle Lock - Push or Pull</td>
</tr>
<tr>
<td><strong>Caster Size:</strong></td>
<td>6 x 1-inch Urethane, 8 x 1-inch Urethane (Standard), 8 x 1-inch Solid Rubber and 8 x 1-1/4-inch Pneumatic or Pneumatic-Flat Free Insert</td>
<td>6 x 1-inch Urethane, 8 x 1-inch Urethane (Standard), 8 x 1-inch Solid Rubber and 8 x 1-1/4-inch Pneumatic or Pneumatic-Flat Free Insert, 8 x 1-3/4-inch Semi Pneumatic</td>
<td>8 x 1-inch Urethane (Standard), 8 x 1-inch Solid Rubber and 8 x 1-1/4-inch Pneumatic or Pneumatic-Flat Free Insert, 8 x 1-3/4-inch Semi Pneumatic</td>
<td>8 x 1-inch Urethane (Standard), 8 x 1-inch Solid Rubber and 8 x 1-1/4-inch Pneumatic or Pneumatic-Flat Free Insert, 8 x 1-3/4-inch Semi Pneumatic</td>
</tr>
<tr>
<td><strong>Upholstery:</strong></td>
<td>Black Nylon</td>
<td>Black Nylon, Black Sail Cloth Adjustable, Hunter Green, and Ruby</td>
<td>Heavy Vinyl, Light Vinyl, Nylon, Sail Cloth</td>
<td>Black Nylon, Black Sail Cloth Adjustable, Hunter Green, and Ruby</td>
</tr>
<tr>
<td><strong>Frame Colors:</strong></td>
<td>Chrome, Deep Purple, Black, Silver Vein</td>
<td>Chrome, Silver Vein, Black, Red, Super Teal or Cobalt Blue</td>
<td>Chrome, Silver Vein, Black, Red, Super Teal or Cobalt Blue</td>
<td>Chrome, Silver Vein, Black, Red, Super Teal or Cobalt Blue</td>
</tr>
<tr>
<td><strong>Weight:</strong></td>
<td>33 lbs.</td>
<td>31-1/2 lbs.</td>
<td>50-1/2 lbs.</td>
<td>36-1/2 lbs.</td>
</tr>
<tr>
<td><strong>Shipping Weight (approx.):</strong></td>
<td>43 lbs.</td>
<td>41-1/2 lbs.</td>
<td>60-1/2 lbs.</td>
<td>46-1/2 lbs.</td>
</tr>
</tbody>
</table>

* 16x16-inch Seat Frame with complete package. ** 18x17-inch Seat Frame with complete package.
SAFETY INSPECTION CHECKLIST

NOTE: Every six (6) months take your wheelchair to a qualified dealer for a thorough inspection and servicing. 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.

Initial adjustments should be made to suit your personal body structure and preference. Thereafter follow these maintenance procedures:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>INITIALLY</th>
<th>INSPECT/ ADJUST WEEKLY</th>
<th>INSPECT/ ADJUST MONTHLY</th>
<th>INSPECT/ ADJUST PERIODICALLY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL (TROUBLESHOOTING)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheelchair rolls straight (no excessive drag or pull to one side).</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>FRAME AND CROSSBRACES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspect for loose or missing hardware.</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Inspect for bent frame or crossbraces.</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><em><em>WHEEL LOCKS (PROCEDURE 9</em>)</em>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not interfere with tires when rolling.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pivot points free of wear and looseness.</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Wheel locks easy to engage.</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><em><em>SEAT AND BACK UPHOLSTERY (PROCEDURE 6</em>)</em>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspect for rips or sagging.</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Inspect for loose or broken hardware.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em><em>TIRES (PROCEDURES 7</em> and 4)</em>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspect for flat spots and wear.</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>If pneumatic tires, check for proper inflation.</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>CAUTION:</strong> As with any vehicle, the wheels and tires should be checked periodically for cracks and wear, and should be replaced when necessary.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em><em>REAR WHEELS (PROCEDURE 7</em>)</em>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No excessive side movement or binding when lifted and spun.</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>If equipped, quick-release axles lock properly.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em><em>HANDBRIMS (PROCEDURE 7</em>)</em>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspect for signs of rough edges or peeling.</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>SPOKES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspect for cracked or broken spokes.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em><em>FRONT CASTER (PROCEDURE 4</em>)</em>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspect wheel/fork assembly for proper tension by spinning caster; caster should come to a gradual stop.</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Loosen/tighten locknut if wheel wobbles noticeably or binds to a stop.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Wheel bearings are clean and free of moisture.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>CAUTION:</strong> As with any vehicle, the wheels and tires should be checked periodically for cracks and wear, and should be replaced when necessary.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CLEANING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean upholstery and armrests.</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

NOTE: * Refer to the Owner’s Manual, part number 1056953, for these procedures.
**TROUBLESHOOTING**

<table>
<thead>
<tr>
<th>CHAIR VEERS RIGHT</th>
<th>CHAIR VEERS LEFT</th>
<th>SLUGGISH TURN OR PERFORMANCE</th>
<th>CASTERS FLUTTERS</th>
<th>SQUEAKS AND RATTLES</th>
<th>LOOSENESS IN CHAIR</th>
<th>CHAIR 3 WHEELS</th>
<th>SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>If pneumatic, check tires for correct and equal pressure.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Check for loose stem nuts and bolts.</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Check that both casters contact the ground at the same time.</td>
</tr>
</tbody>
</table>

**MAINTENANCE**

**MAINTENANCE SAFETY PRECAUTIONS**

**WARNING**

After making adjustments, always make sure that parts are properly tightened BEFORE using the wheelchair.

**CAUTION**

DO NOT overtighten hardware attaching to the frame. This could cause damage to the frame tubing.

**SUGGESTED MAINTENANCE PROCEDURES**

1. Before using your wheelchair, make sure all nuts and bolts are tight. Check all parts for damage or wear and replace. Check all parts for proper adjustment.
2. 9000 SL / 9000 XT ONLY - Keep quick-release axles free of dirt and lint to ensure positive locking and proper operation. Refer to **ADJUSTING THE QUICK-RELEASE AXLE** in **PROCEDURE 7** of the owner's manual, part number 1056953.
3. Oil quick-release axles at least once (1) a month (3-in-1 oil® or equivalent).

3-in-1 oil - Registered trademark of American Home Products Corporation.

**WARNING**

DO NOT use the wheelchair unless it has the proper tire pressure (p.s.i.). DO NOT overinflate the tires. Failure to follow these suggestions may cause the tire to explode and cause bodily harm. The recommended tire pressure is listed on the side wall of the tire.

4. If tires are pneumatic, recommended tire pressure is listed on the side wall of the tire.
5. The wheels and tires should be checked periodically for cracks and wear, and should be replaced when necessary by your authorized dealer or by a qualified technician.
6. Periodically check handrims to ensure they are securely attached to the rear wheels. Refer to **REPLACING REAR WHEEL HANDRIM** in **PROCEDURE 7** of the owner's manual, part number 1056953.
7. Periodically adjust wheel locks in correlation to tire wear. Refer to **WHEEL LOCK ADJUSTMENT** in **PROCEDURE 9** of the owner's manual, part number 1056953.
8. Periodically check front caster and rear wheel hubs to make sure they are clean.
9. Check Upholstery for sagging, rips or tears.
PROCEDURE 1 - GENERAL GUIDELINES

OPERATING INFORMATION

GENERAL WARNINGS

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** attempt to reach objects if you have to move forward in the seat.

**DO NOT** attempt to reach objects if you have to pick them up from the floor by reaching down between your knees.

**DO NOT** lean over the top of back upholstery to reach objects from behind as this may cause the wheelchair to tip over.

**DO NOT** shift your weight or sitting position toward direction you are reaching as the wheelchair may tip over.

**DO NOT** tilt the wheelchair without assistance.

**DO NOT** use an escalator to move a wheelchair between floors. Serious bodily injury may occur.

**DO NOT** attempt to stop a moving wheelchair with the wheel locks. WHEEL LOCKS ARE NOT BRAKES.

Before attempting to transfer in or out of the wheelchair, every precaution should be taken to reduce the gap distance. Turn both casters toward the object you are transferring onto. When transferring to and from the wheelchair, ALWAYS ENGAGE BOTH WHEEL LOCKS.

**DO NOT** operate on roads, streets or highways.

**DO NOT** climb, go up or down ramps or traverse slopes greater than 9°.

**DO NOT** attempt to move up or down an incline with a water, ice or oil film.

**DO NOT** attempt to ride over curbs or obstacles. Doing so may cause your wheelchair to turn over and cause bodily harm or damage to the wheelchair.

**DO NOT** use unauthorized parts, accessories, or adapters other than those authorized by Invacare.

**DO NOT** attempt to lift the wheelchair by any removable (detachable) parts. Lifting by means of any removable (detachable) parts of a wheelchair may result in injury to the user and/or assistant or damage to the wheelchair.

**DO NOT** stand on the frame of the wheelchair.

If so equipped, anti-tippers MUST BE attached and pointing down towards the ground/floor at all times. Inasmuch as the ANTI-TIPPERS are an option on this wheelchair (You may order with or without the anti-tippers), Invacare strongly recommends ordering the anti-tippers as an additional safeguard for the wheelchair user.

**DO NOT** use the footplate as a platform when getting in or out of the wheelchair.

ALWAYS wear your Seat Positioning Strap. Inasmuch as the SEAT POSITIONING STRAP is an option on this wheelchair (You may order with or without the Seat Positioning Strap), Invacare strongly recommends ordering the Seat Positioning Strap as an additional safeguard for the wheelchair user.

**NEVER** use quick-release axles on the 9000XT RECLINER or 9000XDT wheelchairs.
OPERATING INFORMATION

GENERAL WARNINGS (CONTINUED)

TIRE PRESSURE
DO NOT use your wheelchair unless it has the proper tire pressure (p.s.i.). DO NOT overinflate the tires. Failure to follow these suggestions may cause the tire to explode and cause bodily harm. The recommended tire pressure is listed on the side wall of the tire.

Replacement of a pneumatic tire or tube MUST be performed by an authorized Invacare Dealer or Qualified Technician.

WEIGHT TRAINING
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. If occupant uses said wheelchair as a weight training apparatus, Invacare shall NOT be liable for bodily injury and the warranty will be voided immediately.

WEIGHT LIMITATION
The 9000SL, 9000XT, and 9000XT Recliner wheelchairs have a weight limitation of 250 lbs. The 9000XDT wheelchair has a weight limitation of 350 lbs.

SPECIFIC WARNINGS FOR ALL PROCEDURES
The following procedure must be performed by an authorized Invacare dealer or qualified technician.

After making adjustments, always make sure that parts are properly tightened BEFORE using the wheelchair.
This Procedure Includes the Following:

Adjusting Back Angle - 9000XT Adjustable Back Model Wheelchairs Only
Adjusting Seat Width

ADJUSTING BACK ANGLE - 9000 XT ADJUSTABLE BACK MODEL WHEELCHAIRS ONLY (FIGURE 1)

NOTE: Refer to Procedure 1 - General Guidelines which include GENERAL and SPECIFIC WARNINGS for the 9000SL, 9000XT, 9000XDT, and 9000XT RECLINER.

NOTE: Space Saver arms do not work with the adjustable angle back option.

WARNING

The back angle and seat depth of the wheelchair directly relate to the stability of the wheelchair. Any change to one (1) or any combination of the two (2) may cause the wheelchair to decrease in stability. Use EXTREME caution when using a new seating position.

1. Loosen, but do not remove the pivot screw and locknut that secures the back angle bracket to the wheelchair frame.
2. Remove the hex screw, washers and locknut that secure the back angle bracket to the wheelchair frame.
3. Refer to FIGURE 1 to determine the mounting hole in the back angle bracket for the necessary back angle relative to the seat frame.
4. Resecure the back angle bracket to the wheelchair frame with the existing hex screw, washers and locknut. Securely tighten.
5. Securely tighten the pivot screw and locknut from STEP 1.

NOTE: Ensure both back angle brackets are adjusted to the same mounting position.

6. Repeat STEPS 1-5 for the opposite side of the wheelchair.

FIGURE 1 - ADJUSTING BACK ANGLE - 9000XT ADJUSTABLE BACK MODEL WHEELCHAIRS ONLY
ADJUSTING THE SEAT WIDTH (FIGURE 1)

NOTE: Refer to Procedure 1 - General Guidelines which include GENERAL and SPECIFIC WARNINGS for the 9000SL, 9000XT, 9000XDT, and 9000XT RECLINER.

NOTE: When adjusting the seat width of the wheelchair, the back and seat upholstery MUST be changed. If applicable, the headrest pillow and headrest upholstery MUST be changed as well.

1. Remove the existing back and seat upholstery from the wheelchair. Refer to REPLACING THE BACK UPHOLSTERY and REPLACING THE SEAT UPHOLSTERY in PROCEDURE 6 of the Owner’s Manual, part number 1056953.

2. Remove the four (4) button screws and locknuts that secure the two (2) pivot links to the wheelchair frame and crossbraces.

3. Remove the two (2) button screws, locknuts and crossbrace saddle that secures the bottom of the crossbrace to the wheelchair frame. Repeat for other crossbrace.

4. Remove the hex screw, coved washers, washers and locknut that secure the two (2) crossbraces together. See DETAIL "B".

NOTE: Note the orientation of the coved washers, washers and locknut for assembling the NEW crossbraces. See DETAIL "B".

5. Assemble the two (2) NEW crossbraces together with the existing hex screw, coved washers, washers and locknut. Securely tighten. Refer to DETAIL "B" for hardware orientation.

6. Determine the correct pivot link and mounting hole to use with the desired seat width. See chart below.

<table>
<thead>
<tr>
<th>SEAT WIDTH</th>
<th>PIVOT LINK</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-inch</td>
<td>14-Inch</td>
</tr>
<tr>
<td>15 inch</td>
<td>15-Inch</td>
</tr>
<tr>
<td>*16-inch</td>
<td>16-Inch</td>
</tr>
<tr>
<td>*18-inch</td>
<td>18-Inch</td>
</tr>
<tr>
<td>*20-inch</td>
<td>20-Inch</td>
</tr>
<tr>
<td>22-inch</td>
<td>22-Inch</td>
</tr>
</tbody>
</table>

NOTE: 16, 18, and 20-inch are the only crossbrace settings available on the 9000 SL.

7. Secure the pivot link to the crossbraces and wheelchair frame with the four (4) button screws and locknuts. Securely tighten.

NOTE: Position crossbrace saddle on wheelchair frame using the washer on the underside of the wheelchair frame as a reference. See DETAIL "A" for proper positioning of the crossbrace saddle.

8. Reinstall the two (2) button screws, locknuts and crossbrace saddle that secures the bottom of the NEW crossbrace to the wheelchair frame. Refer to DETAIL "B" for hardware orientation. Repeat for opposite crossbrace. Securely tighten.

FIGURE 1 - ADJUSTING THE SEATWIDTH - 9000 XT/ XDT/ SL WHEELCHAIRS
This Procedure Includes the Following:
Front Caster Mounting Adjustments

FRONT CASTER MOUNTING ADJUSTMENTS (FIGURE 1)

NOTE: Refer to Procedure 1 - General Guidelines which include GENERAL and SPECIFIC WARNINGS for the 9000SL, 9000XT, 9000XDT, and 9000XT RECLINER.

1. Remove the hex screw, washers and locknut that secures the front caster to the fork.

2. Reposition the front caster on the fork to the determined mounting hole. Refer to CHANGING SEAT-TO-FLOOR HEIGHT in PROCEDURE 4 of this manual to determine front caster mounting hole for front caster size and seat-to-floor height.

3. Secure front caster to fork with existing hex screw and locknut. Securely tighten.

WARNING
Make sure both front casters are positioned in the same mounting hole BEFORE using the wheelchair; otherwise injury may result.

4. Repeat STEPS 1-3 for the opposite front caster.

FIGURE 1 - FRONT CASTER MOUNTING ADJUSTMENTS
This Procedure Includes the Following:
Changing Seat-To-Floor Height

CHANGING SEAT-TO-FLOOR HEIGHT (FIGURES 1, 2 AND 3)

NOTE: Refer to Procedure 1 - General Guidelines which include GENERAL and SPECIFIC WARNINGS for the 9000SL, 9000XT, 9000XDT, and 9000XT RECLINER.

1. Determine the model and frame style of your wheelchair. Refer to the following chart and FIGURE 1.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>FRAME STYLE</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adult/Hemi</td>
<td>Adult/Tall</td>
<td>Super Hemi</td>
</tr>
<tr>
<td>9000SL</td>
<td>✓</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>9000XT</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>9000XT With</td>
<td>✓</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Bolt on Headtube</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9000XDT</td>
<td>N/A</td>
<td>✓</td>
<td>N/A</td>
</tr>
<tr>
<td>*9000XT RECLINER</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Seat to Floor heights for the 9000XT Recliner are obtained through different size rear wheels and front caster mounting adjustments. Different frame styles DO NOT apply.

2. Remove the rear wheels from the wheelchair by performing one (1) of the following:
   A. For 9000SL, 9000XT, 9000XDT, refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 7 of the Owner's Manual, part number 1056953.
   B. For 9000XT RECLINER, refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 10 of the Owner's Manual, part number 1056953.

3. Remove the front casters from the wheelchair. Refer to FRONT CASTER MOUNTING ADJUSTMENTS in PROCEDURE 3 of this manual.

4. Refer to the charts of front caster/fork and rear wheel sizes to determine mounting positions for obtainable seat-to-floor heights in FIGURES 2 and 3 depending on frame style.

5. Reinstall the front casters onto the wheelchair. Refer to FRONT CASTER MOUNTING ADJUSTMENTS in PROCEDURE 3 of this manual.

6. Reinstall the rear wheels onto the wheelchair by performing one (1) of the following:
   A. For 9000SL, 9000XT, 9000XDT, refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 7 of the Owner's Manual, part number 1056953.
   B. For 9000XT RECLINER, refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 10 of the Owner's Manual, part number 1056953.

FIGURE 1 - CHANGING SEAT-TO-FLOOR HEIGHTS - FRAME STYLES
Adult/ Hemi Frame Style

◆ 6-INCH FRONT CASTERS

<table>
<thead>
<tr>
<th>SEAT-TO-FLOOR HEIGHT (in inches)</th>
<th>FRONT CASTER MOUNTING POSITION</th>
<th>REAR WHEEL SIZE</th>
<th>REAR WHEEL MOUNTING POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-1/2</td>
<td>TOP</td>
<td>20-inch</td>
<td>TOP</td>
</tr>
<tr>
<td>16-1/2</td>
<td>MIDDLE</td>
<td>22-inch</td>
<td>TOP</td>
</tr>
<tr>
<td>17-1/2</td>
<td>BOTTOM</td>
<td>24-inch</td>
<td>TOP</td>
</tr>
<tr>
<td>17-1/2</td>
<td>BOTTOM</td>
<td>20-inch</td>
<td>BOTTOM</td>
</tr>
</tbody>
</table>

◆ 8-INCH FRONT CASTERS

<table>
<thead>
<tr>
<th>SEAT-TO-FLOOR HEIGHT (in inches)</th>
<th>FRONT CASTER MOUNTING POSITION</th>
<th>REAR WHEEL SIZE</th>
<th>REAR WHEEL MOUNTING POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-1/2</td>
<td>TOP</td>
<td>20-inch</td>
<td>BOTTOM</td>
</tr>
<tr>
<td>17-1/2</td>
<td>TOP</td>
<td>24-inch</td>
<td>TOP</td>
</tr>
<tr>
<td>18-1/2</td>
<td>MIDDLE</td>
<td>22-inch</td>
<td>BOTTOM</td>
</tr>
<tr>
<td>19-1/2</td>
<td>BOTTOM</td>
<td>24-inch</td>
<td>BOTTOM</td>
</tr>
</tbody>
</table>

◆ NOTE: 6-inch and 8-inch front casters require different forks.

REAR WHEEL MOUNTING POSITIONS - 6 OR 8-INCH FORK MOUNTING POSITIONS

6-INCH FRONT CASTERS

Adult/Hemi Frame Style with Bolt On Front Caster Option (9000 XT Adult/Hemi Only)

CASTER HEADTUBE, FRONT CASTER, AXLE MOUNTING BRACKET POSITIONING AND CAM POSITION FOR 24-INCH REAR WHEELS AND 8-INCH FRONT CASTERS (FIGURES 3 - 4)

Refer to the following chart to determine the obtainable seat-to-floor height and seat angle combinations for 24-inch rear wheels and 8-inch front casters:

<table>
<thead>
<tr>
<th>SEAT-TO-FLOOR HEIGHT</th>
<th>SEAT ANGLE</th>
<th>FIGURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-1/2-inches</td>
<td>3°</td>
<td>Refer to FIGURE 3</td>
</tr>
<tr>
<td>17-1/2-inches</td>
<td>3°</td>
<td>Refer to FIGURE 4</td>
</tr>
</tbody>
</table>

FIGURE 3 - SEAT-TO-FLOOR HEIGHT OF 19-1/2-INCHES AND A SEAT ANGLE OF 3°
Caster Headtube, Front Caster, Axle Mounting Bracket Positioning and Cam Position for 22-inch Rear Wheels and 8-inch Front Casters (FIGURE 5)

Refer to the following chart to determine the obtainable seat-to-floor height and seat angle combinations for 22-inch rear wheels and 8-inch front casters:

<table>
<thead>
<tr>
<th>SEAT-TO-FLOOR HEIGHT</th>
<th>SEAT ANGLE</th>
<th>FIGURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-1/2-inches</td>
<td>3°</td>
<td>Refer to FIGURE 1</td>
</tr>
</tbody>
</table>

Caster Headtube, Front Caster, Axle Mounting Bracket Positioning and Cam Position for 20-inch Rear Wheels and 8-inch Front Casters (FIGURE 1)

Refer to the following chart to determine the obtainable seat-to-floor height and seat angle combinations for 20-inch rear wheels and 8-inch front casters:

<table>
<thead>
<tr>
<th>SEAT-TO-FLOOR HEIGHT</th>
<th>SEAT ANGLE</th>
<th>FIGURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-1/2-inches</td>
<td>3°</td>
<td>Refer to FIGURE 6</td>
</tr>
</tbody>
</table>

Caster Headtube, Front Caster, Axle Mounting Bracket Positioning and Cam Position for 20-inch Rear Wheels and 8-inch Front Casters (FIGURE 1)

Refer to the following chart to determine the obtainable seat-to-floor height and seat angle combinations for 20-inch rear wheels and 8-inch front casters:

<table>
<thead>
<tr>
<th>SEAT-TO-FLOOR HEIGHT</th>
<th>SEAT ANGLE</th>
<th>FIGURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-1/2-inches</td>
<td>3°</td>
<td>Refer to FIGURE 6</td>
</tr>
</tbody>
</table>
PROCEDURE 4

SEAT-TO-FLOOR HEIGHT

CASTER HEADTUBE, FRONT CASTER, AXLE MOUNTING BRACKET POSITIONING AND CAM POSITION FOR 24-INCH REAR WHEELS AND 6-INCH FRONT CASTERS (FIGURE 6)

Refer to the following chart to determine the obtainable seat-to-floor height and seat angle combinations for 24-inch rear wheels and 6-inch front casters:

<table>
<thead>
<tr>
<th>SEAT-TO-FLOOR HEIGHT</th>
<th>SEAT ANGLE</th>
<th>FIGURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-1/2-inches</td>
<td>3°</td>
<td>Refer to FIGURE 6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REAR WHEEL MOUNTING POSITION</th>
<th>CASTER HEADTUBE</th>
<th>FRONT CASTER</th>
<th>CAM POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEADING</td>
<td>TRAILING</td>
<td>LEADING</td>
<td>TRAILING</td>
</tr>
</tbody>
</table>

![Diagram of Caster Headtube, Front Caster, Axle Mounting Bracket Positioning and Cam Position for 24-Inch Rear Wheels and 6-Inch Front Casters (Figure 6)]

FIGURE 6 - SEAT-TO-FLOOR HEIGHT OF 17-1/2-INCHES AND A SEAT ANGLE OF 3°

CASTER HEADTUBE, FRONT CASTER, AXLE MOUNTING BRACKET POSITIONING AND CAM POSITION FOR 22-INCH REAR WHEELS AND 6-INCH FRONT CASTERS (FIGURE 7)

Refer to the following chart to determine the obtainable seat-to-floor height and seat angle combinations for 22-inch rear wheels and 6-inch front casters:

<table>
<thead>
<tr>
<th>SEAT-TO-FLOOR HEIGHT</th>
<th>SEAT ANGLE</th>
<th>FIGURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-1/2-inches</td>
<td>3°</td>
<td>Refer to FIGURE 7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REAR WHEEL MOUNTING POSITION</th>
<th>CASTER HEADTUBE</th>
<th>FRONT CASTER</th>
<th>CAM POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEADING</td>
<td>TRAILING</td>
<td>LEADING</td>
<td>TRAILING</td>
</tr>
</tbody>
</table>

![Diagram of Caster Headtube, Front Caster, Axle Mounting Bracket Positioning and Cam Position for 22-Inch Rear Wheels and 6-Inch Front Casters (Figure 7)]

FIGURE 7 - SEAT-TO-FLOOR HEIGHT OF 16-1/2-INCHES AND A SEAT ANGLE OF 3°
CASTER HEADTUBE, FRONT CASTER, AXLE MOUNTING BRACKET POSITIONING AND CAM POSITION FOR 20-INCH REAR WHEELS AND 6-INCH FRONT CASTERS (FIGURES 8 - 9)

Refer to the following chart to determine the obtainable seat-to-floor height and seat angle combinations for 20-inch rear wheels and 6-inch front casters:

<table>
<thead>
<tr>
<th>SEAT-TO-FLOOR HEIGHT</th>
<th>SEAT ANGLE</th>
<th>FIGURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-1/2-inches</td>
<td>3°</td>
<td>Refer to FIGURE 8</td>
</tr>
<tr>
<td>15-1/2-inches</td>
<td>3°</td>
<td>Refer to FIGURE 9</td>
</tr>
</tbody>
</table>

FIGURE 8 - SEAT-TO-FLOOR HEIGHT OF 17-1/2-INCHES AND A SEAT ANGLE OF 3°

FIGURE 9 - SEAT-TO-FLOOR HEIGHT OF 15-1/2-INCHES AND A SEAT ANGLE OF 3°

Super Hemi Frame Style

6-INCH FRONT CASTERS

<table>
<thead>
<tr>
<th>SEAT-TO-FLOOR HEIGHT (in inches)</th>
<th>FRONT CASTER MOUNTING POSITION</th>
<th>REAR WHEEL SIZE</th>
<th>REAR WHEEL MOUNTING POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-1/2</td>
<td>TOP</td>
<td>20-inch</td>
<td>N/A</td>
</tr>
<tr>
<td>14-1/2</td>
<td>MIDDLE</td>
<td>22-inch</td>
<td>N/A</td>
</tr>
</tbody>
</table>

REAR WHEEL MOUNTING POSITIONS - SUPER HEMI FRAME STYLE

6-INCH FORK MOUNTING POSITIONS

BOTTOM (NOT USED WITH SUPER HEMI FRAME STYLE)
### Adult/Tall Frame Style

### 8-INCH FRONT CASTERS

<table>
<thead>
<tr>
<th>SEAT-TO-FLOOR HEIGHT (in inches)</th>
<th>FRONT CASTER MOUNTING POSITION</th>
<th>REAR WHEEL SIZE</th>
<th>REAR WHEEL MOUNTING POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-1/2</td>
<td>TOP</td>
<td>24-inch</td>
<td>TOP</td>
</tr>
<tr>
<td>19-1/2</td>
<td>TOP w/ 2-inch Extension</td>
<td>24-inch</td>
<td>MIDDLE</td>
</tr>
<tr>
<td>19-1/2</td>
<td>BOTTOM</td>
<td>24-inch</td>
<td>MIDDLE</td>
</tr>
<tr>
<td>21-1/2</td>
<td>BOTTOM w/ 2-inch Extension</td>
<td>24-inch</td>
<td>BOTTOM</td>
</tr>
</tbody>
</table>

#### REAR WHEEL MOUNTING POSITIONS - ADULT/TALL FRAME STYLE

**8-INCH FORK MOUNTING POSITIONS**

**WITHOUT 2-INCH EXTENSION**

- **TOP**
- **MIDDLE**
- **BOTTOM**

**WITH 2-INCH EXTENSION**

- **TOP**
- **MIDDLE**
- **BOTTOM**

**FIGURE 3 - CHANGING SEAT-TO-FLOOR HEIGHT - ADULT/TALL FRAME STYLES**

### Recliner Frame Style

### 8-INCH FRONT CASTERS

<table>
<thead>
<tr>
<th>SEAT-TO-FLOOR HEIGHT (in inches)</th>
<th>FRONT CASTER MOUNTING POSITION</th>
<th>REAR WHEEL SIZE</th>
<th>REAR WHEEL MOUNTING POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-1/2</td>
<td>TOP</td>
<td>20-inch</td>
<td>N/A</td>
</tr>
<tr>
<td>18-1/2</td>
<td>MIDDLE</td>
<td>22-inch</td>
<td>N/A</td>
</tr>
<tr>
<td>19-1/2</td>
<td>BOTTOM</td>
<td>24-inch</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**FIGURE 3 - CHANGING SEAT-TO-FLOOR HEIGHT - RECLINER FRAME STYLE**
This Procedure Includes the Following:

- Replacing the Release Handle
- Adjusting the Tension of the Cable Assembly
- Replacing the Cable Assembly
- Disconnecting/Connecting the Lower Cable Assembly
- Replacing the Threaded Sector
- Replacing the Locking Rod
- Replacing the Back Tube
- Removing/Installing the Spring Lift Mechanism
- Replacing the Recliner Tube
- Adjusting the Seat Width

REPLACING THE RELEASE HANDLE (FIGURE 1)

NOTE: Refer to Procedure 1 - General Guidelines which include GENERAL and SPECIFIC WARNINGS for the 9000SL, 9000XT, 9000XDT, and 9000XT RECLINER.

WARNING

ALWAYS make sure that the wheelchair is stable BEFORE using the recliner option.

Ensure the spreader bar is attached and secured before using the 9000XT Recliner.

LIFT KIT MODELS ONLY - Both spring lift mechanisms MUST be operational BEFORE using the recliner. DO NOT operate the recliner option if only one (1) of the spring lift mechanisms is operational.

TO HEALTHCARE PROFESSIONALS/ASSISTANTS:

Make sure the occupant of the wheelchair is properly positioned.

When returning the occupant of the wheelchair to the full upright position, more body strength will be required for approximately the last twenty (20) degrees of incline (reverse recline). Make sure to use proper body mechanics (use your legs) or seek assistance if necessary to avoid injury.

DO NOT attempt to recline or incline the wheelchair back without occupant. Back will raise ABRUPTLY and cause injury. Keep clear when reclining or inclining chair back to avoid injury.

ALWAYS engage both wheel locks while reclining or inclining (reverse recline) the wheelchair.

Make sure the patient is properly positioned in the wheelchair before reclining or inclining (reverse recline) to maintain maximum stability and safety. Refer to SAFETY/HANDLING section of this manual.

WARNING (CONTINUED)

Before using the recliner option, make sure the anti-tipper wheel assemblies are in the lowest adjustment hole (adjustment hole closest to the ground/floor).

1. Rotate the jam nut CLOCKWISE and run the jam nut downward to the bottom of the threads.
2. Turn the swivel nut CLOCKWISE and run the swivel nut downward to the top of the jam nut.

NOTE: By turning the swivel nut CLOCKWISE this will push the barrel end of the cable upward.

3. Remove the mounting screw and locknut that secure the release handle to the back tube mounting bracket.
4. Thread the barrel end of the cable assembly through the larger hole on the existing release handle. See DETAIL "A".
5. Remove the existing release handle.
6. Thread the barrel end of cable assembly through larger hole on the NEW release handle. See DETAIL "A".

---

**FIGURE 1 - REPLACING THE RELEASE HANDLE**

---

- Jam Nut (STEPS 1,11)
- Locknut (STEPS 3,7)
- Barrel End of Cable (STEPS 4,6)
- Swivel Nut (STEPS 2,8,9)
- Release Handle (STEPS 3,5,7)
- Mounting Screw (STEPS 3,7)
- Back Tube Mounting Bracket (STEPS 3,7)
- Large Hole (STEPS 4,6)
- Cable Assembly
- Seven (7) Threads

---

**DETAIL “A”**

- Swivel Nut (STEPS 2,8,9)
- Release Handle (STEPS 3,5,7)
- Mounting Screw (STEPS 3,7)
- Back Tube Mounting Bracket (STEPS 3,7)
- Larger Hole (STEPS 4,6)

---

**DETAIL “B”**

- Back Tube Mounting Bracket
- Seven (7) Threads
- Cable Assembly
ADJUSTING THE TENSION OF THE CABLE ASSEMBLY (FIGURE 2)

NOTE: Activation of the recline mechanism depends on proper tension of the cable assembly.

NOTE: Proper Tension is defined as the release handle having some resistance when squeezed and is firmly held in place when not activated.

NOTE: If the tension of the cable assembly is:

Too Loose (too much play in release handle) - the recline mechanism will not be activated when release handle is squeezed.

Too tight (release handle needs more play) - the release handle will be difficult to squeeze.

1. Perform one (1) of the following:

A. If there is too much play in the release handle:

   - Rotate the jam nut CLOCKWISE (downward) two (2) to three (3) revolutions.

B. If there is not enough play in the release handle:

   - Rotate the jam nut CLOCKWISE (downward) two (2) to three (3) revolutions.
   - Rotate the swivel nut CLOCKWISE (downward) one (1) revolution.
   - Rotate the jam nut CLOCKWISE (upward) directly underneath the swivel nut. Securely tighten.
   - Squeeze release handle and note the amount of play. If necessary, repeat this procedure until slight play in release handle occurs.

WARNING

When securing the release handle to the back tube mounting bracket, DO NOT overtighten the mounting screw. Overtightening the mounting screw will cause the release handle to jam when squeezed and the recline mechanism will not disengage, possibly causing injury to the user and/ or assistant or damage to the equipment.

7. Secure NEW release handle to back tube mounting bracket with existing mounting screw and locknut.

NOTE: Tighten until snug fit. DO NOT overtighten.

8. Rotate the swivel nut COUNTERCLOCKWISE (upward).

NOTE: By turning the swivel nut COUNTERCLOCKWISE this will pull the barrel end of the cable assembly downward creating tension on the release handle.

9. Rotate the jam nut COUNTERCLOCKWISE (upward) directly underneath the swivel nut. Securely tighten.

NOTE: Allow seven (7) threads to be exposed below the jam nut. See DETAIL "B".

10. Squeeze release handle and note the amount of play.

   If release handle is too loose or too tight, refer to ADJUSTING THE TENSION IN THE CABLE ASSEMBLY in this procedure of the manual.

REPLACING THE CABLE ASSEMBLY (FIGURE 3)

NOTE: Refer to Procedure 1 - General Guidelines which include GENERAL and SPECIFIC WARNINGS for the 9000SL, 9000XT, 9000XDT, and 9000XT RECLINER.

1. Cut the tie-wraps that secure the cable assembly to the back tube.
2. Remove the release handle. Refer to REPLACING THE RELEASE HANDLE in this procedure of the manual.

3. Disconnect the existing lower cable assembly. Refer to DISCONNECTING/CONNECTING THE LOWER CABLE ASSEMBLY in this procedure of the manual.

4. Loosen the jam nut, rotate clockwise (downward) and run the jam nut to the bottom of the threads.

5. Hold swivel nut in place and unthread cable assembly from swivel nut. To unthread, rotate clockwise.

NOTE: Note the number of revolutions that is required for removal of the existing cable assembly for proper installation of the NEW cable assembly.

6. Insert the threaded end of the cable assembly into the existing swivel nut.

7. Hold swivel nut and rotate the cable assembly counterclockwise (upward) the number of revolutions noted from STEP 4. (approximately ten (10) revolutions)

8. Connect the NEW lower cable assembly. Refer to DISCONNECTING/CONNECTING THE LOWER CABLE ASSEMBLY in this procedure of the manual.


10. Secure cable to back tube with NEW tie wraps.

DISCONNECTING/CONNECTING THE LOWER CABLE ASSEMBLY (FIGURE 4)

NOTE: Refer to Procedure 1 - General Guidelines which include GENERAL and SPECIFIC WARNINGS for the 9000SL, 9000XT, 9000XDT, and 9000XT RECLINER.

Disconnecting

1. Remove the U-bolt and two (2) locknuts that secure the housing and support plate to the recliner tube.

Connecting

1. Lubricate threads of both the threaded sector and the threads of the locking rod (WD-40® or equivalent).

WD-40 - Registered trademark of the WD-40 Company.

2. Align threads of threaded sector with exposed threads of locking rod through cut out in recliner tube.

NOTE: Route cable assembly to the inside of the locking rod/recliner tube assembly as shown in FIGURE 3.

CAUTION

DO NOT route the cable assembly to the outside of the locking rod/recliner tube assembly as it may rub against the tires.


NOTE: When connecting the lower cable assembly to the recliner tube, the housing must be at 90° to the frame step tube. See DETAIL "A" for top view and FIGURE 2 for side view.

WARNING

A 90° angle must be maintained to provide full contact of the threads between the sector and the locking rod - otherwise, injury to the user and/or assistant or damage to the equipment may result.

CAUTION

DO NOT overtighten the locknuts on the U-bolt - otherwise, damage to the equipment may result.

4. Secure support housing/cable assembly and support plate to recliner tube with existing U-bolt and two (2) locknuts. Torque to 4 ft/lbs. (48-inch/pounds)
A 90° angle must be maintained to provide full contact of the threads between the sector and the locking rod - otherwise, injury to the user and/or assistant or damage to the equipment may result.

NOTE: Recliner tube is exploded away from lower frame lug for clarity, disassembly is not required.
REPLACING THE THREADED SECTOR (FIGURE 5)

NOTE: Refer to Procedure 1 - General Guidelines which include GENERAL and SPECIFIC WARNINGS for the 9000SL, 9000XT, 9000XDT, and 9000XT RECLINER.

1. Disconnect the lower cable assembly. Refer to DISCONNECTING/CONNECTING THE LOWER CABLE ASSEMBLY in this procedure of the manual.
2. Remove the release handle. Refer to REPLACING THE RELEASE HANDLE in this procedure of the manual.
3. Thread the barrel end of the cable through the larger hole on the threaded sector.
4. Remove existing threaded sector from housing.
5. Thread barrel end of cable assembly through large hole in NEW threaded sector.
6. Position barrel end of cable in smaller hole of NEW threaded sector.
7. Reinstall the release handle. Refer to REPLACING THE RELEASE HANDLE in this procedure of the manual.
8. Squeeze the release handle and verify that the cable is activating the threaded sector.
9. If release handle does not activate threaded sector, perform the following:
   a. Make sure barrel end of cable is positioned in smaller hole of NEW threaded sector.
   b. Ensure release handle is installed properly, repeat STEP 7.
   c. If release handle still does not activate threaded sector, contact Invacare technical support at the number listed on the back cover.
10. Connect the lower cable assembly. Refer to DISCONNECTING/CONNECTING THE LOWER CABLE ASSEMBLY in this procedure of the manual.

REPLACING THE LOCKING ROD (FIGURE 6)

NOTE: Refer to Procedure 1 - General Guidelines which include GENERAL and SPECIFIC WARNINGS for the 9000SL, 9000XT, 9000XDT, and 9000XT RECLINER.

1. Remove the mounting screw and locknut that secure the locking rod to the back tube mounting bracket.
2. Pull locking rod/recliner tube assembly backward.
3. Remove anti-rattle from locking rod.
4. While holding the locking rod, squeeze release handle.

NOTE: By squeezing the release handle and activating the recline mechanism, the locking rod is released.

5. Pull existing locking rod out of recliner tube assembly.
6. Install NEW locking rod into recliner tube.
7. Slide anti-rattle down NEW locking rod and position on top of recliner tube.
9. While squeezing the release handle, align the holes of the locking rod with the holes in the back tube mounting bracket.
10. Secure the NEW locking rod to the back tube mounting bracket with existing mounting screw and locknut. Securely tighten.
REPLACING THE BACK TUBE
(FIGURE 7)

NOTE: Refer to Procedure 1 - General Guidelines which include GENERAL and SPECIFIC WARNINGS for the 9000SL, 9000XT, 9000XDT, and 9000XT RECLINER.

1. Remove the spreader bar. Refer to STORING/REPLACING THE SPREADER BAR in PROCEDURE 10 of the Owner’s Manual, part number 1056953.

2. Remove the armrests. Refer to REMOVING/INSTALLING THE ARMREST in PROCEDURE 4 of the Owner’s Manual, part number 1056953.

3. If applicable, remove the headrest. Refer to REPLACING THE HEADREST/BACK UPHOLSTERY in PROCEDURE 10 of the Owner’s Manual, part number 1056953.

4. Remove the back upholstery. Refer to REPLACING THE HEADREST/BACK UPHOLSTERY in PROCEDURE 10 of the Owner’s Manual, part number 1056953.

5. If applicable, remove the spring lift mechanism. Refer to REMOVING/INSTALLING THE SPRING LIFT MECHANISM in this procedure of the manual.

6. Remove the release handle. Refer to REPLACING THE RELEASE HANDLE in this procedure of the manual.

7. Disconnect the lower cable assembly. Refer to DISCONNECTING/CONNECTING THE LOWER CABLE ASSEMBLY in this procedure of the manual.

8. Remove the mounting screw and locknut that secures the locking rod to the back tube mounting bracket.

9. Hold swivel nut in place and unthread cable assembly from swivel nut. To unthread, rotate cable assembly clockwise.

NOTE: Note the number of revolutions that is required for removal of the cable assembly for proper reinstallation.

10. Remove the mounting screw and locknut that secures the back tube to the clevis bracket.

11. Secure NEW back tube to clevis bracket with existing mounting screw and locknut. Securely tighten.

12. Insert the threaded end of the cable assembly into the NEW swivel nut.

13. Hold swivel nut and rotate the cable assembly COUNTER-CLOCKWISE the number of revolutions noted from STEP 4. (approximately ten (10) revolutions)

14. Secure the locking rod to the back tube mounting bracket with the existing mounting screw and locknut. Securely tighten.

15. Connect the NEW lower cable assembly. Refer to DISCONNECTING/CONNECTING THE LOWER CABLE ASSEMBLY in this procedure of the manual.

16. Reinstall the release handle. Refer to REPLACING THE RELEASE HANDLE in this procedure of the manual.

17. If applicable, reinstall the spring lift mechanism. Refer to REMOVING/INSTALLING THE SPRING LIFT MECHANISM in this procedure of the manual.


20. If applicable, reinstall the headrest. Refer to REPLACING THE HEADREST/BACK UPHOLSTERY in PROCEDURE 10 of the Owner's Manual, part number 1056953.


REMOVING/INSTALLING THE SPRING LIFT MECHANISM (FIGURE 8)

Removing

NOTE: Refer to Procedure 1 - General Guidelines which include GENERAL and SPECIFIC WARNINGS for the 9000SL, 9000XT, 9000XDT, and 9000XT RECLINER.

1. Recline the wheelchair exposing the two (2) holes on either side of the spring lift mechanism.

NOTE: Before removing the spring lift mechanism, a retaining clip must be installed to prevent the spring lift mechanism from compressing. The retaining clip, part number 1021688, can be purchased from Invacare at the number listed on the back cover.

2. Position one (1) end of the retainer clip in each of the holes.

3. Return chair to upright position until top portion of lift mechanism rests on the retaining clip.

4. Remove the locknut that secures the top of the spring lift mechanism to the wheelchair frame.

5. Remove the mounting screw, spacer, and locknut that secures the bottom of the spring lift mechanism to the wheelchair frame.

6. Remove existing spring lift mechanism.

Installing

NOTE: If installing a new spring lift mechanism, assembly is shipped with retaining clip attached.

CAUTION

DO NOT remove the retaining clip before the spring lift mechanism is secured to the wheelchair. If the retaining clip is removed, the spring lift mechanism will compress. This will make the spring lift mechanism unusable.

1. Install spring lift mechanism.

2. Install the mounting screw, spacer, and locknut that secures the bottom of the spring lift mechanism to the wheelchair frame.

3. Install the locknut that secures the top of the spring lift mechanism to the wheelchair frame.

CAUTION

DO NOT overtighten the attaching hardware of the lift mechanism- otherwise damage may occur.

4. Tighten both locknuts from STEPS 2-3 until one (1) to two (2) full threads are exposed.

5. Remove retaining clip.

NOTE: If retaining clip does not remove, contact Invacare technical support at the number listed on the back cover.

6. Return wheelchair to normal position.
REPLACING THE RECLINER TUBE
(Figure 9)

1. Remove the mounting screw and locknut that secure the locking rod to the back tube mounting bracket.
2. Slide anti-rattle up and off of locking rod.
3. If applicable, perform the following:
   a. Loosen the bolt and locknut that secure the attendant operated wheel lock to the recliner tube.
   b. Slide the attendant operated wheel lock up and off of the locking rod.
4. Disconnect the lower cable assembly. Refer to DISCONNECTING/CONNECTING THE LOWER CABLE ASSEMBLY in this procedure of the manual.
5. Remove locking rod from existing recliner tube.
6. Remove the rear wheel. Refer to REMOVING/INSTALLING THE REAR WHEELS in PROCEDURE 10 of the Owner's Manual, part number 1056953.
7. Remove the shoulder bolt and locknut that secure the lower portion of the recliner tube to the wheelchair frame.
8. Secure lower portion of the NEW recliner tube to wheelchair frame with existing shoulder bolt and locknut. Securely tighten.
9. Install existing locking rod into NEW recliner tube.
10. If applicable, perform the following:
    a. Slide the NEW attendant operated wheel lock down locking rod and onto the recliner tube.
    b. Position the attendant operated wheel lock above the cutout in the recliner tube and tighten the bolt and locknut.
11. Reposition the anti-rattle onto the recliner tube.
12. Resecure the locking rod to the back tube mounting bracket with the existing mounting screw and locknut. Securely tighten.
15. If applicable, adjust the attendant operated wheel lock. Refer to USING/ADJUSTING THE WHEEL LOCKS in PROCEDURE 10 of the Owner's Manual, part number 1056953.

FIGURE 9 - REPLACING THE RECLINER TUBE
ADJUSTING THE SEAT WIDTH
(Figure 10)

NOTE: Refer to Procedure 1 - General Guidelines which include GENERAL and SPECIFIC WARNINGS for the 9000SL, 9000XT, 9000XDT, and 9000XT RECLINER.

NOTE: When adjusting the seat width of the wheelchair, the back and seat upholstery, and spreader bar MUST be changed. If applicable, the headrest pillow and headrest upholstery MUST be changed as well.

1. If applicable, remove the headrest pillow. Refer to REPLACING THE HEADREST PILLOW in the PROCEDURE 10 of the Owner's Manual, part number 1056953.

2. If applicable, remove the headrest upholstery. Refer to REPLACING THE HEADREST/BACK UPHOLSTERY in the PROCEDURE 10 of the Owner's Manual, part number 1056953.


4. Remove the existing back and seat upholstery from the wheelchair. Refer to REPLACING THE HEADREST/BACK UPHOLSTERY in PROCEDURE 10 and REPLACING THE SEAT UPHOLSTERY in PROCEDURE 6 of the Owner's Manual, part number 1056953.

5. Remove the button screws and locknuts that secure the two (2) pivot links to the wheelchair frame and crossbraces.

6. Remove the two (2) button screws, locknuts and crossbrace saddle that secures the bottom of the crossbrace to the wheelchair frame. Repeat for other crossbrace.

7. Remove the hex screw, coved washers, washers and locknut that secure the two (2) crossbraces together. See DETAIL "B".

NOTE: Note the orientation of the coved washers, washers and locknut for assembling the NEW crossbraces. See DETAIL "B".

8. Assemble the two (2) NEW crossbraces together with the existing hex screw, coved washers, washers and locknut. Securely tighten. Refer to DETAIL "B" for hardware orientation.

9. Determine the correct pivot link and mounting hole to use with the desired seat width. See chart below.

10. Secure the pivot link to the crossbraces and wheelchair frame with the four (4) button screws and locknuts. Securely tighten.

11. Reinstall the two (2) button screws, locknuts and crossbrace saddle that secures the bottom of the NEW crossbrace to the wheelchair frame. Repeat for opposite crossbrace. Securely tighten.

NOTE: Position crossbrace saddle on wheelchair frame using the washer on the underside of the wheelchair frame as a reference. See DETAIL "A" for proper positioning of the crossbrace saddle.


NOTE: There are three (3) lengths of spreader bars. One for each of the following groupings: 14-inch wide chairs, 16-19-inch wide chairs, and 20, 22-inch wide chairs. All spreader bars install in the same manner.

13. Install the correct length spreader bar for the desired chair width. Refer to STORING/REPLACING THE SPREADER BAR in the PROCEDURE 10 of the Owner's Manual, part number 1056953.


15. If applicable, reinstall the headrest pillow. Refer to REPLACING THE HEADREST PILLOW in the PROCEDURE 10 of the Owner's Manual, part number 1056953.
FIGURE 10 - ADJUSTING THE SEAT WIDTH
LIMITED WARRANTY

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/user of our products.

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

Invacare warrants its product to be free from defects in materials and workmanship for a period of one (1) year from date of purchase (including the spring lift mechanisms for the recliners). The side frames and crossmembers are warranted for the lifetime of the original purchaser/users. If within such warranty period any such product shall be proven to be defective, such product 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 back cover. Provide dealer’s name, address, the product model number, 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 SUBJECTED TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE, 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 OR FAILURE TO ADHERE TO THE FOLLOWING INSTRUCTIONS.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, IF ANY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESSED WARRANTY PROVIDED HEREIN AND THE REMEDY FOR VIOLATIONS OF ANY IMPLIED WARRANTY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. INVACARE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

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