



SAVE THESE INSTRUCTIONS

NOTE: Check ALL parts for shipping damage. In case of shipping damage, DO NOT use. contact Carrier/Dealer for further instruction.

SAFETY SUMMARY

To ensure the safe installation of the Recliner Conversion Kit, these instructions **MUST** be followed:

WARNING

DO NOT install or use this equipment without first reading and understanding these instructions and the Owner's Manual, part number 1110550. If you are unable to understand the Warnings, Cautions or Instructions, contact a healthcare professional, dealer or technical personnel before attempting to install this equipment - otherwise, injury or damage may occur.

AFTER conversion of the wheelchair and **BEFORE USE** of the recliner, read the **GENERAL GUIDELINES** and **RECLINER** sections of the Owner's Manual, part number 1110550, for recliner operation instructions.

INSTALLATION WARNING

After **ANY** adjustments, repair or service and before use, make sure all attaching hardware is tightened securely - otherwise injury or damage may occur.

SX5 Recliners MUST have 8-inch casters installed. If the wheelchair originally had 6-inch casters installed, seat-to-floor height adjustments **MUST** be made. Seat-to-floor adjustments will also be necessary for certain 8-inch caster mounting positions. Refer to the **SEAT-TO-FLOOR** section in the Owner's Manual, part number 1110550, for these adjustments.

SX5 Recliners CANNOT be used with the following options/accessories: one-arm drive, solid folding seat, IV/O2 holder, O2 holder, Model 2218 IV rod, amputee attachments or quick release axles. These options/accessories **MUST** be removed prior to the conversion of the wheelchair.

SX5 Recliners MUST have properly installed and adjusted wheel locks and anti-tippers. Refer to **INSTALLING/ADJUSTING THE WHEEL LOCKS** and **INSTALLING THE ANTI-TIPPERS** in this instruction sheet. Failure to observe this warning can result in serious injury.

This kit contains the following items:

DESCRIPTION	QUANTITY	DESCRIPTION	QUANTITY
Back Assembly	1	Wheel Lock Shoe Extension	2
Headrest Assembly	1	Quad Release	2
Headrest Pillow	1	Spring Button Assembly	2
Fork Assembly with Caster	2*	Armrest Plug	2
Washers (Fork Stem)	2*	Rear Arm Socket with Hardware	2
Pivot Bushing	2	Anti-Tipper	2
Offset Wheel Bracket (Left)	1	Cap Nut	4
Offset Wheel Bracket (Right)	1	Flat Head Socket Screw	2
U-Bracket	2	Offset U-bracket Mounting Screw	2
SX5 Owner's Manual	1		

**NOTE: These items are not included in kits for 20 and 22-inch wide (300 lb. weight capacity) wheelchairs. These wheelchairs are shipped from the factory with the required fork, fork hardware, and casters already installed. Refer to the FRONT CASTER section of the Owner's Manual, part number 1110550, for more information.*

REMOVING EXISTING WHEELCHAIR COMPONENTS

To convert the wheelchair to a recliner, the following components **MUST** be removed:

Rear Wheels

Arms

Back Canes

Back Upholstery

Wheel Locks

Fork/Caster Assemblies - if wheelchair is 14 to 18-inches wide.

REMOVING THE REAR WHEELS

Refer to REMOVING/INSTALLING THE REAR WHEELS in the Owner's Manual, part number 1110550.

REMOVING THE FLIP BACK ARMS

Refer to USING OR REPLACING FLIP-BACK ARMREST in the Owner's Manual, part number 1110550.

REMOVING THE BACK CANES (FIGURE 1)

1. Remove the locknut from the bottom of each back cane.
2. Unthread the hex screw from the bottom of each back cane.
3. Remove the back canes with the upholstery from the wheelchair frame.

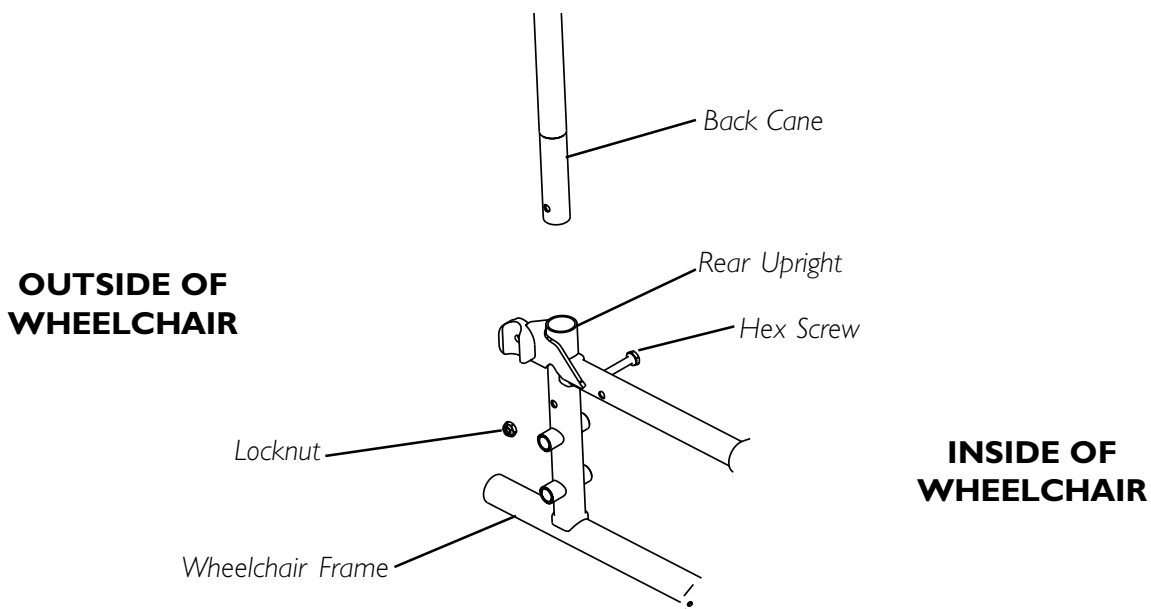


FIGURE 1 - REMOVING THE BACK CANES

REMOVING THE WHEEL LOCKS (FIGURE 2)

1. Ensure the wheel lock is in the open (unlocked) position.
2. Remove the bolt and locknut that secure the wheel lock assembly to the wheelchair frame.
3. Repeat STEPS 1-2 for the opposite wheel lock.

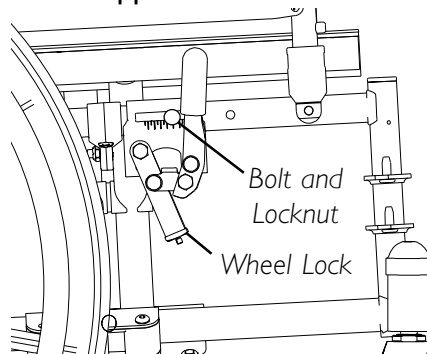


FIGURE 2 - REMOVING THE WHEEL LOCKS

REMOVING THE FORK/CASTER ASSEMBLIES - WHEELCHAIRS UNDER 20-INCHES WIDE ONLY (FIGURE 3)

1. Remove the dust cover.
2. Remove the locknut and nylon washer that secures the fork to the caster headtube.
3. Drop the front caster and fork out of the caster headtube.
4. Repeat STEPS 1-3 for the opposite fork/caster assembly.

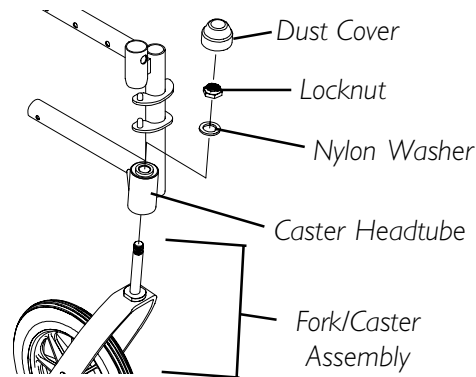


FIGURE 3 - REMOVING THE FORK/CASTER ASSEMBLIES - WHEELCHAIRS UNDER 20-INCHES WIDE ONLY

INSTALLING THE RECLINING BACK

1. Remove the components listed in REMOVING EXISTING WHEELCHAIR COMPONENTS in this instruction sheet.
2. Perform the following to complete installation of the reclining back:
 - Install the Rear Arm Sockets
 - Install the Offset Wheel Brackets
 - Install the Reclining Back Assembly
 - Install the Rear Wheels
 - Install/Adjust the Fork/Caster Assemblies
 - Install the Wheel Locks
 - Convert Flip Back Arms to Removable Arms
 - Install the Spreader Bar
 - Install the Rear Anti-tippers
 - Install the Headrest and Pillow

INSTALLING THE REAR ARM SOCKETS (FIGURE 4)

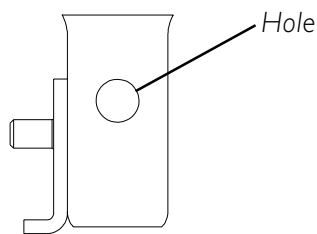
1. Position one (1) arm socket on the outside of the wheelchair frame, as shown in FIGURE 4.

NOTE: There are right and left versions of the arm socket. The hole in the arm socket (DETAIL "A") should be facing the REAR wheelchair when mounted.

2. Secure the arm socket to the armrest mounting bracket with the locknut. Torque to 30-40 in. lbs.
3. Repeat STEPS 1-2 for the opposite arm socket.

DETAIL "A" - ARM SOCKET

NOTE: Right arm socket shown.



REAR OF WHEELCHAIR

Armrest Mounting Bracket

Locknut

Arm Socket

Wheelchair Frame

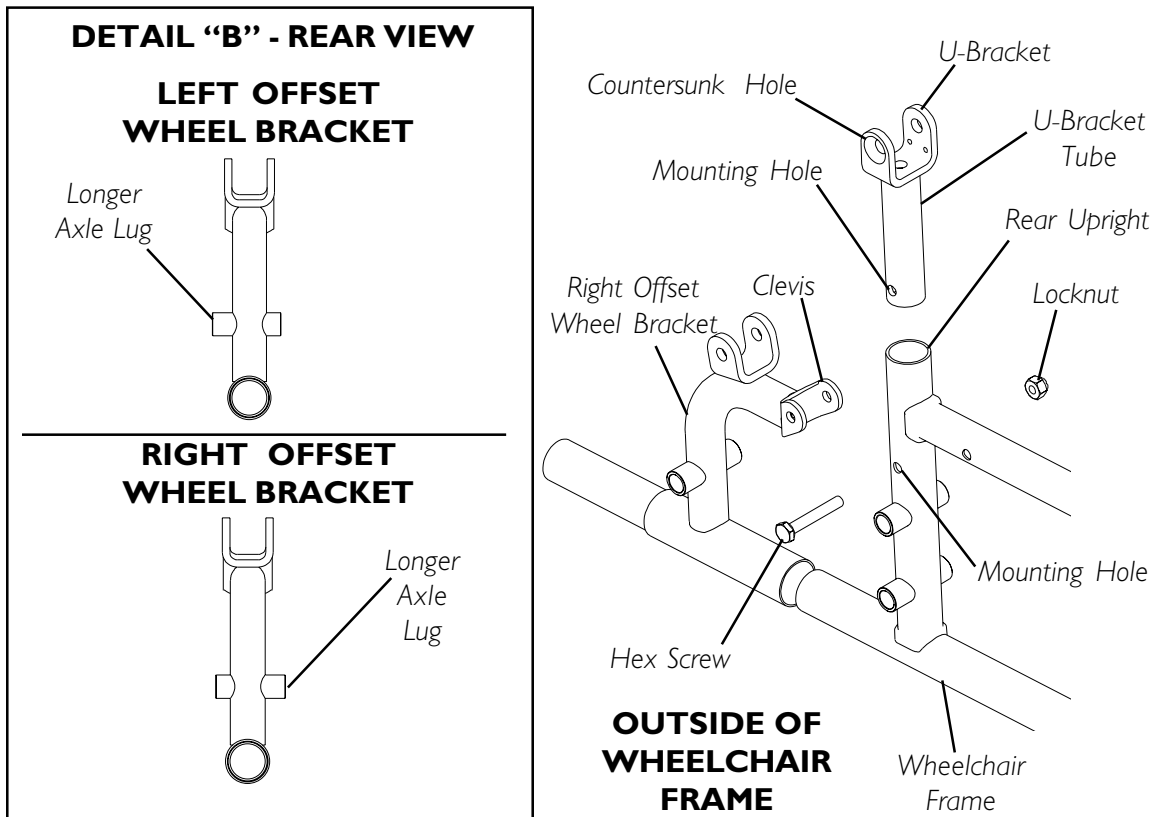
OUTSIDE OF WHEELCHAIR FRAME

FIGURE 4 - INSTALLING THE REAR ARM SOCKET

INSTALLING THE OFFSET WHEEL BRACKETS (FIGURE 5)

NOTE: Stand behind the wheelchair to determine right and left sides.

1. Examine the rear of the offset wheel brackets (DETAIL "B").
 - A. **RIGHT AXLE LUG LONGER** = RIGHT offset wheel bracket
 - B. **LEFT AXLE LUG LONGER** = LEFT offset wheel bracket.
2. Slide the bottom tube of the RIGHT offset wheel bracket over the RIGHT lower frame tube.
3. Ensure the clevis sits flush against the rear upright.
4. Position the U-bracket so the countersunk hole faces towards the outside of the wheelchair frame.
5. Insert the U-bracket tube into the rear upright.
6. Align the mounting hole in the U-bracket tube with the mounting hole in the rear upright and clevis.
7. Install the hex screw through the clevis, rear upright tube and U-bracket tube from the outside of the wheelchair frame.
8. Secure the offset rear wheel bracket to the wheelchair frame with a locknut. Torque to 165-175 in./lbs.
9. Repeat STEPS 1-8 on the left side of the wheelchair using the left offset wheel bracket.



NOTE: Arm socket and mounting bracket not shown for clarity

NOTE: Only RIGHT side of wheelchair shown for clarity. Left side installs in a similar manner.

FIGURE 5 - INSTALLING THE OFFSET WHEEL BRACKETS

INSTALLING THE RECLINING BACK ASSEMBLY (FIGURE 6)

NOTE: This procedure requires two (2) people. One (1) person is needed to support the reclining back assembly during the procedure.

NOTE: Stand behind the wheelchair to determine right and left sides.

NOTE: Ensure the reclining mechanism cables (not shown) are positioned towards the inside of the wheelchair frame.

1. Install the spacer into the pivot bushing at the bottom of the right back cane.
2. Position the pivot bushing with spacer into the right U-bracket .
3. Install a flat head socket screw through the right U-bracket, spacer and pivot bushing.
4. Install a cap nut onto the flat head socket screw. Torque to 120 in./lbs.
5. Align the mounting hole at the bottom of the right reclining back tube with the top clevis on the right offset wheel bracket.
6. Install a hex screw through the top clevis and reclining back tube.
7. Install a cap nut onto the hex screw. Tighten the nut just enough to remove the side play of the reclining back tube with the clevis.

NOTE: DO NOT overtighten the cap nut. Otherwise the reclining back will be difficult to operate.

8. Repeat STEPS 1-7 for the left side of the reclining back assembly.

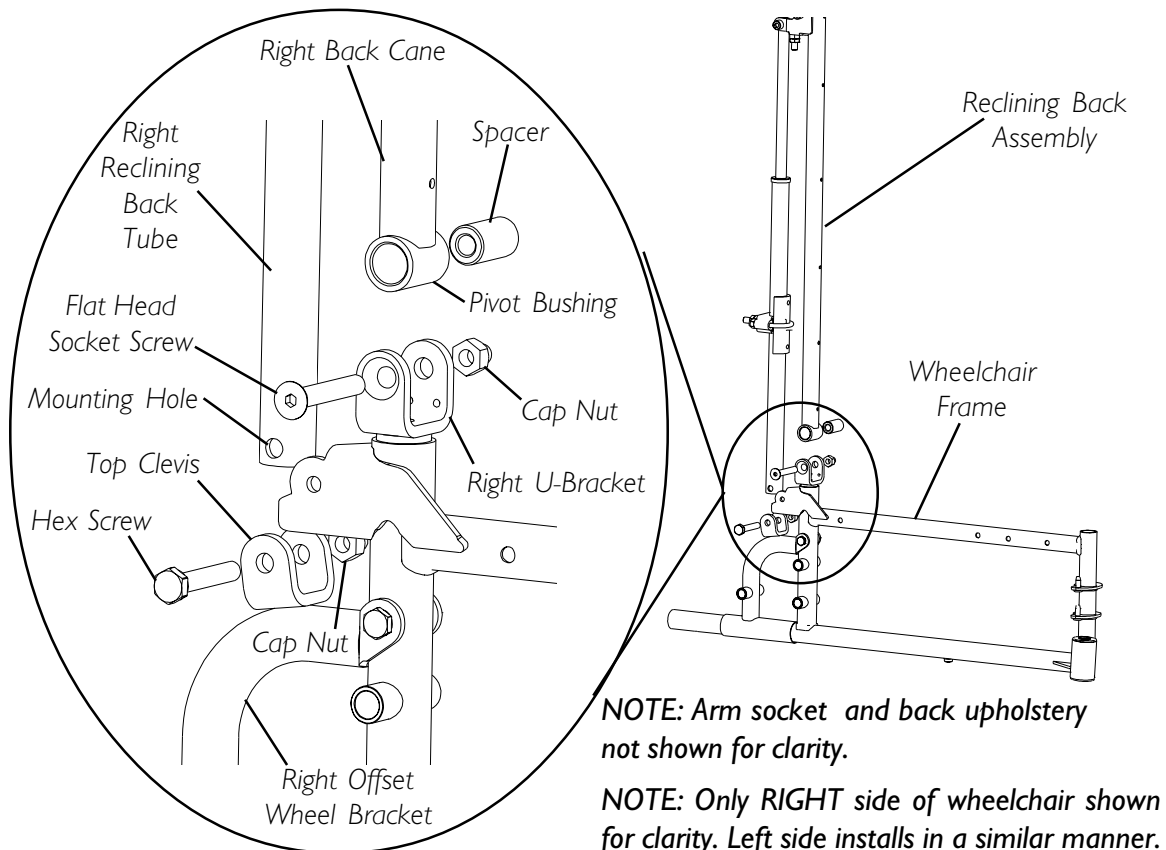


FIGURE 6 - INSTALLING THE RECLINING BACK ASSEMBLY

INSTALLING THE REAR WHEELS

Refer to REMOVING/INSTALLING THE REAR WHEELS in the Owner's Manual, part number 1110550.

INSTALLING/ADJUSTING THE FORK/CASTER ASSEMBLIES

WARNING

SX5 Recliners MUST have 8-inch casters installed. If the wheelchair originally had 6-inch casters installed, seat-to-floor height adjustments MUST be made. Seat-to-floor adjustments will also be necessary for certain 8-inch caster mounting positions. Refer to the SEAT-TO-FLOOR section in the Owner's Manual, part number 1110550, for these adjustments.

Wheelchairs Under 20-inches Wide ONLY.

Install 8-inch forks/caster assemblies. Refer to INSTALLING/REPLACING FORK ASSEMBLIES in the Owner's Manual, part number 1110550.

All Wheelchair Widths.

Check that the front casters have been mounted properly for the rear wheel size. Refer to the SEAT-TO-FLOOR section in the owner's manual, part number 1110550.

INSTALLING/ADJUSTING THE WHEEL LOCKS

NOTE: If the wheelchair has 24-inch rear wheels, bolt-on wheel locks must be used with the wheel lock shoe extension provided in this kit.

NOTE: If the wheelchair has 20 or 22-inch rear wheels, clamp-on wheel locks must be used. Contact Invacare for ordering information.

Installing Bolt-On Wheel Locks (FIGURE 7).

1. Align the slot in the wheel lock with the rear wheel lock mounting hole in the wheelchair frame.
2. Install the bolt through the wheel lock and the wheelchair frame.
3. Loosely install a locknut onto the bolt.
4. Repeat STEPS 1-3 for the opposite side of the wheelchair.
5. Install the wheel lock shoe extension. Refer to INSTALLING THE WHEEL LOCK SHOE EXTENSION in this procedure of the instruction sheet.

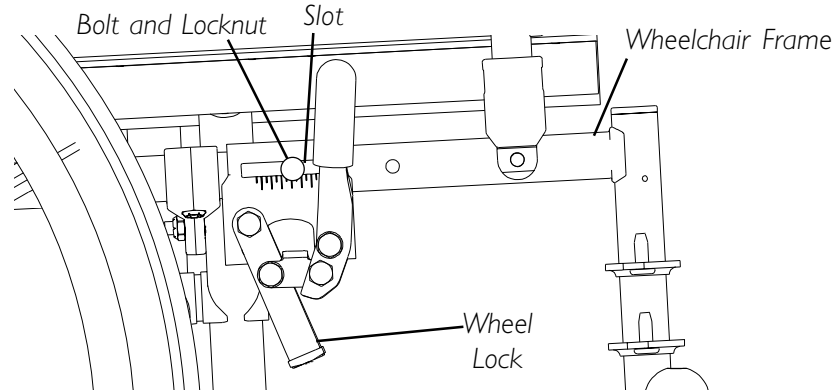


FIGURE 7 - INSTALLING THE BOLT-ON WHEEL LOCKS

Installing the Wheel Lock Shoe Extension (FIGURE 8).

1. If necessary, disengage the wheel lock.
 2. Loosen the two (2) set screws in the wheel lock shoe extension.
 3. Insert the wheel lock shoe into the slot in the wheel lock shoe extension.
- NOTE: Ensure the pointed end of the wheel lock shoe extension is facing toward the rear wheel.*
4. Position the wheel lock shoe extension so it is flush with the end of the wheel lock shoe.
 5. Tighten the two (2) set screws to secure the wheel lock shoe extension to the wheel lock shoe.
 6. Repeat STEPS 1-5 for the opposite side of the wheelchair.
 7. Adjust the wheel locks. Refer to ADJUSTING THE WHEEL LOCKS in this procedure of the instruction sheet.

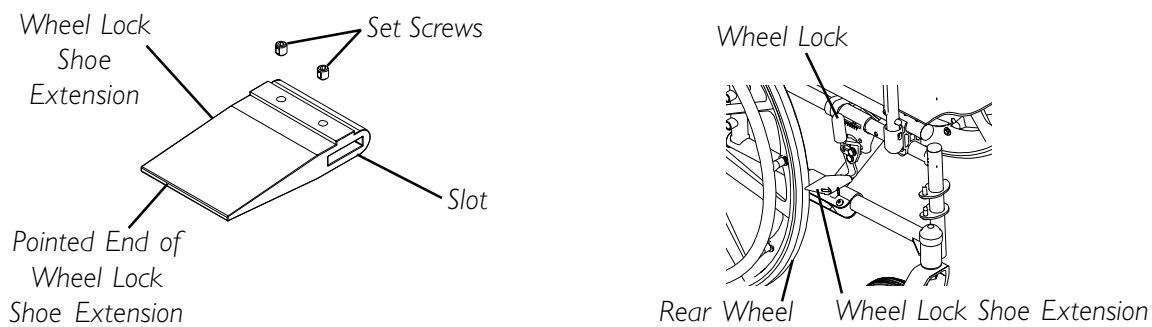


FIGURE 8 - INSTALLING WHEEL LOCK SHOE EXTENSION

Installing Clamp-On Wheel Locks (FIGURE 9).

1. Position the clamp onto the wheelchair frame.
2. Adjust the clamp position so the wheel lock shoe will embed the tire when engaged.
NOTE: Any wheel lock adjustment should embed the wheel lock shoe at least 1/8-inch (3/16-inch if pneumatic tire) into the tire when engaged.
3. Loosely install the bolt and locknut.
- NOTE: It may be necessary to squeeze the clamp together with pliers to install the bolt.*
4. Repeat STEPS 1-2 for the opposite side of the wheelchair.
5. Adjust the wheel locks. Refer to ADJUSTING THE WHEEL LOCKS in this procedure of the instruction sheet.

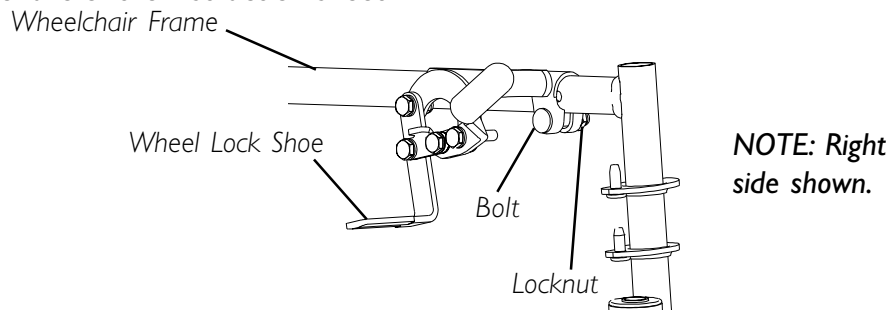


FIGURE 9 - INSTALLING CLAMP-ON WHEEL LOCKS

ADJUSTING THE WHEEL LOCKS (FIGURE 10)

NOTE: If wheels are pneumatic, before adjusting or replacing the wheel lock assemblies, ensure that the tires are inflated to the recommended psi on the side wall of tire. The recommended tire pressure is located on the side wall of the tire.

1. Disengage the wheel locks.
2. Loosen the bolt and locknut that secure the wheel lock to the wheelchair frame.
3. Reposition the wheel lock so that when engaged, the wheel lock shoe embeds the tire 1/8-inch (3/16-inch for pneumatic tires) and **HOLDS** the occupied wheelchair in place when pushed.
4. Securely tighten the bolt and locknut securing the wheel lock to the wheelchair frame.
5. Engage the wheel lock.

6. Measure the distance the wheel lock is embedded into the tire as shown in DETAIL "C" of FIGURE 10.

NOTE: Any wheel lock adjustment should embed the wheel lock shoe at least 1/8-inch (3/16-inch if pneumatic tire) into the tire when engaged.

7. Repeat STEPS 1-6 until the wheel lock shoe embeds the tire 1/8-inch (3/16-inch for pneumatic tires) and **HOLDS** the occupied wheelchair in place when pushed. If the correct measurement still cannot be achieved, contact a qualified technician.
8. Repeat STEPS 1-7 for the opposite wheel lock.

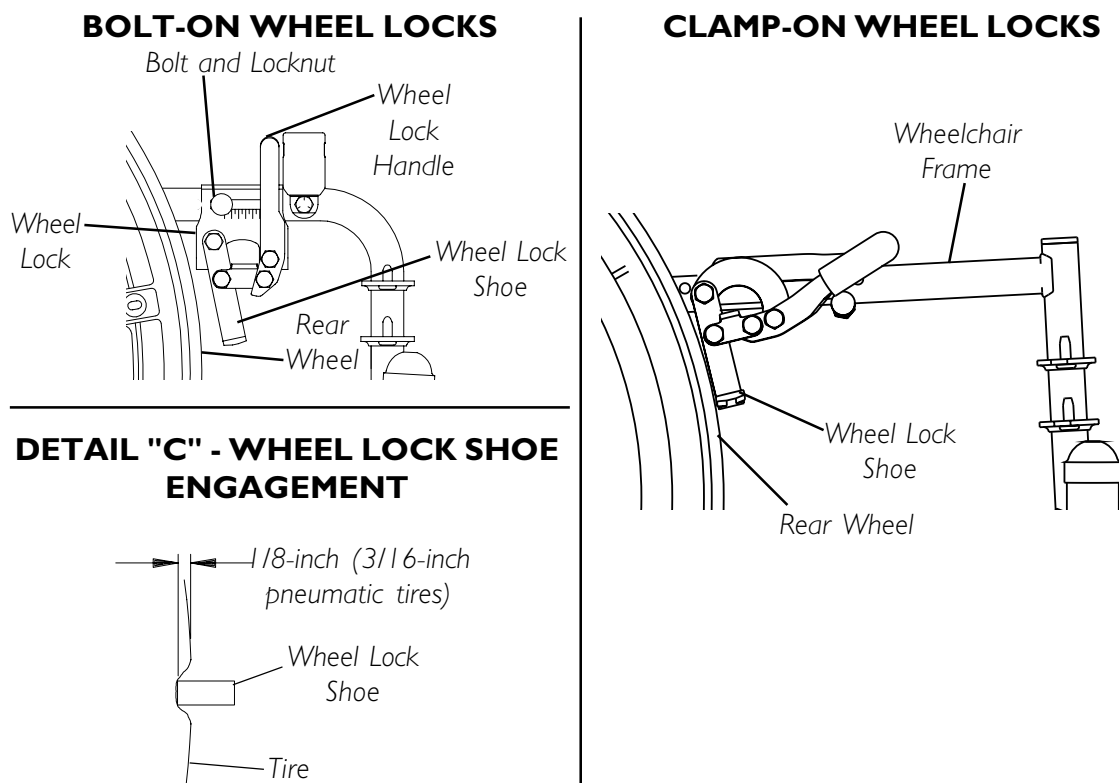


FIGURE 10 - ADJUSTING THE WHEEL LOCKS

CONVERTING ARMS FROM FLIP-BACK STYLE TO REMOVABLE STYLE (FIGURE 11)

1. Remove the insert from the bottom of the rear arm tube.
2. Align the spring buttons with the spring button holes in the rear arm tube.
3. Install spring button assembly into rear arm tube until both spring buttons protrude from the spring button holes.
4. Press and hold spring button in.
5. Slide the release lever up and over the top snap button.

NOTE: Orient the lever so that it rotates to the outside of the wheelchair to retract the spring buttons.

5. Position the plug button so the arrow on the bottom points towards the spring button holes in the rear arm tube.

6. Install the plug button into the rear arm tube. Use a mallet if necessary.
7. Install the arm onto the wheelchair. Refer to REMOVING AND INSTALLING THE ARMREST in the RECLINER section of the Owner's Manual, part number 1110550.

NOTE: If necessary, loosen the locknut securing the arm socket and rotate the socket slightly to improve the alignment and ease installation of the arm. Retighten the locknut while keeping the arm socket from moving. See DETAIL "E" in FIGURE 11.

8. Repeat STEPS 1-7 for the opposite arm.

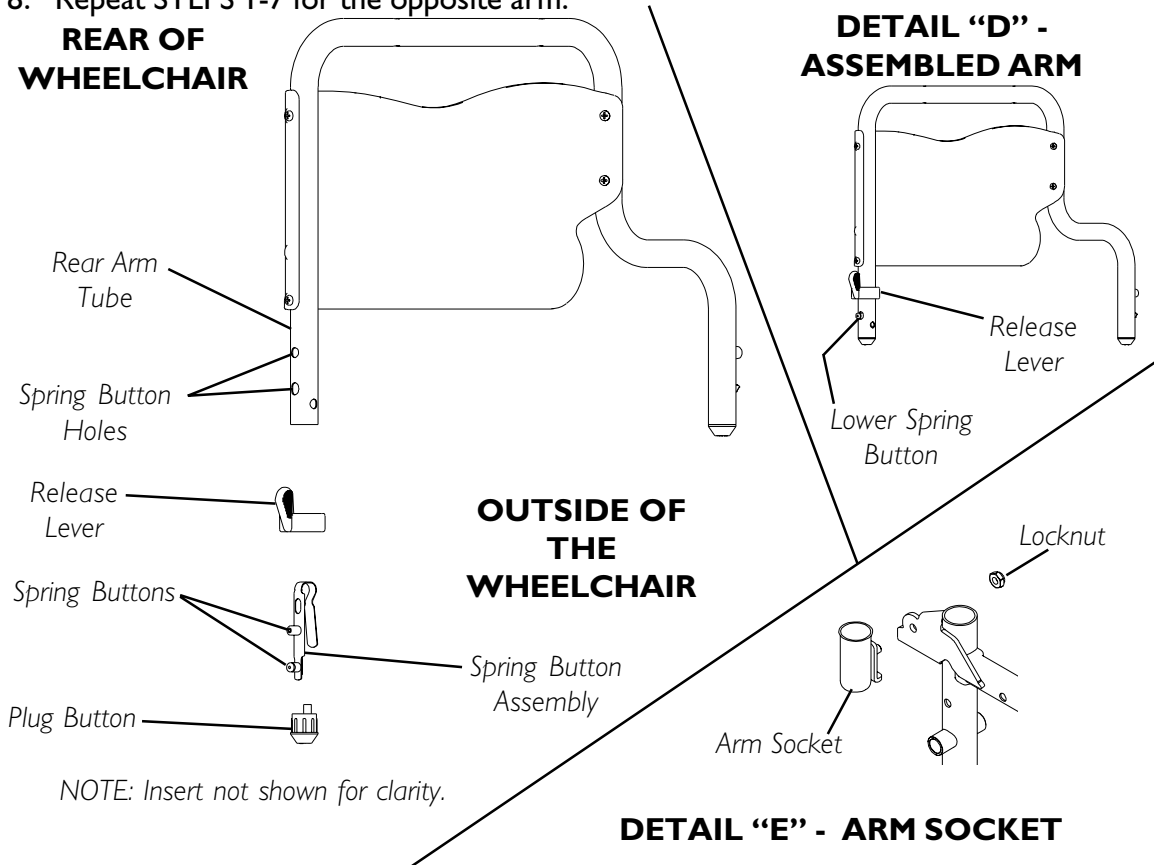


FIGURE 11 - CONVERTING ARMS FROM FLIP-BACK STYLE TO REMOVABLE STYLE

INSTALLING THE SPREADER BAR

Install the spreader bar. Refer to REMOVING/INSTALLING THE SPREADER BAR in the RECLINER section of the Owner's Manual, part number 1110550.

INSTALLING THE ANTI-TIPPERS

WARNING

The anti-tippers for the recliner are DIFFERENT than the anti-tippers for non-recliner wheelchairs. The anti-tippers included in this kit MUST be installed at all times on the recliner.

Install the anti-tippers included with this kit. Refer to INSTALLING/ADJUSTING THE ANTI-TIPPERS in the Owner's Manual, part number 1110550.

INSTALLING THE HEADREST AND PILLOW (FIGURE 12)

1. Position the headrest extension tubes so the slots at the bottom (DETAIL "F") are facing the front of the wheelchair.
2. Insert the headrest extension tubes into the back canes.

NOTE: The slots in the headrest extension tubes should engage the upper back upholstery screws and prevent the headrest extension tubes from rotating.

3. Install the headrest pillow. Refer to REPLACING THE HEADREST PILLOW in the RECLINER section of the Owner's Manual, part number 1110550.

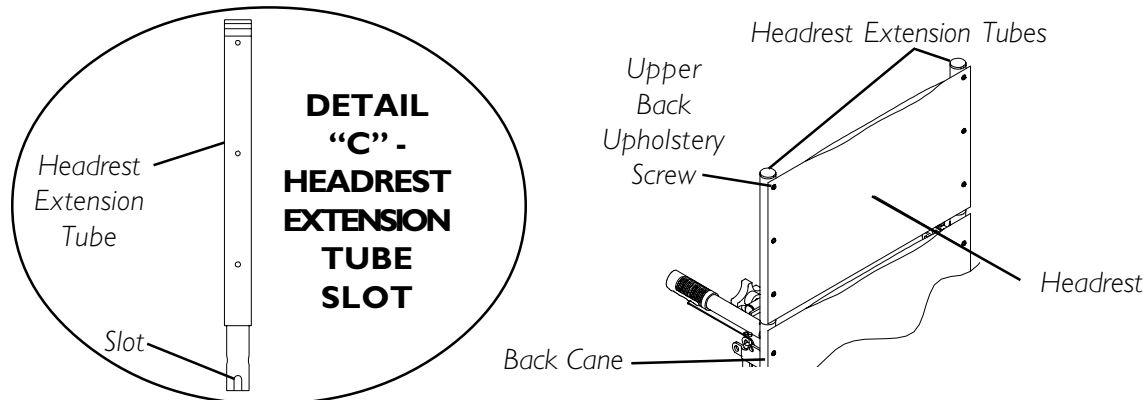


FIGURE 12 - INSTALLING THE HEADREST AND PILLOW

USING THE RECLINER

WARNING

AFTER conversion of the wheelchair and **BEFORE USE** of the recliner, read the **GENERAL GUIDELINES** and **RECLINER** sections of the **Owner's Manual**, part number 1110550, for recliner operation and safety instructions.

Test that the recliner mechanism locks in place in multiple positions BEFORE the wheelchair is occupied. If the recliner does not lock, contact Invacare for technical assistance.



Yes, you can.™

Invacare Corporation www.invacare.com

USA
One Invacare Way
Elyria, Ohio USA
44036-2125
800-333-6900

Invacare is a registered trademark of Invacare Corporation.
Yes, you can. is a trademark of Invacare Corporation.
© 2002 Invacare Corporation
Part No. 1110194 Rev A - 11/02