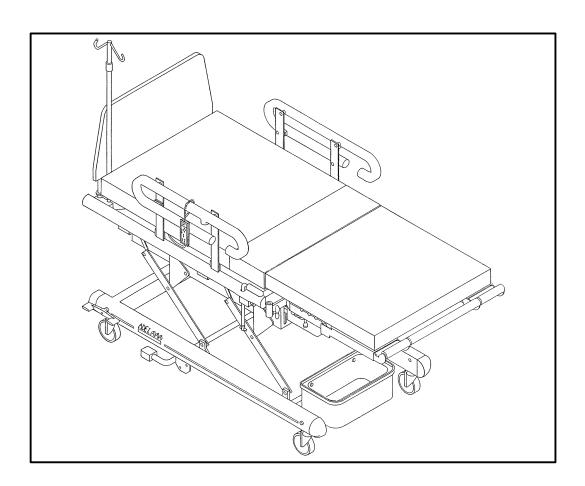
IMPORTANT File in your maintenance records





# 2100 Childbearing Bed

## **MAINTENANCE MANUAL**

For Parts or Technical Assistance 1–800–327–0770

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### Introduction

#### INTRODUCTION

This manual is designed to assist you with the maintenance of the 2100 Childbearing Bed. Read it thoroughly before using the equipment or beginning any maintenance on it.

#### **SPECIFICATIONS**

Maximum Weight Capacity	300 pounds (135 kilograms)
Electrical	3 motor function: Head–Bed–Foot 6 function patient comfort 120 VAC, 60 Hz, 4 Amp – 105 to 135 VAC operating range. Current leakage less than 100 microamperes. Hospital grade plug and 3–wire heavy duty cord. Compatible with non–flammable anesthetic agents and oxygen by nasal catheter or mask.

#### **WARNING**

The 2100 is equipped with a hospital grade plug for protection against shock hazard. It must be plugged directly into a properly grounded three–prong receptacle. Grounding reliability can be achieved only when a hospital grade receptacle is used.

#### **WARNING / CAUTION / NOTE DEFINITION**

The words WARNING, CAUTION and NOTE carry special meanings and should be carefully reviewed.

#### WARNING

The personal safety of the patient or user may be involved. Disregarding this information could result in injury to the patient or user.

#### **CAUTION**

These instructions point out special procedures or precautions that must be followed to avoid damaging the equipment.

#### **NOTE**

This provides special information to make maintenance easier or important instructions clearer.

To assure its proper use and the safety of patients and staff, the 2100 has been marked with the following caution and warning labels:

DANGER Explosion Hazard – do not use in the presence of flammable anesthetics.

CAUTION This unit is equipped with a hospital grade attachment plug. Grounding reliability can be achieved only when equipment is connected to equivalent receptacle.

CAUTION Electrical shock hazard. Do not remove cover panels. Refer all servicing to qualified personnel.

CAUTION Disconnect power cord before hand cranking. Remove hand crank before connecting power

cord.

## **Unpacking and Initial Set-Up Procedures**

#### UNPACKING INSTRUCTIONS

Refer to unpacking instructions located on outside of marked crate.

#### **SET-UP PROCEDURES**

It is important that the Stryker Adel 2100 Childbearing Bed is working properly before it is put into service. The following list will help assure that each part of the bed is tested.

Plug the bed into a properly grounded, hospital grade wall receptacle.

#### **WARNING**

The 2100 is equipped with a hospital grade plug for protection against shock hazard. It must be plugged directly into a properly grounded three–prong receptacle. Grounding reliability can be achieved only when a hospital grade receptacle is used.

- Assure the siderails raise and lower smoothly and lock in the up position.
- Assure that the brakes hold when the brake pedal is engaged (see page 4 for adjustment).
- Run through each function on the hand pendant to assure that each function is working properly.

Beds equipped with siderail control option only:

- Plug the interface cable into the 37 pin connector in the litter frame at the head end of the bed, and into the "Patient Station", "Head Wall", "Docker Station", or equivalent (whichever applies).
- Run through each function on the siderail control panels to assure that each function is working properly.

## **Preventative Maintenance**

#### PREVENTATIVE MAINTENANCE PROGRAM

Observation of the following scheduled maintenance and inspection program will help assure continuous trouble–free operation of your 2100 Childbearing Bed.

ACTIVITY	MONTHLY INTERVAL	TOOLS REQUIRED	SUPPLIES REQUIRED
Lubricate screw threads on leg support clamping knobs.	6	N/A	Lubricant
Clean and lubricate vertical slide rods that support the foot panels.	6	N/A	Lubricant
Inspect and adjust wheel brake shoes on central locking casters.*	24	Phillips screwdriver	N/A
Lubricate pin joints on lift mechanism.	6	N/A	Lubricant
Inspect power cord and plug for damage due to abrasion or cutting.	12	N/A	N/A
Inspect exposed metal surfaces and apply touch—up paint where required.	12	N/A	Touch-up paint**
Check electrical safety by testing for leakage current and ground continuity.	12	Electrical testing equip- ment	N/A
Scratched wood components. Remove loose dust; spray a light coat of Varathane over the area. Apply a second coat in approximately six hours.	N/A	N/A	Satin Varathane #91
Remove stains from mattress covers.	Each occurrence		See page 23.

<sup>\*</sup>To adjust brakes, remove 6 mm screw from caster. Rotate housing to the right (counterclockwise) to reduce braking force or to the left (clockwise) to increase braking force. Reinstall the 6 mm screw.

#### NOTE

Left front caster is not a brake caster

Tan Brown (spray) p/n 0064-06-00 Tan Brown (touch-up) p/n 0064-08-00 Camel (spray) p/n 0064-07-00 Camel (touch-up) p/n 0064-09-00

<sup>\*\*</sup>Touch-up paint

#### TROUBLESHOOTING GUIDE

The following chart is intended to assist qualified service personnel with identifying and correcting problems associated with the electrical/pneumatic systems. The schematic diagrams on the following pages should be used for reference. A volt–ohm meter will be required.

#### **WARNING**

Because these problem solving methods may involve interchanging motor plugs or pneumatic air lines to isolate the fault or probable cause, the patient should always be removed from the bed before corrective action is taken.

PROBLEM/SYMPTOM	POSSIBLE CAUSE	RECOMMENDED ACTION
No motors functioning.	No power supply. Defective power cord or plug. Defective electrical controller.	Test voltage at wall receptacle Examine and test for continuity. Test input and output voltages (see schematic page 7). Listen for relay actuation.
One motor not functioning – head, bed, or foot.	Loose wire at motor plug or receptacle. Defective motor. Defective pendant controller. Defective membrane switch. Defective electrical controller (circuit board).	Inspect connectors; check continuity.  Interchange motor plugs to isolate. Interchange motor plugs to isolate. Check continuity. Test input and output voltages (see schematic page 7). Listen for relay actuation.
Incorrect travel limits – head, bed or foot.	Physical blockage of movement. Defective motor or drive screw. Motor drive tube out of adjustment.	Visually inspect moving parts. Replace motor (see pages 9–11). Reset (see motor replacement– pages 9–11)
One pneumatic solenoid not functioning – lumbar, seat left or seat right.	Loose wire at solenoid plug. Defective solenoid.  Defective pendant controller.  Defective membrane switch. Defective electrical controller (circuit board).	Inspect connectors; check continuity. Interchange solenoid plugs to isolate. Replace coil. Interchange solenoid plugs to isolate. Check continuity. Test input and output voltages (see schematic page 7).
No inflation of lumbar, seat left, or seat right.	Leaking bladder.	Replace head panel–mattress or seat panel–mattress (see page 15 or 16).
No inflation or deflation of lumbar, seat left, or seat right.	Kinked lines.  Defective solenoid.	Inspect lines for kinking: re–route, if necessary. Interchange solenoid plugs to isolate.
No air to operate lumbar, seat left, or seat right.	Defective compressor. Loose wire at motor connectors.	Replace compressor (see page 14). Inspect connectors: check continuity; test voltage.
Slow filling or emptying of air from lumbar, seat left, or seat right.	Kinked lines.  Contamination in valves.	Inspect lines for kinking: re–route, if necessary. Isolate by switching lines. Replace manifold (see page 17).
Squeal or noise in lift mechanism Or, bed motor labors when bed is fully loaded with 300 pounds.	Dry joints. Defective counterbalance spring.	See prev. maintenance (page 4). Check for obstruction, bent rod, or bent housing. Remove obstruction. Replace spring (see page 20).

#### TROUBLESHOOTING GUIDE (CONTINUED)

PROBLEM/SYMPTOM	POSSIBLE CAUSE	RECOMMENDED ACTION
Bed does not tilt when lever is depressed.	Tilt spring out of adjustment. Defective tilt spring.	Readjust spring length. Replace spring (see page 21).
Bed tilts when weight is applied to opposite ends.	Tilt spring out of adjustment. Defective tilt spring.	Readjust spring length. Replace spring (see page 21).
Brakes do not lock wheels.	Tire wear.	Readjust casters
Brakes hard to apply.	Brakes over–adjusted.	Readjust casters

#### NURSE COMMUNICATION SIDERAIL OPTION TROUBLESHOOTING GUIDE

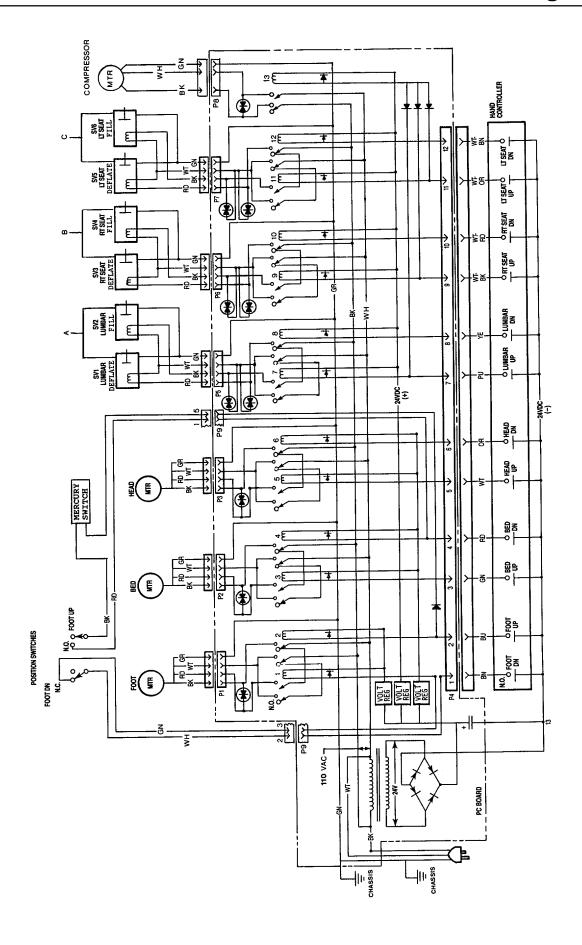
Before attempting to diagnose an apparent problem, be sure the power cord is plugged into a properly grounded hospital grade wall receptacle and the bed has power. Be sure the nurse call cable has a good connection at both the wall and the bed. If both these things are done, proceed with diagnosis.

#### **CAUTION**

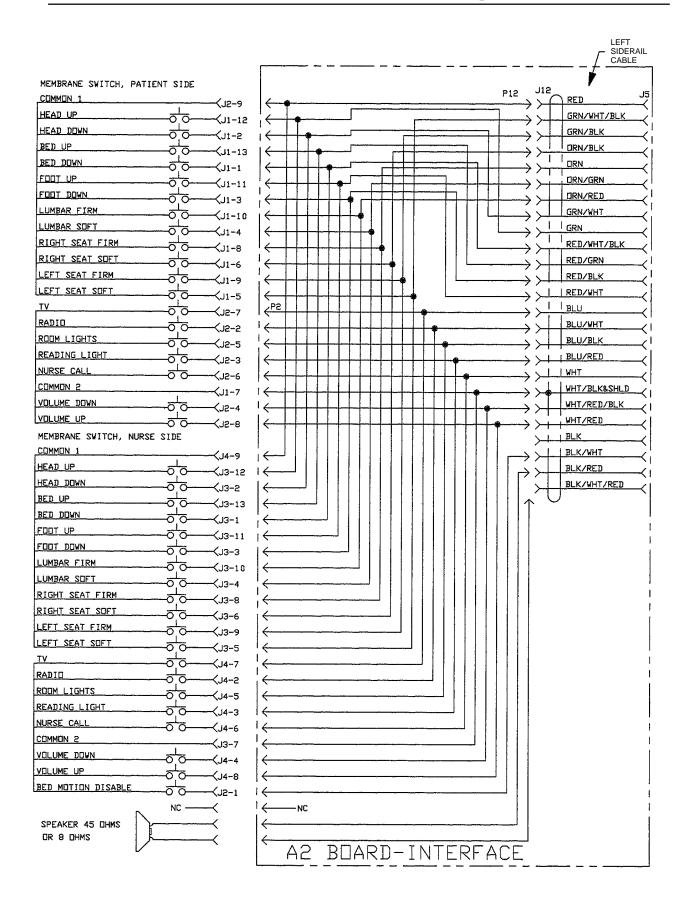
Membrane switches are fragile. Never depress a membrane dome unless the switch is lying on a flat, firm surface. Doing otherwise will cause the switch to fail eventually. When applying a new membrane switch, lay it down evenly; do not roll it down. Once a membrane switch has been peeled back, it cannot be reused.

PROBLEM/SYMPTOM	POSSIBLE CAUSE	RECOMMENDED ACTION
Some or all of the pillow speaker functions aren't working properly.	Defective cable (from bed to wall).	Switch the cable with one that is known to work. If this solves the problem, replace the cable. If not, try a bed from another room that is known to be O.K. If the problem persists on the bed that is known be O.K., the problem is in the wiring in the wall.
A control button on one side of the siderail doesn't work or the T.V. sounds different on one side.*	Defective control switch. Defective siderail P.C. board. Defective splitter box.*** Defective siderail cable.	Replace switch.** Replace siderail PC board.** Switch the siderail cables at the splitter box. If the problem switches sides, replace splitter box. If the problem stays in the same siderail, replace cable.

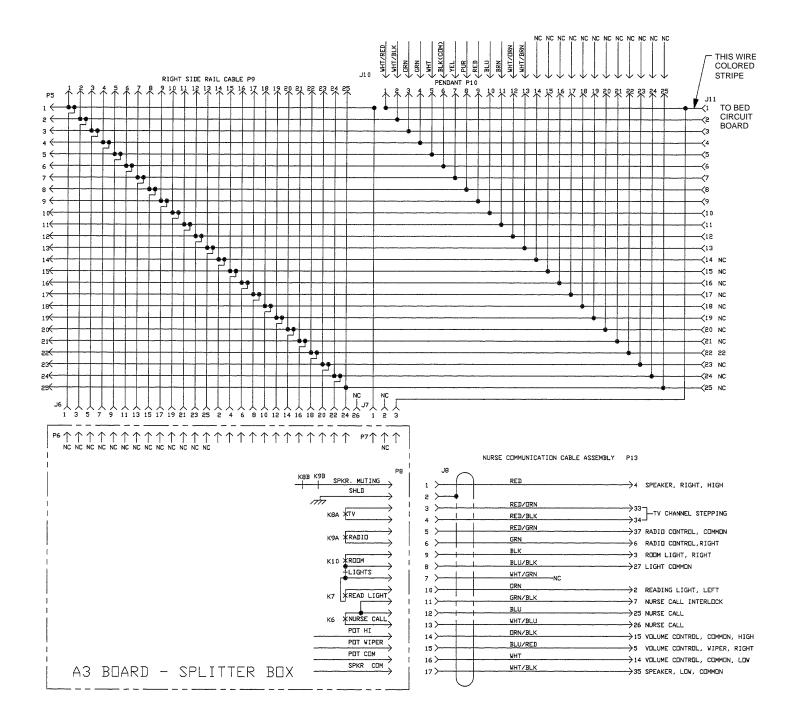
- \* For audio problems, check resistance across pins 4 and 35 on the 37 pin connector at the rear of the bed. The reading should be 22.5 ±5 ohms for 45 ohm systems or 4 ±2 ohms for 8 ohm systems. A reading double these values indicates no connection to the speaker in one of the siderails. If the sound is inadequate, turn the volume up to its highest level by holding the button for 30 seconds. Adjust the remote speaker output volume on the TV to its highest level. Turn the TV back down until the volume at the remote speakers just begins to be affected to reduce distortion caused by overdriving the speakers. Cover the speaker orills separately and compare the sound loss to be sure the sound is balanced between the two speakers.
- \*\* For problems inside the siderails, peel back the outside membrane switch to expose the seven screws holding the plastic housing to the siderail assembly. Remove the screws and carefully disconnect the membrane switch from the siderail PC board.
- \*\*\* For problems in the splitter box, remove the box and examine the LED's next to the relays. If the LED comes on when the function button is pressed, a faint click should be audible. If no click is heard, replace the relay. If replacing the relay doesn't solve the problem or if the LED doesn't light, replace the splitter box PC board. If the problem still persists, replace the splitter cable. (Refer to Splitter Box Assembly (page 49) for part reference.)



## **Nurse Communication Schematic Diagram**



## **Nurse Communication Schematic Diagram**



# Notes

#### **HEAD MOTOR REPLACEMENT**

HEAD MOTOR KIT #88-3979-18-00

#### **Required Tools:**

7/16" Hex Socket & Ratchet Phillips Screwdriver

1/4" Allen Wrench Loctite 242

#### **Replacement Procedure:**

1. Raise bed to full up position.

#### **CAUTION**

Disconnect power plug from wall receptacle.

- 2. Use hand crank to lower head panel.
- 3. Remove headboard, foot mattress, foot extension, foot pans, I.V. pole and leg supports.
- 4. Set brake with casters turned as though the bed is being pushed backwards. Assure the head end of the bed is at least five feet away from the wall when it is upright.
- 5. With the assistance of another person, lift the foot end of the bed chassis and rotate the locked rear casters until the upper frame—headboard mounts touch the floor.
- 6. Disconnect the head motor plug and unscrew the cord strain relief clamp.
- 7. Remove the four hex screws from the motor trunnion mounts.
- 8. Remove the two hex screws and washers from the drive tube/pull bar.
- 9. Motor, drive tube and mounting hardware can now be removed as a unit.

#### **NOTE**

The head motor is supplied to you with the drive tube retracted (ref. 1/8" from motor case). Do not allow drive tube to rotate.

- 10. Remove the two white trunnion bearings from the defective motor and place them onto the new motor trunnion mounts. Place the motor assembly back into the litter frame and attach with the four hex screws. Use Loctite 242 to secure the screws.
- 11. To hook up the head panel to the drive tube, plug the motor lead into the control box, replace the strain relief clamp, and plug the power cord into the wall receptacle. Hold the drive tube to prevent rotation and press the "HEAD DOWN" button on the hand pendant until the drive tube aligns with the head panel pull bar holes. Install the two hex screws and washers.
- 12. Be sure all screws, cables and electrical connections are secure.
- 13. With the assistance of another person, tilt the bed back down to the floor.
- 14. Operate the head motor from full down position to full up to full down again. Make sure the motor stops electrically before the drive tube bottoms out on the mechanical stops. Check motor cable for proper routing and attachment to prevent interference.
- Check electrical safety in conformance with specified hospital requirements (leakage current, ground continuity, etc.)
- 16. Remount all items removed in step three and return the bed to service.

## **Service Information**

#### **BED MOTOR REPLACEMENT**

BED MOTOR KIT #88-0316-08-00

#### **Required Tools:**

7/16" Hex Socket & Ratchet Phillips Screwdriver Loctite 242 & 271 1/4" Allen Wrench 3/8" Nut Driver

#### **Replacement Procedure:**

1. Lower head panel.

#### **CAUTION**

Disconnect power plug from wall receptacle.

The 2100 bed is equipped with gas springs to assist the lift mechanism. To prevent the seat section from expanding away from the chassis when the bed motor is removed, use the hand crank to raise the bed to full up before placing the bed in servicing position. If the motor is jammed or cannot be hand cranked, tie the seat section to the chassis with straps or strong rope.

- 2. Remove headboard, foot mattress, foot extension, foot pans, I.V. pole and leg supports.
- Set brake with casters turned as though the bed is being pushed backwards. The casters at the head end of the bed must be five feet away from the wall.
- 4. With the assistance of another person, lift the foot end of the bed chassis and rotate the locked rear casters until the upper frame—headboard mounts touch the floor.
- 5. Disconnect the bed motor plug and unscrew the cord strain relief clamp.
- 6. Remove the four hex screws from the motor trunnion mounts.
- 7. Remove the two Allen screws and sleeves from the drive tube/crank.
- 8. Motor, drive tube, and mounting hardware can now be removed as a unit.
- 9. Remove the two white trunnion bearings from the defective motor and place them onto the new motor trunnion mounts. Place the motor assembly back into the litter frame and attach with the four hex screws. Use Loctite 242 to secure the screws.

#### NOTE

The bed motor is supplied with the drive tube retracted (ref. 1/8" from motor case). Do not allow drive tube to rotate.

- 10. Using Loctite 271, install the two 1/4" Allen screws and sleeves.
- 11. Plug the motor lead into the control box and replace the strain relief clamp.
- 12. Be sure all screws, cables, and electrical connections are secure.
- 13. With the assistance of another person, tilt the bed back down to the floor.
- 14. Plug the power cord into the wall receptacle. Operate the bed motor from full up position to full down to full up again. Be sure the motor stops electrically before the drive tube bottoms out on the mechanical stops. Check motor cable for proper routing and attachment to prevent interference.
- 15. Check electrical safety in conformance with specified hospital requirements (leakage current, ground continuity, etc.)
- 16. Remount all items removed in step two and return bed to service.

#### FOOT MOTOR REPLACEMENT

FOOT MOTOR KIT #88-0316-09-00

#### **Required Tools:**

7/16" Hex Socket & Ratchet Phillips Screwdriver

1/4" Allen Wrench Loctite 242 & 271

#### **Replacement Procedure:**

1. Raise bed to full up position.

#### **CAUTION**

Disconnect power plug from wall receptacle.

- 2. Use hand crank to lower foot pans to full down position.
- 3. Remove headboard, foot mattress, foot extension, foot pans, I.V. pole and leg supports.
- 4. Set brake with casters turned as though the bed is being pushed backwards. The casters at the head end of the bed must be five feet away from the wall.
- 5. With the assistance of another person, lift the foot end of the bed chassis and rotate the locked rear casters until the upper frame—headboard mounts touch the floor.
- 6. Disconnect the foot motor plug and unscrew the cord strain relief clamp.
- 7. Remove the four hex screws from the motor trunnion mounts.
- 8. Remove the two Allen screws and sleeves from the drive tube/crank.
- 9. Motor, drive tube and mounting hardware can now be removed as a unit.
- 10. Remove the two white trunnion bearings from the defective motor and place them onto the new motor trunnion mounts. Place the motor assembly back into the litter frame and attach with the four hex screws. Use Loctite 242 to secure the screws.

#### NOTE

The bed motor is supplied with the drive tube retracted (ref. 1/8" from motor case). Do not allow drive tube to rotate.

- 11. Install the two 1/4" Allen screws and sleeves.
- 12. Plug the motor lead into the control box and replace the strain relief clamp.
- 13. Be sure all screws, cables, and electrical connections are secure.
- 14. Plug the power cord into the wall receptacle. Operate the foot motor from full down position to full up to full down again. Be sure the motor stops electrically before the drive tube bottoms out on the mechanical stops. Check for proper cable routing and attachment to prevent interference.
- 15. With the assistance of another person, tilt the bed back down to the floor.
- 16. Check electrical safety in conformance with specified hospital requirements (leakage current, ground continuity, etc.)
- 17. Remount all items removed in step three and return the bed to service.

## **Service Information**

#### **CONTROLLER (CIRCUIT BOARD) REPLACEMENT**

CONTROLLER KIT #88–0316–02–00 (for beds with serial numbers 880596 and below) CONTROLLER KIT #88–0316–21–00 (for beds with serial numbers 880597 and above)

#### **Required Tools:**

3/8" Nut Driver #1 Phillips Screwdriver 5/16" Nut Driver Pliers

#### **Replacement Procedure:**

1. Raise bed to the full up position.

#### **CAUTION**

- 2. Remove headboard, foot mattress, foot extension, foot pans, I.V. pole and leg supports.
- 3. Set brake with casters turned as though the bed is being pushed backwards. The casters at the head end of the bed must be five feet away from the wall.
- 4. With the assistance of another person, lift the foot end of the bed chassis and rotate the locked rear casters until the upper frame—headboard mounts touch the floor.
- 5. Unplug all connectors on controller box.
- Remove the two screws holding on the controller box cover, remove the cover, and disconnect the power cord.
- 7. Remove the three mounting nuts and 2 stand-offs and loosen the cable clamps. Remove the defective circuit board.
- 8. Attach replacement circuit board to control box base with the four star washers and screws. (On later model beds without a control box base, attach the circuit board to the litter.)
- 9. Remount the box to the litter frame with four star washers and nuts.
- 10. Connect the power cord and attach the cover with the two screws.
- 11. Plug all connectors into the controller box and re-tighten the cable clamps.
- 12. Be sure all screws, cables, and electrical connections are secure.
- 13. With the assistance of another person, tilt the bed back down to the floor.
- 14. Plug the power cord into the wall receptacle. Run through all functions on the hand pendant at least three times to ensure proper operation. Check for proper cable routing and attachment to prevent interference.
- 15. Check electrical safety in conformance with specified hospital requirements (leakage current, ground continuity, etc.)
- 16. Remount all items removed in step two and return bed to service.

#### HAND PENDANT REPLACEMENT

HAND PENDANT KIT #88-0316-03-00

#### **Required Tools:**

Phillips Screwdriver

3/8" Nut Driver

#### **Replacement Procedure:**

- 1. Raise bed to full up position.
- 2. Remove screw at head end of motor cover and remove cord strain relief clamps.
- 3. Unplug pendant cable from controller box and remove.
- 4. Route replacement pendant cable to control box and plug into controller.
- 5. Attach strain relief clamps and install screw at head end of motor cover.
- 6. Be sure all screws and connections are secure.
- 7. Run through all the functions on the hand pendant at least three times to ensure proper operation.
- 8. Return bed to service.

#### MEMBRANE SWITCH REPLACEMENT

MEMBRANE SWITCH KIT #88-0316-04-00

#### **Required Tools:**

5/64" Allen Wrench

#### **Replacement Procedure:**

#### **CAUTION**

- 1. Remove the four screws from the back of the hand pendant.
- 2. Unplug the membrane switch assembly at the ribbon cable connector.
- 3. Plug the replacement membrane switch ribbon into the connector.
- 4. Place the membrane switch into the pendant housing, being sure to properly locate the strain relief bar. Insert and tighten the four socket screws.
- 5. Run through all the functions of the membrane switch at least three times to ensure proper operation.
- 6. Return bed to service.

## **Service Information**

#### COMPRESSOR REPLACEMENT

COMPRESSOR KIT #88-0316-24-00

#### **Required Tools:**

11/32" Nut Driver Side (Wire) Cutter Blade Screwdriver

#### **Replacement Procedure:**

1. Raise the bed to the full up position.

#### **CAUTION**

- 2. Remove headboard, foot mattress, foot extension, foot pans, I.V. pole and leg supports.
- 3. Set brake with casters turned as though the bed is being pushed backwards. The casters at the head end of the bed must be five feet away from the wall.
- 4. With the assistance of another person, lift the foot end of the bed and rotate the locked rear casters until the upper frame—headboard mounts touch the floor.
- 5. Remove ground wire screw. Pull lead wire connectors apart and cut tubing line next to compressor fitting.
- 6. Remove the three mounting nuts and washers and the defective compressor.
- 7. Install the replacement compressor and shock mounts in the litter frame with the three star washers and nuts.
- 8. Connect the ground wire with the star washer and screw. Push the electrical connectors together and push the tubing end over the compressor outlet fitting.
- 9. Be sure all screws, cables and electrical connections are secure.
- 10. With the assistance of another person, tilt the bed back down to the floor.
- 11. Plug the power cord into the wall receptacle. Run through all functions on the hand pendant at least three times to ensure proper operation. Check for proper cable routing and attachment to prevent interference.
- 12. Check electrical safety in conformance with specified hospital requirements (leakage current, ground continuity, etc.)
- 13. Remount all items removed in step two and return bed to service.

#### **HEAD PANEL-MATTRESS REPLACEMENT**

HEAD PANEL-MATTRESS KIT #88-0316-10-00

#### **Required Tools:**

7/32" Allen Wrench Side (Wire) Cutter Phillips Screwdriver

#### **Replacement Procedure:**

- 1. Raise head panel to approximately 30°.
- 2. Raise bed to the full up position.

#### **CAUTION**

- 3. Remove headboard, foot mattress, foot extension, foot pans, I.V. pole and leg supports.
- 4. Set brake with casters turned as though the bed is being pushed backwards. The casters at the head end of the bed must be five feet away from the wall.
- 5. Unfasten Velcro strap and remove over-mattress cover.
- 6. Cut tie-wraps to free tubing (note routing of tubing to ensure it will be reinstalled properly).
- 7. Behind the head panel, separate the head mattress vinyl tubing at the middle of the two inch "J" clip.
- 8. Remove the eight cap screws from the head panel support arms to release the head panel assembly with mattress.
- 9. Feed lumbar tubing line through litter access hole and place head panel base ribs in support arm tracks. Avoid kinking or pinching tubing.
- 10. Install the eight cap screws.
- 11. With barb supplied in kit, match and cut tubing and splice together.
- 12. Replace over-cover and pull it taut with the Velcro strap.
- 13. Plug the power cord into the wall receptacle. Run through all functions on the hand pendant at least three times to ensure proper operation. Check for proper cable routing and attachment to prevent interference.
- 14. Remount all items removed in step three and return bed to service.

## **Service Information**

#### SEAT PANEL-MATTRESS REPLACEMENT

SEAT PANEL-MATTRESS KIT #88-0316-11-00

#### **Required Tools:**

3/8" Nut Driver SIde (Wire) Cutter Phillips Screwdriver

#### **Replacement Procedure:**

- 1. Raise head panel to approximately 30°.
- 2. Raise bed to the full up position.

#### **CAUTION**

- 3. Remove headboard, foot mattress, foot extension, foot pans, I.V. pole and leg supports.
- 4. Remove over-mattress cover, loosening Velcro straps and screws on underside of head panel.
- 5. Set brake with casters turned as though the bed is being pushed backwards. The casters at the head end of the bed must be five feet away from the wall.
- 6. With the assistance of another person, lift the foot end of the bed chassis and rotate the locked rear casters until the upper frame—headboard mounts touch the floor.
- 7. Cut old air lines on foot end of barbs located about 8" from the manifold.
- 8. Cut tie-wraps to free tubing (note routing of tubing to ensure it will be reinstalled properly).
- 9. Remove the four screws to release the defective seat panel assembly from the litter.
- 10. Install the four screws to hold the replacement seat panel assembly to the litter.
- 11. Route tubing as it was before removal and push ends of tubing onto manifold fitting. Install the tie-wraps.
- 12. Reconnect air lines at the barbs, noting that the center of the manifold is the right seat bladder.
- 13. Replace over-cover by pulling it taut with the Velcro straps.
- 14. Be sure all the screws, cable and electrical connections are secure.
- 15. With the assistance of another person, tilt the bed back down to the floor.
- 16. Plug the power cord into the wall receptacle. Run through all functions on the hand pendant at least three times to ensure proper operation. Check for proper cable routing and attachment to prevent interference.
- 17. Remount all items removed in step three and return bed to service.

#### MANIFOLD REPLACEMENT

MANIFOLD KIT #88-0316-12-00

#### **Required Tools:**

Phillips Screwdriver SIde (Wire) Cutter 3/8" Nut Driver

#### **Replacement Procedure:**

1. Raise bed to the full up position then lower about 2" to gain access to lower manifold screw.

#### **CAUTION**

- 2. Remove headboard, foot mattress, foot extension, foot pans, I.V. pole and leg supports.
- 3. Set brake with casters turned as though the bed is being pushed backwards. The casters at the head end of the bed must be five feet away from the wall.
- 4. With the assistance of another person, lift the foot end of the bed chassis and rotate the locked rear casters until the upper frame—headboard mounts touch the floor.
- 5. Disconnect the manifold electrical connectors at the control box.
- 6. Remove the two manifold mounting screws, washers and cable clamps.
- 7. Cut and remove air lines to the seat–left, seat–right and lumbar at the manifold fittings and cut air lines at compressor.
- 8. Connect the air lines to the replacement manifold fittings.
- 9. Mount the manifold to the litter with the two star lock washers and screws.
- 10. Reconnect the electrical plugs to the control box and replace the cable clamps.
- 11. Be sure all screws, cables and electrical connections are secure.
- 12. With the assistance of another person, tilt the bed back down to the floor.
- 13. Plug the power cord into the wall receptacle. Run through all functions on the hand pendant at least three times to ensure proper operation. Check for proper cable routing and attachment to prevent interference.
- 14. Check electrical safety in conformance with specified hospital requirements (leakage current, ground continuity, etc.)
- 15. Remount all items removed in step two and return bed to service.

## **Service Information**

#### LIMIT SWITCH REPLACEMENT

LIMIT SWITCH KIT #88–0316–14–00 (for beds with serial numbers 880596 and below) LIMIT SWITCH KIT #88–0318–62–00 (for beds with serial numbers 880597 and above)

#### **Required Tools:**

#1 Phillips Screwdriver 1/4" Nut Driver

Small Blade Screwdriver

#### **Replacement Procedure:**

#### NOTE

See page 38 for part reference.

1. Raise bed to the full up position.

#### **CAUTION**

- 2. Remove headboard, foot mattress, foot extension, foot pans, I.V. pole and leg supports.
- 3. Set brake with casters turned as though the bed is being pushed backwards. The casters at the head end of the bed must be five feet away from the wall.
- 4. With the assistance of another person, lift the foot end of the bed chassis and rotate the locked rear casters until the upper frame—headboard mounts touch the floor.
- 5. Remove the two Phillips screws and lock washers and pull the switch assembly away from the bracket.
- 6. Remove the electrical connectors from the switches.
- 7. Remove the two screws, washers, spacers and nuts to release the limit switches.
- 8. Install the replacement switches using the fasteners removed in step 7.
- 9. Reconnect the electrical connectors to the switches.
- 10. Be sure all screws, cables and electrical connections are secure.
- 11. With the assistance of another person, tilt the bed back down to the floor.
- 12. Plug the power cord into the wall receptacle. Run through all the functions on the hand pendant at least three times to ensure proper operation.
- 13. Raise bed to full up position. Lower foot pans to full down position, then lower bed. Note the automatic raising of the foot pans. Raise foot pans to the full up position. Lower the bed to the full down position, then lower foot pans. Note the automatic stop of the foot pans. Check for proper cable routing and attachment to prevent interference.
- 14. Check electrical safety in conformance with specified hospital requirements (leakage current, ground continuity, etc.)
- 15. Remount all items removed in step two and return bed to service.

#### **COIL REPLACEMENT**

COIL KIT #88-0316-16-00

#### **Required Tools:**

Phillips Screwdriver

#### **Replacement Procedure:**

1. Raise bed to the full up position.

#### **CAUTION**

- 2. Remove headboard, foot mattress, foot extension, foot pans, I.V. pole and leg supports.
- 3. Set brake with casters turned as though the bed is being pushed backwards. The casters at the head end of the bed must be five feet away from the wall.
- 4. With the assistance of another person, lift the foot end of the bed chassis and rotate the rear casters until the upper frame—headboard mounts touch the floor.
- 5. Remove retaining clip on top of coil (slide to one side) and remove defective coil.
- 6. Loosen screw on side of coil connector and pull connector away from solenoid.
- 7. Install the replacement coil on the valve post and fasten with the slide clip.
- 8. Plug connector onto solenoid and tighten screw.
- 9. Be sure all screws, cables and electrical connections are secure.
- 10. With the assistance of another person, lower the bed back down to the floor.
- 11. Plug the power cord into the wall receptacle. Run through all functions on the hand pendant at least three times to ensure proper operation. Check for proper cable routing and attachment to prevent interference.
- 12. Check electrical safety in conformance with specified hospital requirements (leakage current, ground continuity, etc.)
- 13. Remount all items removed in step two and return the bed to service.

## **Service Information**

#### COUNTERBALANCE SPRING REPLACEMENT

COUNTERBALANCE SPRING KIT #88-0316-17-00

#### **Required Tools:**

Blade Screwdriver

#### **Replacement Procedure:**

1. Raise bed to full up position.

#### **CAUTION**

Disconnect power plug from wall receptacle.

- 2. Remove headboard, foot mattress, foot extension, foot pans, I.V. pole and leg supports.
- Set brake with casters turned as though the bed is being pushed backwards. The casters at the head end of the bed must be five feet away from the wall.
- 4. With the assistance of another person, lift the foot end of the bed chassis and rotate the rear casters until the upper frame—headboard mounts touch the floor.
- 5. Remove the retaining clip wire off each of the two ball joint sockets of the defective spring.
- 6. Use the blade screwdriver to pry the socket off the ball joints and remove the faulty spring. To verify spring is defective, hold large end firmly in your hands, place the small end on the floor, and push down. If the spring collapses, the spring is defective. If it is not defective, remove the other springs and test.
- 7. Install the replacement spring by snapping the sockets on the ball joints and installing the retaining clip wire through the ball joint socket.

#### NOTE

Be sure to install the spring in the same direction it was prior to removal.

- 8. Be sure all screws, cables and electrical connections are secure.
- 9. With the assistance of another person, tilt the bed back down to the floor.
- 10. Plug the power cord into the wall receptacle. Run through all functions on the hand pendant at least three times to ensure proper operation. Check for proper cable routing and attachment to prevent interference.
- Check electrical safety in conformance with specified hospital requirements (leakage current, ground continuity, etc.)
- 12. Remount all items removed in step two and return bed to service.

#### TILT/TRENDELENBERG SPRING REPLACEMENT AND ADJUSTMENT

TILT/TRENDELENBERG SPRING KIT #88-0316-18-00

#### **Required Tools:**

Snap Ring Pliers (External)

11/16" Open End Wrench

5mm Allen Wrench

Blade Screwdriver

1/4" Drift Punch

Loctite 242

#### **Replacement Procedure:**

1. Raise bed to the full up position and tilt head down.

#### CAUTION

Disconnect power plug from wall receptacle.

- 2. Remove headboard, foot mattress, foot extension, foot pans, I.V. pole and leg supports.
- 3. Set brake with casters turned as though the bed is being pushed backwards. The casters at the head end of the bed must be five feet away from the wall.
- 4. With the assistance of another person, lift the foot end of the bed chassis and rotate the locked rear casters until the upper frame—headboard mounts touch the floor.

#### **CAUTION**

Replace gas springs one side at a time.

- 5. Remove shoulder bolt holding gas spring to tilt arm.
- 6. Remove pin connecting rear lift bar and tilt arm. Disconnect rear lift bar from drive crank.
- 7. Fully compress gas spring and remove from tilt arm.
- 8. Remove pin connecting front lift bar and tilt arm.
- 9. Loosen jam nut on defective gas spring. Unscrew gas spring from spring bracket and remove.
- 10. Turn replacement gas spring into spring bracket 7 1/2 turns. This will ensure both gas springs engage at the same time when the Trendelenberg pedal is depressed.
- 11. Replace and tighten jam nut on gas spring.
- 12. Apply Loctite 242 to threads of shoulder bolt and attach gas spring to tilt arm.
- 13. Activate gas springs to align tilt arm.
- 14. Reconnect front lift bar to tilt arm.
- 15. Reconnect rear lift bar to drive crank and tilt arm.
- 16. Repeat steps 5 through 15 for other spring, if necessary.
- 17. With the assistance of another person, tilt the bed back down to the floor.
- 18. Remount all items removed previously and return the bed to service.

# **Field Replacement Parts**

PART NAME	PART NUMBER
Fluid Basin, 10–liter Basin Liners, Pack of 250 Coil Kit Compressor Kit Controller Kit (for beds with serial number 880596 and below) Controller Kit (for beds with serial number 880597 and above) Counterbalance Spring Kit Hand Pendant Kit Head Panel–Mattress Kit I.V. Pole Limit Switch Kit (for beds with serial number 880596 and below) Limit Switch Kit (for beds with serial number 880597 and above) Manifold Kit Mattress Cover, Head/Seat Mattress, Foot Section Complete Membrane Switch Kit Bed Motor Kit Head Motor Kit (for beds with serial number 880591 and below) Head Motor Kit (for beds with serial number 880592 and above) Seat Panel–Mattress Kit Tilt/Trendelenburg Spring Kit Tubing Kit	88-1228-01-00 88-1332-00-00 00-0316-16-00 88-0316-24-00 88-0316-02-00 88-0316-17-00 88-0316-17-00 88-0316-10-00 88-0316-10-00 88-0316-14-00 88-0316-14-00 88-0316-12-00 88-0316-01-00 88-0316-01-00 88-0316-09-00 88-0316-09-00 88-0316-07-00 88-0316-11-00 88-0316-11-00 88-0316-11-00
<u>MATTRESSES</u>	
Mattress Cover Kit (Head/Seat)  Mattress Seat Panel Kit (w/Bladders)  Mattress Kit, Foot (for Mattresses w/o Pushbar)  Head/Seat Mattress, Enhanced Comfort, Removable (Repl. Only)  Head/Seat Mattress, Standard, Removable (Repl. Only)  Mattress, Foot, Standard, w/Pushbar (Repl. Only)  Mattress, Foot, Enhanced Comfort, w/Pushbar (Repl. Only)	88-0316-11-00 88-0316-01-00 88-0308-59-00 88-0307-62-00 88-0307-29-00

The 2100 is designed and constructed to minimize and simplify your housekeeping requirements. Large, flat surfaces with a minimum of cracks and crevices make the bed easy to clean using standard hospital practices and procedures. All parts of the bed should be washed using a mild, detergent—type, cleaning solution. General—duty sanitizers and disinfectants may be used on all bed components, but avoid excessive moisture or abrasive cleaners on hardwood areas. Also, avoid leaving excessive moisture between the mattress and foot panel by drying surface thoroughly before re—making the bed.

#### **GENERAL CLEANING**

In general, when used in those concentrations recommended by the manufacturer, either phenolic type or quaternary type disinfectants can be used with Staph—Chek fabrics. Iodophor type disinfectants are not recommended for use on Staph—Chek fabrics because staining may result. The following products have been tested by the Herculite Laboratory and have been found not to have a harmful effect on Staph—Chek fabrics WHEN USED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDED DILUTION.\*

TRADE NAME	DISINFECTANT TYPE	MANUFACTURER	*MANUFACTURER'S RECOMMENDED DILUTION
A33	Quaternary	Airwick (Professional Products Division)	2 ounces/gallon
A33 (dry)	Quaternary	Airwick (Professional Products Division)	1/2 ounce/gallon
Beaucoup	Phenolic	Huntington Laboratories	1 ounce/gallon
Blue Chip	Quaternary	S.C. Johnson	2 ounces/gallon
Elimstaph	Quaternary	Walter G. Legge	1 ounce/gallon
Franklin Phenomysan F2500	Phenolic	Purex Corporation	1 1/4 ounce/gallon
Franklin Sentinel	Quaternary	Purex Corporation	2 ounces/gallon
Galahad	Phenolic	Puritan Churchill Chemical Company	1 ounce/gallon
Hi–Tor	Quaternary	Huntington Laboratories	1/2 ounce/gallon
LPH	Phenolic	Vestal Laboratories	1/2 ounce/gallon
Matar	Phenolic	Huntington Laboratories	1/2 ounce/gallon
Omega	Quaternary	Airwick (Professional Products Division)	1/2 ounce/gallon
Quanto	Quaternary	Huntington Laboratories	1 ounce/gallon
Sanikleen	Quaternary	West Chemical Products	2 ounces/ gallon
Sanimaster II	Quaternary	Service Master	1 ounce/gallon
Vesphene	Phenolic	Vestal Laboratories	1 1/4 ounce/ gallon

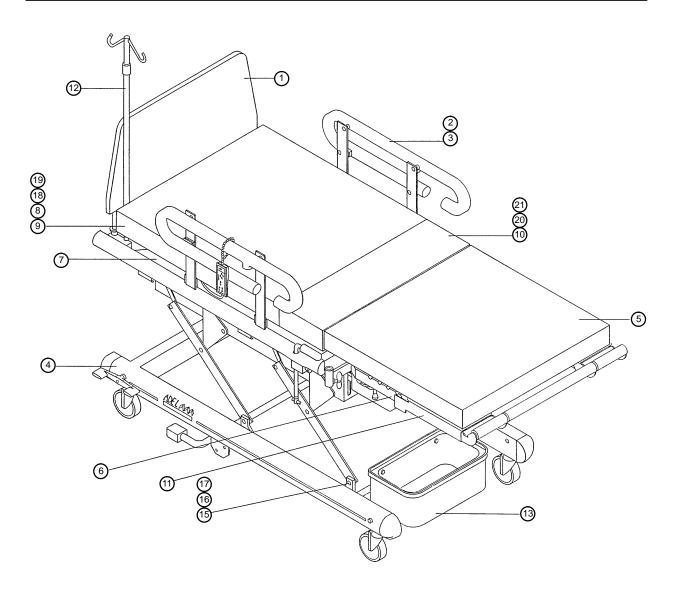
#### **REMOVAL OF IODINE COMPOUNDS**

#### **NOTE**

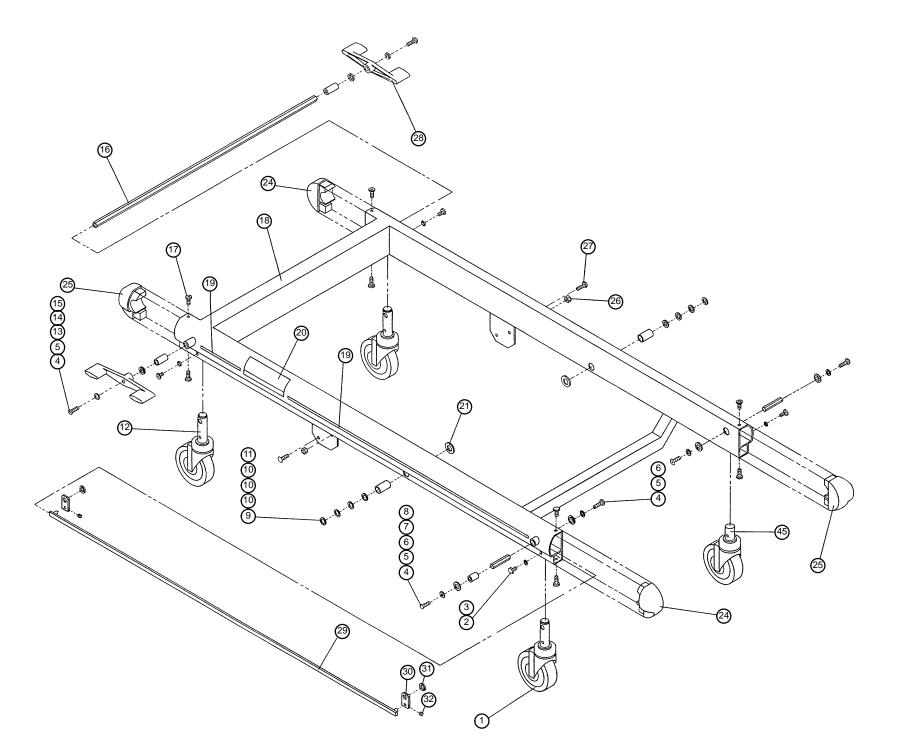
This solution may be used to remove iodine stains from mattress cover and foam footrest pad surfaces.

- 1. Use a solution of 1–2 tablespoons Sodium Thiosulfate in a pint of warm water to clean the stained area. Clean as soon as possible after staining occurs. If stains are not immediately removed, allow solution to soak or stand on the surface.
- 2. Rinse surfaces which have been exposed to the solution in clear water before returning bed to service.

# 2100-07-00 Bed Assembly

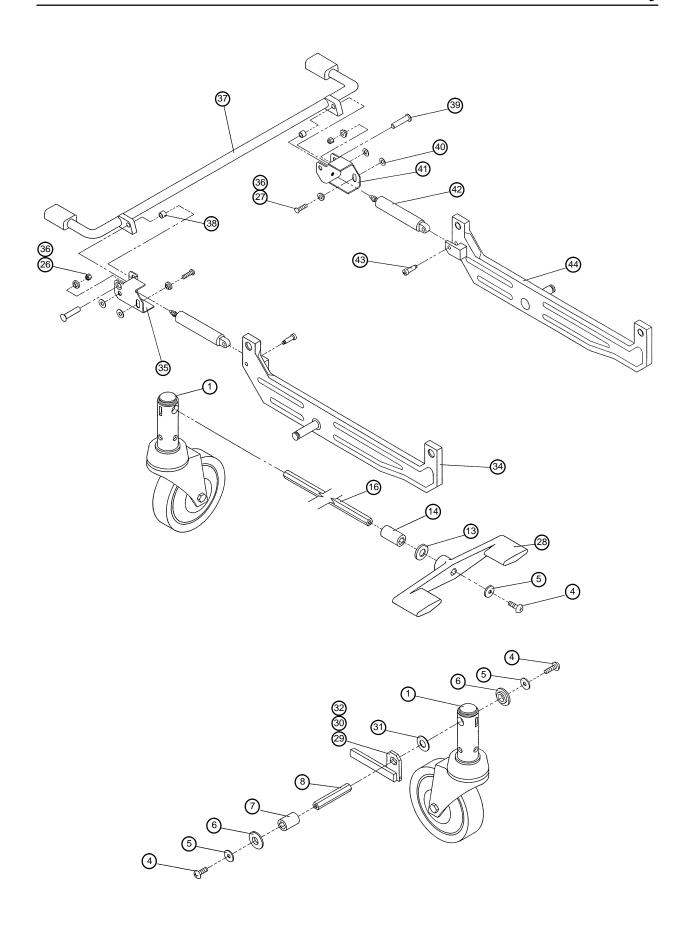


Item	Part No.	Part Name	Qty.
1	(page 42)	Headboard Assembly	1
2	(page 43)	Siderail Assembly, Right	1
3	(page 43)	Siderail Assembly, Left	1
4	(page 25–26)	Base Assembly	1
5	(page 52)	Ft. Matt./Push Bar Ass'y	1
6	(page 50)	Foot Pan Assembly	2
7	(page 29-32)	Litter Assembly	1
8	(page 54)	Head Section Assembly	1
9	0300-77-00	Overcover	1
10	(page 55)	Seat Section Assembly	1
11	(page 57)	Foot Rest Assembly	2
12	0589–67–00	I.V. Pole Assembly	1
13	1228-01-00	Fluid Basin	1
14	(page 56)	Hand Crank (not shown)	1
15	0301-52-00	Groove Pin	4
16	0301-46-00	Flat Washer	4
17	0301-43-00	Retaining Ring	4
18	0306-48-00	But. Hd. Soc. Screw	8
19	0025-07-00	Internal Tooth Lock Washer	8
20	0022-14-00	Pan Head Screw	4
21	0025-02-00	Internal Tooth Lock Washer	4

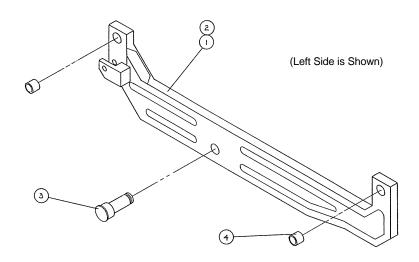


# 0318-66-00 Base Assembly

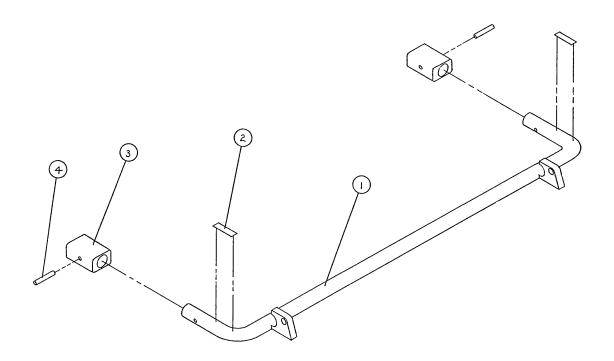
Item	Part No.	Part Name	Qty.
1	0301-22-00	Caster, Brake	2
2	0022-18-00	Ph. Pan Hd. Screw	4
3	0177-00-00	Int. Tooth Lock Washer	4
4	0022-24-00	Ph. Truss Hd. Screw	6
5	0601-24-00	Washer	6
6	0601–16–00	Nylon Bushing	4
7	3978-96-00	Front Bushing	1
8	3978-98-00	Front Shaft	2
9	0610-24-00	Retaining Ring	2
10	0310-50-00	Washer	6
11	0310-52-00	Bushing	2
12	0301-23-00	Caster, Brake/Steer	1
13	0318-64-00	Pedal Assembly, Left	1
14	0025-10-00	Flat Washer	2
15	0316-29-00	Rear Bushing	2
16	3978-99-00	Rear Shaft	1
17	1113–11–00	Screw	8
18	0316-32-00	Chassis Weldment	1
19	0305-03-00	Long Stripe Label	1
20	0310-01-00	Adel 2100 Label	2
21	0310-49-00	Steel Washer	2
24	3979-01-00	Chassis Cap, Right	2 2
25	3979-00-00	Chassis Cap, Left	2
26	0024-02-00	Nut	4
27	0306-73-00	But. Hd. Screw	4
28	0318-65-00	Pedal Assembly, Right	1
29	0304-88-00	Tie Bar	1
30	0304-83-00	Link	2
31	0602-43-00	Flat Washer	2 2
32	3978-71-00	Set Screw	2
34	(page 28)	Tilt Arm Assembly, Right	1
35	0306-76-00	Spring Bracket, Right	1
36	3978-75-00	Washer	4
37	(page 28)	Tilt Lever Assembly	1
38	0310–58–00	Spacer	2
39	0310-45-00	Pedal Pin	2
40	0310-48-00	Nylon Washer	4
41	0306–75–00	Spring Bracket, Left	1
42	0316–18–00	Gas Spring	2
43	0310–53–00	Shoulder Screw	2
44	(page 28)	Tilt Arm Assembly, Left	1
45	0301–72–00	Swivel Caster	1



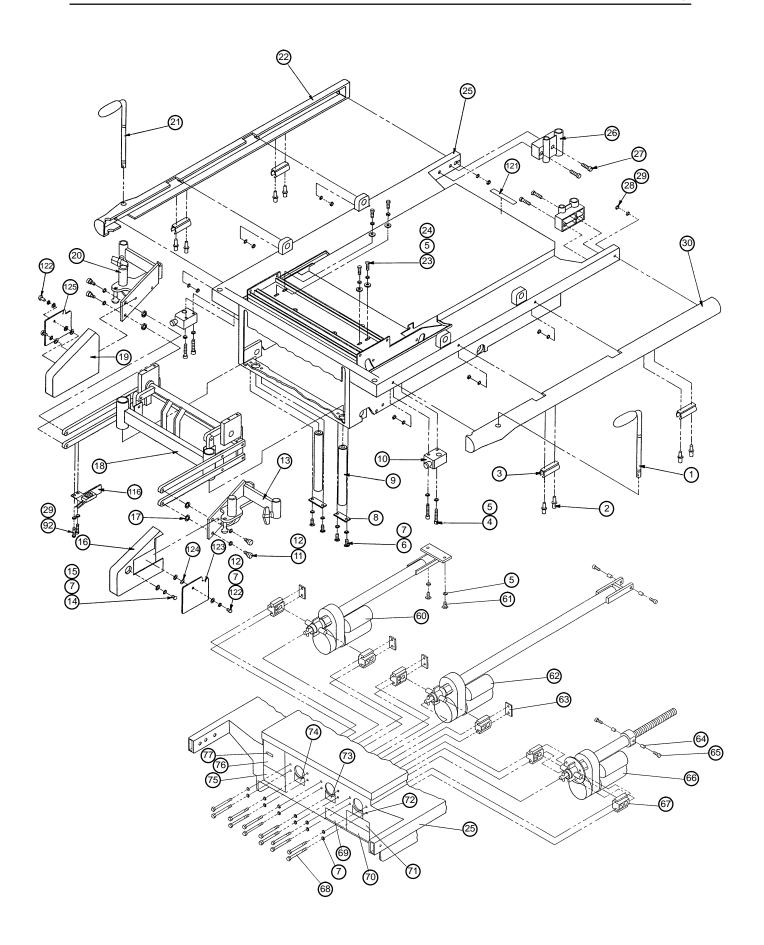
# 0307–24/25–00 Tilt Arm Assembly, Left & Right 0310–79–00 Tilt Lever Assembly



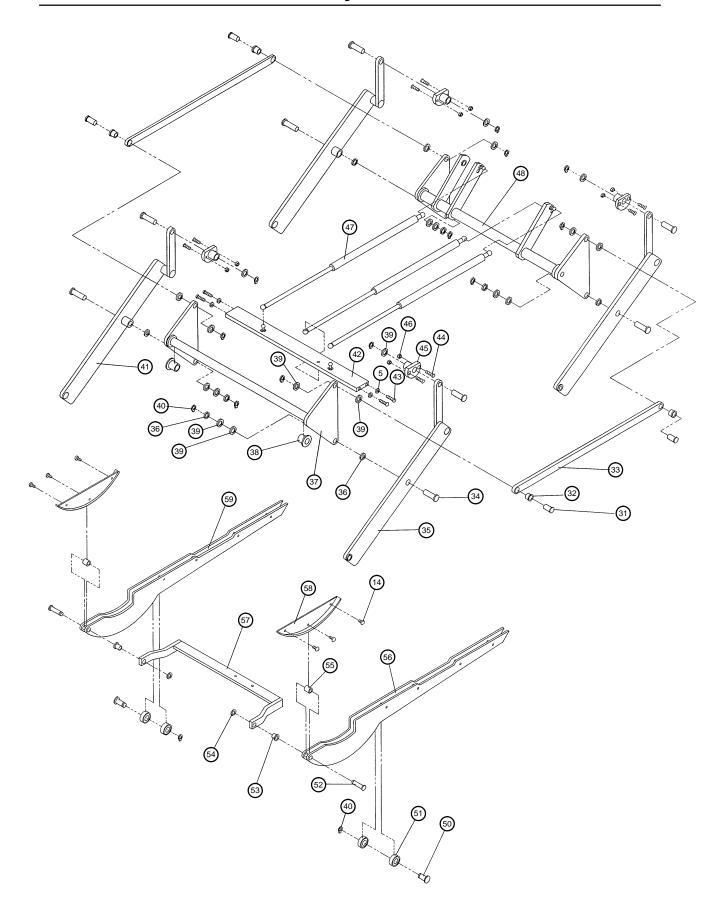
Item	Part No.	Part Name	Qty.
1	0306-79-00	Machined Tilt Arm, Left	1
2	0306-80-00	Machined Tilt Arm, Right	1
3	0310-44-00	Tilt Arm Pin	1
4	0301–36–00	Bronze Bushing	2



Item	Part No.	Part Name	Qty.
1	0310-41-00	Tilt Lever	1
2	0608-22-00	"Tilt" Label	2
3	0602-49-00	Pedal	2
4	0610-22-00	Spring Pin	2



# 0307-64-00 Litter Assembly

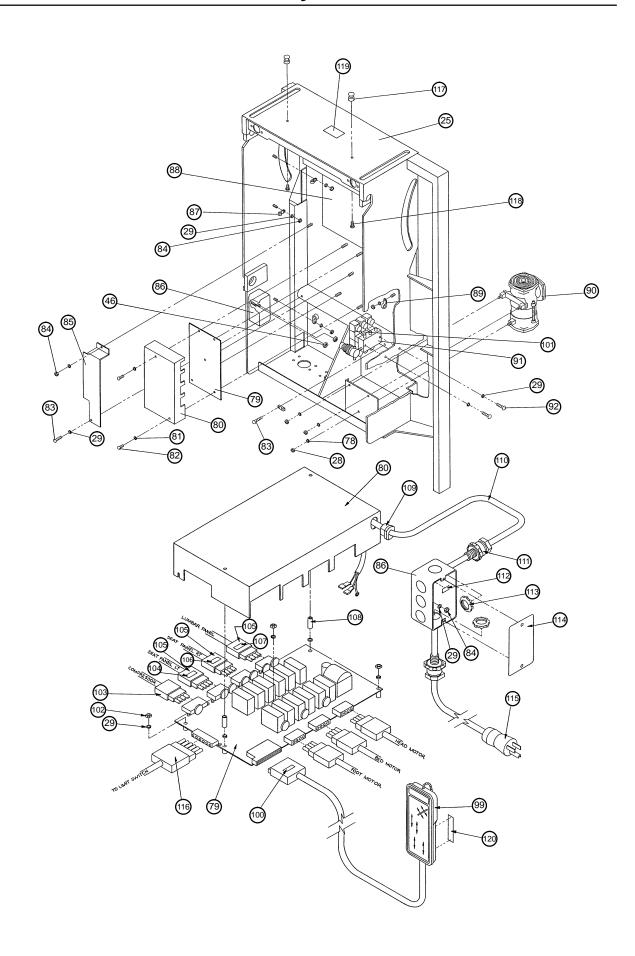


# 0307-64-00 Litter Assembly

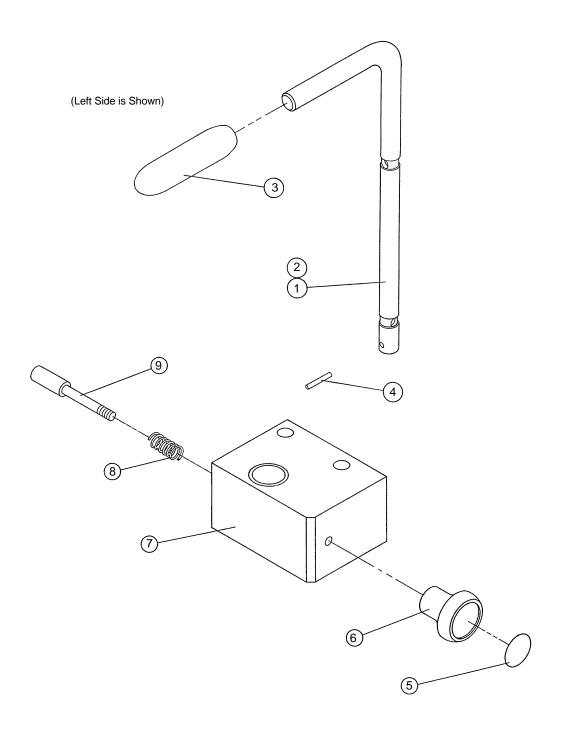
Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
1	(page 33)	Hand Grip Ass'y, Lt.	1	62	**	Foot Motor Assembly	1
2	0173-09-00	Pop Rivet	8	63	0111-01-00	Trunnion Plate	4
3	0573-02-00	I.V. Pole Clip	4	64	0591-04-00	Sleeve Bolt Spacer	4
4	3978-55-00	Screw	4	65	0591-05-00	Soc. Hd. Cap Screw	4
5	0025-09-00	Int. Th. Lock Washer	12	66	**	Lift Motor Assembly	1
6	0023-04-00	Hex Hd. Cap Screw	4	67	0306–96–00	Motor Mount	6
7	0025–07–00	Int. Th. Lock Washer	20	68	0301–60–00	Hex Hd. Screw	12
8	1234-00-00	Retainer Bar	2	69	0315-08-00	Crank Label	1
9	0303–47–00	Foot Pan Guide Shaft	2	70	0199-00-00	Crank Caution Label	1
10	(page 33)	Hand Grip Hsg. Ass'y	2	71	0141-00-00	French Caution Label	1
11	0301–62–00	Shoulder Screw	4 4	72 72	0305-06-00	Bed Crank Dir. Label	1 1
12 13	0318–19–00 (page 34)	Shim Ft. Pan Mnt. Ass'y, Lt.	1	73 74	0305–07–00 0305–05–00	Ft. Crank Dir. Label Hd. Crank Dir. Label	1
14	1501–78–00	But. Hd. Soc. Screw	8	7 <del>4</del> 75	1131–28–00	Shock Caution Label	1
15	0601–24–00	Washer	4	76	0305-00-00	Serial Number Label	1
16	0309-91-00	Ft. Pan Mnt. Cover, Lt.	1	77	0084-07-00	Numerical Label	1
17	0310-08-00	Washer	4	78	1500–56–00	Int. Th. Lock Washer	3
18	(page 35)	Foot Lift Ass'y	1	79	**	PC Board	1
19	0309-92-00	Ft. Pan Mnt. Cover, Rt.	1	80	0307-28-00	Cir. Bd. Cover Ass'y	1
20	(page 34)	Ft. Pan Mnt. Ass'y, Rt.	1	81	3978-42-00	Lock Washer	2
21	(page 33)	Hand Grip Ass'y, Rt.	1	82	1501-43-00	Screw	2
22	3978-51-00	Litter Bumper, Rt.	1	83	0023-24-00	Pan Hd. Tap. Screw	2
23	3978–45–00	Soc. Hd. Screw	4	84	0024-18-00	Nut	5
24	0549-00-00	Flat Washer	4	85	0306–50–00	Shield	1
25	3978–65–00	Litter Weldment	1	86	3979–25–00	Junction Box	1
26	3978–39–00	Headboard Mount	2	87	0306-74-00	Cable Clamp	4
27	3978–63–00	Soc. Screw	4	88	0315-05-00	Elec./Pneu. Schematic	1
28 29	0306-68-00	Hex Nut Int. Th. Lock Washer	11 22	89 90	0306–51–00	Cable Clamp Compressor Assembly	2 1
30	0025–02–00 3978–50–00	Litter Bumper, Lt.	1	90		Manifold Assembly	1
31	0301–50–00	Groove Pin	4	92	0022-14-00	Pan Hd. Screw	4
32	0301–35–00	Flange Bushing	4	96	0046-15-00	Cable Clip	15
33	0301-28-00	Lift Link	2	98	0046-00-00	Cable Clamp	1
34	0301-53-00	Groove Pin	8	99	0300-05-00**	Hand Pendant	1
35	(page 36)	Lift Bar Ass'y, Lt.	2	100	0310-02-00	#4 Wire Label	1
36	0301–46–00	Flat Washer	8	101	0306–59–00	Gasket	6
37	0306–72–00	Slave Crank	1	102	1500–39–00	Hex Nut	3
38	0301–40–00	Flange Bushing	2	103	0300-70-00	Compressor Cable	1
39	0602–54–00	Flat Washer	20	104	0310-05-00	#7 Wire Label	1
40 41	0301-43-00 (page 36)	Retaining Ring Lift Bar Ass'y, Rt.	12 2	105 106	0300–61–00 0310–04–00	Solenoid Cable Ass'y #6 Wire Label	3 1
42	0307–26–00	Gas Spring Bar	1	107	0310-04-00	#5 Wire Label	1
43	0306-73-00	Screw	4	108	1132–17–00	Standoff	2
44	0608–19–00	Screw	8	109	1500–14–00	Strain Relief	1
45	0303-89-00*	Bushing	4	110	3979-27-00	Interconnect Cable	1
46	0024-01-00	Hex Lock Nut	8	111	3979-22-00	Strain Relief	2
47	0303-64-00	Gas Spring	3	112	3979-41-00	Ground. Symbol Label	1
48	(page 37)	Drive Crank Ass'y	1	113	3979–23–00	Conduit Lock Nut	2
49	0850-02-00	Gas Spring Ret. Clip	6	114	3979–24–00	Cover	1
50	0302-92-00	Roller Guide Pin	2	115	3979–26–00	Power Cord	1
51	0607–14–00	Ball Bearing	4	116	(page 38)	Limit Switch Assembly	1
52 53	0302–93–00	Head Panel Pin	2 2	117	1229-00-00	Basin Holder Button	2 2
53 54	0303–79–00 0164–00–00	Flange Bushing Retaining Ring	2	118 119	0022–21–00 0305–23–00	Pan Hd. Slot. Screw Basin Caution Label	1
5 <del>5</del>	0303-20-00	Caged Roller	2	120	0590-77-00	Control Warning Label	1
56	0303-99-00	Head Panel Frame, Lt.	1	121	0309-01-00	Label, Pendant Caution	1
57	3978–73–00	Pull Bar, Head	1	122	0022-24-00	Screw	2
58	0303–33–00	Head Panel Wear Plate	2	123	0309–93–00	Ft. Pan Mt. Cov. Plate, Lt	
59	0303-98-00	Hd. Panel Frame, Rt.	1	124	0305-15-00	Washer	4
60	**	Head Motor Assembly	1	125	0309–94–00	Ft. Pan Mt. Cov. Plate, R	t. 1
61	3979–37–00	Hex Hd. Screw	2				

<sup>\*</sup> Item # 45: use p/n 307–63–00 for Lift Bushing Kit.

\*\* Refer to page 22, Field Replacement Parts, for correct replacement part number or kit part number.

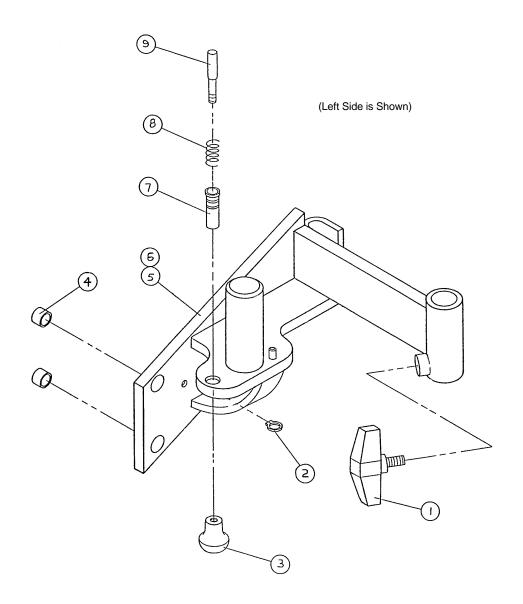


# **3978–53/54–00 Handgrip Assembly**



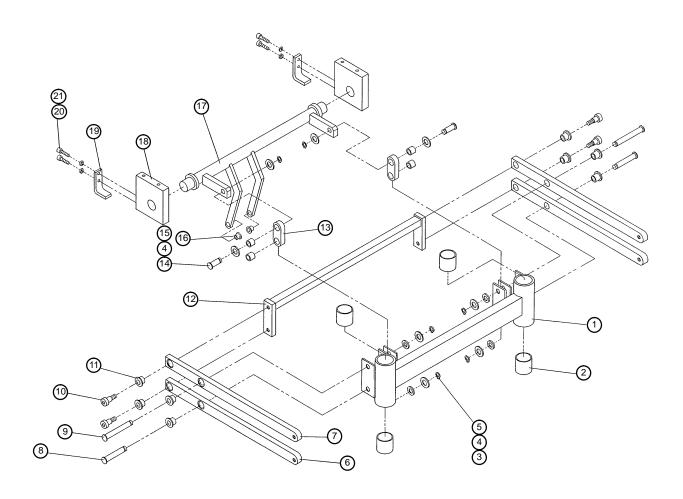
Item	Part No.	Part Name	Qty.
1	3978–60–00	Hand Grip, Left	1
2	3978–61–00	Hand Grip, Right	1
3	0304-23-00	Hand Grip	1
4	3978–57–00	Driv-Loc Pin	1
5	0315-03-00	Pull Label	1
6	0041-06-00	Pull Knob	1
7	3978–59–00	Hand Grip Housing	1
8	1029–06–00	Foot Latch Spring	1
9	3978–56–00	Latch Pin	1

# 0307-67/68-00 Foot Pan Mount Ass'y, Left & Right



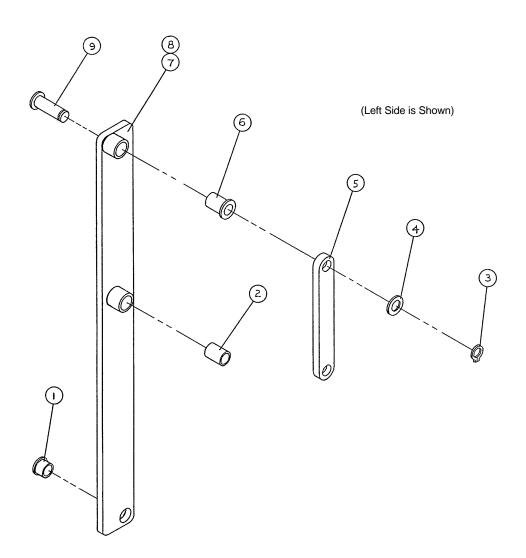
Item	Part No.	Part Name	Qty.
1	1141-03-00	T–Knob	1
2	0020–11–00	Retaining Ring	1
3	0041-06-00	Pull Knob	1
4	0310-09-00	Bearing	2
5	0307–47–00	Foot Pan Mount, Lt.	1
6	0307–48–00	Foot Pan Mount, Rt.	1
7	1307–00–00	Foot Panel Hsg. Latch	1
8	1029–06–00	Foot Latch Spring	1
9	1307–01–00	Foot Panel Latch Spring	1

## 0300-13-00 Foot Lift Assembly



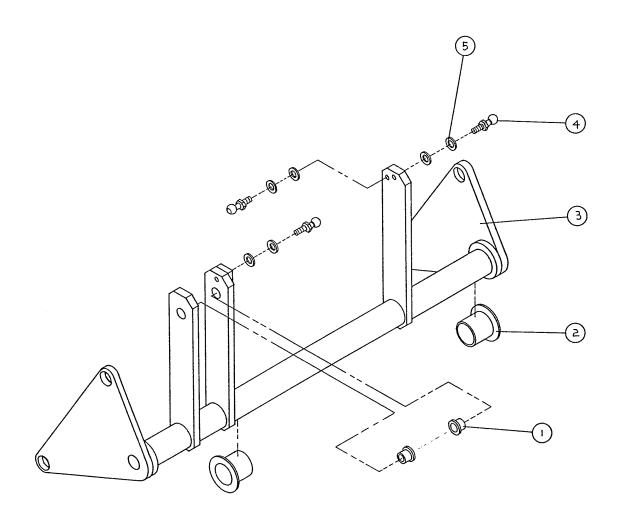
Item	Part No.	Part Name	Qty.
1	0303-37-00	Foot Lift Bar	1
2	0021-04-00	Bushing	4
3	0301-42-00	Retaining Ring	6
4	0602-43-00	Flat Washer	8
5	0301–59–00	Flat Washer	4
6	0310–11–00	Foot Pan Lift Arm	1
7	0303-39-00	Foot Pan Link Arm	3
8	0301-49-00	Pin	2
9	0301-48-00	Pin	2
10	0301-45-00	Shoulder Screw	4
11	0301–39–00	Flange Bushing	8
12	0303-42-00	Slide Bar	1
13	0303-36-00	Foot Lift Link	2
14	0301-47-00	Pin	2
15	0301–38–00	Bronze Bushing	4
16	0021-01-00	Flange Bushing	2
17	0306-71-00	Foot Crank	1
18	0303-65-00	Bearing Block	2
19	0303-78-00	Stop Bracket	2
20	0025-07-00	Int. Th. Lock Washer	4
21	0301-61-00	Soc. Screw	4

# 0301-70/71-00 Lift Bar Assembly, Left & Right



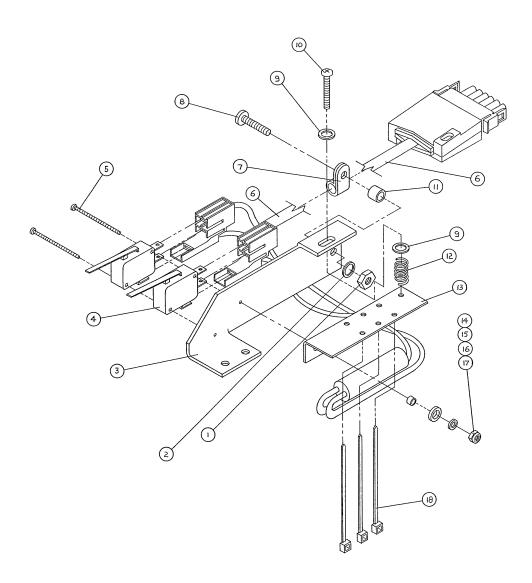
Item	Part No.	Part Name	Qty.
1	0301-35-00	Flange Bushing	1
2	0318-91-00	Bushing	1
3	0301-43-00	Retaining Ring	1
4	0602-54-00	Flat Washer	1
5	0301-01-00	Idle Link	1
6	0301-37-00	Flange Bushing	1
7	0301-63-00	Lift Bar, Left	1
8	0301-64-00	Lift Bar, Right	1
9	0301-53-00	Groove Pin	1

## 0307-27-00 Drive Crank Assembly



ltem	Part No.	Part Name	Qty.
1	0021-01-00	Flange Bushing	2
2	0310-12-00	Flange Bushing	2
3	0303-45-00	Drive Crank	1
4	0850-01-00	Gas Spring Ball Stud	3
5	0025-09-00	Int. Th. Lock Washer	6

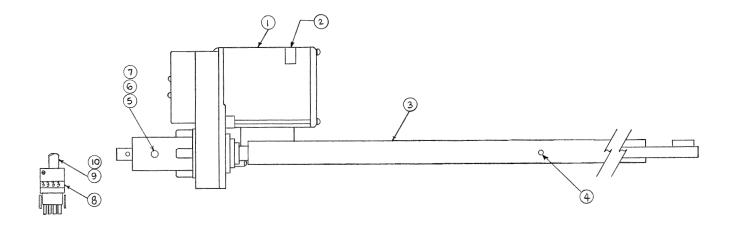
### 0300-04-00 Limit Switch Assembly\*



Item	Part No.	Part Name	Qty.
1	0024-18-00	Nut	1
2	0025-02-00	Int. Th. Lock Washer	1
3	0032-01-00	Switch Bracket	1
4	0306-22-00	Micro Switch	2
5	0032-08-00	Pan Hd. Phillips Screw	2
6	0306-99-00	Limit Switch Cable Ass'y	1
7	0306-74-00	Cable Clamp	1
8	0023-34-00	Screw	1
9	1501-48-00	Flat Washer	2
10	1501-84-00	Screw	1
11	3979-28-00	Spacer	1
12	0032-03-00	Coil Spring	1
13	0032-00-00	Pivot Bracket	1
14	0032-04-00	Spacer	1
15	0032-05-00	Nylon Washer	1
16	0032-06-00	Flat Washer	1
17	0032-07-00	Locking Nut	1
18	1502-56-00	Cable Tie	3

<sup>\*</sup> Refer to page 22, Field Replacement Parts for correct part number.

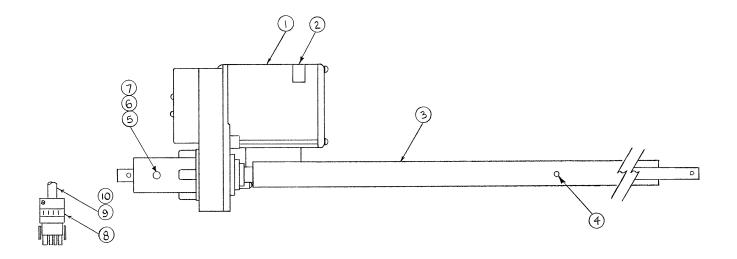
## 3979-17-00 Head Motor Assembly\*



Item	Part No.	Part Name	Qty.
1	0310-07-03	Head Motor, Machined	1
2	1076-06-00	Motor Serial # Label	1
3	3978-72-00	Drive Tube, Head	1
4	0161-01-00	Roll Pin	1
5	3979-21-00	Trunnion Mount	2
6	0023-04-00	Hex Hd. Cap Screw	2
7	0025-07-00	Int. Tooth Lock Washer	2
8	0084-03-00	#3 Wire Label	1
9	0046-00-00	Cable Clamp	1
10	0023-24-00	Pan Hd. Tapping Screw	1

<sup>\*</sup> Refer to Field Replacement Parts (page 22) for correct replacement part number.

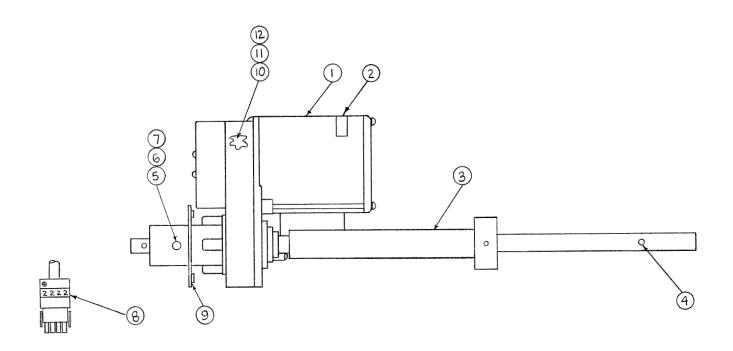
## 0310-10-00 Foot Motor Assembly\*



Item	Part No.	Part Name	Qty.
1	0310-10-03	Foot Motor, Machined	1
2	1076-06-00	Motor Serial # Label	1
3	0303-60-00	Drive Tube, Foot	1
4	0161-02-00	Roll Pin	1
5	3979-21-00	Trunnion Mount	2
6	0023-04-00	Hex Hd. Cap Screw	2
7	0025-07-00	Int. Tooth Lock Washer	2
8	0084-01-00	#1 Wire Label	1
9	0046-00-00	Cable Clamp	1
10	0023-24-00	Pan Hd. Tapping Screw	1

<sup>\*</sup> Refer to Field Replacement Parts (page 22) for correct replacement part number.

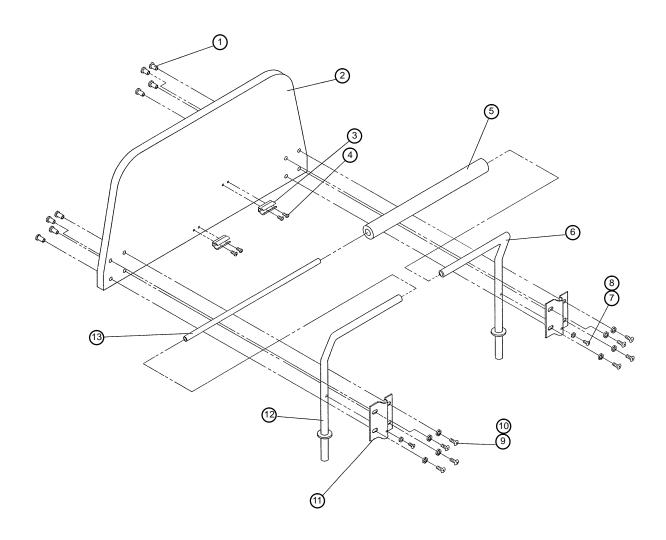
## 0310-13-00 Lift Motor Assembly\*



Item	Part No.	Part Name	Qty.
1	0310-13-03	Lift Motor, Machined	1
2	1076–06–00	Motor Serial # Label	1
3	0303-58-00	Bed Drive Tube	1
4	0161-01-00	Roll Pin	1
5	3979–21–00	Trunnion Mount	2
6	0023-04-00	Hex Hd. Cap Screw	2
7	0025-07-00	Int. Tooth Lock Washer	2
8	0084-02-00	#2 Wire Label	1
9	0302-45-00	Trunnion Plate	1
10	0301–67–00	Pinion Gear	1
11	0301–68–00	Powdered Metal Gear	1
12	0301–69–00	Gear Bushing	2

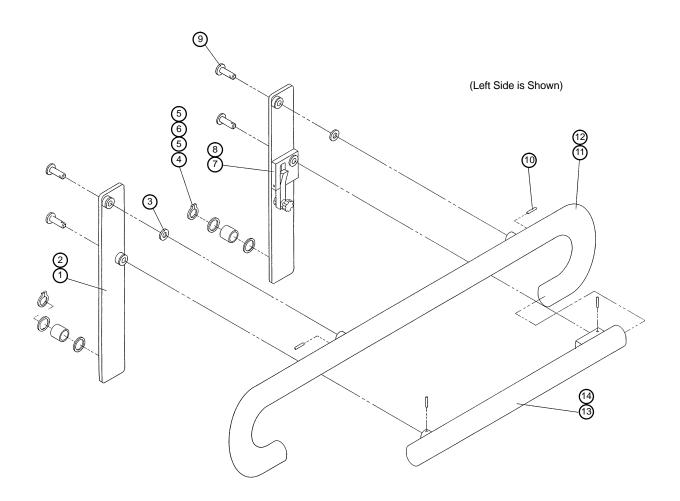
<sup>\*</sup> Refer to Field Replacement Parts (page 22) for correct replacement part number.

## 0304-82-00 Headboard Assembly



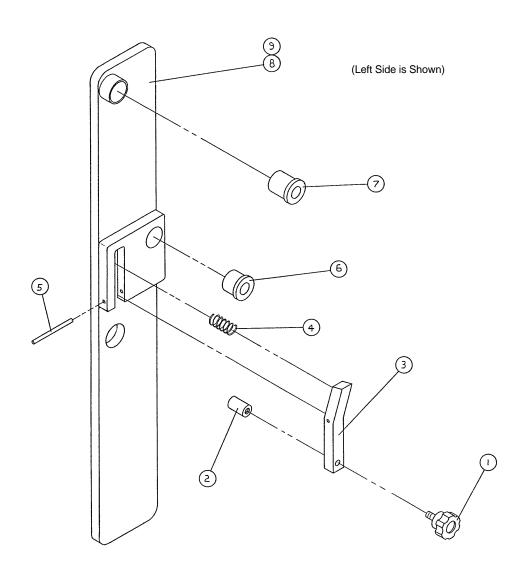
Item	Part No.	Part Name	Qty.
1	0834-01-00	Conn. Joint Cap	8
2	0863-00-00	Headboard .	1
3	2206-00-00	Hand Crank Clip	2
4	3979–19–00	Shim Screw	4
5	0589-90-00	Foam Cover	1
6	3978-69-00	Push Bar, Right	1
7	0022-00-00	Pan Head Screw	2
8	0025-02-00	Int. Th. Lock Washer	2
9	0022-24-00	Screw	8
10	0025-05-00	Flat Washer	8
11	0526-06-00	Headboard Mtg. Brkt.	2
12	3978-70-00	Push Bar, Left	1
13	3978-47-00	Push Tube Handle	1

## 0304-79/80-00 Siderail Assembly, Left & Right



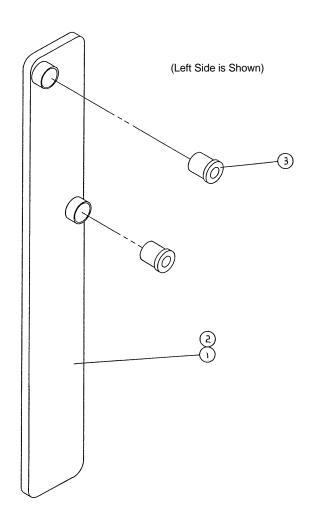
Item	Part No.	Part Name	Qty.
1	(page 45)	Front Siderail Arm, Lt.	1
2	(page 45)	Front Siderail Arm, Rt.	1
3	0025-11-00	Flat Washer	2
4	3978-34-00	Snap Ring	2
5	0304-44-00	Washer	4
6	0304-42-00	Bushing	2
7	(page 44)	Rear Siderail Arm, Lt.	1
8	(page 44)	Rear Siderail Arm, Rt.	1
9	3978-35-00	Pin	4
10	3978-33-00	Roll Pin	4
11	0304-52-00	Upper Tube, Lt.	1
12	0304-53-00	Upper Tube, Rt.	1
13	0304-51-00	Lower Tube, Lt.	1
14	0304-50-00	Lower Tube, Rt.	1

# 0310-77/78-00 Rear Siderail Arm Ass'y, Left & Right



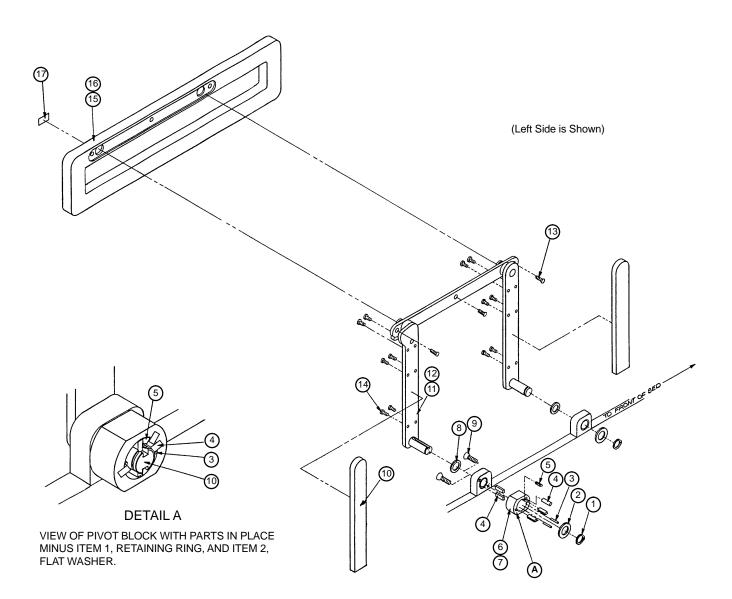
Item	Part No.	Part Name	Qty.
1	3978-52-00	Knob	1
2	0304-41-00	Knob	1
3	0304-11-00	Latch	1
4	0304-47-00	Spring	1
5	0304-22-00	Roll Pin	1
6	0304-43-00	Bushing	1
7	0304-40-00	Bushing	1
8	0304-48-00	Rear Siderail Arm, Lt.	1
9	0304–36–00	Rear Siderail Arm, Rt.	1

# 0310-75/76-00 Front Siderail Arm Ass'y, Left & Right



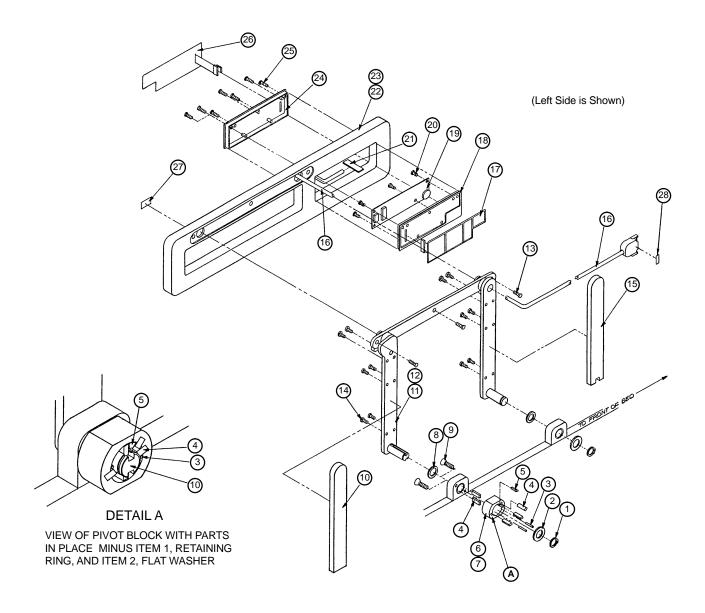
Item	Part No.	Part Name	Qty.
1	0304-49-00	Front Siderail Arm, Lt.	1
2	0304–35–00	Front Siderail Arm, Rt.	1
3	0304-40-00	Bushing	2

#### 0308-37/38-00 Wood Siderail Assembly, Left & Right



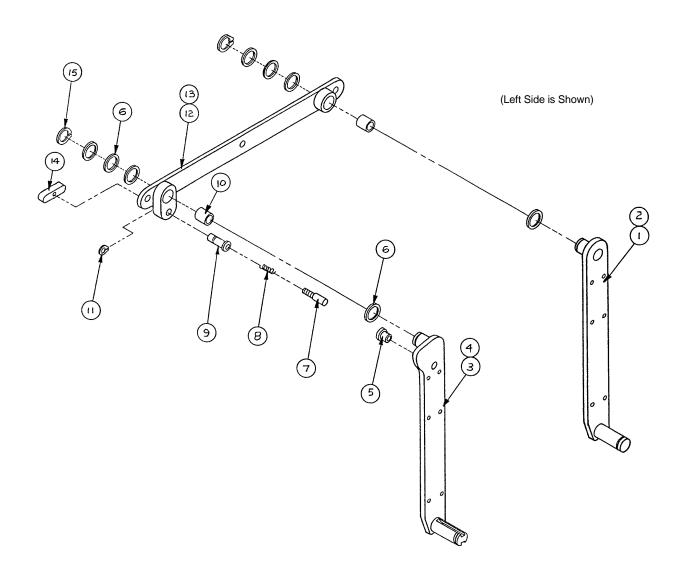
Item	Part No.	Part Name	Qty.
1	0308-32-00	Retaining Ring	4
2	0308-33-00	Flat Washer	2
3	0308-35-00	Rubber Dowel	2
4	0308-36-00	Key	5
5	0308-27-00	Pivot Stop Bearing	1
6	0308-26-00	Pivot Stop Housing, Lt.	1
7	0308-25-00	Pivot Stop Housing, Rt.	1
8	0304–44–00	Washer	2
9	0308–34–00	Flat Head Screw	8
10	0308-65-00	Rear Arm Cover	2
11	(page 48)	Mounting Bar Ass'y, Lt.	1
12	(page 48)	Mounting Bar Ass'y, Rt.	1
13	0608–19–00	Screw	3
14	0023-32-00	Wood Screw	12
15	0308-13-00	Siderail, Left	1
16	0308-12-00	Siderail, Right	1
17	0315-03-00	Label, Pull	1

### 0309-46/47-00 Nurse Comm. Siderail Ass'y, Left & Right



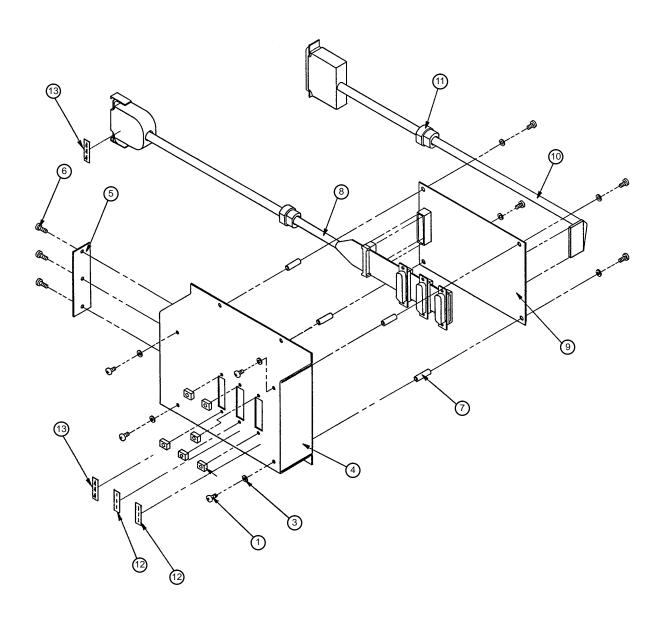
Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
1	0308-32-00	Retaining Ring	2	15	0308-54-00	Arm Cover	1
2	0308-33-00	Flat Washer	2	16	0309-20-00	Siderail Cable Ass'y	1
3	0308-35-00	Rubber Dowel	2	17	0309-11-00	Mem. Switch, Pat. Side	1
4	0308-36-00	Key	5	18	0309-14-00	Plastic Hsg., Pat. SIde	1
5	0308-27-00	Pivot Stop Bearing	1	19	0309-12-00	Nurse Comm. PCB	1
6	0308-26-00	Pivot Stop Housing, Lt.	1	20	0024-29-00	Phillips Hd. Screw	4
7	0308-25-00	Pivot Stop Housing, Rt.	1	21	0309-24-00	Nurse Comm. Connect.	1
8	0304-44-00	Washer	2	22	0301-74-00	Siderail, Left	1
9	0308-34-00	Screw	8	23	0301-73-00	Siderail, Right	1
10	0308-65-00	Rear Arm Cover	1	24	0309-13-00	Plastic Hsg., Nurse Side	1
11	(page 48)	Mounting Bar Ass'y, Lt.	1	25	0024-30-00	Screw	6
12	(page 48)	Mounting Bar Ass'y, Rt.	1	26	0309-10-00	Mem. Swch., Nurse Side	1
13	0608-19-00	Screw	3	27	0315-03-00	Label, Pull	1
14	0023-32-00	Wood Screw	12	28	0084-01-00	Label, Wire #1	1

## 0309-43/44-00 Siderail Mounting Bar Ass'y, Left & Right



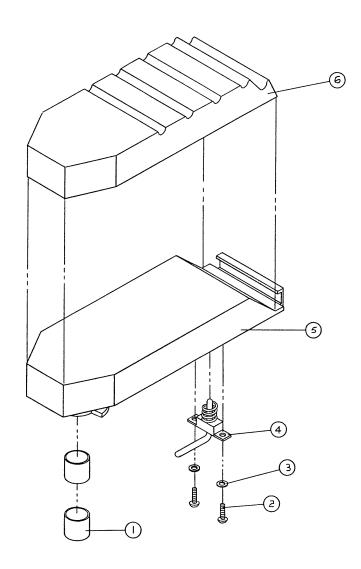
Item	Part No.	Part Name	Qty.
1	0308-64-00	Front Pivot Arm, Left	1
2	0308-63-00	Front Pivot Arm, Right	1
3	0308-17-00	Rear Pivot Arm, Left	1
4	0308-16-00	Rear Pivot Arm, Right	1
5	0308-20-00	Pin Liner, Modified	1
6	0304-44-00	Washer	8
7	0308-24-00	Plunger, Modified	1
8	1029-06-00	Foot Latch Spring	1
9	0308-23-00	Plunger Hsg., Modified	1
10	0308-30-00	Bushing	2
11	0020-11-00	Retaining Ring	1
12	0308-15-00	Siderail Mtg. Bar, Left	1
13	0308-14-00	Siderail Mtg. Bar, Right	1
14	0318-34-00	Plunger Handle	1
15	0308-32-00	Retaining Ring	2

# 0309–28–00 Splitter Box Assembly



Item	Part No.	Part Name	Qty.
1	1500-70-00	Round Head Screw	8
2	0309-27-00	Rear Mount Latching Block	6
3	1500-55-00	Internal Tooth Lock Washer	8
4	0309-19-00	Splitter Box	1
5	0309-26-00	Splitter Box Plate	1
6	0306-02-00	Phillips Head Screw	3
7	1501-44-00	Round Threaded Spacer	4
8	0309-23-00	Splitter Cable Assembly	1
9	0309-17-00	Splitter PCB	1
10	0309-21-00	Bed Cable Assembly	1
11	1500-14-00	Strain Relief	2
12	0084-01-00	Label, Wire #1	2
13	0310-02-00	Label, Wire #4	2

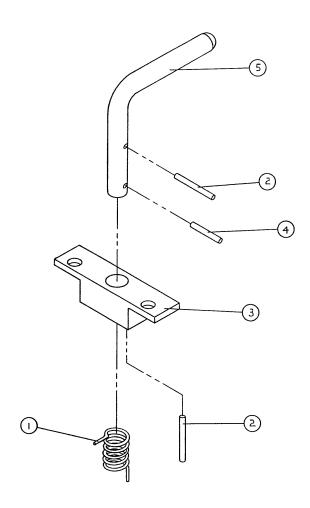
#### 0591-09-00 Foot Pan Assembly



Item	Part No.	Part Name	Qty.
1	0021–04–00	Bushing	2
2	0022-24-00	Truss Head Screw	2
3	0025-07-00	Internal Tooth Lock Washer	2
4	(page 51)	Foot Pan Latch Assembly	1
5	0590-57-00	Foot Pan	1
6	0590–58–00	Foot Pan Pad	1
7	0063-02-00	Adhesive Transfer Tape	.45 Yd.*
8	0063-03-00	Adhesive Transfer Tape	.92 Yd.*

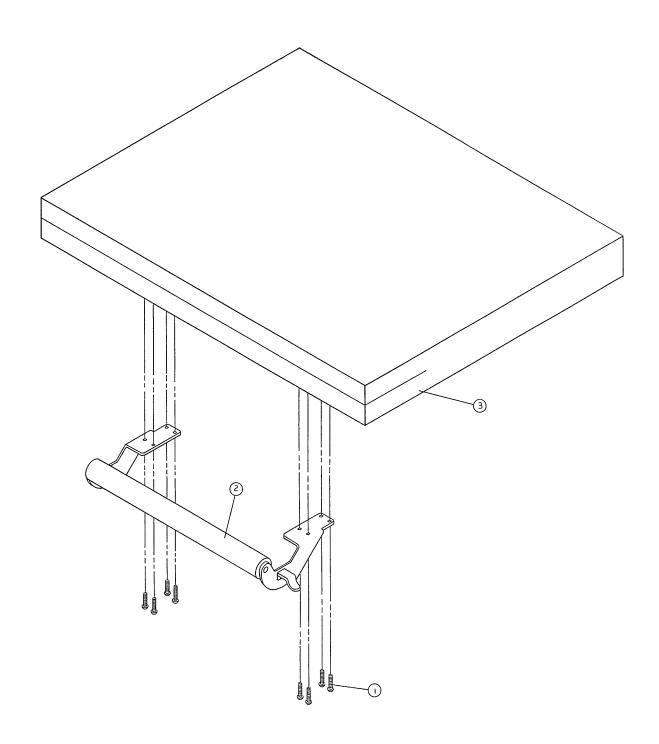
<sup>\*</sup>Items 7 and 8 are not shown. They are used to fasten item 6 to item 5.

## 0590-61-00 Foot Pan Latch Assembly



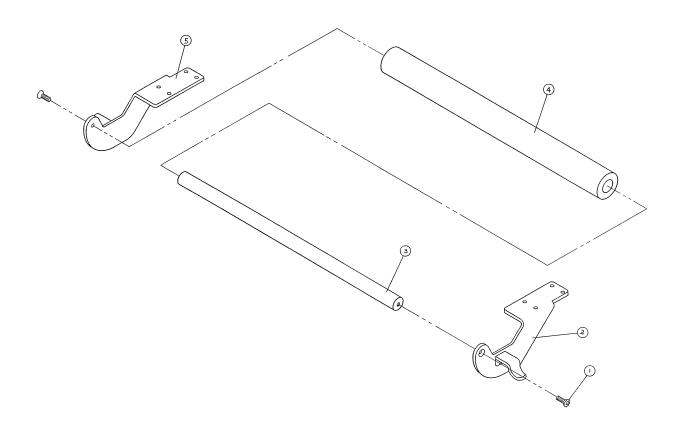
ltem	Part No.	Part Name	Qty.
1	0590-65-00	Torsion Spring	1
2	3978-33-00	Roll Pin	2
3	0590-63-00	Foot Pan Latch Base	1
4	0590-64-00	Roll Pin	1
5	0590-62-00	Foot Pan Latch Pin	1

### 0307–29–00 Foot End Mattress & Push Bar Assembly



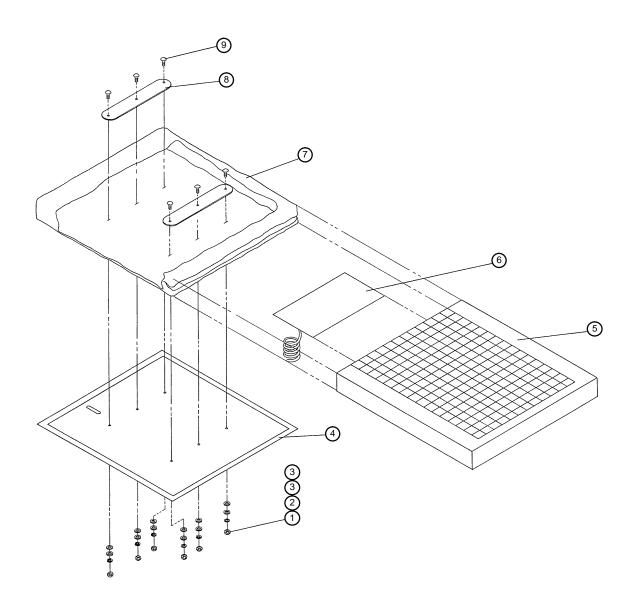
Item	Part No.	Part Name	Qty.
1	0690-00-00	Screw	8
2	(page 53)	Push Bar Assembly	1
3	0307-30-00	Foot Mattress Assembly	1

# 0595-42-00 Push Bar Assembly



Item	Part No.	Part Name	Qty.
1	0022-44-00	Phillips Flat Hd. Screw	2
2	0595-23-00	Push Bar Bracket, Lt.	1
3	0307-38-00	Push Bar	1
4	0589-90-00	Cover Foam	1
5	0595-24-00	Push Bar Bracket, Rt.	1

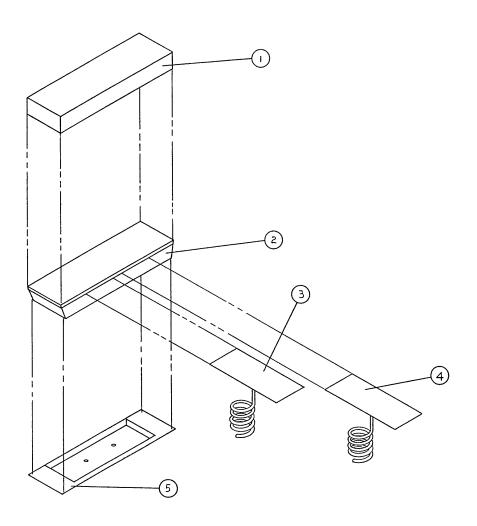
#### 0310-65-00 Head Section Assembly\*



Item	Part No.	Part Name	Qty.
1	0318-38-00	Acorn Nut	6
2	0025-07-00	Int. Th. Lock Washer	6
3	0025-05-00	Flat Washer	12
4	0310–63–00	Head Panel	1
5	0310-62-00	Head Foam	1
6	0300-24-00	Lumbar Bag	1
7	0310–64–00	Head Cover	1
8	0310–68–00	Retainer Plate	2
9	0318–37–00	Rib Neck Bolt	6
10	0310–66–00	Union Barb	1

<sup>\*</sup>Use part number 0316–10–00 for Head Mattress Replacement Kit.

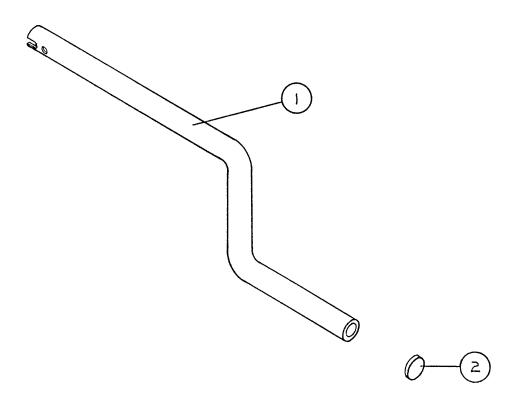
### 0300-51-00 Seat Mattress Assembly\*



Item	Part No.	Part Name	Qty.
1	0300-79-00	Mattress Seat Cover	1
2	0300-49-00	Seat Foam	1
3	0306-53-00	Seat Air Panel, Lt.	1
4	0306-52-00	Seat Air Panel, Rt.	1
5	0302-60-00	Seat Panel	1
6	0605–25–00	Adhesive Tape	A/R

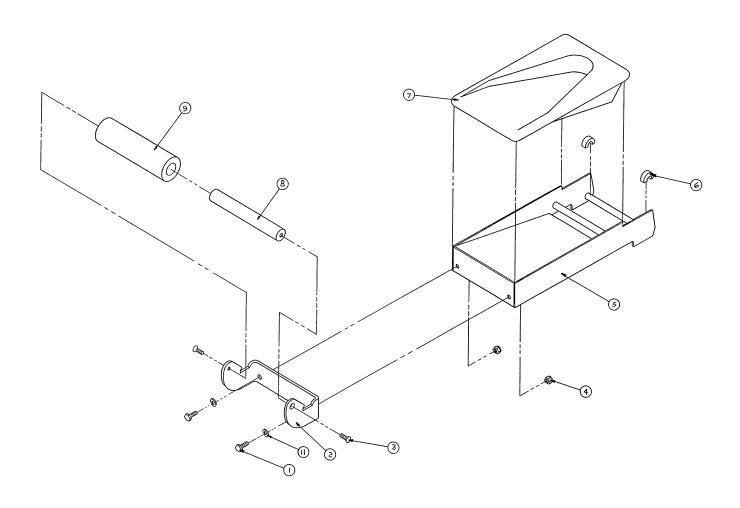
<sup>\*</sup>Use part number 0316-11-00 for Seat Panel Mattress Kit

## 0593-11-00 Hand Crank Assembly



Item	Part No.	Part Name	Qty.
1	0589-43-00	Hand Crank	1
2	0055-01-00	Plug	1

### 0595-50-00 Foot Rest Assembly



Item	Part No.	Part Name	Qty.
1	3979–37–00	Hex Hd. Cap Screw	2
2	0595-25-00	Foot Rest Handle Bracket	1
3	0022-44-00	Phillips Flat Head Screw	2
4	0024-02-00	Nut	2
5	0590-59-00	Foot Rest	1
6	0594-49-00	Foot Rest Bushing	2
7	0590-60-00	Foot Rest Pad	1
8	0307-40-00	Foot Rest Handle Bar	1
9	0307-43-00	Foam Cover	1
10*	0063-02-00	Adhesive Tape (not shown)	.27 Yd.
11	0025-09-00	Lock Washer	2

<sup>\*</sup>Used when installing item 7 to item 5.

#### Warranty

#### **Limited Warranty:**

Stryker Adel warrants to the original purchaser that its products should be free from defects in material and workmanship for a period of one (1) year after date of delivery. Stryker Adel's obligation under this warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any product which is, in the sole discretion of Stryker Adel, found to be defective. Stryker Adel warrants to the original purchaser that the frame and welds on its beds will be free from structural defects for as long as the original purchaser owns the bed. If requested by Stryker Adel, products or parts for which a warranty claim is made shall be returned prepaid to Stryker Adel's factory. Any improper use or any alteration or repair by others in such manner as in Stryker Adel's judgement affects the product materially and adversely shall void this warranty. No employee or representative of Adel is authorized to change this warranty in any way.

This statement constitutes Stryker Adel's entire warranty with respect to the aforesaid equipment. STRYKER ADEL MAKES NO OTHER WARRANTY OR REPRESENTATION, EITHER EXPRESSED OR IMPLIED, EXCEPT AS SET FORTH HEREIN. THERE IS NO WARRANTY OF MERCHANTABILITY AND THERE ARE NO WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT SHALL STRYKER ADEL BE LIABLE HEREUNDER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR IN ANY MANNER RELATED TO SALES OR USE OF ANY SUCH EQUIPMENT.

#### To Obtain Parts and Service:

Stryker Adel products are supported by a nationwide network of dedicated Stryker Adel Field Service Representatives. These representatives are factory trained, available locally, and carry a substantial spare parts inventory to minimize repair time. Simply call your local representative, or call Stryker Adel Customer Service at (800) 327–0770.

#### **Supplemental Warranty Coverage:**

Stryker Adel has developed a comprehensive program of extended warranty options designed to keep your equipment operating at peak performance at the same time it eliminates unexpected costs. We recommend that these programs be activated *before* the expiration of the new product warranty to eliminate the potential of additional equipment upgrade charges. Stryker Adel offers the following Supplemental Warranties:

#### Extended (Parts and Labor)

- All replacement parts (excluding mattresses and consumable items)
- Labor and travel for all scheduled and unscheduled calls
- Biannual Preventive Maintenance Inspections and repairs
- JCAHO paperwork for preventive maintenance
- Priority Emergency Service

#### **Standard (Labor Only):**

- Labor and travel for all scheduled and unscheduled calls
- Biannual Preventive Maintenance Inspections and repairs
- JCAHO paperwork for preventive maintenance
- Priority Emergency Service

#### **Basic (Parts Only):**

- All replacement parts (excluding mattresses and consumable items)
- Priority Emergency Service

Please call your local representative, or call (800) 327–0770 for further information

#### **Return Authorization:**

Merchandise cannot be returned without approval from the Stryker Adel Customer Service Department. An authorization number will be provided which must be printed on the returned merchandise. Stryker Adel reserves the right to charge shipping and restocking fees on returned items.

SPECIAL, MODIFIED, OR DISCONTINUED ITEMS NOT SUBJECT TO RETURN.

#### **Damaged Merchandise:**

ICC Regulations require that claims for damaged merchandise must be made with the carrier within fifteen (15) days of receipt of merchandise. DO NOT ACCEPT DAMAGED SHIPMENTS UNLESS SUCH DAMAGE IS NOTED ON THE DELIVERY RECEIPT AT THE TIME OF RECEIPT. Upon prompt notification, Stryker Adel will file a freight claim with the appropriate carrier for damages incurred. Claim will be limited in amount to the actual replacement cost. In the event that this information is not received by Stryker Adel within the fifteen (15) day period following the delivery of the merchandise, or the damage was not noted on the delivery receipt at the time of receipt, the customer will be responsible for payment of the original invoice in full.

Claims for any short shipment must be made within thirty (30) days of invoice.

