
MODEL 9700 Patient Lift

USER MANUAL - MAINTENANCE GUIDE INDEX

Section 1:	♦ PAGE 1	INDEX
User	♦ PAGE 2	CAUTIONS
Manual	♦ PAGE 3	MECHANICAL OPERATION
	♦ PAGE 4	MECHANICAL OPERATION VIEW
	♦ PAGE 5	SELECTING THE STYLE OF SLING TO BE USED
	♦ PAGE 5	LIFTING FROM CHAIR TO BED
	♦ PAGE 6	LIFTING FROM BED TO CHAIR & SLING LAUNDERING
	♦ PAGE 7	LIFTING FROM THE FLOOR
	♦ PAGE 8	LIFTING WITH RECUMBENT BARS (optional)
	♦ PAGE 9	CHARGING PROCEDURE
	♦ PAGE 10	CHARGER SPECS & WEIGHING WITH ELECTRONIC SCALE
	♦ PAGE 11	CALIBRATION INSTRUCTIONS
	♦ PAGE 12-14	GENERAL PROCEDURE GUIDE / SAFE WORKING LOADS
		(Should be copied for each operator and kept with their personnel records.)
Section 2:	♦ PAGE 15	EXPLODED VIEW
Maintenance	♦ PAGE 16-17	PARTS LIST
Guide	♦ PAGE 18	SPECIFICATIONS
	♦ PAGE 19	CIRCUIT BOARD WIRING
	♦ PAGE 20-21	TROUBLE SHOOTING GUIDE
	♦ PAGE 22	MAINTENANCE SCHEDULE
	♦ PAGE 23-25	ITEMS TO INSPECT
	♦ PAGE 26	MONTHLY LIFT INSPECTION CHECK LIST (To be copied)
	♦ PAGE 27	LIFT / TRANSFER ASSESSMENT FORM
	♦ PAGE 28	WARRANTY

PROBLEMS OR QUESTIONS???

PARTS & SERVICE

ConvaQuip Ind., Inc.

P.O. Box 3417

Abilene, TX 79604

Phone (325) 677-4177 Toll Free (800) 637-8436

Fax (325) 677-7217

CAUTION: PLEASE READ BEFORE OPERATING

1. Model 9700 IS DESIGNED FOR TRANSFERRING ONLY, NOT FOR TRANSPORTING OVER LONG DISTANCES.
2. FOR THE SAFEST TRANSFER, VOLARO LIFT LEGS MUST BE FULLY EXTENDED INTO THE WIDE POSITION WHEN LIFTING A PATIENT OR RESIDENT.
3. FOR EMERGENCY STOP, PULL BATTERY FROM BATTERY RECEPTACLE.
4. MAKE SURE ALL FOUR LOOPS FROM THE SLING ARE PROPERLY “NESTED” IN THE BOTTOM OF THE HOOKS BEFORE LIFTING OR TRANSFERRING A PATIENT OR RESIDENT AND THAT ALL FOUR RETAINER SPRINGS ARE FUNCTIONING.
5. USE Only Model 9700 SLINGS AND ACCESSORIES DESIGNED FOR USE WITH THE Model 9700 LIFT MODELS.

DO NOT:

1. DO NOT PUSH OR PULL ON THE BEAM OR RESIDENT. THIS WILL JEOPARDIZE THE LIFT’S STABILITY.
2. DO NOT USE ANY OTHER BATTERY CHARGER. USE ONLY THE BATTERY CHARGER SUPPLIED WITH THE LIFT.
3. DO NOT EXCEED THE WEIGHT LIMIT LISTED ON THE LIFT
4. DO NOT PLACE FINGERS BETWEEN THE SAFETY GUARDS OF THE BEAM TRACK.
5. DO NOT ATTEMPT A TRANSFER FROM THE FLOOR BEFORE EXAMINING FOR ANY INJURIES THAT MAY NEED SPECIAL ATTENTION.
6. DO NOT USE A SLING THAT SHOWS WEAR, IS TORN, BLEACHED OUT, OR HAS ANY LOOSE THREADS. INSPECT BEFORE EVERY LIFT.

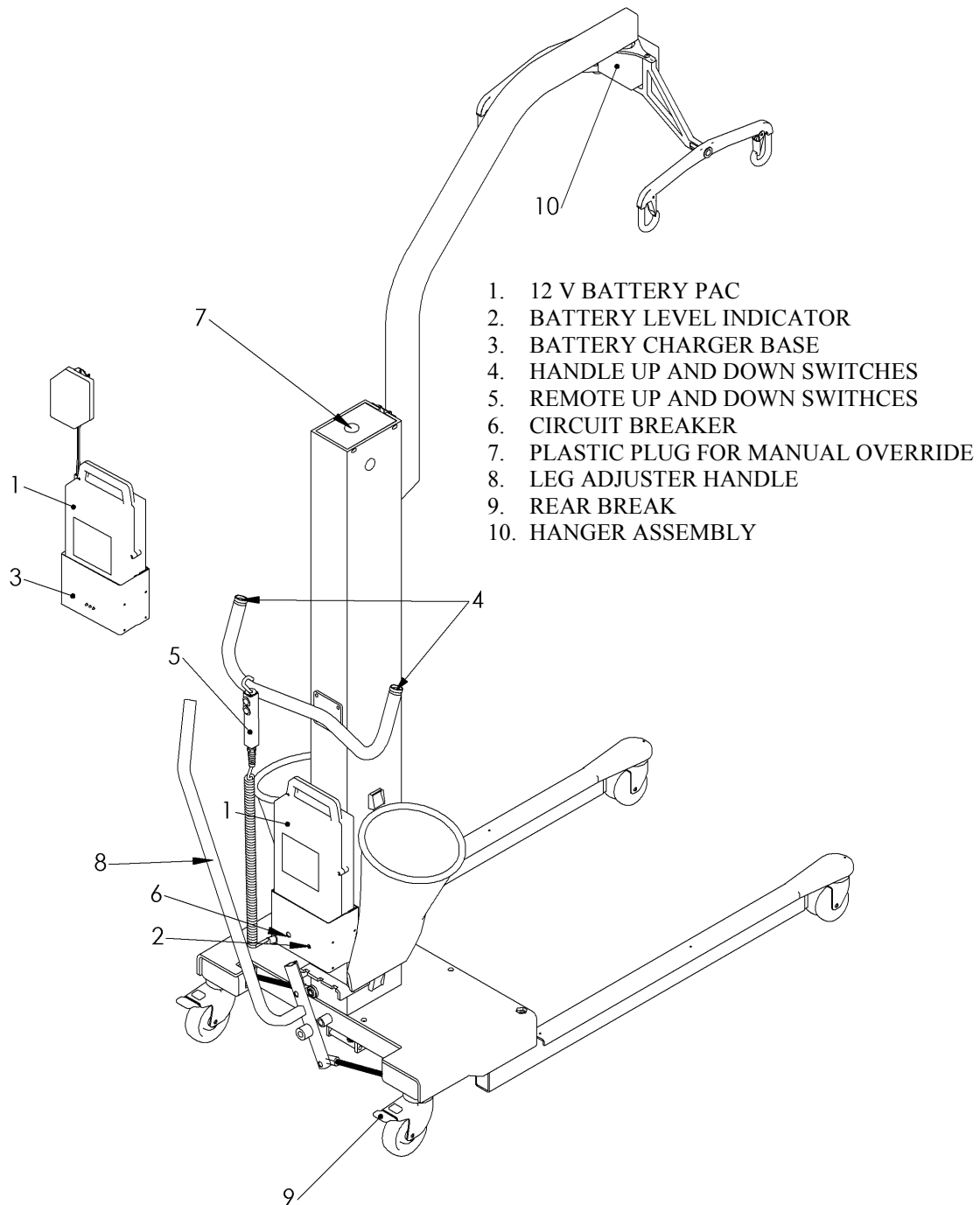
MECHANICAL OPERATION

Model 9700

(Operation Corresponds with the View on Page 4)

1. This lift is powered by a 12VDC removable battery pack located at the back of the lift. The battery fits either way in the lift and charger receptacle to make it easy to remove and replace the battery. **NOTE: Battery removal is your emergency stop feature.**
2. The lift has a built-in battery indicator which illuminates when the battery is about 60% discharged. This would be the best time to replace with the battery with one that is fully charged.
3. Once the battery is inserted into the charging receptacle, the charge light on the charging unit comes on. Make sure this yellow light comes on to assure your battery is charging. Once the battery is fully charged, the light will shut off. The charger is fully automatic and will quit charging when the battery reaches a full charge. You will not damage the battery or charger if the battery is left plugged in.
4. The lift is operated by switches located at the tips of the handles. This allows proper ergonomics by keeping the hands on the handles while operating the lift and maneuvering it at the same time.
5. The optional hand control provides a second source to operate the lift. This allows the operator to be next to the person being transferred and to operate the lift at the same time. It also aids as a back-up source to operate the lift.
6. If for any reason the lift would stop in mid travel, the first thing to check is the circuit breaker located on the battery receptacle. If the breaker has popped out, simply press it back in and try lifting. If the problem is not the breaker, and you cannot lower the patient/resident by the switch on the handle or the remote control, you must use the manual safety override 5/16" x 3/8" bit provided with the lift.
7. To operate the lift manually, remove the plastic plug at the top of the mast and use the 5/16" hex driver supplied with the lift, and a 3/8" socket and ratchet with extension. Insert the hex driver into the hex head at the top of the ball screw and simply turn in the desired rotation.
8. The leg adjuster opens and closes the legs of the lift. By pulling back the handle, the pin is pulled out of the notch plate. This allows you to rotate the handle back and forth. Keep the handle pulled back while rotating to keep the pin from rubbing on the notch plate. This process enables the lift to be narrowed to go through doorways and widened to go around a wheel chair or lounge chair.
9. The brakes are located on the rear wheels. Press the tab with your foot to lock the wheel and the pivot. Press the upper portion of the tab forward to release the brakes.

MECHANICAL OPERATION



SELECTING THE STYLE AND SIZE OF SLING TO BE USED

The first step is to select the **Style** of sling to be used. The most common sling is the divided leg sling. The person must have two full legs in order for you to use the divided leg sling. (Not meant for amputees) This sling is designed to be removed from the person after they have been transferred into their wheelchair so the patient does not have to sit on the sling throughout the time they are sitting in their chair. If you find it difficult to remove a divided leg sling from behind a person while they are seated in a wheelchair, you may choose to leave it behind them. However, be sure to observe the correct position of the sling before you lift that person. The sling may have moved. If a person has leg discomfort while you use the divided leg sling on them, we would recommend the hammock sling. If you are lifting a single or bilateral amputee, you **must** always use a hammock sling. The hammock sling comes with or without the commode hole and with or without head support..

The second step is to determine the proper **Size**. It's simple. Lay a sling across the person's chest. If it's the proper size sling, you will note 2-8 inches of extra material extended past the side of each arm. **NOTE: This is only a guide. Body shapes vary so much that fitting the patient to the sling ultimately needs to be determined by the health care professional.** If you observe little or no fabric extended past the arms, you must upgrade to a larger sling. All styles have a color coded border to easily indicate the size of sling. (Refer to your sling sizing chart available on the website at www.smths.com) The loops on the straps are color coded to match each side in positioning the sling to the desired location. Changing the orientation of these loops will change the angle of the person being transferred. This comes in handy for charting the colors that would work best for each individual. All sling styles come with built in positioning handles on the back of the sling. These always face out and are used to position a person back in a chair.

LIFTING FROM CHAIR TO BED (NOTE: ALWAYS INSPECT THE SLING BEFORE EVERY LIFT—READ CAUTION SHEET)

To apply the divided leg sling on someone sitting in a wheelchair, first lean the person slightly forward to get clearance between the back of the person and the back of the wheelchair. Keeping the sling from twisting, work the sling along the crevice between the legs and the chair. Make sure the sling is all the way down and that there is no gap behind the person. If the sling is not all the way down, it will not come under the leg easily. Work the sling alongside the legs, getting as much material going toward the front of the chair as possible. Raise the leg and pull the material through, trying to prevent any wrinkles. Crisscross the inside flaps with the main loops, then thread the strap with the color-coded loops through the main loop. Crisscrossing the inside flaps will keep the legs tight together for a more comfortable and dignified transfer. If during the transfer it is required for the person's legs to relax open, you can hook it up without crisscrossing the inside flaps. This will allow the legs to relax open. Now that the sling is positioned, bring the lift toward the person, open the legs of the lift to the wide position, lower the hanger until the desired colored loops can be hooked on the hanger. It doesn't matter if the front or back is hooked up first. **(NOTE: RAISE UNTIL THERE IS TENSION ON THE STRAPS, THEN DOUBLE CHECK TO MAKE SURE SLING LOOPS ARE NESTED INTO THE BOTTOM OF THE HOOKS PROPERLY.)**

Now push the up button on the handle or use the remote control to raise the person high enough to clear the bed. Position the lift so that the person will be lowered to the proper position in the bed. Once there is plenty of slack in the straps, remove the loops from the hanger and pull the lift out of the way. Unthread the straps from the main loops. Roll the person on their side and fold the sling, then roll to the other side and remove the sling.

LIFTING FROM BED TO CHAIR

When transferring from bed to chair just reverse the previous steps. Roll the person to their side and fold the sling. Align the bottom of the back of the sling by the tailbone. Roll the person to their side and pull the rest of the sling through, straightening any wrinkles. Bring material under the legs the same way as if they were in the chair. Crisscross the inside flaps and thread the straps through the main loops. Bring the lift in, spread the legs, and lower hanger near the center of the person being transferred. It is recommended to keep the legs in the widest position at all times when transferring a person who is uncooperative or combative. Bend the knees and hook up the color coded loops that were previously used to bring them to a sitting position. Press the button to raise the lift and make sure the material under the leg stays straight toward the knee, keeping out as many wrinkles as possible. **Note: Raise until there is tension on the straps and then double-check to make sure the loops are nested in the bottom to the hooks. If the base is in the narrow position, adjust it to the widest position once you are clear from the bed and always before turning the lift.** Once the patient is over the chair, lower and guide them by the built-in handles on the sling to bring them back far into the chair. **(Do not attempt to move the lift by pushing on the person or the beam.)** To remove the sling, reverse the step. Unthread the straps from the main loops, raise the legs, and pull the material aside. Now lean the person forward and pull sling clear.

SLING LAUNDERING INSTRUCTIONS Model 9700 (FULL BODY LIFTS)

The sling material and webbing are made of nylon. If possible, put the sling in a mesh bag to prevent the straps from getting tangled. Recommended washing instructions are as follows:

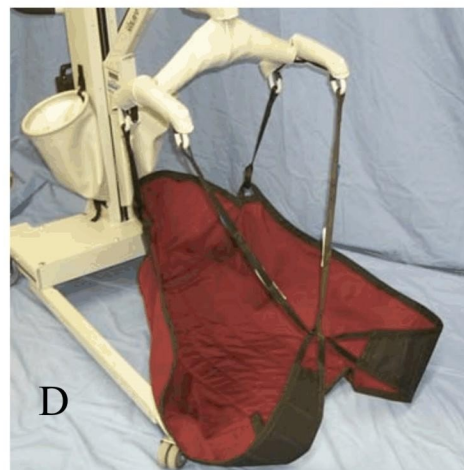
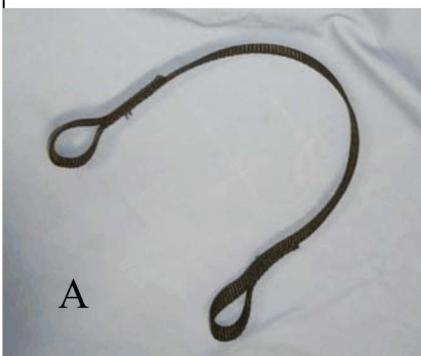
- Machine wash warm - gentle cycle
- Tumble dry - **LOW HEAT ONLY** - or drip dry
- Non-chlorine chemical disinfectants OK
- **NO BLEACH**

**WARNING: EXCESSIVE HEAT AND/OR BLEACH WILL SHORTEN THE
SERVICABLE LIFE OF THE SLING. IF THE SLING IS DAMAGED DUE TO
IMPROPER LAUNDERING, WARRANTY IS VOID.**

LIFTING FROM THE FLOOR

To transfer from the floor, apply the sling with the same procedure as if they were in bed. **If the person is on the floor as a result of a fall, no transfer should be attempted until it is determined that there are no injuries.** Once the sling is positioned under the person as if they were lying in a bed, bring the lift up to the person being transferred from either the head or legs. If the lift is brought in by the head, apply a pillow (or PC45002-1-0 Head Protector (E)) head and the base of the lift. (The reverse may be done as well with the patient's legs resting on pillows on the base of the lift.) Lower the lift to the lowest position and hook up the front two straps to the hanger. You will need to use the two extension straps supplied with the sling (A). This strap loops through itself (B) in order to extend the head end of the sling low enough for a floor lift. A second set of straps can be used to extend it further if necessary. (C). Figure (D) shows a divided leg sling with the extension straps attached to the head end of the sling.

Push the lift as close to the patient as possible, then lock the brakes. (When bringing the lift in by the legs, lift the legs onto the base, cushioning with pillows.) Now hook up the back two straps by bending the knees and applying the loops to the hanger. All the models of slings come with straps on the foot end that are long enough to transfer from the floor. Note that we are using the sling with a built-in head support. If you are using a sling without head support, you will need to support the patient's head with your hands.



RECUMBENT BAR INSTRUCTIONS (optional)

The R-bars were developed in response to several requests from customers to develop a system that will transport hip patients. The system will also lift patients whose bodies are rigid. Previous to the R-bar system, nurses had no choice but to lift their patients manually, therefore placing themselves and patients at risk. **Caution: Be sure to consult with the patient's health care provider for proper patient positioning and transport. The R-bar system is designed to be used on Model 9700 LIFT only!**

Instructions:

1. **Assess the Patient:** Consult with the patient's nurse.
2. **Prepare the Model 9700:** Remove the R-bars from the bag. Attach the R-bars to the J-hooks on the Model 9700 LIFT. Double check the connections. Observe the black nylon loops. If frayed, cease activity and order new loops. Be sure to hang the R-bars directly under each moving hanger bar from the lift. You want the R-bars to mirror image the movement of the existing hanger bars. Do not attach the R-bars perpendicular to the hanger bars.
3. **Safety:** Observe the R-bar sling you will be using. Check the fabric for tears, holes and frays. If damaged, replace with a new sling.
4. **Place the Abductor Pillow:** Place the pillow between the groin and the knees. You should be able to read that label as it is placed properly between the legs.
5. **Place the Sling:** Rest the sling beside the patient. Log roll the patient to one side. Carefully slide the sling underneath the patient. Be sure the bottom of the sling will rest at knee level. Roll the patient back and pull the remaining material out until you see that the patient will be directly in the middle of the sling.
6. **Lift the Patient:** Open the legs of the Model 9700LIFT. Place the R-Bars directly over the patient. Use the patient's navel as a centering point. Lower the lift enough to provide ease of sling hook-up. Double check your connections. Adjust the head support. Tell the patient you are about to lift them, then lift. Lift the patient high enough to clear the bed and transport to the nearest recliner. Center the patient over the recliner and lower the patient. **DO NOT MANIPULATE THE LIFT BY PULLING ON THE PATIENT!** Remove the abductor pillow and leave the sling underneath the patient. Before you lift the patient from the recliner to transport back to bed, check to see that the sling is in the correct lifting position. If not, reposition the sling. Open the legs on the Model 9700 LIFT. Apply the abductor pillow. Lift, Transport and Lower the patient into bed. Unhook the sling and move the lift aside. Remove the sling from under the patient. Observe the sling for contaminants. If soiled, launder per sling instructions.

CHARGING PROCEDURE

- 1) The lift has a RED battery indicator light located on the receptacle that will come on when the battery is low. This is the best time to exchange the battery with one that is fully charged from the charger.
- 2) Locate the charger receptacle near an outlet and on a counter or flat surface where the suction cups will have good contact.
- 3) Insert the battery. (It will fit in either direction.)
- 4) Plug in the charger. (Note: if no battery is in the charger the GREEN light will be on.) The RED light may come on briefly if the battery is excessively discharged, but it should go off within the first few minutes followed by the YELLOW light. If the RED light stays on it may mean the battery is extremely discharged. Leave the battery on the charger overnight to see if it can be restored.
- 5) When the YELLOW light has gone out, the battery is fully charged and will shut off automatically. The GREEN light will stay on.

Note:

- ❑ Charging sequence: Insert battery and then plug into outlet for proper electronic function.
- ❑ Leaving the battery on the charger will not cause it to overcharge.
- ❑ If the battery goes to GREEN in a short period it may mean you have a bad cell that will not take a charge.
- ❑ Plug battery into charger every night.
- ❑ Do not remove until charging cycle is complete.
- ❑ Battery will not be damaged if left plugged in.
- ❑ The charger will get warm during its charge cycle.

Additional charging information:

The Volaro charger uses a three part process and should take about 12 hours. The first part is called the **bulk charge**. During this stage the charger supplies 1.5 Amps until the battery terminal voltage reaches 13.8 volts. The current then begins to ramp down from 1.5 Amps to about .5 Amps at the conclusion of the charging process. This **ramping charge (absorption mode)** will take several hours. Finally, the GREEN light will come on indicating that the charger has switched to the third part of the cycle, the **temperature compensated float charge**. The charger is now in its maintenance mode, keeping the battery in its ideal charged state. The Volaro charger is not a trickle charger nor will the battery be damaged if left permanently attached and powered. If a the GREEN light comes on soon after putting the battery on the charger it means that, either the battery is already charged OR you have a weak battery that will only hold a minimal charge. **Maintaining the proper battery voltage when the battery is not in use will extend the service life of the battery.**

Model 9700 CHARGER SPECIFICATIONS	
Bulk Charge Current	1.5 Amps
Bulk Charge Voltage Range	10-14 Volts
Absorption Mode Current	1.5 - .5 Amps
Absorption Mode Voltage Range	14.0 - 15.0 Volts
Float Voltage	13.6 - 13.8 Volts
AC Voltage In	115 - 130 VAC
Power In	30 Watts

WEIGHING WITH ELECTRONIC SCALE (optional)

- ❑ Press the “**ON/ZERO**” button to turn on the scale. If “LOW BAT” appears, replace in slide out box on the back of the scale. The scale will take about 5 seconds to zero itself.
- ❑ Attach the desired VOLARO, Fleece Cover, Litter, Recumbent Bars, or anything else you plan to use on the person being weighed, making sure it is not touching anything. (Keep the hand control off the lift while weighing.)
- ❑ Press the “**ON/ZERO**” button – The scale counts down for 3 seconds (DO NOT touch lift during countdown, or countdown will reset for additional 3 seconds.) This will place the weight of the sling into memory and the scale will automatically deduct the weight of the sling from the reading.
NOTE: To switch from **Lbs.** to **Kilos** - Press and hold the **LB/KG** button until “**CONV**” disappears. Press and hold again to convert back to **Lbs.** (Note: this may trigger a need to recalibrate after weighing.)
- ❑ Now with the scale still on, remove the sling and place it beneath the person to be weighed.
NOTE the appearance of the screen. You will see a flashing #. This is the weight of the items previously weighed. They will automatically be subtracted from the person’s weight. This reading will stay in memory even if the scale is turned off or the battery is removed.
- ❑ Attach and lift the person clear of chair or bed. Once the reading is steady, the scale will lock on to the reading to make it easier to read if the person starts to move.
NOTE: Before you record weight, **Be Sure That You Are Not Touching Lift.** This will show a false weight. Let weight steady and record reading.
- ❑ Scale shuts off automatically after **two minutes** when not in use. Press the recall button to review the last recorded weight. (See Calibration Procedures on the next page.)

HANGING AND DUAL DISPLAY SCALE
CALIBRATION INSTRUCTIONS
Model 9700

1. Should calibration be necessary, all that is required is a 25 lb. precision weight. Do not use packaged goods, fitness weights, or other items that say they weigh 25 lbs. Failure to use a precision weight may cause the scale to display an inaccurate weight. Using a certified weight is the method preferred. 25 lb. certified weights are available from SMT Health Systems.
2. When calibrating scale, remove hand control from the lift and have the beam positioned in the middle of its stroke.
3. To enter calibration mode, push **“ON/ZERO”** button.
4. While holding the **“ON/ZERO”** button, press and hold the **“LB/KG”** button. After approximately 3 seconds the message on the display will change from **“ZERO”** to **“CAL”**. Release both and the display will show **“C O”**.
5. Hang strap or sling that will hold calibration weight on the hanger hooks. If using a sling, make sure it is empty. Push the **“ON/ZERO”** button and release. The display will count down from **“16”** to **“0”**. When finished the display will show the message **“C 25”**.
6. Now hang 25 LB. calibration weight on strap which you previously attached to the hanger (step 4, above) or place it in the sling and permit the scale to stabilize. (Failure to stabilize the unit may cause the scale to display an inaccurate weight – see below.)
7. Push **“ON/ZERO”** button again. Scale will count down from **“16”** to **“0”** as before and then the display should read **“25”**, which is the weight of the calibration weight. Calibration is now complete. DO NOT TOUCH LIFT WHILE IT IS COUNTING DOWN.
8. Remove the 25 lb. precision weight, stabilize the sling or strap, and press the **“ON/ZERO”** button to zero the scale. The scale is ready to use.

Notes on how to stabilize the unit:

- ◆ Weight must be centered directly below the beam
- ◆ Do not side load the scale
- ◆ Permit the weight to stop bouncing or swinging

NOTE: Switching between lbs. and kg. may trigger a need to recalibrate.

Call ConvaQuip Customer Service if you have any questions.

SMT MECHANICAL FULL BODY LIFTS

GENERAL PROCEDURE GUIDE

- ◆ This form is intended as a guide to help you develop a procedure sheet that will fit your specific application in your facility. It is recommended that everyone be in serviced by the company representative or use the manufacturer's in-service video before operating any mechanical lift. **(This for should be copied for each operator and kept with their personnel records.)**

Staff Name: _____

Date: _____

Checked Off By: _____

General Preparation:

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	1. Identify the resident.
<input type="checkbox"/>	<input type="checkbox"/>	2. Explain what you are going to do
<input type="checkbox"/>	<input type="checkbox"/>	3. Wash hands.
<input type="checkbox"/>	<input type="checkbox"/>	4. Get supplies ready, sling, wheelchair, blanket or lap robe.
<input type="checkbox"/>	<input type="checkbox"/>	5. Get Help from experienced team member for this procedure.
<input type="checkbox"/>	<input type="checkbox"/>	6. Have assistant stand on opposite side of bed to assist with transfer.
<input type="checkbox"/>	<input type="checkbox"/>	7. Provide privacy. Pull curtain all around the bed.

General Procedure:

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	1. Position wheelchair at foot of bed.
<input type="checkbox"/>	<input type="checkbox"/>	2. Adjust bed to working level.
<input type="checkbox"/>	<input type="checkbox"/>	3. Make sure battery indicator does not indicate a low battery. (If so replace)
<input type="checkbox"/>	<input type="checkbox"/>	4. a.) Examine lift sling for any damage: tears, frays, or weak areas. b.) Make sure the correct size sling is to be applied. c.) If weighing resident, hang the sling on the hanger hooks, press the on button

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	5. Lower side rails.
<input type="checkbox"/>	<input type="checkbox"/>	6. Roll resident to one side and place sling, folded halfway under resident. Top of sling should be approximately at shoulder blade area. Bottom of sling should be approximately near the tail bone.
<input type="checkbox"/>	<input type="checkbox"/>	7. Roll resident to other side and pull rolled half of sling through. Smooth sling and check correct placement.
<input type="checkbox"/>	<input type="checkbox"/>	8. Roll resident onto center of sling. Pull padded legs on sling along each side and wrap inside thigh areas close to groin area. Crisscross straps through the holes before hooking to the lift.
<input type="checkbox"/>	<input type="checkbox"/>	9. Raise head of bed slightly
<input type="checkbox"/>	<input type="checkbox"/>	10. Position lift over bed and instruct assistant to help guide lift into proper position.
<input type="checkbox"/>	<input type="checkbox"/>	11. Check that base legs of lift are in wide position where applicable. If base position must remain in a narrow position, make sure the lift area between bed and chair are clear of any obstacles. Widen once clear from bed.
<input type="checkbox"/>	<input type="checkbox"/>	12. Attach straps on sling to lift with the strap "nesting" in the bottom of the hook. Remember, with the divided leg sling, the straps at the thigh area must be crisscrossed at the hanger before lifting.
<input type="checkbox"/>	<input type="checkbox"/>	13. Tell assistant to guide resident as you begin to lift them from the bed using "up" button on hand control or up button at handle grips. Once there is slight tension on the straps check to make sure all four loops are still nested in the bottom of the hooks before lifting.
<input type="checkbox"/>	<input type="checkbox"/>	14. Lift resident until buttocks have cleared the bed. Give reassurance to allay fears. If weighing, steady resident and look at the reading on the scale.
<input type="checkbox"/>	<input type="checkbox"/>	15. Tell assistant to steady the resident in lift and guide to position over wheelchair, trolley, tub lift, etc. CAUTION: Push and turn the lift from the handles only. Pushing on the top of the beam or on the resident could jeopardize the lift's stability.
<input type="checkbox"/>	<input type="checkbox"/>	16. Lock wheelchair brakes.
<input type="checkbox"/>	<input type="checkbox"/>	17. Instruct assistant to stand behind wheelchair and place hands in positioning straps on both sides of sling while the resident is coming down pull the handles back to position the resident in an upright position.

Yes

No

- | | | | |
|--------------------------|--------------------------|-----|--|
| <input type="checkbox"/> | <input type="checkbox"/> | 18. | Disconnect all straps from the hanger and remove sling by raising legs and pulling along sides. Ask resident to lean forward as you assist and support them to remove for back and hip area. |
| <input type="checkbox"/> | <input type="checkbox"/> | 19. | Move lift away and adjust for comfort. Apply safety belt if ordered. Position feet on foot pedals. |
| <input type="checkbox"/> | <input type="checkbox"/> | 20. | Cover lap with blanket and leave call light within reach. |
| <input type="checkbox"/> | <input type="checkbox"/> | 21. | Wash hands. report reaction and overall tolerance to team leader. |

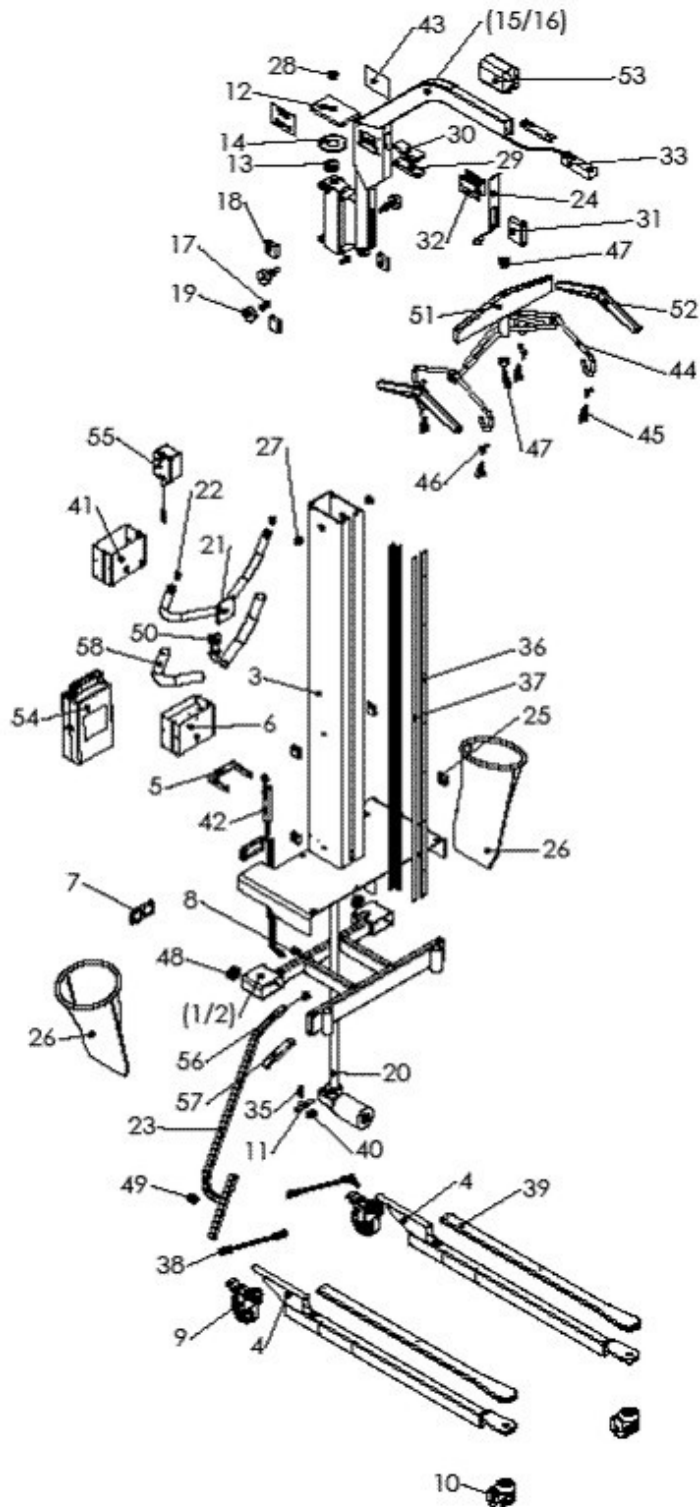
SAFE WORKING LOADS

Model 9700 Patient slings have been developed, tested and manufactured to have a safe working load of 1000 lbs. Due to the variety of resident shapes and dimensions, the appropriate size should be selected to accommodate specific patients. Care should be taken to ensure that the mechanical lift selected has the capacity to safely lift the resident.

The Sling Sizing Chart is designed only to suggest which resident will safely fit into the sling based on their size and weight. (Sling sizing chart is available on the ConvaQuip website www.convaquip.com/sling_chart.pdf)

NOTE: Lifts are designed to “transfer” a resident, not “transport” them.

Model 9700 EXPLODED VIEW



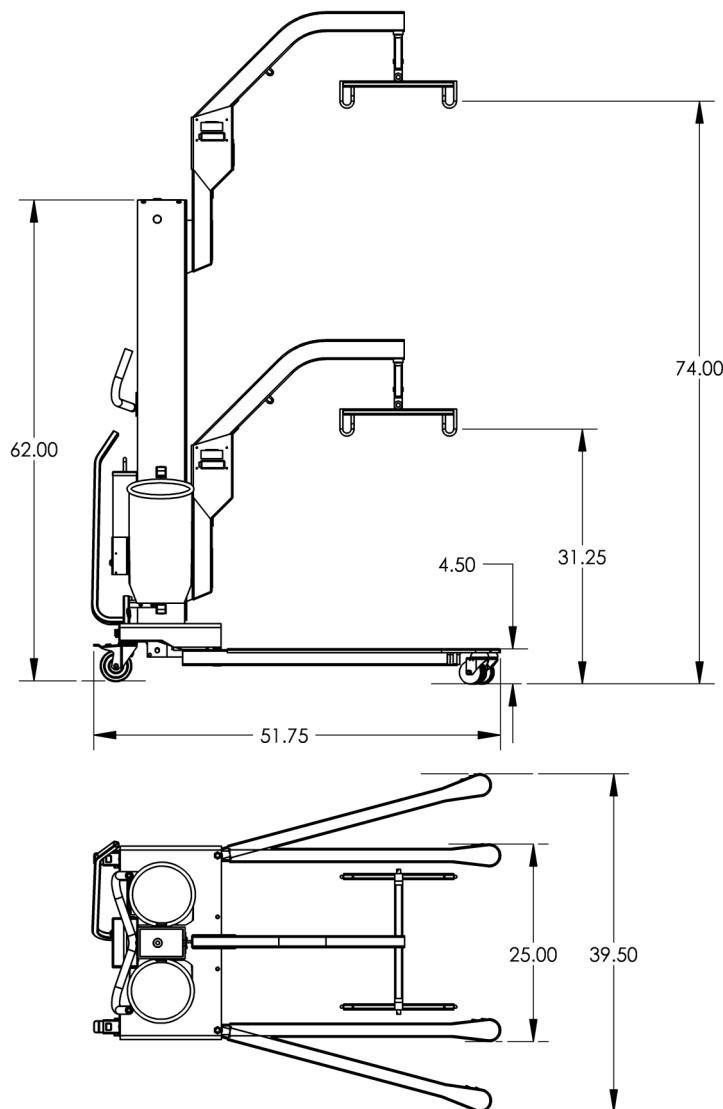
Model 9700 PARTS LIST

ITEM #	QTY	PART #	DESCRIPTION
1	1	HC45001A	HD Frame Assembly
2	1	PC45001A	PC Frame Assembly
3	1	PC45002A	Mast & Base Plate Assembly
4	2	PC4003A	Leg Assembly
5	1	PC45020	Notch Plate
6	1	10015-1	Power Box Assembly
7	2	2293	Rear Caster Mount Cap
8	1	PC45022	Safety Limit Switch
9	2	2196 / LT2046	PC 4" Rear Caster / HD 5" Rear Caster (with brake)
10	2	2003 / 2034	PC 3" Dual Caster / HD 4" Single Caster
11	1	PC45005A	Counter Balance Spring Mount Assembly
12	1	PC45026	Mast Cap
13	1	PC45027	Actuator Support Bearing
14	1	PC45023-1	Actuator Support Bearing Mount
15	1	PC45031NS	Non Scale Beam (Optional)
16	1	PC45006A	Scaled Beam Assembly (Optional)
17	4	2013	Cam Follower
18	4	PC45037	Carriage Slide Block
19	4	35237-1	Nylatron Roller
20	1	2039	Actuator Assembly
21	1	PC45008A	Handle Bar Assembly
22	2	2008	Red Push Button Switch
23	1	PC4509A-1	Leg Adjuster Handle Assembly
24	1	35506-2	Scale Cover (Optional)
25	4	2159	Saddle Bag Strap Retainer
26	2	35005-2	Saddle Bag
27	2	2125	Mast Plug
28	1	2279	Mast Cap Plug
29	1	PC45056	Lower Circuit Board Mount (Optional)

Model 9700 PARTS LIST

30	1	PC45057	Upper Circuit Board Mount (Optional)
31	1	2743	Scale Battery Box (Optional)
32	1	2791	Scale Circuit Board (Optional)
33	1	PC45060	Load Cell (Optional)
34	1	PC45031-1	Non Scale Adapter (Optional)
35	1	2087	Counter Balance Spring
36	2	35022-1	Mast Brush Holder
37	2	35021-1	Mast Brush
38	2	45023-1	Leg Adjuster Rod Assembly
39	2	PC45065-1	Leg Bumper
40	1	50178-1	Actuator Mount Bushing
41	1	10006-A2	Charger Assembly (includes 2026 transformer)
42	1	10047-2	Remote Hand Control
43	2	35506-2	Scale Face Plate
44	1	PL10004A	Hanger Assembly
45/46	1	70756	Strap Retainer & Spring Kit (set of 4)
47	2	2033	Hanger Thrust Bearing
48	2	2035	Leg Bearing
49	1	PP40053-1	Leg Adjuster Spring (Urethane)
50	1	PA62201-1	Remote Holder
51	1	PL44000	Hanger Cover Center
52	2	PL44001	Hanger End Cover
53	1	PL44002	Beam End Cover
54	1	10048-2	12V Battery Assembly (Cell-2001)
55	1	2026	Wall Transformer (White)
56	1	2272	Square End Cap
57	1	2006	Adjuster Handle Grip
58	2	2102	Foam Handle Grip

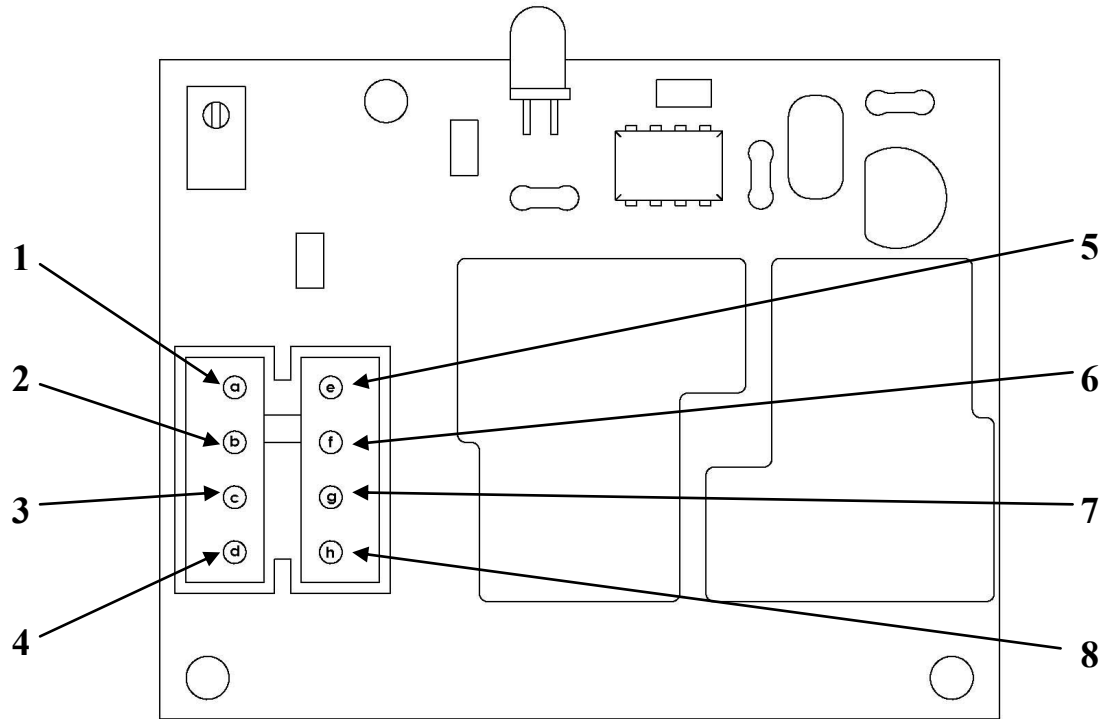
Model 9700 Spec. Sheet



- ◆ 450 LBS Lifting Capacity—PC450
- ◆ 700 LBS Lifting Capacity—HD450
(NOTE: Base on HD450 is 5" wider in both open and closed positions)
- ◆ 1000 LBS Lifting capacity (see manual for model HD1000)
- ◆ Non-Arcing Lift Beam
- ◆ Thrust Bearing Mounted Hanger
- ◆ Spring Retainer Clips
- ◆ Vinyl Safety Padding
- ◆ Vinyl Storage Bags
- ◆ Plastic Case Batteries with Cushion Grip Handles, 12VDC 12Amp/Hr Gel Cell
- ◆ 12VDC Ball-Screw Actuator with 1" diameter screw.
- ◆ Steel Hand Control
- ◆ Powder Coat Paint
- ◆ 3 Position Positive Lock Leg Adjuster
- ◆ Abuse-Resistant Scale, Mounted in Beam
- ◆ High Impact ABS Leg Covers
- ◆ Front Casters 3" Dual Swivel
- ◆ Rear Casters 4" Single Swivel w/Brake
- ◆ Safety Pressure Switch
- ◆ Manual Override

Model 9700 ~ MAINTENANCE MANUAL

CIRCUIT BOARD WIRING DIAGRAM



**1 - POSITIVE POWER -
LARGE RED**

**2 - POSITIVE TO SWITCH -
SMALL RED**

**3 - UP THUMB SWITCH &
REMOTE - 2 SMALL BLACK**

4 - MOTOR - LARGE RED

**5 - POSITIVE UP TO SWITCH -
SM GREEN**

**6 - NEGATIVE POWER -
LARGE WHITE**

**7 - SAFETY SWITCH -
1 SMALL PURPLE**

8 - MOTOR - LARGE BLACK

NOTE: 3 WHITE WIRES ARE ATTACHED TOGETHER WITH WIRE NUTS

Circuit board plug position relative to relays may vary on different boards.

Patient Lift
Model 9700
Model 9700S (W/SCALE)

PROBLEM	CAUSE	SOLUTION
LIFT		
1. Lift won't go up.	1. Bad lift control switch 2. Dead battery 3. Hand control is broken 4. Actuator not working 5. Battery is not making connection 6. Circuit Breaker popped	1. Remove and replace 2. Switch batteries 3. Send in hand control for repair or order new parts 4. Replace motor 5. Make sure battery pack is making contact with terminals in the receiver box; replace terminal contacts. 6. Push in circuit breaker
ACTUATOR		
1. Actuator makes noise	1. Not enough grease on actuator 2. Loud ticking noise when lift goes up and down 3. Faulty or worn out actuator	1. Put #2 grease on the full length of the actuator screw 2. Replace actuator nut 3. Replace actuator
BATTERY PACK		
1. Charge battery light stays on constantly 2. Batteries wearing out too quickly	1. Batteries are worn out or circuit board is bad 2. Batteries are not being charged when the RED charge battery light comes on	1. Order new batteries or order new circuit board 2. Leave battery on overnight; order new batteries; also make sure that you charge the batteries when the RED light comes on at the lift.
BATTERY CHARGER		
1. Battery charger lights do not come on when plugged in	1. Fuse is blown in the Transformer 2. Electrical outlet may not be operational	1. Order a new transformer 2. Use different outlet
2. Yellow light does not come on when battery is inserted	1. Charger bad – verify by using new battery 2. Battery dead	1. Order new charger 2. Order new battery
3. Red light stays on	1. Battery shorted or reversed leads 2. Charger needs to be reset 3. Battery is totally discharged	1. Check terminal contact springs for wear and replace 2. Take out battery, unplug transformer, but battery back in, plug in 3. Leave battery on charger for 24 hours to see if it will revive.

Patient Lift
Model 9700
Model 9700S (W/SCALE)
TROUBLESHOOTING and MAINTENANCE GUIDE

PROBLEM	CAUSE	SOLUTION
SCALE		
1. Inaccurate weights	1. Not zeroing out scale properly 2. "Lb" to "Kg" switch is in the wrong setting 3. Batteries in scale are low 4. Person in lift is moving excessively while taking weight 5. Scale is out of calibration	1. Zero scale according to instructions 2. Switch to desired setting 3. Replace the four "AA" batteries in scale 4. Make sure the patient is hanging evenly under the hanger and there is minimal movement 5. Calibrate the scale following the calibration instructions
2. Display is erratic	1. "AA" batteries in scale low. 2. Scale is out of calibration 3. Wire from load cell to circuit board is loose. 4. Circuit board is bad 5. Load cell is bad	1. Replace four "AA" batteries 2. Calibrate scale 3. Remove battery box and check connection 4. Replace circuit board 5. Replace load cell
3. Display is blank	1. Power to scale is not turned on 2. 4 AA batteries are bad 3. Scale is damaged	1. Turn scale on 2. Replace batteries 3. Call tech. support for instructions

MAINTENANCE SCHEDULE

Model 9700 LIFT

<u>Every Day</u>	<u>Every 3 Months</u>	<u>Periodic Testing</u>
<ul style="list-style-type: none"> • After each person you lift, you should check the sling, and wash if needed. Refer to the Sling laundering instructions • Check the condition of all slings. If you are in doubt of its operational ability to safely lift a person, then discard the sling and order a new sling • Check to see that strap retainer flapper and spring are working. • Check the lift; if the “RED” light is on , then charge the batteries • Keep your Model 9700 lift clean by wiping it down with a damp cloth. Use a mild detergent if needed <p>NOTE: Do not use a petroleum based solvent on paint, stickers, or plastic.</p>	<ul style="list-style-type: none"> • Lube pivot points on lift • Grease actuator with a good heavy duty #2 grease. (Note: DO NOT USE A SILICONE OR WD 40 TYPE LUBRICANT ON THE ACTUATOR) • Check leg adjuster stop for signs of wear • Check the movement of the lift; remove hair from the casters if needed • Check leg covers; if cracked replace with new • Check all vinyl covers; if worn, replace with new • Check all external fittings; tighten where needed <p>NOTE: At the back of this manual you will find a sample monthly inspection sheet and check off list. We encourage you to make copies for each lift and keep for your records.</p>	<ul style="list-style-type: none"> • General Lift Condition: A general visual inspection of the external parts and all functions can be carried out at any time to ensure no adverse damage has occurred. If any doubt, withdraw the equipment from use and call the Conva-Quip Service Department. <p><u>Other Maintenance</u></p> <ul style="list-style-type: none"> • Hanger bolt must be replaced every <u>three years</u>. • Actuator bearing (ball screw nut) must be replaced when grinding wear is heard but not longer than <u>5 years</u>.
(800) 637-8436		

**THIS IS A SUGGESTED MAINTENANCE SCHEDULE -
DEPENDING ON USE. THE EQUIPMENT MAY NEED
TO BE INSPECTED MORE FREQUENTLY.**

LIFT ITEMS TO INSPECT

1. HANGER: FULL BODY LIFT

- ☐ STRAP RETAINER SPRINGS
- ☐ ATTACHING HARDWARE
- ☐ BEARINGS
- ☐ ARM PIVOT
- ☐ PADDING
- ☐ HANGER BOLT REPLACED EVERY THREE YEARS

2. Y-BEAM: STAND LIFT

- ☐ STRAP RETAINER SPRINGS
- ☐ PADDING

3. BOLTS AND NUTS

- ☐ TORQUE BOLTS UNDER BEAM PADDING TO 55 POUNDS
- ☐ CHECK ALL BOLTS AND NUTS

4. LEG ADJ. HANDLE

- ☐ CONDITION (Check wear at pivot points.)
- ☐ ATTACHING HARDWARE
- ☐ SPRING

5. LEG ADJ. NOTCH PLATE

- ☐ WEAR (Are legs kept securely in locked position?)
- ☐ ATTACHING HARDWARE

6. LEG ADJ. STOP PIN/ ROD

- ☐ WEAR

7. LEG LINKAGE

- ☐ HARDWARE CONDITION

8. SLINGS (Reasons to discard)

- ☐ WORN
- ☐ FRAYED
- ☐ BLEACHED OUT

9. ACTUATOR:

- ☐ NOISE-UP/DOWN (Replace bearing after 5 years.)
- ☐ WITH AND W/O WEIGHT
- ☐ GREASE (should be greased at least semi-annually)

10. SCALE:

- ☐ ACCURACY (Calibration needed?)
- ☐ BATTERIES
- ☐ MOUNT

11. POWER BOX:

- ☐ PLASTIC GUIDES
- ☐ TERMINALS (Bent or worn)

12. LED:

- ☐ REMOTE JACK
- ☐ HOLDER OR LENS

13. THUMB SWITCHES

- ☐ LEFT AND RIGHT

14. REMOTE

- ☐ SWITCHES
- ☐ STRAIN RELIEF
- ☐ CORD (Replace if stretched out or cut.)

15. CASTERS

- ☐ BRAKES
- ☐ SWIVEL
- ☐ ROLL
- ☐ BEARINGS

16. LEG BUMPERS

- ☐ CRACKED OR MISSING

17. KNEE REST: (STAND LIFT)

- ☐ SAFETY STRAP
- ☐ PADDING
- ☐ PIVOT
- ☐ ADJUSTING PINS/KNOBS

18. CHARGER

- ☐ OPERATION
- ☐ LIGHTS
- ☐ TERMINALS (Bent or worn)

19. BATTERIES

- ☐ LOAD TEST
- ☐ AGE

20. GRIPS

21. LEGS

- ☐ PIVOT
- ☐ ATTACHING HARDWARE
- ☐ ALIGNMENT

22. WELDS

- ☐ VISUALLY INSPECT FOR CRACKS

23. PAINT

24. BEAM SAFETY SWITCH

- ☐ LIFT UP ON BEAM WHILE HOLDING DOWN BUTTON

25. DECALS

- ☐ CORRECT
- ☐ MISSING

26. OTHER:

FORM SHOULD BE COPIED AND USED ON EACH LIFT FOR ONE YEAR

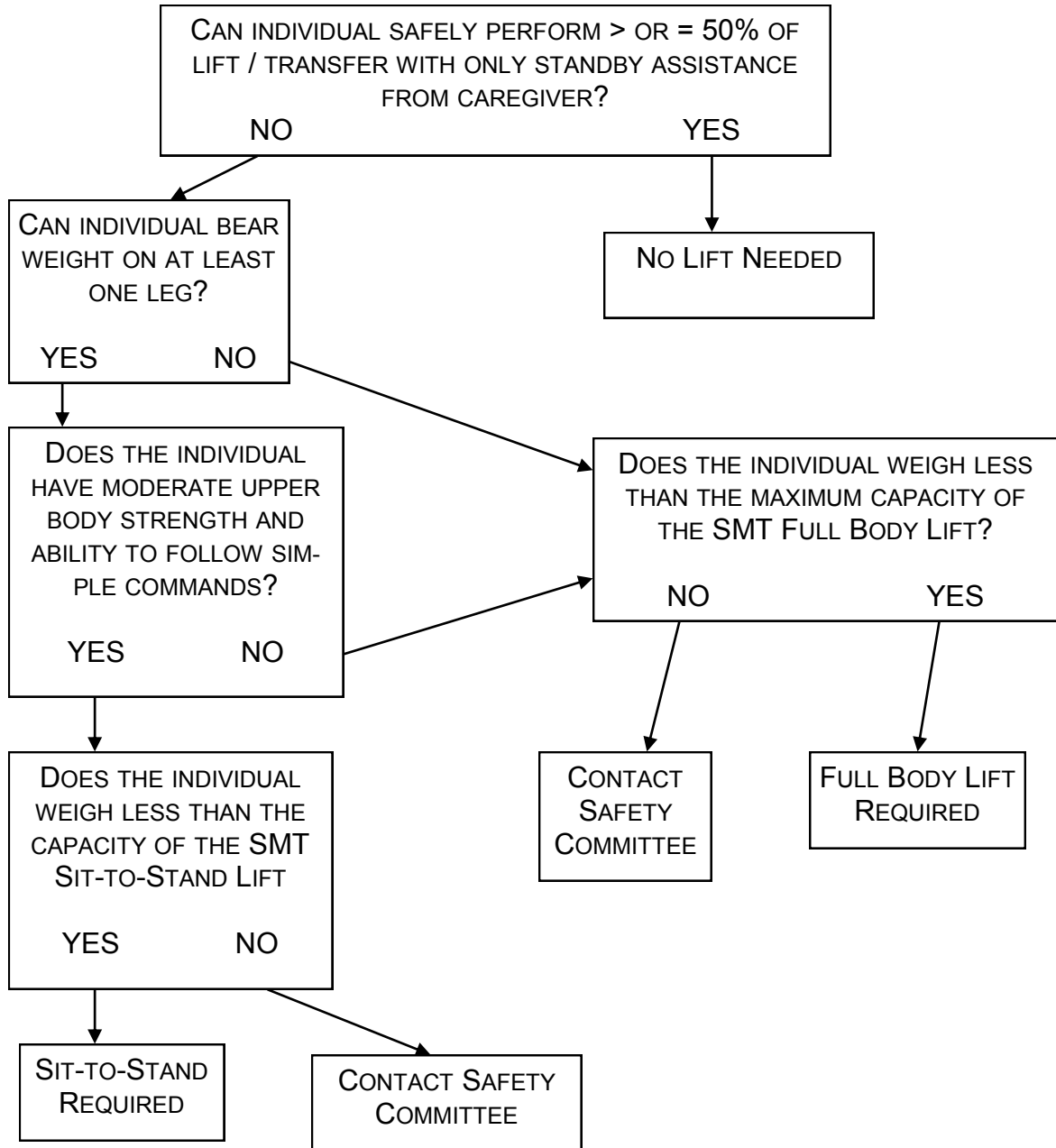
LIFT INSPECTION MUST BE DONE MONTHLY (INCLUDE SLINGS)	
MODEL	LIFT LOCATION
SERIAL #	

DATE	CHECKED BY	REPAIRS NEEDED	COMPLETED

1-3-07

(FORM MAY BE PHOTOCOPIED FOR INDIVIDUAL LIFTS)

LIFT / TRANSFER ASSESSMENT FORM



Patient Name _____ ID# _____ Room# _____

Assessment Completed by _____ Date _____

Lift(s) Required _____ Sling Size _____

Comments for PRN Use _____

Assessment Updated by _____ Date _____

_____ Date _____

_____ Date _____

Assessment Care Planned by _____ Date _____

WARRANTY

1 YEAR *LIMITED WARRANTY ON ALL PARTS ONLY UNDER CONDITIONS OF NORMAL AND INTENDED USE. *10 YEAR WARRANTY ON THE MAIN STRUCTURE OF THE LIFT. MISUSE, DAMAGE OR ALTERATION OF BODY LIFT OR ANY OF ITS PARTS, VOIDS THE WARRANTY. NO OTHER WARRANTIES WRITTEN, VERBAL, IMPLIED OR OTHER THAN LISTED HERE WILL BE HONORED.

***SHIPPING CHARGES NOT INCLUDED.**

CONVAQUIP IND., INC.

P.O. BOX 3417

ABILENE, TX 79604

CUSTOMER SERVICE:

PHONE: (325) 677-4177 or (800) 637-8436

FAX 325-677-7217

www.convaquip.com