

A modern bedroom interior featuring a bed with white linens and a patterned pillow. A wooden headboard and built-in wooden storage units are visible. A black Integralift hoist is suspended from the ceiling, positioned over the bed. A floor lamp with a white shade and a black base is also present. The room is well-lit, with a large window covered by vertical blinds and a large, curved, modern light fixture hanging from the ceiling.

# INTEGRALIFT HOIST SERVICE MANUAL

[www.innovacareconcepts.com](http://www.innovacareconcepts.com)



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### Explanation of symbols

CE



Warning



Read User manual



Product for indoor use



## 1. Safety

**IMPORTANT:** Integralift must only be operated by personnel with the proper training to do so. Read the User manual before operating Integralift and please keep the User manual at hand for everyone using Integralift. Don't leave the User suspended in the sling. This product must be installed by authorized personnel only.

### **Before first time use make sure that:**

- Installation is correctly done, tested and signed by authorized personnel.
- The Lifting bar is correctly mounted
- User manual is read and completely understood
- The emergency lowering switch is working

### **Before lifting always make sure that:**

- The Lifting bar is fastened correctly to the lift strap
- The lift strap is not twisted or worn.
- Make sure the lifter can be run up and down
- There are no visible damages on Integralift or the sling
- The sling is the correct type; adapted to both User and Lifting bar
- The sling is mounted correctly around the User
- The sling is fastened correctly to the Lifting bar, both before the lift strap is tensioned and before the User is lifted from the bed.



### **Max user weight**

Max user weight for Integralift 230 is

**230 kg**

## 2. Product description

***Integralift is a new Patient lifter made in Norway. Integralift is a non intrusive product and gives a safe and efficient workplace for the Assistant, solving the big dilemma “my workplace but your home”***

Integralift consists of a vertical cabinet and a top cabinet. The lift is integrated in the top cabinet and consists of two pivoting jibs. The Lifting bar, remote control and User manual have a dedicated place in the vertical cabinet.

Integralift is activated by opening the vertical cabinet and then moving the top cabinet over the User by pulling the hanging Lifting bar. The lifter is ready for use in one integrated movement.

In the user manual the person being lifted is called the User and the one giving assistance is called Assistant.

***Non intrusive*** Integralift creates a more attractive room for the User and gives a subtle expression. Integralift appears as an elegant designed furniture which encloses the user's bed and becomes a natural part of the room's interior.

- Cabinets can be special ordered in every colour to fit its environments
- Downlights. Personalize the top cabinet with downlights

***Safe & effective*** Integralift is truly innovative lift with many new features. The lifter is designed to ease the whole transfer process, from entering the room, to putting everything in place after the transfer. As a result Integralift is a highly efficient and safe lifter

- It transforms from a design furniture to a working lifter by a single hand movement
- Everything in place. The Lifting bar, sling and remote in dedicated places
- No charging routines. Always fully charged
- Flexible dropping points

***Easy installing*** Can be installed in almost every home or institution with the versatile Integralift structure system. This means easier projects for architects and builders.

### 3. Technical Data

Warranty	2 years
Lifecycle	10 years with service agreement (10.000 lifting cycles)
Maximum load	230 kg
Battery	24 V DC, 4,5 Ah, sealed lead battery, 40 lifting cycles
Battery charger	100-240 VAC, 50-60 Hz, max 1.300 mA
Lifting speed	50-70 mm/sec.
Lifting interval strap	1,8 m (vertically adjustable)
Diameter of action	3 m
Radius of action	1,5 m
Soft start and soft stop	
Emergency stop	Electrical
Emergency lowering	Electrical and mechanical
Operating forces hand Control	4,5 N
Sound level	69 dB
Weight	95 kg Int. op
Protection class	IP 20
Intermittent operation	Int. op 20/80, active operation max 1 min at SWL

Integralift is quality certified in accordance with:

- ISO 10535:2006(E)
- IEC 60601-1 Ed. 3.0 b:2005
- IEC 60601-1-2 Ed. 3.0 b:2007



Product for indoor use

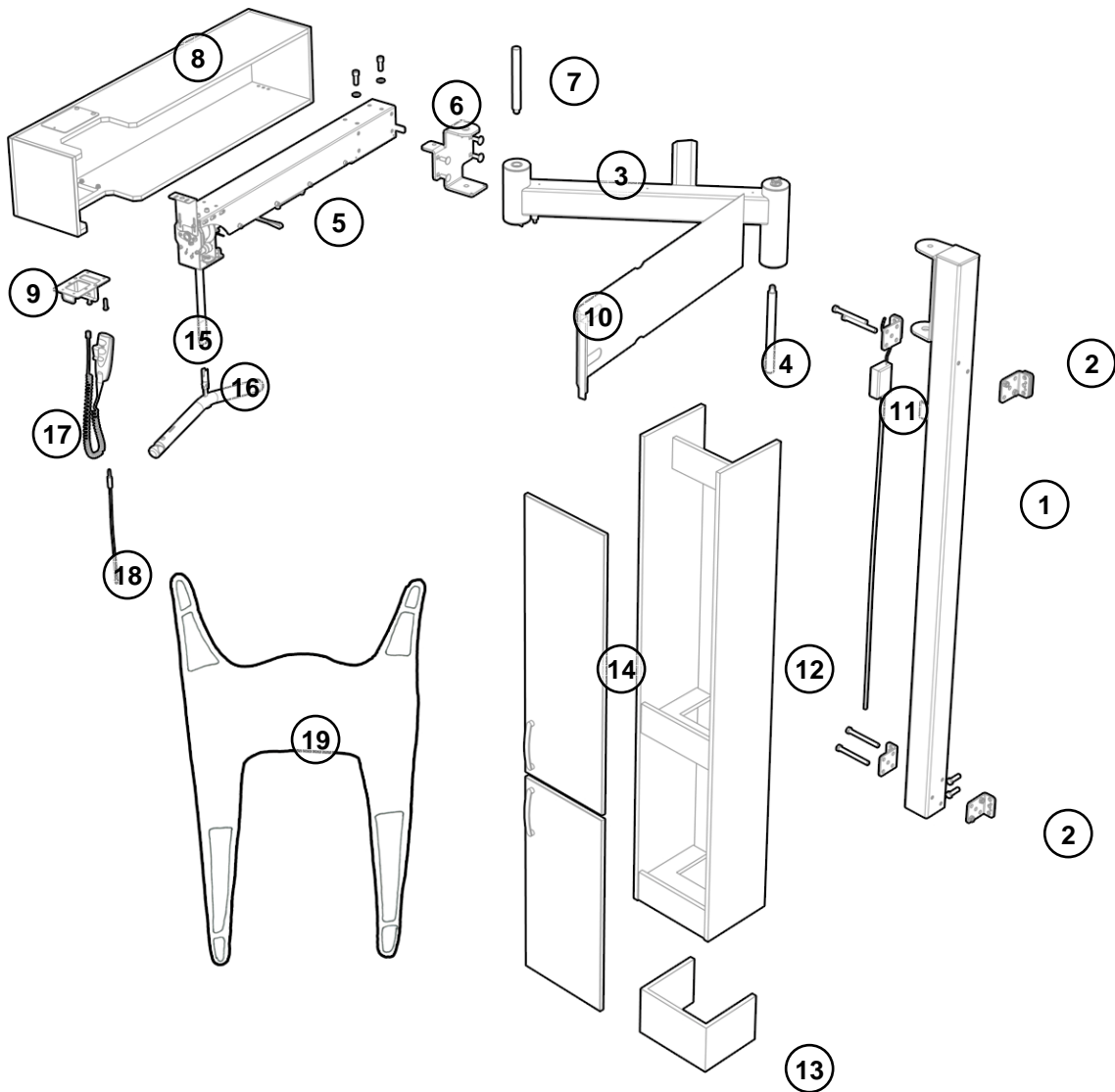


Type B, in accordance with the electrical shock protection class

Class I equipment in accordance with MDD 93/42/EEC

- Temperature: -10 grd C og+40grd C
- Relative humidity 10% til 93%
- Lightning level /ambient luminance minimum 300 lux

## 4. Main components



1. Vertical structure
2. Brackets for structure
3. Back jib
4. Shaft for back jib
5. Front jib with engine
6. Bracket for front jib
7. Shaft for front jib

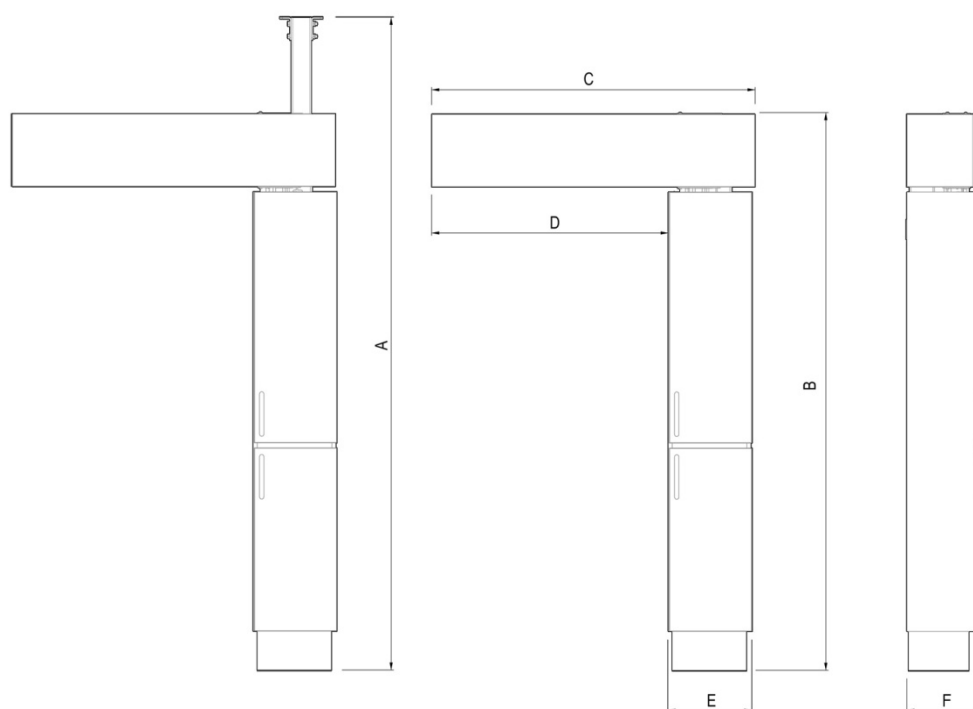
8. Top Cabinet
9. Handle
10. Rear cover
11. Charger
12. Vertical cabinet
13. Cabinet base
14. Cabinet front doors

15. Lifting strap
16. Sling bar
17. Remote control
18. Emergency stop
19. Sling
20. Drum house

## 5. Maintenance parts

Part.no	Pos nr	Name	Photo
	15	Lift strap	
	16	Sling bar	
	17	Remote control	
	11	Charger	
		Connector cable	
	20	Drum house	
		Motor module	
		Control board	
		Interface card	
		Battery set: 2x12V 5,4Ah	
		Corner protectors	

## 6. Dimensions



Model	Capacity	A	B	C	D	E	F
WM-230	230 kg	220	225	130	95	35	31
FC-230	230 kg	230-330		130	95	35	31
IW-230	230 kg	230-500		130	95	35	31

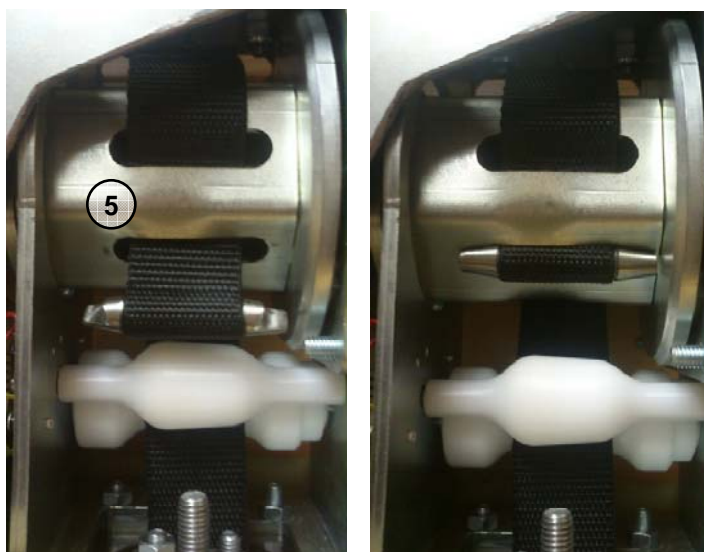
All measurements (A-F) in centimeters.



## 7. Replacing lifting strap:

If the lifting strap is visibly worn it should be replaced. It is nevertheless recommended to change the lifting strap after 4000 lifting cycles or 4 years usage.

1. Remove the rear cover
2. Drive lifting strap out until the fastening part of the drum is serviceable.
3. Notice which way the strap is fastened. Cut and throw away the used lifting strap.
4. Force the back end of the new strap up in between the two white plastic rollers, sown overlap facing to the left, seen from the end of the front jib..
5. Slide the back end of the strap into the two slots of the drum, insert strap bolt, and tighten. Please notice:
  - a. Roll lifting strap clockwise (seen from the end of the front jib)
  - b. The double overlap of the lifting strap (registers end stop) must face towards drum.
6. Attach the liftstrap to the sling bar. (see next page)
7. Test Integralift functionality and mount rear cover.
8. Register the change of lifting strap in the log.



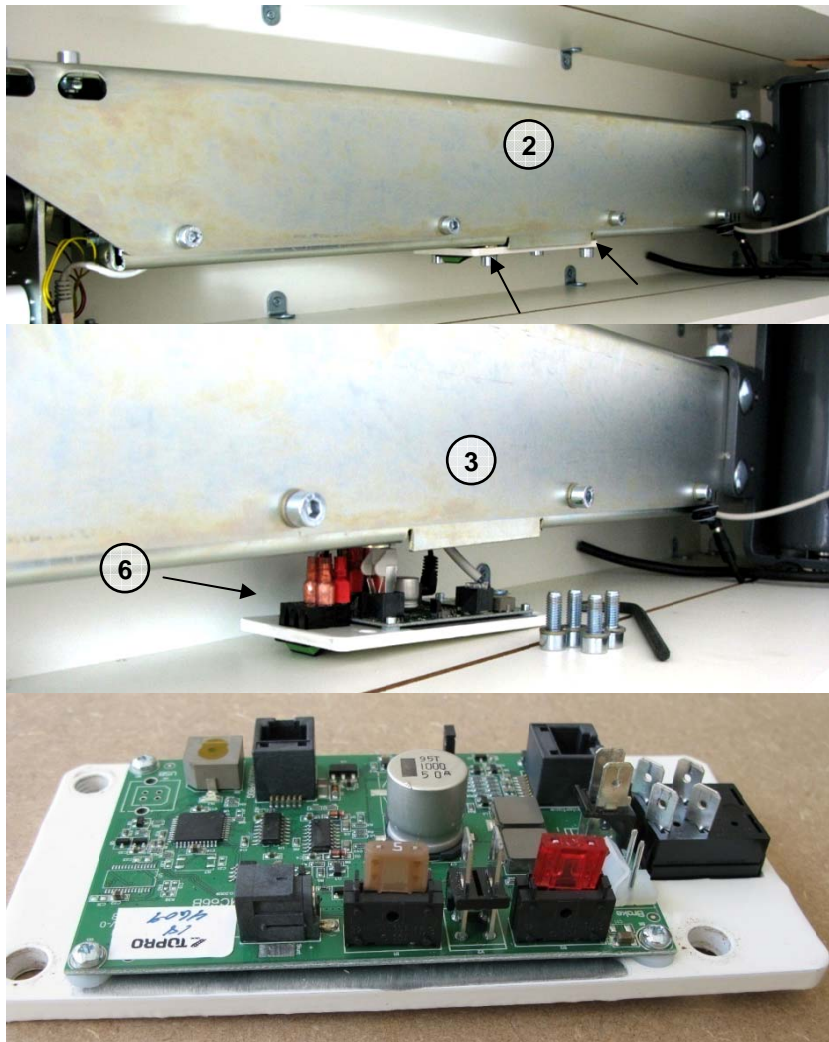
## 8. Replacing the sling bar (Starlock solution):

1. Pry off the Starlock fastener, and throw away (after they are pried off, strength is greatly reduced)
2. Unscrew the screw and place the new sling bar in the lifting strap.
3. Screw in the bolt, press attach new Starlock fastener to end.
4. Register the change of sling bar / (or lift strap) in the log.



## Replacing Control board

1. Remove the rear cover
2. Unscrew the 4 screws that fixates the the control board to the front jib.
3. Pull control board down gently and remove all cables.
4. Place new control board and attach all cables.
  - a. Be careful with polarity, in conjunction with battery and motor.
  - b. The control board should beep 5 times and the green light blink when power is supplied/ or battery is connected.
5. Attach the control board with the same four screws.
6. Inspect that motor switch under the control board is activated (green side visible)
7. Test Integralift functionality and close rear cover.
8. Register the change of control board in the log.

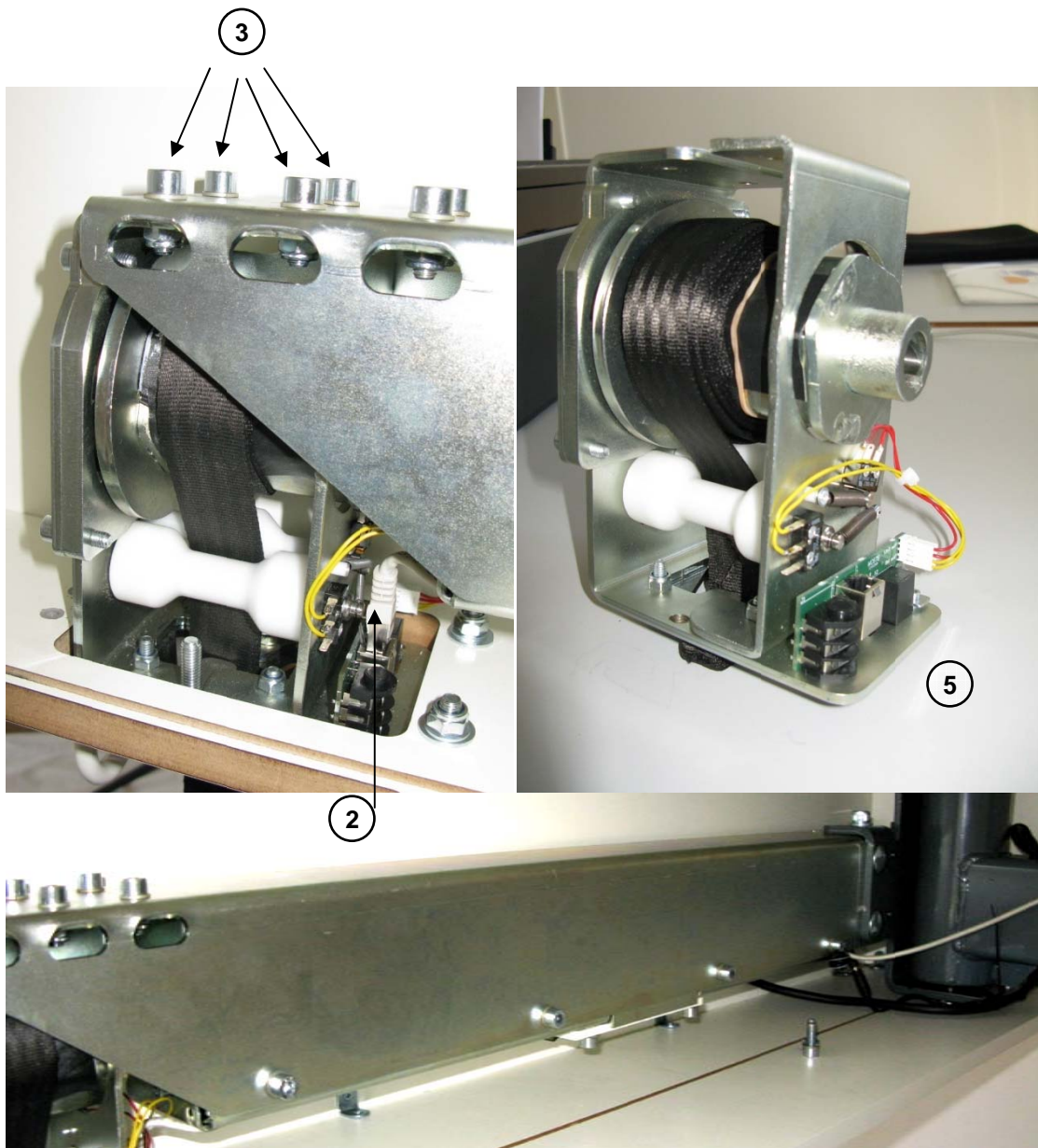


## 9. Replacing Fuses on Control Board or Battery Cable

1. On Board: Use original fuses from Integra: Littelfuse Miniblade 5A (Brown), 10A (Red)
2. On Cable: Use original fuses from Integra: Littelfuse Bladefuse 10A (Red)
3. If power supply cord is broken, order new from Integra and change cord into charger.

## 10. Replacing Drum house:

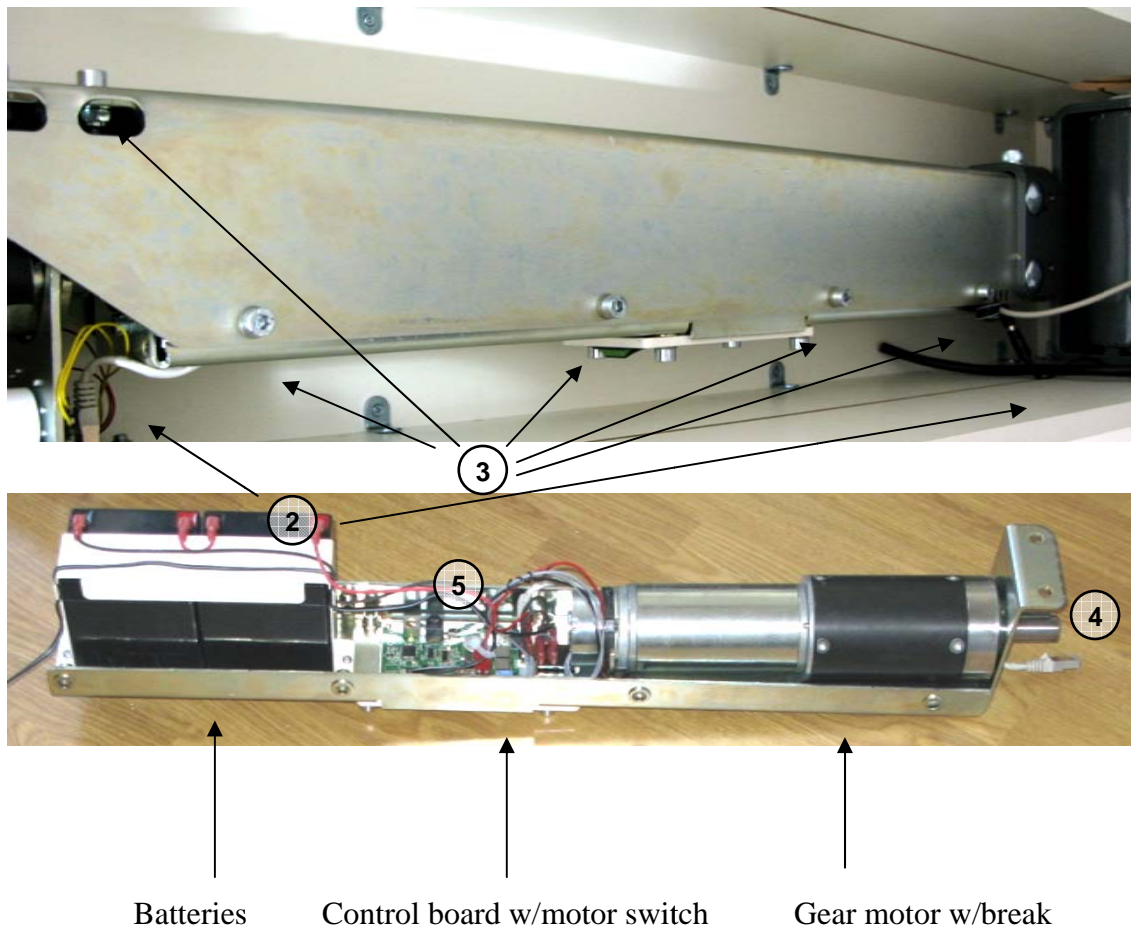
1. Remove both rear cover and the top cabinet.  
Tip: With a vertical elevator-support the top cabinet can be removed by one person.
2. Remove the connector cable from the connector card.
3. Unscrew the four holding screws/locknuts pictured in top picture, left.
4. Gently pull the drum and drum house from the motor shaft.
5. Attach the new drum house, attach the connector cable.
6. Re-position top cabinet and rear cover.
7. Test Integralift functionality.
8. Register the change of drum house in the log.





## 11. Replacing Motor module:

9. Remove top cabinet and rear cover.  
Tip: With a vertical elevator-support the top cabinet can be removed by one person.
1. Remove both the connector cable and the charger cable.
2. Unscrew the motor module by removing the 4 screws on each side of the front jib and the 2 screws with nuts on top.
3. Gently pull the motor house backwards and off the drum.
4. Insert the new motor module and re-attach the removed cables.  
NB: Make sure no wires get trapped.
5. Re-position rear cover and top cabinet.
6. Test Integralift functionality.
7. Register the change of motor module in the log.



NB: If the motor, controller card or batteries have errors, these parts are to be sent to Integra for inspection.

## 12. Troubleshooting:

Marked in blue is the Troubleshooting steps that may be done by the user when he or she calls the service partner and communicates with a duly trained and certified service person.

### Integralift does not work

1. Pull out and re-insert the emergency stop plug:
  - a. Does it beep 3 or 5 times when pulled out and twice at re-insertion? If yes:
    - i. Check connections in the following order:
      1. Is the emergency lowering functioning?
      2. Check if the remote control is connected correctly
      3. Motor switch activated (green side visible)?
    - ii. Test with new remote control
    - iii. Test with new interface card
    - iv. If Integralift is still not working, contact Integra or your local supplier
  - b. If no (Does not beep):
    - i. Check connections in the following order:
      1. Is the charger supplied with power? (green, yellow or red light?)
      2. Motor switch activated?
      3. Connector cable connected with interface card?
      4. All cables connected with controller card?
    - ii. Test with new connector cable
    - iii. If Control board does not blink green:
      1. Control board: 10 A red fuse broken? Replace the fuse.  
This will be an effect of overload or control board error.
      2. Control board: 5 A brown fuse broken? Replace the fuse.  
Wrongful polarization on charger or control board error.
      3. Still no green blinking?
        - a. Replace control board.
2. If Integralift is still not working, contact Integra or your local supplier.

### Integralift lifts up, but will not move downwards.

1. Gently pull the lift strap while driving the lifter downwards.
2. Check the remote control being correctly attached.
3. Pull out and re-insert the emergency stop plug (see also: problem “Integralift does not work”, above)
4. Control that the miniswitches (registering belt tightener and end stop) is correctly connected to the interface card.
5. If Integralift is still not working; contact Integra or your local retailer.

**Integralift beeps while lifting patient:**

1. Check that the patients weight does not exceed the safe working load (SWL)
2. Check the charger being connected and displaying green or yellow light.
3. Is something clogging the lifting strap or driving mechanism?
4. Insert programming cable in controller card:
  - a. Check what triggered last alarm.
  - b. Check that the power limit in the controller card is set at 85 (equivalent of 8,5 Amper)
  - c. Check that the voltage limit is set at 20 (equivalent of 20V)
5. If Integralift is still not working; contact Integra or your local retailer.

**Integralift beeps continuously:**

Voltage from batteries too low.

1. Check that the charger is properly connected, from wall outlet to circuit board.
2. Check that charger light changes when lifting up and down with load.
3. Check fuses on circuit board (UK: Check fuse in outlet/plug)
4. If Integralift still beeps, contact Integra or your local supplier.

**Integralift emitting noise/dissonance:**

1. Is the noise coming from the structure or the walls or ceiling?
  - a. Check that fastening to room features is done correctly and all screws sufficiently tightened.
  - b. Check that noise disappears during usage, if not; contact Integra or your local retailer.
2. Is the noise coming from bearings between the jibs and/or structure?
  - a. Identify the source of the noise and add a small amount of teflon lubricant between steelbracket and the bolt (not at plastics)
  - b. Check that noise disappears during usage, if not; contact Integra or your local retailer.
3. Is the noise coming from drum, lifting strap, or motor bracket?
  - a. Identify the source of the noise and add a small amount of teflon lubricant between the metal parts.
  - b. Perform a visual inspection of lifting strap with drum and attachments, and make sure everything is working accordingly.
  - c. Check that noise disappears during usage, if not; contact Integra or your local retailer.

In the event of other errors; contact Integra or your local supplier.

### 13. End control, installation – Integralift

Integralift		Customer	
Model		Name	
Serial number		Address	
Production year		Zip number	
Installed date		Placement (room)	

Control	Status	Comment
<b>Fastening</b>		
Comments about room/house		
Specify loadbearing structure & quality		
Distance from floor to ceiling		
Specify chosen fastening, wall/ceiling		
Screws used		
<b>Structure</b>		
Vertical structure		
Jibs		
Bracketts		
<b>Driving unit and lifter</b>		
Motor		
Band		
Sling bar		
Remote control		
<b>Electronics</b>		
Cables and connectors		
Battery and charger		
Circuit card		
Emergency stop		
Emergency lowering		
<b>Documentation</b>		
Product branding with SWL		
User manual		

Status: X = OK, 1 = Observation needed, 2 = Immediate repairs needed, 3 = Withdraw from usage

Weight Tested with 1,0 Max patient  
weight for 20minutes

Date:

Control performed by: Tel nr:

www.integracp.no



Service Partner:

Supplier:

Producer:  
Integra Care Products AS  
Darres gate 22B  
0175 Oslo - Norway  
Tel nr: +47 21 98 26 84/  
Manager:+47 90 19 87 99  
E-mail: [post@integralift.net](mailto:post@integralift.net)  
[www.integralift.net](http://www.integralift.net)