



**SERVICE MANUAL
FOR HANDI-LIFT 9**

Table of contents

1	Introduction	2
1.1	In the company:	2
1.2	At the customer's house:	2
2	The Service:	3
2.1	In general:	3
2.2	The examination	3
2.3	The main examination	4
2.4	- Mechanical parts:	4
2.5	- Safety equipment:	5
2.6	- Controls:	5
2.7	- Energy supply/electrical equipment:	5
2.8	Service record	5

1 Introduction

According to Danish rules the lift should be examined 1-12 times per year depending on where it is installed (public/private – indoor/outdoor). The examinations are divided into 1 main examination and 0-11 ordinary examinations. If there are no similar rules in your country, we recommend that you make an annual main examination of the lift.

1.1 In the company:

1. Check the service cards on the lifts, which are to be examined, and check if there are any remarks from last time and if you are to bring something special concerning tools and spare parts.
2. Contact the customer and make an arrangement to examine the lift, so you won't drive in vain.

1.2 At the customer's house:

1. Introduce yourself, show some ID if the customer asks you to. Ask the customer the following questions:
 - has the customer noticed anything since the last examination?
 - does the customer understand the operation manual?
 - could anything be better?
 - does the customer have any wishes?

Please aim at establishing a good social contact with the customer.

2 The Service:

2.1 In general:

1. The stair lifts shall be kept in secure condition by examination and maintenance and be in agreement with the construction demands as long as it is being used.
2. In order to make the examination in a satisfactory way and to use the lift safely it has to be cleaned in a necessary extent.
3. At the examination you have to take the necessary safety precautions. Repair and all examination have to take place when the lift is not running normally and may not take place until:
 - a) All dangerous movements are brought to a standstill
 - b) An unintended, wrong or unexpected start is prevented
 - c) A disengagement of a dangerous movement due to accumulated energy is prevented
4. If you find defects, damages, wear or something else at the examination please make the necessary arrangements before the lift is used again.
5. When examining the lift please pay special attention to the lift's carrying parts and possible locking devices.
6. When examining please check that all signs and labelling are intact and readable.

2.2 The examination

Please check the following:

- test drive the lift
- test all safety features
- test and check the controls
- check all screw joints, switches, buttons and rack for defects
- if there is an extraneous matter, please remove it

- grease the rack if necessary
- make a sound test of all the motors in order to check if the sound level is normal

2.3 The main examination

It is recommended that you perform a main examination once a year.

The main examination shall according to Danish rules be made by the supplier or another expert. After the Danish rules, an expert means that the party concerned has:

1. Knowledge of the lift's technical construction and function
2. The necessary education and training in service and maintenance of the lift
3. Knowledge of the lift's operation manual
4. Knowledge of the Danish rule's safety demands for the lift, especially concerning notification, test load and service record
5. Knowledge of other authorities demands to the lift, e.g., the fire department
6. Knowledge of possible demands for authorization/certification for special assignments e.g., power installation.

It is the supplier's opinion that it is necessary for another expert to have regular service on at least 5 lifts annually in order to form sufficient experience grounding.

At the main examination should the following parts be checked:

2.4 - Mechanical parts:

All screw joints and linkages are examined for breaks and wear.

Check motors, including if the barrier arm motor control and the platform motor control are functioning satisfactory. Check the main motor's tractive effort is there unnatural noise from the motor. Check the drive unit for working operation and wear. Check if the over speed governor is without load and that it is intact and not worn. Check the fastening of the rack.

2.5 - Safety equipment:

Check if the following is functioning correctly: up-flap shall when driving up be able to stop the lift. Down-flap and pressure sensitive plate under platform should when driving down be able to stop the lift. Current limiter should stop barrier arms and platform if there is resistance. The movements of the lift should stop if the control button is released. Finally check that the load cell is working properly.

2.6 - Controls:

Check if buttons/joystick and control lamps are functioning correctly.

2.7 - Energy supply/electrical equipment:

Check cable and cable chain for damages or breaks. Check the rest of the electrical equipment with regards to function and possible damages.

If you find any defects or broken parts, please repair/replace them and fill out the customers and your own service record.

Furthermore, you have to examine and test the lifts functions; especially you will have to see to it that:

1. the adjustment of the safety equipment is correct
2. the adjustment is made by people who are specially instructed in this
3. all safety parts are checked
4. all carrying parts are in good condition
5. all useless parts are replaced, and that the supplier's guideline are followed

2.8 Service record

Please enter in the customers service record the date of the visit and your signature. If you have replaced any parts, please make a note in the record.

The visit should also be entered in the company's service record. Here you put down the date, your signature and which parts you have replaced and if you have to change any parts next time.

If you have any questions, please contact Cama Lift on phone no. +0045 98 43 01 22.