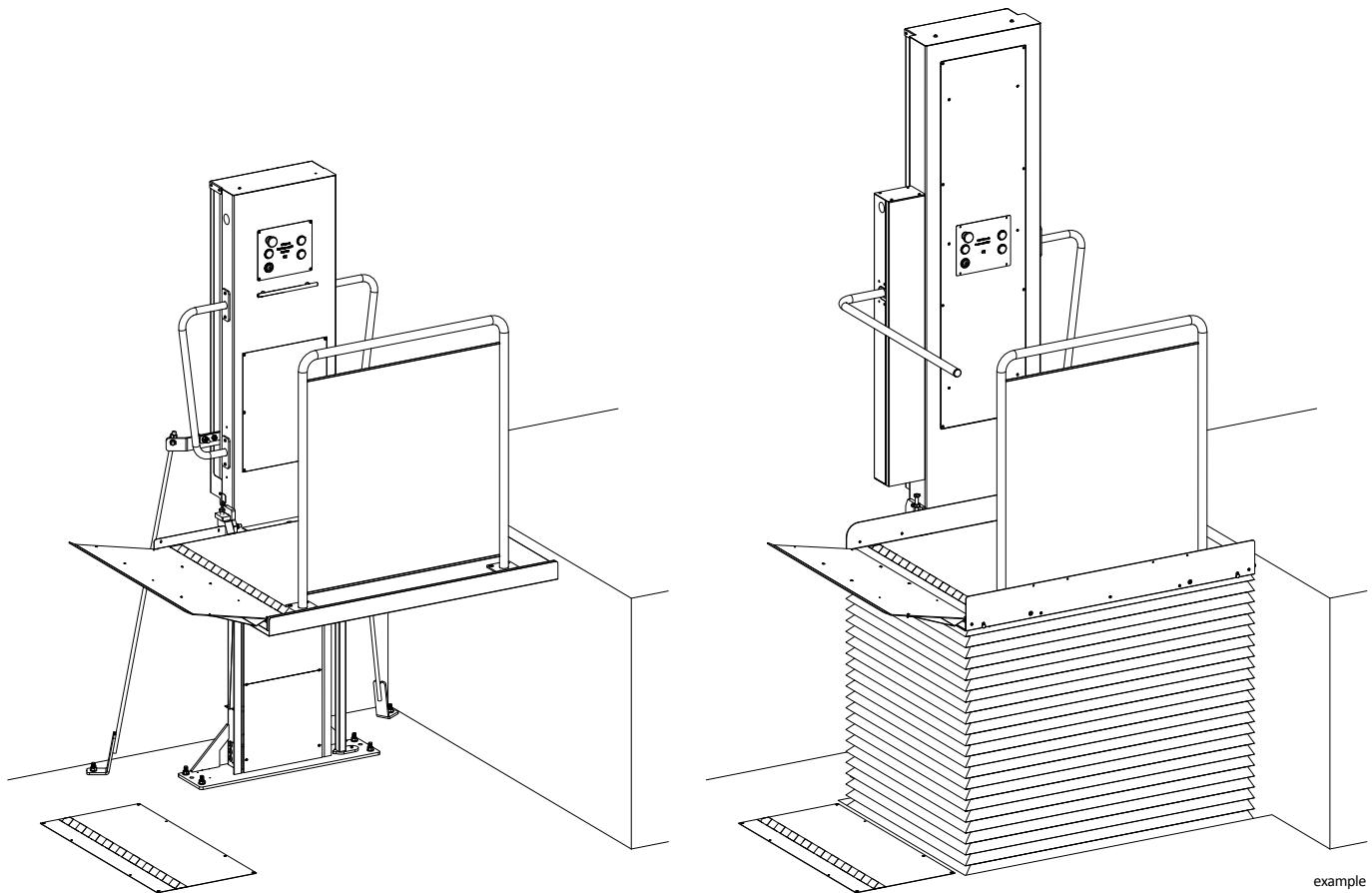


domoSTEP

Hydraulic platform for small height differences



MAINTENANCE INSTRUCTIONS



As far as the following items are concerned : general instructions, safety instructions, responsibility and warranty, material receiving and storage on site, packing, waste disposal, cleaning and maintenance, please consult the manual "**SAFETY AND MATERIAL HANDLING ON SITE**".

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1	General update	18.09.2017
Rev.	Descrizione	Data

0 MANUAL READING GUIDE

0.1 CHAPTER SYMBOLS

	General information		Positioning		domoFLEX100 model
	Box content		Installation		domoFLEX160 model
	Preliminary advice		Commissioning		
	Read carefully		Electrical Wiring		

0.2 IMPORTANT ITEMS

	General safety warning		Important notice		Read carefully
	Risk of electric shock		Risk of bodily injury (e.g. due to sharp angles or protruding parts)		Risk of damage to mechanical parts (e.g. during incorrect installation)
	Fire hazard		Hanging load		Risk of skin injury
	Risk of falling		No entry		Materials to be protected against bad weather conditions

0.3 INDIVIDUAL SAFETY DEVICES

	Hard hat		Ear protection		Safety harness and other accessories
	Overalls		Safety steel-toe boots with ankle protection		Safety glasses
	Dust masks		Work gloves Rubber gloves		First aid kit

The words **WARNING** and **CAUTION** are used to highlight the following risks of injury and damage:

WARNING	Serious danger to safety
CAUTION	Risk of damage to materials which may lead to safety risks



1 TEST PROCEDURE

The platform lift has been designed to reduce the necessity of periodical maintenance.

The safety components have been certified in accordance with the current regulations. The platform lift has been certified in accordance with Machine Directive 2006/42/CE, to guarantee the maximum reliability of the products and the complete user's safety. The actual maintenance requirements comprise a periodical check by an authorized Body, to be effected every two years. We recommend that maintenance operations be effected to ensure the correct functioning of the lift.

The owner of the lift is invited to plan and strictly follow the maintenance operation schedule. Should any irregularity or trouble occur, the maintenance personnel must be notified immediately.



As far as the following items are concerned : general instructions, safety instructions, responsibility and warranty, material receiving and storage on site, packing, waste disposal, cleaning and maintenance, please consult the manual "**SAFETY AND MATERIAL HANDLING ON SITE**".

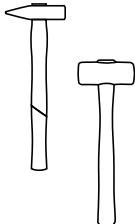
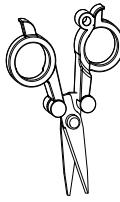
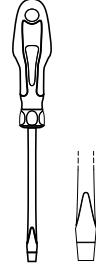
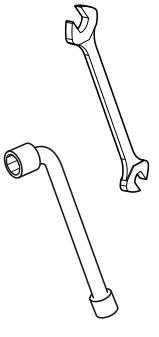
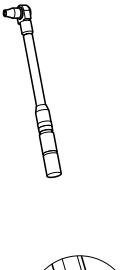
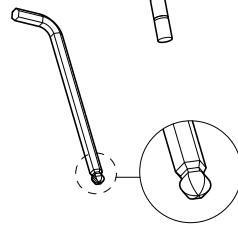
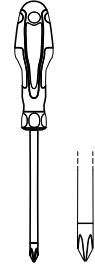
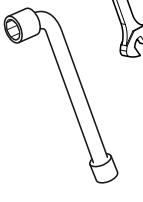
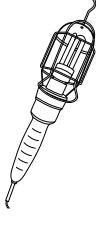
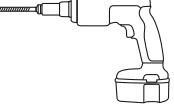
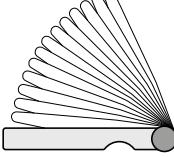
1.1 GENERAL INFORMATION

- A. The stops are indicated as 0, 1; "0" meaning the lowest floor: the COP numbering may be different according to the customer's needs (example -1, 0, etc.);
- B. The other reference documents are as follows:
 - Project drawings referred to the lift;
 - Electrical schemes and instructions;
 - Hydraulic scheme.
- C. For threaded fixings coupling, please respect the below table.

SCREW	COUPLE MAX (Nm)	COUPLE MIN (Nm)
M3	1.2	1.0
M4	2.6	2.1
M5	5.1	4.1
M6	9.0	7.0
M8	21.0	17.0
M10	42.0	34.0
M12	71.0	57.0
M16	175.0	145.0

1.2 AINTENANCE TOOLS

The lift maintenance operations must be carried out by qualified personnel, authorized in accordance with the current legislation.

Hammer		Tape measure		Insulation tape		Scissors for electricians	
Rubber hammer							
Flat-blade screwdriver		Spanner 5 ÷ 27 mm 2 each size		Ratcheting ring spanner 13 to 19 mm		Allen key with ball end 2,5 to 8 mm	
Phillips screwdriver		Socket wrench 5 to 27 mm					
Adjustable pliers		Portable lamp		Platform or foldable safety ladder, 5 steps		Digital Multimeter	
Drill		for Brickwork 6 to 22 mm Metal 2 to 13 mm		Chronometer		Feeler gauge	

1.3 OUT OF SERVICE MODE

The following instructions describe the out of service procedure.

1. Verify that the mat is empty;
2. Drive the mat to down floor;
3. Wait for the busy signal to be off;
4. Open all the circuits of the power supply board;
5. Hang the out of service indication to the mat and to the potential floor control station.

On completion of the above listed operations, the lift can be considered out of service, and cannot be used.

1.4 MAINTENANCE OPERATIONS

La periodicità e le modalità esecutive delle operazioni di manutenzione a carico della ditta manutentrice sono descritte nella tabella. The frequency and the description of the operations are stated in the table, paragraph 1.5. The recommended frequency is referred to the normal use of the lift, which means 1200 runs per month; a more frequent use requires a more frequent maintenance. The commissioning operations are listed in the Installation Manual; these are to be repeated, should there be a time gap of more than six months between the installation and the commissioning dates, or should the service be suspended for more than six months. Should any element need to be replaced, we recommend using original components from the supplier LIFTINGITALIA S.r.l.



The operations described below are to be effected by qualified personnel only.

The following maintenance areas have been identified:

1. IN FRONT OF THE CONTROL BOARD;
2. IN THE PIT;
3. ON THE MAT.

The following table shows the maintenance areas in connection with paragraph 1.4.

<i>Maintenance area</i>	<i>N. of operation</i>
In front of the control board	2, 8, 9, 10, 11, 12, 13, 14
In the pit	5, 6, 7, 10, 14
On the mat	1, 2, 3, 4, 13

Make sure that all the safety measures are taken, before starting to work in the maintenance areas.

1.4.1 IN FRONT OF THE CONTROL BOARD



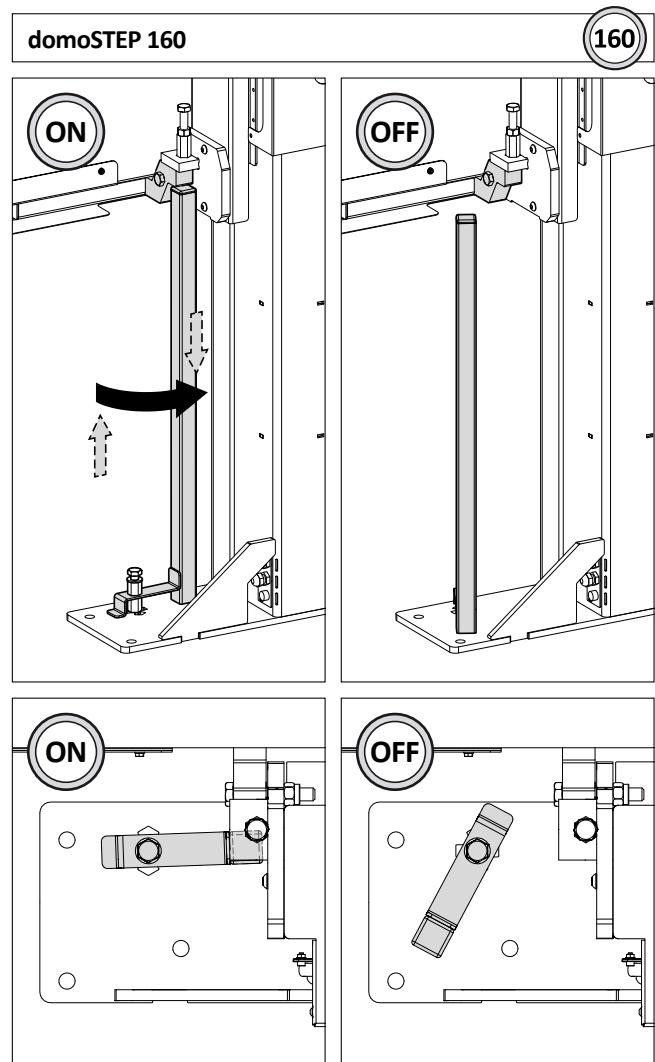
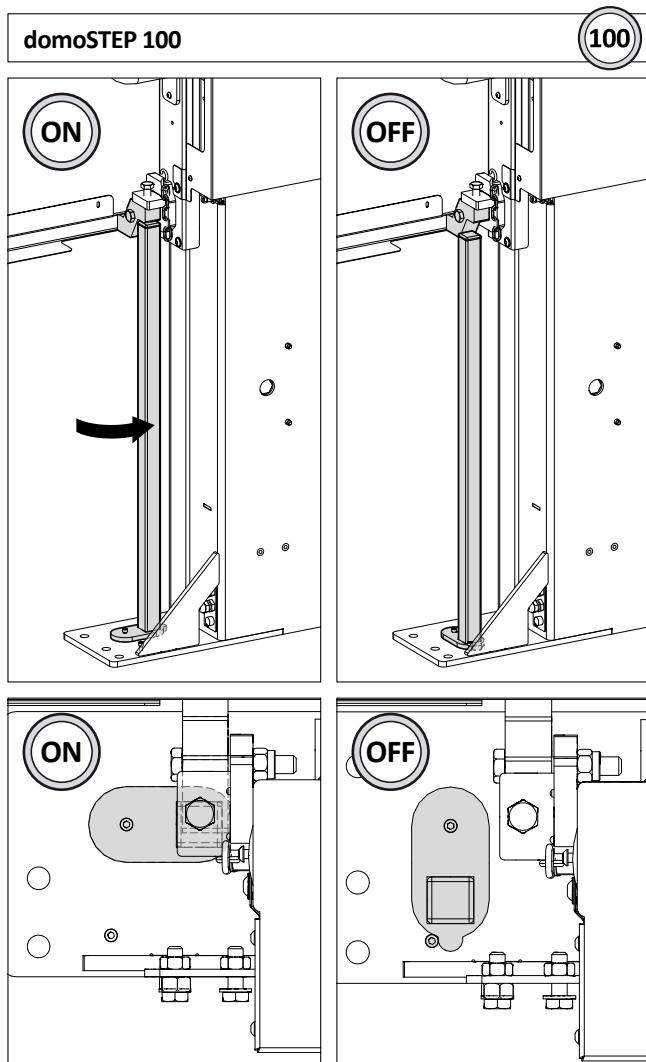
Several operations are to be effected in front of the control board under power.

- disable power by means opening the main switch;
- close the main switch only if required, paying attention to the safety rules to be followed in presence of components under power.

1.4.2 IN THE PIT

As clearly stated in the adhesive plate, the "Safe Pit" device must be enabled before accessing the pit, by means of the following sequence of operations:

- Drive the loading bed to the upper floor;
- Put the manual pit protection device in the working position;
- Now you can proceed with the maintenance in pit.



- Once work in the pit has been completed, release the pit protection device.

1.4.3 ON THE MAT

While working on the mat:

- Drive the mat to down floor.

1.5 MAINTENANCE OPERATIONS : FREQUENCY AND DESCRIPTION

OPERATION	RECOMMENDED FREQUENCY			
	1st run	every 6 months	every 1/2 year(s)	every 5/10 years
1. SYSTEM MOVEMENT Check the regular movement of the system stop by given the order. A. From the mat you shall try the system dispatch to all stops, both for up and down, checking the regular automatic stop, with a maximum stop gap about 10 mm, above and under the floor; B. From all floors you shall try the mat call, checking the regular automatic stop and the proper functioning of busy and here indicator; C. Check that, without turning the licensing key, the system doesn't answer to related control station commands.	•	•		
2. BATTERY CIRCUIT Check that the battery circuit is in good working order with regard to the alarm and lower level descent control. A. Disconnect the power supply; B. Bring the platform to the upper stop; C. Press the alarm button: the siren must sound; D. Reactivate the system. If you need to change the batteries (located inside the machine) please proceed as it follows. E. Disconnect the power supply; F. Disconnect all batteries connectors, paying attention not to cause any short circuit; G. Replace the batteries and connect the related connectors; H. Reactivate the system; I. Dispose the fully-used batteries delivering them to the authorized regional quarters in charge (they are special dangerous waste).	•	•		
3. EDGE SENSORS Check the effectiveness of all edge sensors. WITHOUT BELLOW A. with platform descending, manually trigger the operation of the lower mobile mat: the platform stops immediately; WITH BELLOW A. with platform descending, manually trigger the edge sensor (the one opposite the column): the platform stops immediately.	•	•		

OPERATION	RECOMMENDED FREQUENCY			
	1st run	every 6 months	every 1/2 year(s)	every 5/10 years
4. GUIDES Make sure that the sliding guides do not have a play greater than 2 mm (use feeler gauge). Replace if they do.	•		• 1	
5. OIL LEVEL Clean out the possible air by the head of the cylinder and of the stem. Control that the oil levels of the tank is over the minimum when the platform is at the highest floor. In case of refill, use ISO VG 46 oil.	•		• 1	
6. SEALING OIL JOINTS Check that there are not oil leak caused by components sleeping: piston valves, units, fillets, pipes, jacks. Check the good conditions of the flexible pipes and of its fillets.	•		• 1	
7. GROUNDING Verify the efficiency of the grounding and the electrical circuit insulation, as described in the electrical scheme.	•		• 1	
8. OIL FEATURES Make sure that the oil has preserved the original features. Every two ears, pick up some oil from the tank, to check its clearness; replace completely, if needed.			• 2	
9. ELECTRICAL WIRING Check the integrity of the lines, either fixed and mobile.	•		• 2	
10. CONTACTORS Check the contactors and their integrity.	•		• 2	

OPERATION	RECOMMENDED FREQUENCY			
	1st run	every 6 months	every 1/2 year(s)	every 5/10 years
11. PLATES - SCHEMES Verify the presence of the followings schemes and plates: A. pit plate (danger in case of access, safety devices required); B. control board plate (electrical hazard, access forbidden); C. carplate(load,capacity,constructor'sname,emergencydescentprocedureincaseofpower blackout); D. electrical and hydraulic schemes inside control board (or machine room).	•		• 2	
12. TOTAL HYDRAULIC INSPECTION The hydraulic components must be totally inspected to restore the conditions altered due to oil contamination and ageing. The procedure is as follows: A. filter the oil and clean the tank (using 30 - 40 micron filters); B. check all the seals and replace them if needed.				• 5
13. HOSE REPLACEMENT Replace the hose every 10 years.				• 10



2 REPAIR



Usually a damaged system (especially if the damage was caused by a bending, excessive heat etc.) cannot be replaced. The damaged parts must be replaced. Only spare parts by LIFTINGITALIA S.r.l. can be used for replacement.



The repair operations must be carried out by qualified personnel, with the maximum care, to guarantee post repair efficiency.

The following operations can be carried out directly in place by qualified personnel:

- Sanding down the rust (caused by painting faults) and anti-rust layer application;
- Shoes (or parts of shoes) replacement.



3 SPARE PARTS LIST

Component	Description	Q.ty	Code
Sliding shoes	Top sliding shoes	2	F320.05.6003
	Lower sliding shoes	2	V0601.05.9058V01