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Indian Standard

LIFTS FOR THE TRANSPORT OF PERSONS AND GOODS PART 5 ELECTRIC TRACTION & HYDRAULIC: INSPECTION MANUAL

व्यक्तियों और वस्तुओं के परिवहन के लिए लिफ्ट

भाग 5

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FOREWORD

This draft Indian Standard (Part 5) will be adopted by Bureau of Indian Standards, after the draft finalized by the Lift and Escalators Sectional Committee had been approved by the Electrotechnical Division Council.

This draft Indian Standard is a part of series of Indian Standards on 'Lifts for the transport of persons and goods.' Other parts of this series of standards cover various requirements likespecifications for planning and selection, guide for inspection and maintenance of lifts, lifts for special applications, dumbwaiters etc. Parts 1, 2, 3 and 6 of this series of standards are being published as Indian Standards and other parts of this series are under development.

This standard applies to electric traction and hydraulic passenger/goods lifts erected at any place and intended for use by passengers. This document is applicable for initial inspections and also for any periodical inspections as and when required by authorities and others.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2: 2022 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1 SCOPE

This standard applies to electric traction and hydraulic passenger/goods lifts erected at any place and intended for use by passengers. This document is applicable for initial inspections and also for any periodical inspections as and when required by authorities and others.

1.1 This standard does not apply to:

- a) Service lifts (dumbwaiters)
- b) Escalators
- c) Cranes

1.2 This standard is concerned with inspection of lifts from safety point of view and does not cover performance requirements and corresponding tests.

1.3 References

The Indian Standard IS 17900- Part 1 & Part 2 is a necessary adjunct to this standard. The checklist given in this standard is based on the requirements as specified in that standard. For elaboration of the requirements, one may refer to the applicable causes of IS 17900-Part 1 & Part 2. User's attention is drawn to clause no **6** of IS 17900- Part 1 which spells out means of verification of safety requirements.

2 TERMINOLOGY

2.1 The definitions given in various Indian Standards on lifts are applicable.

2.2 Additional Definitions

Inspector — Inspector means inspector of lifts or any other officer appointed and approved by State/Union Government to maintain Lift Act/Rules or any other Act/Rules connected with safety of lifts and framed by State/Union Government

3 GENERAL REQUIREMENTS

3.1 This topic has been further divided into three parts

- a)Personal safety during Inspection
- b)Duties of inspectors
- c)Arrangement for inspection

3.2 Personal Safety

3.2.1 Inspectors should know the danger involved in the inspection of lifts, since any accident may not only disable the person but may prove to be fatal. Inspector should at all times be alert for moving objects, and when on top of an elevator car for moving counter weights, hoistway, projections such as beams, adjacent moving cars, cams and other equipment attached thereto or mounted in the hoist way. When the car is at its highest position, the vertical clearance above any such area and the lowest parts of the ceiling of the well shall be the height of the relevant refuge space(s) according to IS 17900-1 5.2.5.7.1.

3.2.2 When working in the lift pit, the inspector should always note the position of the car and also keep clear distance from descending counterweight in the hoistway of the lift being inspected and those in adjoining hoistway. When the car is at its lowest position, at least one clear area where a refuge space can be accommodated shall be provided on the pit floor. Inspectors should never enter lift pits containing water. *

3.2.3 The power supply line disconnect switch should be opened, locked and tagged out when it is desired to prevent movement of the lift or when inspecting electrical parts, to ensure that no unauthorized person operates the switch.

3.2.4 Before starting the inspection of a lift, the Inspector should first determine that the operating device, emergency stop switch, and any other safety devices or switches are in proper working order and in the proper position for inspection.

3.2.5 When dual or attendant operation is provided, the changeover switch should be in the position for operation from the car only. Before inspecting a lift in a bank of "Group Supervisory Control Lifts", disconnect the lift to be inspected from the group operation. When means of communication is provided in the car, determine that it is Operative. While car operating device is provided on the top, use it to operate the car when on top of the car instead of depending on an Operator in the car.

3.2.6. There is a refuge space label (Pictogram) in the shaft pit and on the car top (balustrade). The label shows the person position as laying, crouching or standing. The label also indicates the maximum number of people refuge space can accommodates.

Working simultaneously on different levels creates hazards of falling tools and other objects. Working in the pit is by default prohibited when someone is at the same time working on higher level, for example on the car roof. Such work is allowed only if it is described in a risk assessed working instruction.

3.2.7 Personal Protective Equipment

In order to prevent personal injury, inspectors must use the appropriate personal protective equipment (PPE). Use the following personal protective equipment (PPE) in all elevator inspection:

- Cut resistant gloves against sharp objects
- Safety shoes with toe guard
- Safety helmet

Where needed, use the following PPE to protect against specific hazards:

- Safety goggles
- Protective gloves against chemical hazards, cold and heat (refer to local safety rules).
- Hearing protection
- Dust mask
- Fall restraint or arrest equipment.

3.3 Duties of Inspectors

The following are the duties of the Inspectors.

3.3.1 While inspecting a new lift or an altered installation of a lift, determine whether the lift installation confirms to the requirements of the applicable Indian Standard(s) &/or lift regulations and whether the required safety devices function as required therein.

3.3.2 While making initial inspections, or periodical inspections and tests of existing installations after they have been approved for operation by the enforcing authority, determine that the equipment is in a safe operating condition and has not been altered except in conformity to the applicable BIS Code or lift regulations.

3.4 Arrangement for Inspection

The Inspector should request the owner or his agent to make the following arrangements, prior to the inspection or tests, on receipt of completion reports from the owner for the lift or his agent

Provide qualified personnel from the lift manufacturer for initial inspection or from the approved lift maintenance contractor for initial inspection or subsequent periodical inspections to perform the tests specified in clause **4** and regulations of the State/Union Government.

4 GENERAL NOTES ON TESTS

- 4.1 The inspection and tests on lift installations can be done from the following five places:
 - a) From the lift pit (Table 1)
 - b) From inside of the lift car (Table 2)
 - c) From top of the lift car (Table 3)
 - d) From the machine room (Table 4), if applicable
 - e) Every landing of the lift (Table 5).

4.2 Instruction given at the top of each table shall be read carefully and followed properly before starting the inspection.

4.3 The points given in tables are general guidelines. If an Inspector desires to carry out some more tests as per provision contained in the relevant Indian Standards, he is free to do so.

4.4 Before starting inspection from any of the position mentioned in **4.1** above, a sign board indicating that the lift is under maintenance and inspection shall be displayed at ground floor landing (preferably at all landings, if possible).

4.5 The actual position of each and every point of the table shall be compared with the requirements and accordingly a remark 'satisfactory' or 'unsatisfactory' shall be written in remark column.

4.6 A detailed recommendation on each and every point when the remark **'unsatisfactory'** has been written in remark column shall be given at the end of the Table

Inspection Manual as per IS 17900 Part 5: 2022

The lift owner or his agent shall submit the following details of the Lift: -Owner Name / Agent Name: Location / Building Name: Lift number: Passenger capacity: Rated load: Type of door

Table 1Inspection Made from the Lift Pit

Instruction before Entering the Lift Pit

- a) For pit inspection, take the lift car above the bottommost
- b) Landing and enter the lift pit only if it is dry.
- c) Open the landing gate/door of bottommost landing by the special key and check that the moving lift stops on opening the gate/door, thereby ensuring that the electrical contact of the bottommost landing is in the safety circuit.
- d) Put the pit switch in 'STOP' position and once again check that the lift does not operate after closing the bottommost landing gate/door and giving a call.
- e) Open the bottommost landing gate/ door, put the pit light 'ON' and enter the lift pit. Switch on the inspection drive in inspection panel.
- f) From safety considerations, it is not recommended to move the lift when inspecting from the lift pit.
- g) Use safety fences if there is public safety risk or the landing door is going to be open more than 100 mm.
- h) Switch on the pit lights from the machine room or maintenance access panel, if needed.
- i) When working in the pit, there must be a safe escape route to the landing all the time. The escape route must be available also during equipment malfunction or power failure.
- j) Verify the existence and functionality of pit exit device (PED), if applicable.
- k) Familiarize yourself with the position of the car and counterweight (if applicable) before entering pit.
- 1) For emergency situation, locate an adequate safety space (Refuge space) in the pit.
- m) For hydraulic elevators, pit props, pit safety device or equivalent must be activated
- n) Do not stand on hydraulic piping.
- o) Never stand on the pit ladder if the pit stop switch is not pushed down.
- p) During inspection at PIT area, the precaution to keep the landing gate/door open by a small distance (50 mm) and keep pit switch(es) in the 'STOP' position.
 - a) The car shall be moved only when directed by the inspecting person.
 - b) The directives of the inspecting person shall be repeated and only on receipt of OK signal from the inspecting person, the car shall be moved.

Instruction for exiting from the lift pit:

- a) Open the landing door mechanical lock.
- b) Use pit exit device (PED), if the door is closed.
- c) Block the landing door open with door blocking tool.
- d) Go to the landing by using pit ladder.
- e) Switch off the inspection drive.
- f) Release the stop switch.
- g) Switch off the elevator shaft lights, if not needed later.

h) Close the landing door for normal operation.

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SI. No	Type of lift T- Traction H- Hydraulic	IS 17900- 1 reference	Description	Requirement	Position	Remarks
1	T&H		Dimensions	As per approved plan or in its absence as per relevant Indian Standard.	Checked and Found ok/ Not ok	
2	Т&Н		Clean and dry	Pit shall be in clean and dry condition and may have proper drainage / dewatering pumping system	Clean and dry. Clean but not dry. Dry but not clean. Neither dry nor clean. Drainage / dewatering pumping system available. Drainage / Dewatering pumping system not available	
3	Т & Н	5.2.2.4	Provision of ladder	Pit access door shall be provided if pit depth exceeds 2500mm. Either an access door or a ladder inside the well shall be provided where pit depth does not exceed 2500 mm.	Pit depth = mm. Pit access door provided/not provided. Pit ladder provided/not provided	
4	Т&Н	5.8.1.5 5.8.1.6	No. of buffers for car	Lifts shall be provided with buffers at the bottom limit of travel of the car. Energy accumulation type buffers, with linear and non-linear characteristics, shall only be used if the rated speed of the lift does not exceed 1 m/s.	Spring/oil/PU buffers are provided as per approved plan.	
5	Т&Н	5.8.1.5 5.8.1.6	Number of buffers for counterweight	Lifts shall be provided with buffers at the bottom limit of travel of the counterweight. Energy accumulation type buffers, with linear	Spring/oil/PU buffers are provided as per approved plan.	

				and non-linear characteristics, shall only be used if the rated speed of the lift does not exceed 1 m/s.		
6	Т&Н		Condition of car buffers	Buffers shall not be in bent condition. PU buffer shall not be in degenerated condition in the case of oil buffers, a device for determining the quantum of oil shall be provided	Normal/Bent/Missing. Device for determining the quantum of oil is provided/not provided (Applicable only for oil buffers)	
7	Т & Н		Condition of counterweight buffer	Buffers shall not be in bent condition. PU buffer shall not be in degenerated condition In case of oil buffers a device for determining the quantum of oil shall be provided	Normal/Bent/Missing. Device for determining the quantum of oil is provided/not provided (Applicable only for oil buffers)	
8	Т & Н		Vertical clearance between the car and buffer ('car runby')	Measure clearance when the car is levelled at bottom most landing.	mm.	
9	Т&Н		Vertical clearance between counterweight and buffer (counterweight runby)	Measure clearance when the car is levelled at top most landing.	mm	
10	Т & Н	5.2.5.5.1	Counterweight guard screen	Shall be provided up to a height of two meters from the floor of the pit except where rope compensation sheave is provided.	Guard screen is provided/not provided. Guard screen is provided but not up to a height of two meters.	
11	Т&Н	5.2.1.5.1	Provision of pit switch and arrangement for lighting the pit	Shall be provided and should be accessible from the lowest landing. When pit depth is more than 1.6 m there should be two pit switches, one accessible from the	Pit switch unit(s) is provided/not provided.	

				lowest landing and other from the pit floor. In case of separate pit access door one pit switch is permissible.		
12	Т&Н	5.2.1.5.1	Operation of pit switch (es)	The lift shall stop on opening of pit switch.	Pit switch is tested and found OK/not OK.	
13	Т&Н		Condition of tension pulley of governor rope	It shall have free movement.	Pulley is having free movement/jammed.	
14	Τ&Η		Condition of rollers of tension weight limit switches. Measure the distance between switch and actuator	It shall have free movement and adequate distance between switch and actuator.	Roller is having/not having free movement Distance between switch and actuator is adequate / inadequate	
15	Т&Н	5.2.1.5.1 (b)	Provision of Inspection control station at pit.	To facilitate inspection and maintenance, a readily operable inspection control station shall be permanently installed on Pit.	Inspection control station provided/not provided.	
16	Τ&Η	5.12.1.5.2.1	Checking of inspection control-station at pit.	If more than one inspection control station is switched to "INSPECTION", it shall not be possible to move the car from any of them, unless the same push buttons on the inspection control stations are operated simultaneously	Simultaneous operation of Inspection control stations checked and found OK / Not OK.	
17	Т&Н	5.12.1.5.2.4	Condition of alarm bell at Inspection box	Emergency alarm bell shall be in working order.	Emergency alarm bell is tested and found OK/not OK	
18	Т&Н		Condition of travelling cable and its termination, if termination is provided under the car.	The travelling cable shall be properly terminated so as to avoid detachment from termination box	Condition of travelling and its termination in the box is satisfactory/unsatisfactory.	

	19	Т		Check the	The compensation	Rope termination is ok /	
				compensation	rope shall be	Not ok.	
				rope	properly terminated		
				termination	and adequate	Distance between switch	
				and actuating	distance between	and actuator is adequate /	
				switch	switch and actuator	inadequate	
				condition.	shall be maintained.		
	20	Т&Н		Earthing of all	Earthing shall be	Earthing is satisfactory/	
				switches at pit	proper.	not satisfactory	
				area.			
I	21	Т&Н	5.2.5.8	Provision of	When the car is at	Required Refuge space	
				refuge space	its lowest position	available / not available	
				requirement at	according to		
				pit.	5.2.5.6.1, at least		
				-	one clear area		
					where a refuge		
					space can be		
					accommodated shall		
					be provided on the		
					pit floor.		
İ	22	Т&Н	5.2.5.8	Provision of	A sign in the pit	Refuge Space Label	
				refuge space	readable from the	provided/ not provided.	
				signage at nit	entrance(s) shall	r r r	
				signinge ar pro	clearly indicate the		
					allowed number of		
					nersons and the type		
					of posture		
				By_pass	01 posture.		
				indicator at car			
				hottom			
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Table 2 Inspection Made from Inside of the Lift Car

Instruction

I Bring the lift to the bottommost landing by giving a landing call and enter the lift car.

SI. No	Type of lift T- Traction H- Hydraulic	IS 17900 -1 reference	Description	Requirements	Position	Remarks
1	Т&Н	5.4.2.3.2	Inside car :	Inside the Car, the	All details	
			Label	following shall be	displayed/not	
			requirements	displayed.	displayed	
				a) Manufacturer/installer's		
				name;		
				b) Installation serial		
				number.		
				c) Year of construction.		

				 d) Rated load of the lift in kilograms. e) Number of persons. The notice shall be made as follows: " kg PERS." or by using symbols for weight and persons 		
2	Т&Н		Provision of fan/blower	Fan/blower shall be provided.	Fan/blower is provided/not provided.	
3	Т&Н		Condition of fan/blower	Fan/blower shall be in working condition.	Fan/blower working / Not working.	
4	Т&Н	5.12.3.1	Condition of alarm bell	Emergency alarm bell shall be in working order.	Emergency alarm bell is tested and found OK/not OK	
5	Т&Н	5.4.10	Condition of car lighting	The car shall be provided with electrical lighting that is permanently installed. There shall be at least two lamps connected in parallel.	Checked and found OK / Not ok	
6	Т&Н	5.4.10.3	Checking of Car light.	The car shall be continuously illuminated except when the car is parked, and the doors are closed	Car lighting is tested and found OK/not OK.	
7	Т&Н	5.4.3	General condition of the lift car wall, top and flooring	General condition shall be satisfactory.	Condition of the lift car is satisfactory/not satisfactory.	
8	Т&Н	5.4.9	Provision of natural air ventilation in case of solid car door and landing doors inside the lift car	The car shall be provided with ventilation apertures in the upper and lower parts of the car.	Ventilation apertures are provided/not provided.	
9	Т&Н	5.3.1.4	Checking of clearance between door panels	When closed, the clearance between door panels, or between panels and uprights, lintels, or sills, shall not exceed 6 mm.	Checked and found OK / not OK	
10	Т&Н	5.3.4.1	Sill gap between -Car sill and landing sill at each landing	Sill gap shall not exceed 35 mm.	Max Sill Gap between car sill & landing sill=mm Min Sill Gap between car sill & landing sill =mm. Sill gap is normal/ abnormal.	

11	Т&Н	5.12.1.1.4	Landing level of car with respect to landing sill at all landing for up and down direction.	The stopping accuracy of the car shall be ± 10 mm. If, during loading and unloading phases for example, the levelling accuracy of ± 20 mm is exceeded, it shall be corrected to ± 10 mm.	The car stops within the specified limits of the landing level / The car does not stop s within the specified limits of the landing level.	
12	Т&Н		Experience of jerk in the car at the time of starting or stopping.	No appreciable jerk shall be noticed at the time of starting/stopping.	Appreciable jerk is not noticed/noticed at the time of starting/stopping.	
13	Т&Н		In case of manually operated car door, open the car door (Not more than 90mm) while the lift is moving	On opening the car door, lift shall stop.	Lift stops/lift continues to move.	
14	Т&Н	5.3.4.2	Gap between door and shaft well	The horizontal distance giving access to the well between the leading edges of the car door and the landing doors during the whole of their normal operation shall not exceed 120mm.	Checked Found ok / Not ok	
15	Т&Н		In case of power operated car door, while lift is moving, operate the "DO" button.	The car door shall not open.	The car door opens/does not open.	
16	Т&Н	5.3.6.2.2.1 (b)	Door protection device requirements.	Protective device shall automatically initiate re- opening of the door(s) in the event of a person crossing the entrance during the closing movement. The protective device may be rendered inoperative in the last 20 mm of door closing gap;	Checked and found OK/ not OK	
17	T&H	5.3.6.3	Testing of Door reopen button.	If car doors are automatic power-operated, a control button inside the car shall allow to reopen the doors when the car is at the landing. NOTE — This is normally referred to as a "door re-open button".	Tested and found OK/ not OK.	

18	Т&Н		In case of manually operated doors, put the control in an automatic position, enter the lift car, manually close the landing door and the car door	The lift shall not operate for four to six seconds after arrival of car at that landing.	The lift operates instantly/does not operate instantly.	
19	Т&Н		While lift is moving, is the floor position correctly displayed.	The floor position shall be correctly displayed.	The floor positions correctly displayed/not displayed.	
20	Т&Н		In case of goods-cum- passenger lift, open the emergency exit if provided, when the lift is moving	The lift shall stop.	The lift stops/does not stop.	
21	Т&Н		In case of goods-cum- passenger lift, when the lift halts either above or below the landing level say by about ± 140 mm, operate the inching device if provided.	The lift shall come to landing level.	The lift comes to/does not come to the landing level.	
22	Т&Н	5.12.3.2	Provision of intercom	An intercom system, or similar device, powered by the emergency supply shall be installed for communication between inside the car, someone outside the lift (security / reception / BMS room) and the place from which the emergency operation is carried out, if the lift travel exceeds 15 m or if direct acoustic communication in- between these locations is not possible.	Intercom is tested and found OK / not OK	
23	Т&Н	5.4.10.4	Checking of Car Emergency light.	Emergency lighting shall come on automatically upon failure of the normal car lighting supply.	Checked and found OK / not OK	

Table 3(a) Inspection Made from Top of the Lift Car (For MR and MRL lifts)

Instruction before Entering Top of the Lift Car

- a) Ensure available refuge space in car top area.
- b) Prohibition of working simultaneously on different levels prevents the hazard of falling tools and other objects.
- c) Switch on the elevator shaft lights from the controller, if needed.
- d) Switch 'ON' the hoistway lighting and a light point on the car top.
- e) Familiarize yourself with the position of the car and counterweight.
- f) When working on the car roof, there must be a safe escape route to the landing at all times. The escape route must be available also during equipment malfunction or power failure.
- g) Verify the electric safety chain of landing door locks and Car roof emergency stop switches are working.
- h) Verify that inspection switch must prevent the elevator from moving in inspection mode.
- i) Open the landing door with the special key to stop the moving lift car so that the top of the lift car is approximately in level with the top landing level.
- j) Put the car in inspection mode by putting maintenance switch 'ON' and stop switch is in 'STOP' position before entering car top.
- k) It is recommended to have not more than two persons on the car top. (Refuge Label signage shall be followed)

SI. No	Type of lift T- Traction H- Hydraulic	IS 17900 - 1 reference	Description	Requirements	Position	Remarks
1	Т&Н	5.4.7.1(a)	Condition of car top	The car roof shall have sufficient strength to support the maximum number of persons permitted.	The car top is in good/not in good condition.	
2	Т&Н	5.4.8	Provision of Inspection box at the car top.	Inspection box -operable within 0.30 m horizontally from a refuge space shall be provided.	Checked and found OK / not OK	

3	Т&Н	5.12.1.5.2.1	Testing of maintenance switch in 'UP' and 'DOWN' Direction	The inspection operation switch, when in the inspection position, shall satisfy the following conditions a) Neutralize the normal operation controls; b) Neutralize emergency electrical operation	Tested and found OK/not OK.	
4	Т&Н	5.12.1.5.2.4	Condition of alarm bell at the Inspection box	Emergency alarm bell shall be in working order.	Emergency alarm bell tested and found OK/not OK	
5	Т&Н		For Manual door, Operation of lever of landing gate/door locks that is pressing of the door lever from the car top.	The lift shall not start if the lever is pressed.	Lift starts /does not start.	
6	Т&Н		Earthing of metal parts of lift car	The metal parts shall be efficiently earthed.	Metal parts are satisfactorily earthed /Metal Parts are not satisfactorily earthed.	
7	Т&Н	5.2.4.1	Provision of well lighting	The well shall be provided with permanently installed electric lighting,	Well lighting is provided / not provided.	
8	Т&Н		Condition of Hoist way	Hoistway shall be maintained in clean, ventilated condition.	Hoistway is clean, ventilated and surface of hoistway needs no repair / requires plastering or repairs.	
9	Т&Н		For manual door, Observe whether the retiring cam comes in contact with the lever of landing gate locks.	Retiring cam shall not come in contact with the lever of gate locks while the lift is in motion.	Retiring cam comes in contact/does not come in contact with the lever of the gate locks.	
10	Т&Н		Condition of car guide shoe liners.	The guide shoe liners shall be in good condition. There may be reasonable play, but it shall not be so much as to cause the shoe to jump the rails under any condition.	The guide shoe liners are in good/not good condition.	

11	Т&Н		Condition of counterweight guide shoe liners	The guide shoe liners shall be in good condition. There may be reasonable play, but it shall not be so much as to cause the shoe to jump the rails under any condition.	The guide shoe liners are in good/not good condition.	
12	Т&Н		Condition of midway junction box. (if applicable)	The wiring shall be properly terminated in midway junction box where installed.	Wiring terminated neatly/needs adequate termination.	
13	Т&Н		Condition of trailing cable	The trailing cable shall be in good condition that is the insulation shall not get frayed or damaged mechanically.	The trailing cable is in good condition and insulation is not frayed/not in good condition and insulation is frayed.	
14	Т&Н		Condition of floor-gangway switches along the hoistwav, if provided	Gangway switches shall be in good working condition.	Gangway switches are in good condition/not in good condition.	
15	Т&Н		Lubrication of car and counterweight guides. (Roller guide shoes do not require lubrication of rails)	The guides shall be in properly lubricated condition.	The guides are in properly/not properly lubricated condition.	
16	Т&Н	5.4.11.2	Observe whether the counterweight stacks are firmly secured to the frame by tie-rod or other suitable means	Means shall be provided to retain the sections in place and prevent displacement.	Counterweight stacks are firmly/ loosely secured.	
17	Т&Н	5.5.2.3.1	Condition of the suspension media fixing.	The ends of the suspension media shall be fixed to the car, counterweight or balancing weight, or suspension points of the dead parts of suspension media by means of self- tightening wedge type sockets, ferrule secured eyes, or swage terminals	The suspension elements are properly/ not properly fastened.	

18	Т&Н	5.2.5.3.2 (a)	Condition of facia plates	It shall form a vertical surface which is directly connected to the landing door sill, whose height is at least half the unlocking zone plus 50 mm and whose width is at least the clear opening of the car access plus 25 mm on both sides;	Facia plates provided/not provided.	
19	Т&Н		Earthing of landing gate locks, gang switches, car top components and trucking.	Earthing shall be proper.	Earthing is satisfactory/ not satisfactory	
20	Т&Н		In case of manually operated doors, reverse the order of closing the doors by first closing the car door and then the landing door. Operate the floor button from inside the car or from landing side	The lift shall operate independent of sequence of closing of landing car door.	The lift operates/does not operate.	
21	Т		General Condition of compensation chain.	It shall be in good working condition whenever provided.	Link chain is in good/not good condition.	
21	Т&Н	5.3.9.1	Operation of Landing door locks	Each landing door shall be provided with a locking device. It shall not be possible in normal operation to open a landing door (or any of the panels in the case of a multi-panel door) unless the car has stopped, or is on the point of stopping, in the unlocking zone of that door.	Landing door lock is tested and found OK/not OK	
22	Т&Н	5.4.7.2	Provision of Toe board at car roof.	The car roof shall be provided with a toe board a minimum of 100mm height.	Checked and found ok/ not ok.	
23	Т&Н	5.4.7.2 5.4.7.4	Provision of Balustrades	Balustrade height shall be 0.70 m where the distance between car and shaft wall is $> 0.30 \text{ m}$	Checked and Found ok / Not ok.	

				and <= 0.50 m; and shall be 1.10 m where the distance exceeds 0.50 m Where the free distance in a horizontal plane, beyond and perpendicular to the outer edge of the car roof to the wall of the well is less than 0.30 m, a balustrade may not be provided		
24	Т&Н	5.4.8	Provision of emergency stop switch at Car Top.	Emergency Stopping devices shall be positioned not more than 1 m from the entry point.	Check and found OK / not OK	
25	Т&Н	5.5.7	Protection for Sheaves and Pulleys	For sheaves, pulleys, overspeed governors, tension weight pulleys, provisions shall be made to avoid accidental access.	Check and found OK / not OK	
26	Т&Н	5.2.5.7	Provision of refuge space requirement at the car top	When the car is at its highest position at least one clear area where a refuge space can be accommodated shall be provided on the car roof.	Required refuge space is available / not available	
27	Т&Н	5.2.5.7	Provision of refuge space signage at the car top	A sign on the car roof readable from the landings giving access to the car roof shall clearly indicate the allowed number of persons and the type of posture considered for the refuge space(s) accommodation.	Refuge Space label provided/ not provided.	
28	Т&Н	5.2.1.4.1	Provision of properly guarded hand lamp /torch Checking the provision car door lock.	Properly guarded hand lamp/torch shall be provided and maintained in working order.	Hand lamp/torch is provided/not provided and working/ not working.	

Table 3(b) Inspection Made from Top of the Lift Car (for MRL lifts only)

SI. No.	Type of lift T- Tracti on H- Hydra ulic	IS 17900 - 1 reference	Description	Requirements	Position.	Remar ks
1	T	5.9.2.2.	Checking of brakes	The lift shall be provided with a braking system which operates automatically in the event of loss of: a) the main power supply; b) the supply to control circuits.	Checked and found OK/not OK	
2	Т	5.9.2.2.2.6	Condition of brake shoe liners	The brake shoe liners shall be in good conditionBrake linings shall be incombustible. Asbestos material shall not be used	The condition of brake shoe liner is OK/not OK	
3	Т		Operation of motor	The motor shall be smooth in operation.	The motor is smooth/ noisy in operation.	
4	Т		Condition of grooves of traction Sheave	The condition of grooves shall be such that rope /CSB does not slip excessively during elevator stopping at floor level.	The Ropes/CSBs slip / do not slip	
5	Т&Н		Condition of main suspension ropes/CSBs	The ropes/CSBs shall not be in frayed condition.	The suspension ropes/CSBs are not frayed/ frayed.	
6	Т&Н		Condition of various contacts at the panel	All contacts shall be in proper condition	The condition of contacts OK / not OK	
7	Т&Н		Earthing arrangement of main switches, control panel, over speed governor .etc.	The Earthing arrangement shall be proper from separate earth pit / clean earth terminal from standalone earthing system of lifts, and the electrical contractor/owner shall ensure that earth resistance shall not exceed one ohm as per Indian Electricity Rules.	Earthing arrangement is tested and values found ok satisfactory / not ok satisfactory	
8	Т&Н		Condition of power wiring at control panel	The control panel power wiring shall be neatly grouped, and the insulation of wires shall be more than one Mega Ohm with 500-volt megger.	The control panel power wiring is satisfactory / not satisfactory	
9	Т&Н	5.10.4.2	Motor overheat protection	Protection of motors against overheating shall be provided for motor.	Provided / Not Provided.	

10	Т&Н	5.5.2.1	Main suspension.	The ratio between the pitch diameter of sheaves, pulleys or drums and the nominal diameter of the suspension ropes or diameter of steel cord in case of CSBs shall be at least 40, regardless of the number of strands of the suspension ropes or CSBs.	Condition of ratio of diameters is satisfied/not satisfied.	
11	Т&Н	5.6.2.2.1.3	Condition of ropes of over speed governor	The ratio between the pitch diameter of the pulleys for the over speed governor rope and the nominal rope diameter shall be at least 30	Checked & found OK/ not OK	
12	Т&Н	5.6.2.2.1.6	Operation of over speed governor	The over speed governor or another device shall, by means of an electric safety device initiate the stopping of the lift machine before the car speed, either up or down, reaches the tripping speed of the governor	Tested and found OK/not OK.	
13	Т&Н	5.2.4.1	Display of Danger signage.	The electrical warning sign shall be provided on the car control enclosure.	Danger signage is provided / not provided.	
14	Т&Н		Display of UP and DN direction sticker on the machine	UP and DN direction sticker shall be provided.	UP & DN stickers are provided / not provided.	

Instruction for Exiting from Top of the Lift Car

- a) Take the lift car roof to the top landing level and open the top landing gate/door.
- b) Come out from car top onto the top landing.
- c) Return to normal mode by putting maintenance switch in 'NORMAL' position and release the STOP switch.
- d) Switch 'OFF' car top li
- e) Get and Close the landing door

Table 4 Inspection of Lift from Machine Room

- a) Beware of fall and slipping hazards.
- b) Close the machine room trap doors.

SI. No	Type of lift T- Traction H- Hydraulic	IS 17900 -1 reference	Description	Requirements	Position	Remarks
Ι	Т&Н		Locking arrangement of the machine room	Locking arrangement shall be provided and machine room shall be kept locked.	Locking arrangement is provided/not provided/ provided but machine room was not locked.	
2	Т&Н		Approach to the machine room from the top landing	There shall be an easy access from the top landing to the machine room.	There is an easy access/inadequate access to the machine room from the top landing.	
3	Т&Н		Cross ventilation	There shall be adequate cross ventilation preferably with exhaust fan.	The cross ventilation is adequate/inadequat e.	
4	Т&Н		Cleanliness in the machine room	Machine room shall be maintained clean and without any seepage of water from roof, walls.	The machine room is maintained clean and without any seepage of water /is not clean and with or without any seepage of water.	
5	Т&Н	5.2.1.4.2	Provision of light points and their working part	Machinery spaces and pulley rooms shall be provided with permanently installed electric lighting with an intensity of at least 200 lux at floor level everywhere a person needs to	Adequate number of light points is provided/not provided/provided but not working.	

				work, and 50 lux at floor level to move between working areas.		
6	Т & Н		Provision of separate main switches for elevator power and light	Provision of separate main switches for elevator power and light arrangements	Separate main switches for power and light provided/ not provided.	
8	Τ	5.6.1.1.1.1	Provision of brake releasing device	The machine shall be capable of having the brake released by a continuous manual operation. The operation can be mechanical (for example, lever) or electrical, powered by an automatically rechargeable emergency supply.	Brake releasing device provided/not provided	
10	Т&Н	7.3.1	Provision of log maintenance book and entries therein	Logbook shall be maintained in up to date condition.	Logbook is provided/not provided; provided but is not up to date.	
12	Т&Н	5.11.1.2	Protection of lift equipment in case of phase failure or phase reversal.	Lift equipment shall be protected.	Lift equipment is protected/ not protected.	
13	Т&Н		Condition of various contacts at the panel	All contacts shall be in proper condition.	Checked & found OK/not OK	
14	T & H	5.10.1.3.1	Earthing arrangement of main switches, lift motor, control panel, overspeed governor switch etc.	The insulation resistance shall be measured between all live conductors except for PELV and SELV circuits rated 100 VA or less.	Earthing arrangement is tested and values found satisfactory / not satisfactory.	
15	1	5.9.2.2.	brakes	provided with a	OK/ not OK	

			1	1		
				braking system		
				which operates		
				automatically in		
				the event of loss		
				of:		
				a) the main		
				power supply;		
				o) the supply to		
16	т		Or anotion of	The geor box	The coordinates	
10	1		operation of	shall be smooth	smooth/noisy in	
			provided	in operation	operation	
17	Т		Operation of	The motor shall	The motor is	
1 /	1		motor	he smooth in	smooth/noisy in	
			motor	operation	operation	
18	Т		Condition of	There shall not	There is an oil	
	_		gear box (if	be any oil	leakage/no oil	
			applicable)	leakage from	leakage.	
			11 /	gear box (oozing	0	
				acceptable)		
19	Т		Lubrication	The gear box	The gear box does	
			of gear box	shall be well	not need	
			(if applicable)	lubricated.	lubrication/needs	
					lubrication.	
20	Т		Condition of	The condition of	The ropes/CSBs	
			grooves of	grooves shall be	slıp/do not slıp.	
			traction	such that the		
			sneave	ropes/CSBs do		
				traction sheave		
				stops pormally		
21	Т&Н	5521	Condition of	The ratio	The suspension	
		0101211	main	between the	rope is not fraved/	
			suspension.	pitch diameter of	frayed.	
			1	sheaves, pulleys	Condition of the	
				or drums and the	ratio of diameters	
				nominal	is satisfied/not	
				diameter of the	satisfied.	
				suspension ropes		
				or diameter of		
				steel cord in case		
				of CSBs shall be		
				at least 40,		
				regardless of the		
				number of		
				strands of the		
				or CSBs		
22	Т&Н	562213	Condition of	The ratio	Checked ok/ Not	
22	1 & 11	5.0.2.2.1.5	ropes of over	hetween the	ok	
			speed	pitch diameter of		
			governor	the pullevs for		
			8	the over speed		
				governor rope		
				and the nominal		

				rope diameter shall be at least 30		
23	Т&Н	5.12.2.3.2	Operation of up final limit switch	The lift, when operated on power or manually, from top most landing shall travel in upward direction till the final limit switch cuts off electric supply to motor.	Tested and found OK/not OK.	
24	Т&Н	5.12.2.3.2	Operation of down final limit switch.	The lift, when operated on power or manually, from bottommost landing, shall travel in downward direction till the final limit switch cuts off the electric supply to motor.	Tested and found OK/not OK.	
25	Т&Н	5.6.2.2.1.6	Operation of over speed governor	The over speed governor or another device shall, by means of an electric safety device initiate the stopping of the lift machine before the car speed, either up or down direction, reaches the tripping speed of the governor	Tested and found OK/not OK.	
26	Т&Н	5.2.3.2	Condition of Machine room trap door.	Access trap doors for persons to machine and pulley rooms shall give a clear passage of at least $0.80 \text{ m} \times 0.80 \text{ m}$, and shall be counterbalanced.	Checked & found OK/not OK	

27	Т&Н		Testing of contract load and linear speed of the lift at the time of initial inspection, and in case of any addition/alter ation which changes the contract load/speed	The linear speed of the lift & the motor current when the lift car is loaded with full contract load shall be measured in 'UP' and 'DOWN' direction, and mean rated speed calculated	The motor draws current as follows: Down UP direction : R phase : Yphase : B phase : The linear speed of the lift in UP direction : Down direction:	
28	Т&Н	5.2.4.1	Display of danger signage.	Danger signage shall be provided.	Danger signage is provided / not provided.	
29	Т&Н		Display of UP and DN direction stickers in Machine	UP and DN direction stickers shall be provided.	UP & DN stickers are provided / not provided.	
30	Т&Н	5.12.1.11.1 (e)	Provision of Stop switch at machine room	Stop switch shall be provided at the lift machine, unless there is a main switch or another stopping device nearby that is directly accessible within 1 m; They shall be bi- stable and such that a return to service cannot result from an involuntary action.	Stop switch tested and found OK/ not OK	
31	Т&Н	7.3.1	Provision of maintenance log book and entries therein	A logbook shall be provided, in which notes about repairs, examinations after modifications, accidents and periodic checks, including those specified by the manufacturer/ins taller, can be recorded	Logbook is provided/ not provided / not up to date.	

32	Т	5.6.6.1	Provision of Ascending Car Over speed Protection	It shall detect over speed of the ascending car and cause the car to stop, or at	Checked and found OK / not OK	
				least reduce its speed.		
33	Τ	5.6.7.1	Provision for Protection against Unintended Car Movement	Provision made to prevent or stop unintended car movement away from the landing, with the landing door not in the locked position and the car door not in the closed position.	Checked and found OK / not OK	
34	Т	5.9.2.3.4	Provision of emergency operation.	Emergency operation shall be located: a) in the machine room b)in the machinery cabinet or c) on the emergency and tests panel(s).	Provided/not provided.	
35	Т	5.10.4.2	Motor over heat protection	Protection of motors against overheating shall be provided for each motor.	Provided / Not Provided.	
36	Т&Н	5.10.5.5	Provision of Main supply with Emergency power supply disconnect.	When main supply to the lift is disconnected, any automatic operated movement of the lift (for example, automatic battery powered operation) shall be prevented.	Checked and found OK / not OK	
37	Т&Н	5.10.6.3.5	Provision of Electric circuits (Live Terminals)	Electric Circuits connected to such live terminals, the requirements of labelling, separation or identification by colour shall be fulfilled	Checked and found OK / not OK	

38	Т&Н	5.10.8.2	Checking of Well light switches.	Well lighting switches (or equivalent) shall be located both in the pit and close to the main switch, so that the well light can be operated from either location.	Checked and found OK / not OK	
39	Т & Н	5.10.1.2.3	Provision of residual current protective device (RCD) - Required for Voltage higher than 50VAC for single phase supply.	Residual current protective device (RCD) with a rated residual operating current not exceeding 30 mA (not applicable to main drive) shall be provided.	Provided/not provided.	
40	T& H	6.3.4	Safety Gear & OSG testing	Move the empty car from TOP floor to bottom at inspection speed with test tripping arrangement	Elevator is stopped with Safety gear switch activation. Checked OK / Not ok	

Instruction before Exiting from the Lift Machine Room

- a. Lock the machine room.
- b. Proceed towards the floor landing.

Table 5(a) Inspection Made from Floor Landings (For MR and MRL Lifts)

SI	Type of lift T- Traction H-	IS 17900 -1 reference	Description	Requirements	Position	Remarks
	Hydraulic					
1	Ť&H	5.3.9.3.1	Provision of delocking arrangement at every landing provision of a de locking key	Each of the landing doors shall be capable of being unlocked from the outside with the aid of an emergency unlocking key	The delocking arrangement is provided/not provided.	
2	Т&Н	5.3.7.1	Provision of lights at every landing	The natural or artificial lighting of the landings in the vicinity of landing doors shall be at least 50 lux at floor level, such that a user can see ahead when they are opening the landing door to enter the lift, even if the car light has failed	The light points are provided/not provided.	
3	Т&Н	5.3.5.3.1	Condition of landing doors at every floor	The landing doors shall be maintained in good operating and sound condition.	The landing doors are in operating condition/not in operating condition.	
4	Т&Н		Condition of landing buttons at every floor	The landing buttons shall be in good condition.	The landing buttons are in good condition/not in good condition.	
5	Т&Н		Operation of landing call buttons	The landing call buttons shall respond to the type of operation of the lift.	Tested and found OK/not ok	
6	Т & Н		Condition of floor indicator/in use indicator or direction call registering light.	These shall be in working condition wherever provided.	The indicators are working/not working.	
7	Т&Н	5.12.5.1.16	Operation fireman switch and test if applicable.	The switch, when made 'ON' shall make the landing calls inoperative and the car shall report to designated floor and shall remain on car control. When the switch is put 'OFF' the car shall return to normal working.	Tested and found OK/not found OK.	
8	Т&Н	5.3.8.1	Opening of any landing doors while lift is passing through a landing zone to another floor	The landing door on pull or sliding, shall not open and the car shall continue movement.	The landing doors open/ do not open.	

9	Т&Н	5.12.1.2	Testing of Overload function	The overload shall be detected at the latest when the rated load is exceeded by 10 percent, with a minimum of 68 kg	Overload tested and found OK/ not OK
10	Т&Н	5.12.3.3	Condition of Automatic Rescue Device with load and without load	Automatic Rescue Device shall work in both conditions of load i.e. with load and without load with three nos. of operation without charging between two consecutive served stops.	Condition of Automatic Rescue Device is satisfactory / not satisfactory
11	Т&Н	5.3.1.4	Door Gap	When closed, the clearance between door panels, or between panels and uprights, lintels or sills, shall not exceed 6 mm	Door Gap =mm Door Gap is OK / not OK
12	Т&Н	5.4.5	Provision of apron in car sill.	Each car sill shall be fitted with an apron, which extends at least to the full width of the clear landing entrance. Any projections on the face of the apron, such as fixings, shall not exceed 5 mm. Projections exceeding 2 mm shall be chamfered at least 75° to the horizontal. The height of the vertical portion shall be at least 0.75 m.	Provided / Not Provided
13	Т&Н	5.3.2	Check the height and width of door entrance.	Minimum clear height of the entrance shall be 2 m and minimum width shall be 700mm	Check and found OK / not OK
14	Т&Н	5.3.8.1	Provision of Landing door/ Car door lock.	It shall not be possible to open landing door/car door in unlocking zone unless the car has stopped/making a stop at that landing.	Checked and found OK/ not OK
15	Т&Н	5.3.9.3.2	Provision of Emergency door lock - opening mechanism. (at vertical plane on the door panel or frame)	The position of the unlocking triangle shall not exceed 2 m in height above the landing.	Checked and found OK/ not OK
16	Т&Н	5.3.9.3.2	Provision of Emergency door lock - opening mechanism.	The position of the unlocking triangle shall not exceed 2.7m in height above the landing.	Checked and found OK/ not OK

	(downward in the horizontal plane)		

Table 5(b) Inspection Made from Floor Landings (For MRL Lifts)

SI	Type of lift T- Traction H- Hydrauli c	IS 17900 -1 reference	Description	Requirements	Position	Remarks
1	Τ	5.3.9.3.1	Provision of brake releasing device (Manual / Battery Operated)	Brake release device (Manual / Battery operated) shall be provided	Brake release device (manual / battery operated) is provided / not provided	
2	Т&Н	5.3.7.1	Condition of various contacts at the control panel at landing.	All contacts shall be in proper condition	The condition of contacts is OK / not OK	
3	Т&Н	5.3.5.3.1	Earthing arrangement of main switches, control panel.	The earthing arrangement shall be proper from separate earth pit/clean earth terminal from standalone earthing system of lifts and the electrical contractor/owner shall ensure that earth resistance shall not exceed one ohm as per Indian electricity rules.	Earthing arrangement is tested and values found satisfactory / not satisfactory	
4	Т&Н		Condition of wiring at control panel	The control panel wiring shall be neatly grouped and the insulation of wires shall be more than one Mega Ohm with 500volt megger.	The control panel wiring is satisfactory / not satisfactory	

6	Т&Н		Provision of Emergency operation switch in control panel	Emergency operation switch shall be provided.	Provided/ Not provided	
7	Т&Н		Testing of Emergency operation switch in UP and DN direction.	When Emergency operation switch is ON and car shall not get registered when travelling in either direction.	Tested & found OK/ not OK	
8	Т&Н	5.12.5.1.16	Provision of maintenance log book and entries therein	Log book shall be maintained in up to date status.	Logbook is provided/ Not provided / Not up to date.	
9	Т&Н	5.3.8.1	Rescue in case of lift car in balance condition	The lift car shall be able to rescue in case of balance load condition	Checked and found satisfactory / not satisfactory	
10	Т&Н	5.12.1.2	Provision of Main supply	When main supply to the lift is disconnected, any automatic operated movement of the lift (for example, automatic battery powered operation) shall be prevented.	Checked and found OK / not OK	
11	Т&Н	5.12.3.3	Provision of Electric circuits (Live Terminals)	Upon disconnection of the main switch if any terminals remain live, for those & for electric circuits connected to such live terminals, the requirements of labelling, separation or identification by colour shall be fulfilled.	Checked and found OK / not OK	
12	Т&Н	5.3.1.4	Checking of Well light switches.	Well lighting switches (or equivalent) shall be located both in the pit and close to the main switch, so that the well light can be operated from either location.	Checked and found OK / not OK	
13	Т&Н	5.10.1.2.3	Provision of residual current protective device (RCD) - Required for Voltage higher than 50VAC for single phase supply.	Residual current protective device (RCD) with a rated residual operating current not exceeding 30 mA (not applicable to main drive) shall be provided.	Provided/not provided.	

14	Т	5.6.6.1	Provision of	It shall be detect over	Checked and	
			Ascending Car	speed of the ascending car	found OK /	
			Over speed	and cause the car to stop,	not OK	
			Protection	or at least reduce its		
				speed.(Verified with test		
				certification)		
15	Т	5.6.7.1	Provision for	Provision made to prevent	Checked and	
			Protection against	or stop unintended car	found OK /	
			Unintended Car	movement away from the	not OK	
			Movement	landing, with the landing		
				door not in the locked		
				position and the car door		
			D 1 0110	not in the closed position	T 10	
16	Т&Н	5.11.1.2	Protection of lift	Lift equipment shall be	Lift	
			equipment in case	protected.	equipment is	
			of phase failure or		protected/	
			phase reversal.		not	
26	T 0 H	5 10 1 0	D :: C		protected.	
26	Ι&Η	5.12.1.8	Provision of	For maintenance of	Checked and	
			"Bypass device"	contacts of the landing	Tound OK /	
				door, car door, and door	not OK.	
				locking, a bypass device		
				shall be provided in the		
				control panel or		
27	T θ. II	5 12 1 9	Testing of	Normal anaration	Chaolrad and	
27	Ιαп	5.12.1.8	"Purpage devrice"	normal operation	found OV /	
			Bypass device	controls, including the	not OV	
				power operated doors	liot OK	
				shall be neutralized:		
				shan be neutralized,		
15	Т&Н	512232	Operation of up	The lift when operated on	Tested and	
15	1 4 11	5.12.2.5.2	final limit switch	power or manually from	found	
				top most landing shall	OK/not OK.	
				travel in upward direction	one not one.	
				till the final limit switch		
				cuts off electric supply to		
				motor.		
16	Т&Н	5.12.2.3.2	Operation of	The lift, when operated on	Tested and	
			switch of down	power or manually, from	found	
			final limit switch.	bottommost landing, shall	OK/not OK.	
				travel in downward		
				direction till the final limit		
				switch cuts off the electric		
				supply to motor.		

17	Τ	Testing of contract load and linear speed of the lift at the time of initial inspection, and in case of any addition/alteration which changes the contract load/speed	The linear speed of the lift & the motor current when the lift car is loaded with full contract load shall be measured in 'UP' and 'DOWN' direction, and mean rated speed calculated.	The motor draws current as follows: Down and UP direction : R phase : Yphase : B phase :
18	T& H	Safety Gear & OSG testing	Move the car from TOP floor to bottom at rated speed with test tripping arrangement	Elevator is stopped with Safety gear switch activation. Checked OK / Not ok

Table 6 Inspection for Hydraulic lifts

Safety arrangement for inspection:

- a) Do not open or tighten the parts of a pressurized system.
- b) Make sure that the energy source has been locked and tagged before starting the work.
- c) Ensure that there is no pressure.
- d) The car must be at the lowest position.
- e) The piston must be at the bottom.
- f) The shut-off valve must be closed.
- g) The pressure gauge on the hydraulic unit must display that the pressure is zero. NOTE! Ensure that the pressure gauge valve is open. During normal operation, keep the pressure gage valve open. If the valve is closed, the pressure gauge cannot display the pressure.
- h) Press the emergency lowering valve to release all system pressure.
- i) To prevent the motor of the pump starting accidentally, lock and tag the main switch when you are not in the machine room

SI	Type of lift H- Hydraulic	IS 17900 -1 reference	Description	Requirements	Position	Remarks
1	Н		Check the oil level in the tank.	When the cylinder is in upper end position, check that the oil level in the tank covers the motor-pump group well (min. 2 cm over the motor) When the cylinder is in lower extra- travel position, the oil level has to be 7/8 cm under the tank edge	Checked Found ok / Not OK	

2	Η	5.4.2.2.3	Check the max pressure.	When the main line shut-off valve is closed, the motor activated for the upper travel, the oil discharges into the tank and the manometer shows the max. Adjusting pressure of the overpressure valve The value of the max. Adjusting pressure has to correspond to 1.4 times the max static pressure with full load.	Checked Found ok / Not OK	
3	Н		Check the sealing of seals and Pipes.	Check visually the connection pipe sealing, in particular the joints of the flexible hoses and rigid pipes.	Checked Found ok / Not OK	
4	Н	6.3.8	Check the Rupture valve intervention.	A system test shall be carried out, with the rated load uniformly distributed in the descending car at an overspeed (5.6.3.1) to operate the rupture valve. The correct adjustment of the tripping speed can be checked, for instance, by comparison with the manufacture's adjustment diagram (see Annex B). For lifts with several interconnected rupture valves, check the simultaneous closing by measuring the inclination of the car floor (5.6.3.4).	Checked Found ok / Not OK	
5	Н		Check the oil temperature.	This check has to be carried out only after the check of the rupture valve intervention and when the oil temperature is constant. (Temperature is the same as the room temperature)	Checked Found ok / Not OK	
6	Н		Check the Rod counter pressure and hand manoeuvre.	For indirect acting installations 2:1, check that, when the car is blocked on the proper parachutes or lays on its dampers, by activating the emergency button, the rod does not go down making the ropes loosen	Checked Found ok / Not OK	
7	H		Check the emergency lowering valve is protected against casual activation	Checked protection against accidental operation of emergency lowering valve.	Checked Found ok / Not OK	
8	Н		Check the operation of hand Pump.	When the main shut-off valve is closed, activating the hand pump, the pressure on the manometer has to increase up to the adjusting value.	Checked Found ok / Not OK	

9	Н		Check the Motor thermistor.	Check the provision of Motor thermistor.	Provided / Not Provided.
10	Н		Check the noise level.	No abnormal noise during normal drive both UP and DN direction travel.	Checked Found ok / Not OK
11	Н		Check the manometer shut- off	In regular working of the lift, the manometer shut-off has to be perfectly closed to avoid possible oil losses or damage to the manometer itself.	Checked Found ok / Not OK
12	Н		Check the electrical anti creep system. electrical anti- creep system	Check the working of the anti- creep system, activating the hand emergency at every floor	Checked Found ok / Not OK
13	Η		Check the Emergency Lowering with battery back-up.	Emergency Lowering with battery back-up.	Checked Found ok / Not OK
14	Н	6.3.9	Check the Restrictor/One- Way Restrictor	Check that the maximum speed, vmax, does not exceed vd + 0.30 m/s: a) either by measuring; or b) By using Formula (22).	Checked Found ok / Not OK
15		6.3.6	Check the Pawl Device	 a) Dynamic Test — The test shall be made while the car is travelling at a normal speed downwards, with the load uniformly distributed; the contacts on the Pawl device and on the energy dissipation buffer (5.6.5.7), if any, being short- circuited to avoid closing of the down direction valves. The car shall be loaded with 125 percent of the rated load and shall be stopped by the pawl device at each landing. After the test, it shall be ascertained that no deterioration which could adversely affect the normal use of the lift has occurred. Visual check is considered to be sufficient; b) Visual examination of the engagement of the pawl(s) with all supports, and of the running clearance measured horizontally between the pawl(s) and all supports during travel; c) Verification of the stroke of the buffers. 	Checked Found ok / Not OK

16	6.3.10	Pressure Test	A pressure of 200 percent full load pressure is applied to the hydraulic system between the non-return valve and the jack included. The system is then observed for evidence of pressure drop and leakage during a period of 5 min (taking into account the possible effects of temperature change in the hydraulic fluid).	Checked Found ok / Not OK	
			After this test, it shall be visually ascertained that the integrity of the hydraulic system is maintained:		
			This test should be carried out after the test of the devices against free fall (5.6), and include any hydraulic elements included in the uncontrolled movement protection means.		