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CE

DEKRA CERTIFICATION BGV C1



TL-A220

TORRE ELEVADORA
TOWERLIFT
TRAVERSENLIFT

MANUAL DE INSTRUCCIONES
OPERATING INSTRUCTIONS USER MANUAL
BEDIENUNGSANLEITUNG

PROLIFTS S.L.

V.08.19

LIFTING TOWER **TL-A200**
TORRE ELEVADORA **TL-A200**
TRAVERSENLIFT **TL-A200**

CE

CONTENTS / ÍNDICE

Features of the TL-A220 Towerlift / Características TL-A220.....3 - 4
English Quick operation guide.....5 - 11
Manual de usuario Español.....12 - 19
Bedienungsanleitung Deutsch.....20 - 26
Sketches / Planos piezas.....27 - 34
Spare part list / Lista de repuestos.....35 - 37
Certifications / Certificaciones.....38

BGV-C1

BGG-912

EC Conformity Declaration pursuant to the EC Machinery Directives 89/392/CE and 98/37/CE: Manual lifters

Find a copy of the certifications at the end of this booklet.
Puede ver una copia de las certificaciones al final del manual.

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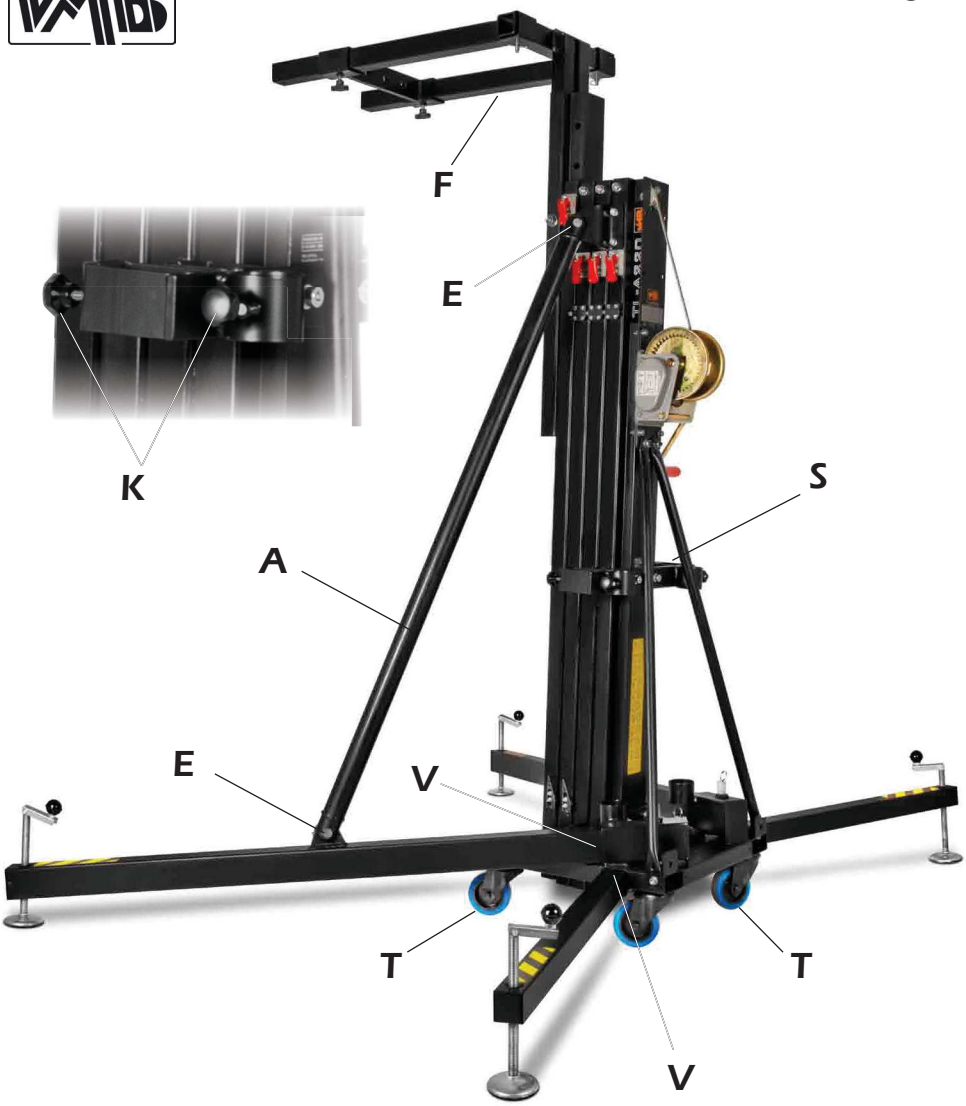
Manufacturer - Fabricante

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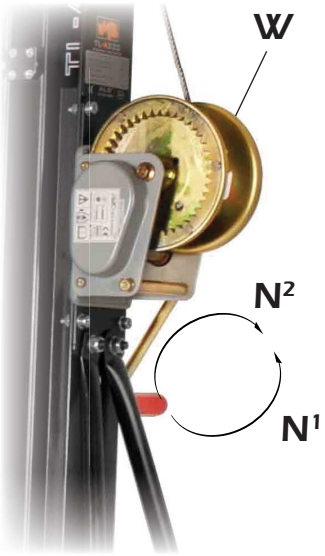
TL-A220

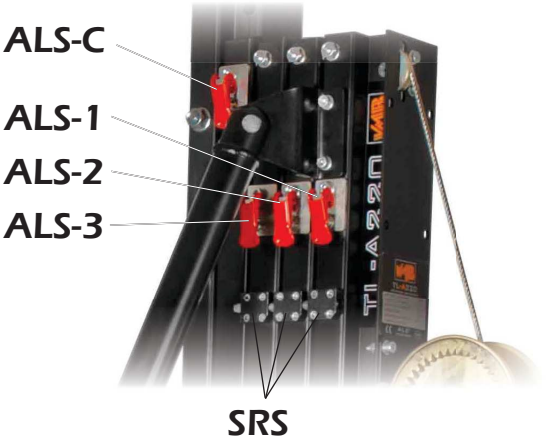


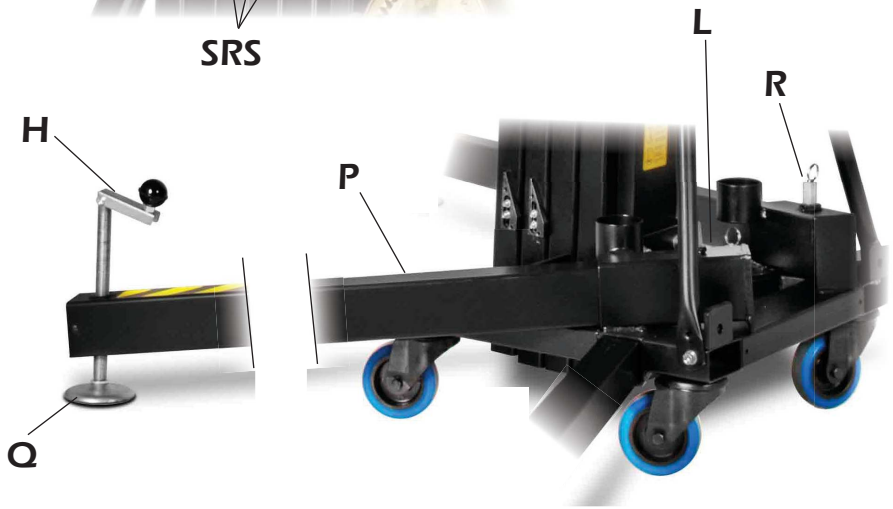
A: Reinforcement struts for line array / Refuerzo especial para Line Array
E: Anchor points for struts / Anclaje del tirante refuerzo especial para Line Array
F: Load forks / Brazos de carga
K: Tightening knob for legs / Pomo de seguridad transporte patas
T: Transport wheels / Ruedas de transporte
S: Transport compartment for legs / Alojamiento de transporte para patas
V: Working compartment for legs / Alojamiento de trabajo para patas

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ALS-C: Auto Lock System carriage / Gatillo automático carro
ALS-1: Auto Lock System 1st profile / Gatillo automático tramo 1
ALS-2: Auto Lock System 2nd profile / Gatillo automático tramo 2
ALS-3: Auto Lock System 3rd profile / Gatillo automático tramo 3
H: Handle / Manivela
L: Spirit level
N: Force on hand crank / Fuerza sobre manivela
P: Leg / Pata
Q: Stabilizer / Estabilizador
SRS: Sequence Retainer System
R: Catch pawl / Gatillo bloqueo patas
W: Winch / Cabrestante







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CONTENTS

1. Introduction.
2. Technical information.
3. Safety precautions.
4. Operation.
5. Maintenance.
6. Guarantee.

1. INTRODUCTION

Dear customer, in order to ensure a safe and reliable operation of the TL-A220 towerlift please follow the instructions in this booklet carefully. Before operating the lift, read the instructions completely and please note the technical information contained within this manual.

All VMB products undergo very rigorous testing, under strict conditions and they are monitored continuously during the manufacturing process.

In order to guarantee the lifts function and safety, only original parts from the manufacturer must be used. If any parts other than those of the manufacturer are used, or the product is modified in any way, the user forfeits all warranty rights to claim. VMB reserves the right to modify the product specifications without prior notice.

The model type, production year and serial number must be quoted in any queries or orders for spare parts.

2. TECHNICAL INFORMATION

2.1 - TL-A220 Towerlift.

2.2 - Designed to lift audio systems, such as PA systems or Line Array, up to different heights.

2.3 - Maximum load : 220 kg (485 lb).

2.4 - Minimum load: 25 Kg (55 lb).

2.5 - Security :
ALS (Automatic Lock System).

2.6 - Maximum height : 5.50 m (18').

2.7 - Folded height : 1.72 m (5.6').

2.8 - Transport surface:
0,49 x 0,49 x 1,72m (1.6 x 1.6 x 5,6')

2.9 - Shipping dimension:
0,51 x 0,51 x 1,74m (1.67 x 1.67 x 5.71')

2.10 - Work surface :
2.1 x 1.6 m (6.9' x 5.2').

2.11 - Unit weight : 116 Kg (255.7 lb).

2.12. - Load support:
Long forks (74.5 cm).

2.13 - Construction material : 6082-T6 alluminium for the main body, comprised of 4 profiles and a lifting carriage. Base and legs are made of steel profile according to DIN 2394. Catches and pulleys of ST-37 steel.

2.14 - Winch: 900 Kg. maximum load with automatic brake. Certification CE and GS TÜV.

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2.15 - Cable : Steel DIN 3060. Quality 180 Kg/mm^2 twist resistant.
Cable diameter: Ø5 mm.

2.16 - Adjustable stabilizing feet with rubber non-slip supports.

2.17 - Safety catches to anchor the legs.

2.18 - Antirust protection, primed paint with cured polyester dust cover. The tower can be supplied with natural aluminium finish or black (version B).

2.17 - Spirit level to adjust the tower vertically.

2.18 - Swivel wheels to transport the lift when folded.

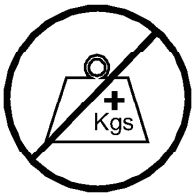
3. SAFETY PRECAUTIONS.



3.1 - The TL-A220 is a machine designed to elevate loads upwards in a vertical direction, It should NEVER be used as a platform to elevate people.



3.2 - Only place the lift on hard, flat surfaces always checking that it is in a vertical position by using the bubble level indicator (**L**) found on the base. Adjust the leg stabilizers (**Q**) by turning the handles (**H**) to level if necessary. NEVER use wedges or other foreign objects to balance the lift.



3.3 - The maximum load indicated on the characteristics label and the instructions manual should not be exceeded.



3.4 - This lift should NEVER be used to elevate a load that has not been properly checked. It is necessary to verify that the load is correctly supported and centred on the appropriate lift support so that the weight of the load will only elevate in a vertical direction.

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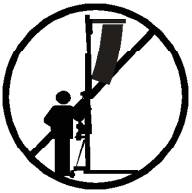
3.5 - Check that the legs (**P**) are placed and set-up correctly with their safety pins (**R**) inserted and locked.



3.6 - NEVER use the lift on a vehicle or any other mobile surface.



3.7 - If there is a possibility of strong winds or gusts, place the lift on the ground firmly and secure it with the use of straps. NEVER attach a strap to a vehicle or any other object that can possibly be moved.



3.8 - NEVER move the lift whilst it is carrying a load. It is not advisable to carry out any type of horizontal movement even small positional adjustments.



3.9 - NEVER allow any team member below the load or anybody else in the lifts operating zone.

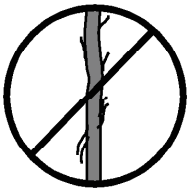


3.10 - Take care with all obstacles above the lift and its extension zone such as cornices, balconies, and luminous signboards. It is very important to avoid the presence of all types of cables below the extended lift.

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3.11 - Do not use stepladders on the lift or use it as a support for them.



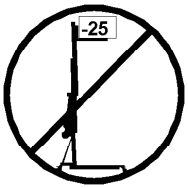
3.12 - Before using the lift, check the condition of the cable. The cable should not have broken threads or show any signs of crushed/flattened areas. NEVER use faulty cables, always change them if there is any doubt. Only use VMB steel cables; reference: DIN 3060. Quality: 180KG/mm and torsion resistant.



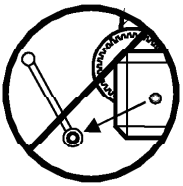
3.13 - All sections must be lowered first, and the legs placed in its transport position, before transportation.



3.14 - Do not grease or lubricate the winch's braking mechanism. The brake disks have been greased with a special heat and pressure resistant solution. Other products should not be used to avoid negative effects regarding the braking mechanism.



3.15 - The minimum load to avoid problems regarding the braking mechanism is 25Kg. Without this load the brake will not work.



3.16 - NEVER take apart the crank of the winch when the lift is carrying a load or extended.

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ORIGINAL

3.17 - Only original replacement parts should be used.

4. USER INSTRUCTIONS.

4.1 - Place the lift on a firm, flat surface in the area it is to be used with the help of the transport wheels (***T***).

4.2 - Untighten the transport knobs (**K**) and remove the legs (***P***) from their transport compartment (***S***) and fully insert them into their working positions (***V***) checking that they are fixed by the pins (***R***). Remove the reinforcement struts (**A**) as well and place them in their anchor points (**E**), fix them with their corresponding pins and clips.

4.3 - Check that the lift is in vertical position using the spirit level (***L***) at the base of the tower, adjust the stabilizer (***Q***), turning the handle (***H***) if necesary.

4.4 - Release the forks (***F***) and place them in its working horizontal position ready to take the load on them. Insert the pins to block the forks.

4.5 - <u>DO NOT</u> OVERLOAD THE LIFT. MAXIMUM LOAD IS 220 kg (485 lb)

The lift should NEVER be overloaded. Safety at work is the most important issue. Place the load onto the lift using an adequate VMB support according to the need, use so that the weight of the load will only be elevated in a vertical direction. The minimum load is 25 Kg.

4.6 - How to place the load: Always load as close to the tower as possible.

The maximum load diminishes according to the distance from the body of the tower as illustrated in the diagram ***4.6.1***, which shows the load on the gravity centre with distances to the lifting carriage at a maximum lifting. Use a VMB adaptor if necessary.

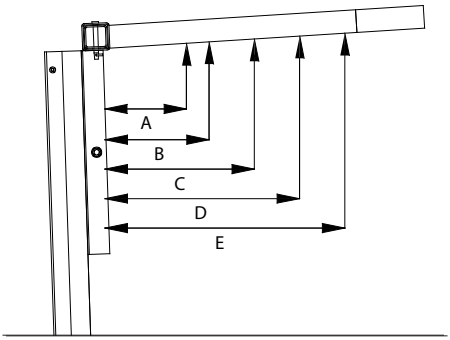
CAUTION

When two towers are used to elevate a truss bridge, or many towers to elevate a structure of any type, it is almost impossible that two or more people co-ordinate the winches elevating or lowering the loads, at exactly the same pace. At a certain point each tower will be extended to different height. For this reason it is necessary that the structure does not stretch and allows for these differences.

With a rigid fixation and if the level difference is significant, the force generated from the handle of the winch will deform the structure and apply a lateral force to the lifts causing them to break and block.

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Diagram *4.6.1*



	Distance from the load's center to the axel of the tower	Maximum load TL-A220
A	50 cm (1.64')	220 kg (485 lb)
B	55 cm (1.80')	200 kg (441 lb)
C	60 cm (1.97')	183 kg (404 lb)
D	65 cm (2.13')	168 kg (370 lb)
E	70 cm (2.30')	120 kg (264 lb)

Security system ALS / ILS

The TL-A220 incorporates the patented security system ALS (Automatic Lock Security). This VMB red trigger system automatically blocks the tower in the position it is left in. Each section of lift has an ALS that blocks the section in the unlikely event of the cable breaking. For a more complete security the lifting carriage incorporates the ILS system (Inertial Lock Security)

4.7 - Elevation:

Turn the winch crank clockwise (***N*^{1}**) to lift the carriage and profiles. The ALS system enable the lift to rise and automatically block the carriage and profiles whilst rising ensuring that it will never fall. This enables the cable to be without any force and means it is only used for the elevation and descent of the lift. The SRS (Sequence-Retainer-System) will also ensure that the profiles rise in sequence, one after the other.

4.8 - Hold:

The tower can be left in any intermediate position if it is necessary. Just stop turning the handle of the winch and gently turn it in an anticlockwise direction (***N*^{2}**) to block the last profile risen. The ALS lock will take the pressure of the load and release strain applied on the cable.

4.9 - Lowering:

To bring the lift down you need to first turn the winch handle slightly clockwise (***N*^{1}**) and at the same time pull the red ALS lock (***ALS-1***) out. This releases the blocking systems. Then turn the handle anti-clockwise (***N*^{2}**), whilst maintaining the ALS lock pulled out until the profile has been completely lowered. All red ALS locks (***ALS-2, ALS-3 & ALS-C***) should be pulled out one by one whilst the handle is turned anti-clockwise (***N*^{2}**) and the profiles are brought down, one by one.

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If you release your finger from the ALS lock it will automatically block. In this case, repeat the first operation by turning slightly clockwise (***N*[1]**) and then anti-clockwise (***N*[2]**) whilst always pulling the red ALS lock out. It is necessary to completely lower each profile before starting to lower the next. **DO NOT** pull another red ALS lock without having completely lowered the previous profile.

4.10 - Transport:

For the transport of the tower is necessary to fold the machine lowering every profile completely. Once the towerlift is completely folded, place the legs and the struts (**A**) in their transport compartment (**S**) and tighten the legs with the security knobs (**K**), then the lift will be ready to be transported.

5. MAINTENANCE.

5.1 - Regularly check the state of the cable. If the cable has broken threads, or if it shows any signs of crushed/flattened areas, it should be changed and replaced immediately with a new one. Do not use the lift if the cables are in bad condition. Only use VMB steel cables reference: DIN 3060 torsion resistant.

5.2 - The lift is supplied from the factory completely greased. However, it is recommended to periodically grease according to use, the gearing, the axis bearings, the spiral of the crank, and the sections.

5.3 - All lifts should undergo an annual technical inspection carried out by an authorized VMB dealer to check the certifications and general condition of all the lift's elements and security systems involved in the lift's use.

5.4 - Only use original spare parts to guarantee a continued security level. The user loses all rights to warranty if any spare parts other than originals are used or carries out any modification or alteration to the towerlift.

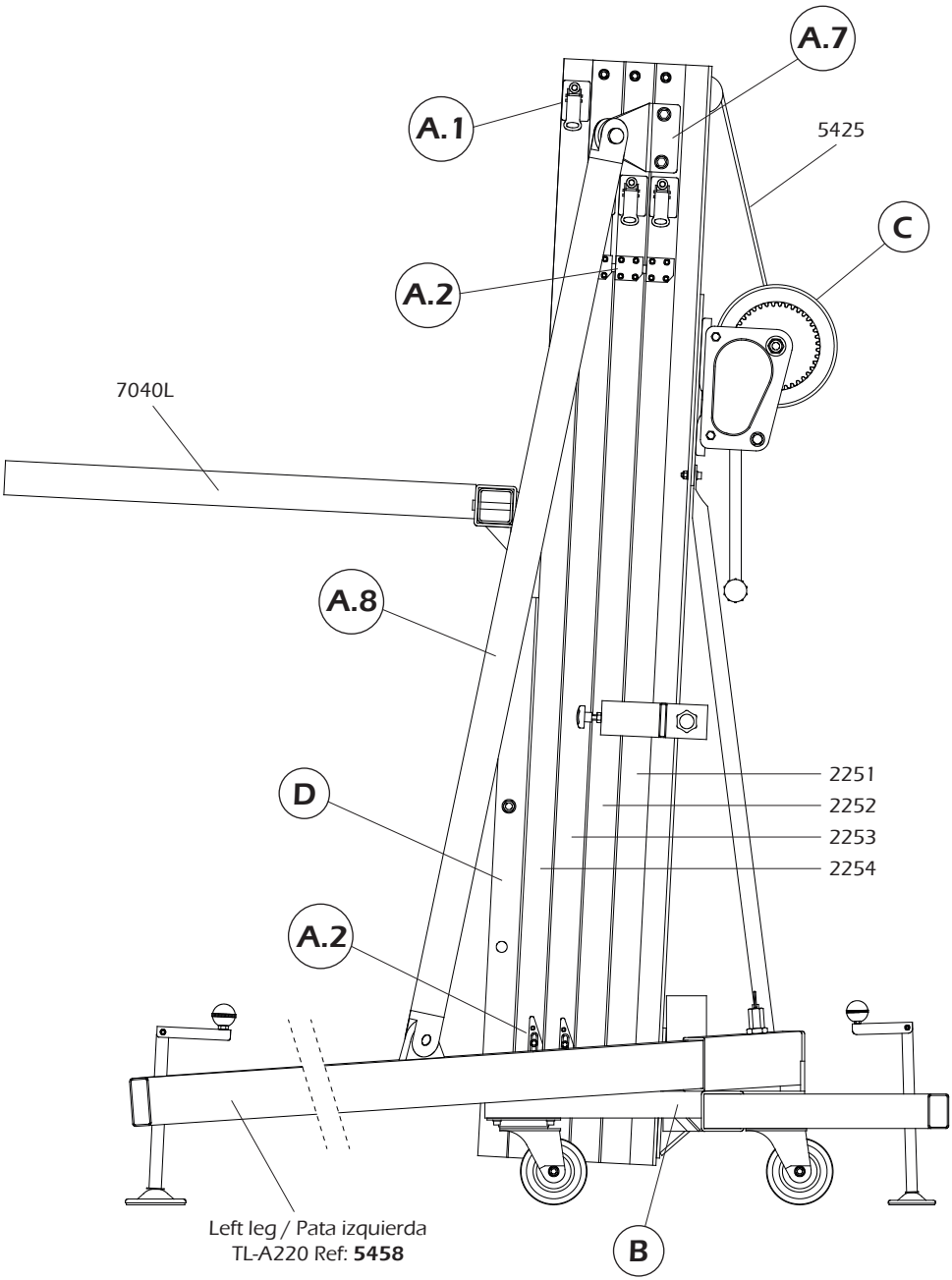
5.5 - To request a spare part please indicate the corresponding code which can be found in this manual together with the lift's serial number and year of manufacture.

6. GUARANTEE.

The warranty period for this lift is 2 years from the date of purchase.

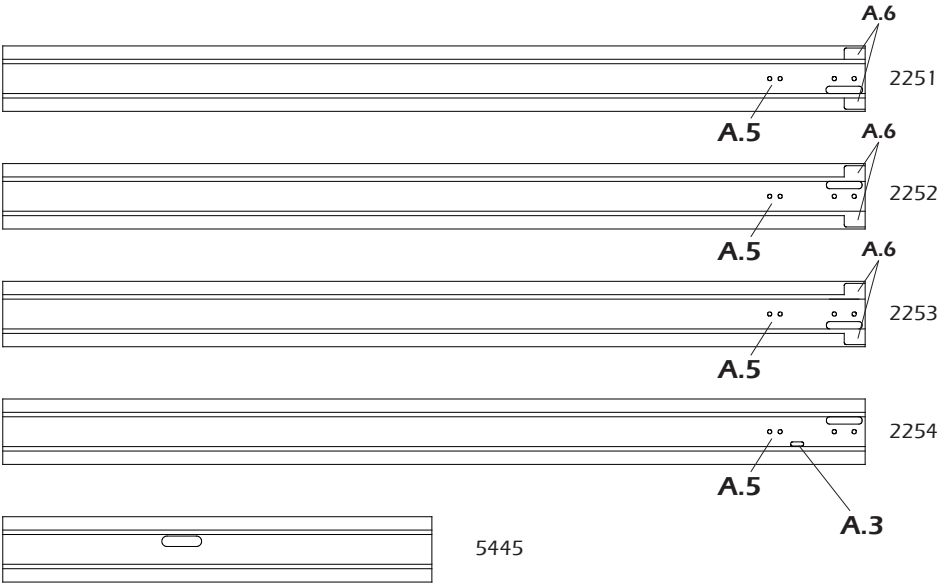
PRO LIFTS S.L. promises, that from the date of purchase and during the warranty period to resolve any faults that may occur, produced through defect material or fabrication. Damage caused by improper use, product modification, third party manipulation or accidental fire are not covered by this warranty.

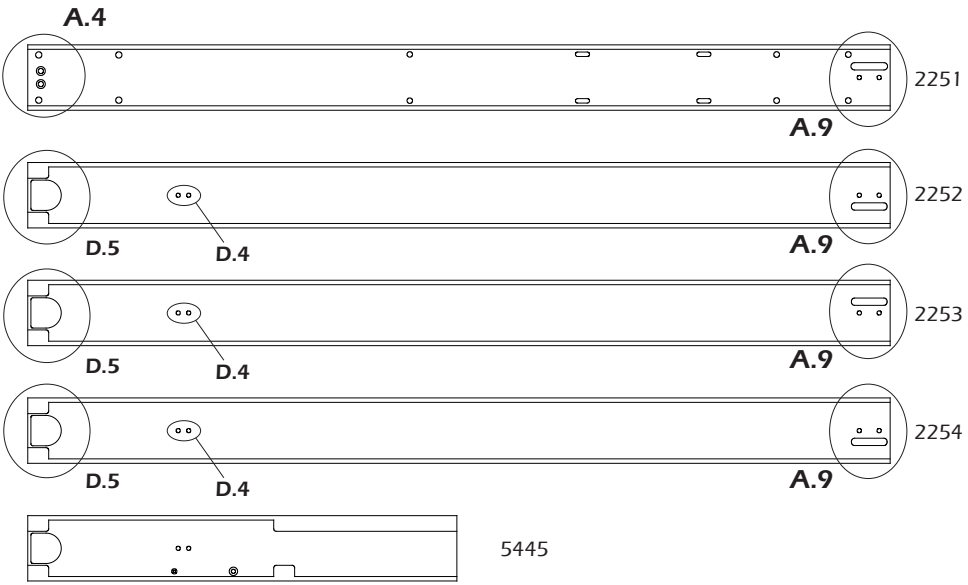
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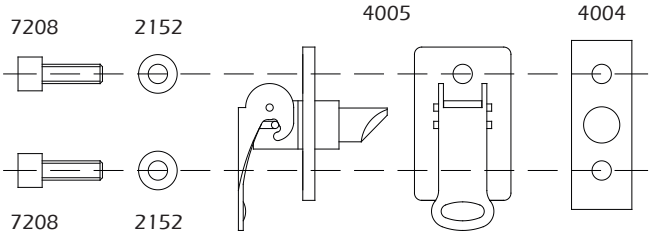
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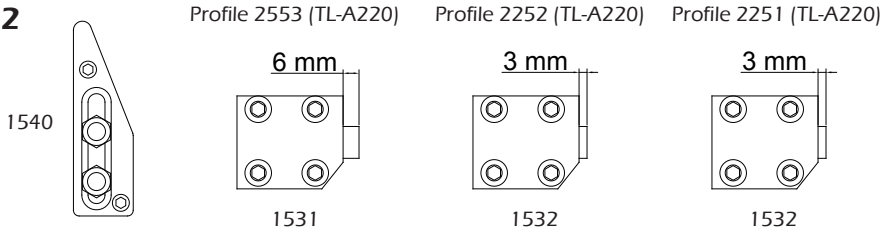


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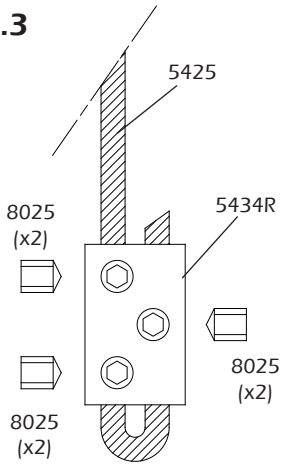
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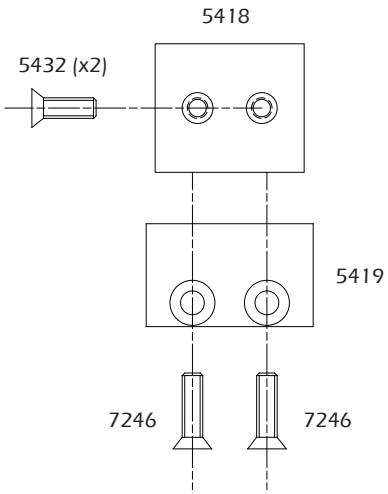
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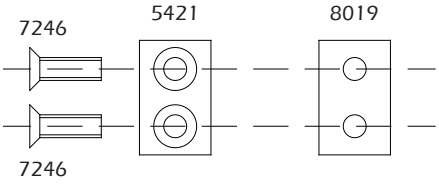


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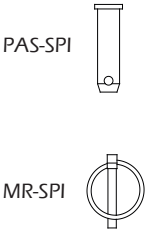


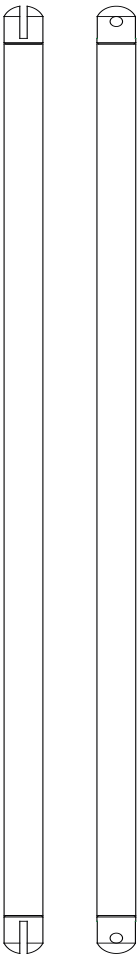
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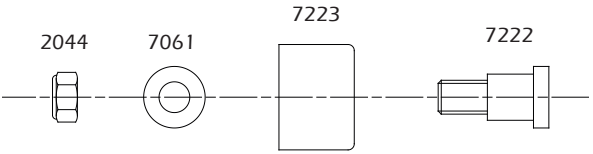


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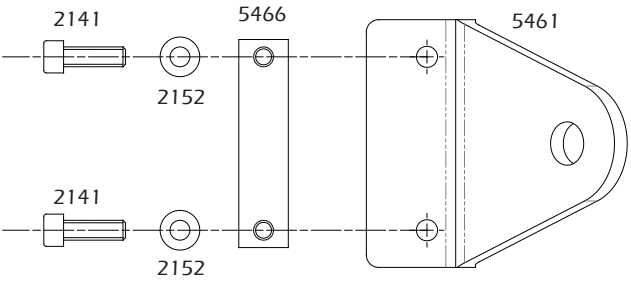




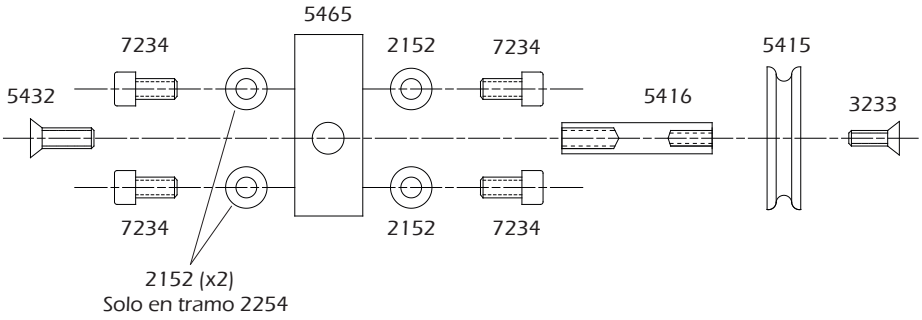
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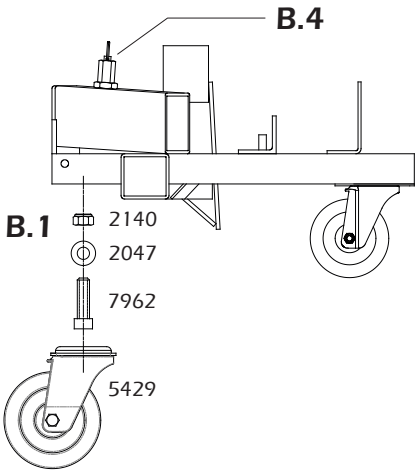
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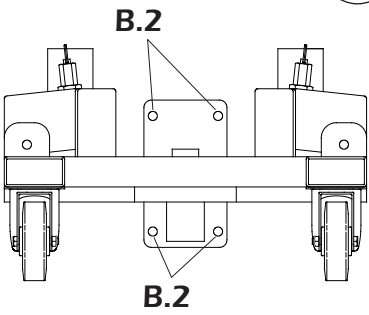


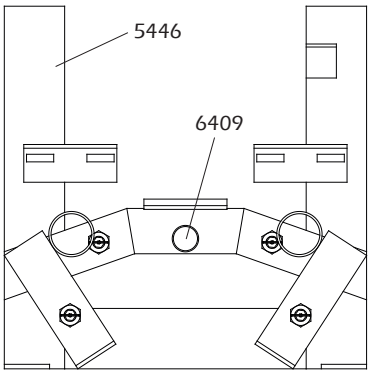
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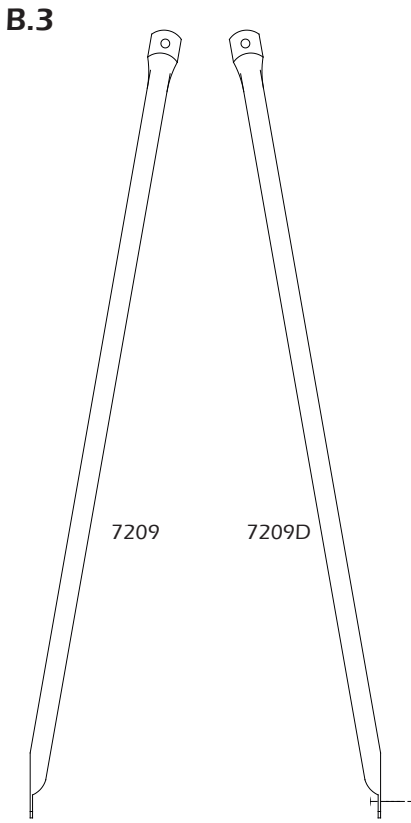


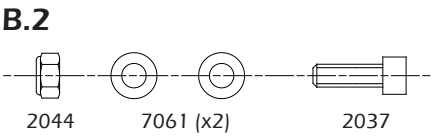
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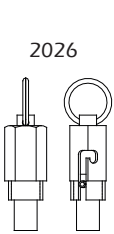


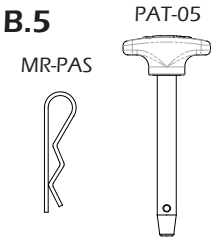


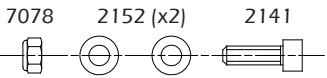




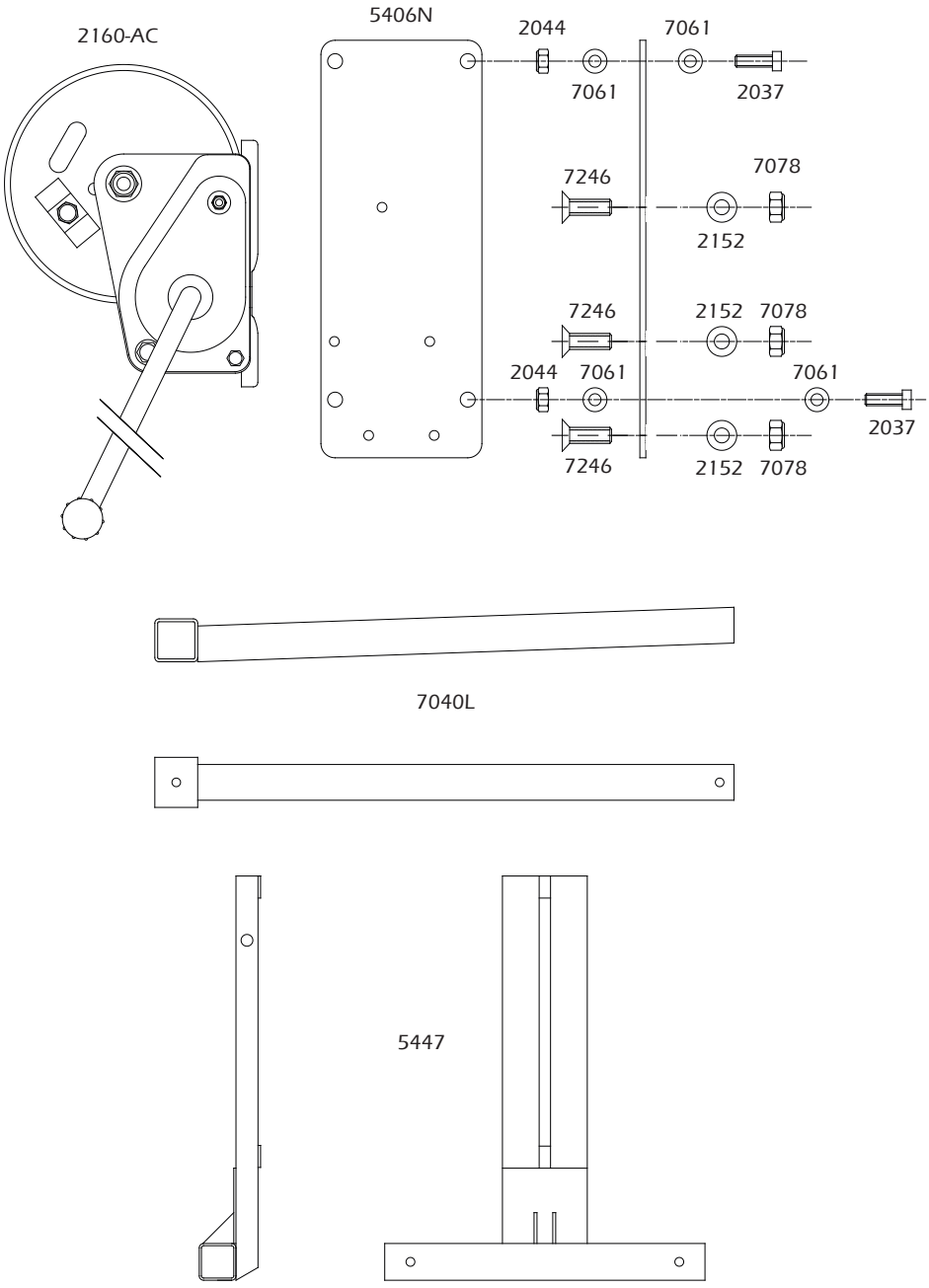




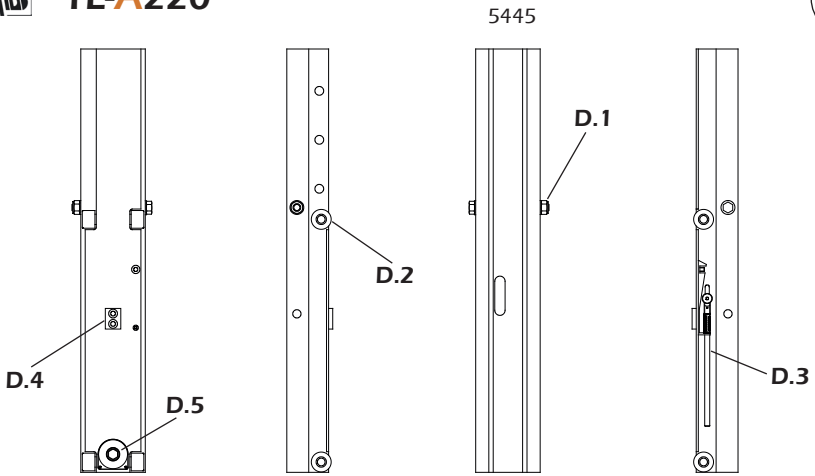




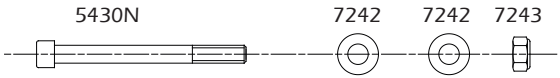
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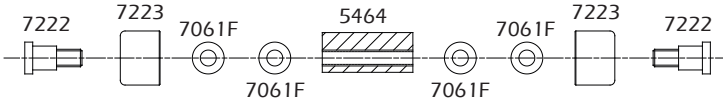
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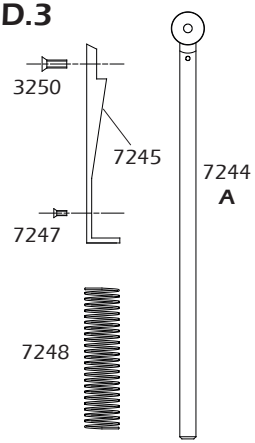
D.1



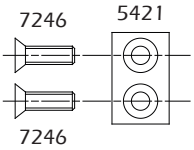
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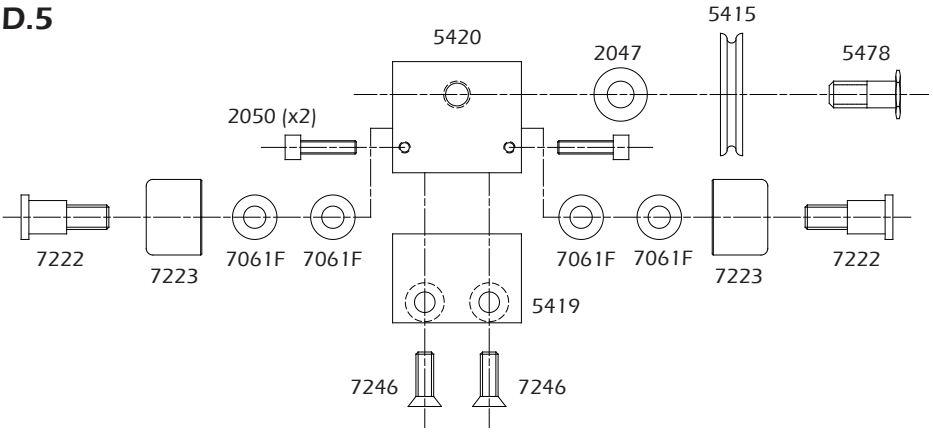
D.3



D.4

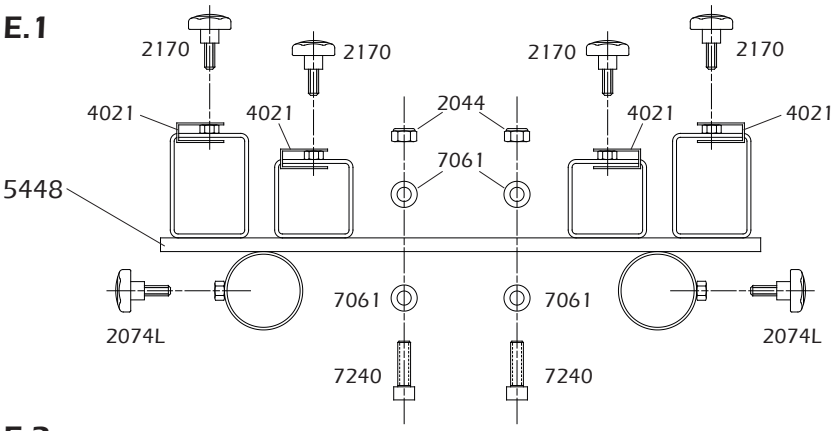


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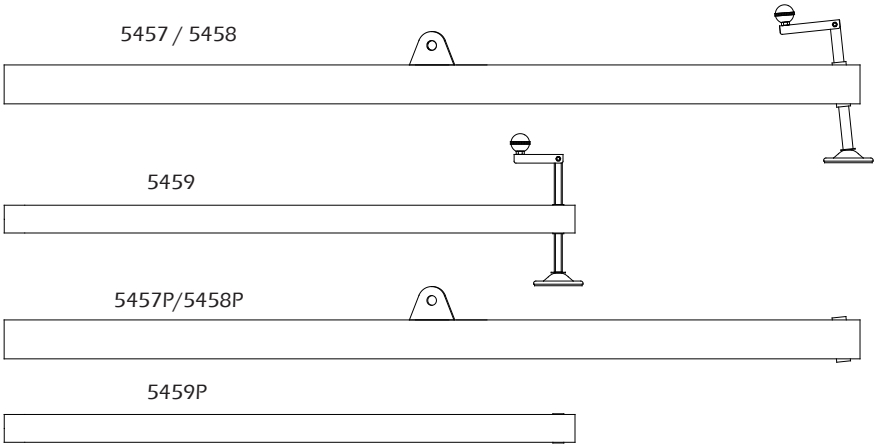


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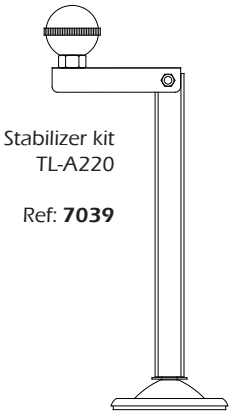
E.1



E.2

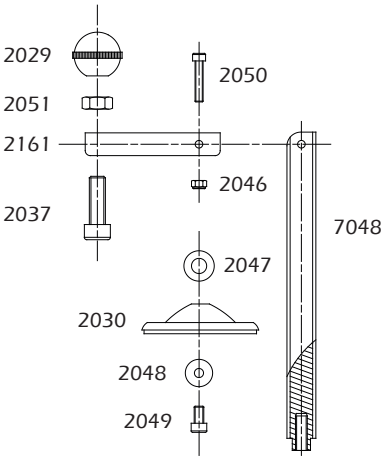


E.3



Stabilizer kit
TL-A220

Ref: **7039**



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SPARE PARTS LIST / LISTA DE REPUESTOS
TL-A220

Code	Description GB / USA	Descripción ES
1531 (B)	SRS Unit Profile 4 (B black)	Pieza Retentor tramo 3 (B Negro)
1532 (B)	SRS Unit Profile 1, 2 & 3 (B black)	Pieza Retentor tramo 1, 2 y 3 (B Negro)
1540 (B)	SRS Unlock (B black)	Desbloqueador sistema SRS (B Negro)
2026	Safety catch	Gatillo de seguridad
2029	Crank nob Ø34	Pomo baquelita estabilizador patas Ø34
2030	Stabilizer round plate	Platillo de apoyo estabilizador patas Ø84
2037	M10x30 Allen screw	Tornillo allen M10x30
2044	M10 Auto-block nut	Tuerca autoblocante M10
2046	M5 Auto-block nut	Tuerca autoblocante M5
2047	M12 Washer	Arandela M12
2048	M6 Washer	Arandela M6
2049	M6x10 Allen screw	Tornillo allen M6x10
2050	M5x25 Allen screw	Tornillo allen M5x25
2051	M10 Nut	Tuerca M10
2074L	Knob with long nylon screw (25mm)	Pomo con rosca larga de nylon (25mm)
2140	M12 Auto-block nut	Tuerca autoblocante M12
2141	M8x25 Allen screw	Tornillo allen M8x25
2152	M8 Washer	Arandela M8
2160-AC	900 Kg Winch	Cabrestante 900 Kg
2161	Steel hand crank	Manivela estabilizador patas
2170	Screw knob	Pomo con rosca
2244	M6 Auto-block nut	Tuerca autoblocante M6
2251 (B)	Base profile 1 (B Black) TL-A220 (1648mm)	Tramo 1 Base (B Negro) TL-A220 (1648mm)
2252 (B)	Profile 2 (B Black) TL-A220 (1648mm)	Tramo 2 (B Negro) TL-A220 (1648mm)
2253 (B)	Profile 3 (B Black) TL-A220 (1495mm)	Tramo 3 (B Negro) TL-A220 (1648mm)
2254 (B)	Profile 4 (B Black) TL-A220 (1495mm)	Tramo 4 (B Negro) TL-A220 (1648mm)
3233	Conic screw M6x16	Tornillo cabeza cónica M6x16
3250	M8x20 Conic screw	Tornillo cabeza cónica M8x20
3251	M6x16 Allen screw	Tornillo allen M6x16
3252	SRS screwed plate	Pletina roscada Retentor
3253	M6x10 Headless allen bolt	Tornillo allen sin cabeza M6x10
4004	ALS fixation alluminium piece	Pieza roscada aluminio fijación gatillo ALS

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Code	Description GB / USA	Descripción ES
4005	ALS catch lock	Gatillo ALS
4021 (B)	Tightening knob protector (B Black)	Protector apriete pomos (B Negro)
5406N (B)	Winch fixation plate	Placa porta-cabrestante
5415	Special pulley Ø55	Polea especial Ø55
5416	Steel axe Ø12x58	Eje de acero Ø12x58
5418	Alluminium stop holding piece	Pieza de aluminio sujeta tope
5419	Alluminium stop piece	Tope de aluminio
5420	Alluminium stop holding piece	Pieza de aluminio sujeta tope
5421	Alluminium stop piece	Tope de aluminio
5425	Steel cable Ø5 x 14.2 m	Cable de acero Ø5 x 14.2 m
5429	Wheel Ø100	Rueda Ø100
5430N	M14x150 Allen screw	Tornillo allen M14x150
5432	M8x20 Conic screw	Tornillo cabeza cónica M8x20
5434R	Cable grip (6 screws)	Pieza fijación cable (6 Tornillos)
5445 (B)	TL-A220 Lifting carriage (B Black)	Carro elevador TL-A220 (B Negro)
5446 (B)	TL-A220 Base (B Black)	Base TL-A220 (B Negro)
5447 (B)	Fork support (B Black)	Soporte brazos de carga (B Negro)
5448 (B)	Legs support (B Black)	Soporte transporte patas (B Negro)
5457 (B)	Complete long right leg (B Black)	Pata larga derecha completa (B Negro)
5457P (B)	Long right leg profile (B Black)	Perfil pata larga derecha (B Negro)
5458 (B)	Complete long left leg (B Black)	Pata larga izquierda completa (B Negro)
5458P (B)	Long left leg profile (B Black)	Perfil pata larga izquierda (B Negro)
5459 (B)	Complete short leg (B Black)	Pata corta completa (B Negro)
5459P (B)	Short leg profile (B Black)	Perfil pata corta (B Negro)
5460 (B)	Reinforcement frontal legs strut (B Black)	Tirante refuerzo frontal a patas (B Negro)
5461 (B)	Fixation piece for strut (B Black)	Oreja soporte tirante refuerzo frontal (B Negro)
5464	Alluminium support for carriage rollers	Soporte de aluminio para rodillos de nylon carro
5465	Alluminium M12 axel support	Pieza de aluminio soporte eje M12
5466	Screwed piece for strut's fixation	Pieza fijación oreja de tirante de refuerzo
5478	Special thin head screw M12x30	Tornillo especial cabeza fina M12x30
6409	Spirit level Ø30mm	Nivel de burbuja Ø30mm
7039	Complete stabilizer	Estabilizador completo
7040L (B)	Long load support fork (B Black) (74.5cm)	Brazo de carga largo (B Negro) (74.5cm)
7048	M18 Threaded bolt	Perno roscado M18

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Code	Description GB / USA	Descripción ES
7061	M10 Washer	Arandela M10
7061F	M10 Thin washer for adjustments	Arandela fina de ajuste M10
7078	M8 Auto-block nut	Tuerca autoblocante M8
7208	M8x35 Allen screw	Tornillo allen M8x35
7209 (B)	Left reinforcement strut (B Black)	Tirante de refuerzo izquierdo (B Negro)
7209D (B)	Right reinforcement strut (B Black)	Tirante de refuerzo derecho (B Negro)
7222	Special screw for nylon roller	Tornillo especial para rodillo de nylon
7223	Nylon roller	Rodillo nylon
7234	M8x16 Screw	Tornillo M8x16
7240	M10x35 Allen screw	Tornillo allen M10x35
7242	M14 Washer	Arandela M14
7243	M14 Auto-block nut	Tuerca autoblocante M14
7244**A**	Inertial brake lock (Ø21mm disk)	Varilla freno de inercia (Disco Ø21mm)
7245	Brake lock support	Soporte varilla freno de inercia
7246	M8x25 Conic screw	Tornillo cabeza cónica M8x25
7247	M5x10 Conic screw	Tornillo cabeza cónica M5x10
7248	Brake spring	Muelle freno de inercia
7962	M12x40 Allen screw	Tornillo allen M12x40
8019	Threaded alluminium piece inner stop	Pletina roscada tope interior de aluminio
8025	M8x10 Headless allen bolt	Tornillo allen sin cabeza M8x10
MR-PAS	'R' Clip	Clip de seguridad 'R'
MR-SPI	Ring safety clip	Clip de seguridad anillo
PAS-SPI	Fastener steel pin Ø16 x 65.5mm	Pasador de acero Ø16 x 65.5mm
PAT-05	Magnetic steel pin Ø10x84.5mm	Pasador acero imantado Ø10 x 84.5mm

REMEBER TO QUOTE THE TYPE, PRODUCTION YEAR AND SERIAL NUMBER OF THE TOWERLIFT.

RECUERDE CITAR EL MODELO, EL AÑO DE PRODUCCIÓN Y EL NÚMERO DE SERIE DE LA TORRE ELEVADORA.

Vergessen Sie nicht den MODELLJAHR DER PRODUKTION und Seriennummer des HEBETURM zitieren.

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DEKRA

Test report about an acceptance inspection

Device typ:	Towerlift	
Typ:	TL-A 220	
Fabrikator:	Prolifts S. L. Pol. Ind. Picassent Calle 7 E-46220 Picassent VALENZIA	
Technical specifications:	charge maximum:	220 kg
	tare:	95 kg
	minimum high:	1,72 m
	maximum high:	5,50 m
	Serial Number:	059171
	Year of manufacture:	2009
Foundation :	BGV C1, BGG 912	
Test result:	The accomplishment of the towerlift complies the safty-related receivables of the BGV-C1.	
Clue: deliver.	At each towerlift is an EG-declaration of conformity to	
	Bevor the towerlift is commissioning at first is an optical control from an assessor after BGG 912 necessary.	



Berlin, 15.10.2009

Dipl. Ing. Konrad Haak

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