

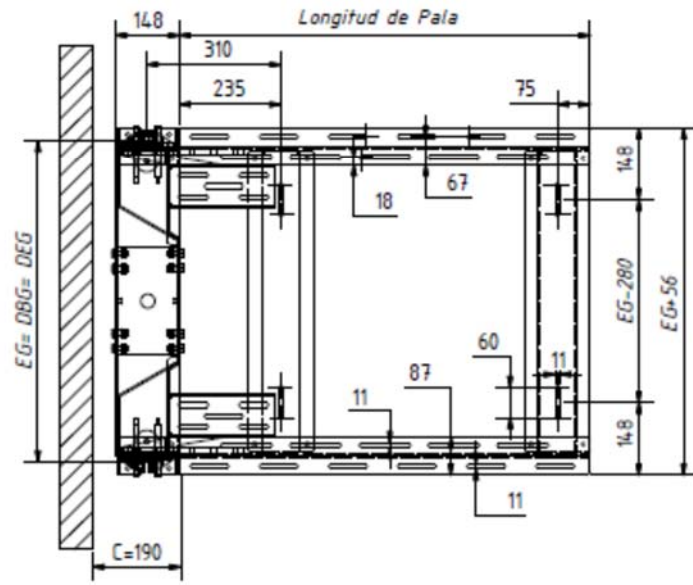
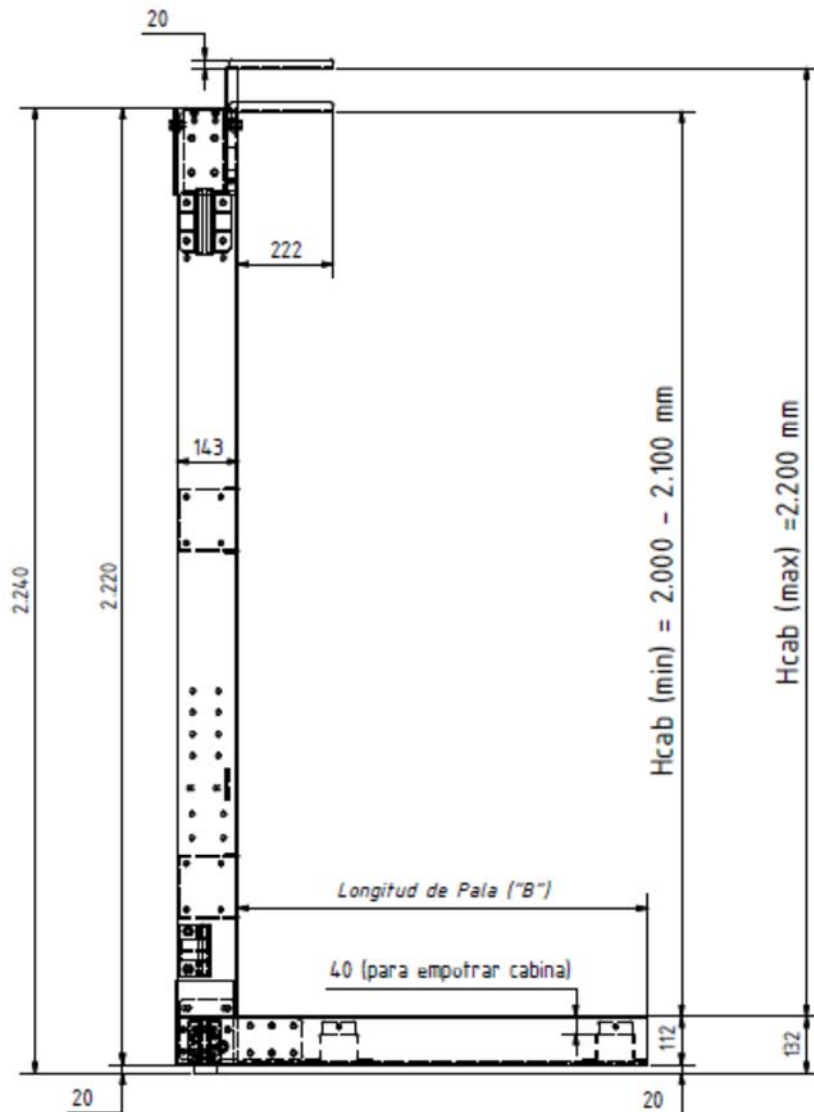
Installation - Assembly

ASSEMBLY MANUAL
HOME LIFT KIT 1:1

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0. MAIN TECHNICAL CHARACTERISTICS OF THE 1:1 HYDRAULIC KIT



CARACTERISTICAS PRINCIPALES:

(P+Q) max. = 1.150 Kg

Suspension= 1:1

Vel.Nominal max. = 0,30 m/s (0,5 m/s opcional)

Recorrido maximo= 4.000 mm (con extrarecorrido de 120 mm)

Foso Minimo Recomendable = 160 mm (Con cabina empotrada 40 mm)

Foso Minimo Recomendable = 200 mm (Con cabina apoyada sobre chasis)

Guia = T82/9 - 2,5 m

Peso aprox. chasis = 102 Kg

Pistones admisibles en tiro DIRECTO 1:1 :

* Piston simple modelo CRA-60 (camisa D.80 mm)- Para Recorridos cortos < 2.300 mm

* TELESCOPICO T60/80 (P+Q<1.150 Kg) (camisa D.115 mm) -Para 2.300 < Rdo< 4.000 mm

Central hidraulica: con bomba de husillo, motor sumergido y valvula hidraulica de 2 velocidades (MORIS MH-2V) , ó 1 velocidad (BLAIN KV1P- KV1S- KV1S+Ks)

Deslizaderas :

OPCION 1 : Con Deslizadera INFERIOR y Deslizadera SUPERIOR (Estandar) (para 0,15m/s)

OPCION 2 : Con rueda excentrica D.70 y Semipatin INFERIOR y Semipatin SUPERIOR $v>0,15$ m/s

ENTREGUIA (EG)	550	650	(ESTANDAR) 750	950
Ancho Mecánica	946	1.046	1.146	1.346

LONGITUD DE PALA (b)	750	850	(ESTANDAR) 950	1.050
Fondo Mecanica	930	1.030	1.130	1.230

P+Q (max) = 1.150 Kg

RECORRIDO MAXIMO = 4.000 mm
(para mas recorrido, consultar)

HUIDA MINIMA (Con ExtraRdo=120 mm)

—
* Si $R < 3.350$ mm ,
 $H_{min} = \text{MAYOR de } [H_{cab} + 200 \text{ mm} ; 2.400]$

* Si $R > 3.350$ mm ,
 $H_{min} = 2.400 + (R - 3.350) \text{ mm}$

C= FONDO DE MECANICA= 190 mm

1. OCCUPATIONAL HEALTH AND SAFETY MEASURES

1.1. INTRODUCTION

Before the start of the assembly, we must ensure that the requirements for good work are met:

- Correct preparation of the work.
- Tools and utensils in good condition and suitable for the methodology we apply.
- Personal protective equipment must be complete and in perfect condition.
- Collective protection equipment must be installed.
- The necessary documentation (drawings, list of materials, assembly instructions...) must be available to us.

1.2. SECURITY

We will always pay special attention to safety measures in order to prevent accidents. Before each assembly, the individual protection equipment must be checked and the good condition of the tools and equipment must be checked to avoid malfunctions that could cause an accident.

We will always put collective safety measures before individual ones and ensure that they are complied with.

Following the instructions in the assembly manual ensures good accident prevention and compliance with safety regulations.

ALL THAT IS EXPLAINED HERE IN SAFETY MATTERS IS IN GENERAL TERMS. TOGETHER WITH THIS MANUAL, WE MUST ALWAYS CARRY THE PREVENTION OF OCCUPATIONAL RISKS, WHICH IS WHERE EVERYTHING RELATED TO SAFETY MEASURES IS MOST EXTENSIVELY DETAILED.



Mandatory head protection



Mandatory foot protection



Mandatory individual fall protection



Mandatory face protection



Mandatory hand protection

1.3. ARRIVAL AT THE CONSTRUCTION SITE

Whenever we are inside the building site, we will use the safety helmet that will protect us from possible falling objects. We will also use boots with the sole protected against sharp elements and the upper part of the toes with metal reinforcement to protect us from blows and crushing due to the fall of some heavy material.

When we arrive at the site, we will introduce ourselves to the manager. We will inform ourselves of the general and specific working, safety and operating conditions. We will agree on the use of the existing auxiliary means (forklifts, cranes, scaffolding, etc.) and look for the areas where to store the tools and materials.

The opening will be clean and free of obstacles, with its accesses protected against the fall of objects and people and built according to plan specifications.

We will ensure that we have a single or three phase power supply with neutral and ground.

Verify that the installation meets all the requirements set out in the platform's specifications

1.4. DOWNLOADING MATERIALS AND TOOLS

Wherever possible, we will use mechanical means for handling loads.

We will check that the packages are correct and in good condition. We will not open the boxes until the materials are used. We will house the materials in a suitable, clean, damp-free and well-protected place.

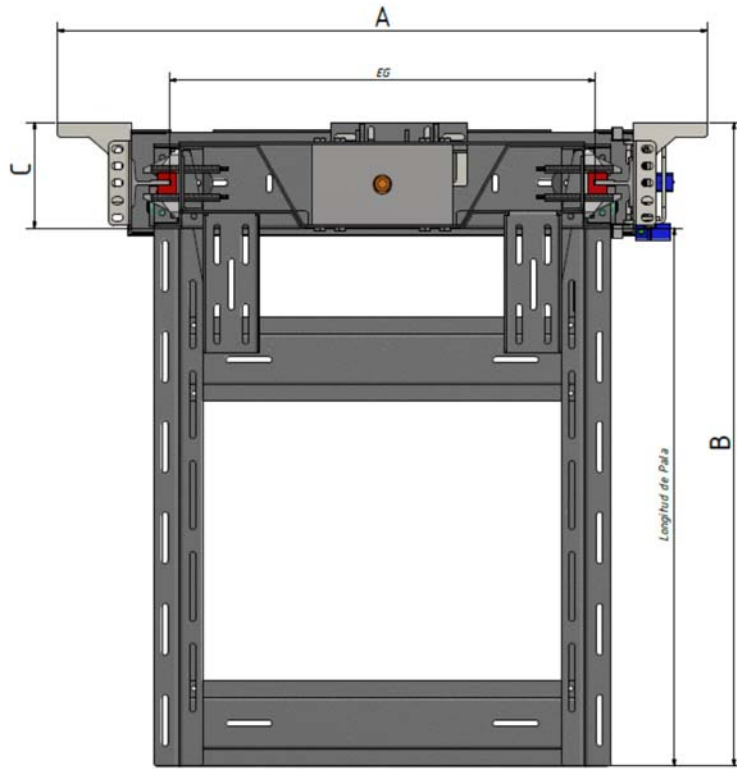
Unloading of materials: They will be unloaded at the site by the two operators. The drive unit will be placed together with the column in the hole of the installation, the rest of the materials in the area prepared for this purpose.

The operators can use, according to their criteria, all the tools that they consider convenient, as well as obtain from the work the necessary material for the correct performance of their work. In order to avoid wasting time, it may be interesting to have plugs, insulating tape, screws, terminals, strips, rivets, etc. that may be necessary at any time during assembly.

2. INSTALLATION AND ASSEMBLY

2.1. GENERAL CHECK OF THE KIT

It must be checked before installation that the KIT supplied is suitable for the opening. An image with the exterior dimensions is shown.



(Medidas en mm)

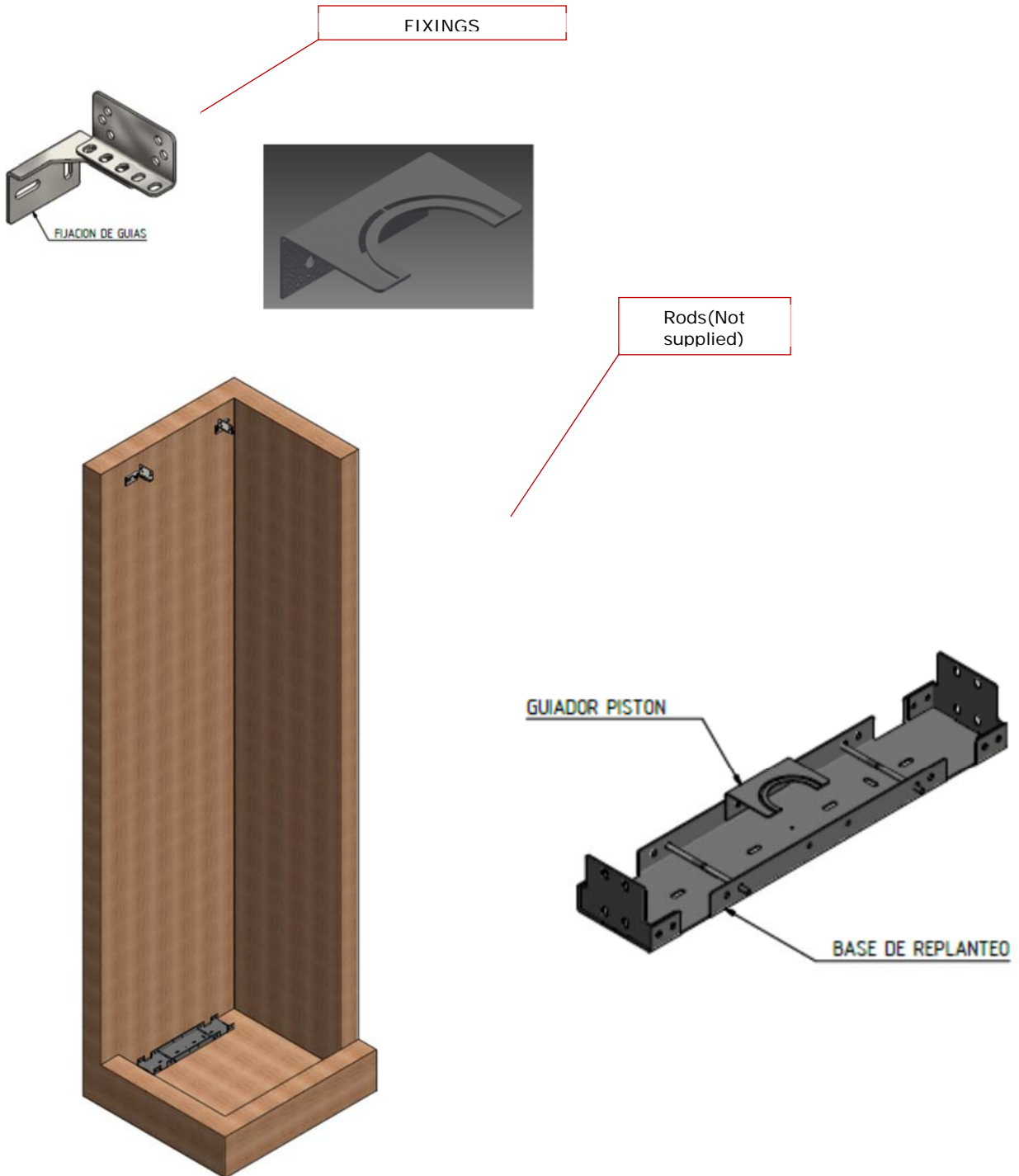
ENTREGUIA(EG)	550	650	(ESTANDAR) 750	950
"A"	946	1.046	1.146	1.346

LONGITUD DE PALA	750	850	(ESTANDAR) 950	1.050
"B"	930	1.030	1.130	1.230

C= FONDO DE MECANICA= 190 mm

2.2. REPLACEMENT

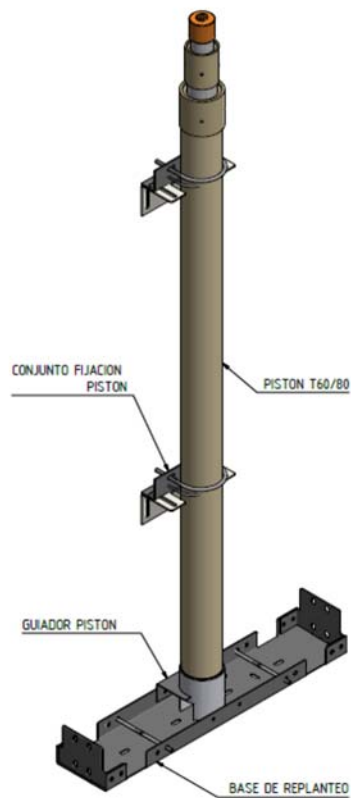
Carry out the stakeout of the hole, using 2 plumb bobs fixed to 2 guide supports (or other similar tools) and fixing them to the replate base, to 2 threaded rods (not supplied) in the stakeout base. Fix the stakeout base by means of wall mounting plugs (plugs not supplied). The base has a GUIDE to centre the piston when it is placed. If the T60/80 piston is supplied, the outside of the support must be "cut". In the case of the T36/60 telescopic piston (up to 750 Kg of P+Q and $R < 3.500$ mm), the piece is valid as it is.



NECESSARY KIT MATERIAL	QUANTITY
ASSEMBLED STAKEOUT BASE	1
WALL FIXINGS	2

2.3. POSITIONING OF THE HYDRAULIC CYLINDER

Proceed to place the hydraulic cylinder, resting it on the stakeout base and fixing it to the wall by means of a piston wall attachment, in a provisional way and placing the second one temporarily. Use the level to plumb it approximately and with the meter to center the piston wall attachment with respect to the leads.



NECESSARY KIT MATERIAL	QUANTITY
HYDRAULIC CYLINDER	1
CYLINDER WALL MOUNTS	2

2.4. ASSEMBLY OF THE FIRST SECTION OF GUIDES

Proceed to fix the first 2.5 m section of the guide, taking into account the number of guides supplied. If the number of slides supplied is OTHER, place a slide with the "male" end on the base and a slide with the "female" end on the other side. If the number is even, it does not matter.

Place the FIRST rail fixing at 1000 mm from the stakeout base and the second 2,300 mm from the stakeout (just below the rail joint).

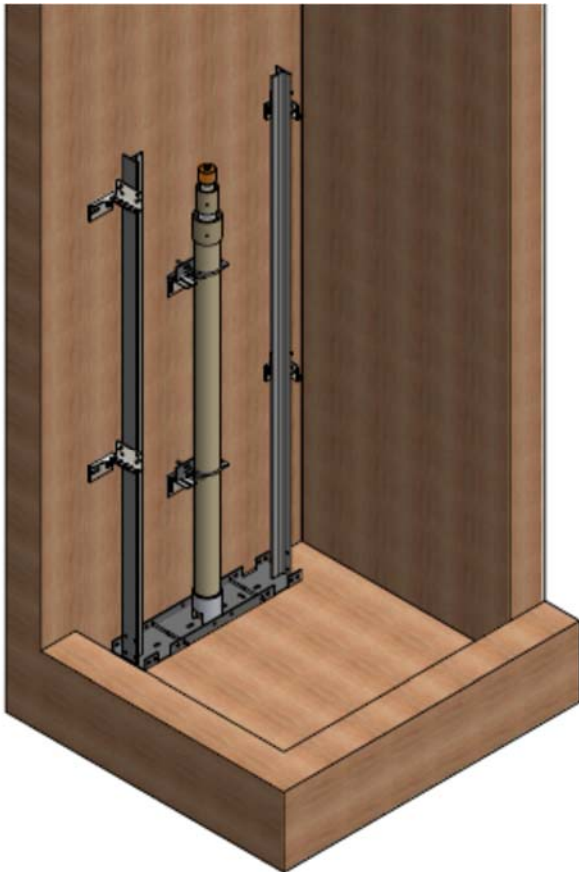
To find out how far the NEXT attachment will be placed, proceed to :

- 1) Count the TOTAL number of bracket levels sent = N (including those holding the leads)
- 2) Discount the 2 already used $M=N-2$
- 3) Carry out the following operation :
 - a. Distance between the following fixings = $(\text{SLOT}+\text{RUN}+100)/M$
 - b. **Check that $M < 1,500$** (if not call the manager)

Fix the guides that are supported on the stakeout base, with the guide supports to the stakeout base and fasten it with screws.

The track fixings are prepared to fix 3 types of tracks: T70/9-T/82/9-T90-16. The rails will be fixed to the "middle" row of the rail fixing bracket, which corresponds to the rail T82/9.

In this way we ensure that we have the first section of rails secured with at least 2 fixings

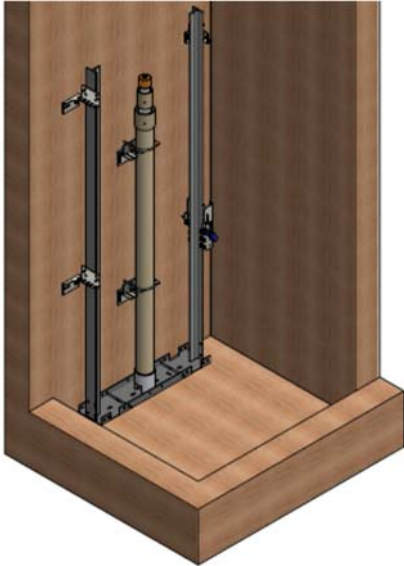


MATERIAL NEEDED FOR THE KIT	QUANTITY
WALL MOUNTING BRACKETS	2

2.5. MOUNTING OF THE SAFETY COVER IN THE PIT

Proceed with the installation of the pit safety stop in accordance with these instructions:

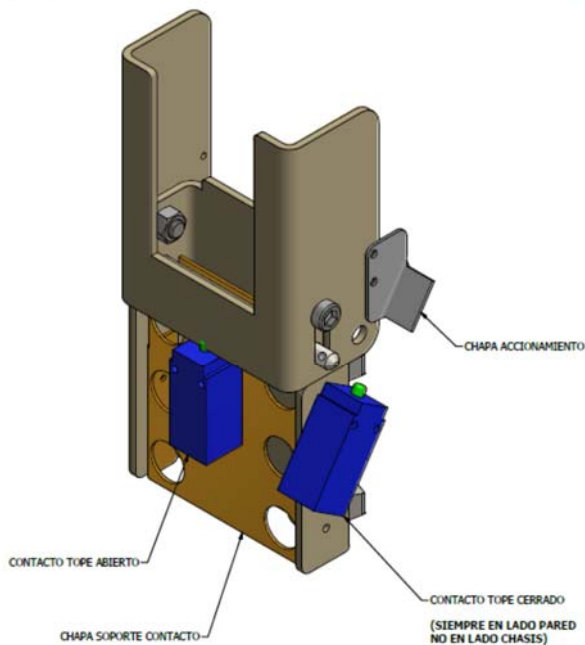
- 1) It shall be placed at least 1.2 m from the ground.
- 2) Proceed to electrically connect the contact to the wall (Once placed there is no access). Hose not supplied in the kit
- 3) The stop will be placed on the guide, **WHERE THE SIDE CONTACT IS CLOSER TO THE WALL**, otherwise it will stick to the cabin
- 4) The safety stop is prepared to operate 2 contacts, which inform about the POSITION OF THE STOP
- 5) Follow the instructions for opening and closing



OPEN STOP

SAFETY STOP

TOPE

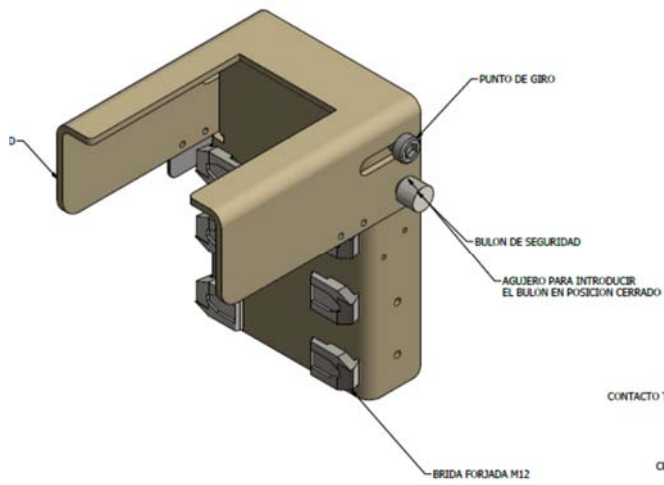


STOP CLOSED

QUANTITY

1

NOTA: El contacto de informacion de TOPE CERRADO, irá colocado en el lado más cercano a la pared, para evitar colisión con la cabina. Los contactos se deberán cablear, previo a la instalación en la guía.



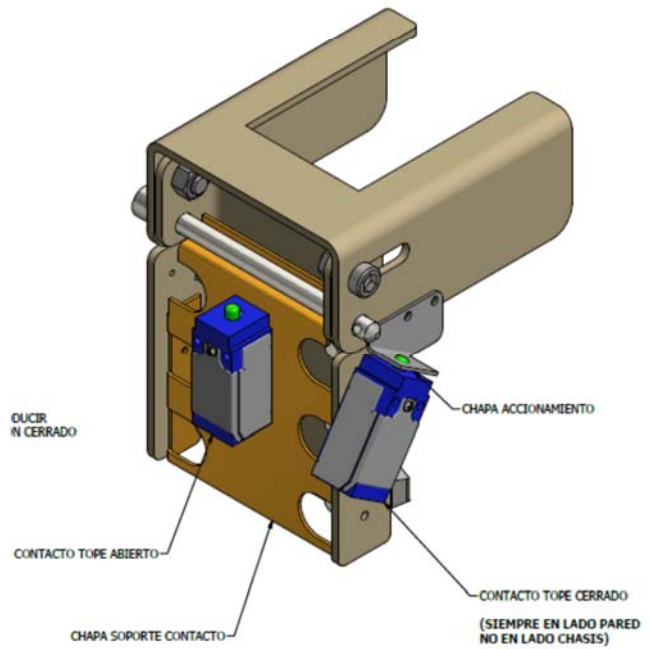
CONTACTO T

Q-

PROCEDIMIENTO PARA CERRAR EL TOPE:

- 1) LIBERAR EL PASADOR DEL BULON DE SEGURIDAD
- 2) SACAR POR COMPLETO EL BULON DE SEGURIDAD
- 3) GIRAR EL TOPE 90°
- 4) INTRODUCIR EL BULON DE SEGURIDAD
- 5) ASEGURAR CON EL PASADOR

NOTA: El contacto de información de TOPE CERRADO, irá colocado en el lado más cercano a la pared, para evitar colisión con la cabina. Los contactos se deberán cablear, previo a la instalación en la guía.



2.6. CHASSIS MOUNTING

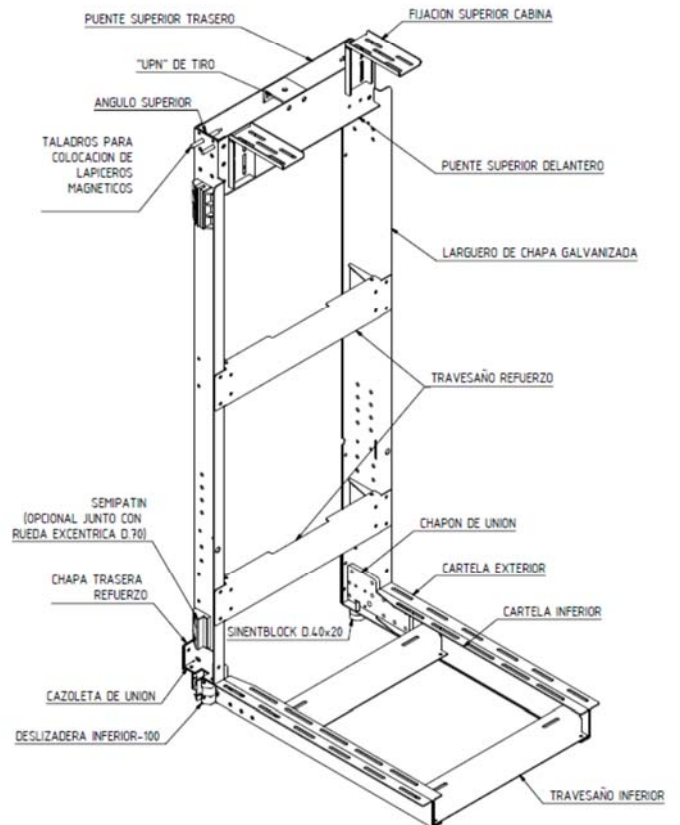
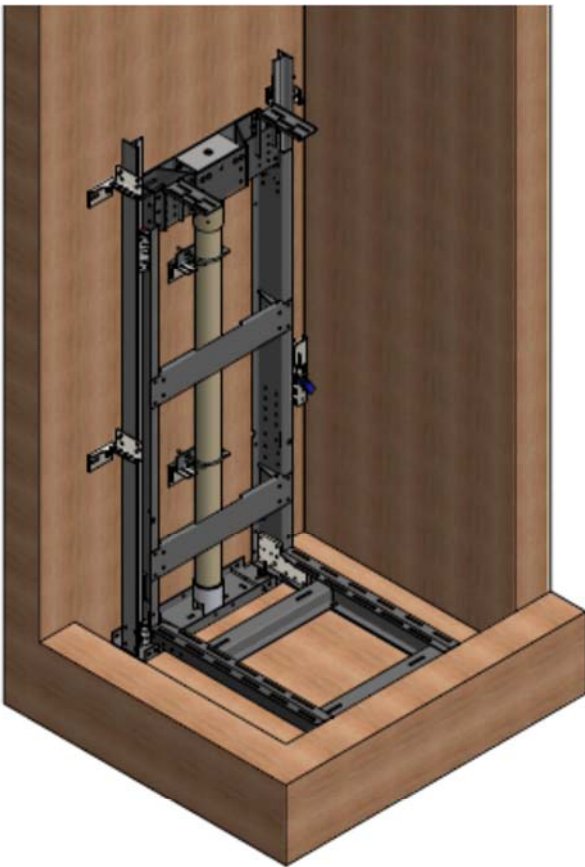
Proceed to insert the chassis inside the guides, using a lifting hoist or similar means.

Rest the chassis on the stakeout base and push the cylinder into the hole between the chassis. Secure the cylinder to the chassis with the M16 screw.

Then fix the cylinder DEFINITELY, aligning it with the stakeout base and the hole in the "U" for chassis pull. Tighten the mountings and the brackets. Take into account the orientation of the parachute valve before tightening.

NOTES: Be careful when putting the chassis in, with the heads of the cylinders and traps (Do not knock and be accessible for bleeding)

NECESSARY KIT MATERIAL	QUANTITY
CHASSIS KIT 1 : 1 ASSEMBLED	1



2.7. ASSEMBLY OF THE REST OF THE GUIDES

Proceed to install the rest of the guides of the hole, using specialized scaffolding for this purpose. Check that the kit is correctly installed by verifying:

- 1) That the number of fixings and the distance between them is correct
- 2) That the trunks and fixings are tight
- 3) That the guides are correctly plumbed



NECESSARY KIT MATERIAL	QUANTITY
REST OF GUIDELINES	XXXX
OTHER FIXINGS	XXXX

2.8. ASSEMBLY OF THE HYDRAULIC PLANT

Place the MS-A hydraulic unit (only unit) or MS-K (with a cabinet to place the control unit inside) in the designated location of the project.

Make the hydraulic connection with the hose supplied, between the safety valve and the inlet fitting to the distributor.

Take the tank with oil, removing the red cap.

The kit is ready to be connected

NECESSARY KIT MATERIAL	QUANTITY
HYDRAULIC POWER STATION	1
HYDRAULIC HOSE	1
HV-46 OIL DRUMS	S/P