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Brava Series BRAVO 2 RAIL

Model 1002A

INSTRUCTIONS MANUAL



Read these maintenance instructions Before using the product and keep them for future references.









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1. INTRODUCTION

1.1. Foreword

The BRAVO 2 rail has been solely designed for perfectly holding the KARTSANA "BRAVA" stretcher model.

The Bravo 2 rail has been tested in conformity with the regulation UNE-EN 1789.

All the information regarding treatment, disinfection and maintenance is indicated, taking into consideration our current experience and know-how.

We reserve the right to change the specifications of the BRAVO 2 rail to improve the products.

1.2. Responsibility and warranty

The stretcher must be checked at the time of its delivery to the rescue organisation. All its functions must be explained in detail. The assistance organisation must take charge of teaching all its employees how to use it correctly.

The product has a 24-months warranty from the delivery date to the end user.

The warranty does not cover defects resulting from incorrect installation, misuse or improper use of the stretcher. All repairs must be made by a technical service authorised by Kartsana or its respective representative.

The manufacture will not be liable for any anomaly caused to the stretcher due to using any products other than original Kartsana products.

1.3. Specifications

	Rail BRAVO 2 – 1002A
Maximum unassisted load:	380 Kg
Standards	UNE-EN-1865-5 EN-1789+A1
Total length	2088,5 mm
Total Width	632 mm
Height	350 mm
Recommended operatives required to load / unload an occupied stretcher	1 operative, or 2 if the stretcher were occupied by a larger sized patient
Compatible stretchers	Power Brava



1.4. Attention

Through this sign, information is furnished on important safety measures for the correct use of the stretcher, in order to prevent accidents. The **warnings** alerts the reader about a situation which, if not avoided, could result in death or serious injury. The **cautions** alerts the reader of a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or damage to the equipment or other property. This includes special care necessary for the safe and effective use of the device and the care necessary to avoid damage to a device that may occur as a result of use or misuse.

1.5. Summary of safety precautions

Read carefully and strictly follow the warnings and cautions listed on these pages. Service only by qualified personnel.



WARNINGS:

- Improper usage of the stretcher can cause injury to the patient or operator. Operate the stretcher only as described in this manual.
- Do not modify the rail or any components of the rail. Modifying the product can cause unpredictable operation resulting in injury to the patient or operator. Modifying the product also voids its warranty.
- This rail must operate with a compatible stretcher.
- Have the vehicle safety rail compatible installed by a certified mechanic, following instructions in this manual. Improper rail installation can cause injury to the patient or operator and/or damage to the stretcher
- Practice changing height positions and loading the stretcher until operation of the product is fully understood. Improper use can cause injury.
- -Do not allow untrained assistants to assist in the operation of the stretcher. Untrained technicians/assistants can cause injury to the patient or themselves.
- Do not ride on the base of the rail. Damage to the product could occur, resulting in injury to the patient or operator.
- Grasping the stretcher improperly can cause injury. Keep hands, fingers and feet away from moving parts. To avoid injury, use extreme caution when placing your hands and feet near the base tubes while raising and lowering the stretcher.
- Always use all restraint straps to secure the patient on the stretcher. An unrestrained patient may fall from the stretcher and be injured.
- The Bravo 2 rail is designed to be compatible with the Power Brava Kartsana stretchers, and is operator responsibility that these products work together.
- Two operators must be present when the stretcher is occupied.
- Operators must be able to lift the total weight of the patient, stretcher and any items on the stretcher.
- When cleaning, use any appropriate personal safety equipment (goggles, respirator, etc.) to avoid the risk of inhaling contagion.
- Some cleaning products are corrosive in nature and may cause damage to the product if used improperly. If the products described above are used to clean Kartsana equipment, measures must be taken to ensure the stretchers are wiped with clean water and thoroughly dried following cleaning. Failure to properly rinse and dry the stretchers will leave a corrosive residue on the surface of the stretchers, possibly causing premature corrosion of critical components.
- Failure to properly clean or dispose of contaminated mattress or other stretcher components will increase the risk of bloodborne pathogens and may cause injury to the patient or operator.





CAUTIONS:

- Changes or modifications to the unit not expressly approved by Kartsana could void the user's authority to operate the system.
- Installation of the safety hook should be done by a certified mechanic familiar with ambulance vehicle construction. Consult the vehicle manufacturer before installing the safety hook and be sure that the installation of the safety hook does not damage or interfere with the brake lines, oxygen lines, fuel lines, fuel tank or electrical wiring of the vehicle.
- Before operating the stretcher, clear any obstacles that may interfere and cause injury to the operator or patient.
- When unloading the stretcher from the patient compartment, ensure that the caster wheels are safely set on the ground or damage to the product may occur.
- Ensure that the restraints are not entangled in the base frame when raising and lowering the stretcher.
- Do not steam clean or ultrasonically clean the unit.
- Maximum water temperature should not exceed 80°C.
- Failure to comply with these instructions may invalidate any/all warranties.
- For additional maintenance information, see the preventative maintenance information.
- Improper maintenance can cause injury or damage to the product. Maintain the stretcher as described in this manual. Use only
 Kartsana approved parts and maintenance procedures. Using unapproved parts and procedures could cause unpredictable
 operation and/or injury and will void the product warranty
- Failure to use authorized parts, lubricants, etc. could cause damage to the stretcher and will void the warranty of the product.



NOTES:

- Loose items or debris on the patient compartment floor can interfere with the operation of the safety hook and stretcher fastener. Keep the patient compartment floor clear
- This manual should be considered a permanent part of the rail and should remain with the product even if the stretcher is subsequently sold.
- Kartsana continually seeks advancements in product design and quality. Therefore, while this manual contains the most current product information available at the time of printing, there may be minor discrepancies between your stretcher and this manual
- Kartsana recommends that, prior to installation, the certified mechanic plan the placement of the safety hook in the rear of the vehicle.



2. INSTRUCTIONS MANUAL

Only the BRAVA stretcher may be put on the BRAVO 2 rail. (Based on the UNE-EN 1789 STANDARD).





To reduce the risk of injuries to the patient and accompanying persons in the event of an accident, it is advisable to avoid sharp edges and projecting parts inside the ambulance, paying special attention to the areas nearest the BRAVO 2 rail.

Make sure that no damage is caused to the areas containing the stretcher mechanisms, to prevent them from malfunctioning.

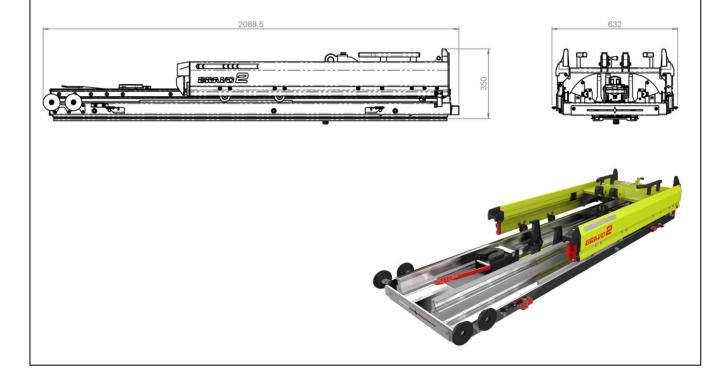


2.1. Technical characteristics

Approximate rail weight 100 Kg

Maximum load permitted: 380 Kg.

Approximate measurements of the stretcher (in mm.) based on the drawing below.



2.2. Rail operation and usage

To prevent injuries to limbs and other body parts, make sure they are not within the range of the rail moveable parts.

2.2.1. Red charging trigger

Stretcher lock on the rail:

- Place the stretcher in front of the rail.
- Place the small wheels of the stretcher on the rail cross section. This should be in the exterior position. Position the stretcher onto the rail so that the small wheels of the stretcher are guided by the rail, until the limit is reached at the edge of the cross section.
- Press the left button to raise the stretcher legs until the end of its run. (If this action has been carried out correctly the front axis should be within the inner part of the hooks.



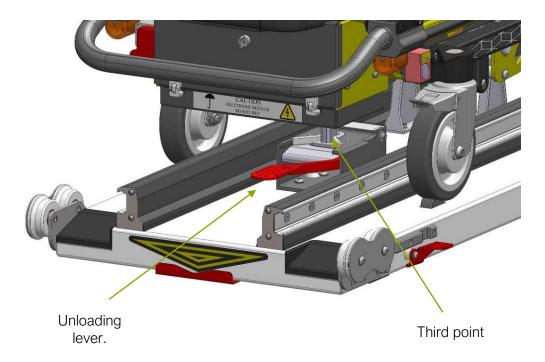


Leg folding and unfolding buttons

- Press the red trigger "B" at the front right of the rail to unlock the mechanism and to push the stretcher towards the inside until the limit has been reached.



To be sure that the whole stretcher rail is correctly placed make sure that the unload lever is in the horizontal position. And the 3rd point is inside of its compartment.









IMPORTANT: do not disconnect the supporting battery from the ambulance when it isn't doing any service, to allow the correct charge of the stretcher batteries between services.

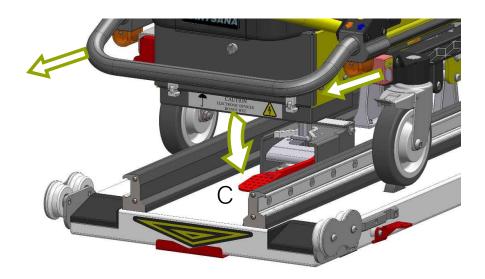
2.2.2. Unloading lever

Push down the unloading lever "C" located between the guides at the front of the rail as shown in the figure below. While maintaining the lever in this position, pull the stretcher towards the outside of the ambulance until the mechanical limit has been reached. Once the rail is fully extended, we will be able to open out the stretcher legs by pressing the right button (Leg unfolding). Once the electric stretcher has been raised above the rail level, we can withdraw it.



To prevent injuries to limbs and other body parts, make sure they are not within the range of the rail moveable parts.

Note: The rear part of the rail corresponds to the part where the rail start lever is located.





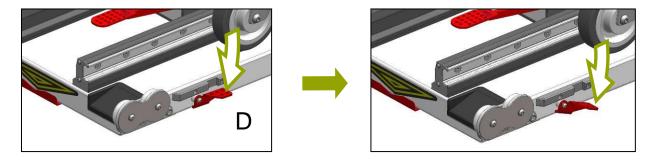
IMPORTANT:





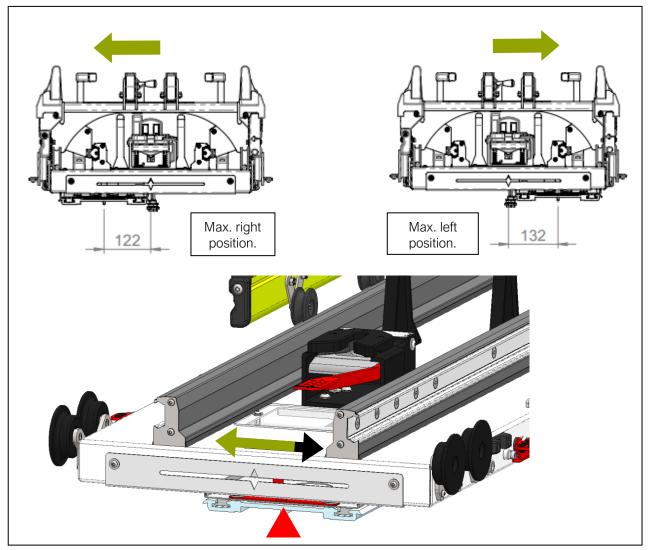
2.2.3. Side movement (lower pedal)

Press one of the four red "D" levers and move the upper trolley sideways until the desired position is reached.



Then, release the red lever so that it locks in the chosen position.

The maximum sideways movement possible is 254 mm, 122 mm to the left side and 132 mm to the right side if the base plates are secured in the centre of the rail. The red part indicates the position of the base related to the centre of the rail.



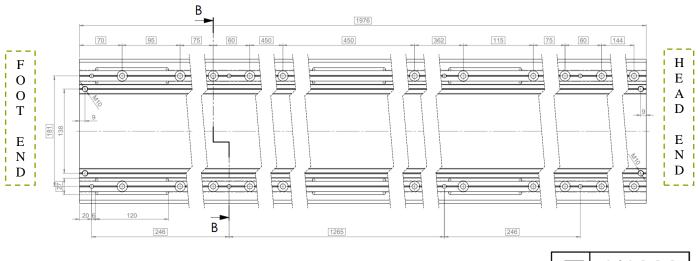


3. ASSEMBLY OF THE RAIL IN THE AMBULANCE

3.1. Setting the rail in the ambulance

The Bravo 2 rail must be secured to the ambulance using the aluminum profile 03-1164 and 22 screws DIN 7991 M8 – 10.1.

The drilling situation is as follows:

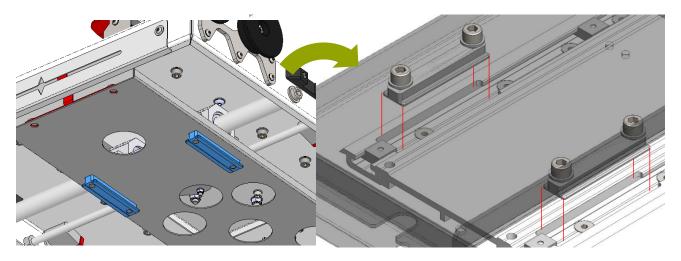




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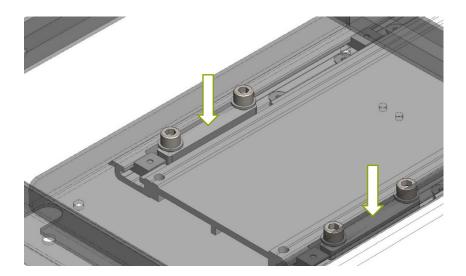
Once the floor profile is installed, the rail must be placed as shown below:

1. Place the "T" fixation parts (in red) in the corresponding 6 slots of the aluminium profile.

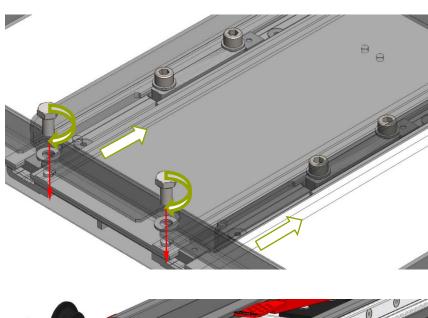


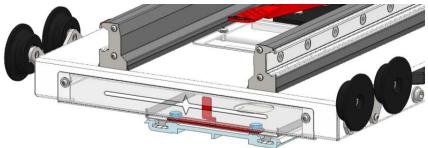






2. Push the rail until the mechanical stop and then tighten the 4 hexagonal DIN 933 M10x20 screws at the front (x2) and rear (x2) zone.







3.2. Electrical connection

The electronics is prepared to admit a current of 12 V.



The BRAVO rail must be connected to the electricity network of the vehicle using section 4 mm2 electric cable as a minimum (paying special attention to the poles + o -). The aim of this connection is that the Brava stretcher charges the stretcher batteries when it is inside the ambulance with the rail closed and the third position lever in horizontal position.

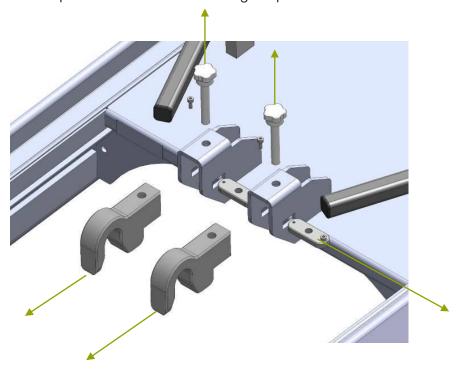
It's highly recommended to protect externally the wires with a plastic cover to prevent electrical problems (scratches, short-circuits...)

The electrical system must be secured with a 20A fuse.

The Bravo rail is provided with a fast connector, the female is connected to the Bravo rail and the male must be connected to the ambulance battery.



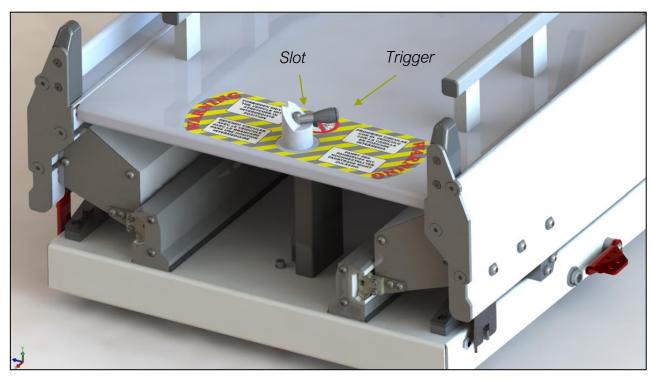
In case the electric stretcher breaks down, remove the rail hooks according to the figure below, take off the stretcher and replace the hooks in their original position.



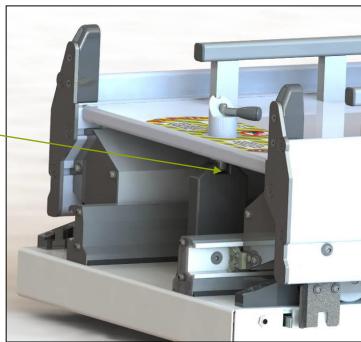


4. INTERMEDIATE POSITION (OPTIONAL)

If you want to rise the stretcher inside the ambulance, you must remove the trigger of the slot as you can see below and move de mobile part of the rail until the vertical trigger stays inside the black piece of plastic. When you want to return at locked position of the stretcher with the rail or if you want to take out the stretcher, you must lift the trigger into the slot.



Vertical trigger inside de black piece





IMPORTANT:



5. DISINFECTION

When disinfecting the stretcher, use products that will not damage the surface of the materials and wipe with a cloth or something similar. If the surface to be disinfected is greased, regreased it after disinfecting it.

All disinfectants must be used in accordance with the manufacturer's instructions.

The manufacturer will not be held responsible for any anomaly or damage caused by using a cleaning product that could damage the surface of the rail materials.

To ensure the hygiene and proper conservation of the product components, the manufacturer recommends that they be disinfected after each use.

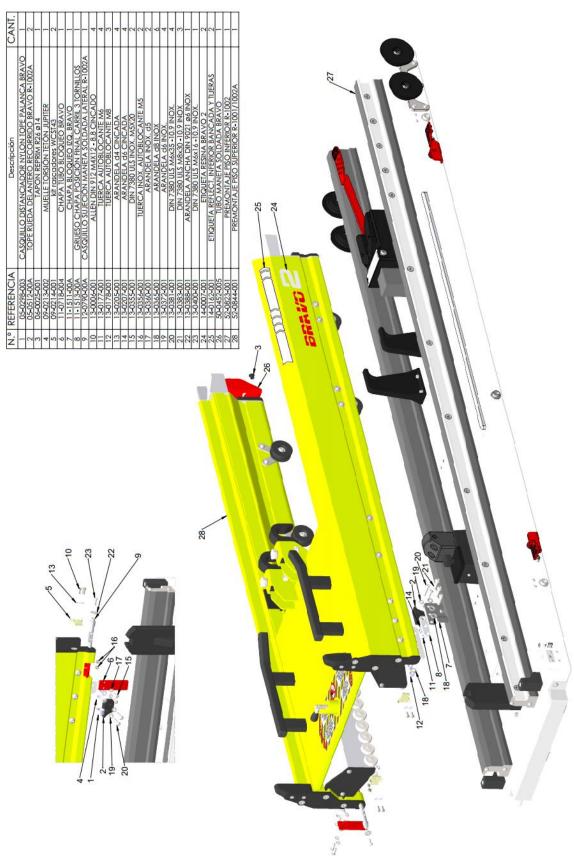
6. MAINTENANCE

Every six months check and lubricate the interior of the side guides as well as the locking system. We recommend that maintenance be performed by a specialist from our company every six months. During this inspection, a general check will be made to replace any parts that could be damaged or worn due to use.

The rail should be regularly greased (more often when lower temperatures) with oil or lubricant to protect it against corrosion and external agents (such as salt and sanitizer) and to provide a proper guide way system movement. For example, you can use WD-40 without silicone.

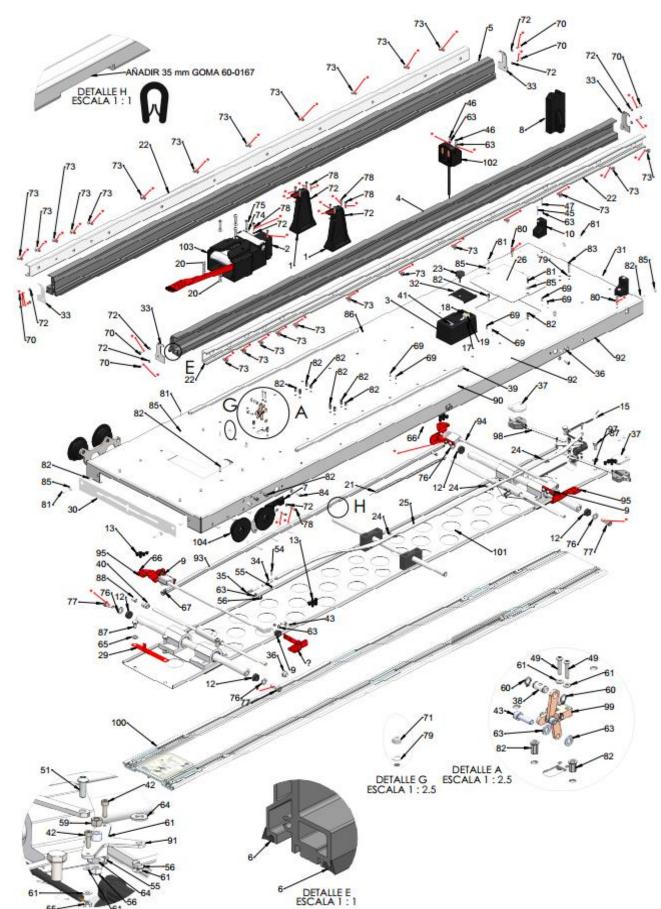


7. BRAVO 2 EXPLODED VIEW 1002A





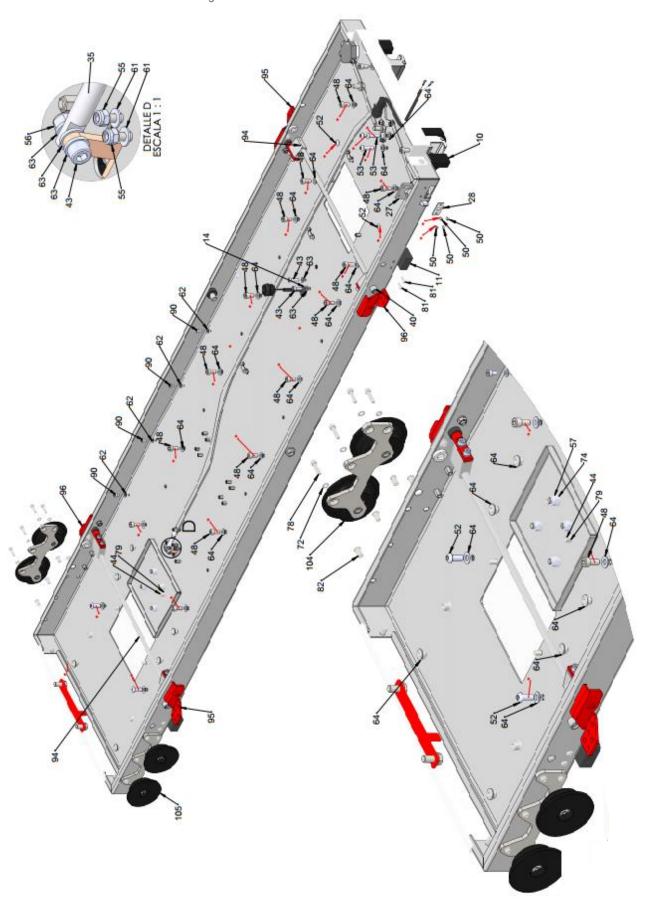
OF BRAVO 2 RAIL R-1002A







Life-moving innovation





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N°	REFERENCIA	Descripción	CANT.
1	01-0231-002	GANCHO INTERMEDIO CORTO BRAVO	2
2	01-0254-001	PROTECCION MECANISMO TIRANTE INFERIOR BRAVO	1
3	01-0318-00A	SOPORTE ENCHUFE BRAVO	1
4	03-1187-001	PERFIL DCH. PARA GUIA DESPLAZ. BRAVO RED. PESO	1
5	03-1188-001	PERFIL IZQ. PARA GUIA DESPLAZ. BRAVO RED. PESO	1
6	05-0303-001	GOMA PROTECCION CORROSION SOPORTE GUIA	4
7	05-0312-002	TOPE LATERAL BLOQUEO LONG. BRAVO	1
8	05-0313-001	BASE SOPORTE POSICIÓN INTERIOR CAMILLA	1
9	05-0506-00A	CASQUILLO MANETAS SOLDADAS R-1002 2017	4
10	05-0515-00B	TOPE TRASERO R-1002A	2
11	05-0516-00B	TOPE DESPLAZAMIENTO LATERAL R-1002A	2
12	05-0520-00A	SEPARADOR EJE DESPLAZAMIENTO R-1002A	5
13	06-0006-001	TAPONES D12. R26	20
14	06-0051-001	PASACABLES IP67 SR 1703 M20 (Ref. 496379)	1
15	07-0081-00B	CONECTOR MACHO CON CABLE BASIC V002	1
16	07-0086-00A	SOPORTE CAJA PORTAFUSIBLE REF. BRAVO	1
17	07-0087-00A	CAJA PORTAFUSIBLE BRAVO REF. 38 20 00481	1
18	07-0088-00A	TAPA PORTAFUSIBLE REF. 38 20 00482	1
19	07-0089-001	FUSIBLE UNIVERSAL 20A REF. 382200356	1
20	09-0006-002	MUELLE CABEZAL	2
21	09-0012-001	MUELLE GANCHO PATA S-400; 860	1
22	09-0210-001	CARRIL GUIA DESPLAZAMIENTO DCHO.	2
23	09-0292-00A	POMO MOLETEADO REF. 1219114 SOPORTE ENCHUFE BRAVO	1
24	11-0640-001	CHAPA GUIA TIRADOR BRAVO	3
25	11-0646-001	TIRANTE LARGO ESPECIAL BRAVO	1
26	11-0756-001	TAPA CONECTOR BRAVO 2	2
27	11-0967-002	FIJACIÓN DESMONTABLE DETECTOR INDUCTIVO BRAVO	1
28	11-0968-001	FIJACIÓN DESMONTABLE EXT. PARA DETECTOR BRAVO	 i
29	11-1424-00B	CHAPA POSICIÓN CENTRAL R-1002 2017	 i
30	11-1425-00C	TAPA APERTURA DELANTERA R-1002 2017	i
31	11-1471-00A	TAPA POSTERIOR PARA ENCHUFE R-1002A	i
32	11-1477-00A	TAPA SOPORTE ENCHUFE BRAVO ACERO	T i
33	11-1540-001	TAPA PERFIL GUIA DESLIZAMIENTO BRAVO	4
34	12-0232-001	ARGOLLA TENSADOR JUPITER	1
35	12-0232-001	TENSADOR TIRANTE LARGO JUPITER	+ i
36	12-0285-001	VALONA CIEGA FIJACIÓN EJE DESPLAZ. LATERAL BRAVO 2	2
37	12-0292-001	SUPLEMENTO TETON ESPECIAL	2
38	12-0305-001	EJE ANILLO GATILLO GAMA 4	1
39	12-0774-00D	BARRA GUÍA DESPLAZAMIENTO LATERAL R-1002 2017	2
40	12-0775-00A	VALONA FIJACIÓN EJE MECHLOK R-1002 2017	2
41	12-0773-00A	TACO ROSCADO SOPORTE ENCHUFE BRAVO	1
42	13-0006-001	ALLEN DIN 912 M4X12 • 8.8 CINCADO	2
43	13-0024-001	ALLEN DIN 912 M4X12 - 0.8 CINCADO	11
44	13-0024-001	ALLEN DIN 912 M6X25 - 8.8 CINCADO	2
45	13-0027-001	ALLEN DIN 912 M6X30 - 8.8 CINCADO	2
46	13-0031-001	ALLEN DIN 912 M6X50 - 8.8 CINCADO	2
47	13-0031-001	ALLEN DIN 912 M6X60 - 8.8 CINCADO	2
48	13-0033-001	ALLEN DIN 912 M8X80 • 8.8 CINCADO	24
49	13-003/-001	ULS ISO-7381 M4x10 CINCADO	24
50	13-0095-001	ULS ISO-7381 M4x6 10.9 CINCADO	4
51	13-0102-001	ULS ISO-7381 M4x8 10.7 CINCADO	1
52	13-0102-001	ULS ISO-7381 M8x20 10.9 CINCADO	4
JZ	13-0113-001	0L3 13O-7301 M0X20 10.9 CINCADO	4



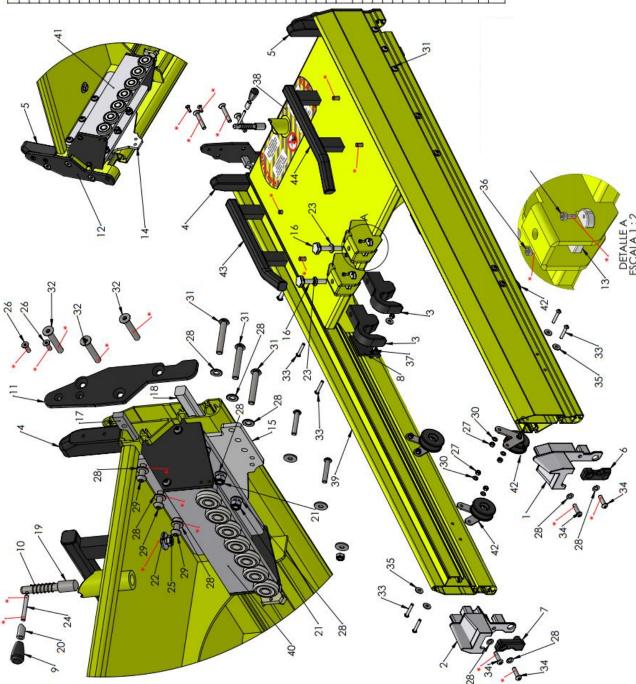
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Nº	REFERENCIA	Descripción	CANT.
54	13-0128-001	TORNI. HEXAG. DIN 933 M4X16 6.8 CINCADO	1
55	13-0175-001	TUERCA AUTOBLOCANTE M4	5
56	13-0177-001	TUERCA AUTOBLOCANTE M6	7
57	13-0178-001	TUERCA AUTOBLOCANTE M8	4
58	13-0184-001	TUERCA HEXAGONAL M3 CINCADA	1
59	13-0191-001	TUERCA HEXAGONAL M6 CINCADA	1
60	13-0196-001	ANILLO ELASTICO d 8	2
61	13-0205-001	ARANDELA d4 CINCADA	8
62	13-0206-001	ARANDELA d5 CINCADA	10
63	13-0207-001	ARANDELA dé CINCADA	23
64	13-0208-001	ARANDELA d8 CINCADA	31
65	13-0210-001	ARANDELA d10 CINCADA	4
66	13-0214-001	RETAINING RING FOR SHAFTS EXT. Ø6	2
67	13-0220-001	ARANDELA NYLON d.6	2
68	13-0266-001	ARANDELA d3 CINCADA	1
69	13-0318-001	REMACHE DE ACERO INOX. 4X12	6
70	13-0355-001	DIN 7380 ULS INOX. M5X20	8
71	13-0357-001	TUERCA INOX. AUTOBLOCANTE M6	7
72	13-0360-001	ARANDELA INOX. d5	28
73	13-0362-001	AVELLANADO ALLEN DIN 7991 - M8 x 16 INOX.	24
74		ARANDELA d8 INOX	8
	13-0365-001		4
75	13-0367-001	DIN 7380 ULS M8x25 -10.9 INOX	_
76	13-0369-001	ARANDELA d12 INOX	6
77	13-0370-001	ALLEN DIN 7984 M12X30 CABEZA BAJA INOX.	6
78	13-0371-001	ALLEN DIN 912 M5X20 - 8.8 INOX.	20
79	13-0372-001	ARANDELA dé INOX.	14
80	13-0373-001	DIN 7380 ULS M6x25 -10.9 INOX	4
81	13-0379-001	DIN 7380 ULS M5X16 -10.9 INOX	12
82	13-0382-001	VALONA HEXAGONAL M5	28
83	13-0384-001	ALLEN DIN 912 M6X30 - 8.8 INOX.	1
84	13-0392-001	ALLEN DIN 912 M6X14 - 8.8 INOX.	4
85	13-0395-001	ARANDELA ANCHA DIN 9021 Ø5 INOX	8
86	13-0400-001	DIN 7380 ULS M6x16 -10.9 INOX.	1
87	13-0517-001	TORNI. HEXAG. DIN 933 M10X20 6.8 CINCADO	4
88	13-0523-001	ESPARRAGO SIN PUNTA DIN 913 M12X16	2
89	13-0528-001	AVELLANADO ALLEN DIN 7991 - M3 x 12 CINCADO	1
90	13-0533-001	ALLEN DIN 912 M5X8 - 8.8 CINCADO	10
91	50-0421-001	CONJUNTO CHAPA SOLDADA BLOQUEO BRAVO	1
92	50-0715-00F	CHAPA BASE SOLDADA INOX. R-1002 2017	1
93	50-0716-00D	SOLDADURA TIRADOR Y BULÓN BRAVO	1
94	50-0719-00D	EJE SOLDADO ACTIVACIÓN MECHLOK R-1002 2017	2
95	50-0735-00A	MANETA SOLDADA DELANTERA R-900	2
96	50-0736-00A	MANETA SOLDADA TRASERA R-900	2
97	52-0703-001	PREMONTAJE TETON TRASERO IZQUIERDO R-1001/1002	1
98	52-0704-001	PREMONTAJE TETON TRASERO DERECHO R-1001/1002	1
99	52-0705-001	PREMONTAJE BIELA-MANIVELA R-1001/1002	1
100	52-0827-00A	PREMONTAJE GUIA SUELO R-1002 2017	1
101	52-0828-00B	PREMONTAJE BASE CON PATINES R-1002 2017	1
102	52-0829-00A	PREMONTAJE NUEVO ENCHUFE R-1001/1002	1
103	52-0841-00A	PREMONTAJE PALANCA ROJA ALUMINIO ANCLAJE R-1001/1002A	1
104	52-0842-00C	PREMONTAJE RUEDA APOYO IZQUIERDA R-1001/1002A	1
105	52-0843-00C	PREMONTAJE RUEDA APOYO DERECHA R-1001/R-1002A	1



Life-moving innovation

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DESCRIPCION	EN IRADA BRAVO IZG.	ENTRADA BRAVO DCHA.	GANCHO BRAVO DESMONTABLE	TOPE POSICION ENTRADA CARRIL DCHO.	TOPE POSICION ENTRADA CARRIL IZQ.	ENTRADA DERECHA RUEDA BRAVO	ENTRADA IZQU. RUEDA BRAVO	GUIA PATAS BRAVO	POMO PARA SILLAS 110519101	MUELLE DIÁM. INTERIOR 10.5mm DIÁM. EXT. 13	TAPA TRAVESA PERFIL BRAVO DCHO.	TAPA TRAVESA PERFIL BRAVO IZQ.	PASAMANO TUERCA GANCHOS BRAVO	SOPORTE RUEDAS POSTERIOR IZQ. R-1002A	SOPORTE RUEDAS POSTERIOR DCHA. R-1002A	POMO ANCLAJES BRAVO	PLETINA FLACIÓN PERFILES BRAVO	GRUESO APRIENTE INTERIOR PERFIL BRAVO	EJE POSICIONADOR BRAVA POSICION INTERIOR	CASQUILLO MANETA POSICIÓN INTERMEDIA	TUERCA AUTOBLOCANTE M8	ARANDELA ANCHA d8 CINCADA	ARANDELA d10 CINCADA	ESPARRAGO SIN PUNTA M5 X40	11111	AVELL. ALLEN DIN INOX.7991 - M5 x 16	TUERCA INOX. AUTOBLOCANTE M6	ARANDELA d8 INOX	DIN 7380 ULS M8x25 -10.9 INOX	ARANDELA de INOX.	-1	AVELL. ALLEN DIN 7991-M8x50 TODO ROSCA INOX	DIN 7380 ULS M6x35 -10.9 INOX.	DIN 7380 ULS M8x30 -10.9 INOX	ARANDELA ANCHA DIN 9021 ø6 INOX	ALLEN DIN 912 M4X10 - 8.8 INOX.	REMACHE DE ACERO INOX. 4X25	ETIQUETA MOTOR PARADO PARA USO - BRAVO	GRUPO PERFILES SOLDADOS BRAVO	PREMONTAJE FUND. IZQ. FIJACIÓN PERFIL BRAVO	PREMONTAJE FUND. DER. FLJACIÓN PERFIL. BRAVO	PREMONTAJE RUEDA ANTERIOR PISO SUP. R- 1001/1002A	BARANDILLA ENTRADA DCHA R-1002A	SOPORTE DCHO. BARANDILLAS ENTRADA R-
REF.	01-0525-001	01-0253-001	05-0239-001	05-0301-001	05-0302-001	05-0324-001	05-0325-001	05-0449-00A	06-0003-001	09-0063-005	11-0702-002	11-0703-002	11-0720-002	11-1505-00A	11-1506-00A	12-0288-002	12-0361-002	12-0370-002	12-0376-001	12-0403-001	13-0178-001	13-0203-001	13-0210-001	13-0275-001	13-0344-001	13-0353-001	13-0357-001	13-0365-001	13-0367-001	13-0372-001	13-0375-001	13-0377-001	13-0381-001	13-0383-001	13-0388-001	13-0399-001	13-0506-001	14-0155-001	50-0442-007	52-0687-002	52-0688-002	52-0845-00A	52-0846-00A	ED 0047 004
å,	-	7	m	4	s	9	1	80	6	10	=	12	13	14	15	16	11	92	19	8	21	22	23	24	25	83	27	28	8	8	3	33	33	8	35	88	37	88	39	40	41	42	43	;





- i. The pieces that his number reference starts in 13-xxxx-xxx will be elements of fixation.
- ii. The pieces that his number reference starts in 50-xxxx-xxx will be welding sets and it will be supplied like an inseparable set, not at loose parts.
- iii. The pieces that his number reference starts in 52-xxxx-xxx will be preassembly. In case of requesting some piece that belongs to a preassembly, contact with our technical services taking the reference of this preassembly and, if it's necessary, the exploded view of preassembly may be provided.









Technical Service sat@kartsana.com



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