

# Boom Gate Tips N Tricks at the back.



**MANUALE D'USO E MANUTENZIONE**  
*USE AND MAINTENANCE MANUAL*  
*BEDIENUNGS - UND WARTUNGSANLEITUNG*  
*MANUEL D'EMPLOI ET D'ENTRETIEN*  
*MANUAL DE USO Y MANTENIMIENTO*

## RBLO Series

**Barriera Automatica**  
Automatic Barrier  
Automatische Schranken  
Barrière Automatique  
Barrera Automatica



D-MNLORBLO 24-11-2014 - Rev.10

IT - Istruzioni originali



MADE IN  
ITALY



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## DESCRIZIONE / DESCRIPTION / BASCHREIBUNG / DESCRIPTION / DESCRIPCIÓN

Le barriere della serie **RBL** sono di tipo veloce, adatte per controllare e gestire ingressi e parcheggi dove è richiesta una breve sosta d'attesa e un uso intensivo. **SI FA ESPRESSO DIVETO DI UTILIZZARE L'APPARECCHIO PER SCOPI DIVERSI O IN CIRCOSTANZE DIVERSE DA QUELLE MENZIONATE.**

*The rapid type **RBL** series barriers are suitable for controlling entrances and car parks where a short waiting time and intensive use are required. **IT IS STRICTLY FORBIDDEN TO USE THE EQUIPMENT FOR PURPOSES OR SITUATIONS THAT ARE DIFFERENT FROM THOSE STIPULATED.***

Bei den Schranken der Serie **RBL** handelt es sich um Schnellschranken für intensiven Gebrauch zur Überwachung von Einfahrten und Parkplätzen, wo nur eine kurze Wartezeit gewünscht wird. **ES IST AUSDRÜCKLICH VERBOTEN, DAS GERÄT ZU ANDEREN ZWECKEN ODER UNTER ANDEREN UMSTÄNDEN ALS ERWÄHNT ZU VERWENDEN.**

*Les barrières de la série **RBL** sont de type rapide, adaptées pour contrôler et gérer des entrées et des parkings nécessitant un court arrêt d'attente et un usage intensif. **IL EST STRICTEMENT INTERDIT D'UTILISER L'APPAREIL DANS DES BUTS OU DES CONTEXTES DIFFÉRENTS DE CEUX QUI SONT INDIQUÉS.***

Las barreras de la serie **RBL** son de tipo rápido, adecuadas para el control de accesos y aparcamientos donde se necesita de una breve parada de espera y un uso intensivo. **QUEDA EXPRESAMENTE PROHIBIDO UTILIZAR EL APARATO PARA FINES DIFERENTES O EN CIRCUNSTANCIAS DIFERENTES DE LAS MENCIONADAS.**

## CARATTERISTICHE TECNICHE / TECHNICAL CHARACTERISTICS TECHISCHE DATEN / CARACTÉRISTIQUES TECHNIQUES / CARACTERÍSTICAS TÉCNICAS

	RBLO	RBLO-X	RBLO-E
Frequenza - Frequency - Frequenz - Fréquence - Frecuencia	50 - 60 Hz		
Alimentazione - Power - Stromversorgung - Alimentation - Alimentación	230 V AC ±10%		
Potenza assorbita - Absorbed power - Leistungsaufnahme Puissance absorbée - Potencia absorbida	250 W		180 W
Motore - Motor - Motor - Moteur - Motor	18V DC		230V AC
Corrente assorbita - Absorbed current - Stromaufnahme Courant absorbé - Corriente absorbida	2,5 A		1,2 A
Coppia max. - Max. torque - Max. Drehmoment - Couple max. - Par max.	155 Nm		160 Nm
Rapporto di riduzione - Reduction ratio - Untersetzungsverhältnis Rapport de réduction - Relación de reducción	1/191		
Tempo minimo di apertura 90° - Min. opening time 90° - Mindestzeit Öffnungszeit 90° Temps min. d'ouverture 90° - Tiempo mínimo de apertura 90°	1,9 sec.		2,2 sec.
Grado di protezione - Protection level - Schutzart Degré de protection - Grado de protección	IP 54		
Ciclo di lavoro - Work cycle - Arbeitszyklus - Cycle de travail - Ciclo de trabajo	100 %		120/hour
Temperatura di esercizio - Operating temperature - Betriebstemperatur Temperature de fonctionnement - Temperatura de trabajo	-20°C ÷ +55°C		
Lunghezza min. asta - Min. bar length - Min. Schrankenbaumlänge Longueur min. Lisse - Longitud min. barra	2 m		
Lunghezza max. asta - Max. bar length - Max. Schrankenbaumlänge Longueur max. Lisse - Longitud max. barra	4 m		3 m
Peso - Weight - Gewicht - Poids - Peso	47 Kg	47 Kg	46 Kg

**Nota:** quando il sistema in 12V DC è alimentato unicamente dalla batteria (in caso di black-out oppure in abbinamento con pannello fotovoltaico), le prestazioni espresse dal motoriduttore (forza e velocità) si riducono del 30% ca.

**Note:** when the system is in the 12V DC mode and is powered by the battery only (in the event of a power failure or when used in conjunction with a photovoltaic panel), the gear motor's output (power and speed) is reduced by approximately 30%.

**Anmerkung:** wenn das 12V DC System nur über Batterie gespeist ist (bei Stromausfall oder in Kombination mit einem Photovoltaicpaneel), verringern sich die Leistungen des Getriebemotors (Kraft und Geschwindigkeit) um ca. 30%.

**Attention :** quand le système à 12V CC est alimenté uniquement par la batterie (en cas de coupure de courant ou bien en association avec un panneau photovoltaïque), les performances du motoréducteur (force et vitesse) diminuent d'environ 30%.

**Nota:** cuando el sistema de 12V DC es alimentado únicamente por la batería (en caso de corte de corriente, o bien combinado con panel fotovoltaico), las prestaciones del motorreductor (fuerza y velocidad) se reducen en un 30%.

## ACCESSORI OPZIONALI / OPTIONAL ACCESSORIES SONDERZUBEHÖR / ACCESSOIRES EN OPTION / ACCESORIOS OPCIONALES

- 1\_ Contropiastra di fondazione - Foundation counterplate - Fundamentgegenplatte - Contre-plaque de fondation - Controplaca de cimentación
- 2\_ Forcella appoggio a terra regolabile per asta (800AT) - Adjustable fork support for telescopic bar (800AT)- Verstellbare bodenstütze für Schrankenbaum (800AT) - Lyre de repos au sol réglable pour lisse (800AT) - Horquilla de apoyo de pie ajustable para barrera telescópica (800AT).
- 3\_ Fotocellule - Photocells - Fotozellen - Photocellules - Fotocélulas
- 4\_ Batteria 12V - 12V Battery - 12V Batterie - Batterie 12V - Batería 12V

MOLLA / SPRING / FEDER / RESSORT / MUELLE	A) M-06000B3000 (ø 4,2 mm) Color: Light green RAL 6019	B) M-0600000028 (ø 5,2 mm) Color: Green RAL 6002															
	C) M-060B3060FP (ø 6,2 mm) Color: Blue RAL 5003	D) M-060CITY0FP (ø 7 mm) Color: Red RAL 3000															
<b>ASTA ED ACCESSORI</b> <b>BAR AND ACCESSORIES</b> <b>SCHRANKENBAUM UND ZUBEHÖRE</b> <b>LISSE ET ACCESSOIRES</b> <b>BARRA Y ACCESORIOS</b>		<b>LUNGH. ASTA</b> <b>BAR LENGHT</b> <b>SCHRANKENBAUMLÄNGE</b> <b>LONGUEUR LISSE</b> <b>LONGITUD BARRA</b>															
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800AFI4 (RBLO) / 800ABT1 (RBLO-E)																	
800AFI4 (RBLO) / 800ABT1 (RBLO-E) + 800AT																	






La forniture standard della barriera RBLO monta la molla D (M-060CITY0FP) adatta ad un'asta di lunghezza max. 4 m.  
 La forniture standard della barriera RBLO-E monta la molla B (M-0600000028) adatta ad un'asta di lunghezza max. 3 m.  
 Per lunghezze asta differenti ed il montaggio di eventuali accessori, è necessario richiedere la molla relativa (vedi tabella).  
*The RBLO barrier is supplied as standard with the "D" spring (M-060CITY0FP), suitable for booms up to 4 m.*  
*The RBLO-E barrier is supplied as standard with the "B" spring (M-0600000028), suitable for booms up to 3 m.*  
*For different boom lengths or when further optionals are to be installed please order a different spring as per enclosed chart.*  
 Zum Standard-Lieferumfang der RBLO gehört die Feder "D" (Best.-Nr. M-060CITY0FP, für Balken bis 4 m).  
 Zum Standard-Lieferumfang der RBLO-E gehört die Feder "B" (Best.-Nr. M-0600000028, für Balken bis 3 m).  
 Bitte entnehmen Sie der folgenden Tabellen die erforderlichen Federn (muss separat bestellt werden) für Ihre Schranke je nach Balken und Zubehör.  
*D'habitude la barrière RBLO est livrée avec le ressort réf. D (M-060CITY0FP) équipant la lisse de longueur de 4 mètres max.*  
*D'habitude la barrière RBLO-E est livrée avec le ressort réf. B (M-0600000028) équipant la lisse de longueur de 3 mètres max.*  
*Dans le cas de lisses de différentes longueurs et l'installation d'accessoires, il est nécessaire de demander le ressort approprié (voir fiche).*  
 La barrera RBLO se suministra con resorte de tipo "D" (código M-060CITY0FP), para astas máx. 4 m.  
 La barrera RBLO-E se suministra con resorte de tipo "B" (código M-0600000028), para astas máx. 3 m.  
 Paras astas diferentes u otros accesorios es necesario pedir por separado el resorte indicado en la tabla anexa.

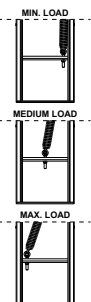
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800AE																	
800AE + 800AT																	

\* Occhiolo nella posizione di massimo carico / \* Eyelet in the max. load position / \* Position der Öse bei maximaler Belastung /

\* Le piton à anneau en position de charge max. / \* Tensor en posición de carga máxima.

**ATTENZIONE: RISPETTO ALLA LUNGHEZZA NOMINALE DELL'ASTA, IL PASSAGGIO UTILE SI RIDUCE DI 260 mm (vedi fig. 1).**  
**ATTENTION: PASSAGE WIDTH EQUALS BAR LENGTH LESS 260 mm (see pic. #1).**  
**ACHTUNG: TATSÄCHLICHE ABSPERRBREITE IST GLEICH BAUMLÄNGE MINUS 260 mm (siehe Abb. 1).**  
**AVERTISSEMENT: LE PASSAGE UTILE EST RÉDUIT DE 260 mm PAR RAPPORT À LA LONGUEUR NOMINALE DE LA LISSE (voir fig. 1).**  
**ATENCIÓN: EL PASO LIBRE ES IGUAL A LA LONGITUD DEL ASTA MENOS 260 mm (véase fig. 1).**

-  La trave forata permette di determinare carichi massimi differenti (in relazione alla lunghezza dell'asta e degli accessori applicati ad essa) nelle varie posizioni (più ci si avvicina alla verticale, minore è il carico massimo).
-  The drilled beam allows to determine different maximum loads (in relation to the length of the bar and accessories applied) in the various positions (the nearer to the vertical, the lower the maximum load).
-  Der gebohrte Träger gestattet die festlegung anderer max. Lasten (in Abhängigkeit von der Länge der Stange sowie dem angebrachten Zubehör) in verschiedenen Positionen (je näher der vertikalen, desto geringer ist die max. Last).
-  Le faisceau perforé permet de déterminer les différentes charges maximales (par rapport à la longueur de la barre et des accessoires qui lui sont appliqués) dans les différentes positions (plus on se rapproche de la verticale, plus la charge maximale diminue).
-  El travesaño perforado permite determinar cargas máximas diferentes (con relación a la longitud del asta y de los accesorios aplicados en ella) en las distintas posiciones (más se acerca a la vertical menor será la carga máxima).



La forniture standard della barriera RBLO-X monta la molla D (M-060CITY0FP) adatta ad un'asta di lunghezza max. 4 m.  
 Per lunghezze asta differenti ed il montaggio di eventuali accessori, è necessario richiedere la molla relativa (vedi tabella).  
*The RBLO-X barrier is supplied as standard with the "D" spring (M-060CITY0FP), suitable for booms up to 4 m.*  
*For different boom lengths or when further optionals are to be installed please order a different spring as per enclosed chart.*  
 Zum Standard-Lieferumfang der RBLO-X gehört die Feder "D" (Best.-Nr. M-060CITY0FP, für Balken bis 4 m).  
 Bitte entnehmen Sie der folgenden Tabellen die erforderlichen Federn (muss separat bestellt werden) für Ihre Schranke je nach Balken und Zubehör.  
*D'habitude la barrière RBLO-X est livrée avec le ressort réf. D (M-060CITY0FP) équipant la lisse de longueur de 4 mètres max.*  
*Dans le cas de lisses de différentes longueurs et l'installation d'accessoires, il est nécessaire de demander le ressort approprié (voir fiche).*  
 La barrera RBLO-X se suministra con resorte de tipo "D" (código M-060CITY0FP), para astas máx. 4 m.  
 Paras astas diferentes u otros accesorios es necesario pedir por separado el resorte indicado en la tabla anexa.

## GENERAL ADVICE

- 1\_ If not foreseen in the electronic control unit instructions, check that a suitable differential switch and an overcurrent protection are present at the source of the electrical system (C6 single-pole circuit breaker with a minimum contact opening of 3 mm) that have the international standards conformity mark. The said device must be safeguarded against involuntary closure (e.g. installing a locked panel inside).
- 2\_ Positioning of a pair of photocells: the range of the photocells must be at a height of 50 ÷ 60 cm from ground level and at a distance of no more than 15 cm from the movement level of the bar. Their correct functioning must be verified at the end of the installation in accordance with the EN 12445 standard.

### N.B. Grounding of the system is compulsory!

The data indicated in the present instructions is purely indicative; TAU Srl reserve the right to modify them at any time.

**The system must be produced in compliance with local laws and regulations.**

## INSTALLATION WARNINGS

- This instructions booklet is aimed at qualified personnel only that are aware of the constructional methods and the accident prevention protection devices for motorised gates, doors and main doors (abide by the present standards and laws).
- The end user must be issued with an instructions booklet by the installer in accordance with the 12635 standard.
- Before commencing with installation, the installer must determine the risk analysis of the final automation system and the placing in safety of the identified hazardous points (in accordance with the EN 12453 and EN 12445 standards).
- The wiring of the various electrical accessories (e.g. photocells, flashing lights, etc.) must be performed in accordance with the EN 60204-1 standard and their modification in accordance with the EN 12453 standard.
- Eventual fitting of a manual manoeuvre control button, must be performed by positioning the button in an area that is not at risk when operated; furthermore, it must be performed in such a manner that the risk of involuntary use of the button is reduced to a minimum.
- Keep the automation controls (buttons, remote controls, etc.) out of reach of children. The controls must be positioned at a height no less than 1.5 m from the ground and outside the operating range of the moving parts.
- Before performing any type of installation, adjustment, maintenance operation on the system, turn off the power supply by means of the thermal-magnetic circuit breaker positioned before the system.

THE COMPANY TAU HOLD NO RESPONSIBILITY WHAT SO EVER for possible damages caused by the non-compliance of the present safety standards and laws during installation.

## OVERALL DIMENSIONS

The main dimensions of the barrier are indicated in Fig. 1; Fig. 2 illustrates the dimensions of the foundation base plate.

## POSITIONING OF THE BARRIER

The following principles must be followed in addition to the functionality:

- 1\_ before installing the bar, make sure that the area above the bar is free of all obstacles (balconies, cables, trees, etc.)
- 2\_ a good visibility at a sufficient distance to avoid collision (pay attention to bushes, etc.)
- 3\_ suitable base to guarantee the secure positioning of the barrier
- 4\_ absence of pipes and/or electrical cables that could be damaged when preparing the site
- 5\_ minimization of the length of the electrical cables that are necessary to operate the barrier
- 6\_ positioning in accordance with the present national standards.

## SITE PREPARATION

Construct a rectangular concrete slab (A fig. 3) of suitable size which includes cable outlet holes. If possible use the foundation base plate (B fig. 3), with the 4 supplied tie bars to submerge into the slab; or secure the barrier cabinet directly to the finished slab with 4 anchor bolts M10x120 (C fig. 3). The thickness of the slab must be at least 10 cm, remembering that it can be deeper if the ground conditions require it.

## ANCHORING OF THE BARRIER

The barrier is now placed in position, without the bar, and fixed to the base by securely tightening the nuts to the tie bars (or anchor bolts). The perfect stability of the anchorage is controlled and if necessary, the nuts are tightened further.

## BARRIER DIRECTION ADJUSTMENT

Right-hand barriers (RH) are barriers that have the cabinet on the right-hand side viewed from the inside of the passageway (the door is normally on the inside).

- 1\_ The barrier can be right-hand operating (RH) by fitting the plates as shown in A Fig. 4.

Left-hand barriers (LH) are barriers that have the cabinet on the left-hand side viewed from the inside of the passageway (the door is normally on the inside).

- 2\_ The barrier can be left-hand operating (LH) by fitting the plates as shown in D Fig. 4.

“RBLO” is normally delivered in the RIGHT-HAND (RH) version. If it needs to be transformed to LEFT-HAND (LH), proceed as follows:

- 1\_ after having removed the nuts and washers, remove the upper support (B fig. 4), rotate it through 180° and secure it again; RBLO-E: remove the limit switches and install them on the opposite side of the support (1B, fig. 4);
- 2\_ Remove the mechanical stopper (1C, fig. 4) and install it on the opposite side on the cabinet (2C, fig. 4);
- 3\_ **Once the barrier direction has been changed the motor connections must be inverted (see K205M instructions for RBLO and RBLO-X, K101M instructions for RBLO-E).**

**Note: once the direction of the barrier has been changed, the position of the devices are inverted.**

## SECURING OF BAR AND BALANCING

Balancing is fundamental for the correct function of the barrier.

**This operation is only performed after the bar has been fitted in its final position with all possible accessories.**

All operations are performed with the power supply switched off and the barrier released (see chapter “manual release”):

fig. 5: close the end with the supplied cap (E); insert the bar (A) into the bar holder (B) and secure it with the 2/4 bolts (C) and nuts (D);

*Important: the boom must be completely inserted into the boom holder.*

fig. 6: keeping at a safe distance, operate the manual release (A). The bar must lift to 45° on its own, otherwise turn the spring preloading nut (B) (19 Allen wrench). Lower the bar, release it and check that it has reached 45°.

**Note: if a load is needed that is greater/lower than that permitted when balancing, move the eyelet (1 D fig. 4) into the hole on the right or left to increase/decrease the load capacity.**

## MANUAL RELEASE

- 1\_ Introduce the supplied release key (1 fig. 7);
- 2\_ turn the key through approx. 330° in a clockwise direction (if it is a bit tight at the beginning, apply more force, there is no danger of causing damage).

**Turn the key as far as it will go before manually operating the bar.**

**Once the bar has been released it should automatically position itself in the balanced position (approx. 45°)**

## POWER SUPPLY CONNECTION AND EXTERNAL CONTROL AND SAFETY SYSTEMS

Each device, including the power supply, must be correctly installed in accordance with the present standards. Separate the power cables from the control cables, especially if the distances are long (over 50 m). TAU advise that the cable sections (excluding the aerial) should be: power supply 1.5 mm<sup>2</sup>, other cables 0,5 mm<sup>2</sup> and in any case should abide by the IEC 364 standard and the local installation standards. After having removed the locking nut (2 fig. 8) (RBLO-E), remove the cabinet cover (1 fig. 8) to access the control unit. The connections can be accessed after having previously removed the fixing screw (3 fig. 8) and the cover of the control unit container (4 fig. 8) (RBLO and RBLO-X).

**N.B.: The internal wiring has already been made and tested. The power supply, external photocell, and possible remote control must be connected and the control unit programmed.**

## IMPORTANT

- 1\_ An efficient grounding in compliance with the present standards for the safety of the equipment is extremely important. The manufacturer cannot be held responsible for possible damages due to the non-compliance of the said standard.
- 2\_ For safety reasons a thermal-magnetic circuit breaker should ideally be positioned prior to the barrier to control the power supply in the event it must be turned off.

## ELECTRIC LIMIT SWITCHES - ADJUSTMENT (RBLO-E)

The electric limit switches installed on the RBLO-E are used to set the beginning of the soft stop during opening and closing.

To adjust the cams which trigger the limit switches (1, picture 9) move them around the housing ring (2, picture 9) until the desired position is reached.

To adjust the limit switches, it is also necessary to set the logic parameters of the controller. For example, if the boom stops immediately after the limit switch has been activated it will be necessary to increase the motor torque (see "logic adjustments" on the K101M controller's manual); on the other hand, if the motor does not shut off once the closing or opening is complete, it will be necessary to increase the limit switch detection threshold (see "logic adjustments" on the K101M controller's manual).

## MECHANICAL STOPS ADJUSTMENT

The barrier is normally supplied with the mechanical stops already adjusted for the ideal movement of the bar.

In the event that the foundation plate is incorrectly positioned, the bar may not be perfectly horizontal or vertical thereby giving the barrier an unpleasant appearance.

The course of the bar can be modified to rectify this problem by moving the vibration-damping plugs of the mechanical stop back or forward (1 fig. 10), by means of the lock nuts (2 fig. 10) of the plugs.

**Note: the memorisation procedure on the control unit must be repeated each time the position of the mechanical stops is modified (see K205M instructions).**

**Once the adjustment has been made, turn the power back on and perform the memorisation procedure on the control unit (see K205M instructions), and check the correct position of the bar from the second automatic manoeuvre (the first manoeuvre is for the control unit to acquire the new stops), if the position is incorrect repeat the procedure.**

## FINAL OPERATIONS

Having tested the efficiency of each individual device concerning the command and control of the barrier, ensure the integrity of the barrier before handing over to the end user.

Place notices indicating the presence of an automatic barrier in an easily legible location.

## USE

The barrier has been exclusively designed to limit the flow of vehicles and/or persons in restricted entrances by means of a bar. In the event of blackout, functioning can be guaranteed by means of an optional 12V dry battery having an autonomy of approximately 100 manoeuvres (RBLO and RBLO-X).

Furthermore, it also comprises electrical equipment and therefore must be approached and used with caution and foresight. In particular we recommend:

- not to touch the equipment with wet hands and/or bare or wet feet;
- not to perform the automatic or semiautomatic function in the presence of known or suspected malfunctions;
- not to pull the cable to disconnect the equipment;
- not to let children, or those unable, use the cabinet keys or controls (including remote controls) even if only to play with;
- not to operate the barrier until it is completely in view;
- not to enter within the operating range while it is moving, wait for it to stop;
- not to rest against the bar or cabinet for any reason, even when the barrier is inactive and do not remain within the operating range of the barrier;

- not to let children or animal play within the operating range of the barrier;
- not to use the barrier for purposes (e.g. lifting of weights or persons) other than those foreseen. The manufacture holds no responsibility what so ever for damages caused by the said actions;
- to perform periodic maintenance by specialised personnel;
- if there is a fault, turn off the power supply. Use the manual manoeuvre only if safe. Do not attempt to resolve the problem yourself, contact a qualified technician of the manufacturer or authorised by the manufacturer. In any case, make sure that the spare parts are original so that the safety of the barrier is not compromised.

## TYPE OF SYSTEM (fig. 11)

- 1\_ Gearmotor
- 2\_ Photocell column
- 3\_ Flashing light with antenna
- 4\_ Safety photocell
- 5\_ Magnetic mass detector
- 6\_ Bar (max. length 4 m)
- 7\_ Bar forked rest

Cable section:

- a 3 x 1.5 mm<sup>2</sup>
- b 2 x 0.5 mm<sup>2</sup>
- c 4 x 0.5 mm<sup>2</sup>
- d 2 x 0.5 mm<sup>2</sup>
- e RG58
- f 4 x 0.5 mm<sup>2</sup>

## MAINTENANCE

To be performed by specialised personnel only after having turned off the power supply.

After every 100,000 manoeuvres, check:

- the greasing of the spring;
- the balance of the bar (see chapter "SECURING OF BAR AND BALANCING");
- the efficiency of the force;
- the integrity of the battery;
- The efficiency of the protection and safety devices;
- the wear on the mechanical stops and the adjustment of the limit switches (see chapter "LIMIT SWITCH ADJUSTMENT").

**The above mentioned maintenance is vital in order that the product functions correctly throughout time.**

### In general

It must be impossible for third parties to operate the barrier during maintenance; therefore turn off the mains power supply (and battery if present).

- Release the bar first in order to facilitate the operation.

### Greasing

- 1\_ open the cabinet door;
- 2\_ grease the eyelets of the balancing spring (1 fig. 12);
- 3\_ grease the contact points between the cam of the manual release and the release lever (2 fig. 12);
- 4\_ keep away from possible moving gears or mechanical parts.

FREQUENCY: every 100,000 manoeuvres or 6 months, **fail-  
ing which the guarantee lapses.**

### Bar balancing

Check the balance of the bar, repeating the manoeuvres described in chapter "Securing of bar and balancing". This operation is fundamental for the correct functioning and duration of the barrier. If necessary, increase the preloading of the spring in order to compensate for its wear. See the subsequent paragraph "Extraordinary maintenance and repairs" in the event the spring needs to be changed.

FREQUENCY: every 100.000 manoeuvres or 6 months, **fail-  
ing which the guarantee lapses.**

Control of the force limitation efficiency

Check the correspondence between the true operation and the operation established during installation.

FREQUENCY: every 100.000 manoeuvres or 6 months, **failing which the guarantee lapses.**

Control of the 12V dc battery

Check the charge level of the battery by means of a tester. If replacement is necessary, substitute the flat battery with an original and do not dispose of it in the environment.

FREQUENCY: every 100.000 manoeuvres or 6 months, **failing which the guarantee lapses.**

Control of the remaining protection and safety devices

Photocells: they can trigger both in opening as well as in closing; check the dip-switch programming. Clean the outer casing.

Check that the following specifications are respected:

- The flashing light is working and visible;
- The adhesive danger sign on the door is well attached and visible;
- The adhesive danger sign on the back of the barrier is well attached and visible. If these signs do not correspond to the stated conditions, restore their original effectiveness or, if this is impossible, replace them.

FREQUENCY: every 6 months, **failing which the guarantee lapses.**

**EXTRAORDINARY MAINTENANCE AND REPAIRS**

**ATTENTION: ON COMPLETION OF THE FIRST 2000 MANOEUVRES, THE ROD BALANCING PROCEDURE MUST BE CARRIED OUT AGAIN.**

If a complicated repair or replacement of electromechanical parts is necessary, the unit in question (control unit, gearmotor unit) should be removed in order for the repair to be carried out by the manufacturer or by authorised technicians. Otherwise, the safety and reliability of the barrier may be reduced (such as the guarantee for example).

**NOTE: if the barrier is used in a saline environment or an environment that is highly contaminated by corrosive chemical reactants, the frequency of the maintenance controls must be increased due to the increased environmental deterioration; In this case the external metal cabinet should also be inspected.**

**TROUBLESHOOTING**

This paragraph deals with the most probable causes of common faults, in order to promptly re-establish the barrier.

In any case the indicated case study is incomplete (both from a cause point of view as well as a fault point of view).

a\_ The barrier is blocked (open, closed or half-open):

- 1\_ *no power supply;*
- 2\_ *inefficient commands;*
- 3\_ *blown power supply fuse;*
- 4\_ *photocells (also enabled during opening) active because they are incorrectly aligned and/or covered (grass, etc);*

b\_ the barrier continues to open and close;

- 1\_ *check the false contacts of the remote control buttons and the key selector switches that remain on;*

c\_ the barrier remains open;

- 1\_ *the photocells are active because they are not aligned and/or dirty (mud, etc) and/or covered (grass, etc);*

d\_ the barrier has difficulty in opening;

- 1\_ *the bar balancing spring needs adjusting;*

e\_ the barrier lifts/lowers more than the foreseen limits;

- 1\_ *the mechanical limit switches need adjusting (see chapter "LIMIT SWITCH ADJUSTMENT").*

**DECOMMISSION**

When the barrier has reached the end of its useful life it should be removed and the reusable materials should be recycled. Pay attention to that which is stipulated by local and/or national laws and regulations. Care should be taken when recycling the following parts:

- cabinet painted with epoxy paint
- methacrylate flashing light dome
- polycarbonate control unit box
- electronic cards
- 12V DC dry battery (lead acid)
- lithium grease inside the reduction gear
- minor plastic and/or rubber connections and protections.

**RESPECT THE ENVIRONMENT!**

**DISMANTLING WARNINGS:** the barrier dismantling operations must respect the safety measures: therefore, disconnect the power supply before proceeding. Slacken (not completely) the adjustment nut of the balancing spring so that the bar can be comfortably and safely removed. Then unscrew the blocking screws on the base of the cabinet in order to process as desired.

**TRANSPORT**

The bar, which can be purchased on request, is packed separately from the barrier that is packaged in a cardboard box.

Care and attention must be taken throughout the handling phase. Ideally, a manual or motorised trolley should be used for lifting and movement. The items must be stored upright, even for short periods, respecting the direction that is indicated on the packaging and taking into consideration that high centres of gravity cause instability.

The bar must be stored making sure that there are no protruding parts or loads that could damage it. Once unpacked, make sure that it is intact. Do not discard the packaging, but rather recycle it following local laws.

**WARNING: to prevent suffocation or similar dangers, do not allow children to handle the packaging.**

**GUARANTEE: GENERAL CONDITIONS**

TAU guarantees this product for a period of 24 months from the date of purchase (as proved by the sales document, receipt or invoice).

This guarantee covers the repair or replacement at TAU's expense (ex-works TAU: packing and transport at the customer's expense) of parts that TAU recognises as being faulty as regards workmanship or materials.

For visits to the customer's facilities, also during the guarantee period, a "Call-out fee" will be charged for travelling expenses and labour costs.

**The guarantee does not cover the following cases:**

- If the fault was caused by an installation that was not performed according to the instructions provided by the company inside the product pack.
- If original TAU spare parts were not used to install the product.
- If the damage was caused by an Act of God, tampering, overvoltage, incorrect power supply, improper repairs, incorrect installation, or other reasons that do not depend on TAU.
- If a specialised maintenance man does not carry out routine maintenance operations according to the instructions provided by the company inside the product pack.
- Wear of components.

The repair or replacement of pieces under guarantee does not extend the guarantee period.

In case of industrial, professional or similar use, this warranty is valid for 12 months.

**MANUFACTURER'S DECLARATION OF INCORPORATION  
(in accordance with European Directive 2006/42/EC App. II.B)**

Manufacturer: TAU S.r.l.  
Address: Via E. Fermi, 43  
36066 Sandrigo (Vi)  
ITALY

ENGLISH

**Declares** under its sole responsibility, that the product: *Electromechanical actuator*  
designed for automatic movement of: *Road Barriers*  
for use in a: *General environment*  
complete with: *Electronic control unit*

Model: *RBLO*  
Type: *RBLO / RBLO-X / RBLO-E*  
Serial number: *SEE SILVER LABEL*  
Commercial name: *AUTOMATIC BARRIER*

Has been produced for incorporation on an access point (*automatic barrier*) or for assembly with other devices used to move such an access point, to constitute a machine in accordance with the Machinery Directive 2006/42/EC.

**Also declares** that this product complies with the essential safety requirements of the following EEC directives:

- **2006/95/EC Low Voltage Directive**
- **2004/108/EC Electromagnetic Compatibility Directive**

and, where required, with the Directive:

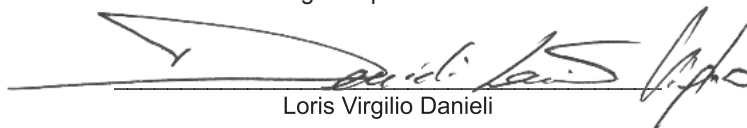
- **1999/5/CE Radio equipment and telecommunications terminal equipment**

Also declares that ***it is not permitted to start up the machine*** until the machine in which it is incorporated or of which it will be a component has been identified with the relative declaration of conformity with the provisions of Directive 2006/42/EC.

The manufacturer undertakes to provide, on sufficiently motivated request by national authorities, all information pertinent to the quasi-machinery.

Sandrigo, 24/11/2014

Legal Representative

  
Loris Virgilio Danieli

Name and address of person authorised to draw up all pertinent technical documentation:

*Loris Virgilio Danieli - via E. Fermi, 43 - 3606 Sandrigo (Vi) Italia*

## INSTRUCTIONS AND WARNINGS FOR AUTOMATIC SYSTEM USERS

**CONGRATULATIONS** on choosing a Tau product for your automation system!

Tau S.r.l. produces components for automatic gates, doors, barriers and shutters. These include gear motors, control units, radio control devices, flashing lights, photocells and accessories.

Tau products are exclusively made with top quality materials and processes and, as a company, we constantly research and develop innovative solutions in order to make our equipment increasingly easier to use. We also pay great attention to all details (technology, appearance and ergonomics). The extensive Tau range makes it possible for your fitter to choose the product which best meets your requirements.

Tau, however, does not produce your automated system as this is the outcome of a process of analysis, evaluation, choice of materials and installation performed by your fitter.

Each automated system is unique, therefore, and only your fitter has the experience and professionalism required to create a system that is tailor-made to your requirements, featuring long-term safety and reliability, and, above all, professionally installed and compliant with current regulations.

An automated system is handy to have as well as being a valid security system. Just a few, simple operations are required to ensure it lasts for years.

Even if your automated system satisfies regulatory safety standards, this does not eliminate "residue risks", that is, the possibility of dangerous situations being generated, usually due to irresponsible and/or incorrect use. For this reason we would like to give you some suggestions on how to avoid these risks:

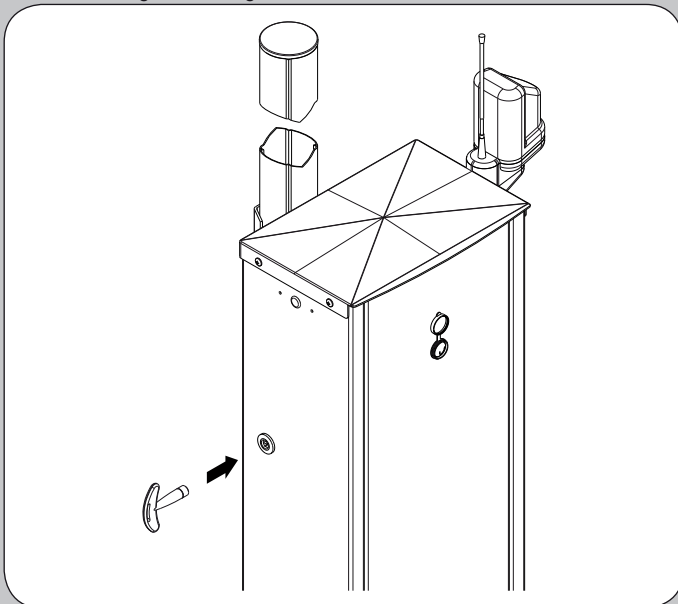
- **Before using the system for the first time:** ask your fitter to explain how residue risks can arise and read the instructions and warnings in the user handbook that your fitter will have given you. Keep this manual for future use and, if you should ever sell your automated system, hand it over to the new owner.
- **Your automated system carries out your commands to the letter:** irresponsible and/or incorrect use may cause it to become dangerous. Do not use the system if people, animals and/or objects enter its operating area.
- **IT IS NOT A TOY!** Make sure children do not play near the system and keep the remote control device out of their reach.
- **Faults:** If you notice any abnormal behaviour, disconnect the system from the power supply immediately and perform the manual release operation (see figure). Do not attempt to repair the door but call in your fitter: the system will operate manually as it did before installation.
- **Maintenance:** to ensure long life and totally safe operation, the system required routine maintenance, just like any other piece of machinery. Establish maintenance times together with your fitter. Tau recommends a frequency of 6 months for normal domestic installations but this may vary depending on the intensity of use (always every 3000 work cycles).

**N.B.:** All controls, maintenance work and/or repairs may only be carried out by qualified personnel.

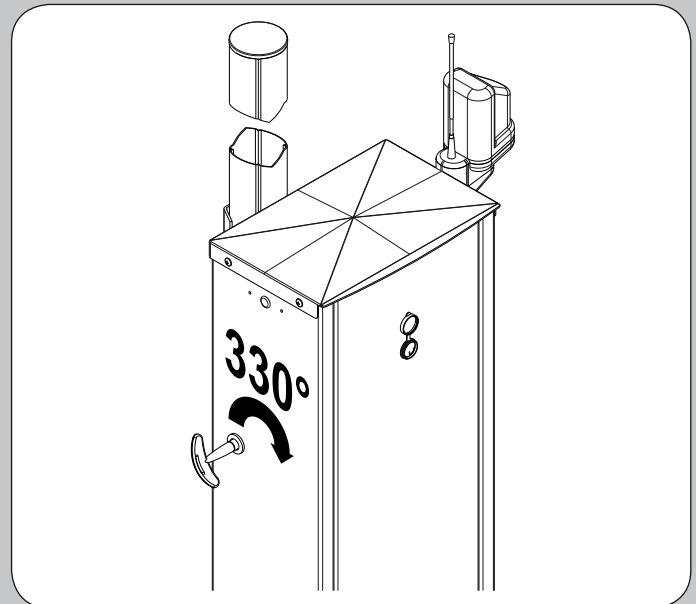
- Do not modify the plant or the relative programming and adjustment parameters: your fitter will see to that.

**N.B. Final testing, routine maintenance and any repairs must be documented by the fitter (in the relative spaces) and such documents kept by the owner of the system (IF THE DOCUMENTS ARE NOT PRODUCED, THE WARRANTY WILL EXPIRE).**

- **Disposal:** At the end of system life, make sure that it is demolished by qualified personnel and that the materials are recycled or disposed of according to local regulations.



*In the event there is no line voltage, introduce the key as indicated in the figure.*



*Then turn the key through 330° in order to be able to manually control the bar.*

**The manual manoeuvre must only be performed with the automation inactive and AFTER having switched off the power from the mains.**

**N.B.:** if your remote control unit (if supplied) starts working badly after a time, or does not work at all, the batteries may be flat (they can last from several months to 2/3 years depending on what type is used). This can be seen from the fact that the transmission confirmation LED gets dimmer or only turns on for brief moments. Before contacting your fitter, try exchanging the battery with one from a good transmitter: if this is the reason for the fault, simply replace the battery with another one of the same type.

If you wish to add a new automated system to your house, contact your fitter and we at Tau to have the advice of a specialist, the most developed products on the market, best operation and maximum automation compatibility.

Thank you for reading these suggestions and we trust you are fully satisfied with your new system: please contact your fitter for any further requirements.



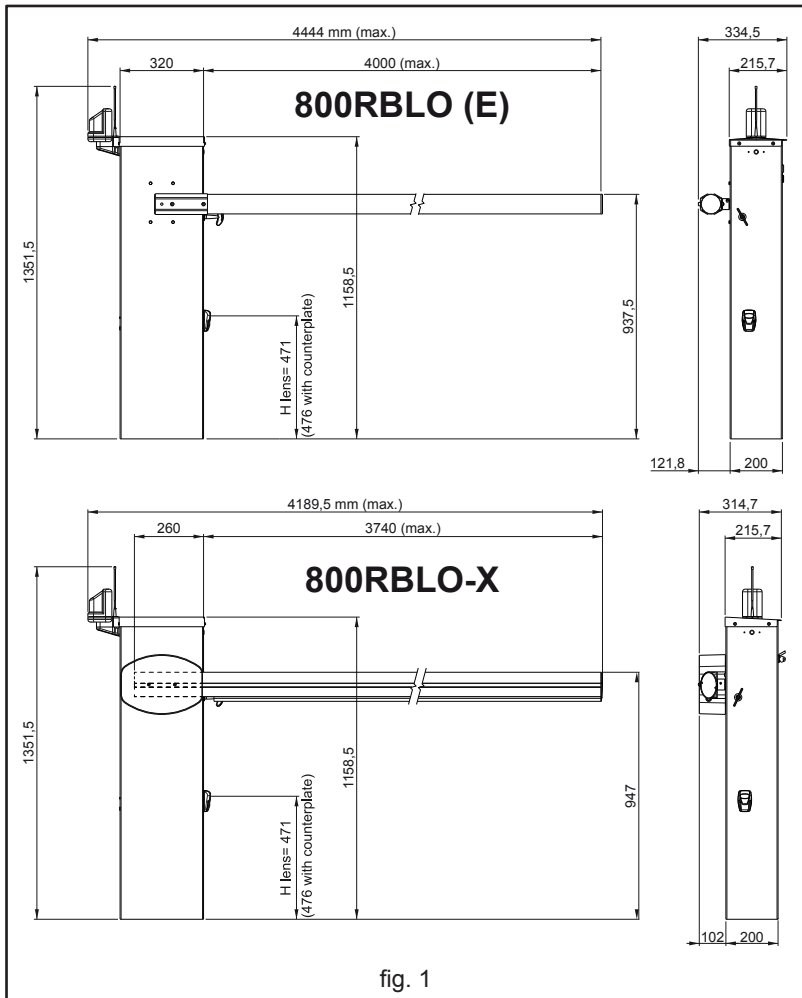


fig. 1

fig. 2

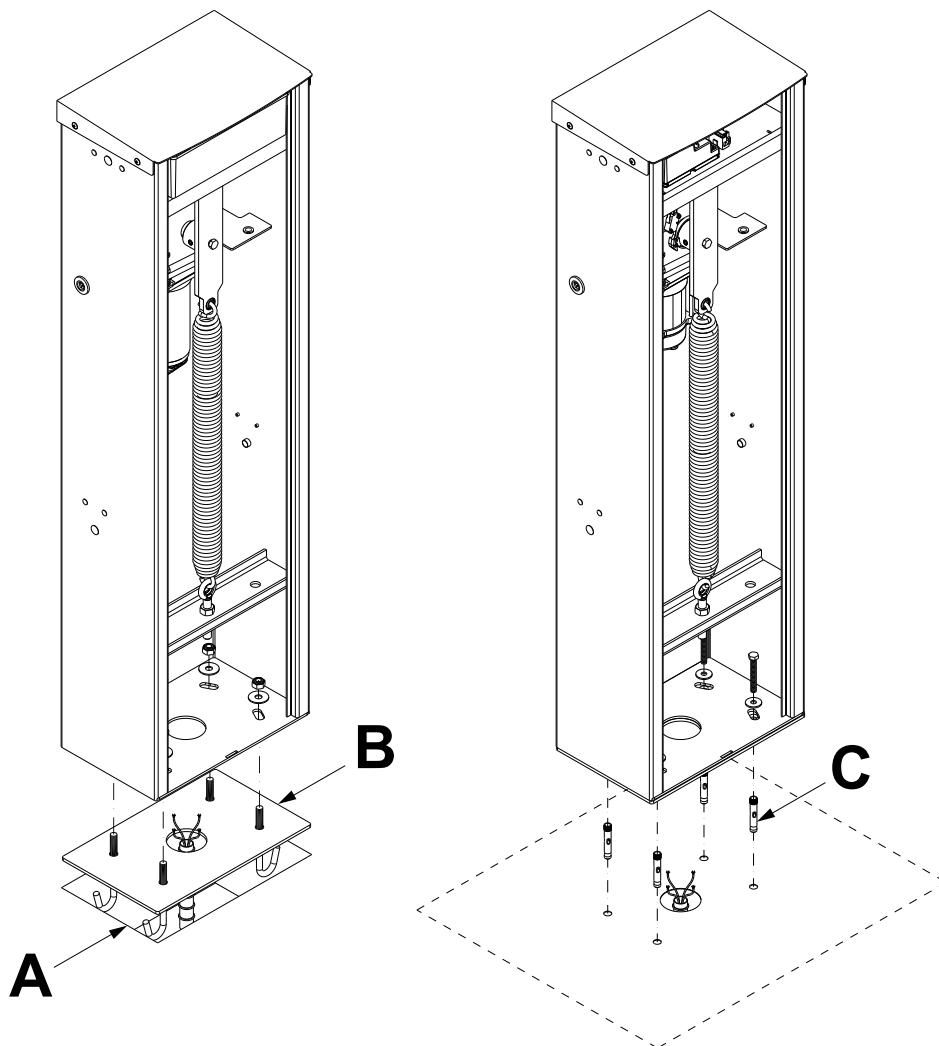


fig. 3



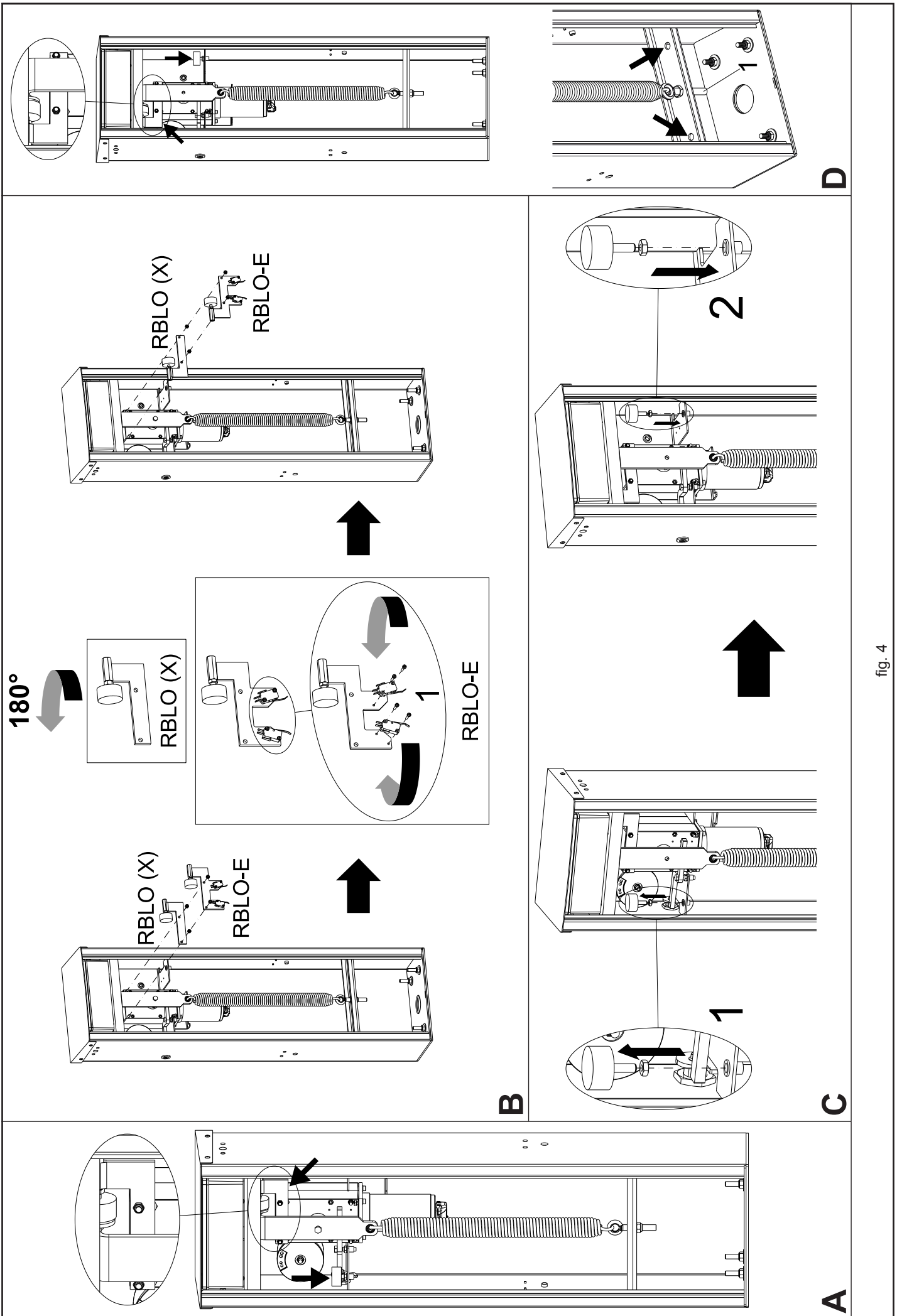


fig. 4

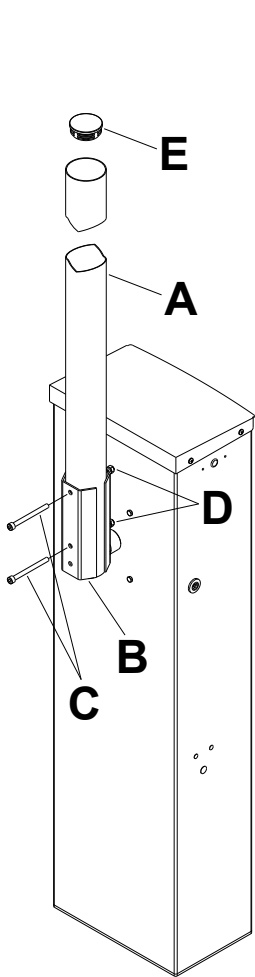


fig. 5

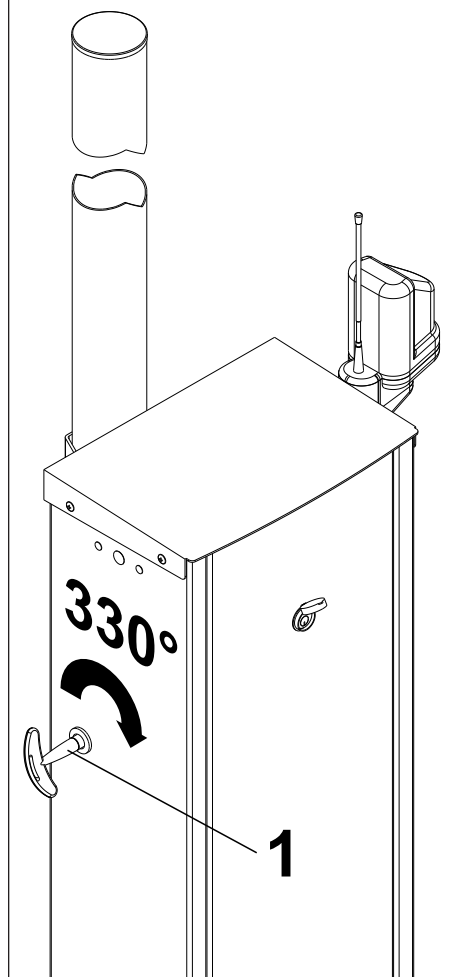
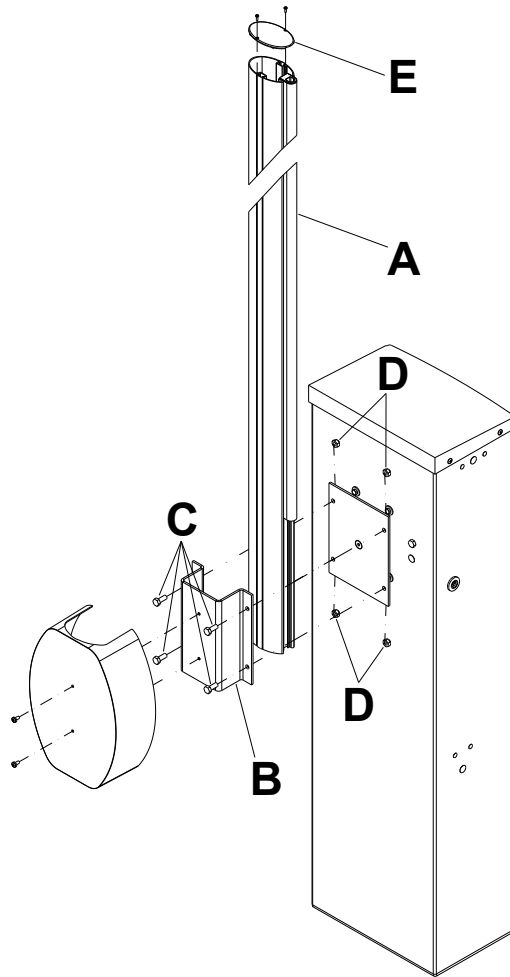


fig. 7

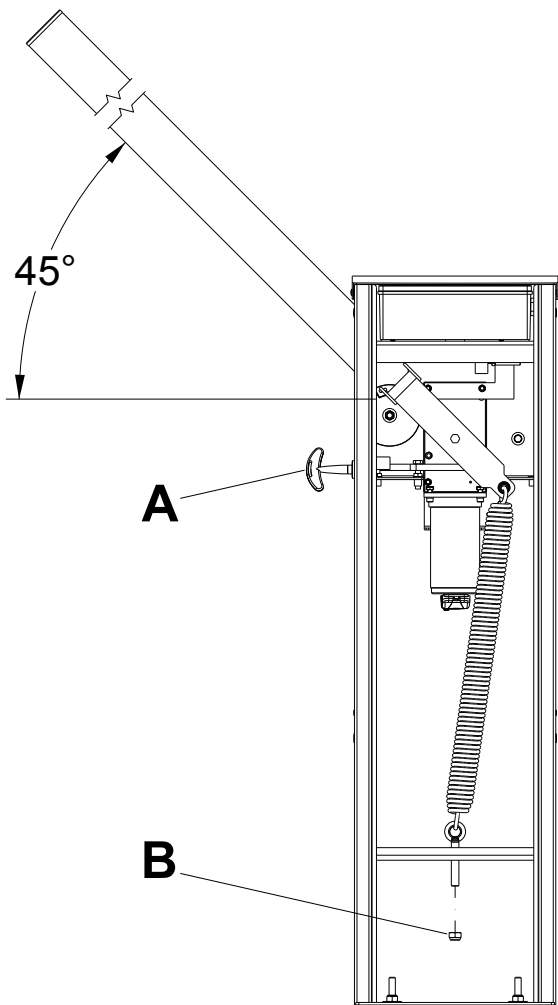


fig. 6

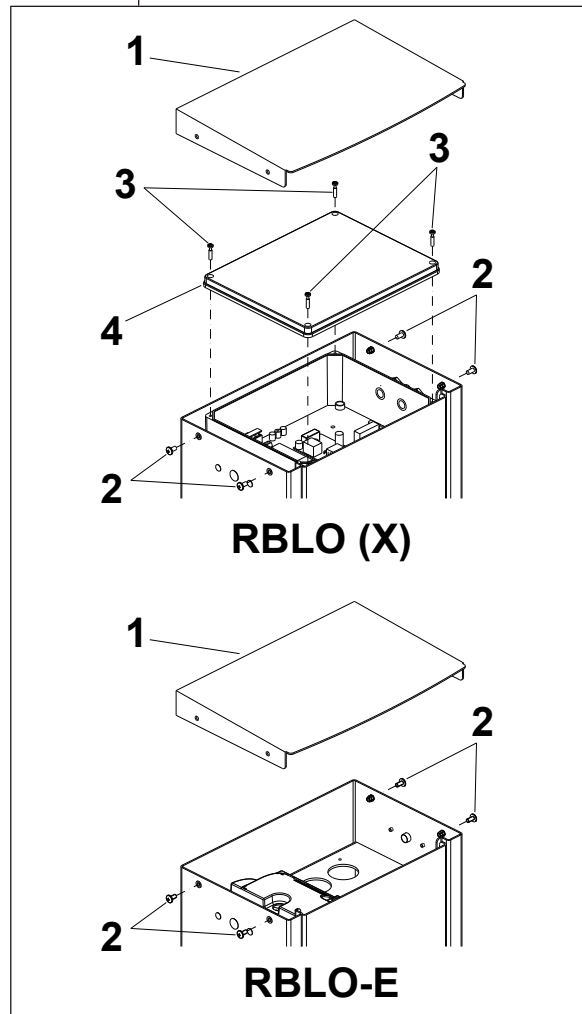


fig. 8

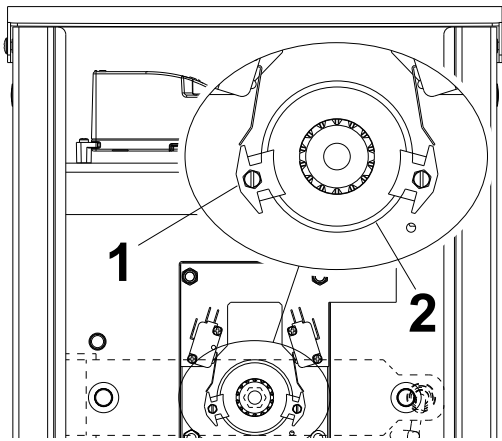


fig. 9

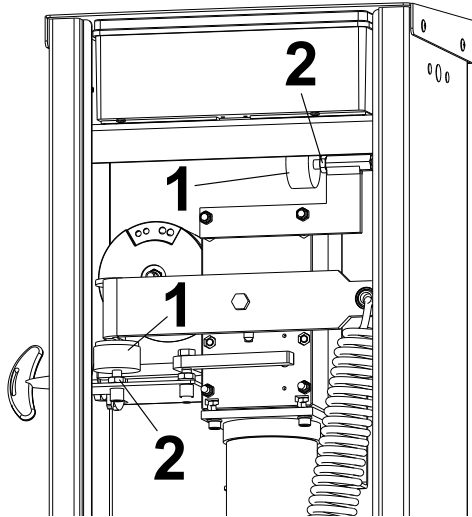


fig. 10

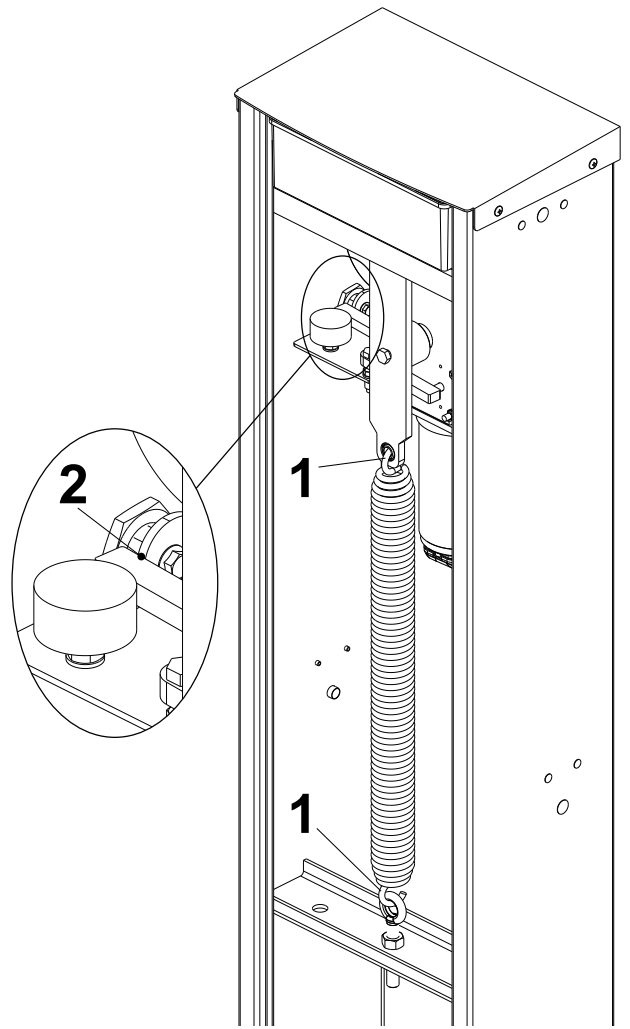


fig. 12

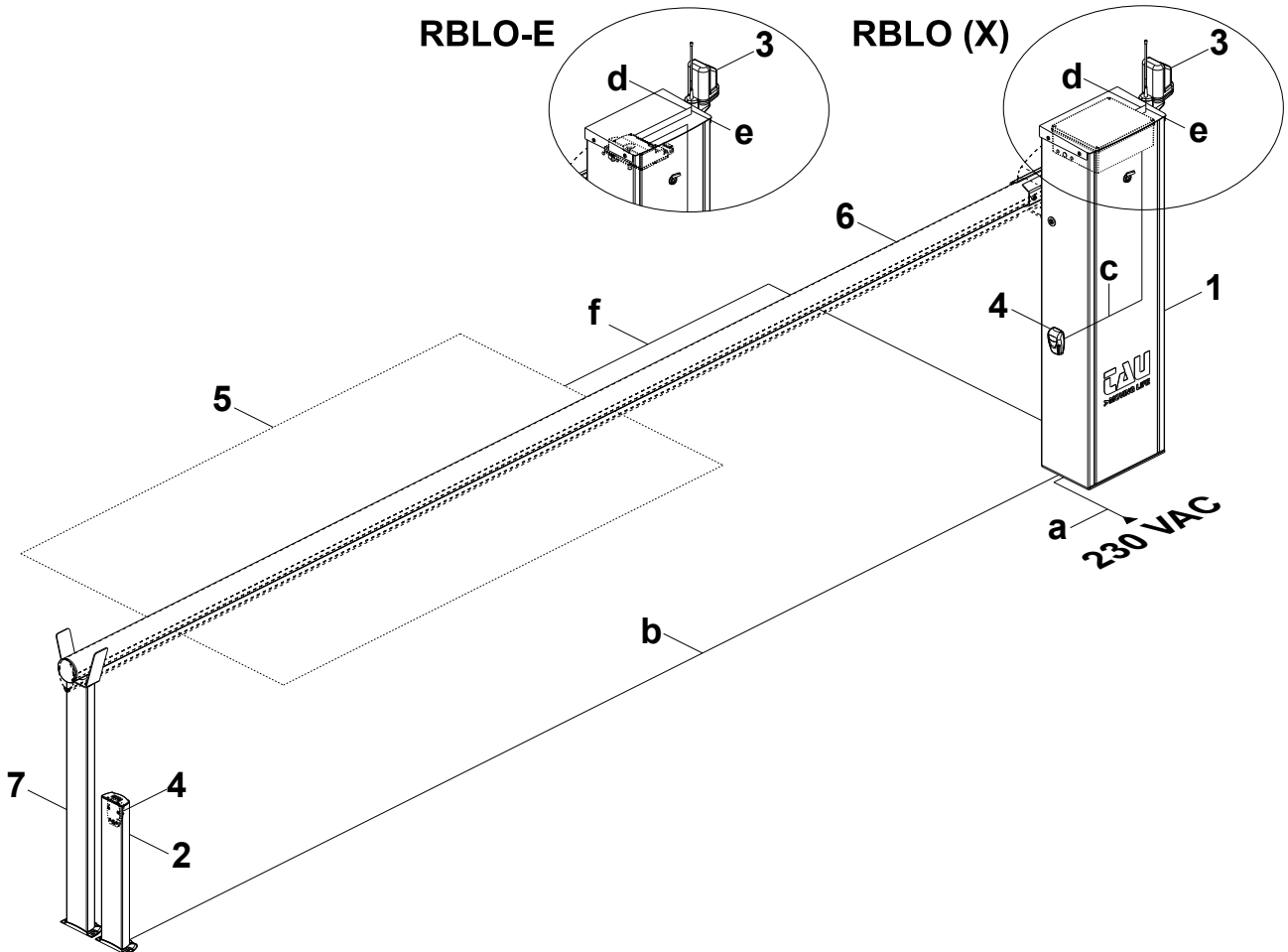


fig. 11

# SELF INSTALL - NEED TECHNICAL ASSISTANCE?

## OPTION 1: DIRECT WITH THE SERVICE DESK – QUICKEST AND MOST EFFECTIVE METHOD

Submit your enquiry direct with the service desk at – [service@automaticsolutions.com.au](mailto:service@automaticsolutions.com.au)

The service desk has the most experienced staff in Australia to help with your problem but they need your help.

- Describe your problem in detail and as clearly as possible. Don't forget to include a telephone number.
- Be certain to detail which model or models of you are working with.
- Send photos of the installation – they love photos. The people at the service desk are good but they are even better when they can see the installation. Send photos of the overall scene so they can see the entire installation. Also send photos of the wiring to the control board and any other part of the installation you think is relevant.
- Send video if appropriate. Smartphone's these days take remarkably good video in small file sizes which can be emailed in a moment. If your problem needs a video to show the issue please feel free to send it.

**NOTE: THIS IS BY FAR THE FASTEST AND MOST SUCCESSFUL WAY TO SOLVE YOUR PROBLEM  
PHOTOS AND VIDEOS ARE THE NEXT BEST THING TO BEING THERE**

## OPTION 2: LODGE YOUR ENQUIRY LOCALLY - SLOWER BUT CAN STILL BE EFFECTIVE

Make contact with the store of purchase. Branch staffs are typically not technicians and dependent on their length of service will have varying degrees of technical knowledge. If they cannot help however they will certainly either source help locally from their technicians or make contact with the service technicians on your behalf.

## OPTION 3: SERVICE CALL WITH AUTOMATIC SOLUTIONS TECHNICIAN – SLOWEST METHOD

If you fall within the local branch service area it may be possible to book a local technician to look at your installation. Wait times will vary dependent on local workloads. The cost is a service fee which includes the first half hour and the hourly rate thereafter. If any Automatic Solutions provided parts are found to be defective and within warranty these will be provided free of charge.

(NOTE: If you suspect that any parts are defective and within warranty you may wish to consider option 4)

*A note on this option: If you decide on this option you will be asked to sign an "authorisation to proceed" which will provide legal authority and payment security. This form has three options available of which only the first two are available to you. The third option is for warranty repairs only for full install customers. Self install customers requiring warranty only service need to refer to option four below.*

**IMPORTANT: IN SHORT THIS OPTION WILL INCUR CHARGES**

## OPTION 4: RETURN THE PRODUCT IF BELIEVED TO BE FAULTY

As a self install customer who has purchased product if you believe the product to be faulty rather than an installation or site problem you have the option of returning the product for evaluation and to exercise your right to a replacement, repair or refund as applicable. All returned product is forwarded immediately to the service technicians for evaluation and response. There are two main methods available to return product –

- Direct to the service centre – this is the quickest method as it cuts out the branch delay
- Via the branch of purchase – slower because of the delay at the branch

When choosing this option you need to complete a product return form. This form gives you all the information on procedure involved and where to send to. These are available at the branch of purchase, can be emailed to you (contact your branch), or available here - <http://automaticsolutions.com.au/page/warranty.php>

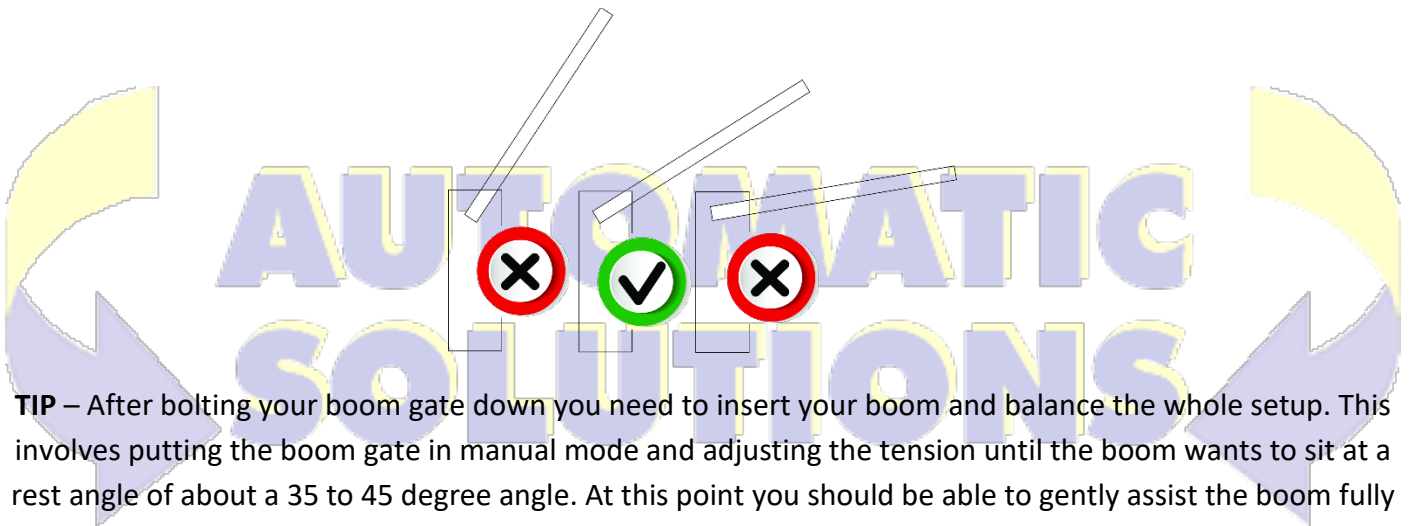
# TIPS & TRICKS

## BOOM GATE INSTALLATION



### General order of installation –

1. Boom gates generally have three distinct install phases. The first is preparation - running your cables and preparing your hardstand. All accessories cables (except loops) should be shielded cable.
2. Your hardstand ideally will be 300mm wider and longer than the boom gate base and a good 600mm deep to prevent the boom gate from moving during operation. If the hardstand is new it is good practice and makes stage two a breeze if you use a base plate.
3. Stage two involves bolting down the boom gate and getting it balanced. Do NOT connect any accessories attempt to program or run the boom gate until the boom gate is balanced.



**TIP** – After bolting your boom gate down you need to insert your boom and balance the whole setup. This involves putting the boom gate in manual mode and adjusting the tension until the boom wants to sit at a rest angle of about a 35 to 45 degree angle. At this point you should be able to gently assist the boom fully up or down by hand.

**TIP** - If you have shortened the boom, balancing may involve adding some weight to the end of the boom to compensate. Example – You have shortened the supplied boom by one metre. That metre of boom might weigh one kilogram. To compensate you can insert an appropriate SHS or round tube that has a similar weight and fix it inside the end of your shortened boom. Note it must be fixed inside the end of the boom. Because you have shortened your boom you may need a little more than the one kilogram you removed. Trial and error until you achieve balance.

4. Once balance is achieved you are ready to program your boom gate. Refer to your manual for programming instructions but essentially this will involve teaching the control board the end stops and required force to open and close. If you have not balanced correctly the board may compensate but you will be shortening the life of your boom gate motor and control board so make sure you do not do this step until you have nice balance.

**TIP** – After balancing the boom you need to insert small loops (45mm length of light gauge single strand cable with both ends stripped about 8mm) into each of the normally closed (NC) safety circuits. These will be removed later if you add safety accessories.

5. Once you have your boom gate running nicely you can then add your accessories one at a time testing each for correct operation before starting the next one.

- **TIP** – If you are using solar power it is a good idea to program first with an inverter generator before changing over to solar.
- **TIP** – It is recommended that all booms over three metres be supported by either drop down leg or boom support stand.
- **TIP** – Boom gates typically get installed in commercial and industrial sites that also typically have dirty and unstable power. Use a CM90 filter to protect your installation and improve reliability.

