

EC DECLARATION OF CONFORMITY FOR MACHINES (DIRECTIVE 98/37/EC)

Manufacturer: FAAC S.p.A.

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Declares that: DOMOSWING mod. operator

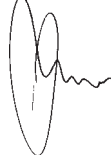
- is built to be integrated into a machine or to be assembled with other machinery to create a machine under the provisions of Directive 98/37/EC;
- conforms to the essential safety requirements of the following EEC directives:

73/23/EEC and subsequent amendment 93/68/EEC.
89/336/EEC and subsequent amendment 92/31/EEC and 93/68/EEC

and also declares that it is prohibited to put into service the machinery until the machine in which it will be integrated or of which it will become a component has been identified and declared as conforming to the conditions of Directive 98/37/EC.

Bologna, 01 January 2004

The Managing Director
A. Bassi



WARNINGS FOR THE INSTALLER GENERAL SAFETY OBLIGATIONS

- 1) **ATTENTION! To ensure the safety of people, it is important that you read all the following instructions. Incorrect installation or incorrect use of the product could cause serious harm to people.**
- 2) Carefully read the instructions before beginning to install the product.
- 3) Do not leave packing materials (plastic, polystyrene, etc.) within reach of children as such materials are potential sources of danger.
- 4) Store these instructions for future reference.
- 5) This product was designed and built strictly for the use indicated in this documentation. Any other use, not expressly indicated here, could compromise the good condition/operation of the product and/or be a source of danger.
- 6) FAAC declines all liability caused by improper use or use other than that for which the automated system was intended.
- 7) Do not install the equipment in an explosive atmosphere: the presence of inflammable gas or fumes is a serious danger to safety.
- 8) The mechanical parts must conform to the provisions of Standards EN 12604 and EN 12605.

For non-EU countries, to obtain an adequate level of safety, the Standards mentioned above must be observed, in addition to national legal regulations.
- 9) FAAC is not responsible for failure to observe Good Technique in the construction of the closing elements to be motorised, or for any deformation that may occur during use.
- 10) The installation must conform to Standards EN 12453 and EN 12445.
For non-EU countries, to obtain an adequate level of safety, the Standards mentioned above must be observed, in addition to national legal regulations.
- 11) Before attempting any job on the system, cut out electrical power and disconnect the batteries (if provided).
- 12) The mains power supply of the automated system must be fitted with an all-pole switch with contact opening distance of 3mm or greater. Use of a 6A thermal breaker with all-pole circuit break is recommended.
- 13) Make sure that a differential switch with threshold of 0.03 A is fitted upstream of the system.
- 14) Make sure that the earthing system is perfectly constructed, and connect metal parts of the means of the closure to it.
- 15) The automated system is supplied with an intrinsic anti-crushing safety device consisting of a torque control. Nevertheless, its tripping threshold must be checked as specified in the Standards indicated at point 10.
- 16) The safety devices (EN 12978 standard) protect any danger areas against **mechanical movement Risks**, such as crushing, dragging, and shearing.
- 17) Use of at least one indicator-light (e.g. FAACLIGHT 12VDC) is recommended for every system, as well as a warning sign adequately secured to the frame structure, in addition to the devices mentioned at point "16".
- 18) FAAC declines all liability as concerns safety and efficient operation of the automated system, if system components not produced by FAAC are used.
- 19) For maintenance, strictly use original parts by FAAC.
- 20) Do not in any way modify the components of the automated system.
- 21) The installer shall supply all information concerning manual operation of the system in case of an emergency, and shall hand over to the user the warnings handbook supplied with the product.
- 22) Do not allow children or adults to stay near the product while it is operating.
- 23) Keep remote controls or other pulse generators away from children, to prevent the automated system from being activated involuntarily.
- 24) Transit is permitted only when the automated system is idle.
- 25) The user must not attempt any kind of repair or direct action whatever and contact qualified personnel only.
- 26) Do not short-circuit the poles of the batteries and do not try to recharge the batteries with power supply units other than those provided with the equipment (in the battery—powered version).
- 27) Do not throw exhausted batteries into containers for other waste but dispose of them in the appropriate containers to enable them to be recycled. Disposal costs have already been paid for by the manufacturer (in the battery—powered version).
- 28) Maintenance: check at least every 6 months the efficiency of the system, particularly the efficiency of the safety devices (including, where foreseen, the operator thrust force) and of the release devices.
- 29) **Anything not expressly specified in these instructions is not permitted.**

DOMOSWING automated system

These instructions apply to the following model:

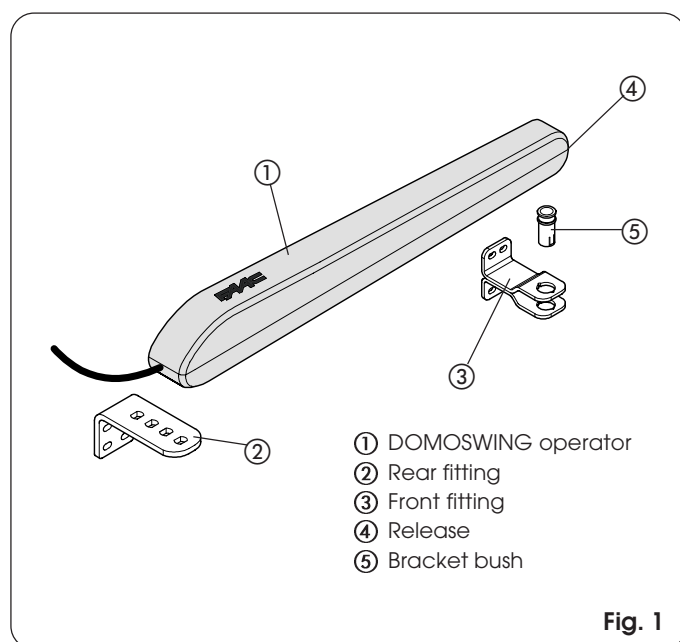
FAAC DOMOSWING

The DOMOSWING automated system can automate residential swing gates with leaves of up to 1.8 m in length with 100° max. opening.

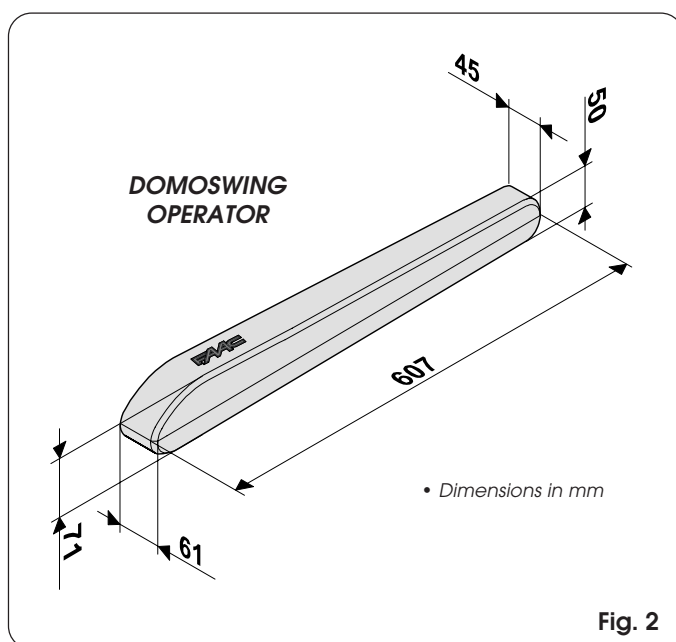
It consists of non-reversing electro-mechanical articulated operators, powered by 12 Vdc, and each operator is coupled to a control unit. The non-reversing system guarantees the gate will automatically lock when the motor is not operating. A release system enables the gate to be moved by hand in case of malfunction.

The DOMOSWING automated system was designed and built for controlling vehicle access. Do not use for any other purpose.

1. DESCRIPTION



2. DIMENSIONS



3. TECHNICAL SPECIFICATIONS

Tab. 1 - Technical specifications of DOMOSWING operator

MODEL	DOMOSWING battery	DOMOSWING transformer
Power supply	12Vdc	
Rated absorbed power (W)	48	
Max static force (N)	1000	
Load-free linear speed (cm./sec.)	3.2	
Rod effective stroke (mm)	280	
Use frequency (cycles/hour)	5 (1)	15 (2)
Consecutive cycles	~15 (1)	30 (2)
Recovery time	~10' for each completed cycle (1)	2' for each completed cycle (2)
Operating ambient temperature (°C)	-20 ÷ +55	
Operator weight (Kg)	2,2	
Protection class	IP 44	
Leaf max length (m)	1,80	
Leaf max weight (kg)	250	
Operator overall dimensions LxHxD (mm)	see fig.2	
Length of operator power cable (m)	0.7 (CANNOT BE MODIFIED)	

(1) The 5 cycles/hour are just a reference value for maintaining full efficiency of batteries. 15 consecutive cycles can be averagely performed with charged battery. The recovery time (battery recharge) is approx. 10' each cycle performed. The consecutive cycles could be reduced by over 50% at low temperatures (< 0°C).

(2) The 15 cycles/hour are just a reference value for maintaining full efficiency of motorisation. 30 consecutive cycles can be performed with software thermal protection. Recovery time is 2' each cycle performed.

4. INSTALLATION

4.1. Preliminary checks

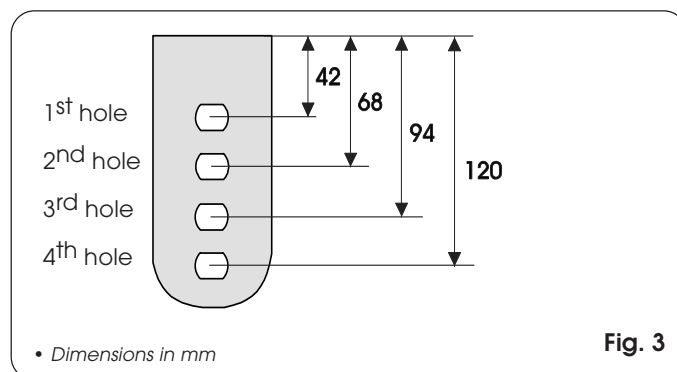
To ensure safety and an efficiently operating automated system, make sure the following conditions are observed:

- **The enclosures of the control boards (see relevant instructions) should be installed at a distance from the operators not requiring the motor cable to be extended.**
- The structure of the gate must be suitable for being automated. In particular, check that the structure is sufficiently strong and rigid, and that its dimensions and weight conform to those indicated in the technical specifications.
- Make sure that the leaves move uniformly and correctly, without any irregular friction during their entire travel.
- Make sure that the hinges are in good condition.
- Check if the mechanical stops of the limit-switches are fitted.
- Remove any locks and lock bolts.

We advise you to have any metalwork carried out before the automated system is installed.

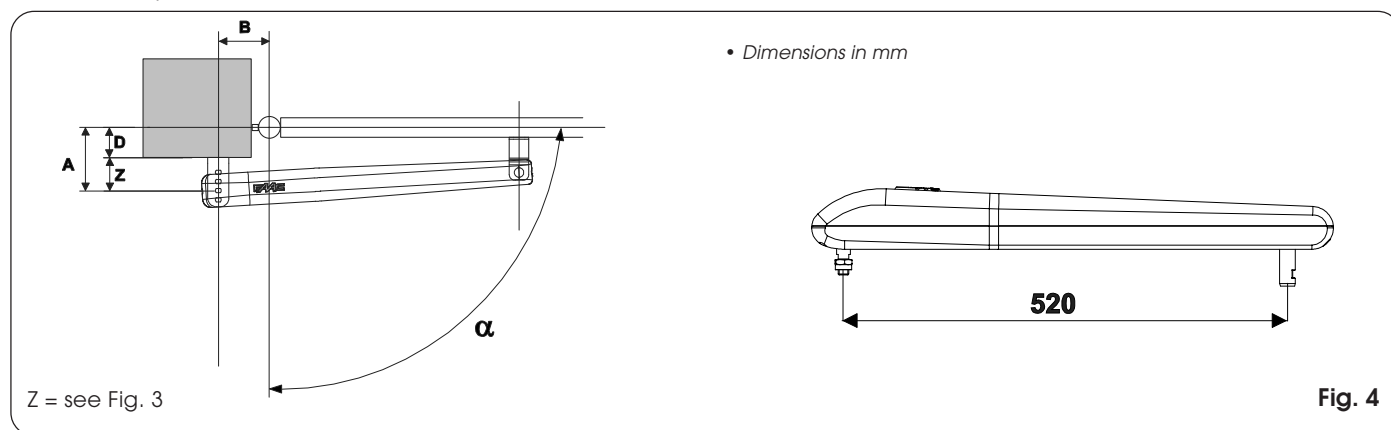
4.2. Installation dimensions

There are 4 possible installation dimensions Z as shown in Fig. 3.



Do not, on any account, cut the rear bracket to obtain dimension A (Fig. 4).

Establish the installation position of the operator by referring to Fig. 4 and Table 2.



Tab. 2 -
Installation
dimensions

		B						
		88 ÷ 91	92 ÷ 97	98 ÷ 102	103 ÷ 107	108 ÷ 113	114 ÷ 119	120 ÷ 126
D	30 ÷ 39					100°	○○○○	90°
	40 ÷ 49			100°	○○○●	90°		
	50 ÷ 59		○○○●	90°				
	60 ÷ 69				100°	○○○●	90°	
	70 ÷ 79		100°	○○○●	90°			
	80 ÷ 89	○○○○	90°			100°	○○○○	90°
	90 ÷ 99			100°	○○○●	90°		
	100 ÷ 109		○○○○	90°				100°
	110 ÷ 119				100°	●○○○	90°	
	120 ÷ 129		100°	●○○○	90°			
	130 ÷ 140	●○○○	90°					

• Dimensions in mm

The intersection of dimensions D and B (see Fig. 4) in the table determines which fixing hole on the bracket should be used.

Note: Intersections without figures cannot be used.

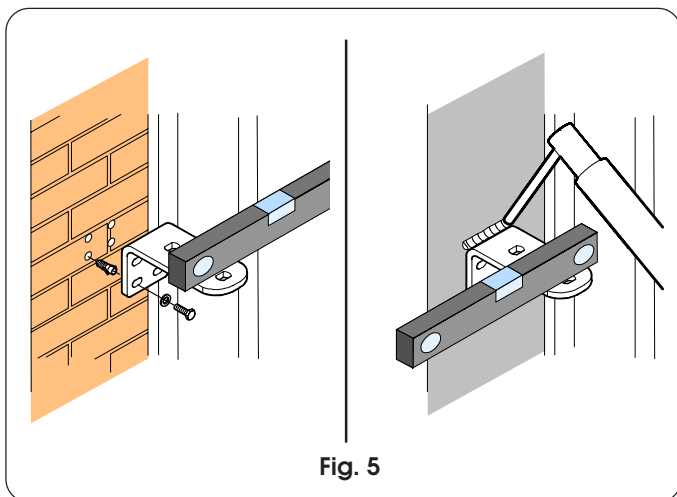
Example: for a D dimension of 45 mm and a B dimension of 100 mm, use the 4th hole (100° opening).
for a D dimension of 45 mm and a B dimension of 105 mm, use the 4th hole (90° opening).

4.3. Installation sequence

4.3.1 Installing the rear fitting

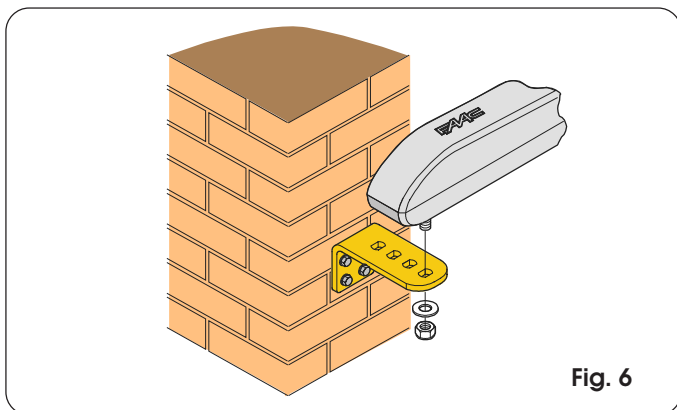
Secure the rear fitting to the pillar by welding or using suitable expansion plugs (Fig. 5), observing the dimension as shown in Table 2 and checking if the fitting is perfectly horizontal.

- ⚠ *The rear fitting must never be cut and it must face downwards with its pillar fixing points.*



4.3.2 Installing the operator-rear fitting

Secure the operator to the rear fitting, with the nut and washer (Fig. 6), taking care to correctly fit the chamfered part of the pin in the hole of the rear fitting determined in Table 2.

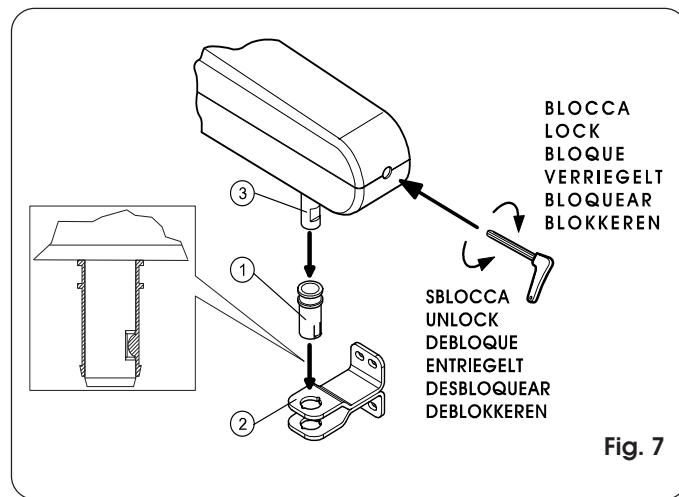


4.3.3 Preparing the operators

- Check if the pin (Fig. 7 Ref. ③) is in contact with the front of the operator. If it is not, turn the release key - fitted in the appropriate seat (Fig. 7) - clockwise to the end of its travel.
- Turn the release key anti-clockwise for 6-7 turns as shown in Fig. 7.

4.3.4 Inserting the bush - front fitting

Insert the bush (Fig. 7 Ref. ①) in the front fitting (Fig. 7 Ref. ②). The mechanical stop on the bush must coincide with the pin groove of the operator. Fit the pin (Fig. 7 Ref. ③) in the bush.

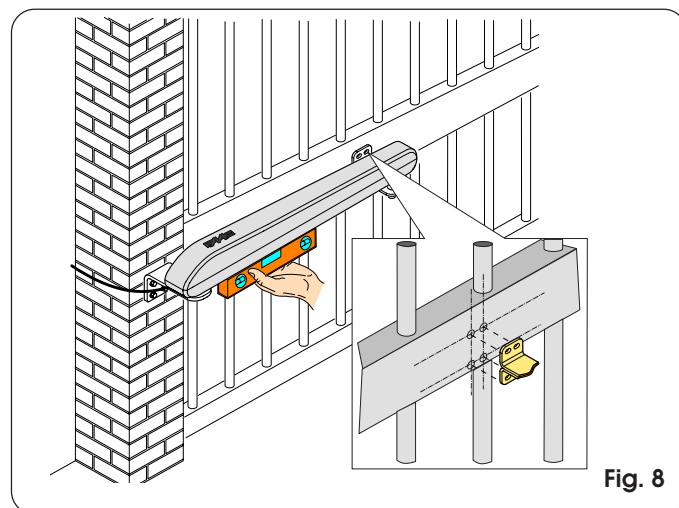


4.3.5 Re-positioning the front pin

- Turn the release key clockwise to the end of its travel.
- Turn the release key anti-clockwise for 3 turns.

4.3.6 Positioning the front fitting

- Take the leaf to its closed position.
- Rest the fitting on the leaf and mark out the fixing points checking if the operator and the fitting are perfectly horizontal (Fig. 8).



4.3.7 Installing the front fitting

- Turn the release key anti-clockwise for 2-3 turns.
- Remove the fitting from the operator and fit it on the leaf. The fitting can be either welded directly or screwed on, using the threaded inserts (Fig. 9).

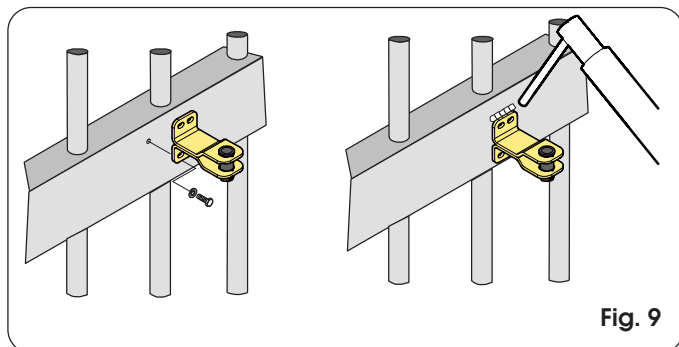


Fig. 9

4.3.8 Installing the operator-front fitting

Fasten the operator to the front fitting as shown in Fig. 10 and turn the release key clockwise to the closing stop position.

➔ The operator is non-reversing, so do not, on any account, try to move the leaves by hand.

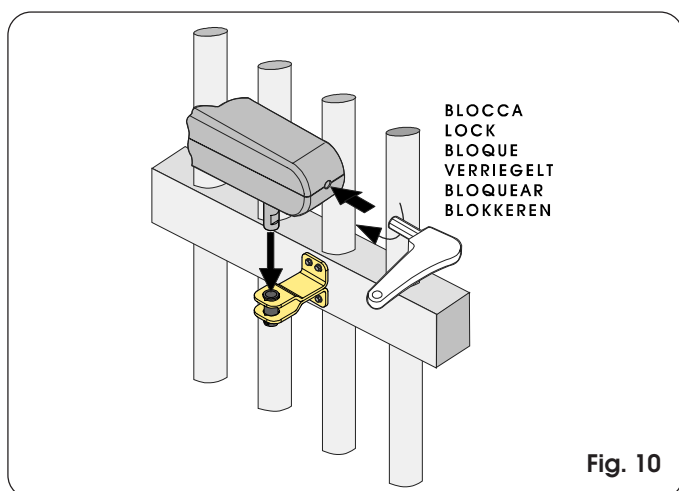


Fig. 10

5. MANUAL OPERATION

If the gate has to be moved manually due to a malfunction of the automated system, use the release device as follows:

- Fit the supplied Allen wrench in the front part of the operator and turn it anti-clockwise for 5-6 turns (Fig. 11 Ref. ①).
- Lift the operator by its front end, detaching it from the fitting (Fig. 11 Ref. ②) and remove the release key.

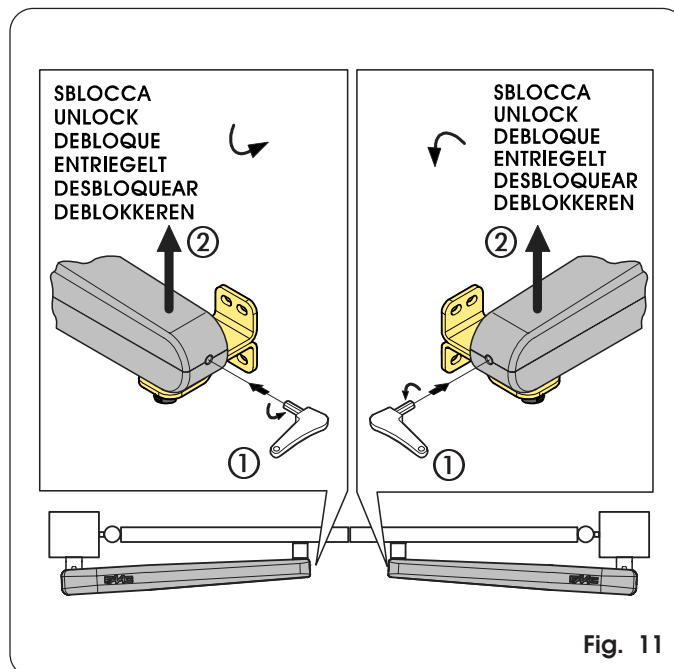


Fig. 11

6. RESTORING NORMAL OPERATION MODE

Procedure to relock the gate:

- Re-position the operator on the front fitting (Fig. 10);
- Fit and turn the release key clockwise until the operator reaches the closing stop position.
- remove the release key.

User's guide

DOMOSWING AUTOMATED SYSTEM

Read the instructions carefully before using the product and store them for future use

GENERAL SAFETY REGULATIONS

If correctly installed and used, the DOMOSWING automated system ensures a high degree of safety. Some simple rules concerning behaviour can prevent accidental trouble:

- Do not pass through the leaves while they are moving. Wait for the leaves to open fully before passing through.
- Do not, on any account, stand between the leaves.
- Do not stand near the automated system or allow children, persons or things to stand or lie there, especially while it is in use.
- Keep remote controls or other pulse generators away from children, to prevent the automated system from being activated involuntarily.
- Do not allow children to play with the automated system.
- Do not willingly obstruct leaf movement.
- Prevent any branches or shrubs from interfering with leaf movement.
- Keep indicator-lights efficient and easy to see.
- Do not attempt to activate the leaves by hand unless you have released them.
- In the event of a malfunction, release the leaves to allow access and wait for qualified technical personnel to do the necessary work.
- Before attempting any job on the system, cut out electrical power and disconnect the batteries (if provided).
- Do not in any way modify the components of the automated system.
- Do not attempt any kind of repair or direct action whatever and contact qualified personnel only for the purpose.
- At least every six months: arrange a check of the automated system, safety devices and accessories.

DESCRIPTION

These instructions apply to the following models:

FAAC DOMOSWING

The FAAC DOMOSWING automated system for residential swing gates consists of non-reversing electro-mechanical linear operators, powered by 12 Vdc, through battery or transformer. Each operator is coupled to an electronic control unit ensuring correct operation.

If using the battery-powered version, it should be considered that this is a work battery (not a back-up battery) therefore when the battery is discharged, the automated system has to allow for its recharge in order to resume operation.

The operators are controlled by an electronic control unit (one for each motor), housed in an enclosure with adequate degree of protection against atmospheric agents.

The leaves are normally in closed position.

When the electronic control unit receives an opening command via the remote control or any other pulse generator, it activates the operator to rotate the leaves until they reach the opening position allowing access.

If automatic operating mode was set, the leaves closes automatically after selected pause time has elapsed.

If the semi-automatic operating mode was set, a second pulse must be sent to close the gate again.

A stop pulse (if supplied) always stops movement.

For details on the behaviour of the automated system in

different function logics, consult the installation Technician. Automated systems may include safety devices that prevent the leaves from moving when there is an obstacle in the area they protect.

The DOMOSWING automated system is provided with an adjustable anti-crushing device which reverses leaf movement in case of contact with an obstacle.

The warning-light indicates that the leaves are moving.

MANUAL OPERATION

If the gate has to be moved manually due to a malfunction of the automated system, use the release device as follows:

- Fit the supplied Allen wrench in the front part of the operator and turn it anti-clockwise for 5-6 turns (Fig. 1- Ref. ①).
- Lift the operator by its front end, detaching it from the fitting (Fig. 1- Ref. ②) and remove the release key.

RESTORING NORMAL OPERATION MODE

Procedure to relock the gate:

- Re-position the operator on the front fitting (Fig. 2);
- Fit and turn the release key clockwise until the operator reaches the closing stop position.
- Remove the release key.

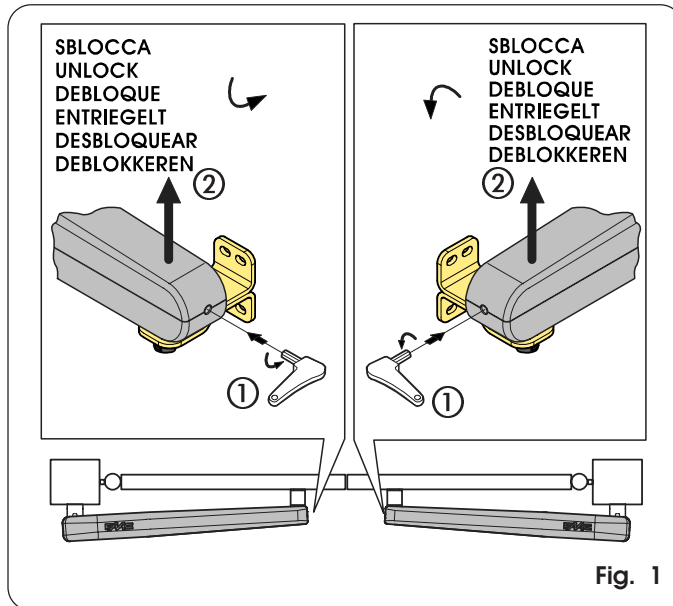


Fig. 1

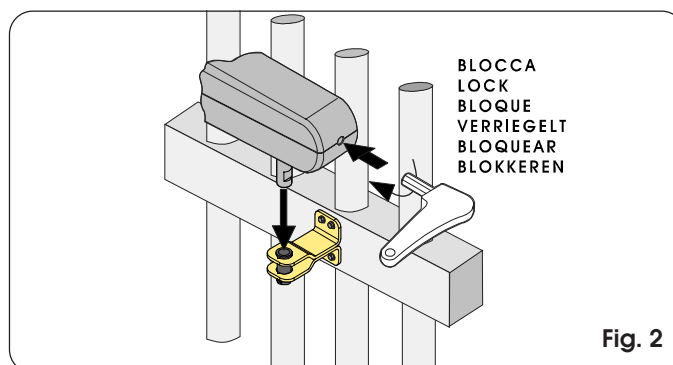


Fig. 2