

Montage-, Bedienungs- und Wartungsanleitung für

NovoPort- Antriebe



GB

Installation, operating, and maintenance instructions for NovoPort operators.

F

Notice de montage, d'utilisation et de maintenance pour motorisations NovoPort.

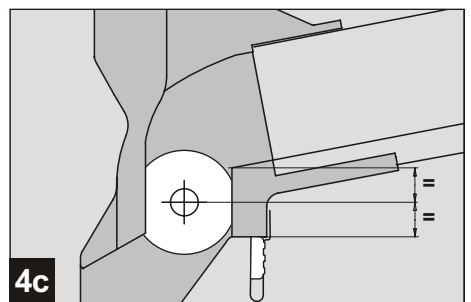
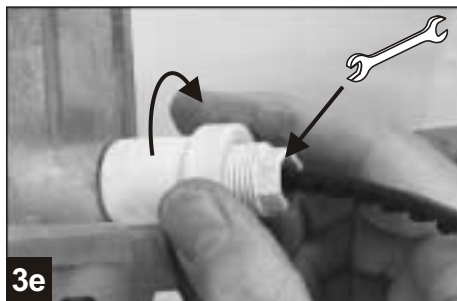
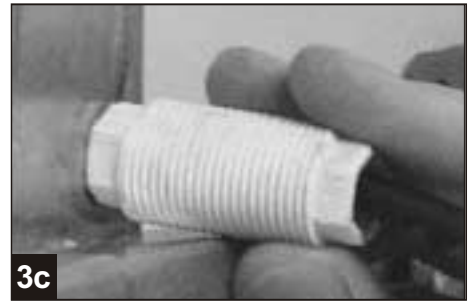
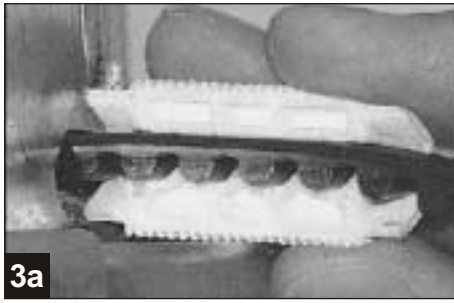
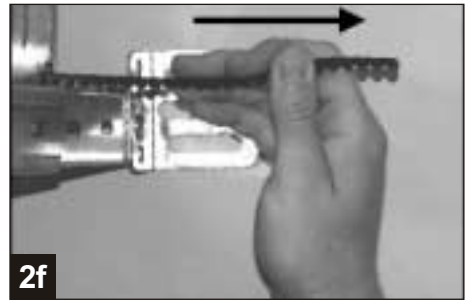
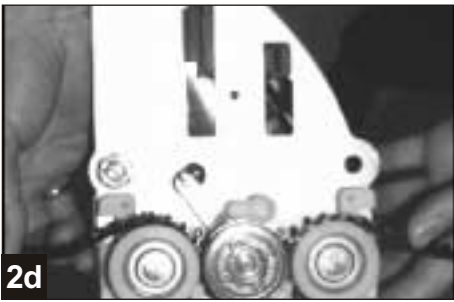
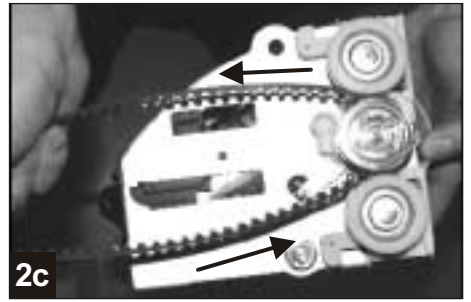
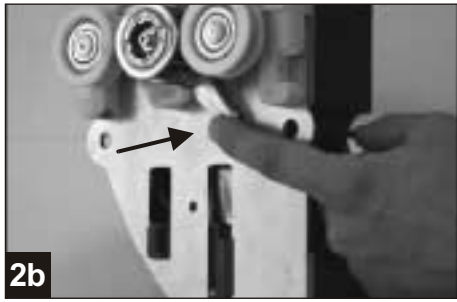
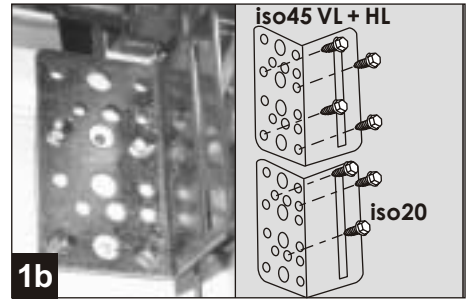
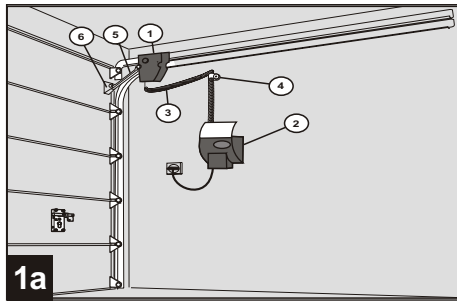
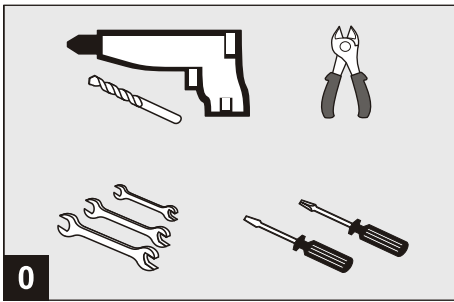
E

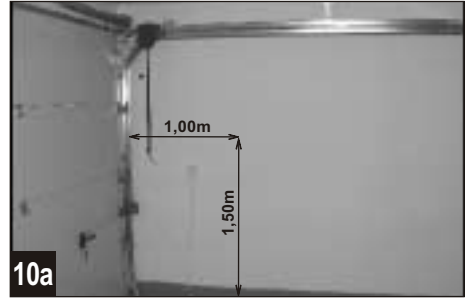
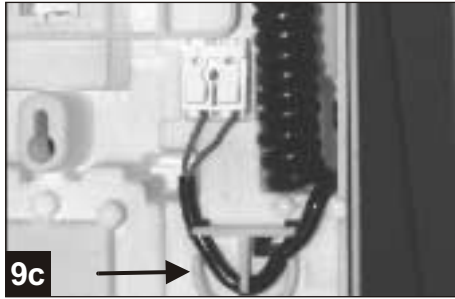
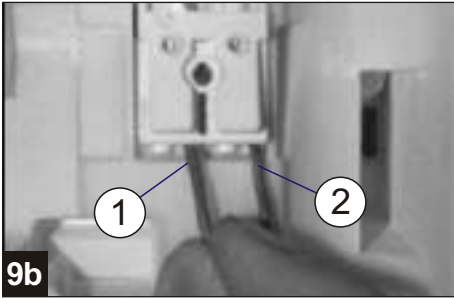
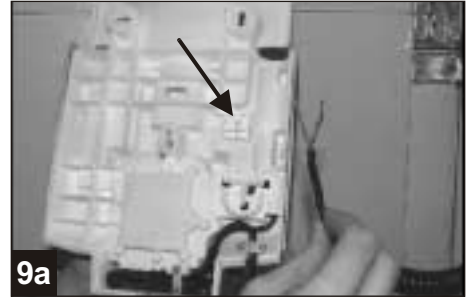
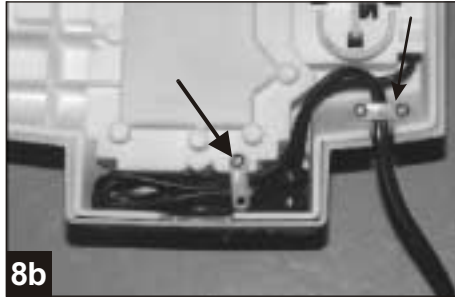
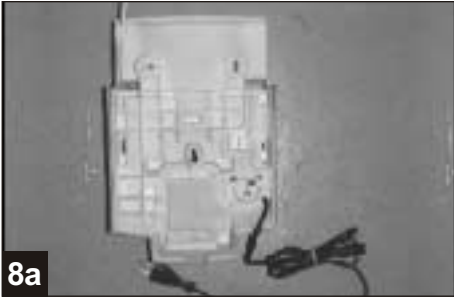
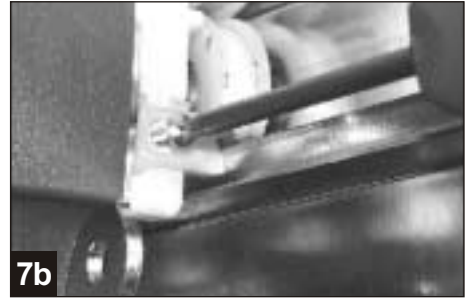
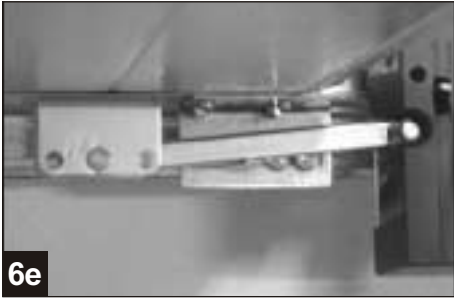
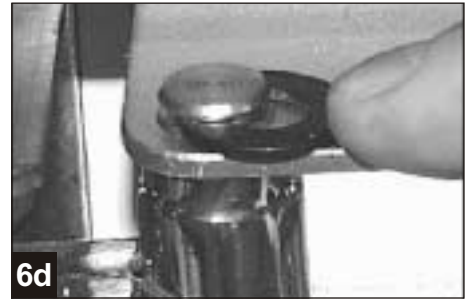
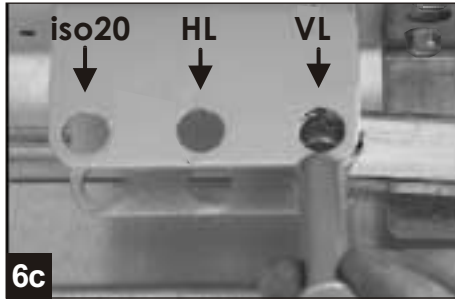
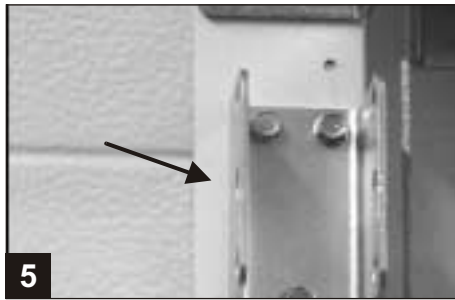
Instrucciones de montaje, de servicio y de mantenimiento para automatismos NovoPort.

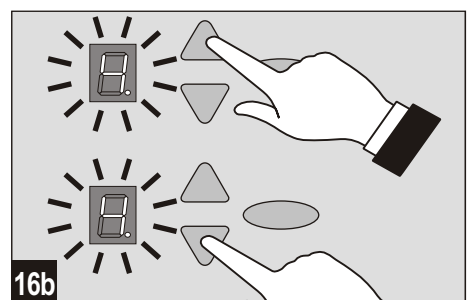
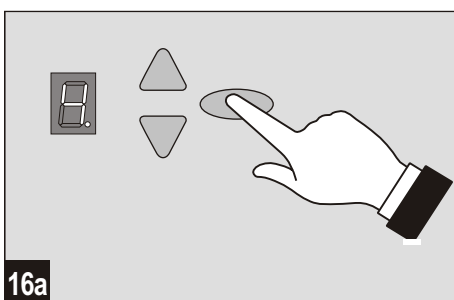
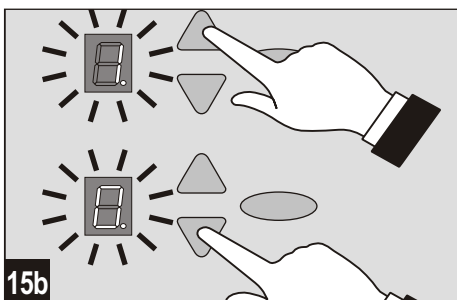
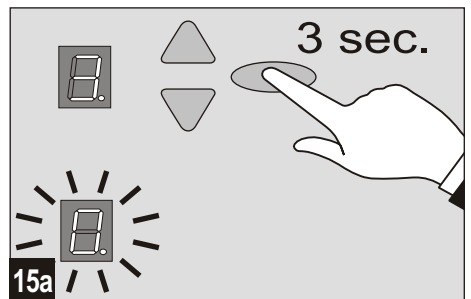
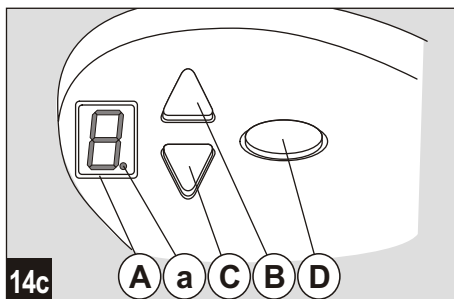
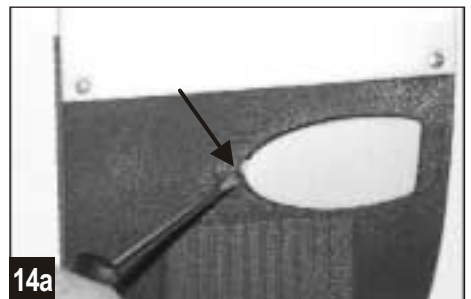
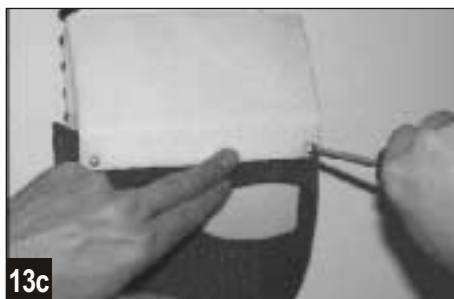
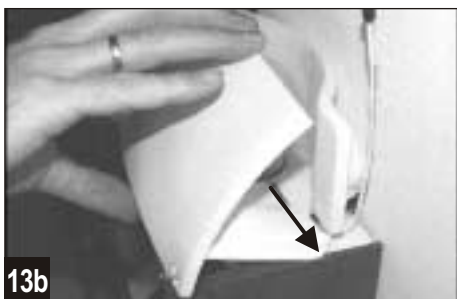
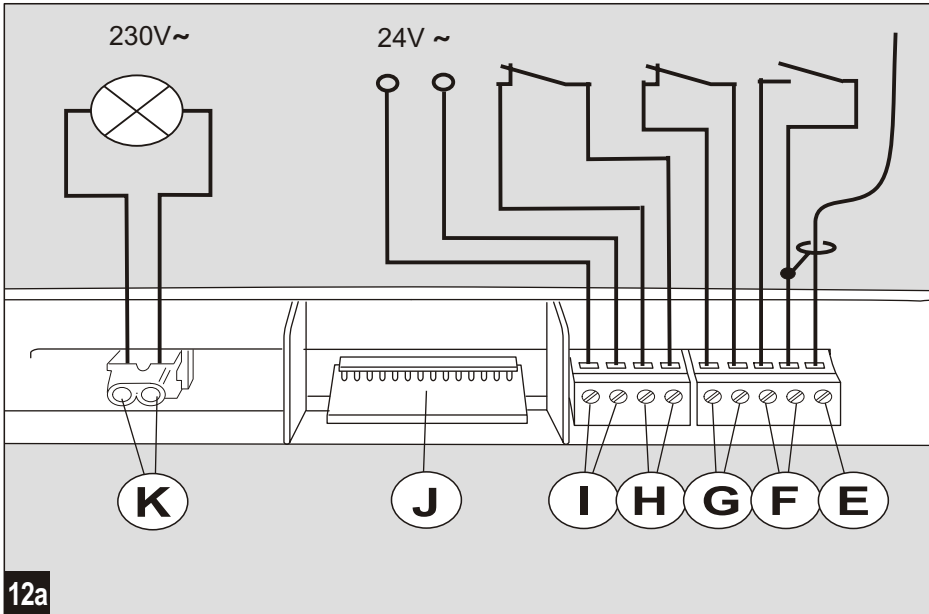
NL

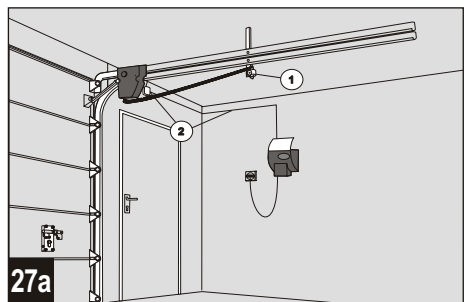
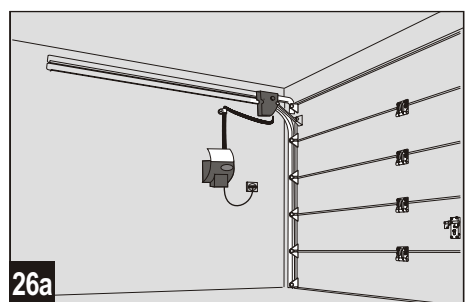
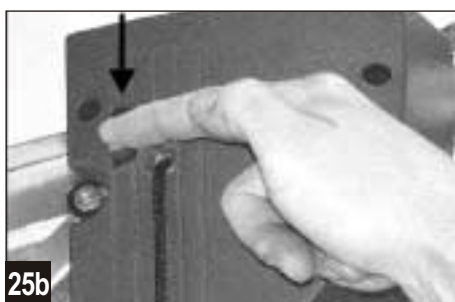
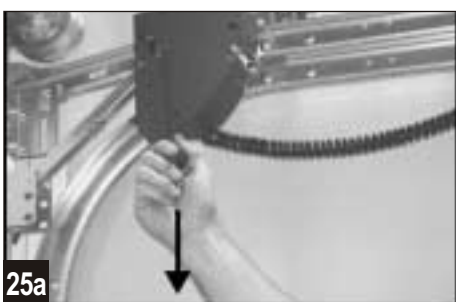
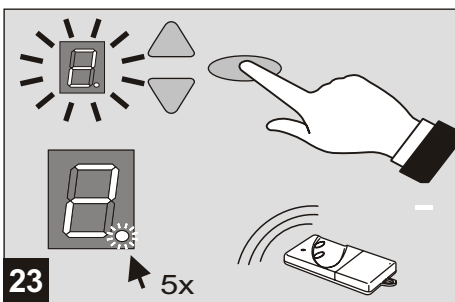
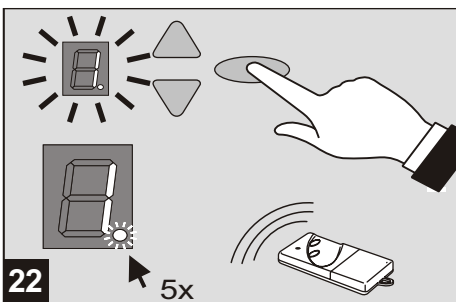
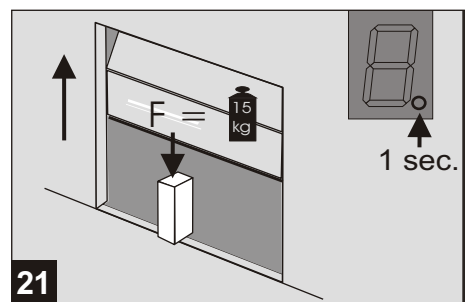
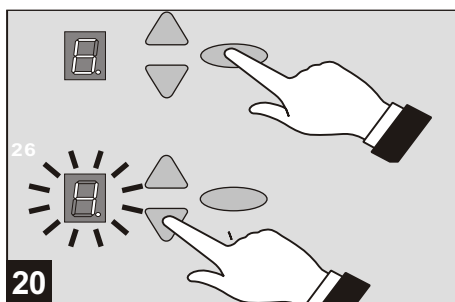
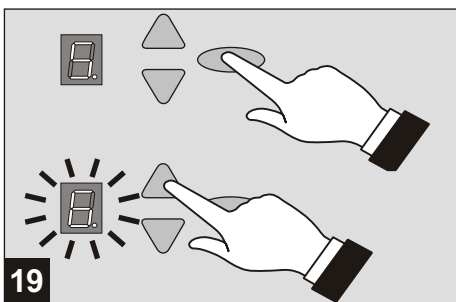
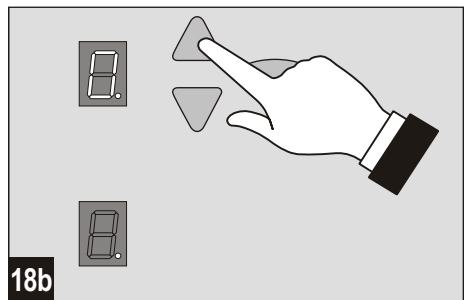
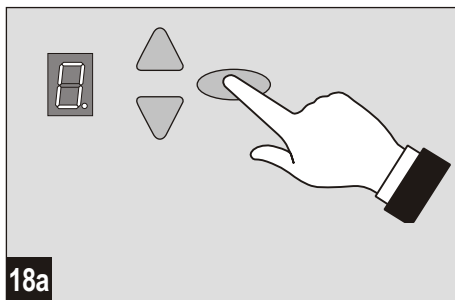
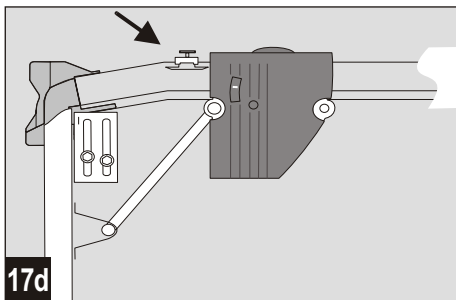
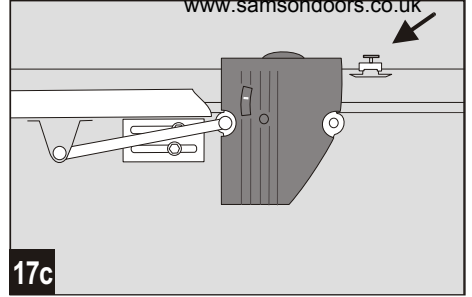
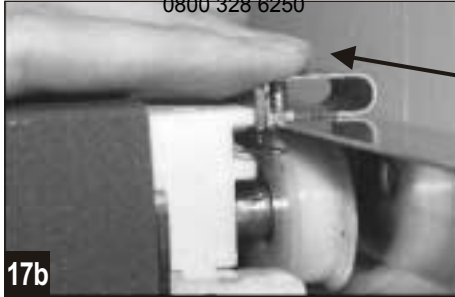
Montage-, bedienings-, en onderhoudsinstructie voor NovoPort-aandrijvingen.

Diese Montage-, Bedienungs- und Wartungsanleitung ist während der gesamten Nutzungsdauer aufzubewahren!











Installation Instructions

Please read these instructions carefully prior to installation!

Installation should only be carried out by persons qualified to do so!

Incorrect installation can put the safety of persons at risk or cause damage to property!

In the case of improper installation, the manufacturer's warranty becomes void.

Preparations for installation

1. To allow mains connection, a safety socket must be installed on site - the supplied mains connecting cable is approx. 1 m long.
2. Check the stability of the door, retighten the screws and nuts on the door.
3. Check that the door is running smoothly and is in good working order, lubricate the shafts and bearings. Check the pretension of the springs and, if necessary, re-adjust.
4. Dismantle the existing door latches (bolt plate and catches).
5. For garages without a second entrance, an emergency release is required (accessory).
6. If a wicket pass door is included, fit the wicket door contact.

0 Required tools

- Drilling machine with 6 mm masonry drill
- Strong side cutter
- Wrench, sizes 10, 13 and 17mm
- Slotted screwdriver, 3 mm wide
- Phillips screwdriver, size 2 x 100 mm

Supply package

Motor head (1) with coiled cable (3), control unit (2) with 40 W light bulb and cap E27, lifting arm (5), door bracket (6), toothed belt, bag of accessories, hand transmitter incl. alkaline battery, track roller for iso20 and HL (rear-mounted torsion spring shaft), track roller for VL (front-mounted torsion spring shaft), roller block, door handle.

Attention: check the supplied screws and wall plugs prior to use to ensure that these are suitable for the structural conditions on site.

1 Choosing the installation side

Choose the installation side in accordance with the structural conditions on site. The standard installation side is on the right (as viewed from the inside) **1a**. For special installation cases see **26** and **27**. Dismantle the top track roller and roller block on the door (operator side) and fit the supplied roller block **1b**.

Spray the track with silicone to achieve optimum running qualities.

2 Fitting the toothed belt

The top door track is used for installing the operator unit. Place the toothed belt with pre-fitted end clamp into the track (back of toothed belt shows upwards). Slot end clamp with hook onto vertical formed piece **2a**.

To disengage the drive wheel, actuate the lever **2b**. Feed the toothed belt through the drive wheels of the motor head as shown in **2c** and **2d**. Insert operator with the drive wheels into the top track **2e**.

Push end of toothed belt through the opening in the end assembly angle **2f**.

3 Fitting the rear toothed belt fastening

Keeping the toothed belt taut, feed it through the end assembly angle **2f**. Slot the sleeve halves onto the toothed belt, as shown in **3a** to **3c**. Slot on knurled nut **3d** and tension the toothed belt by hand-tightening the knurled nut **3e**. Take care not to twist the toothed belt. Any toothed belt still protruding can be cut off.

4 Inserting the top track roller

Select the top track roller in accordance with the door type **4a**.

Insert track roller into the track **4b**, adjust and screw on in accordance with figure **4c**.

5 Fastening the door bracket

Place the door bracket on the designed drill holes of the top door leaf section and screw down with 3 self-tapping screws 6.3 x 16.

6 Inserting the lifting arm

Place lifting arm on the bolt of the motor head **6a** and secure with clip **6b**.

Hold other side of the lifting arm between the door bracket **6c**, insert bolt and secure with clip **6d**.

Connect door to operator **6e**.

7 Sliding block

Slot sliding block onto the track profile **7a**, push into the rear opening on the motor head and screw tight with screw 4.2 x 13, **7b**.

8 Mains connecting cable

The back of the control unit incorporates a chamber **8a**, where, if required, the excess mains connecting cable can be stowed **8b**.

9 Connecting the coiled cable

The back of the control unit features a cable clamp **9a** designed for the coiled cable. Insert brown wire left (1) and blue wire (2) right into the clamp **9b**. Afterwards, feed the cable through the labyrinth **9c**.

10 Fastening the control unit

Install the control unit onto the side wall. At a distance of approx. 1 m from the door and 1.50 m from the floor, mark the spot for the first plug hole **10a**, drill the hole, insert the plug but do not screw in fully. Place the control unit with key hole onto the screw head **10b**. Align the unit and mark the remaining fixing holes **10c**, drill holes, plug and fasten with screws 4.2 x 32 **10d**.

11 Wall clamp

Hold up the coiled cable in a vertical position **11a**. The maximum extension of the horizontally routed cable must not exceed three times the original length. Attach the wall clamp at the bend **11b**. Hold the clamp against the wall, mark the spot, drill, plug and screw to the wall using screw 4.2 x 45 **11c**.

12 Connecting plan / aligning the aerial

Notes:

- Do not connect any current-carrying cables, only connect potential-free buttons and potential-free relay outputs.
- Before putting into service, subject the operator to a function and safety test (see Maintenance/Checks).

E. Connecting the aerial

Route the aerial on the housing exit upwards **12**.

On using an external aerial, the screen should be assigned to the adjacent terminal (F, right).

F. Connection for external impulse generator (accessories, e.g. key switch or digital coder)

G. Input STOP A

Connection for safety devices (accessories, e.g. wicket door contact). An interruption at this input end causes the door to stop during the opening or closing cycle or prevents the operator from starting up in both directions.

H. Input STOP B

Connection for safety devices (accessories, e.g. one-way photocell). An interruption at this input end causes the operator to automatically change direction during the closing cycle only.

I. Voltage supply 24 V ~

(e.g. for one-way photocell), connection can take a max. load of 100 mA (do not exceed!)

J. Plug-in base for radio receiver

K. Connection for external lighting (with earth) or signal light (protection class II, max. 500W).

13 Lamp cover

The lamp cover conceals the terminal connections. To do this, feed the back part of the lamp cover underneath the guides of the control unit **13b**. Fasten the lamp cover with two self-tapping screws 4.2 x 16 **13c**.

14 Control elements

The control elements for programming the door operator are located behind the white cover. The cover can be opened with a screwdriver **14a**. Once the operator has been programmed, the cover is closed again and serves as an interior push-button **24**.

A. The numerical display shows the menu stage, the respectively set value and the diagnosis of errors.

a. Point display, lights up to indicate "ready for operation" and flashes on acknowledging learned hand transmitter codes.

B. Button Δ during the setting /adjustment phase serves as an "up" button and outside the menu as a start button.

C. Button ∇ during the setting / adjustment phase serves as a "down" button.

D. Button \circ serves to call up the adjustment menu, to change the menu stages and to store the settings.

Programming the control unit is menu-driven. Pressing button \circ calls up the menu guide. The numbers displayed indicate the menu stage. After approx. 2 seconds the display flashes and the setting can be altered via buttons Δ and ∇ . The selected setting is stored via button \circ and the programme then automatically jumps to the next menu stage. By repeatedly pressing button \circ , menu stages can be skipped. To quit the menu, press button \circ until "0" is displayed again. Outside the menu, button Δ can be used to generate a start impulse.



15 Menu stage 3: Direction of travel

In menu stage 3 the direction of travel can be changed, e.g. LH/RH installation.

Hold button pressed for 3 seconds. A "3" is displayed.

After approx. 2 seconds, a "0" flashes for installation on the RH side of the door (factory setting) **15a**.

If the operator is installed on the LH side of the door, press button and a "1" flashes **15b**.

16 Menu stage 4: Positioning

This menu stage serves to position the limit switch actuator.

Press button - a "4" is displayed **16a**. As soon as the "4" starts flashing, you can press button to open the door, and button to close the door **16b**. Important: If on pressing the buttons, the door travels in the opposite direction, the direction must then be changed in menu stage 3 (see **15** menu stage 3).

Finally, check the force settings and if necessary repeat the setting procedure. The force at the main closing edge may not exceed the values stipulated in DIN EN 12453. Depending on the use of the door and on the basis of national regulations, further reaching protective measures may be necessary.

17 Limit switch actuator

Setting the OPEN position 17c:

Now actuate the door to travel to the desired OPEN position by pressing button . Set the limit switch actuator on the top part of the track behind the motor head **17a**.

Push the limit switch actuator into the guide of the motor head **17b**.

To test, press button to cause the operator to travel approx. 10 cm in the CLOSE direction and then press button to cause the door to open again. On reaching the limit switch actuator, the operator cuts out.

If the cut-out position is correct, carefully tighten the screw on the limit switch actuator - otherwise re-adjust the limit switch actuator and repeat the test.

Setting the CLOSE position 17d:

Now allow the door to travel to the desired CLOSE position by pressing button .

Set the limit switch actuator on the top part of the track in front of the motor head **17a**.

Push the limit switch actuator into the guide of the motor head **17b**.

To test, press button to cause the operator to travel approx. 10 cm in the OPEN direction and then press button to cause the door to close again. On reaching the limit switch actuator, the operator cuts out.

If the cut-out position is correct, carefully tighten the screw on the limit switch actuator - otherwise re-adjust the limit switch actuator and repeat the test.

18 Maiden operations

Quit the programming menu - press button repeatedly until a "0" appears **18a**. Fully open the door. The operator needs to perform a maiden run on both the closing and opening cycles in order to register the distances covered by the door as well as the forces required 'by it'. To start, press in each instance button **18b**.

Caution: Maiden operations are not force-monitored. The travel cycles must not be interrupted. The maiden operations are completed when the "0" disappears.

19 Menu stage 5: Force limit for the opening cycle

Again in the setting menu, press button . For 3 seconds until a "3" appears. Then press

button twice until a "5" appears.

After approx. 2 seconds the display flashes showing the set value of the power limit for the opening cycle.

The force limit setting can be increased or decreased via buttons and . The factory setting is "4"!

After selecting the setting, press button .

A "6" is displayed.

20 Menu stage 6: Force limit for the closing cycle

After approx. 2 seconds the display flashes showing the set value of the force limit for the closing cycle.

The force limit setting can be increased or decreased via the and buttons.

After setting the value, press button . A "0" is displayed.

Finally, check the force settings and if necessary repeat the setting procedure. The force at the main closing edge may not exceed the values stipulated in DIN EN 12453. Depending on the use of the door and on the basis of national regulations, further reaching protective measures may be necessary.

This applies, for example, to collective garages, underground garages etc.

Caution! If the force is set too high, this can result in injury to persons and damage to property. The factory setting is "4"!

21 Checking the force limit device

- Place an obstruction (e. g. operator's cardboard box) underneath the door's closing edge.
- Start the door from the OPEN end-of-travel position.
- The door travels towards the obstruction, stops, then travels back to the top end-of-travel position.
- The point display (a) must switch off for approx. 1 second. The operator then functions as normal again.

If the door springs were altered, the maiden operation to learn the force limit must then be repeated:

Proceed to menu stage 5 and keep button pressed for 3 seconds. A "0" is displayed. Now carry out maiden operations to learn the force limit, as explained under point **18**.

22 Menu stage 1: Programming the start function for the hand transmitter

Briefly press button . A "1" is displayed.

As soon as the display starts to flash, keep the button of the hand transmitter, with which you would later like to start the operator, pressed for approx. 1 second.

As soon as the code has been read in, the red point display (a) flashes five times to acknowledge. Further hand transmitters (up to a maximum of 10 button codes) can be programmed.

23 Menu stage 3: Programming the light function for the hand transmitter

Press button . A "2" is displayed.

Note: If no 4-minute light is to be programmed, press button once again.

A "0" is displayed indicating that the programming is completed.

Press the second button on the hand transmitter with which the 4-minute light is to be switched on.

As soon as the code has been read in, the red point display (a) flashes five times by way of acknowledgement.

After the code has been learned, briefly press button . A "0" is displayed. The menu is completed.

Deleting all the hand transmitters programmed for the operator:

Plug in the operator's mains plug and in doing so keep button pressed.

Special settings

Menu stage 7: Light phases

Keep button pressed for 3 seconds. A "3" is displayed.

Press button repeatedly until menu stage 6 is displayed.

Keep button pressed for another 3 seconds until a "7" is displayed.

Menu Value	Light phase	Warning phase
0	60 s	-
1	90 s	-
2	120 s	-
3	240 s	-
4	0 s	3 s
5	90 s	3 s
6	240 s	3 s
7	0 s	10 s
8	90 s	10 s
9	240 s	10 s

The setting can be altered using the and buttons. If the warning phase is set, the light flashes before the door starts to move and during the actual travel cycle. The factory setting is "1". Press button to quit the menu.

24 Internal impulse generators

The cover on the control unit is used as an impulse generator for opening and closing inside the garage. Briefly press the cover and the operator starts up **24**.

25 Disengagement

The operator is equipped with a quick release. By pulling the pull cord with knob, the operator can be permanently disengaged from the door **25a**.

The motor head can be re-engaged at any point between the two limit switch actuators. To lock in place, press down the lever **25b**.

26 Installation on the LH side of the door

If favoured by the structural conditions on site, the operator can also be installed on the left-hand side **26a**. Loosen bolts on motor head with wrenches (SW 10 and 17 mm) **26b** and screw them back on on the other side **26c**.

27 Installation: Low-mounted control unit

If the control unit cannot be positioned directly underneath the track **27a**, the coiled cable can then be routed to the motor head using the supplied second cable clamp and the perforated strip **27b**. The extendible part of the coiled cable may be stretched by a maximum of factor 3 and the permanently laid part by a maximum of factor 7.

If the coiled cable is not long enough, the extension set (accessory) should be used.



Operating Instructions

Before carrying out any work on the operator, always pull out the mains plug!

All persons using the door system must be shown how to operate it properly and safely.

When the operator is being used, the opening and closing cycles must be monitored.

Keep hand transmitters out of the reach of children.

It must be ensured that neither persons nor objects are located within the door's range of travel.

Functional sequence

The garage door operator can be actuated by push-button on the control unit (figure 24) or by other impulse generators, such as hand transmitters, key switches etc. It is only necessary to generate a short, sharp impulse.

Initial impulse:

The operator starts up and causes the door to travel to the set OPEN or CLOSE end-of-travel positions.

Impulse generated while the door is in motion:

The door stops.

A new impulse:

The door continues to move but in the opposite direction.

Internal safety device

If the closing door encounters an obstruction, the operator stops and causes the door to open to its top end-of-travel position in order to clear the obstruction.

During the last 2 seconds of the closing cycle, the door only opens slightly, this being sufficient to clear the obstruction but otherwise preventing anyone from being able to see inside the garage. If the opening door encounters an obstruction, the operator stops immediately. The door can be closed again by generating a new impulse.

External safety devices

Wicket door contact (STOP A)

An open wicket door stops the operator immediately or prevents it from starting up.

Photocell defective (STOP B)

If the photocell is interrupted while the door is closing, the door stops and reverses direction. An interruption while the door is opening has no effect.

Quick release

When altering settings or making adjustments, in the event of a power failure or malfunctions, the door can be disengaged from the operator by actuating the pull cord with knob on the lifting arm (figure 25a), so that it can be operated manually.

To restore power operation, press down the lever on the motor head (figure 25b) and the operator re-engages.

If the door is to be operated manually over a longer period of time, then the door latches which were taken out of service for power operation, must be refitted, otherwise the door will not be latched when closed.

Lighting

The lighting switches on automatically whenever a start impulse is generated and switches off again after the set time phase (factory setting approx. 90 seconds).

A second button on the hand transmitter can be programmed for 4-minutes light (figure 23). When the button on the hand transmitter is pressed, the light switches on independent of the motor and switches off again after approx. 4 minutes.

Changing the light bulb:

Pull out the mains plug and open the lamp cover using a Phillips screwdriver size 2 x 100. Replace the light bulb (230 V, 40 W, cap E27) and screw the lamp cover back on again.

Signal light

If a signal light for signalling the opening and closing phases is installed, this flashes together with the lamp in the operator as soon as a start

impulse is generated. The operator starts with a time delay in accordance with the set warning phase (see Special Settings in menu stage 7).

Hand transmitters

Programming further hand transmitters:

See menu stages 1 and 2 (figures 22 and 23).

Changing the battery: Slide back the battery compartment cover on the hand transmitter.

Take out the battery.

Insert a new battery (alkaline 23A, 12V). Be sure to pole correctly! Slide the cover back on.

Empty batteries must be disposed of separately (toxic waste)!

Maintenance / Checks



For your own safety we recommend that the door system be checked by a specialist after initial installation and then regularly at intervals of 1 year minimum.

Monitoring the force limit

The operator's control unit features a 2-processor safety system to monitor the force limit.

The integral force cut-out is automatically tested at each end-of-travel position.

The door system must be checked before being put into service and at least once a year thereafter, during the course of which, a check of the force limit facility (figure 21) must also be carried out!



Caution! If the closing force is set too high, persons can be placed at risk of injury or property could get damaged.

The opening force can be re-adjusted in menu stage 5, the closing force in menu stage 6.

Terms of the Warranty

Dear Customer,

During production the garage door operator you have purchased has undergone various checks by the manufacturer to ensure that it is of impeccable quality. Should this operator or part of it prove to be of no or limited use as a result of proven material or manufacturing defects, we shall rectify this, at our discretion, by means of a free-of-charge repair or replacement.

We shall not accept any liability for damage as a result of unsatisfactory fitting and installation, improper putting into service, incorrect operation and maintenance, excessive use or overloading as

well as any alterations or modifications carried out to the operator and accessory parts by the customer.

The same shall also apply for damage incurred during transit or as a result of force majeure, external influences or natural wear as well as special atmospheric stresses. We cannot accept any liability following alterations or modifications of functional parts carried out by the customer. We must be notified of any defects immediately in writing; on request, the parts in question shall be sent to us.

We shall not bear the costs for dismantling and installation, freight and carriage. If a complaint is proven to be unjustified, the customer must bear our costs.

This warranty is only valid in conjunction with the signed invoice and commences on the day of delivery. The manufacturer guarantees that the product is free of defects.

The warranty is granted for a period of 24 months, in as far as the verification overleaf has been properly filled out. Otherwise the warranty shall expire 27 months after the date of manufacture.

Retain these installation, operating and maintenance instructions for the full duration of the operator's service life!



Trouble-shooting

Important note: When working on the operator, always pull out the mains plug beforehand!

Malfunction	Possibles causes	Remedy
Door does not open / close fully.	Door mechanics have changed. Closing / opening force has been set too weak. End-of-travel position is incorrectly set.	Have the door checked. Set the force (menu stages 5 and 6). Re-set end-of-travel position 17 .
After closing, door opens again to produce a slight gap.	Door blocks just before reaching the closed position. End-of-travel position is incorrectly set.	Remove the obstruction. Re-set the CLOSE end-of-travel position 17 .
Operator does not move although the motor is running.	Operator ist not engaged.	Re-engage operator 25b .
Door does not respond to impulse from hand transmitter - but does respond to push-button or other impulse generators.	Battery in the hand transmitter is flat. Aerial not plugged in or not aligned. No hand transmitter has been programmed.	Replace battery in the hand transmitter. Plug in aerial / align. Programme hand transmitter 22 (menu stage 1)
Door does not respond to impulse from hand transmitter nor to other impulse generators.	See diagnostic display.	See diagnostic display.
Insufficient range of the hand transmitter.	Battery in the hand transmitter is flat. Aerial not plugged / aligned. On-site screening of the receiving signal.	Replace battery in the hand transmitter. Plug in / align aerial. Connect external aerial (accessory).

Diagnostic display

During operation, the display provides diagnostic information on any possible faults and/or malfunctions

Number	State	Diagnosis / Remedy
0	Operator starts up and "0" goes out.	Operator receives a start impulse at the START input or via a receiver. Normal operation
1	Door neither opens nor closes.	STOP A connection is interrupted. External safety device has been activated (e.g. wicket pass door).
2	Door no longer closes.	STOP B connection is interrupted. External safety device has been activated (e.g. photocell).
3	Motor does not rotate.	Call in a specialist.
4	Permanent impulse signal at the start input.	Door no longer accepts a start impulse. External impulse generator emits a permanent impulse signal (e.g. button is jammed).
5	Operator does not reach the end-of-travel position.	Operator is disengaged, re-engage 25b . Limit switch is not actuated. Re-set the end-of-travel position 17 .
0	0" stays displayed during the next opening and closing cycle and then goes out. "0" continues to be displayed.	The operator is performing a maiden operation to learn the force limit. Caution: These cycles are not force-monitored! Limit switch is not actuated. Re-set the end-of-travel position 17 .

Subject to changes

Warranty Document

Type designation: _____

Production Number: _____
(see type plate)

Date of purchase: _____

Date when firstAddress / stamp of company
put into service: _____ carrying out the order: _____

Retain these installation, operating and maintenance instructions for the full duration of the operator's service life!



EC Declaration of Conformity In accordance with Article 8 of the "Machine Directive" (EC Directive 98/37/EC)

Company stamp :

hereby declares that
the NovoPort Power-Driven Door Systems in the size or weight ranges:
ordering size: up to 5000mm
ordering height: up to 3125mm
door leaf weight: up to 196kg

comply with the relevant requirements of the EC Machine Directive (EC 98/37/EC)

comply with the relevant requirements of the following further EC directives:

- Low Voltage Directive (73/23/EEC)
- Electromagnetic Compatibility Directive (Directive (89/336/EEC)

the following harmonised standards (or parts thereof) were applied

- EN 12453 Doors - Safety in Use of Power-Driven Doors - Requirements and Classification
- EN 12445 Doors - Safety in Use of Power-Driven Doors - Test Methods
- EN 12604 Doors - Mechanical Aspects - Requirements
- EN 12605 Doors - Mechanical Aspects - Test Methods

the following national or international standards (or parts / clauses thereof) and specifications were applied

- Directive for Power-Driven Windows, Doors and Gates ZH 1/494 April 1989
- Safety of electrical equipment for domestic use and similar purposes:
DIN EN 60335 - 1 / VDE 0700 Part 1

A model of the machine was inspected by the examining body

TÜV Nord (Technical Northern Division)

TÜV-CERT certifying body for

machines, hoisting and conveying engineering

at TÜV 1

30519 Hannover (Germany)

This body has issued the verification mark no. PP-10/2002.

We declare that the machine is in conformity with the tested model.

Place, date: _____ Signature: _____

Illustration of type plate

<p>This manually operated door was retro-equipped with a door operator by the installer named below. Details of the operator can be found on the operator's type plate. The installer confirms that his declaration of conformity in accordance with the Machines Directive has been issued for the door system and has been handed over to the customer. For your own safety, the door system, in as far as not governed by national regulations, should be inspected at least once a year by a qualified door installer.</p>	Serial number of the door system:	Operator type: power-driven	Manufacturer of the door system (company installing the door system):	Installer:	Date:	Signature :	
--	-----------------------------------	-----------------------------	---	------------	-------	-------------	--

Retain these installation, operating and maintenance instructions for the full duration of the operator's service life!