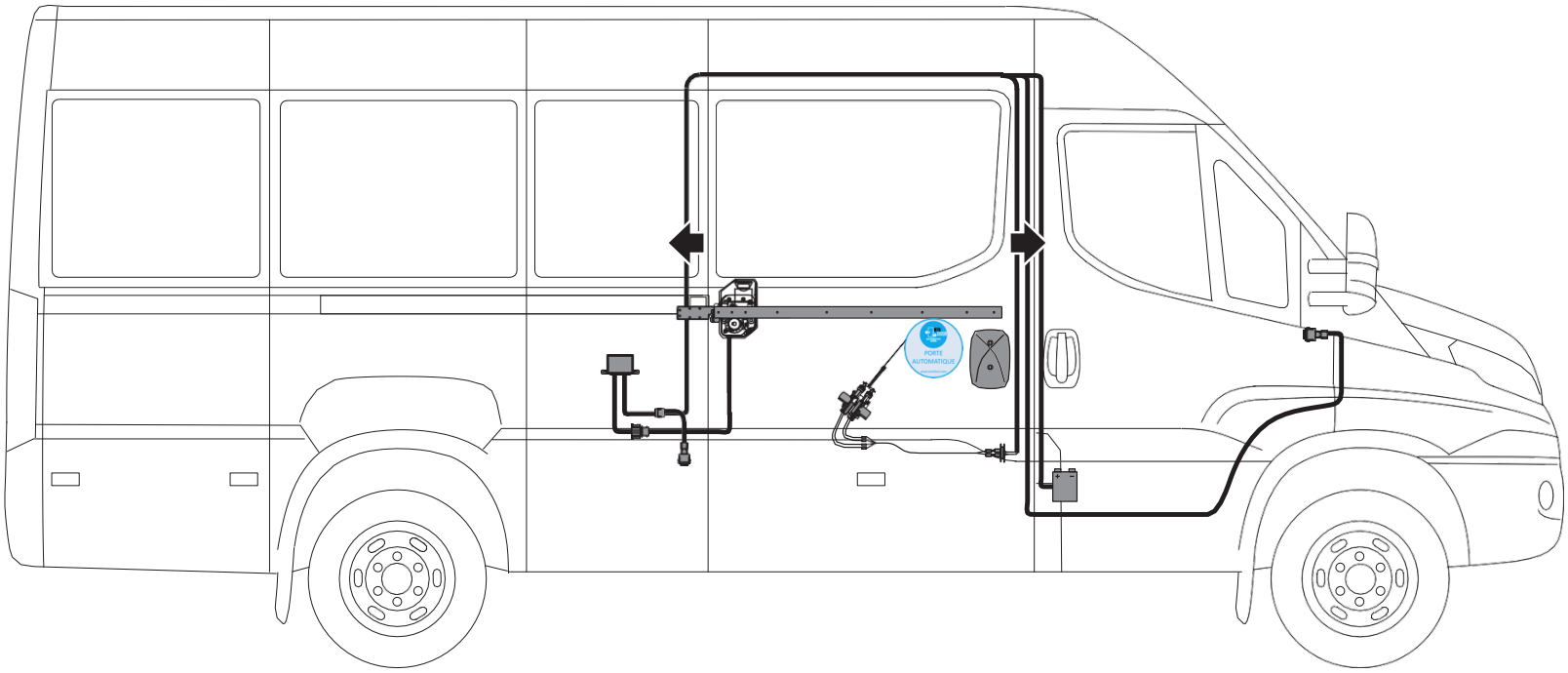
WIN-DOOR®
SYSTEM
INSTALLATION MANUAL

IVECO DAILY > 2015

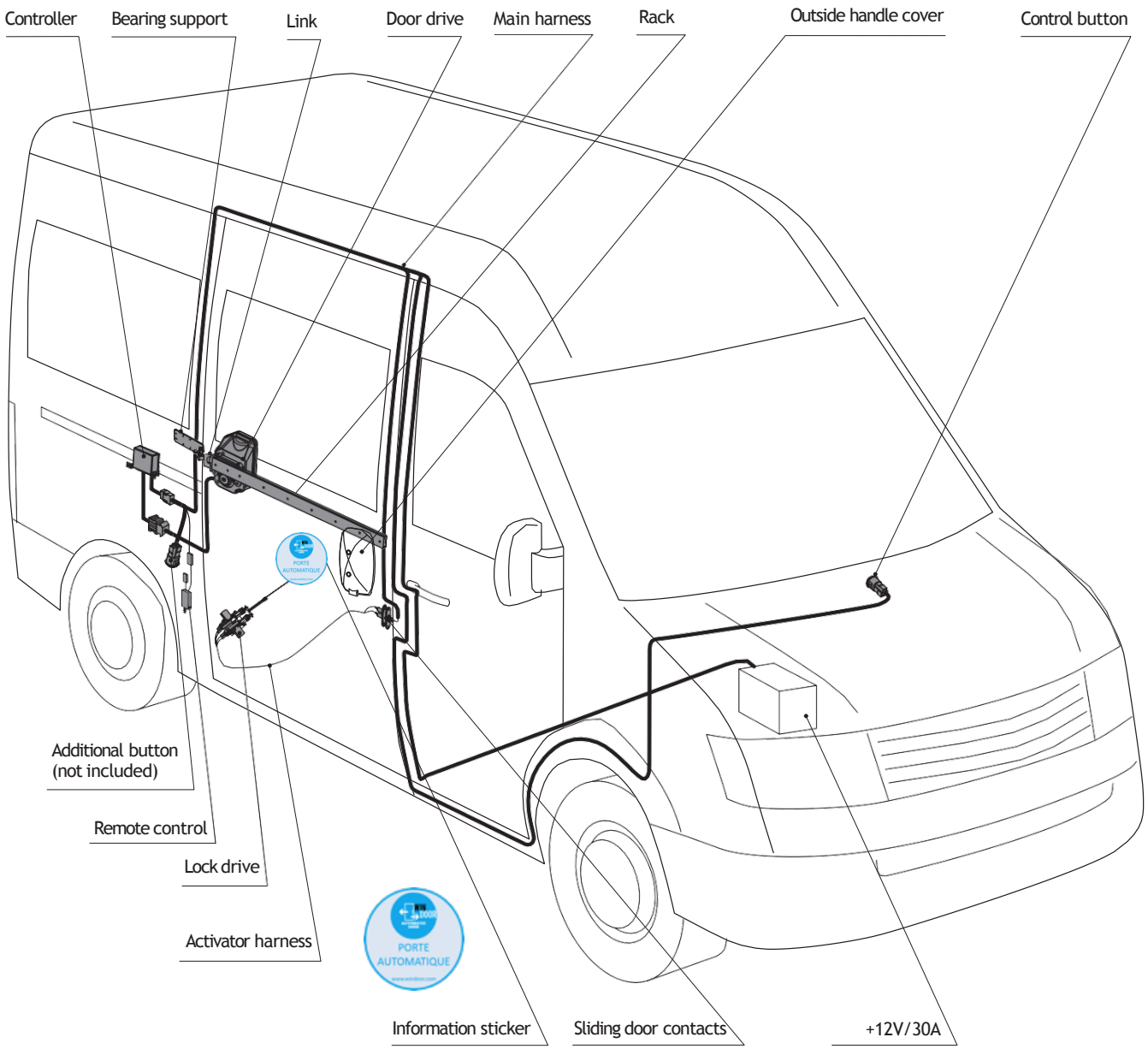


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This model is suitable for opening and closing sliding door in minibus «Iveco Daily».

Disposition of assemblies and parts of the drive is shown on the model of a standard minibus.

NOTE

This manual describes installation of the WIN-DOOR® door system with maximum specifications. If you install a door drive without any additional options, just omit unnecessary paragraphs of the manual.

BASIC TECHNICAL CHARACTERISTICS

WIN-DOOR® drive is designed for opening and closing doors of commercial vehicles (vans). Here for Iveco Daily model.

Power consumption (nominal)	70 W
Power consumption (maximum)	250 W
Time of door opening (depends on the width settings)	2 - 6 .sec
Time of door closing (depends on the width settings)	2 - 6 .sec
External temperatures	-40 - +40
Maximum allowed angle of bus ascent when the door will close	15%
Resource	Not less than 1200000 opening/ closing cycles
Maximum force on the door	370N (37 kg)

NOTE

Long-lasting and trouble-free operation of WIN-DOOR® door system depends on the quality of installation. That is why installation MUST be carried out by professionals.

OPERATING CONTROL

WIN-DOOR® door system is an electromechanical device which operates being connected to the in-vehicle network. The drive consists of two main parts: lock drive and door drive. The lock drive opens the lock and the door drive opens and closes the door Drive control can be carried out by means of:

- **Main control button**

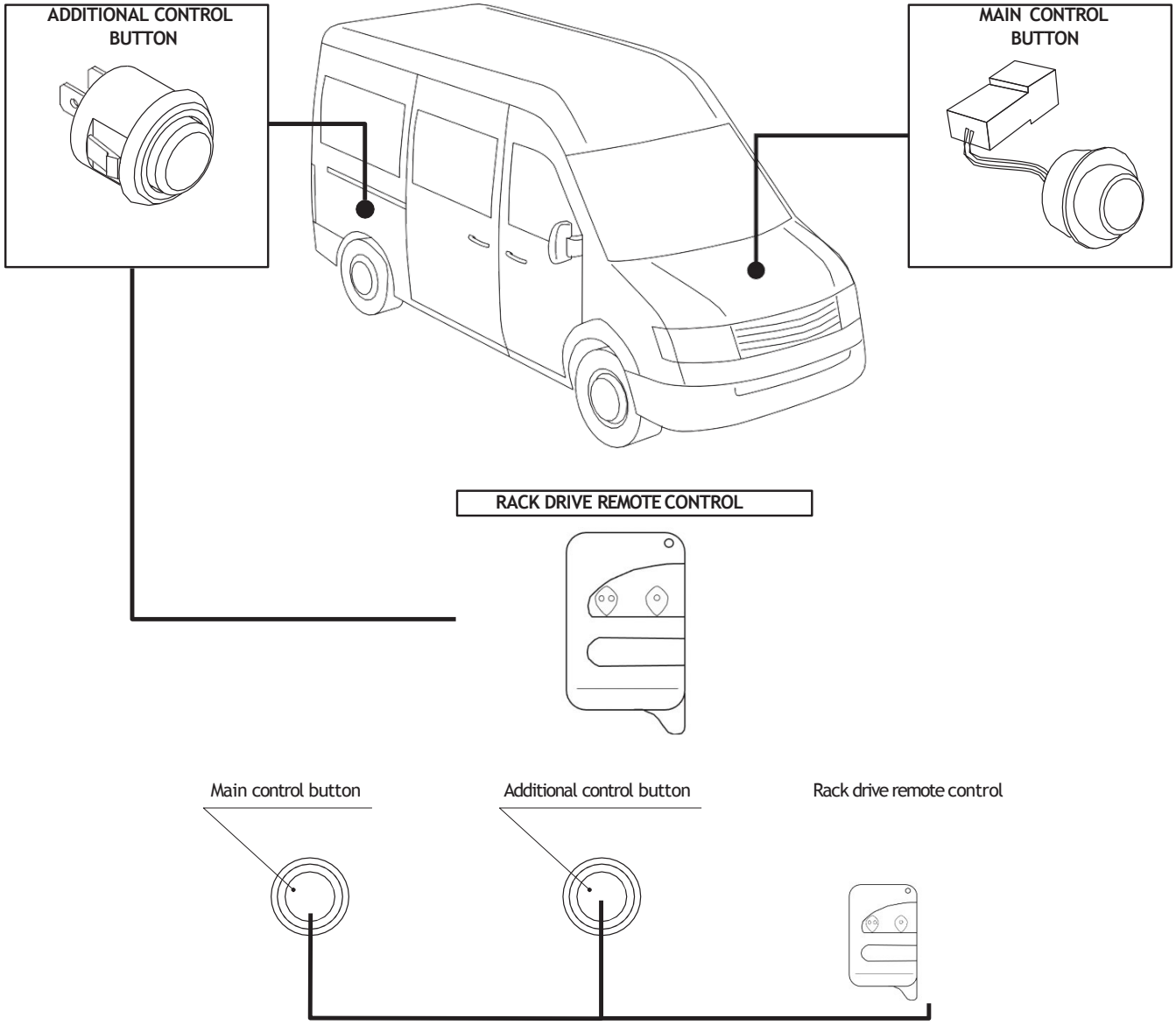
which controls the door functions and the system settings

- **Rack drive remote control**

which controls the door functions

MOTOR DRIVE FUNCTIONS:

- **Opening and closing the door**
- **Automatic roll-back of the door**
- **Door stopping**
- **Sound signal**
- **Operating mode with and without fixing the sliding door**
- **Adjustment of the opening width**
- **Adjusting the door closing speed**



PRECAUTIONS

Drive installation involves refining of existing body parts of a minibus. All body parts of a minibus are made of sheet metal, so there is a high probability of being cut by sharp edges appearing after refinement or by sharp parts of mechanical hand tools. During drive installation follow safety procedures while working with mechanical hand tools, blunt sharp edges of drilled holes. Use only tools in good working condition. During installation keep your working place clean, especially in the bus saloon. Before starting installation prepare all the necessary tools and parts, take away unnecessary things.

Trouble-free operation, reliability and operating life of the drive depend on precise accomplishments of the instructions given . It also depends on the precision of relative disposition of drive parts and assemblies. Before drilling fixation holes put the marks for drilling thoroughly, check correct disposition of a concrete part or assembly and only after that drill the holes.

This drive is an electromechanical device, so alongside metalwork there is also wire installation and connection to power supply. That is why electrical safety procedures must be followed. While connecting contacts, keep your hands and working place clean. This will provide reliable contacts connection and trouble-free operation of the drive as a whole .

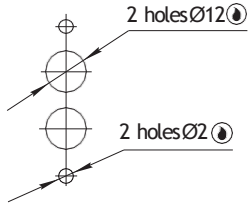
TOOL LIST

Clip withdrawal tool.....1
Head stock 10-17 mm.....1set
Riveter.....1
Riveter for pull-out nuts GESIPA GBM 10 1
Centre punch 1
Combination wrenches 1set
Metal ruler.....1
Hammer.....1
Hexagon wrench tools 1
Star wrench tools Torx 1
Knife 1
Flat tip screwdriver 1
Cross tip screwdriver 1set
Pliers 1set
Wire for tightening ..... 3m.
Drill bits 2.5; 3.2; 5; 6.5; 9; 1
Step-shaped drill 4-24 mm 1
Slack adjuster 1
Electrical extension cord 1
Lamp 1
Sliding calipers 1
Electric drill 1
Hack saw 1
Multimeter 1
Sidecutter 1
Rivet nut 15
Rubber solvent petrol .....1 bottle

After drilling holes burrs are left on hole edges and paint coating of the body is inevitably damaged. In some places which require additional processing the following symbols will be used

— Remove burrs off the edges
— Blunt sharp edges
— Coat the edge with rust-proof liquid

Example: coat the edges of the holes with rust-proof liquid



Before installing the drive, adjust the vehicle's door because its adjustment influences the drive operation.

1. Wash out the door carriage guides with petrol and wipe them with dry rags.

2. Wash out the door latch mechanism, dry it and lubricate with WD-40.

2.1.3 Remove door tenons.

2.1.4 Adjust the door position in relation to its doorway (it is adjusted with the carriages).The closed door must not sag or go inwards vehicle overly.

2.1.5 Adjust the latch tenon and latch bracket on the rear post in such way that it provides the minimum possible closing speed.

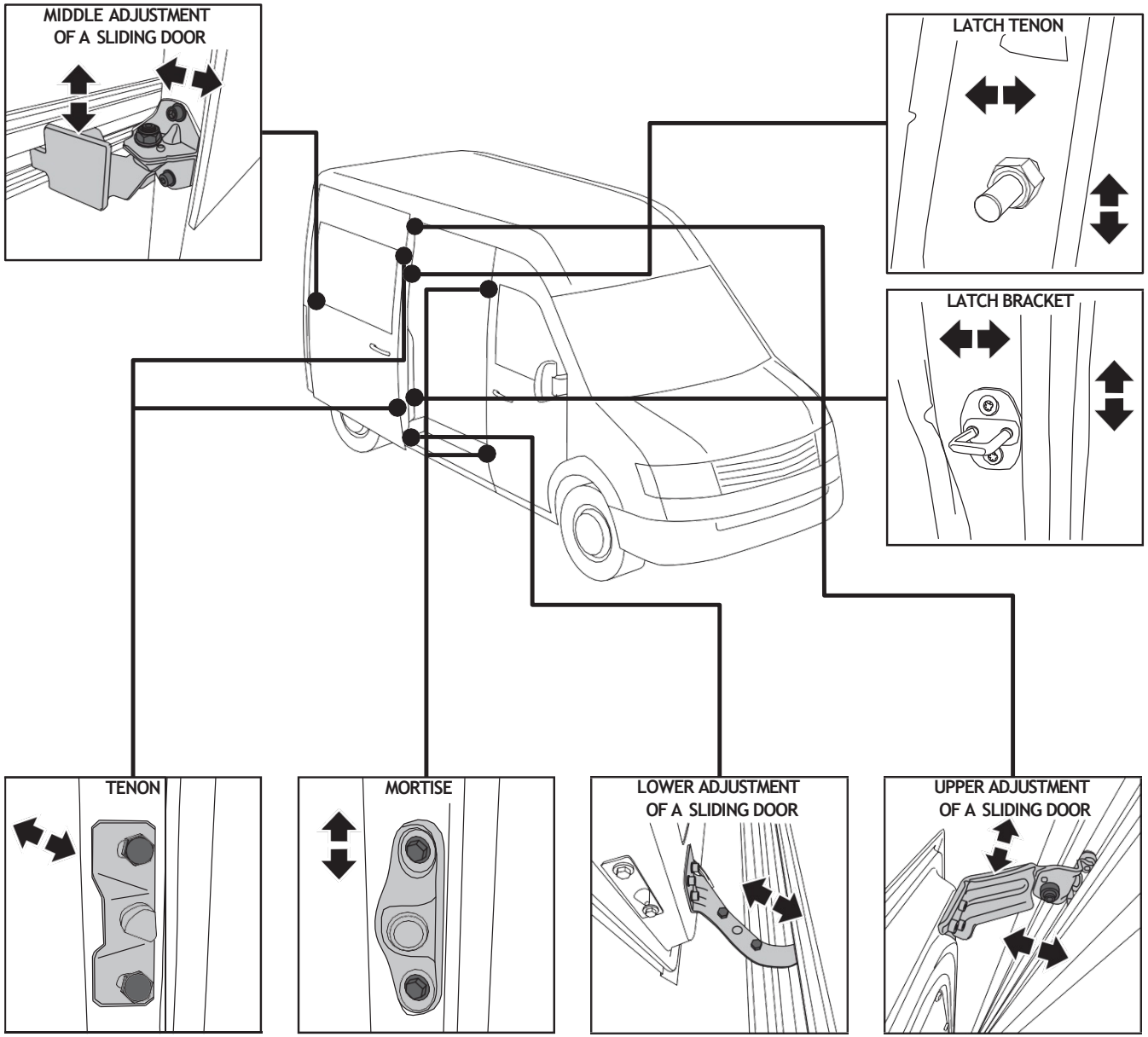
2.1.6. Check the sealing material when the door is closed. The sealing material must not shrink overly. Otherwise remove the sealing material and unbend its edge in the compressed places.

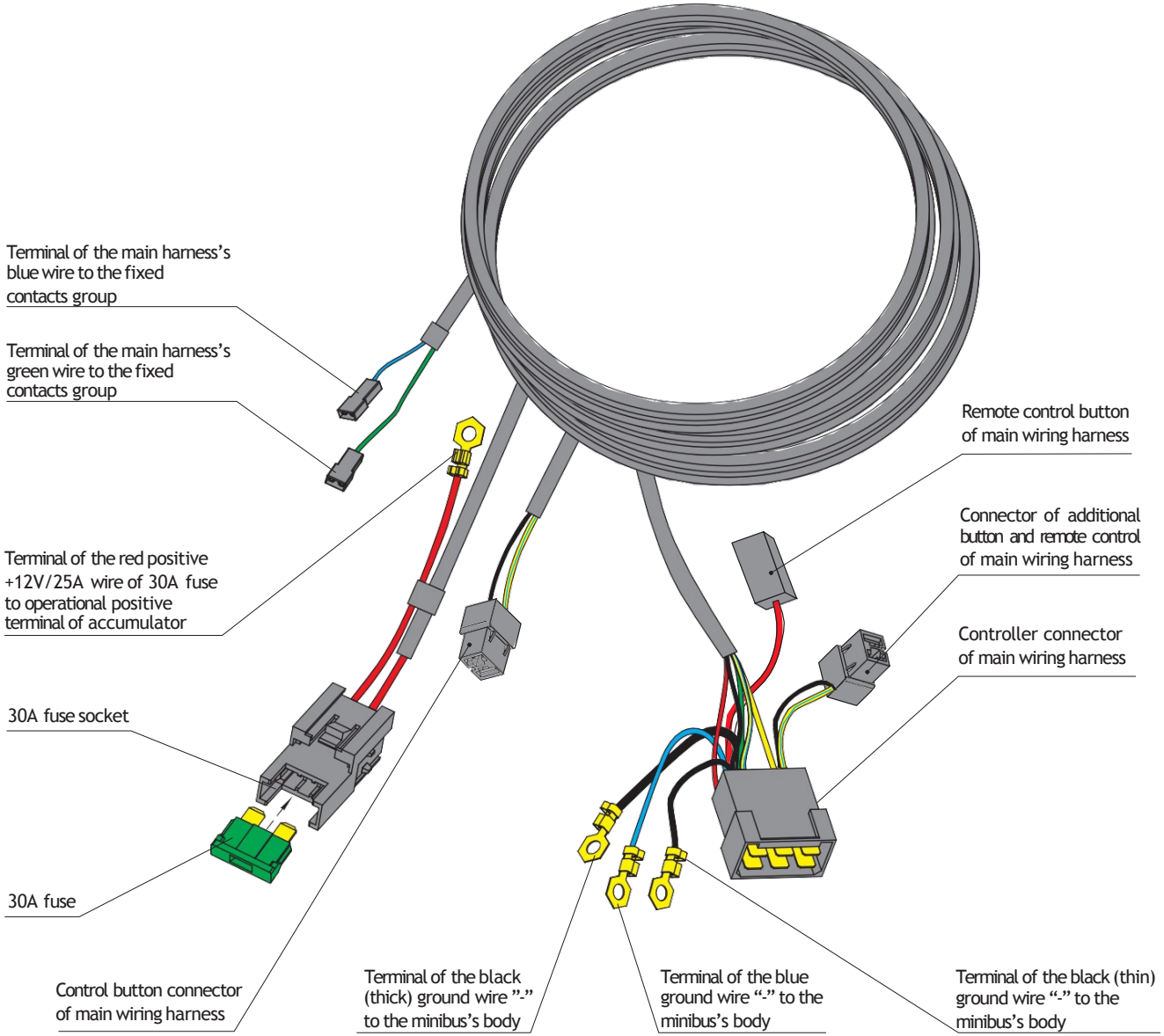
7. Install the door tenons, adjust their position.

8. Open and close the door when the bus is motionless.

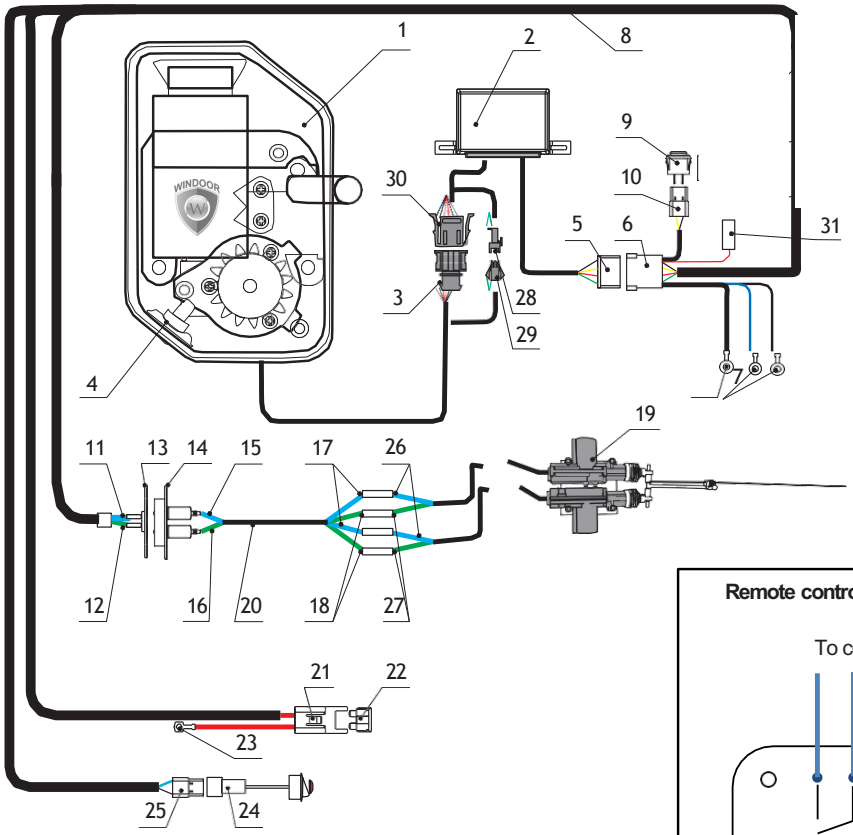
9. Make sure that the sliding door retainers are in their positions and have no any visible damage or wear. Do not use the minibus without retainers or with damaged sliding door retainers.

2.1.10 Check the upper, middle and lower door adjustments. The door must go along the door guide easily without any jerks and knocks, it must open and close freely. The correctly adjusted door in a closed position must come to the sealing material tightly having the same equal gaps.



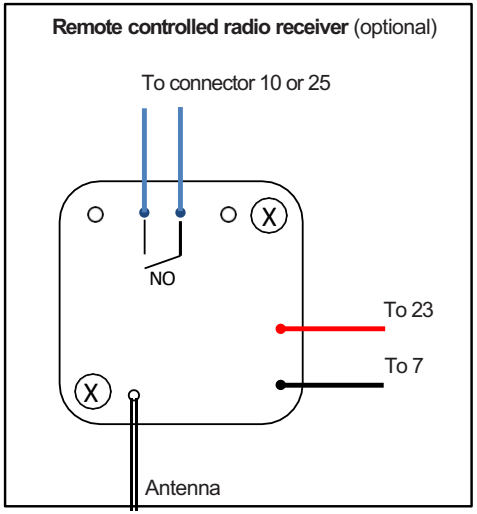

Terminal of the main harness's blue wire to the fixed contacts group
Terminal of the main harness's green wire to the fixed contacts group
Terminal of the red positive +12V/25A wire of 30A fuse to operational positive terminal of accumulator
30A fuse socket
30A fuse
Control button connector of main wiring harness
Terminal of the black (thick) ground wire "-" to the minibus's body
Terminal of the blue ground wire "-" to the minibus's body
Terminal of the black (thin) ground wire "-" to the minibus's body
Remote control button of main wiring harness
Connector of additional button and remote control of main wiring harness
Controller connector of main wiring harness

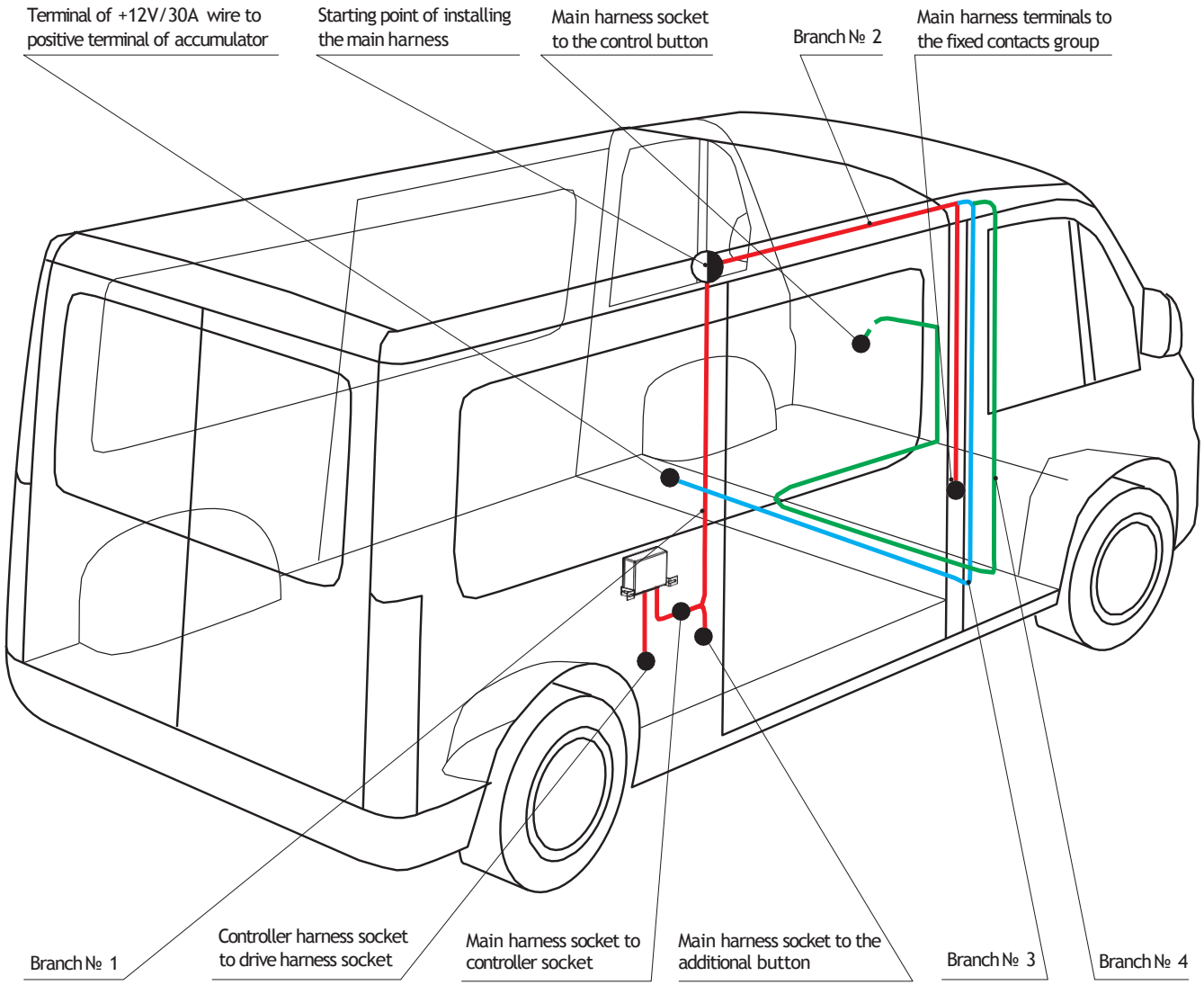
1. WIN-DOOR® door system drive
2. Controller
3. Drive harness connector to controller wiring harness (black, red, grey-and-black, blue-and-black, grey-and-white, red-and-white)
4. Torch
5. Controller wiring harness connector (red, black, green, yellow-and-blue, yellow)
6. Main wiring harness connector (green, red, blue, black (thick), black (thin), yellow-and-blue)
7. Terminals of the ground (black (thick), black (thin), blue) wires "-" to the minibus's body
8. Main wiring harness
9. Additional button
10. Additional button connector (black, yellow-and-blue) and remote control
11. Terminal of the main wiring harness's blue wire to the fixed contacts group
12. Terminal of the main wiring harness's green wire to the fixed contacts group
13. Fixed contacts group
14. Movable contacts group
15. Terminal of the activator blue wire to the movable contacts group
16. Terminal of the activator green wire to the movable contacts group
17. Terminal of the activato wiring harness's blue wire
18. Terminal of the activator wiring harness's green wire
19. Lock drive
20. Actuator wiring harness
21. Terminal of 30A fuse red wire
22. 30A fuse
23. Terminal of +12V red positive wire of 30A fuse to operational positive terminal of accumulator
24. Main control button
25. Main control button connector (black, yellow-and-blue)
26. Terminal of the activator blue wire
27. Terminal of the activator green wire
28. Controller connector to torch connector (green, blue)
29. Torch connector (green, blue)
30. Connector of controller (black, red, grey-and-black, blue-and-black, grey-and-white, red-and-white)
31. Main wiring harness connector (red) - unused
32. Blue wires in parallel to control button to connector 25
33. Black wire " - " ground to chassis)
34. Red wire +Vbatt. Remote control



*

Option 1: use the additional button connector (10): connect each blue wire from the radio remote control receiver directly or via a splice individually to the black and blue/yellow wires of the connector (10). This means you are removing this secondary button, which is usually used during installation.
Option 2: use the main button connector (25): splice each blue wire from the radio remote control receiver individually to the black and blue/yellow wires on connector (25).





NOTE

All wires must be protected and firmly attached to avoid any breakage, abrasion or chafing.

When installing the main harness use steel wire to conceal the harness in the hidden places. Disposition of the main harness is shown in the picture. Be careful while installing the harness: insulating material must not be damaged.

Begin installing the main harness at the starting point as shown in the picture in the following order:

- Extend branch № 1
- Extend branch № 2
- Extend branch № 3
- Extend branch № 4

When extending branch №1 disconnect socket from the main harness. Do not forget to mark the colours of the wires in the socket .

2.5 CONTROLLER INSTALLATION AND CONNECTION OF GROUND WIRE "-" TERMINAL 11

In the van sidebar place and screw up a controller with two self-tapping screws 4,2x12 from the hardware bag as shown in fig. 1

To fix ground wire «-» terminals it is required to make a hole with diameter Ø 6.5 mm in any place of the car inside bar, next to the controller as shown in fig. 1. Remove the paint around the hole completely so you can see metal in order to provide a good contact as shown in fig. 2. With the bolt M6x14, toothed washer and the nut M 6 from hardware bag fix the ground wire "-" terminals as shown in fig. 3. The toothed washer must be between terminals and a car body. After tightening an M6 screw, apply the rust proofing on the surface with damaged rust-proofing paint.

⚠ NOTE ⚠

It is necessary to place the controller so as working hole looked down to prevent the controller card from ingress and accumulation of condensate (v. fig. 1)

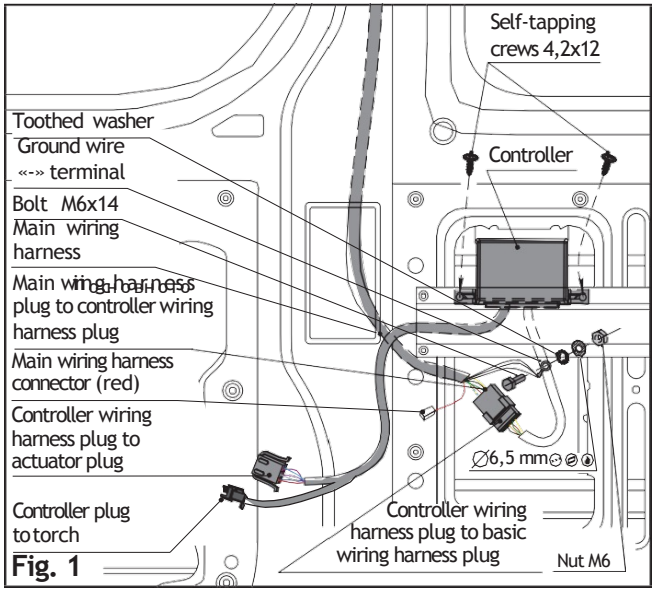


Fig. 1

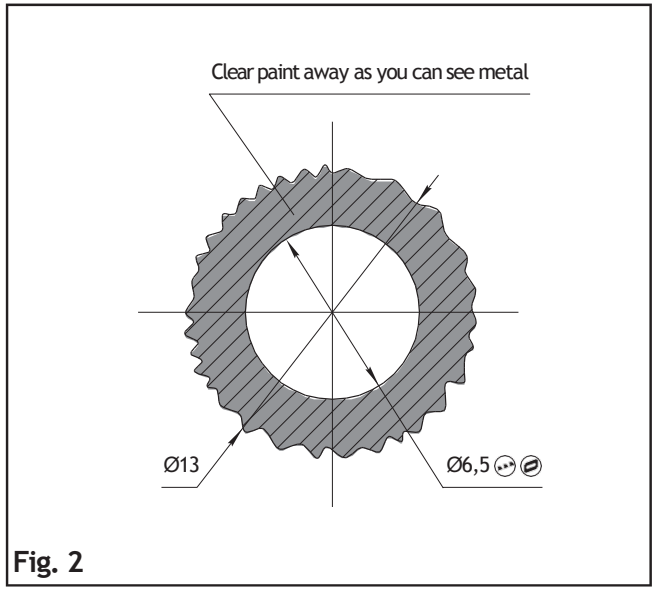


Fig. 2

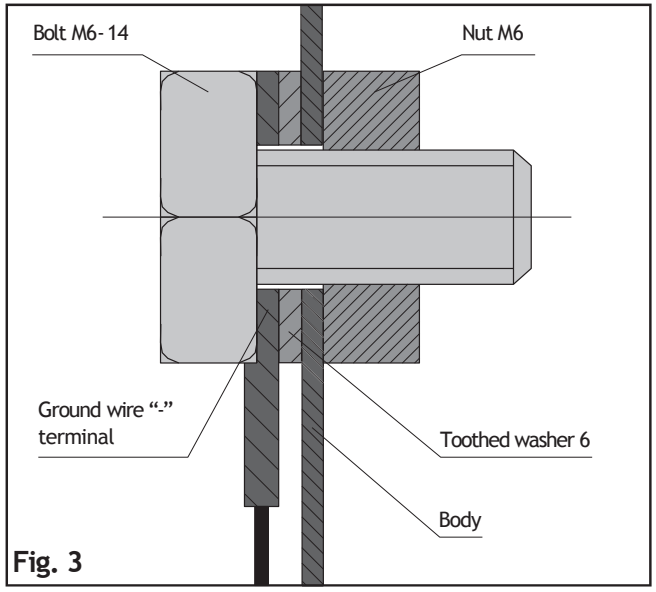


Fig. 3

2.6 CONNECTION OF POSITIVE WIRE TO POSITIVE TERMINAL OF A CCUMULATOR

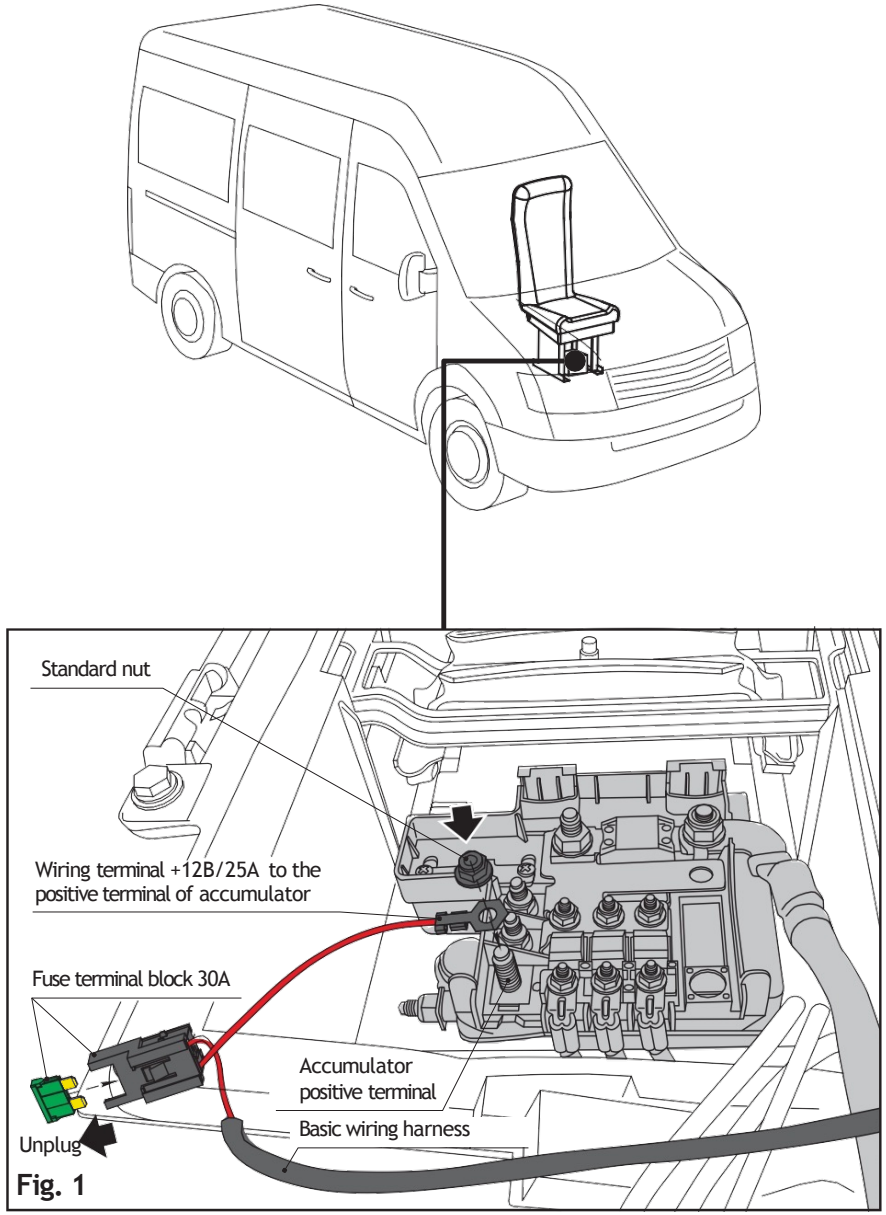


Fig. 1

Connect the wire terminal +12V of the basic wiring harness to a free positive accumulator terminal, which is under a driver's feet. Fix the wire terminal +12V of the basic wiring harness with the standard accumulator nut.

ATTENTION

Before connecting, please, take the fuse 30A out of the fuse terminal block (fig. 1).

Put the drive with the bracket to the door reinforcement and mark out the fixing holes. Drill 2 holes Ø 6.5 mm. Put the drive inside the door and fix it with 2 screws M6x10.

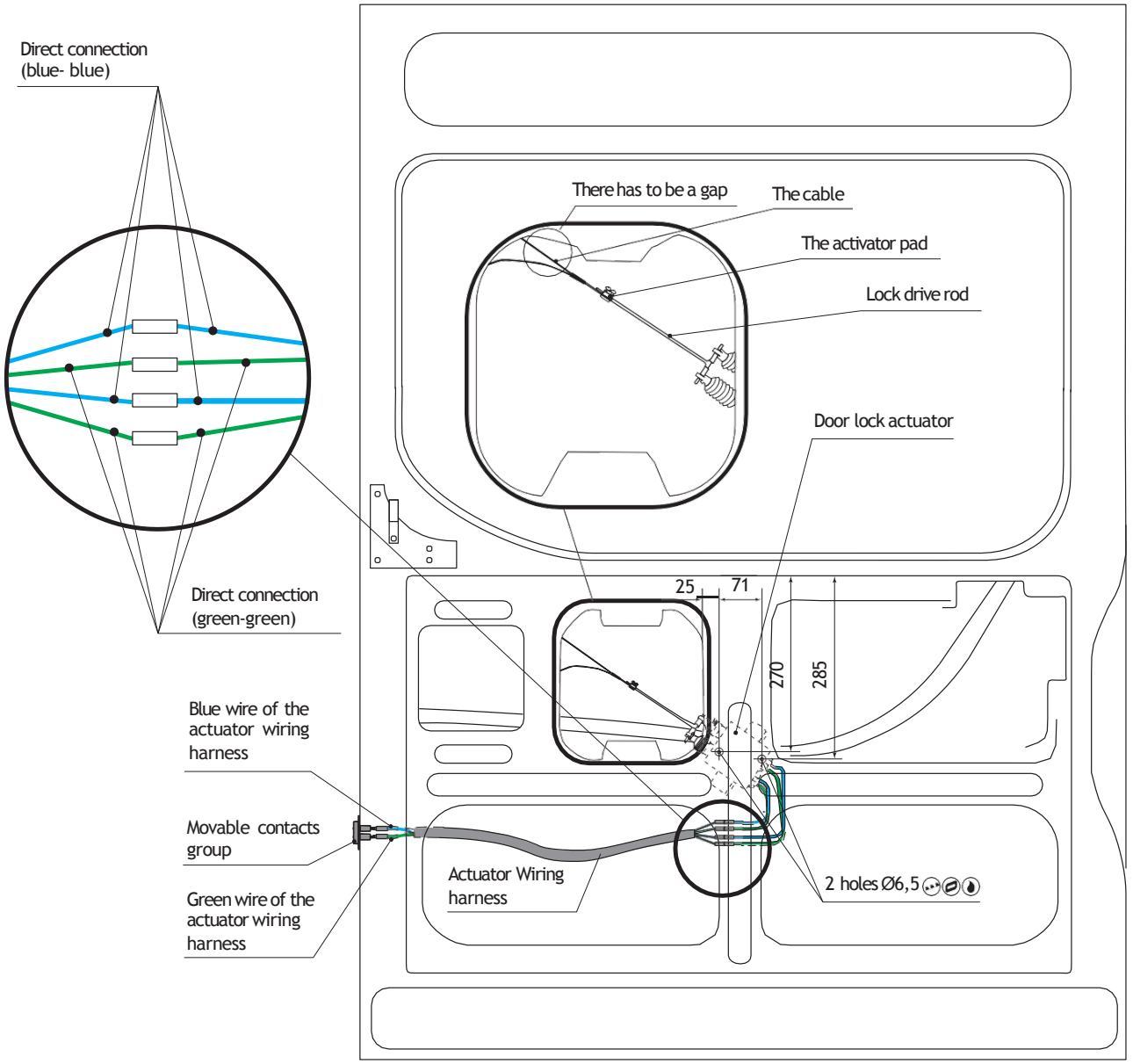
Close the door manually.

With the help of terminal strip adjust rod length so as the cable was tightened to the utmost, but sliding door locks were closed safely.

Connect the terminals of the green wires of the actuator wiring harness, and the blue wires of the lock drive to the terminals of the blue wires of the actuator wiring harness.

ATTENTION

There has to be a gap between the lock drive cable and the edge of the door reinforcement.



2.7 INSTALLATION OF LOCK ACTUATOR AND ITS WIRING HARNESS

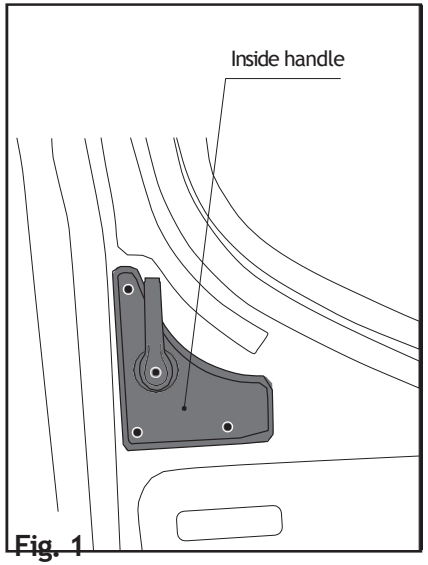


Fig. 1

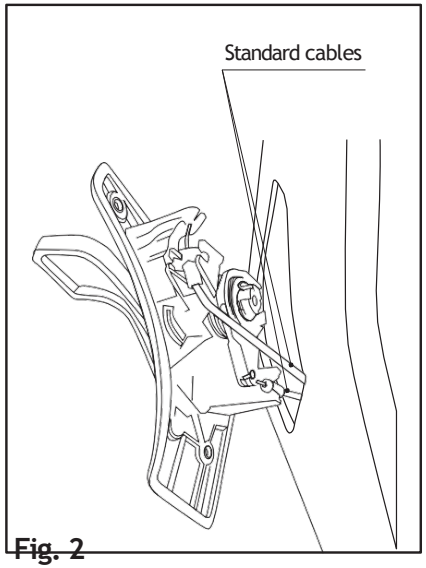


Fig. 2

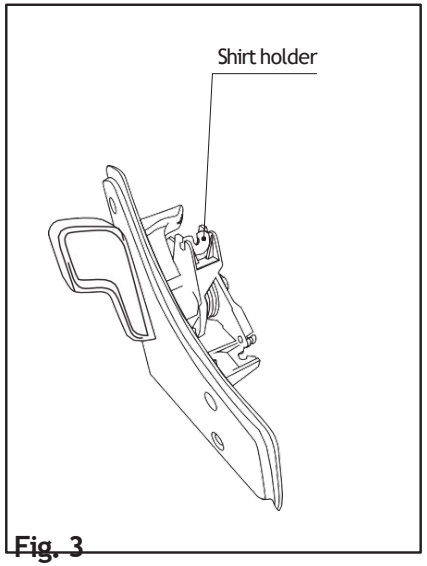


Fig. 3

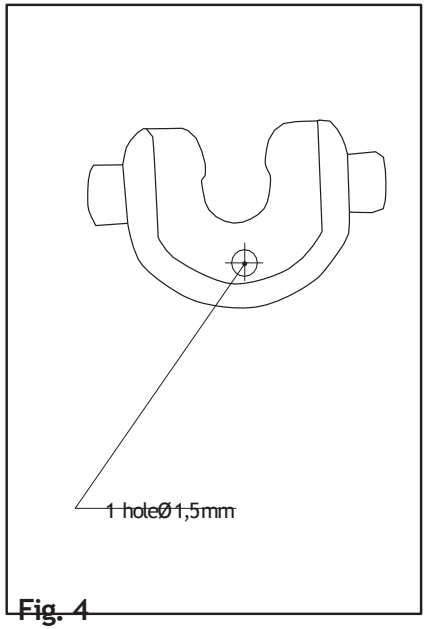


Fig. 4

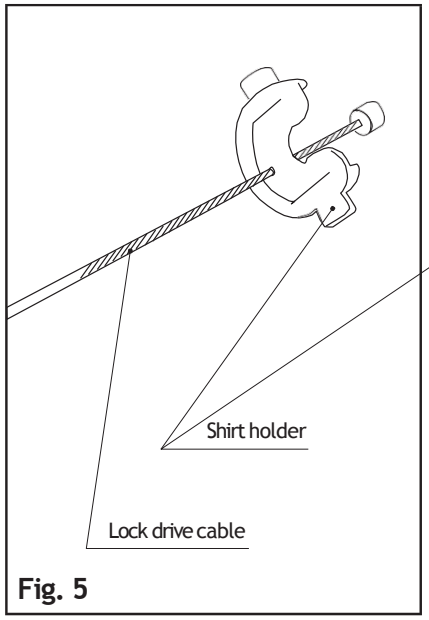


Fig. 5

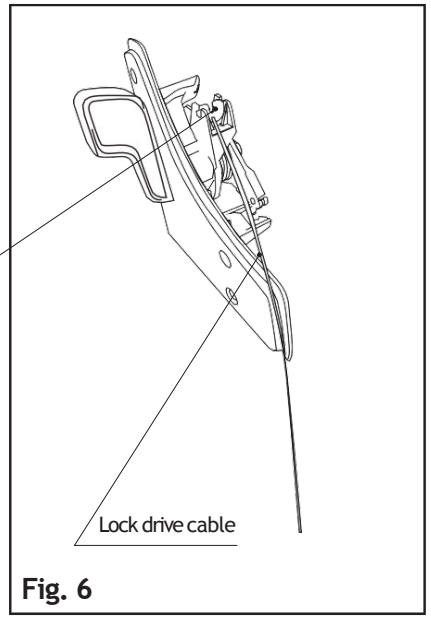


Fig. 6

Detach the inner door handle, fig. 1.

Disconnect the two cables from the inner door handle (fig. 2).

Detach the shirt holder from the inner door handle (fig. 3) and drill a hole Ø 1.5 mm, as shown in fig. 4.

Pull the lock drive cable through the hole in the shirt holder (fig. 5).

Install the holder with the cable on the inner handle (fig. 6).

Pull the drive cable inside the door and connect both cables to the handle in reverse order (fig. 2).

Place the inner handle back (fig. 1).

To place the control button drill a hole Ø 23 mm on the dashboard where you find it convenient to use. Remove burr from the edges and blunt sharp edges. Insert the control button into the hole having connected it to the main wiring harness connector (fig. 3).

NOTE

The movable contacts and fixed contacts groups must be located in such a way that «Autodoor» inscription is positioned on top of it.

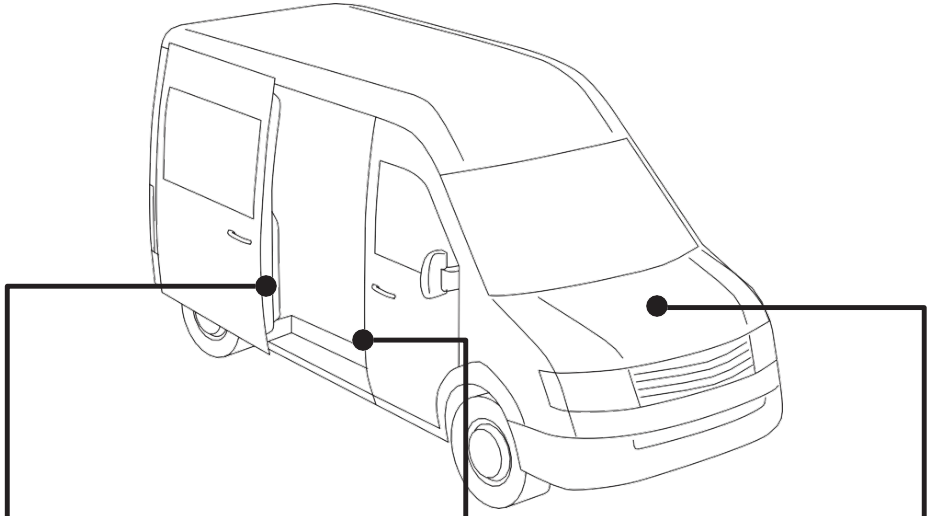
Drill 2 holes Ø 14 mm (fig. 1). Connect the main wiring harness of the actuator to the movable contacts group as follows: connect the green actuator wire to the lower contact of the movable contacts group, connect the blue wire to the upper contact as shown on page 13. Fix the movable contacts group with 2 tapping screws 3,9 x 16 using the contacts separator .

Apply grease lubricant on the contacts of the movable group. Open/close the door. Using the marks left by the grease on the pillar, mark and drill 2 holes Ø 20 mm (fig. 2).

Connect the green wire terminal of the main wiring harness to the lower terminal of the fixed contacts group and the blue one to the upper terminal as shown in scheme on page 9.

Secure the fixed contacts group with 2 tapping screws 3,9x16 (fig.2).

Placement and connection of control button is shown in fig.3.



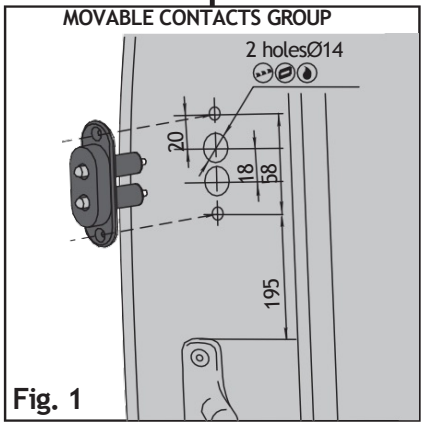


Fig. 1

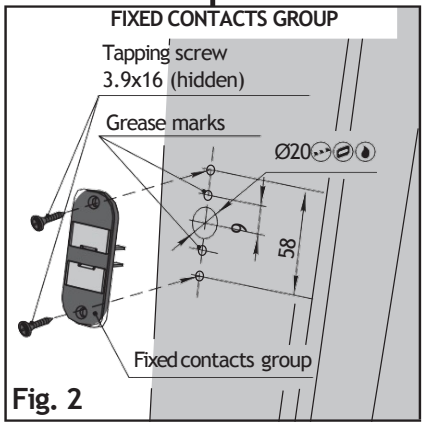


Fig. 2

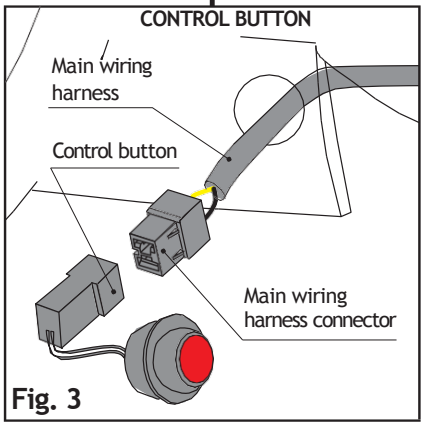
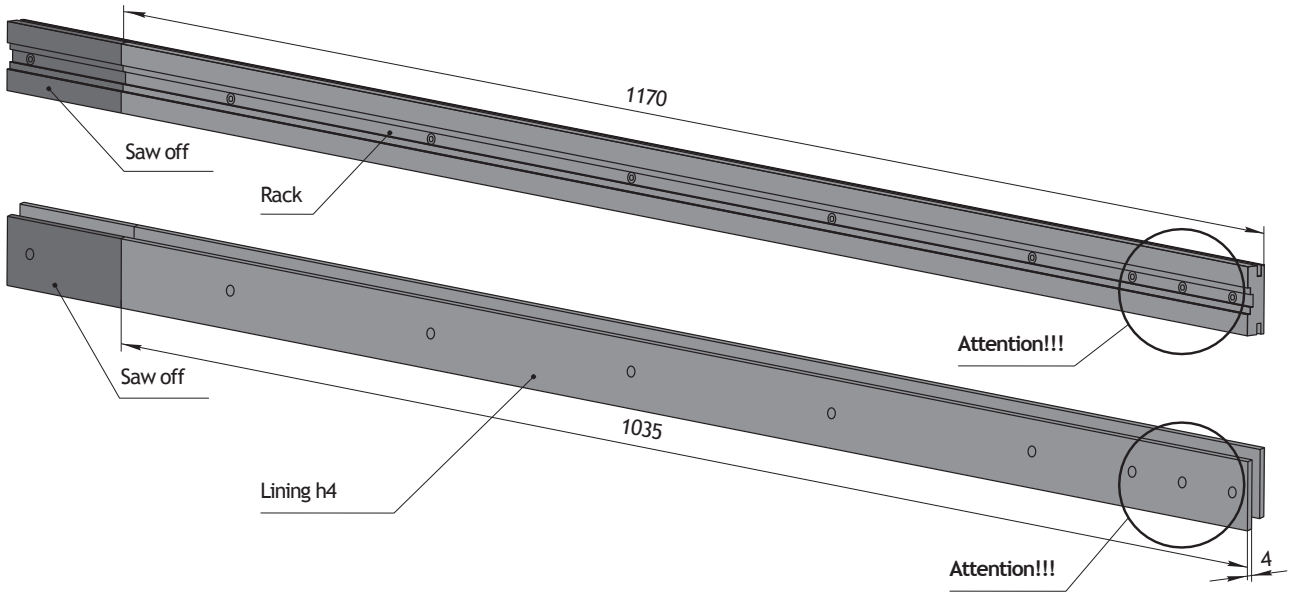
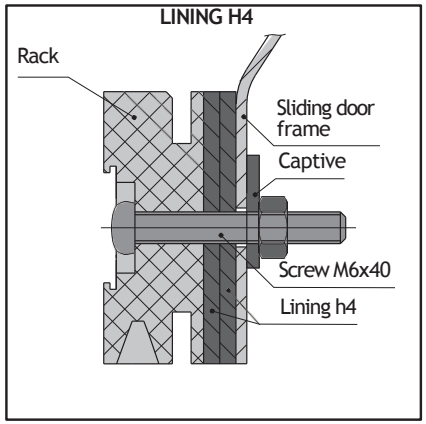


Fig. 3





It is recommended to install a rack with maximum length using some special liners.

NOTE

The rack must be sawn only on the left side .

The rack is installed on 2 lining h4 H4 which must be sawn to the needed length beforehand .

Put the rail to the marked place as shown in figure 11.The lower edge of the rail should be aligned with the lower convex edge of the plastic door cover (Fig. 11 A), and the rear part of the rail should be at 45 mm distance from the opening seal (Fig. 11 B). Using the holes in the rail, mark out the centres of the fixing holes on the door.

Drill holes Ø 6,5 mm using the marks. The holes must be positioned in one line.

Fix the rail using metalware from the metalware set:

- Screws M6- 40
- Plate nuts M6

⚠ NOTE ⚠

If operating mode of the drive is very intensive, you should use an inset under the rail. It is installed through 4 back fixation holes of the rack.

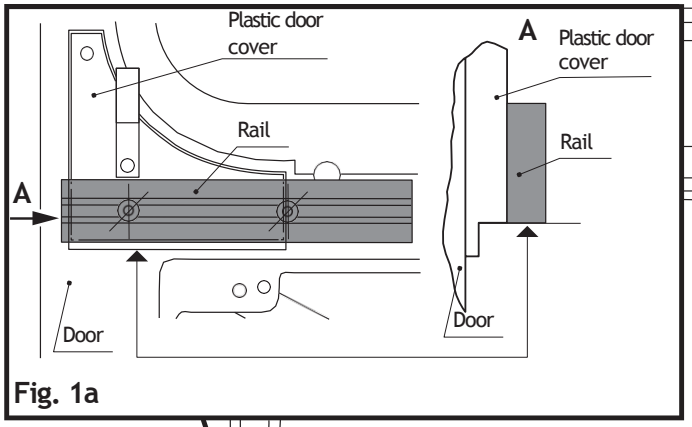


Fig. 1a

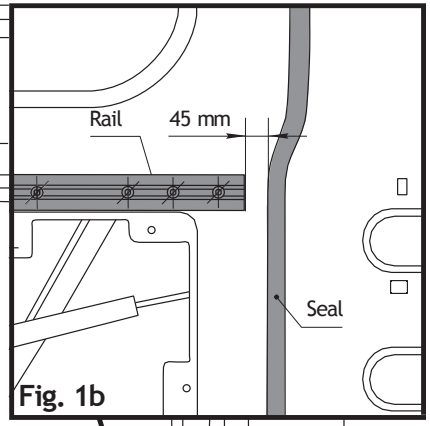


Fig. 1b

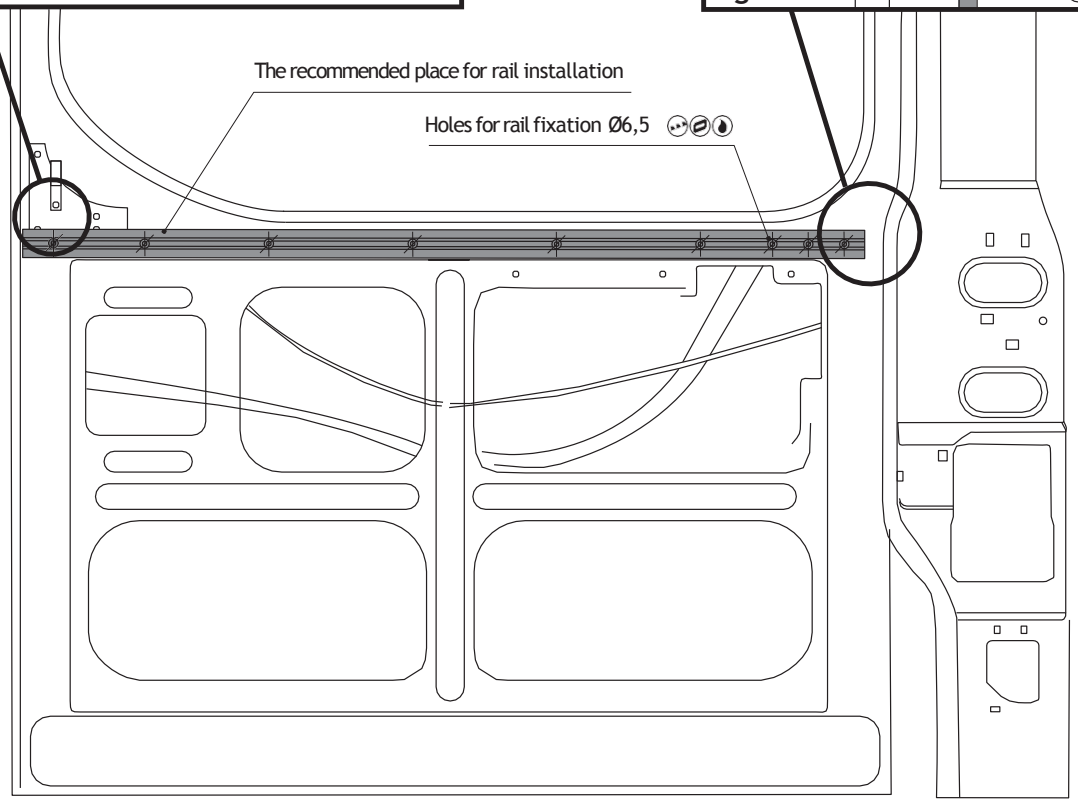


Fig. 1

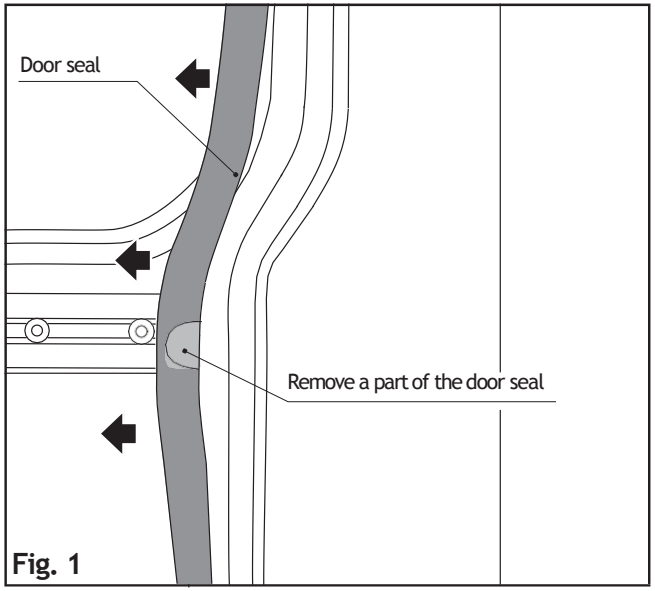


Fig. 1

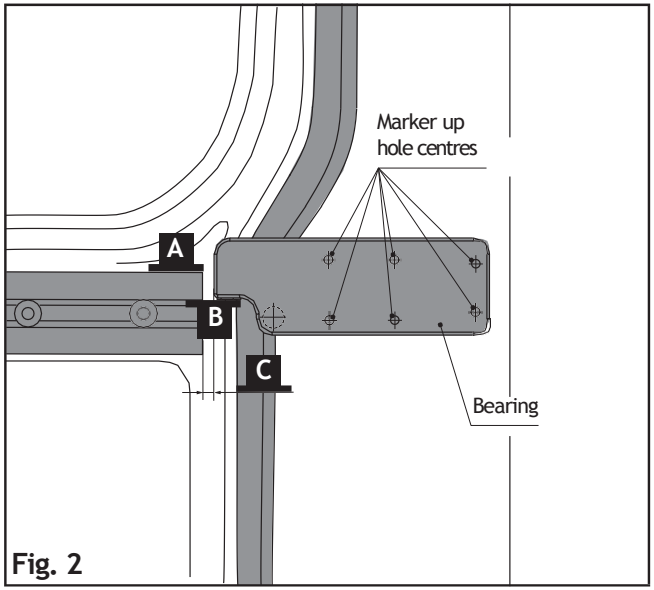


Fig. 2

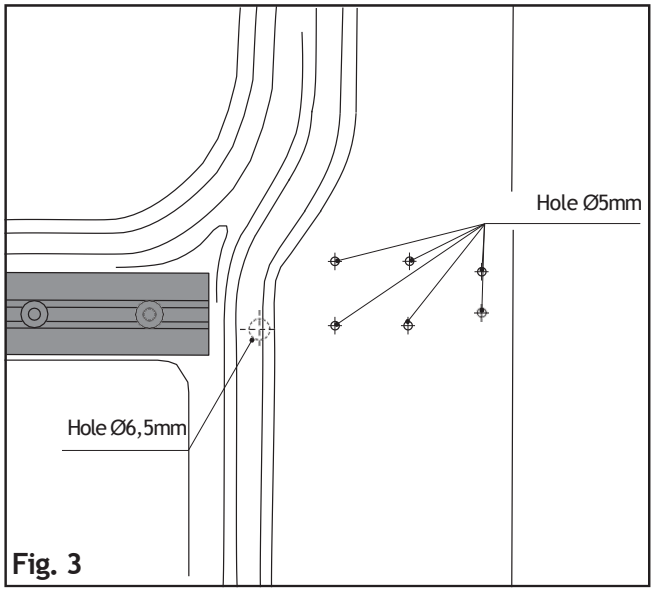


Fig. 3

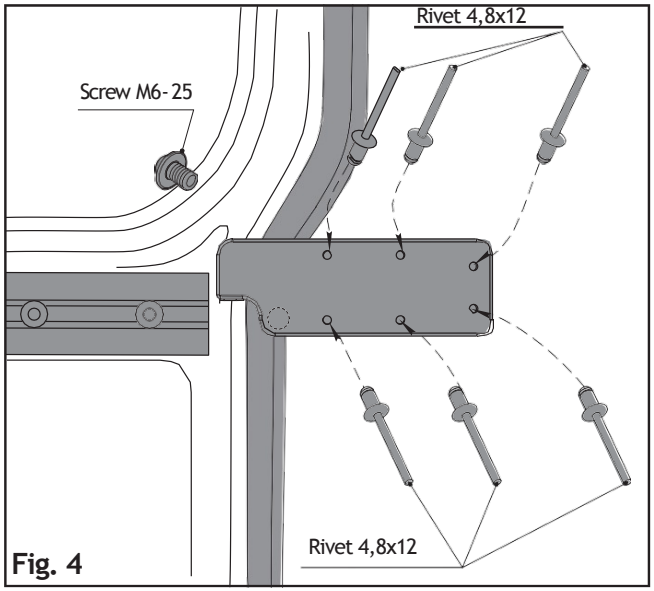


Fig. 4

Remove door seal in the area of bearing support installation (figure 1).

Put the bearing support to the body pillar (figure 2) so that rack plane A would be 8 - 10 mm above the bearing support plane B and space C between the bearing support and the rail would be 6-10 mm. Mark the centres of fixation holes on the bearing support with a marker.

Drill a hole Ø 6.5 mm in the bearing if necessary, for a M6 - 8 screw in order to fix bearing to the doorway rim. Burr the edges, round-off sharp edges and spread acid-free rust-preventing liquid over the edges. Drill the holes Ø 5 mm for rivets 4.8x12 from the metal ware (fig.3).

Firstly, fix the bearing only with M6 - 8 screw, and then rivets 4.8x12 from the metal ware. (fig.4).

Cut off a part of the door seal from the inside so that the cutout would envelope the support's spacing collar (figure 12)

Put the door seal back.

Attach the rod to the bearing (fig. 1).

Close the door manually.

Check to be sure that racks of the bearing item and the rod do not make the door closing difficult.

Install the door drive on the rail (fig. 3). Connect the drive to the rear bearing with the rod.

Drill two holes with diameter Ø 5.5 mm in the front part and set there the block stop lock (fig. 4).

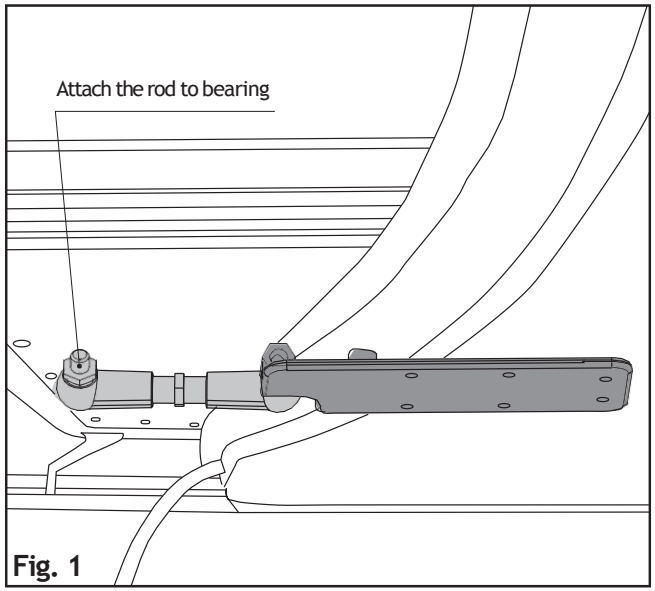


Fig. 1

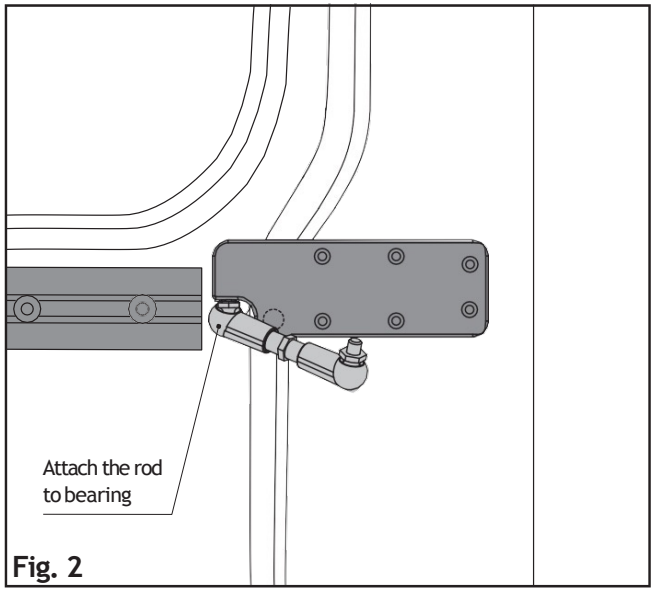


Fig. 2

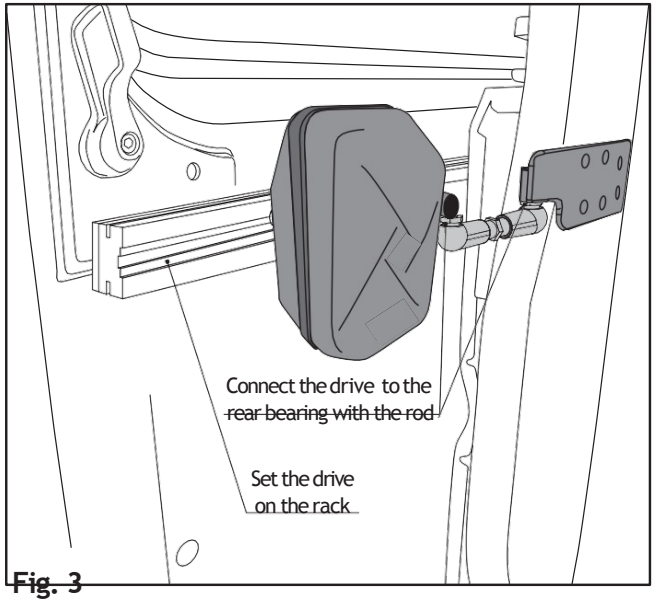


Fig. 3

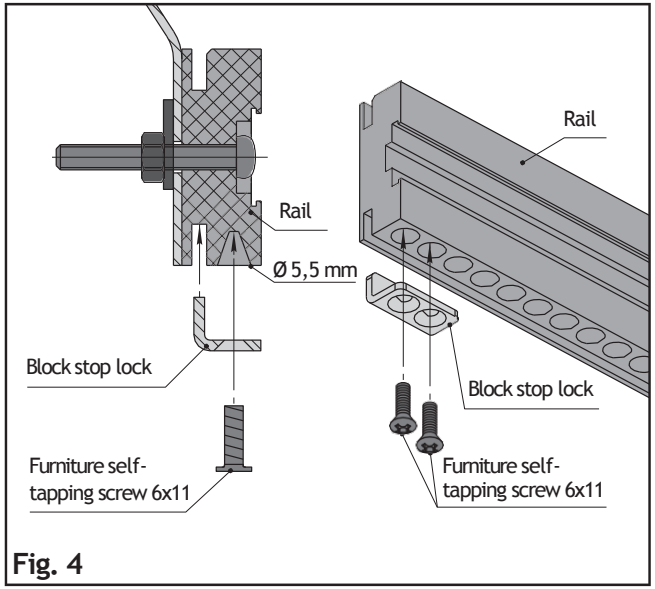


Fig. 4

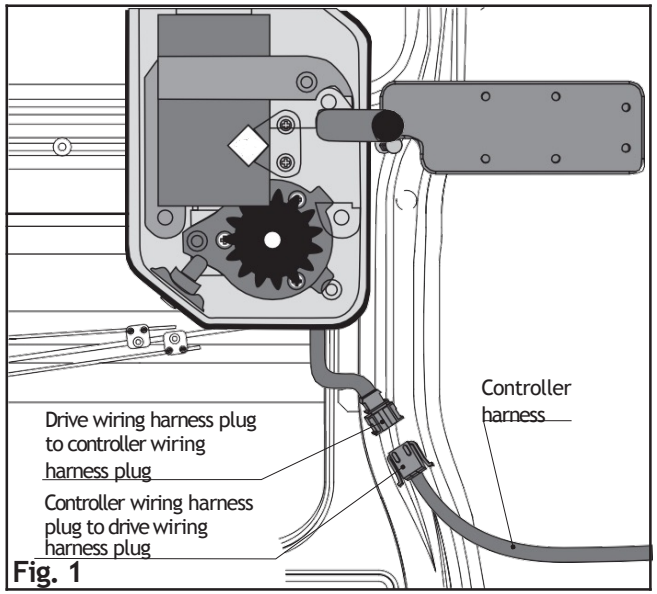


Fig. 1

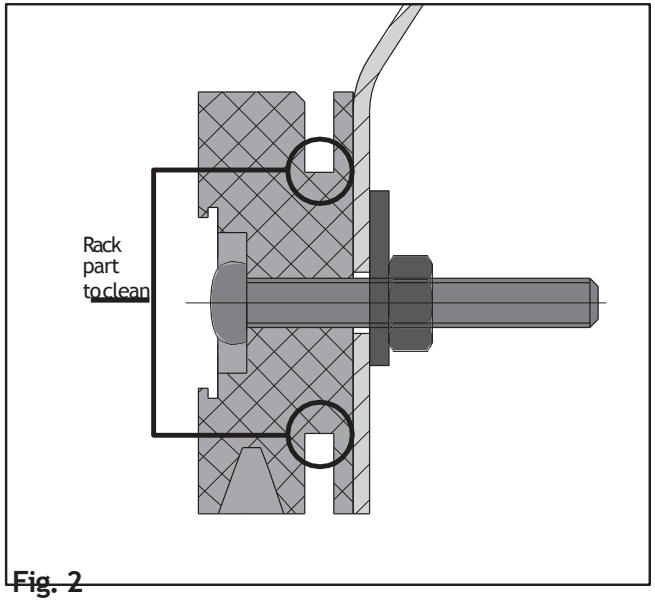


Fig. 2

Clean the rail housing from cuttings (fig. 2).

Connect the drive to the controller (fig. 1).

Insert the switch fuse 30A into the fuse block. Thereby, the controller will produce a long audio signal.

Start the engine.

Press the control button. Thereby, the drive will close the door, and the controller will be producing audio signals for 1-2 sec. After that, launch the opening operation. Thereby, the drive will open the door and slightly move till the block stop lock. Then the drive will operate as usual.

⚠ ATTENTION ⚠

Before detaching the drive (if needed) or disconnecting controller, unplug switch fuse 30A first.

DRAFT ADJUSTMENT

Draft position with correctly closed door in the locking mode is shown in fig. 1 and fig. 1, p. 25.

Rotating the pin by the hexagon drive (fig.2), adjust the draft length so as the door could close tightly.

If draft installed correctly, it should bear against the cluster gear damper (fig. 3).

Draft position with correctly closed door in the nonlocking mode is shown in fig. 3 and fig. 2, p. 25.

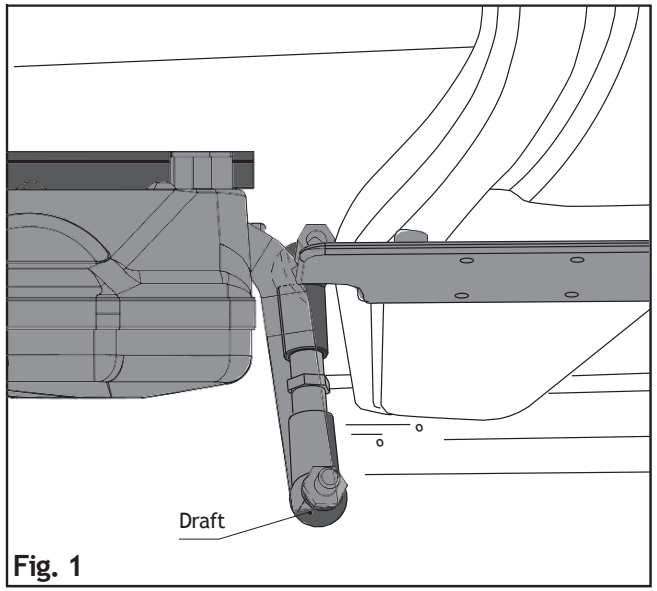


Fig. 1

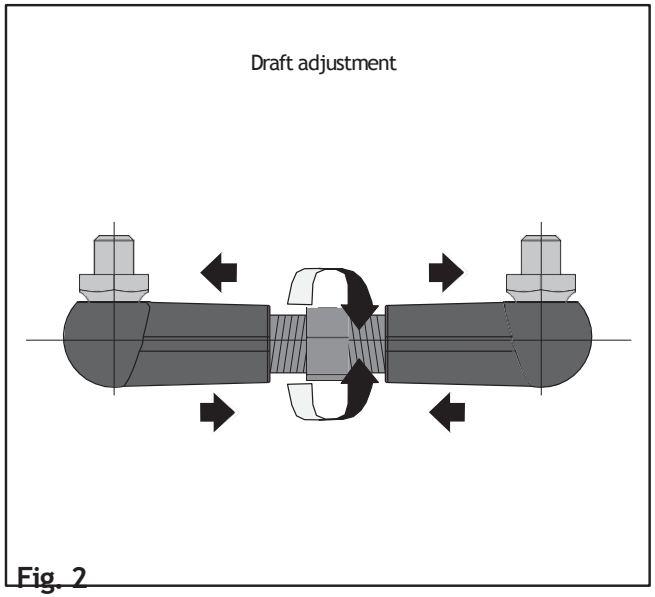


Fig. 2

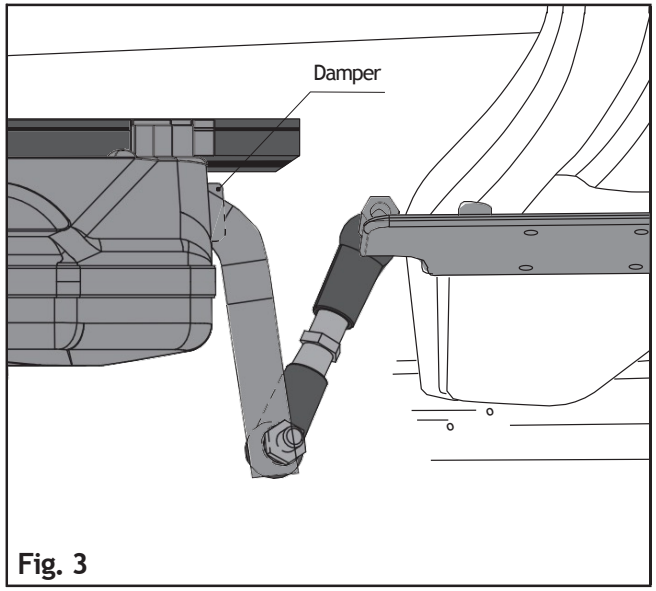


Fig. 3

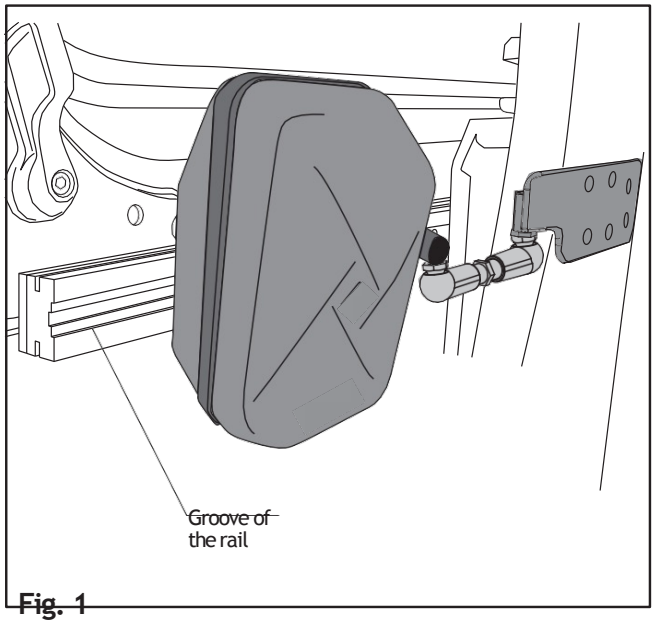


Fig. 1

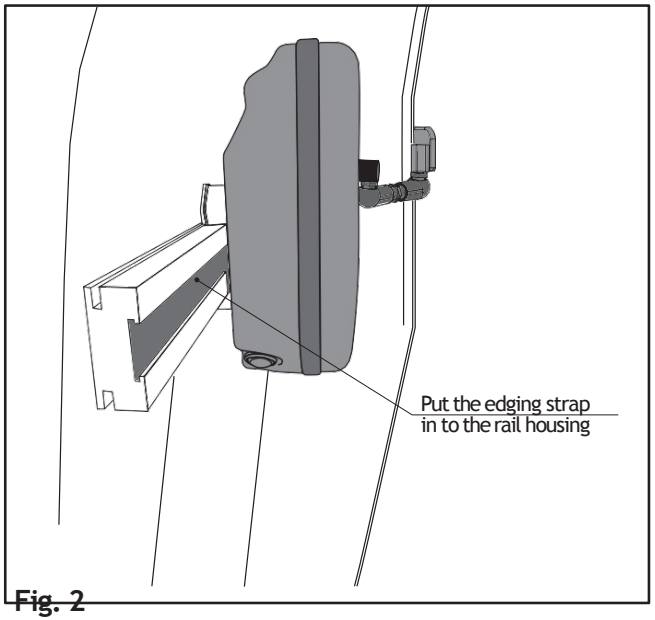


Fig. 2

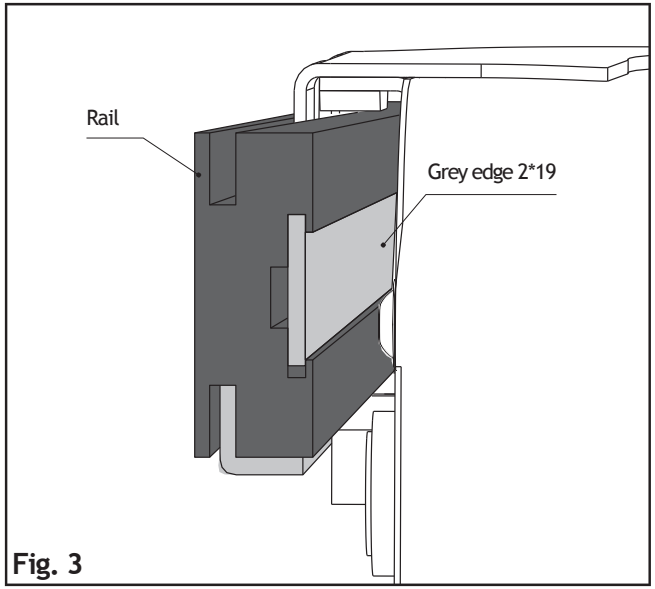
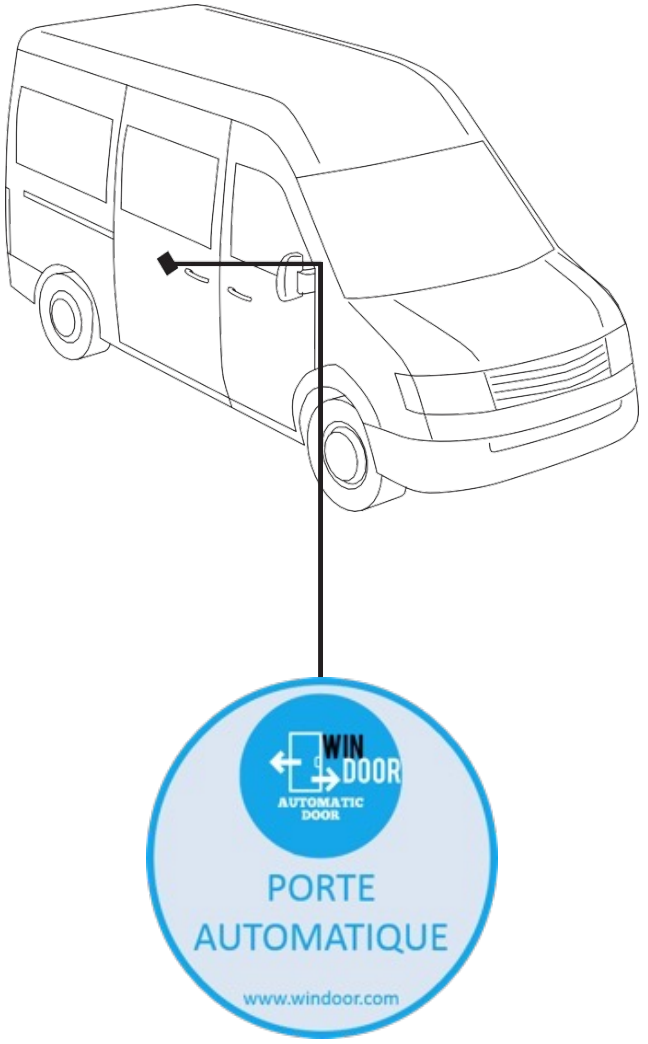


Fig. 3

Cut the decorative strap according to the rail (fig. 2 and 3).

Carefully put the strap into the rail housing as shown in figures 1, 2 and 3.

Place the WIN-DOOR information sticker outside the sliding door on the panel next to the handle so as it is easy to notice.



Put the cover of the external handle to the opening/closing door handle. Mark and drill 2 holes Ø3,5mm. Fix the cover of the external handle on the opening/closing door handle with 2 self-driving screws 4.2-16 from the metalware set as shown in figure 1.

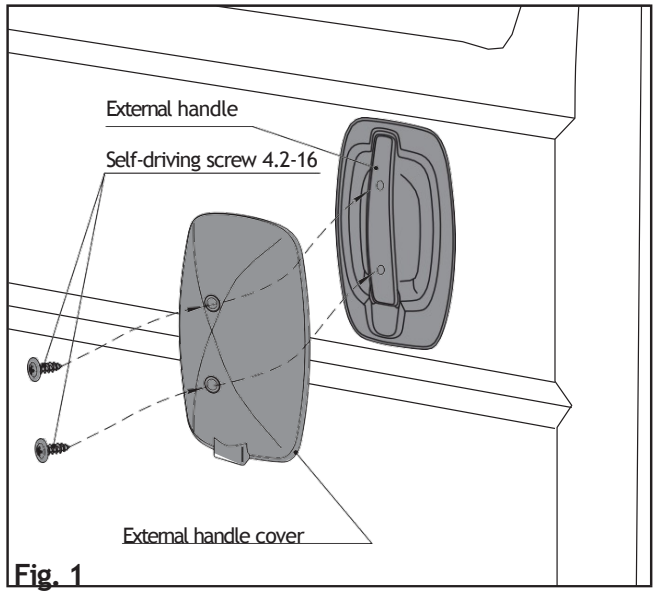


Fig. 1

OPENING AND CLOSING THE DOOR

Press and hold on the control button for about 0.5sec. The door starts moving after you release the button.

DOOR STOP

Press the control button once and shortly to stop the door on the move.

AUTOMATIC ROLL BACK

If during the closing process the door meets an obstacle, it will stop and roll back automatically.

DOOR OPENING WIDTH ADJUSTMENT

Open the door. Manually adjust it to desired width. Press and hold on the control button for about 10 seconds till double signal. Release the button. Since now the drive remembers the adjusted opening width.

SLIDING DOOR LOCKING MODE

The drive can work in two modes:

1. locking (in factory settings) fig. 1;
2. nonlocking fig. 2. (only with lock actuator)

To turn to the nonlocking mode, please, press and hold on the button for about 15 seconds until 3 long audio signals. Release the button.

ADJUSTING THE DOOR CLOSING SPEED

The drive has three door opening/closing speeds.

Press and hold on the control button for about 20 seconds until quadruple audio signal. Release the button.

In order to increase the speed by one position, it is enough to press the button once while closing the door.

In order to reduce the speed by one position, it is enough to press the button once while opening the door.

FACTORY SETTINGS RESET

Press and hold on the control button for about 25 seconds until quadruple audio signal. Release the button. All the drive settings will turn to factory.

NOTE

The drive settings reset to factory during power failure.

LOCKING MODE

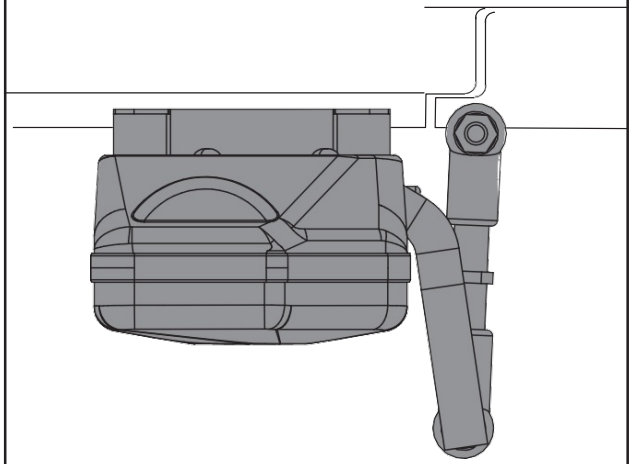


Fig. 1

NONLOCKING MODE

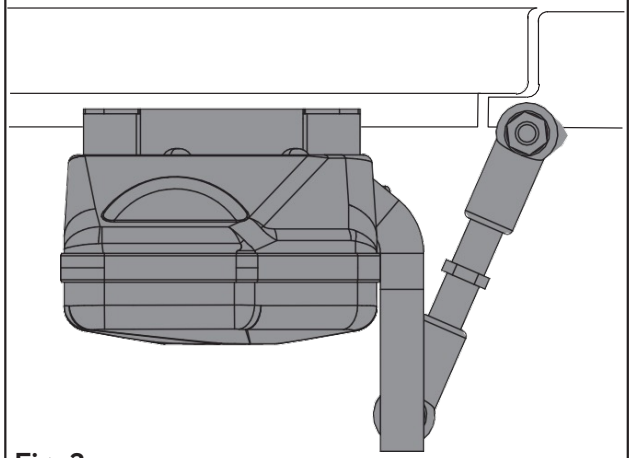


Fig. 2

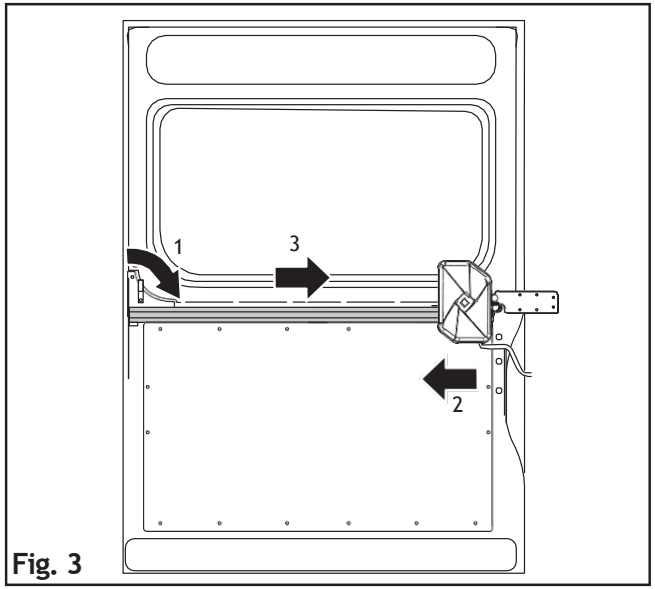


Fig. 3

EMERGENCY DOOR OPENING

FROM OUTSIDE (ONLY IN NONLOCKING MODE):

It is not possible to manually open the door from the outside.
Installator and final user/owner MUST ENSURE beforehand that this is not against the local regulation in teh country of use.

FROM INSIDE:

1. Press and hold on the button of the inside handle (fig. 3).
2. Move the drive to the left as far as it can go (fig. 3.
3. Open the door manually (fig. 3).

CHANGING TO MANUAL OPERATING MODE

1. Unscrew the external handle cover and open the door by hand (figure 1).
2. Remove the index pin (figure 2).
3. Disconnect the drive drive plug (figure 2).
4. Unscrew the link (figure 3).
5. Remove the drive off the rack (figure 3).

Now the door can be used in manual mode.

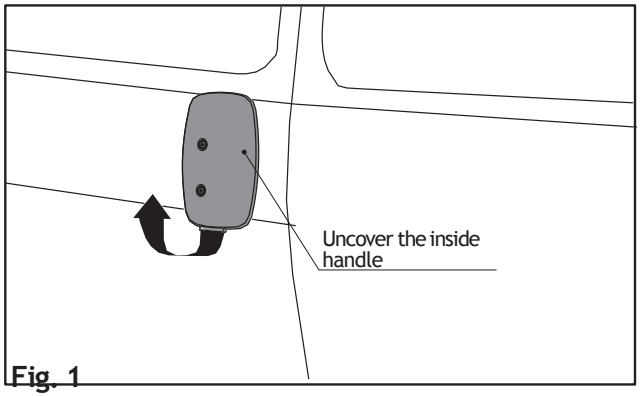


Fig. 1

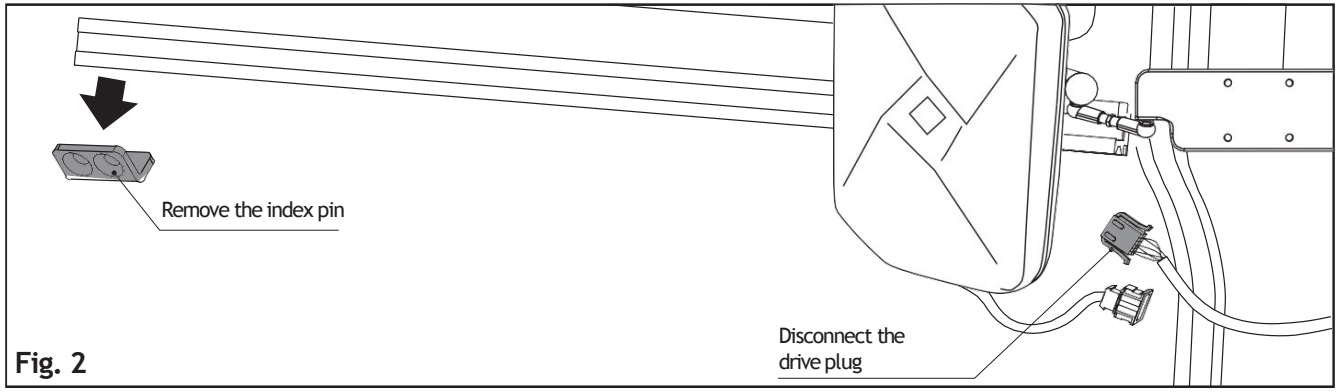


Fig. 2

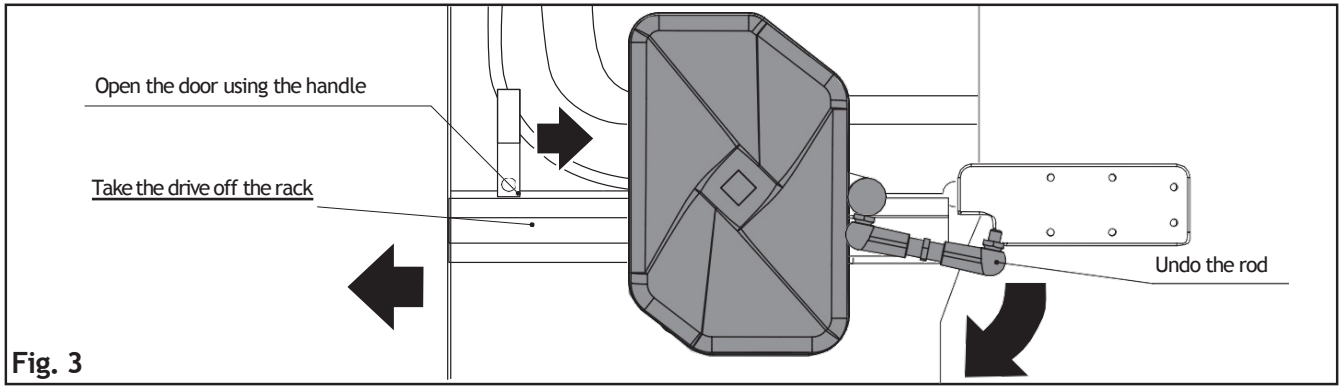


Fig. 3