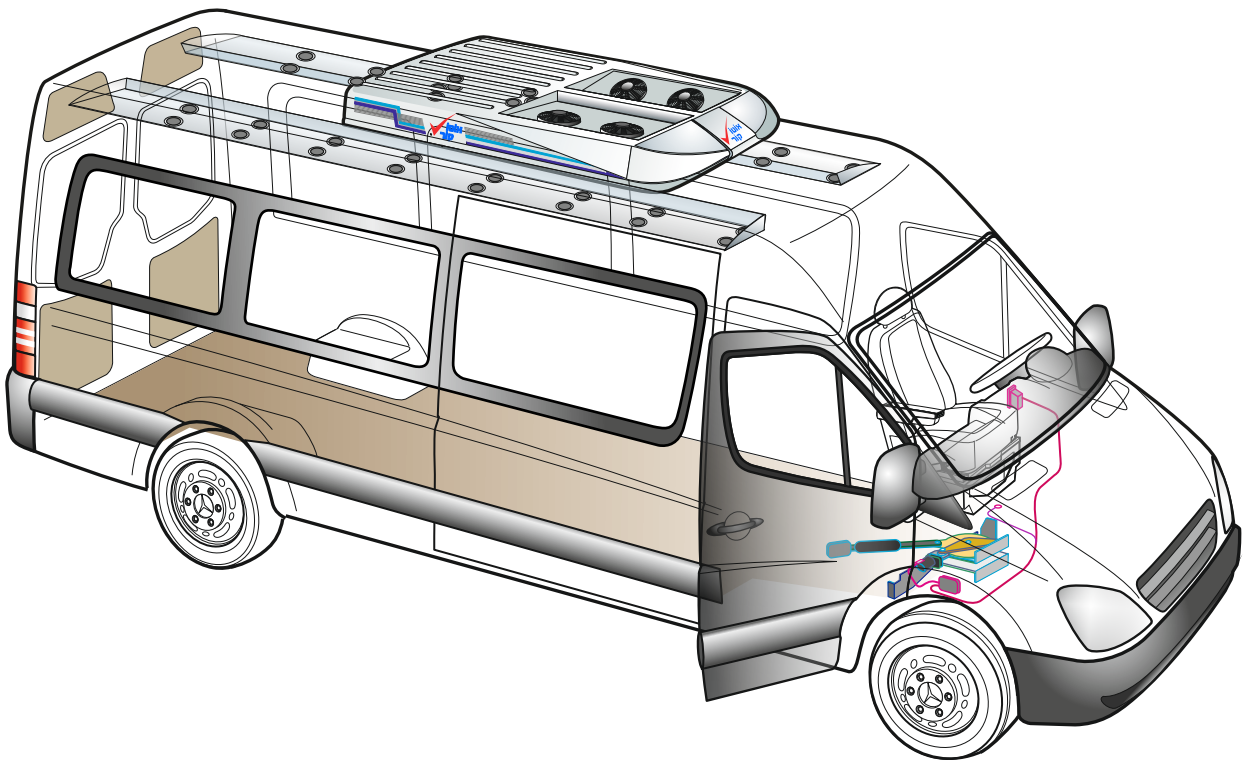




PowerDoorAndStep.com

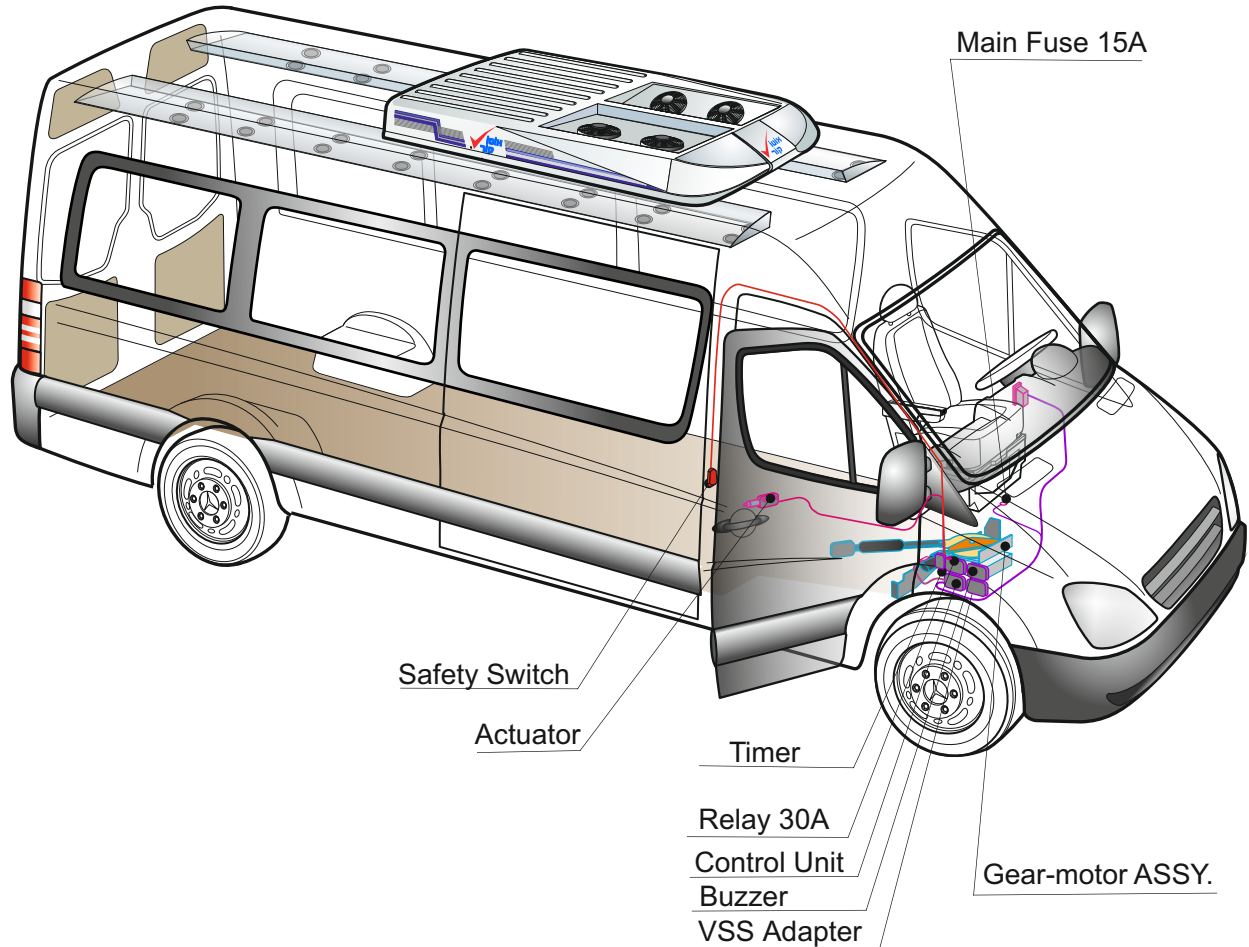
888.928.8000

Mercedes *Sprinter*
VW Crafter
From 2007 models



AAD
Automatic Axial Door

PN: 014-0002



Attention!

1. While activating the system to open/close, do not force **it** to the opposite direction of its motion.
2. Do not connect at any time the "Gear Motor" directly to the battery!!! It **must** be connected through the supplied electric system and control box.
Operating not as indicated, may break the gear motor, thus not covered by our warranty.

Attach the Gear-motor support to the fire wall using original stud (A) for positioning. Upper edge (B) of Mounting bracket must be parallel to the edge (C) (see figure 1). Mark the position of the holes in the back end of the mounting bracket (1) on the fire wall. Drill 7mm diameter 4 holes. Cut

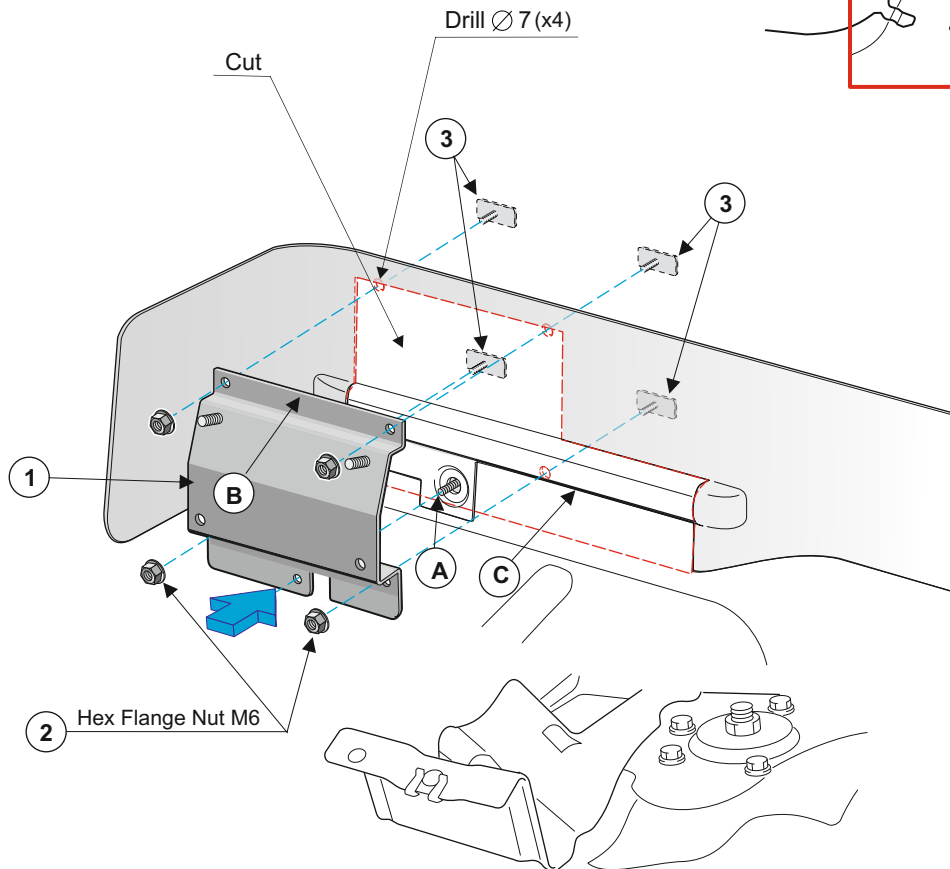
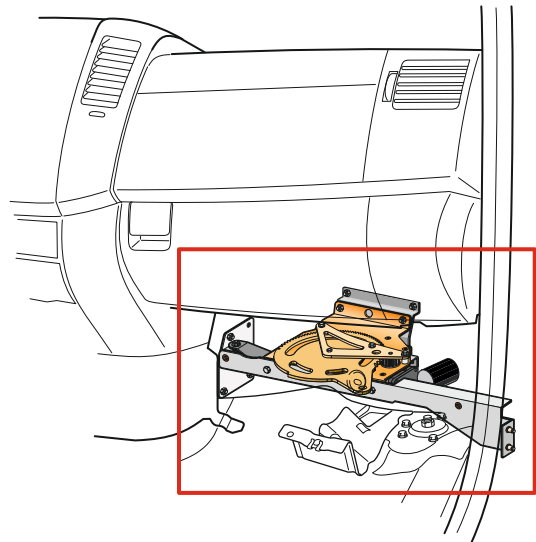
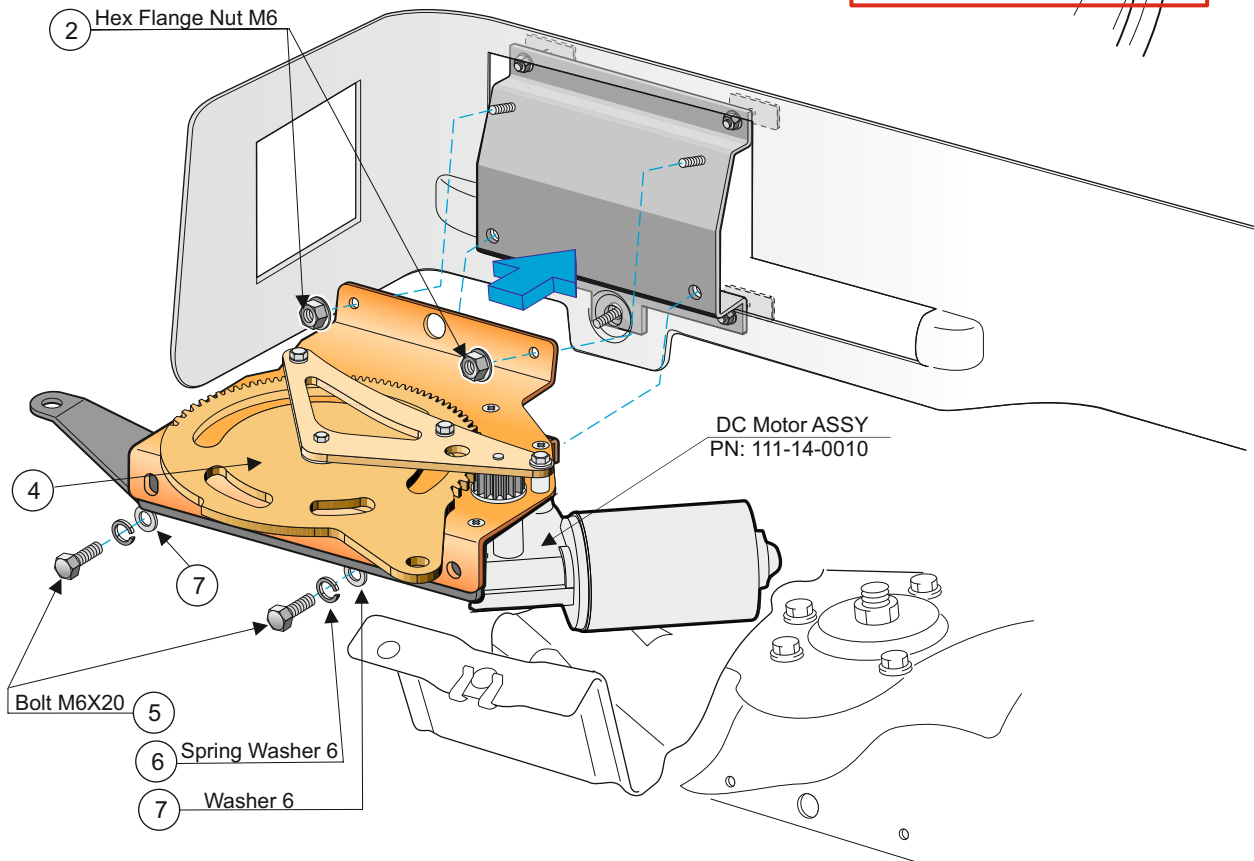
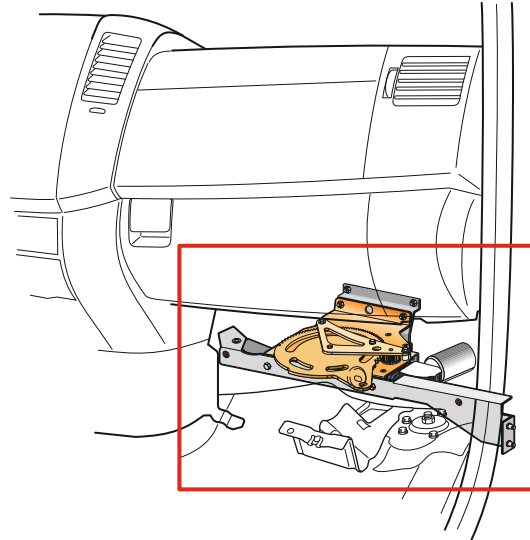
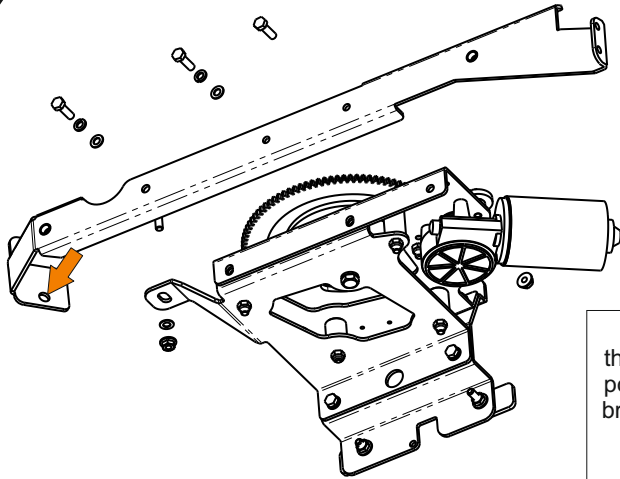


Figure 1

Gear-Motor Kit PN: 160-14-00042




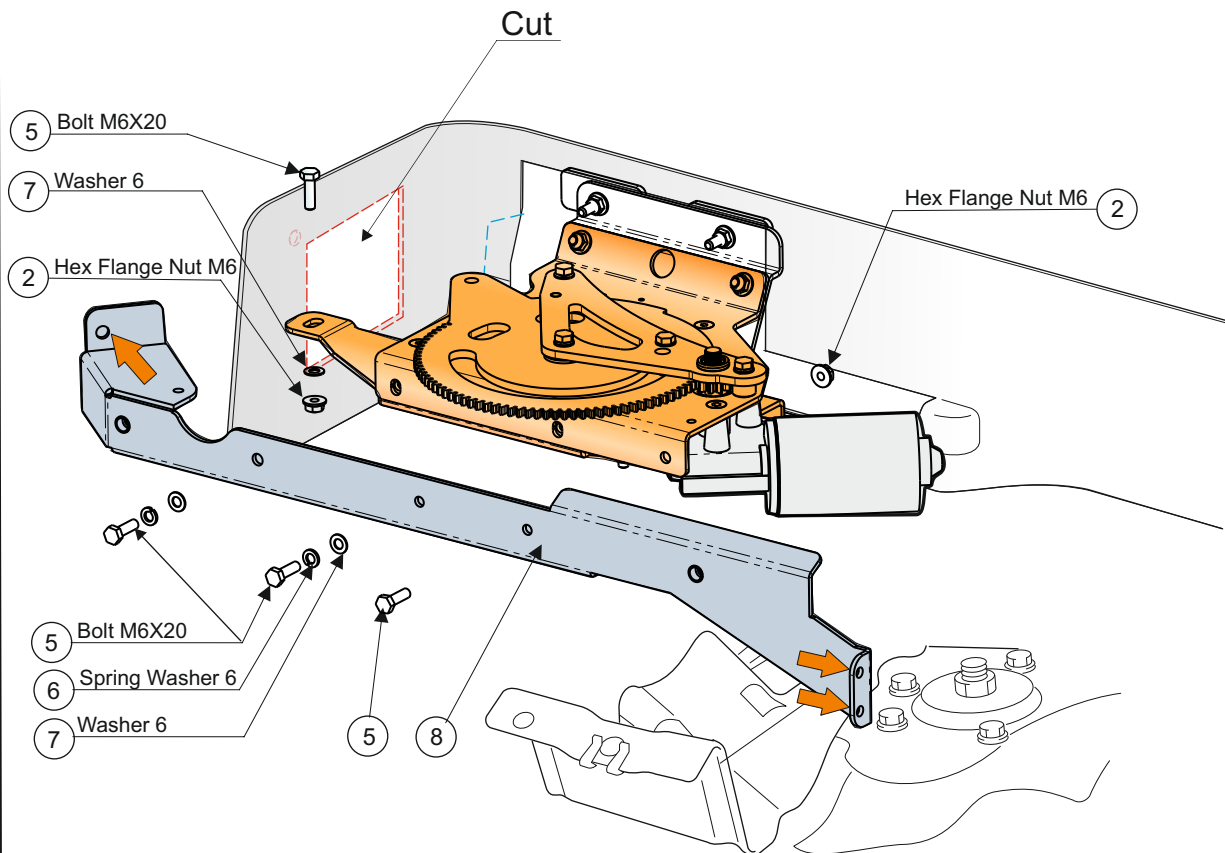
| | |
|-----------------|------------------|
| Gear-Motor ASSY | PN: 111-14-001 |
| Gear-Motor Kit | PN: 160-14-00042 |



Attach the front support to the gear-motor ASSY using the bolts M6X20(3), washers M6, spring washer 6. Mark the position of the holes in the back end of the mounting bracket (8) on the vehicle body.

Remove the front support.

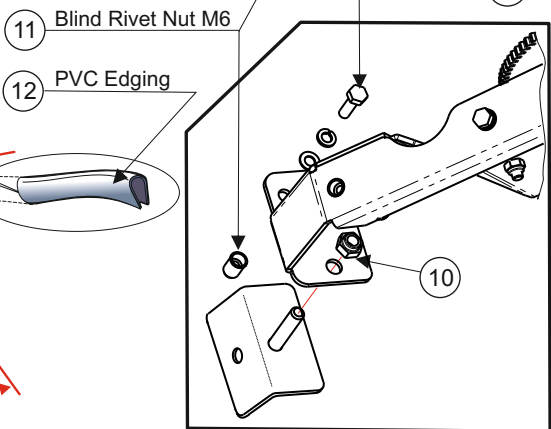
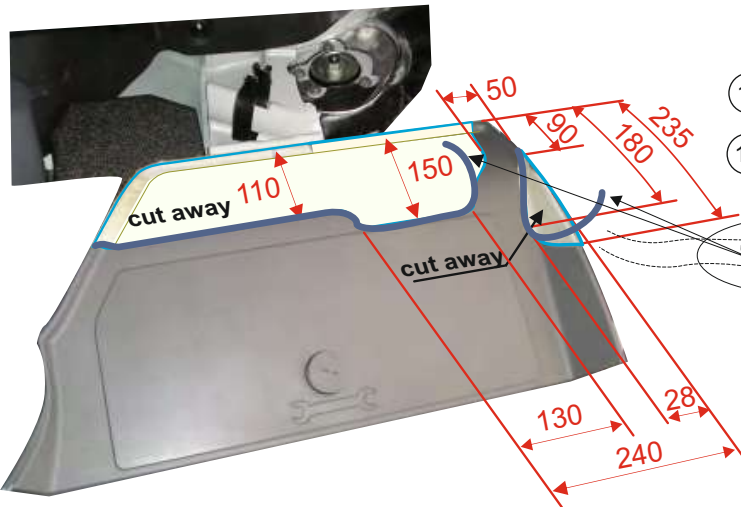
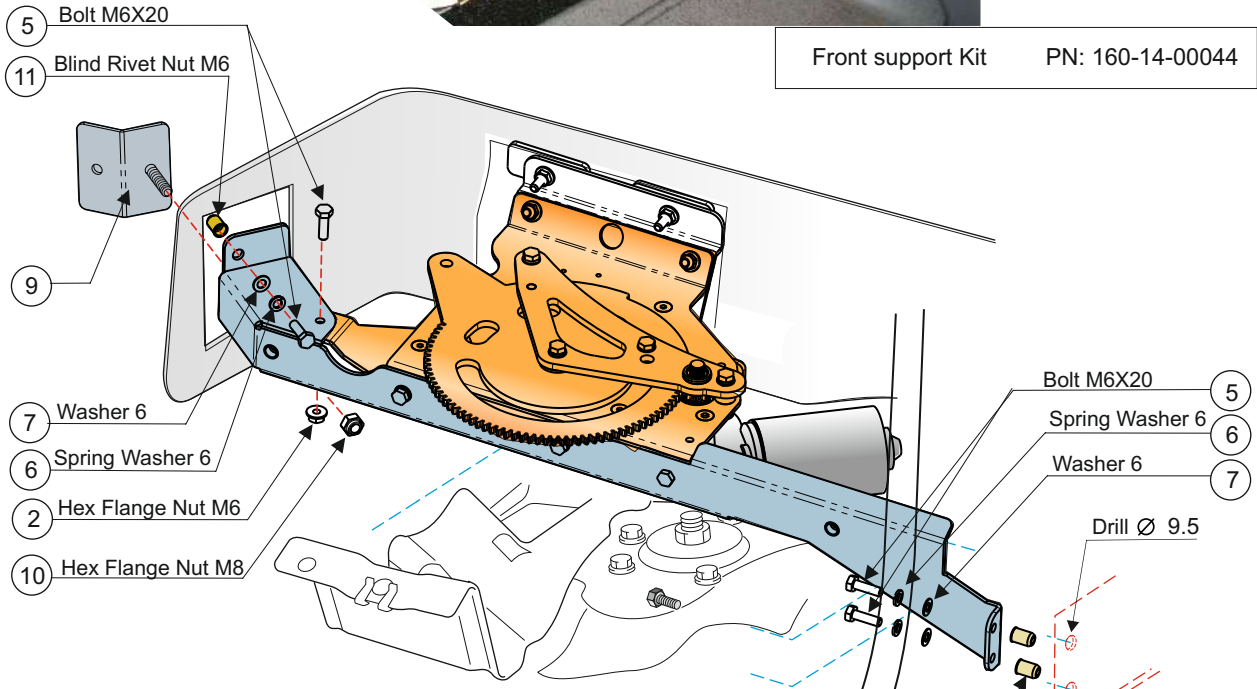
Drill 4 holes 9.5mm and install the threaded inserts (QTY. 3) (See page 5) 

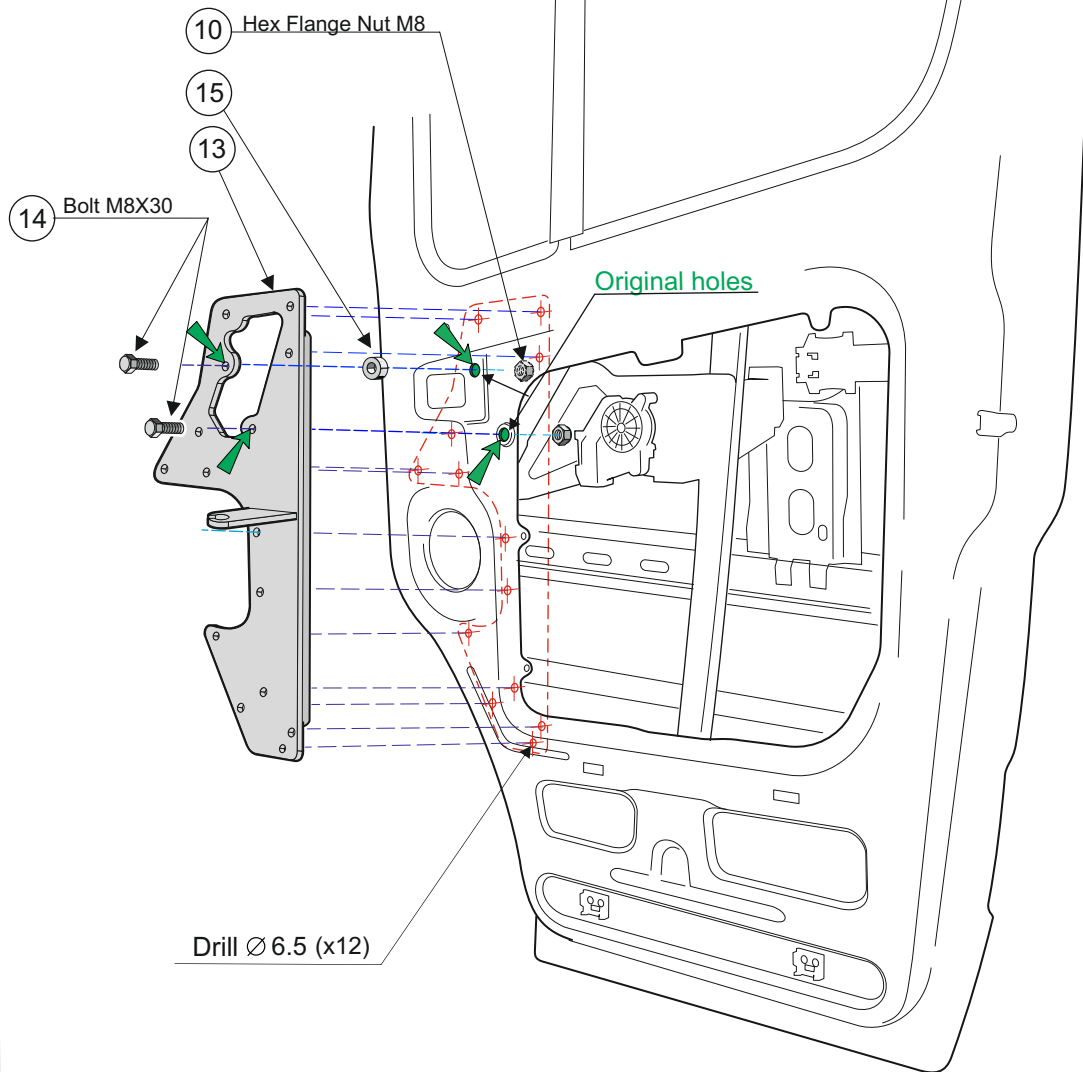
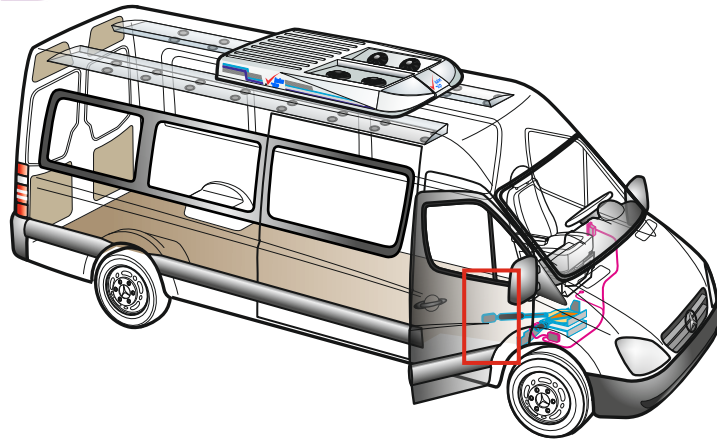


Front Support Kit PN: 160-14-00044



Front support Kit PN: 160-14-00044

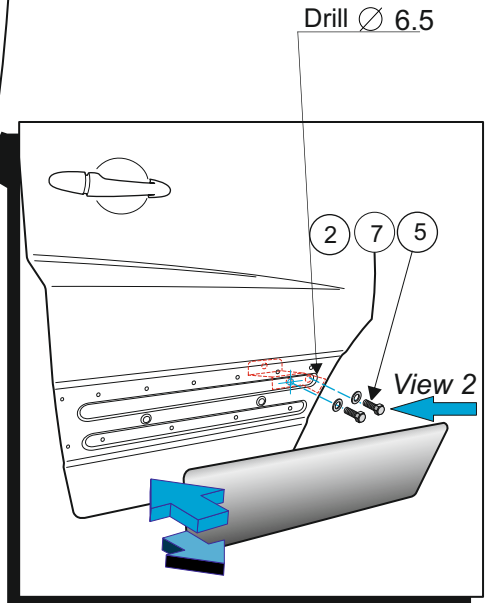
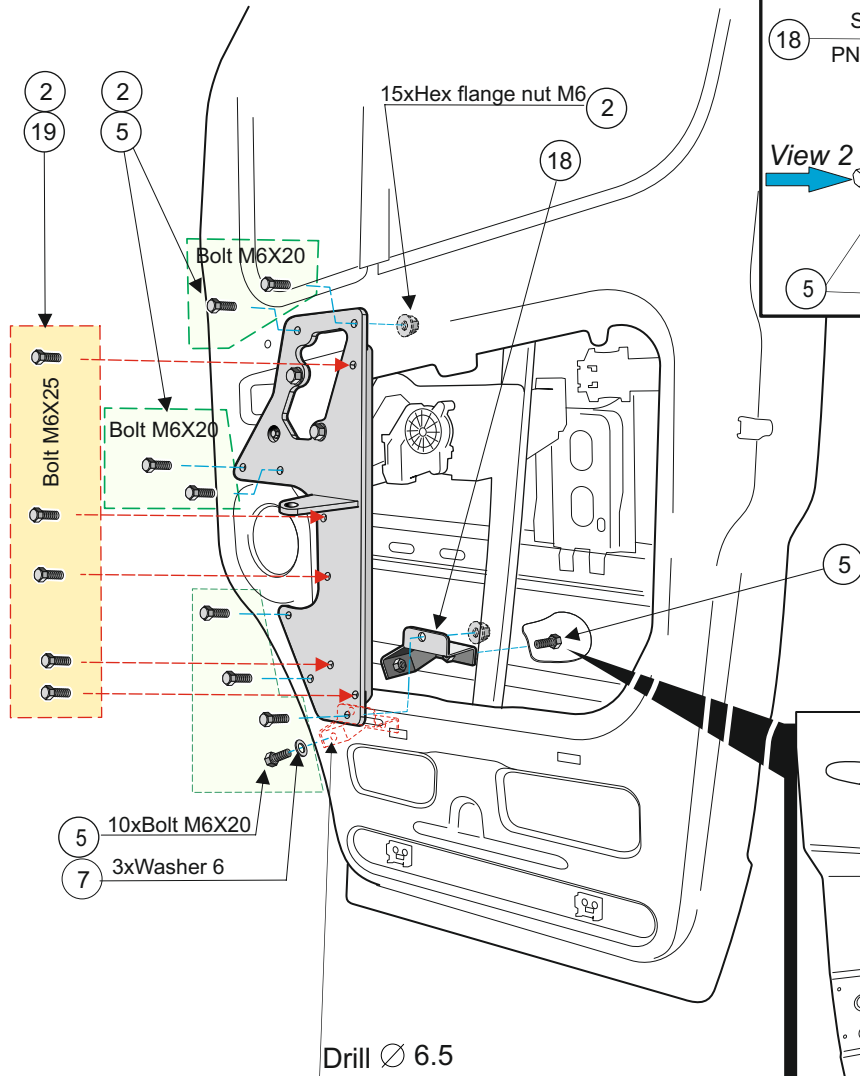
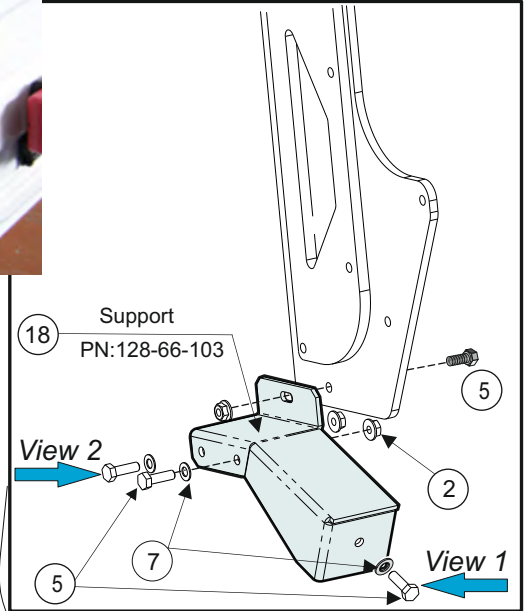




Door Bracket Kit PN: 160-14-00041



Drill hole diameter 6.5mm



Door bracket Kit PN: 160-14-00041



Figure 1

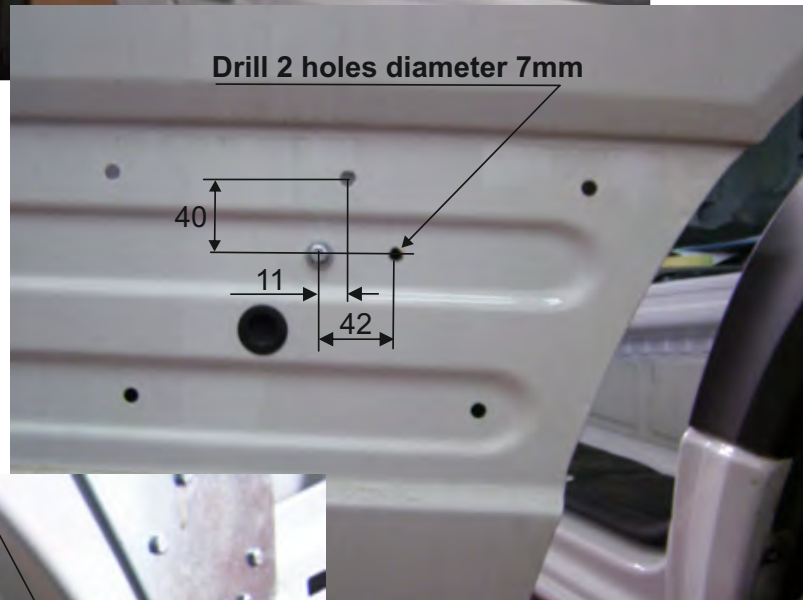
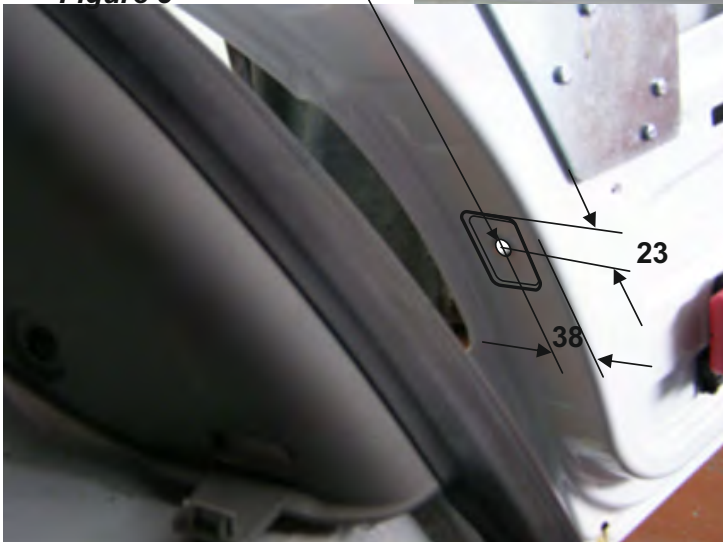
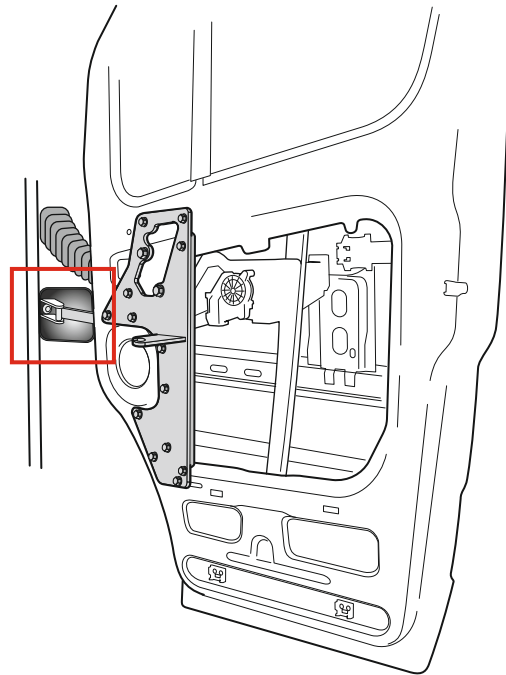
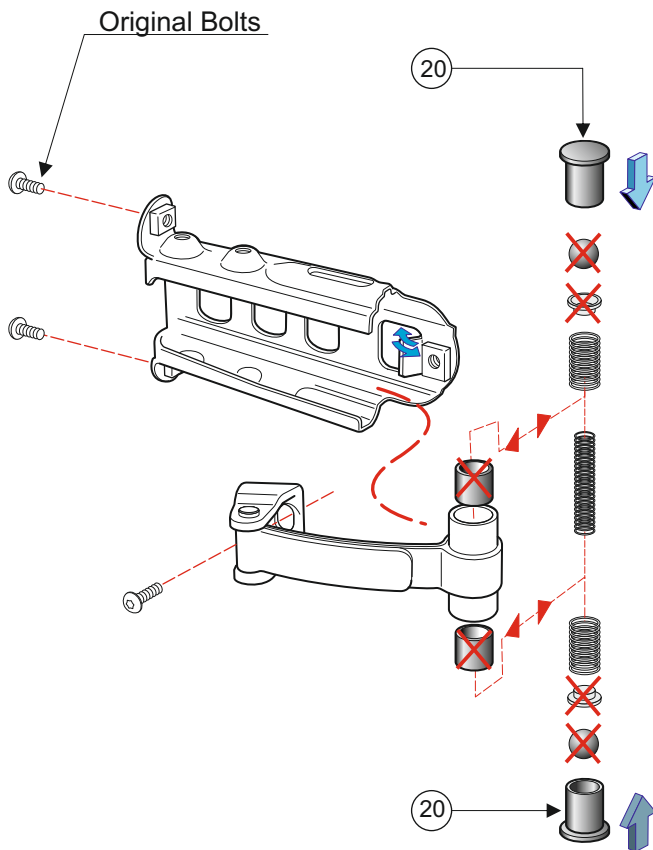
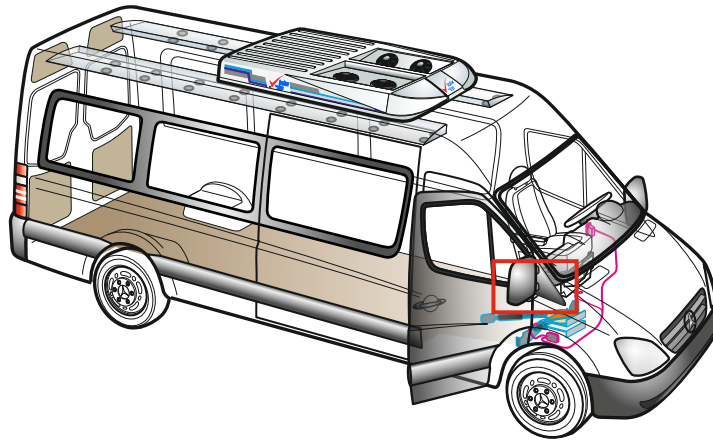


Figure 2

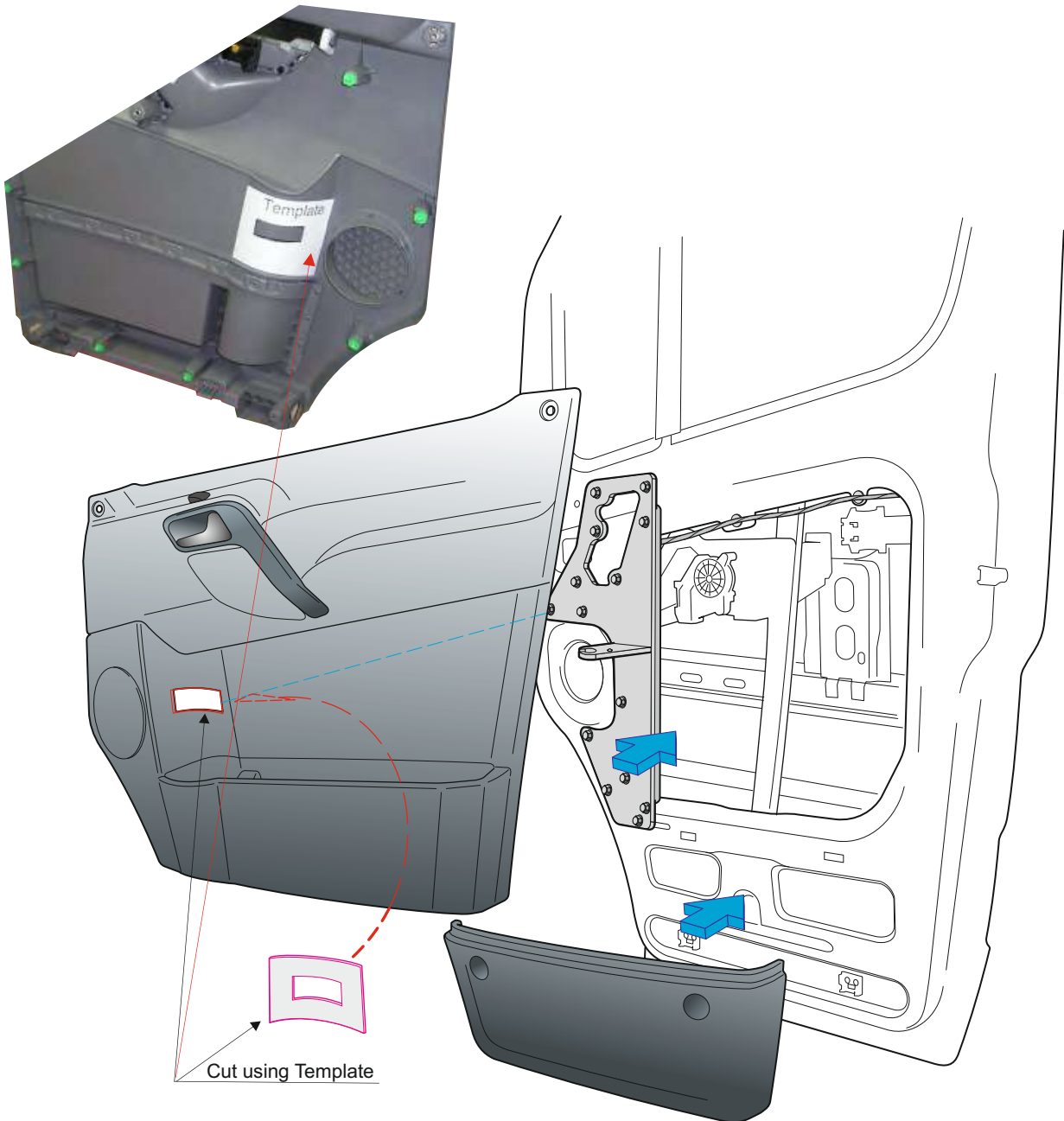
Drill hole diameter 7mm

Figure 3



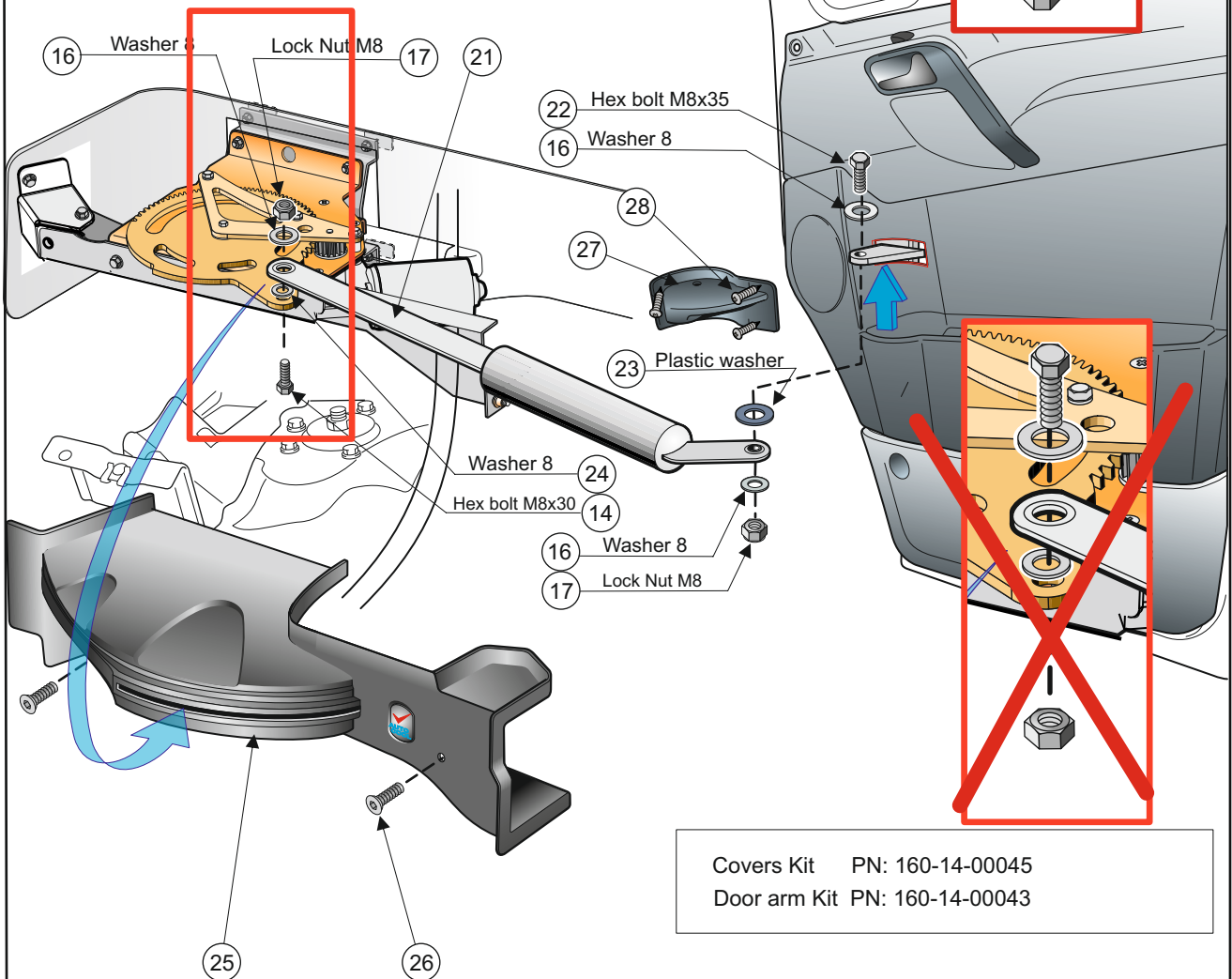
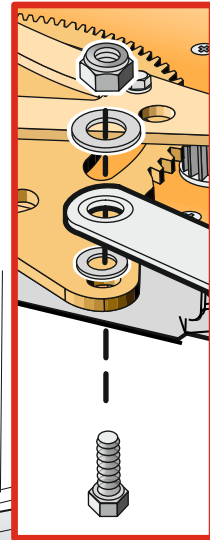


Door bracket Kit PN: 160-14-00041

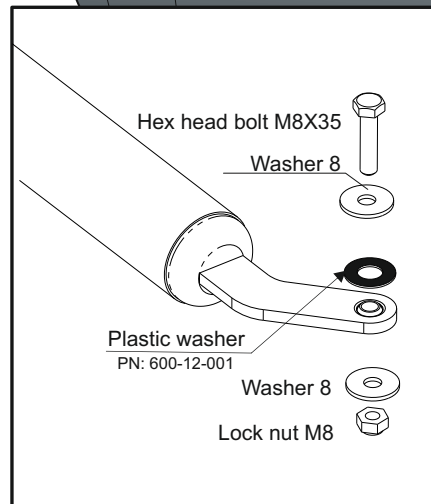
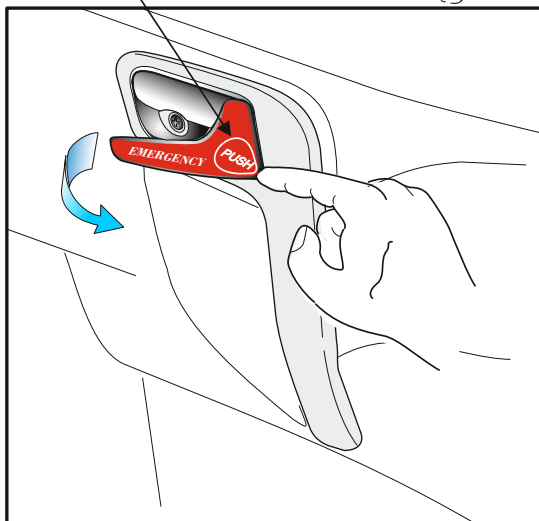
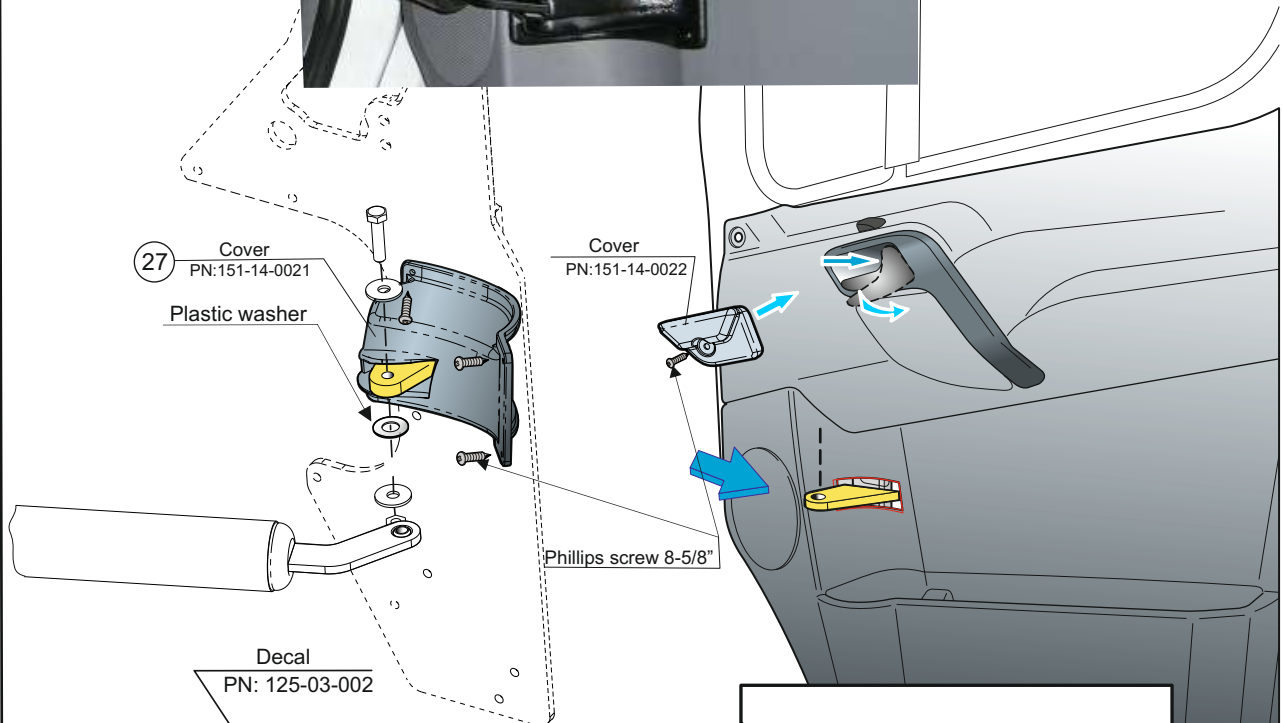


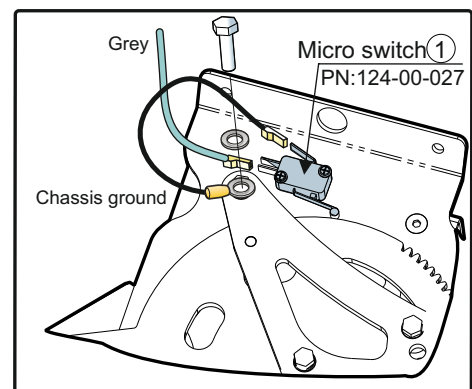
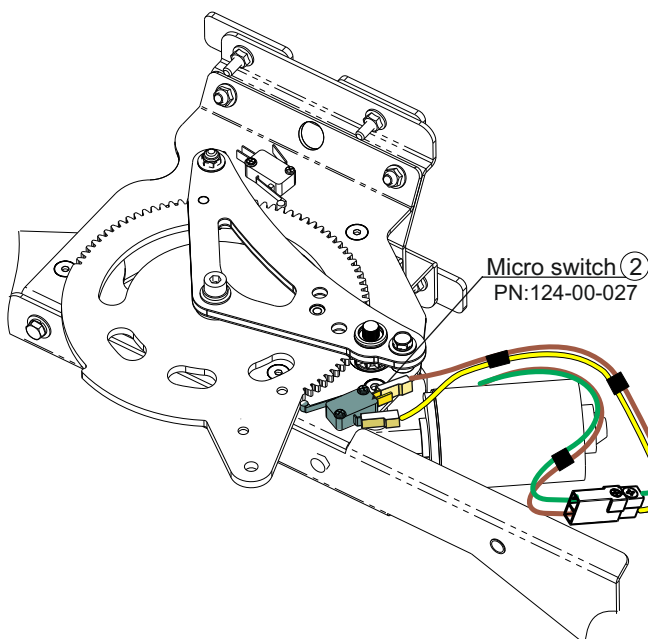
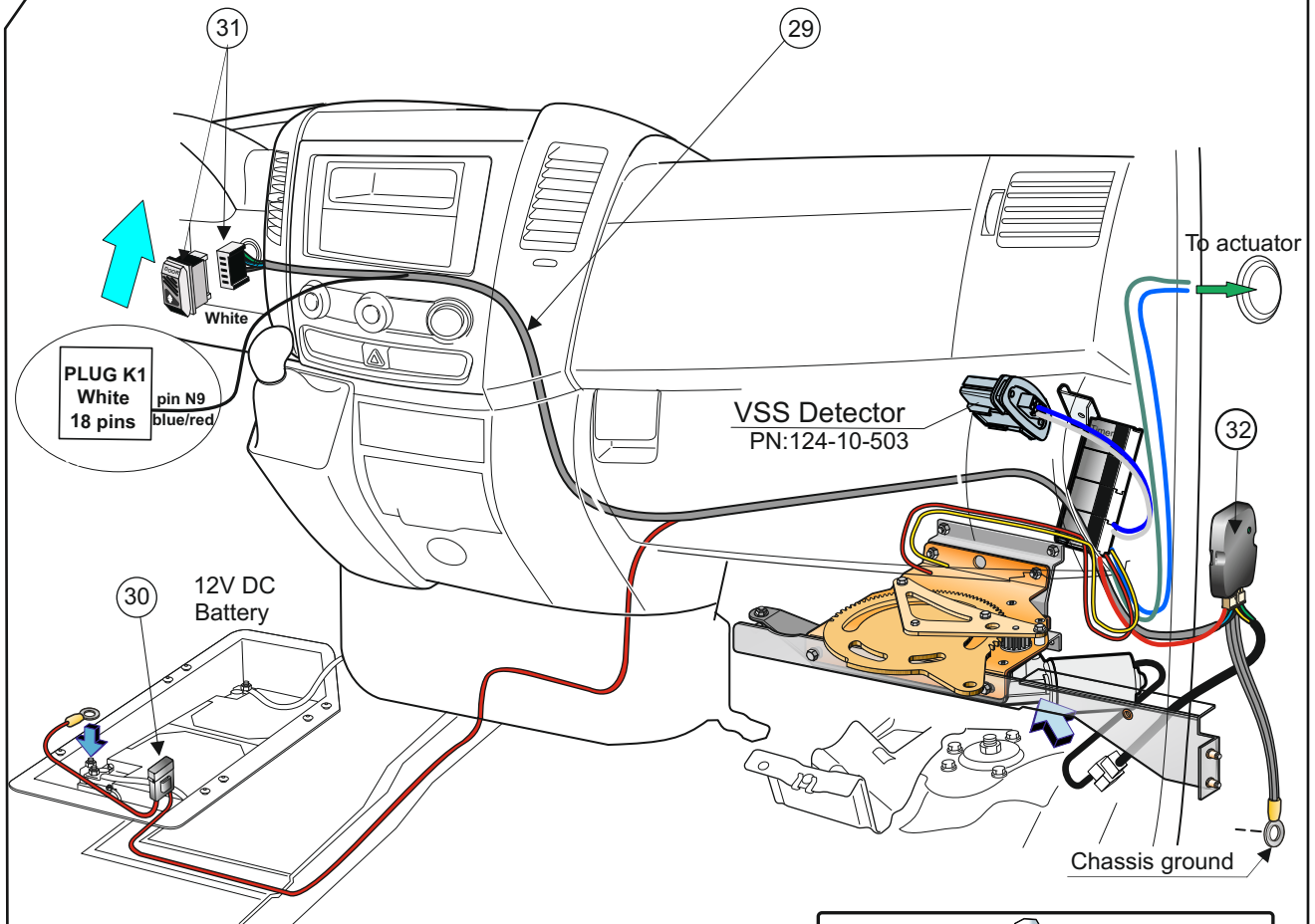


Correct

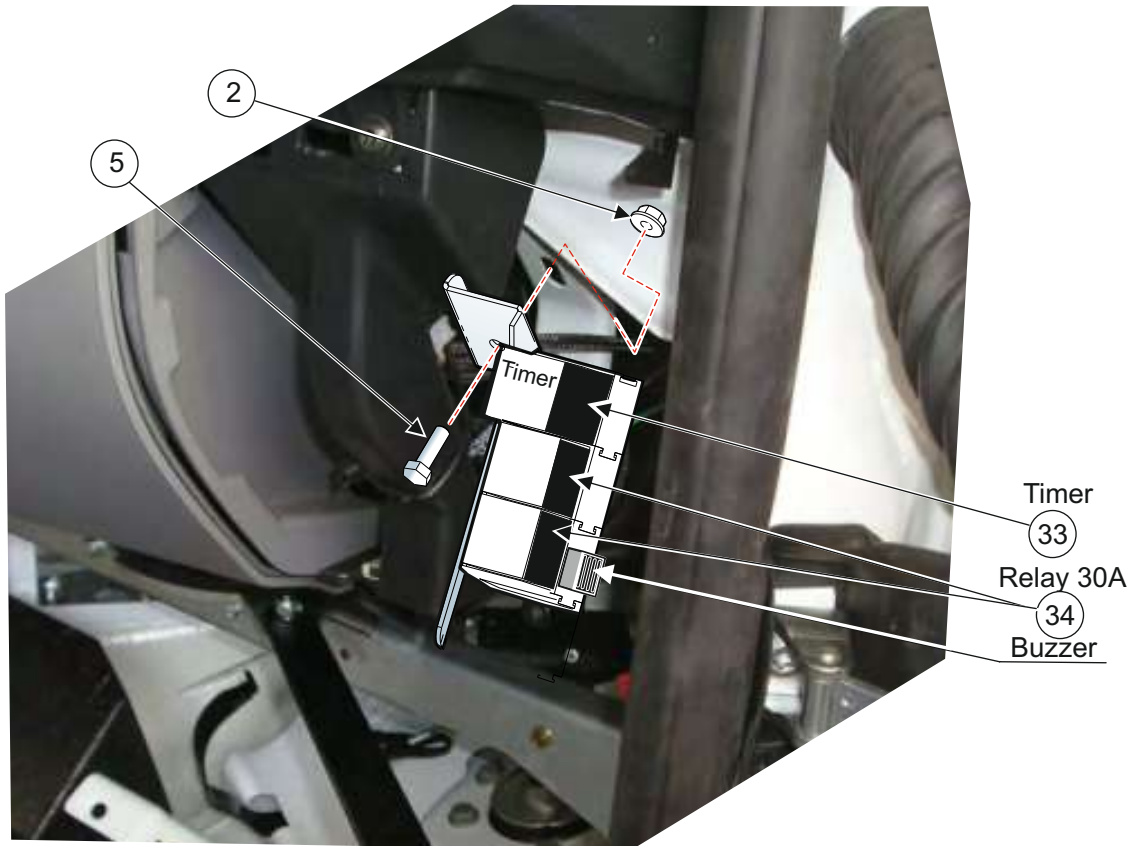
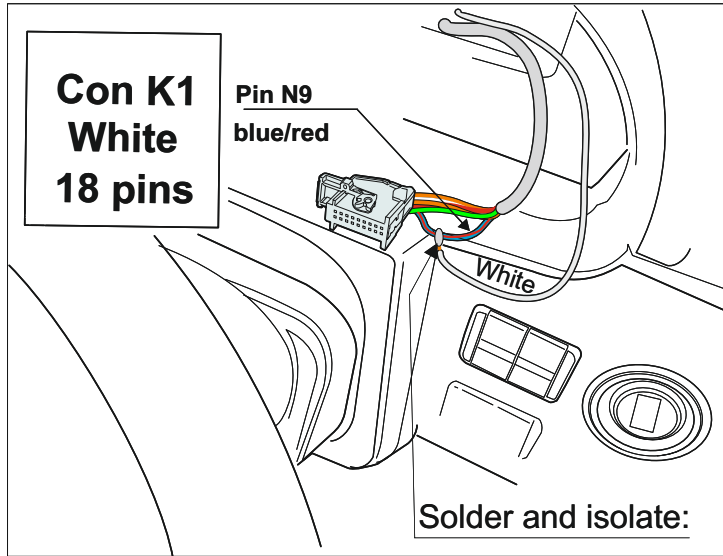


Covers Kit PN: 160-14-00045
 Door arm Kit PN: 160-14-00043





Electrical Accessories Kit PN: 160-14-0002
 Wire Harness Kit PN: 116-14-0002

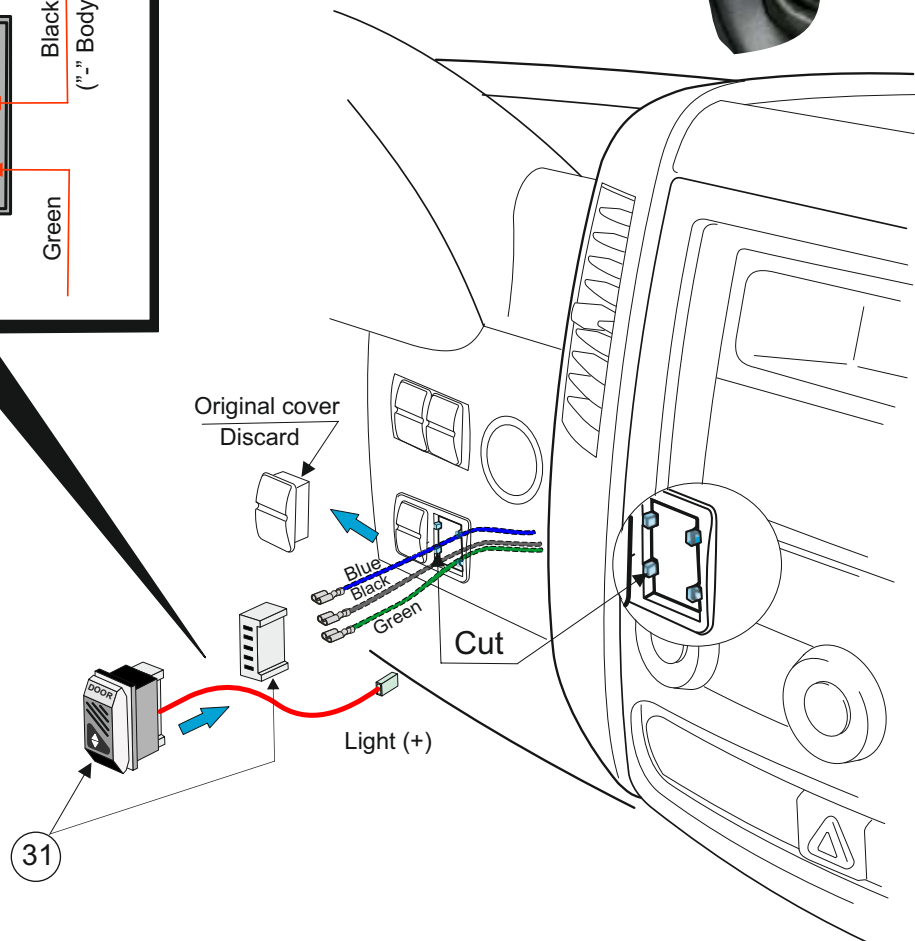
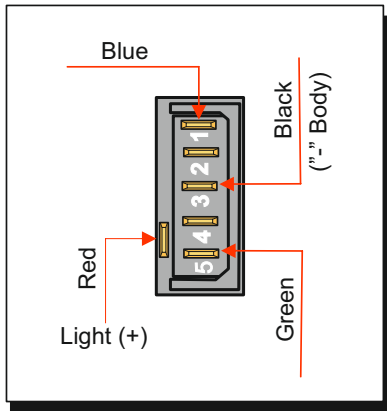


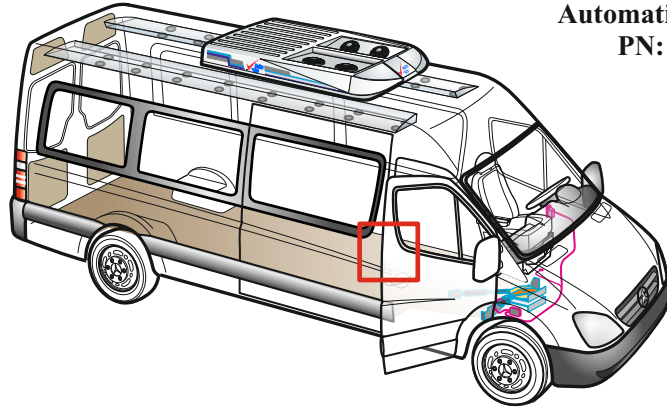




Con K1
White
18 pins

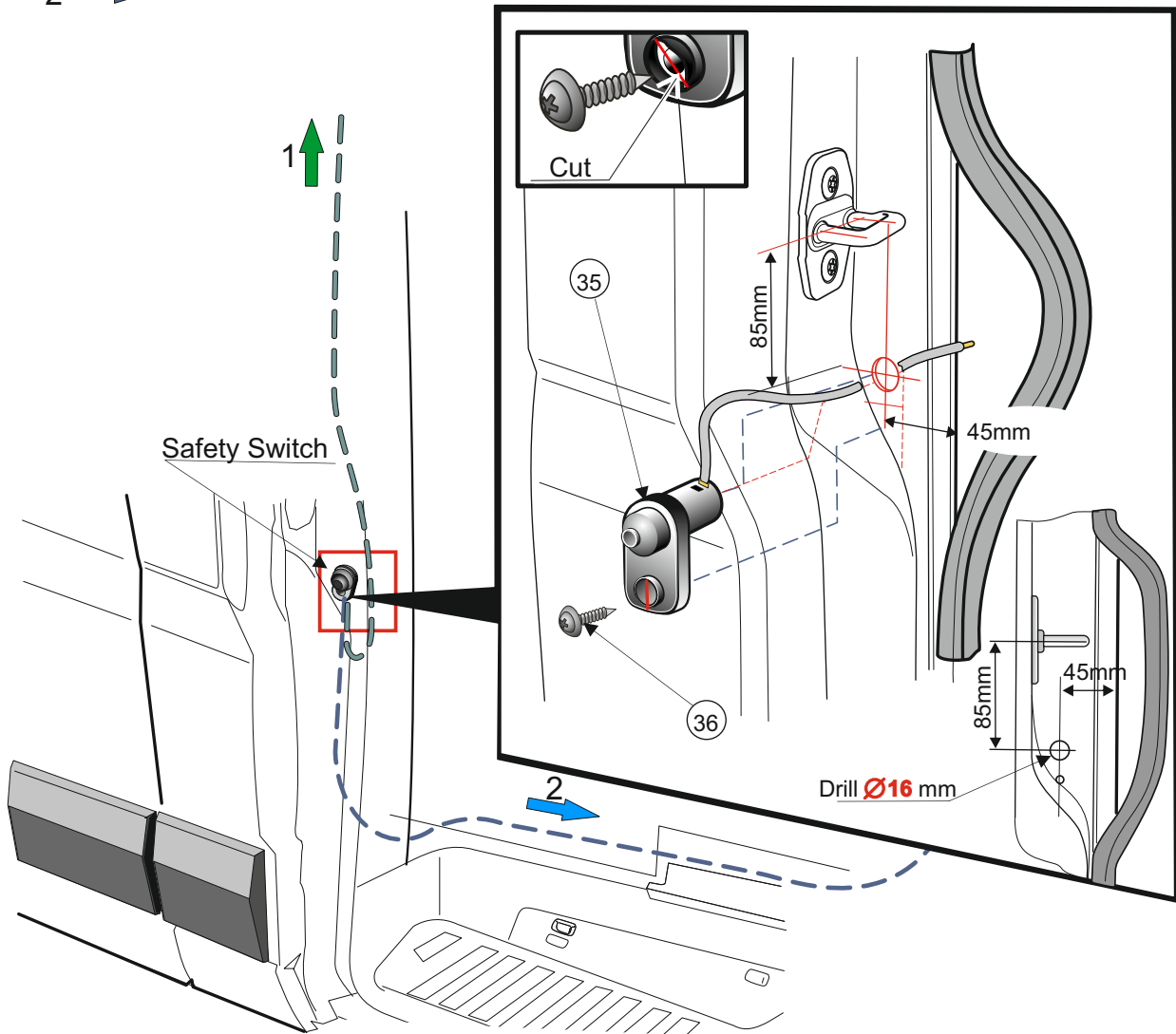
Pin N9
Blue/red



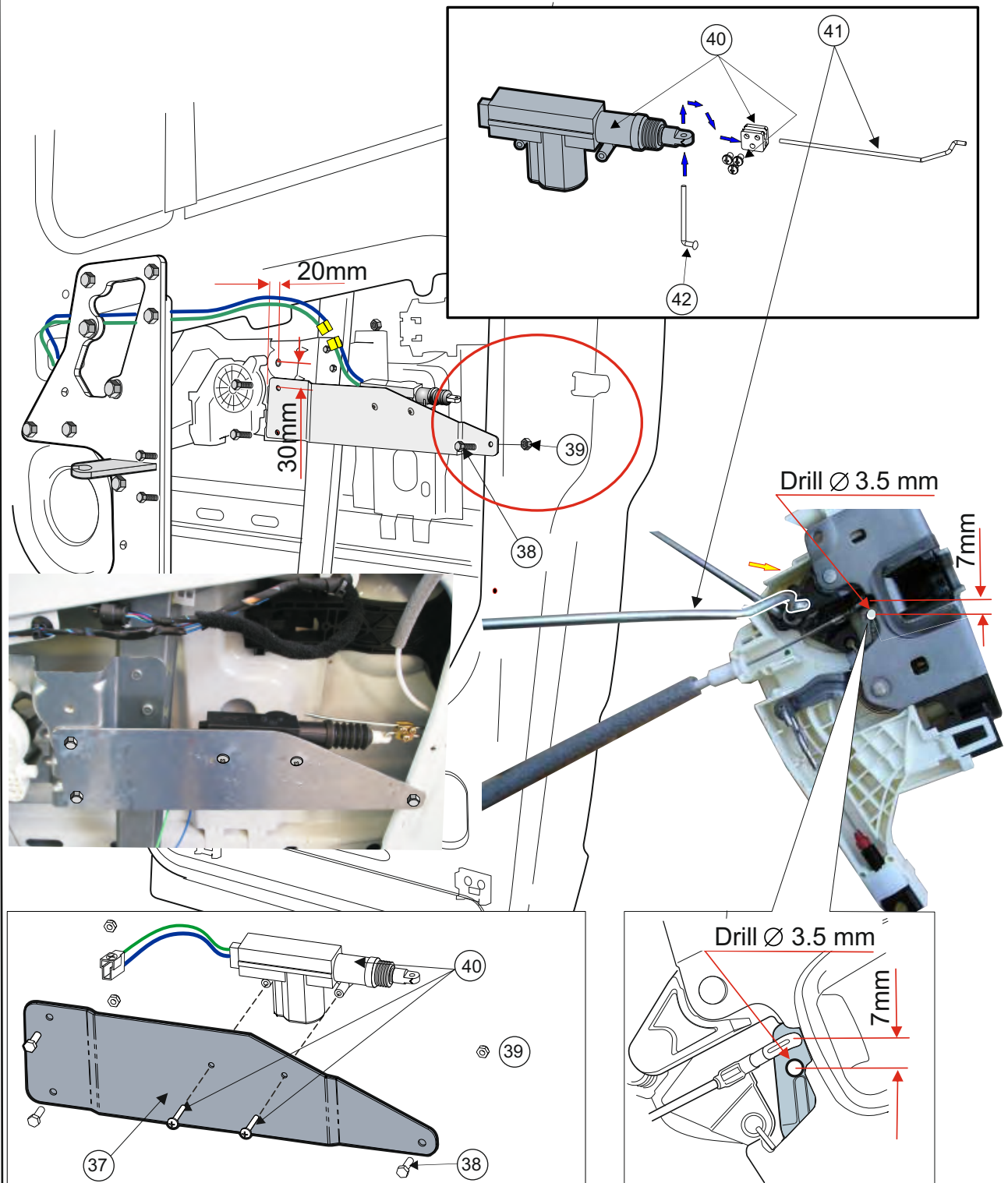




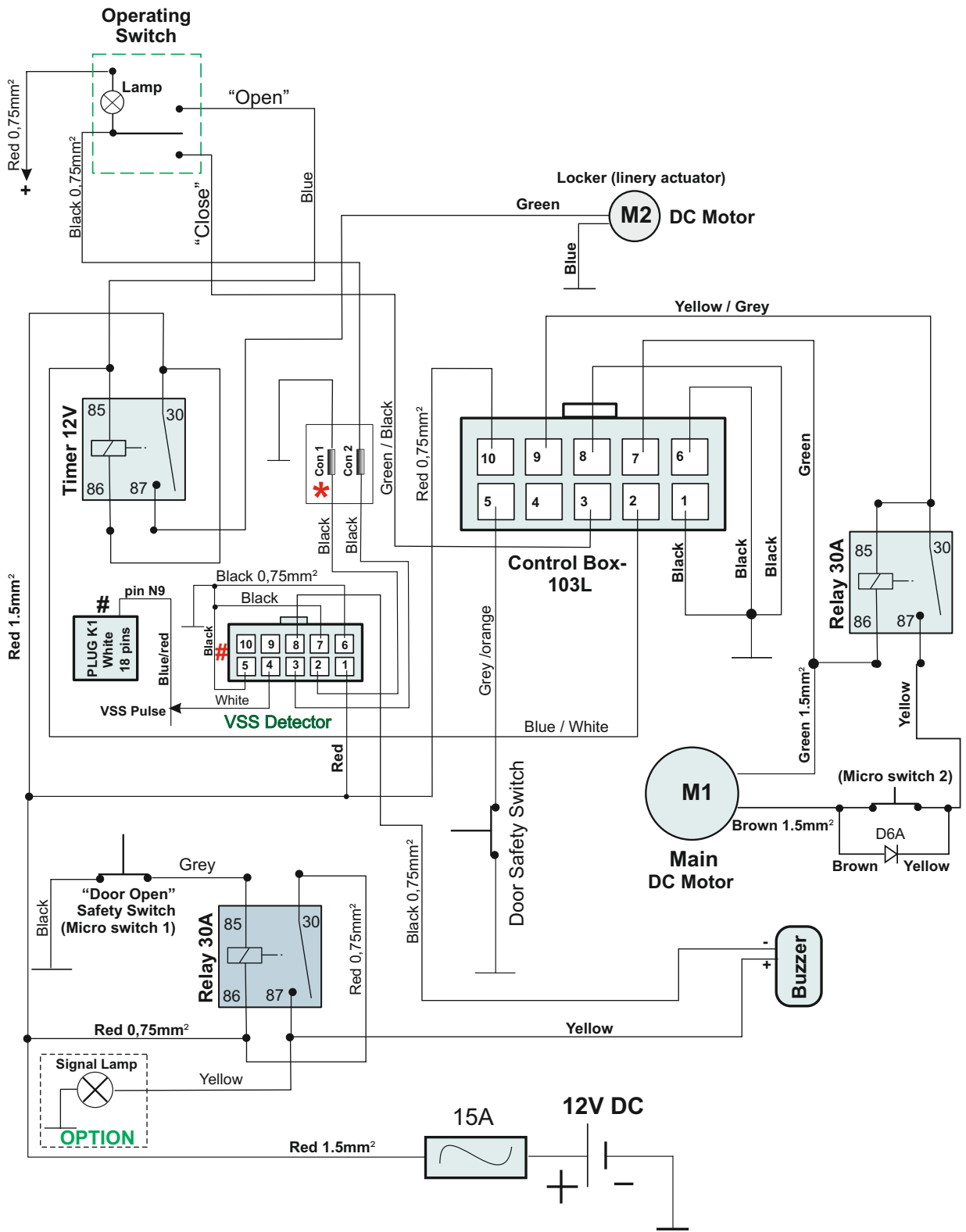
- 1  Two options for harness routing
- 2 



Electrical Accessories Kit PN:160-14-0002



Actuator Kit PN: 111-14-022





- # VSS module (option) disables door opening above 3-5 km/h
- * Con 1 and Con 2 input and output of VSS module



Mercedes Sprinter
VW Crafter
 Automatic Axial Door
 PN: 014-0002

| No | Designation | Part No | Quantity |
|----|----------------------------|----------------|----------|
| 1 | Gear-Motor Support | 111-66-200 | 1 |
| 2 | Hex Flange Nut M6 | 601-06-006 | 23 |
| 3 | Support | 111-66-010 | 4 |
| 4 | Gear-Motor ASSY | 111-14-001 | 1 |
| 5 | Bolt M6X20 | 632-06-020 | 19 |
| 6 | Spring Washer 6 | 600-04-052 | 7 |
| 7 | Washer 6 | 600-12-080 | 12 |
| 8 | Front Support | 111-66-100-1 | 1 |
| 9 | Plate and Stud | 111-14-00041 | 1 |
| 10 | Hex Flange Nut M8 | 601-08-008 | 3 |
| 11 | Blind Rivet Nut M6 | 603-02-006 | 3 |
| 12 | PVC Edging | 112-06-113 | 0.65m |
| 13 | Door Bracket ASSY | 111-14-021 | 1 |
| 14 | Bolt M8X30 | 632-08-030 | 3 |
| 15 | Spacer 25x12x010 | 501-17-100 | 1 |
| 16 | Washer 8 | 600-32-082 | 3 |
| 17 | Lock Nut M8 | 602-02-008 | 2 |
| 18 | Support | 128-66-103 | 1 |
| 19 | Bolt M6X25 | 632-06-025 | 5 |
| 20 | Spacer | 501-66-001 | 2 |
| 21 | Door Arm ASSY | 111-14-023 | 1 |
| 22 | Bolt M8X35 | 632-08-035 | 1 |
| 23 | Plastic Washer | 600-12-001 | 1 |
| 24 | Thick Washer 8 | 600-32-081 | 1 |
| 25 | Gear-Motor Cover | 153-10077-ME1B | 1 |
| 26 | Flat head screw M6X20 | 720-06-020 | 2 |
| 27 | Cover | 151-14-0021B | 1 |
| 28 | Philips Screw 8-5/8" | 646-08-058 | 3 |
| 29 | Wire Harness Kit | 116-14-002 | 1 |
| 30 | Fuse 15A | 124-10-088 | 1 |
| 31 | Operating switch | 124-00-026-1 | 1 |
| 32 | Control Unit - A/K-103L | 124-10-502 | 1 |
| 33 | Timer | 123-06-004 | 1 |
| 34 | Relay 30A | 124-R4A3 | 2 |
| 35 | Safety Switch | 124-00-040 | 1 |
| 36 | Self Drilling Screw 8-1/2" | 647-08-003 | 1 |
| 37 | Lock Actuator bracket | 128-14-022A | 1 |
| 38 | Bolt M5X15 | 632-05-015 | 3 |
| 39 | Lock Nut M5 | 602-02-051 | 3 |
| 40 | Lock Actuator | 110-11-006 | 1 |
| 41 | Lock Actuator Arm | 128-14-022B | 1 |
| 42 | Lock Actuator Arm | 128-14-022F | 1 |

Recommended Torques
[newton meter]

|  8.8 | TORQUE [Nm] |  | TORQUE [Nm] |
|---|----------------|---|----------------|
| M5 | 6.031 | M5 | 8 |
| M6 | 10.3 | M6 | 10 |
| M8 | 25.4 | M8 | 13 |



AAD – Automatic Axial Door
Operating Instructions

Prior to operating the **AAD**, verify that there are no obstacles in the way.

The door is electrically operated by a Push Button located on the dashboard. Press the button shortly to fully open or close the door.

While door is in motion, press the switch shortly to stop it.

Continuously pressing the button operates the door until released.

Safety features:

If the door encounters an obstruction while in motion:

While closing: door stops and reopens about 150 mm.

While opening: the door stops.

While the vehicle is in motion: the AAD will not be operational at speeds exceeding 5 km\h

Note 1

For safety (and as emergency operating method), it is possible (by using slight force), to open and close the door manually at all times.

Note 2

For the first start or if the **AAD** was disconnected from the vehicle battery (for example, after fuse or battery replacement), press the door button for about 5 seconds. The system will self calibrate and reset automatically.

Note 3

Electric door lock is not affected by the AAD system. It remains fully functioning.

AAD system Basic Troubleshooting

1. Door does not function in opening or closing modes.
 - Continuously depress the operating knob for a few seconds.
 - Check main fuse
 - Check connections of power terminals to the control units, motor and operation knob.
 - Check connection of the ground terminal (-)
 - Check control unit
2. Door will only function in one direction - opening or closing.
 - Check operation knob
 - Check control unit
3. Door does not close completely.
 - Check voltage of battery, start the engine
 - Check safety switch
 - Try to regulate the door lock “clamp” situated on the door frame.
4. Door does not open, although the motor is trying to move the system
 - Check locker
 - Check power terminals of locker
 - Check timer (1.5-2.0 sec)
5. Door does not automatically reverse when encountering an obstruction during the closing mode.
 - Check safety switch
 - Check control unit
6. Door can be operated although vehicle is in motion.
 - Check connections to the VSS unit.
 - Check VSS unit.
7. Buzzer does not operate, although door is open and the vehicle is in motion.
 - Check buzzer

Paragraphs 6 & 7 appropriate only for systems including the VSS control unit.

Important information

To commence regular operation after the AAD has been disconnected from power (Battery change, Faulty fuse etc.) reset the system by depressing the operation knob for a few seconds.