

FOR RECYCLING PURPOSES ONLY

Disassembly Instructions

Change-over switches OT1000–1600_C

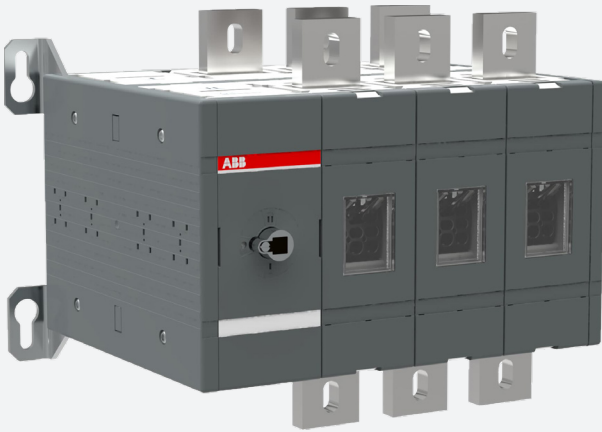


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Important information

This document shows the disassembly process of OT1000-1600_C change-over switches. Accessories, such as shafts, clamps, shrouds, neutral links and auxiliary contacts are not included. **Note! This document is for recycling purposes only.**

Safety Notes

Before starting the disassembly process it is mandatory to put the change-over switch in open position.

Disassembly of change-over switches must be performed by qualified and skilled personnel in the electrical field (IEV 195-04-01: person with relevant education and experience to enable him or her to perceive risks and to avoid hazards which electricity can create) and having a detailed knowledge of change-over switches.

Disassembly must be done in an ergonomic workspace which can ensure the protection of the person doing the disassembling.

Applicable national legislation and international standards in force at the time of the disassembly of the change-over switches must be taken into account in addition to the prescriptions illustrated in this document.

ABB declines any responsibility for injury to people or damage to property resulting from a failure to comply with the instructions set out in this document and with any applicable safety standard.

Personal Protective Equipment (PPE)

When doing the disassembling following safety Personal Protective Equipment (PPE) must be worn:

Glasses



Gloves



Safety shoes



Protective clothes



Tools

The disassembly process requires the use of tools (e.g. screwdriver, torx key, pliers). Tools to be used are specified inside each phase of the disassembly process.

Disassembly process

For each phase of the disassembly process the following information is provided:

- Part/parts to be disassembled (title of the phase)
- Tools to be used
- Description of actions to be performed
- Pictures showing actions to be performed
- List, quantity and picture of disassembled parts with an indication about separate treatment (when applicable)
- In case of potential hazards signal below is reported:



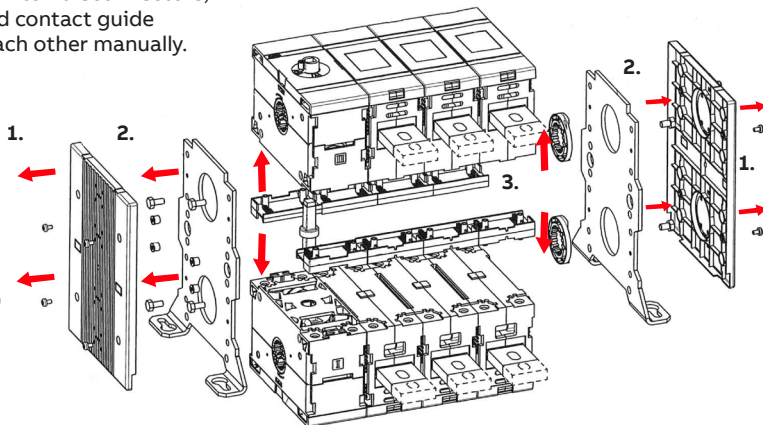
Disassembly of the change-over switch

Phase 1 to 3 – End plates, mounting plates and switch-disconnectors

1. Use a torx key (size 30) to unscrew the 8 screws fixing the end plates to the switch-disconnectors.

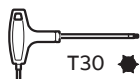
2. Use a socket wrench (socket 13 mm) to unscrew the 8 screws fixing the mounting plates to the switch-disconnectors. Remove the 4 lockparts from the mounting plate.

3. Separate the switch-disconnectors, interm covers and contact guide supports from each other manually.



Tools

Torx key (size 30)

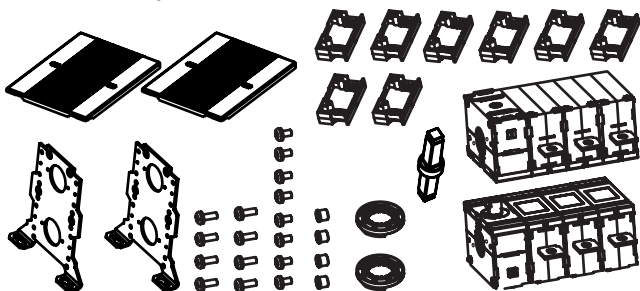


Socket wrench



socket 13 mm

Disassembled parts

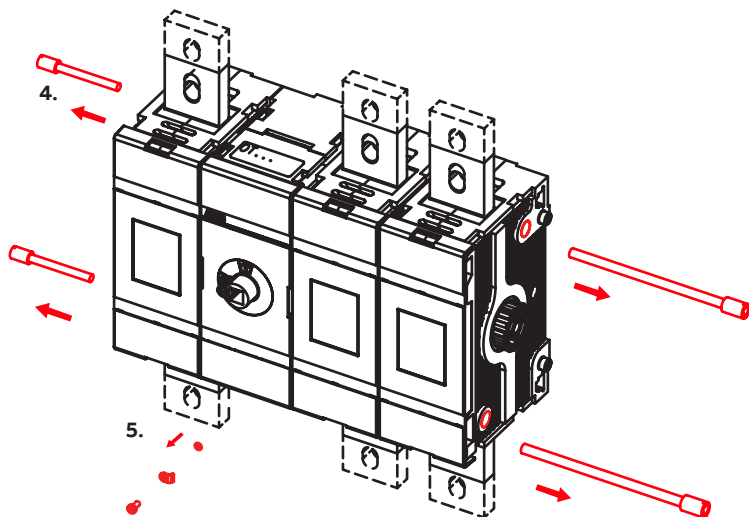


- 8 screws
- 4 screws
- 4 screws
- 4 lockparts
- 2 end plates R4-5
- 2 mounting plates
- 2 contact guide supports
- 6 covers R4
- 2 cover mechanisms R4
- 2 switch-disconnectors
- 1 joint

Phase 4 & 5 – Stud screws and shaft locking

4. Use a flat screwdriver to unscrew the stud screws fixing the poles to the mechanism.

5. Use a flat screwdriver to remove shaft locking.

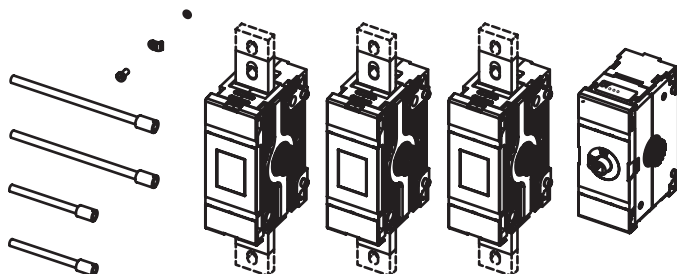


Tools

Flat screwdriver



Disassembled parts



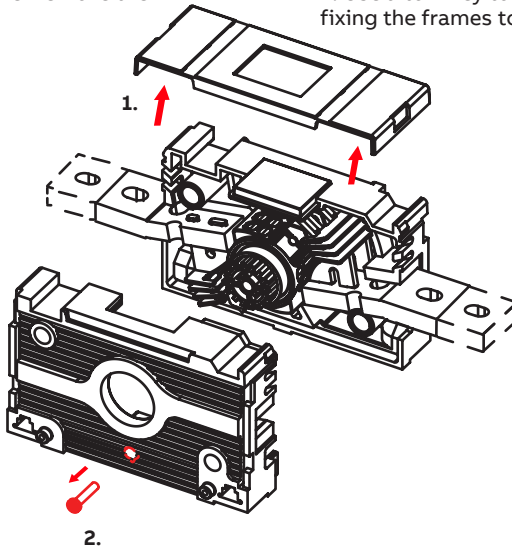
- 2-4 stud screws
- 1 mechanism
- 1-4 poles
- Lock spring
- Slot screw
- Steel locking washer
- O-ring

Disassembly of the pole

Phase 1 & 2 – Cover and frame

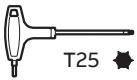
1. Use a flat screwdriver remove the cover.

2. Use a torx key to unscrew the screw fixing the frames to each other.



Tools

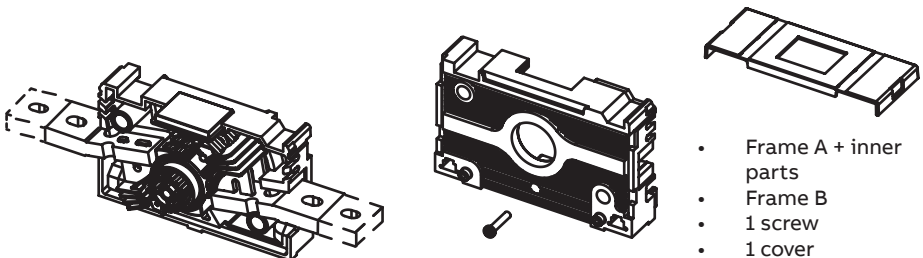
Torx key (size 25)



Flat screwdriver

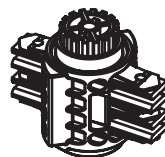
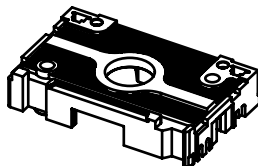
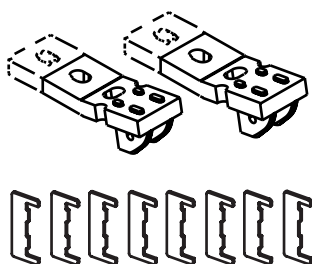
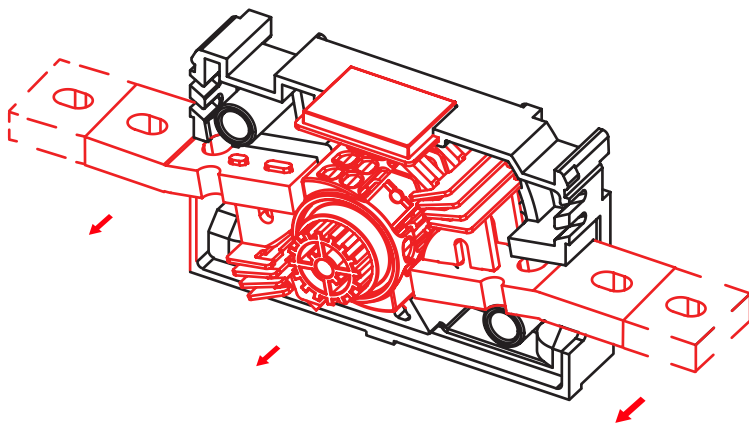


Disassembled parts



Phase 3 – Inner components of the pole

Remove rest of the components (arc plates, roll with knife structure, fixed contacts and window) from frame A manually.

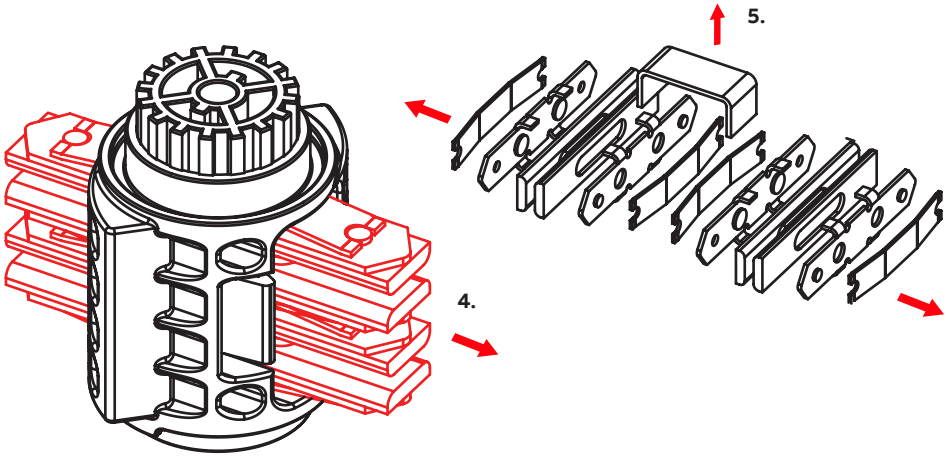


- Frame A
- Roll + knife structure
- Window
- 8 arc plates
- 2 fixed contacts

Phase 4 & 5 – The contact construction

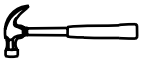
4. Remove the knife structure from the roll with a hammer.

5. Separate contact knives, contact springs and contact irons from each other by removing the guide support of spring.

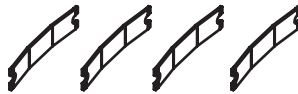
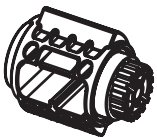


Tools

Hammer



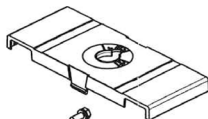
Disassembled parts



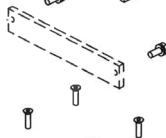
- Roll
- 4 contact knives
- 4 contact springs
- 4 contact irons
- Guide support of spring

Disassembly of the mechanism

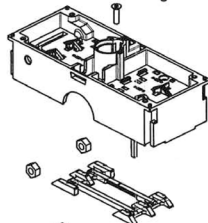
1. Remove the cover with the help of a flat screwdriver.



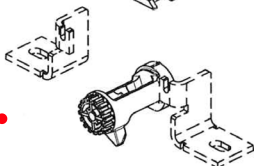
2. Unscrew the 4 screws with a torx key to remove the frame.



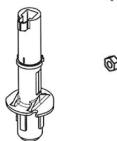
3. Remove hexnuts and contact guide support.



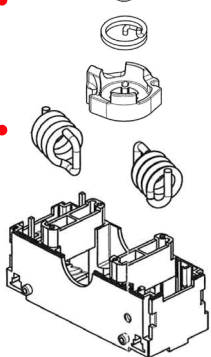
4. Remove the lever.



5. Remove pipesaft, lever and rhythm spring.



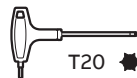
6. Remove the springs using pliers.



Note! Pay special attention to tensioned springs. Use personal protective equipment.

Tools

Torx key (size 20)



Flat screwdriver



Pliers



Disassembled parts

- Frame
- 2 springs
- 4 steel hex nuts
- Lever
- Pipeshaft
- Lever
- Rhythm spring
- Frame
- 4 screws
- Cover
- Contact guide support

Component list

Change-over switch OT1000–1600_C

Component name	Quantity	Material(s)	Weight (g/pc)
OT1000–1600_C1	1	See component list below	18548,3
OT1000–1600_C2	1	See component list below	18548,7
Joint	1	Steel	147,9
Cover R4	6	Polycarbonate	22,1
Cover mechanism R4	2	Polycarbonate	21,7
Mounting plate	2	Steel	14,3
Lockpart	4	Polyamide	0,8
Steel hex screw	4	Steel	11,1
Steel hex screw	4	Steel	11,7
Lockpart	4	Polyamide	0,8
Contact guide support	2	Polyamide	15,6
End plate R4-5	2	Polycarbonate	170,5
Screw	8	Steel	2,9
Lock spring	1	Steel	0,2
Slot screw	1	Chromium steel	2,0
Steel locking washer	1	Steel	0,4
O-ring	1	Rubber	0,0

Switch-disconnector OT1000–1600_C1

Component name	Quantity	Material(s)	Weight (g/pc)
Mechanism	1	See component list	2075,4
Pole	3-4	See component list	5432,2
Stud screw	2-4	Steel	37,0-110,0

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Switch-disconnector OT1000-1600_C2

Component name	Quantity	Material(s)	Weight (g/pc)
Mechanism	1	See component list	2075,8
Pole	3-4	See component list	5432,2
Stud screw	2-4	Steel	37,0-110,0

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Pole

Component name	Quantity/pole	Material(s)	Weight (g/pc)
Frame A	1	Polyest-resin	657,0
Frame B	1	Polyest-resin	698,0
Contact knife	4	Copper	85,8
Contact iron	4	Steel	35,9
Contact spring	4	Chromium steel	15,3
Guide support of spring	1	Chromium steel	41,9
Roll	1	Polyarylamide	93,6
Arc plate	8	Steel	14,0
Fixed contact	2	Copper	1607,1
Window	1	Polycarbonate	10,8
Cover	1	Polycarbonate	47,3
Screw	1	Steel	9,2

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Mechanism

Component name	Quantity	Material(s)	Weight (g/pc)
Frame	1	Polyamide	487,0
Frame	1	Polyamide	207,0
Cover	1	Polycarbonate	60,6
Pipeshaft	1	Zinc alloy	235,0
Lever	1	Zinc alloy	315,2
Lever	1	Zinc alloy	365,3
Spring	2	Steel	169,1
Rhythm spring	1	Steel	39,0
Steel hex nut	4	Steel	5,4
Screw	4	Chromium steel	1,7

Recycling information in accordance with the WEEE

The product is marked with the wheelie bin symbol. It indicates that at the end of life the product should enter the recycling system.

You should dispose of it separately at an appropriate collection point and not place it in the normal waste stream.

The figure below shows the wheelie bin symbol indicating separate collection for electrical and electronic equipment (EEE).



The horizontal bar underneath the crossed-out wheelie bin indicates that the equipment has been manufactured after the Directive came into force in 2005.

The wheelie bin symbol is added to the type designation label of the product since 2017.



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