

ROBOTICS

Product manual, spare parts

CRB 15000



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Product manual, spare parts

CRB 15000

OmniCore

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Revision: G

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Original instructions.

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Overview of this manual

About this manual

This manual contains spare parts for:

- CRB 15000 and all its variants.

Usage

This manual shall be used as a complement to the product manual for CRB 15000 during:

- maintenance work
- repair work.

Who should read this manual?

This manual is intended for:

- maintenance personnel
- repair personnel.

Prerequisites

Maintenance/repair/installation personnel working with an ABB Robot must:

- be trained by ABB and have the required knowledge of mechanical and electrical installation/repair/maintenance work.

References

Documentation referred to in the manual, is listed in the table below.

Document name	Document ID
<i>Product manual - CRB 15000</i>	<i>3HAC077389-001</i>
<i>Circuit diagram - CRB 15000</i>	<i>3HAC081041-003</i>

Revisions

Revision	Description
A	First edition.
B	Published in release 21B. The following updates are made in this revision: <ul style="list-style-type: none"> • Updated spare part number for axis-3 joint unit.
C	Published in release 22A. The following updates are made in this revision: <ul style="list-style-type: none"> • Added laser scanners.
D	Published in release 23A. The following updates are made in this revision: <ul style="list-style-type: none"> • Minor corrections.
E	Published in release 23B. The following updates are made in this revision: <ul style="list-style-type: none"> • Added new variants CRB 15000-10/1.52 and CRB 15000-12/1.27. • Removed brake release units as they are discontinued. • Updated spare part numbers of Cable harness, base socket and Cable harness, transition joint-5 and joint-6 for CRB 15000-5/0.95. • Removed spare part Cable bracket 3HAC075828-001 for CRB 15000-5/0.95.

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Overview of this manual

Continued

Revision	Description
F	Published in release 23D. The following updates are made in this revision: <ul style="list-style-type: none">Renamed spare part "axis-6 inner flange" to "tool flange adapter" for consistency.
G	Published in release 24A. The following updates are made in this revision: <ul style="list-style-type: none">Updated spare part number of axis-4 cover to 3HAC086166-001.Added hybrid floor cable 3 m and drag chain cable 15 m.

1 Definition of spare part levels

Spare part level

ABB spare parts are categorized into two levels, L1 and L2. Always check the part level before conducting a service work on a spare part.

- L1 spare parts

The L1 parts can be replaced in the field. The maintenance and replacement instructions given in the related product manuals must be strictly followed. If there are any problems, contact your local ABB for support.

- L2 spare parts

To replace the L2 parts require specialized training and might need special tools. Only ABB field service personnel or qualified personnel trained by ABB can replace L2 parts.

- L3 spare parts

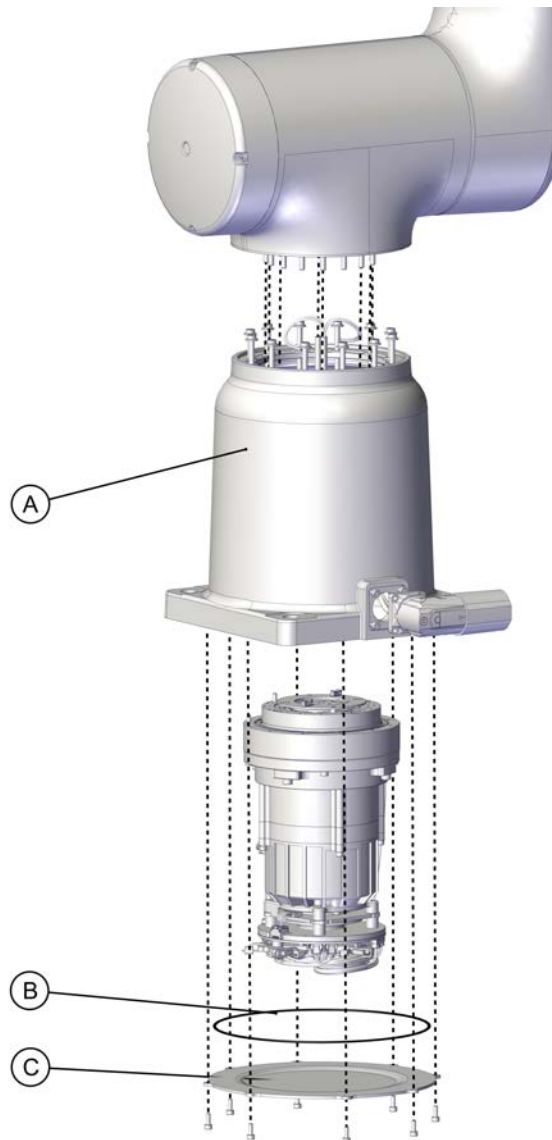
L3 spare parts shall only be replaced or repaired by qualified ABB service technician with knowledge of the application due to risk of injury to equipment. Improper installation may void warranty.

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2 Base and base parts

2.1 CRB 15000-5/0.95

Spare part list



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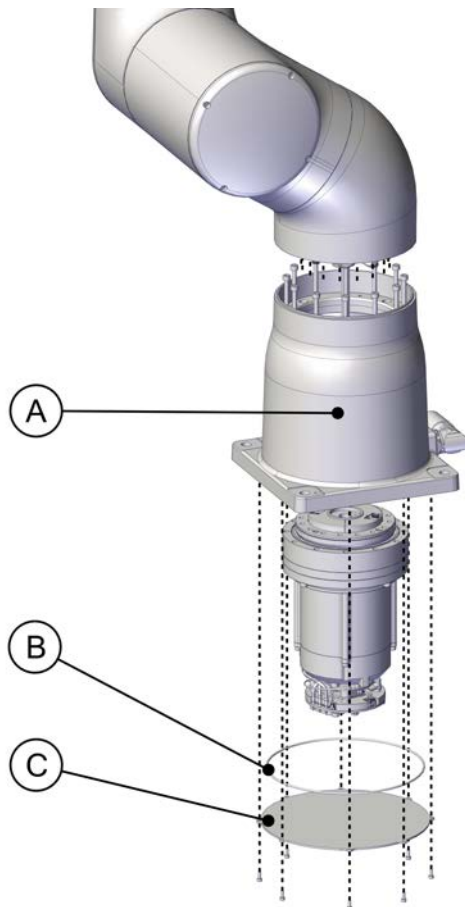
	Spare part	Spare part number	Level
A	Base	3HAC073922-001	L2
B	O-ring	3HAB3772-64	L1
C	Base cover	3HAC073973-001	L1

2 Base and base parts

2.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

2.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list



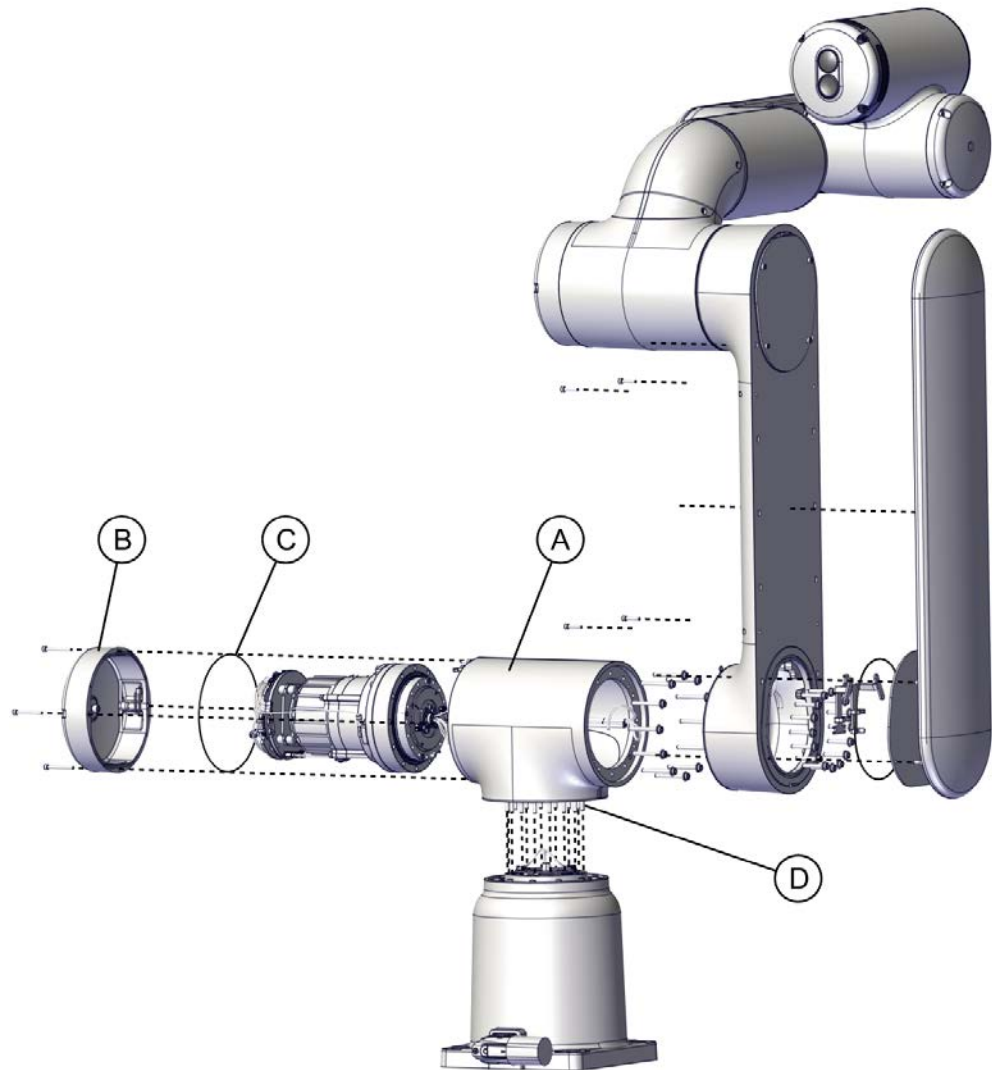
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	Spare part	Spare part number	Level
A	Base	3HAC081047-001	L2
B	O-ring	3HAC061327-072	L1
C	Base cover	3HAC081048-001	L1

3 Swing and swing parts

3.1 CRB 15000-5/0.95

Spare part list



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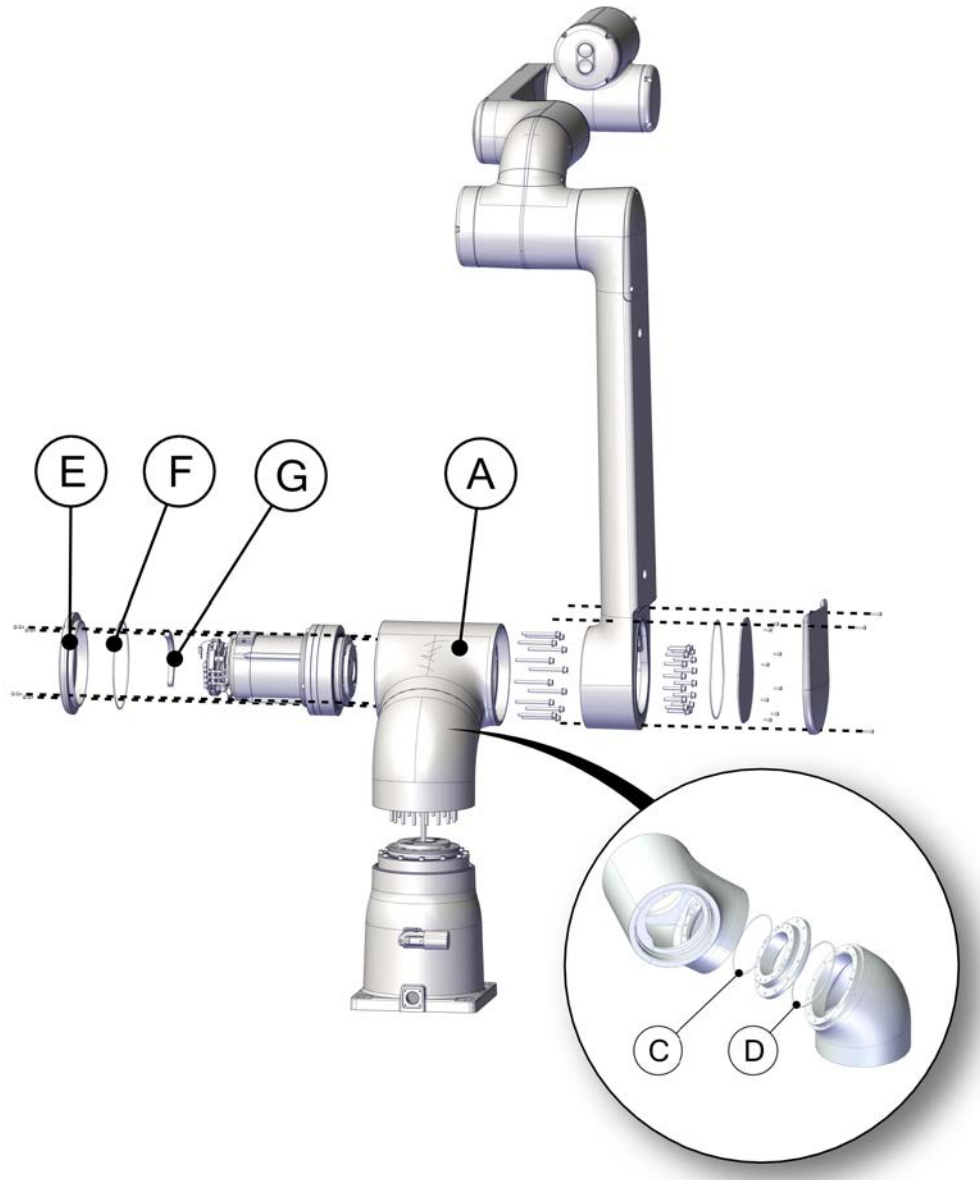
	Spare part	Spare part number	Level
A	Swing	3HAC073933-001	L2
B	Cover for axis 2/3	3HAC073957-001	L1
C	O-ring	3HAC061327-047	L1
D	Hex socket head cap flange screw	3HAB3412-425	L2

3 Swing and swing parts

3.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

3.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list



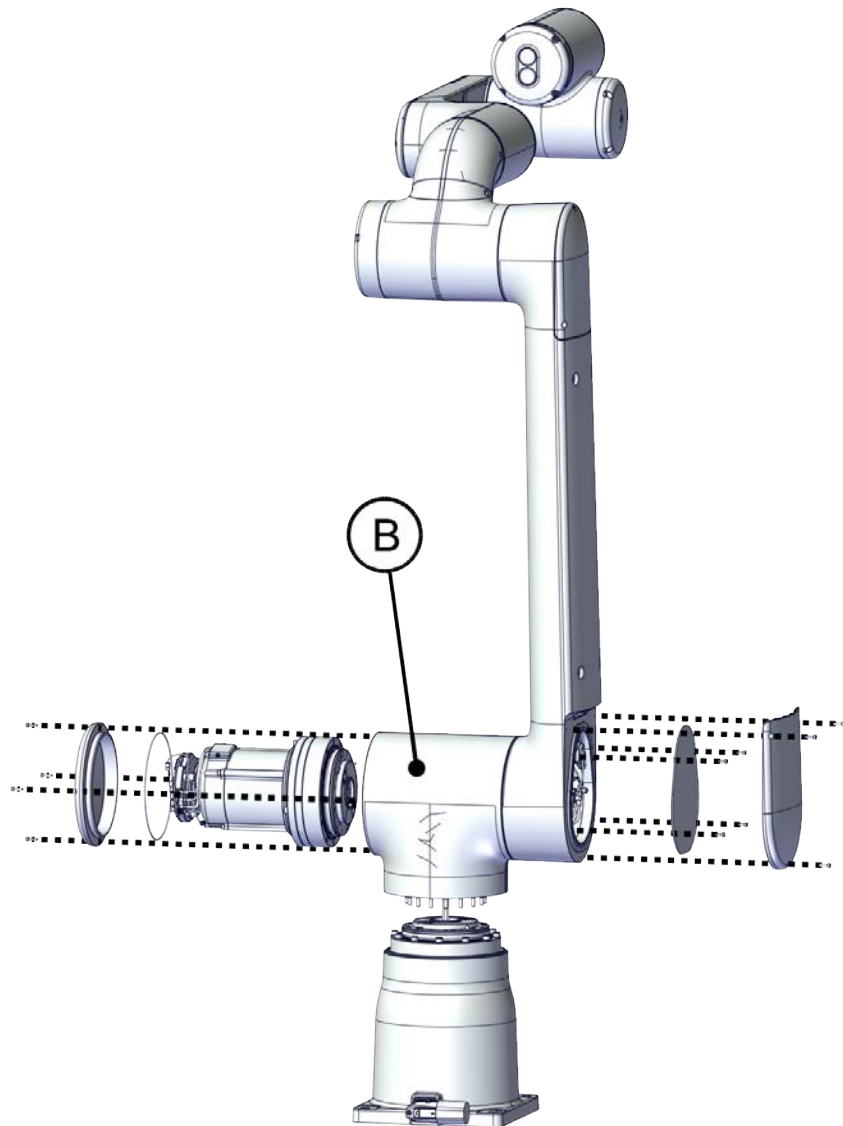
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3 Swing and swing parts

3.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

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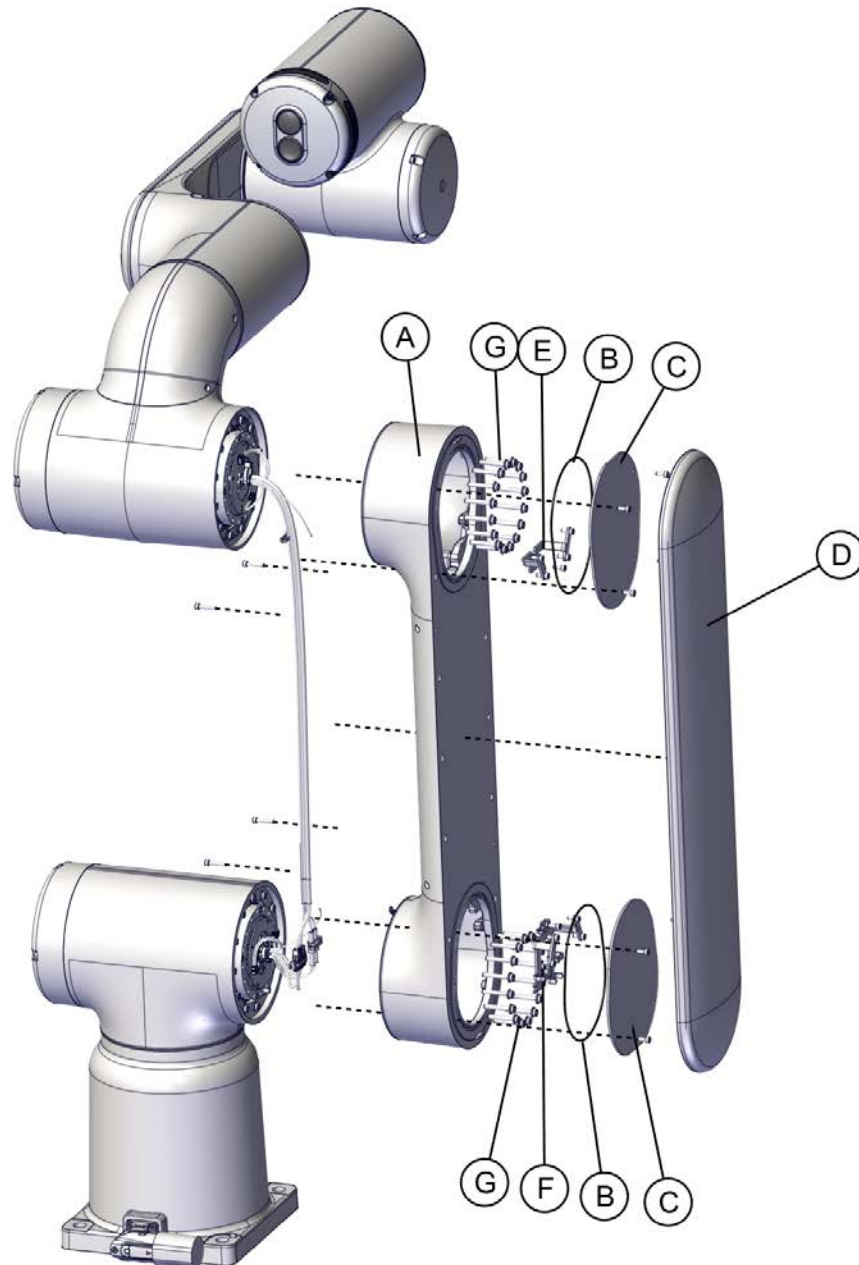
	Spare part	Spare part number	Level
A	Swing (CRB 15000-10/1.52)	3HAC087548-001	L2
B	Swing (CRB 15000-12/1.27)	3HAC087547-001	L2
C	O-ring	3HAC061327-044	L2
D	O-ring	3HAC061327-073	L2
E	Swing cover	3HAC081050-001	L1
F	O-ring	3HAC061327-074	L1
G	Insert	3HAC084002-001	L2

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4 Lower arm and lower arm parts

4.1 CRB 15000-5/0.95

Spare part list



xx210000434

	Spare part	Spare part number	Level
A	Lower arm	3HAC073948-001	L2
B	O-ring	3HAC061327-044	L1
C	Lower arm, inner cover	3HAC073970-001	L1

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4 Lower arm and lower arm parts

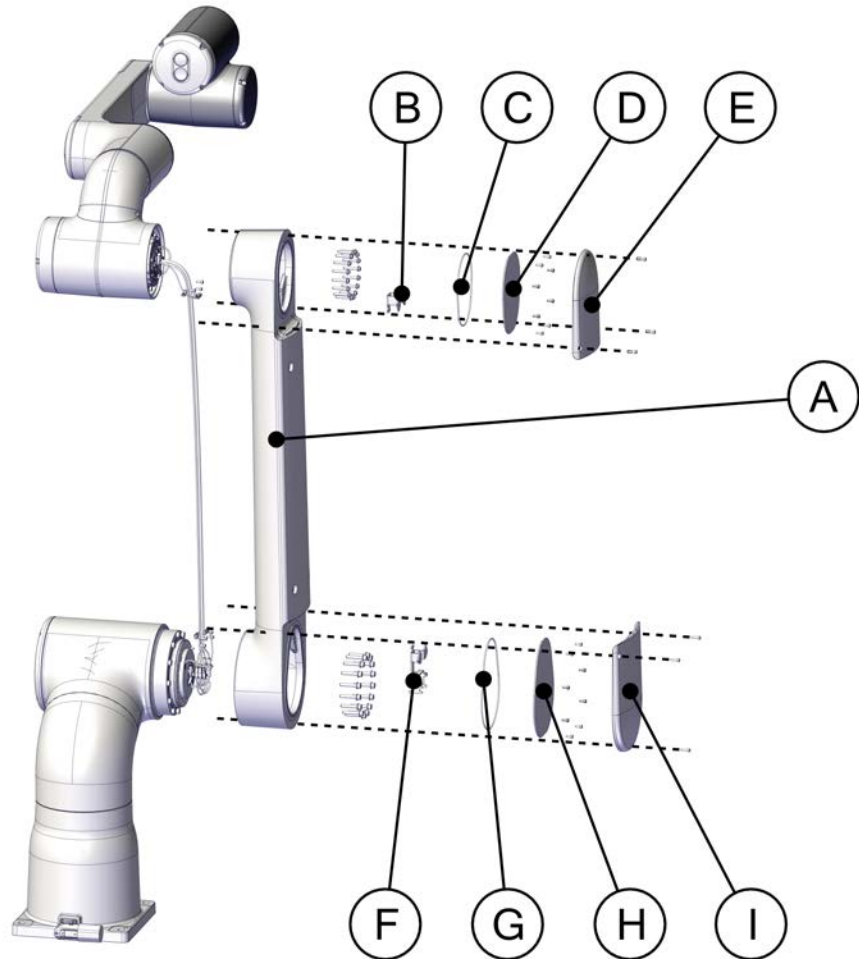
4.1 CRB 15000-5/0.95

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	Spare part	Spare part number	Level
D	Lower arm cover	3HAC073967-001	L1
E	Cable bracket, lower arm	3HAC075572-001	L1
F	Cable bracket, lower arm	3HAC075570-001	L1
G	Hex socket head cap flange screw	3HAB3412-425	L2

4.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list



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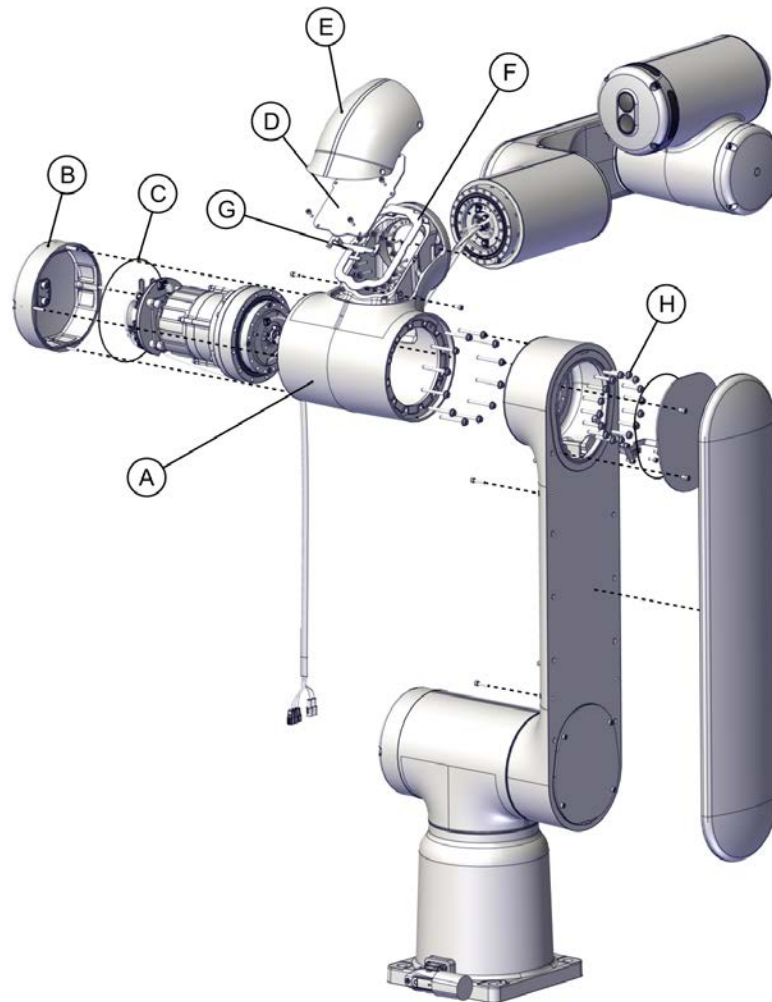
	Spare part	Spare part number	Level
A	Lower arm	3HAC081051-001	L2
B	Cable bracket, lower arm, upper	3HAC082828-001	L1
C	O-ring	3HAC061327-044	L1
D	Lower arm, inner cover, upper	3HAC082482-001	L1
E	Lower arm cover, upper	3HAC083923-001	L1
F	Cable bracket, lower arm, lower	3HAC082826-001	L1
G	O-ring	3HAC061327-075	L1
H	Lower arm, inner cover, lower	3HAC081053-001	L1
I	Lower arm cover, lower	3HAC083922-001	L1

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5 Housing and housing parts

5.1 CRB 15000-5/0.95

Spare part list



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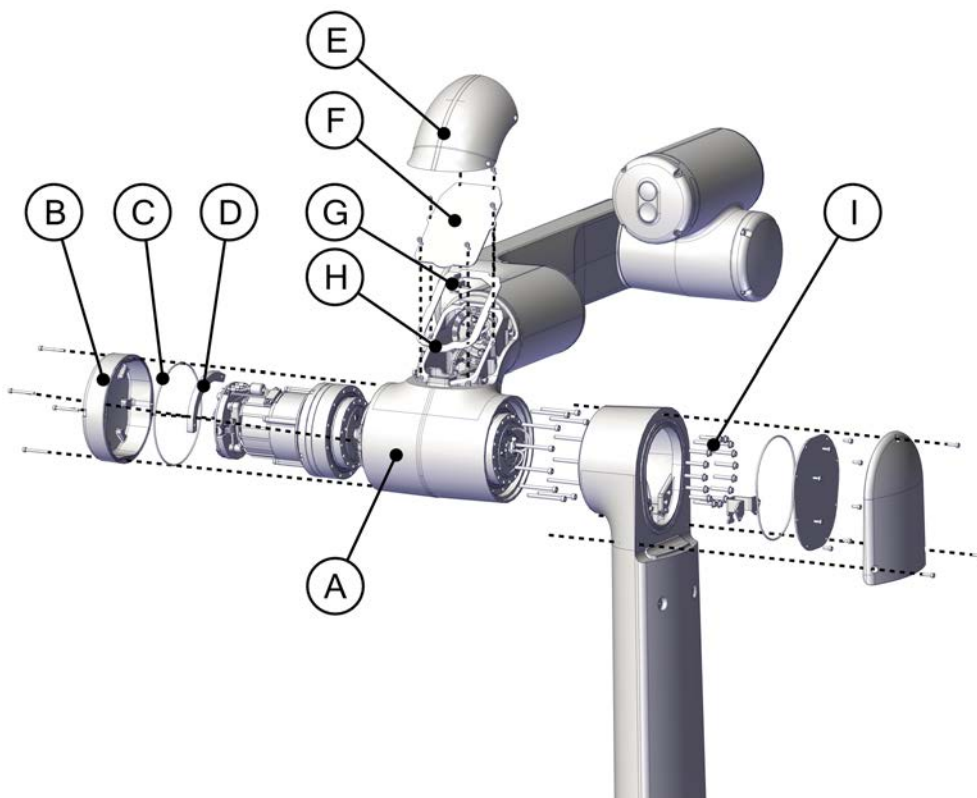
	Spare part	Spare part number	Level
A	Housing	3HAC073949-001	L2
B	Cover for axis 2/3	3HAC073957-001	L1
C	O-ring	3HAC061327-047	L1
D	Housing inner cover	3HAC074344-001	L1
E	Housing cover	3HAC073959-001	L1
F	Gasket	3HAC075056-001	L1
G	Cable bracket	3HAC075571-001	L1
H	Hex socket head cap flange screw	3HAB3412-425	L2

5 Housing and housing parts

5.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

5.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list



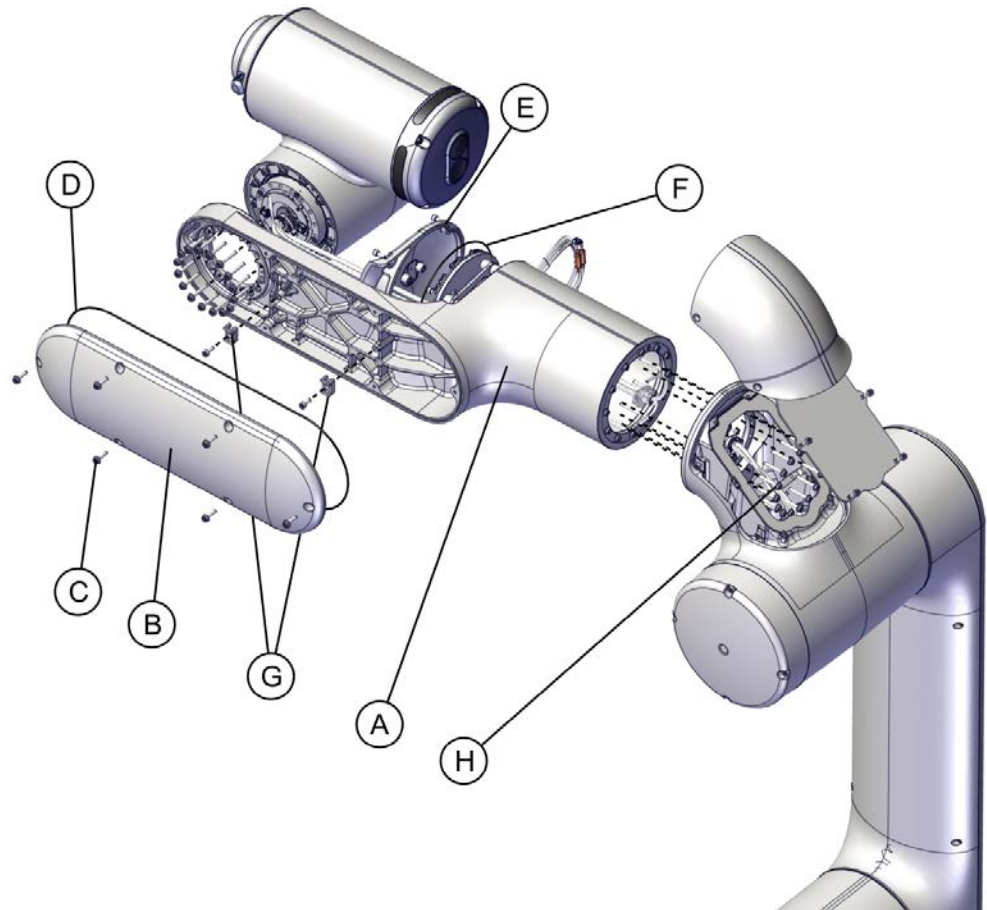
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	Spare part	Spare part number	Level
A	Housing	3HAC087550-001	L2
B	Housing side cover	3HAC086163-001	L1
C	O-ring	3HAC061327-047	L1
D	Insert	3HAC084002-001	L2
E	Housing cover	3HAC073959-001	L1
F	Housing inner cover	3HAC074344-001	L1
G	Cable bracket	3HAC082829-001	L1
H	Gasket	3HAC075056-001	L1
I	Hex socket head cap flange screw	3HAB3412-425	L2

6 Tubular and tubular parts

6.1 CRB 15000-5/0.95

Spare part list



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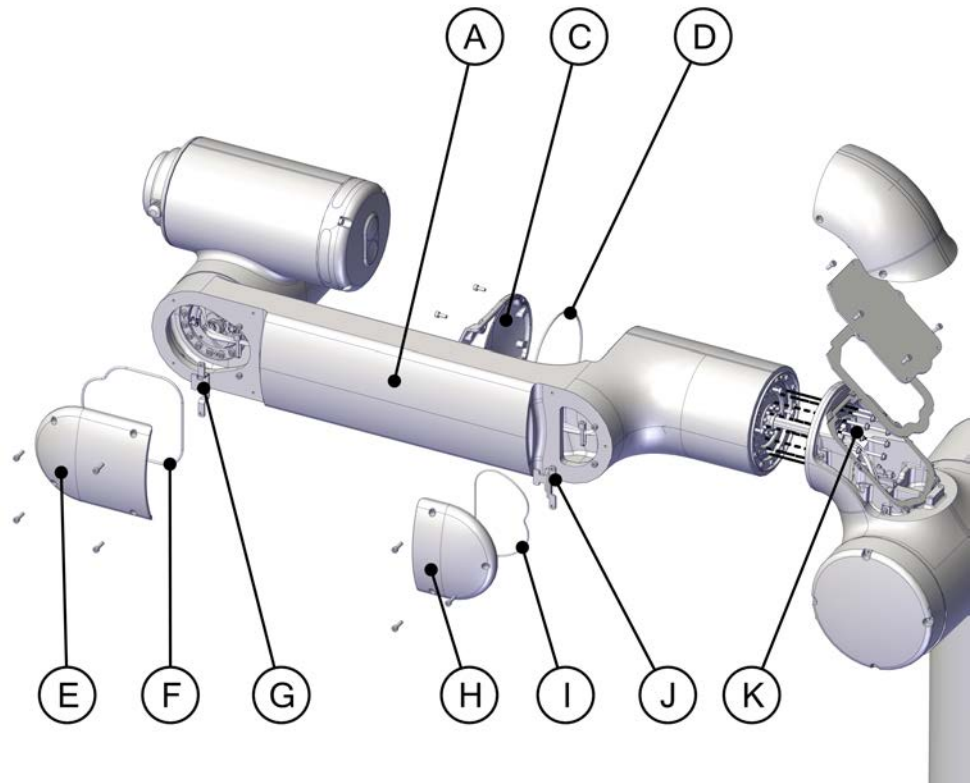
	Spare part	Spare part number	Level
A	Tubular	3HAC074509-001	L2
B	Tubular cover	3HAC073968-001	L1
C	Flange socket head screw with glue	3HAB3413-312	L1
D	O-ring	3HAC061327-043	L1
E	Axis-4 cover	3HAC086166-001	L1
F	O-ring	3HAC061327-051	L1
G	Cable saddle	3HAC032087-001	L1
H	Flange socket head screw	3HAB3412-320	L2

6 Tubular and tubular parts

6.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

6.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list



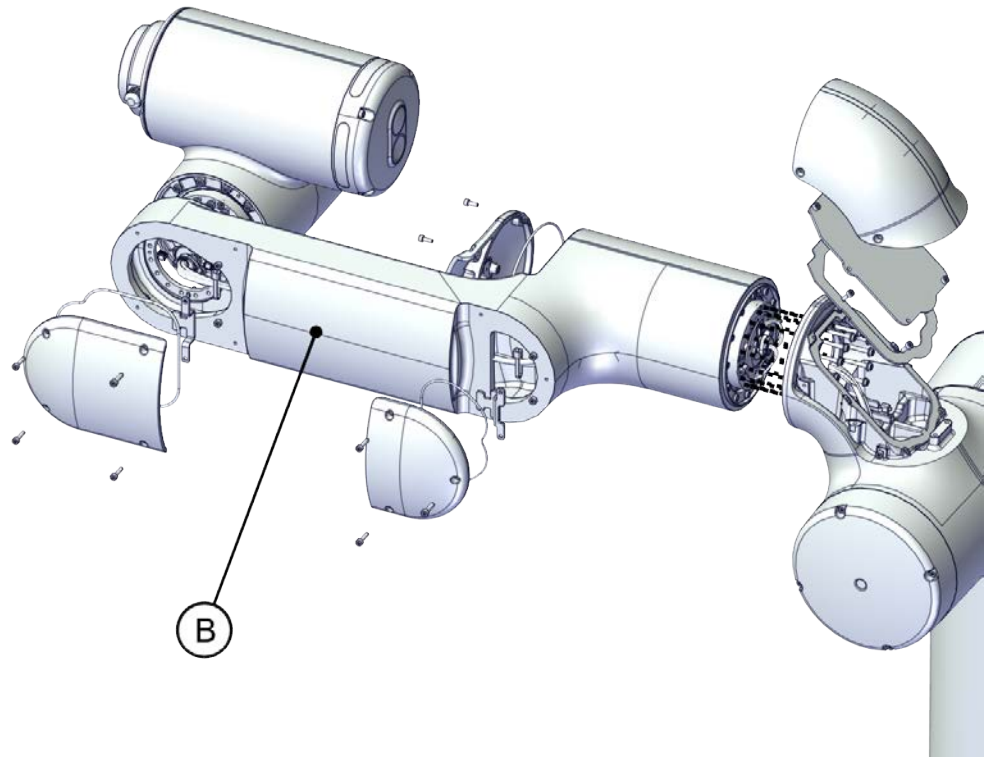
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6 Tubular and tubular parts

6.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

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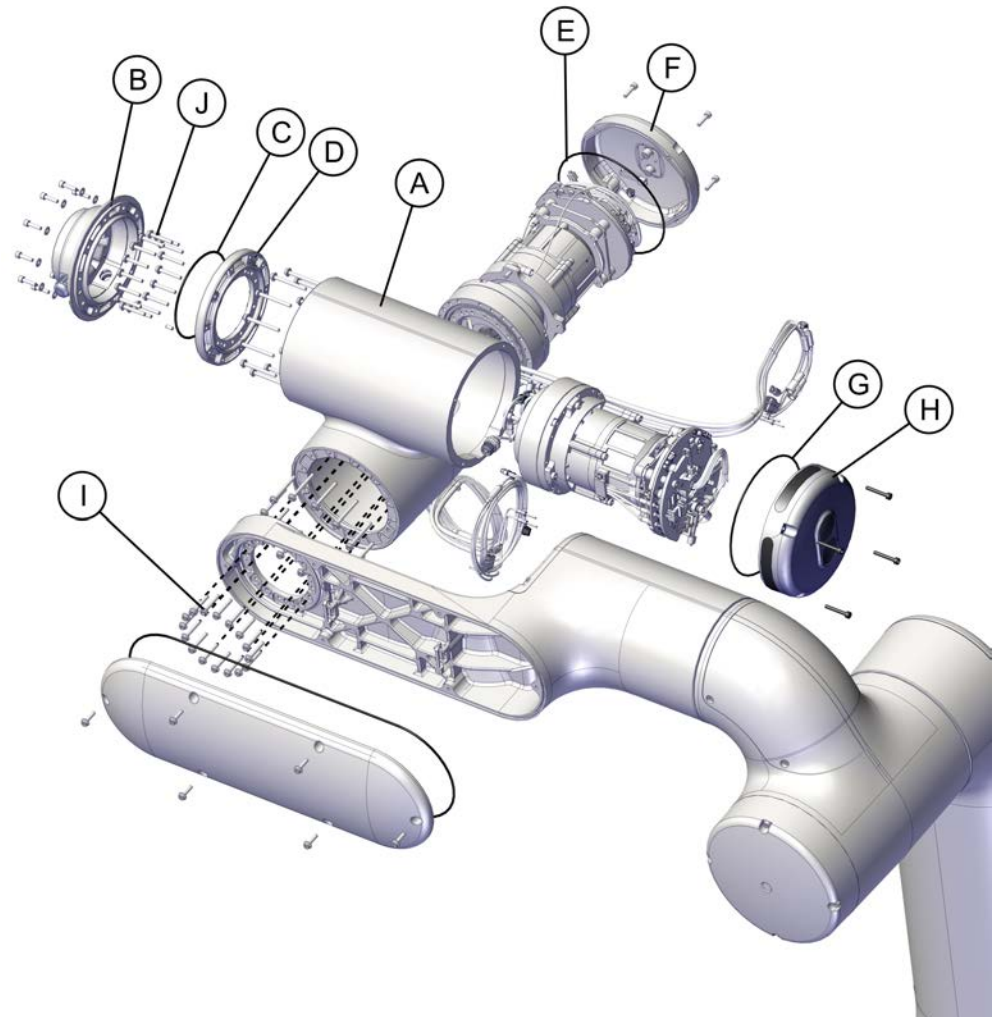
	Spare part	Spare part number	Level
A	Tubular, long	3HAC083685-001	L2
B	Tubular, short	3HAC081054-001	L2
C	Axis-4 cover	3HAC086166-001	L1
D	O-ring	3HAC061327-051	L1
E	Tubular cover, upper	3HAC082328-001	L1
F	O-ring	3HAB3772-166	L1
G	Cable bracket, upper	3HAC082830-001	L1
H	Tubular cover, lower	3HAC083698-001	L1
I	O-ring	3HAC061327-076	L1
J	Cable bracket, lower	3HAC083731-001	L1
K	Flange socket head screw	3HAB3412-320	L2

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7 Wrist/tilt and tilt parts

7.1 CRB 15000-5/0.95

Spare part list



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	Spare part	Spare part number	Level
A	Wrist housing	3HAC073951-001	L2
B	Axis-6 flange	3HAC073953-001	L2
C	O-ring	3HAB3772-182	L2
D	Tool flange adapter	3HAC073952-001	L2
E	O-ring	3HAC061327-051	L1
F	Axis-5 cover	3HAC074065-001	L1
G	O-ring	3HAC061327-051	L2
H	Arm side interface	3HAC076855-001	L2

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7 Wrist/tilt and tilt parts

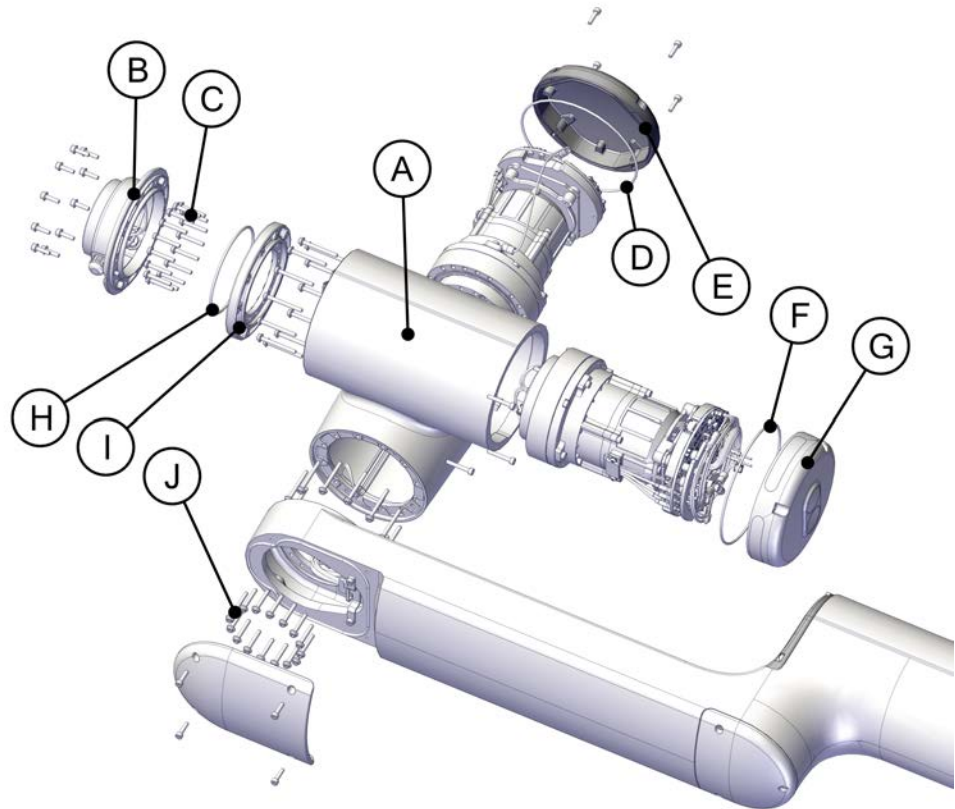
7.1 CRB 15000-5/0.95

Continued

	Spare part	Spare part number	Level
I	Flange socket head screw	3HAB3412-320	L2
J	Flange socket head screw	3HAB3412-320	L2

7.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list



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	Spare part	Spare part number	Level
A	Wrist housing	3HAC073951-001	L2
B	Axis-6 flange	3HAC073953-001	L2
C	Flange socket head screw	3HAB3412-320	L2
D	O-ring	3HAC061327-051	L1
E	Axis-5 cover	3HAC086167-001	L1
F	O-ring	3HAC061327-051	L2
G	Arm side interface	3HAC076855-001	L2
H	O-ring	3HAB3772-182	L2
I	Tool flange adapter	3HAC073952-001	L2
J	Flange socket head screw	3HAB3412-320	L2

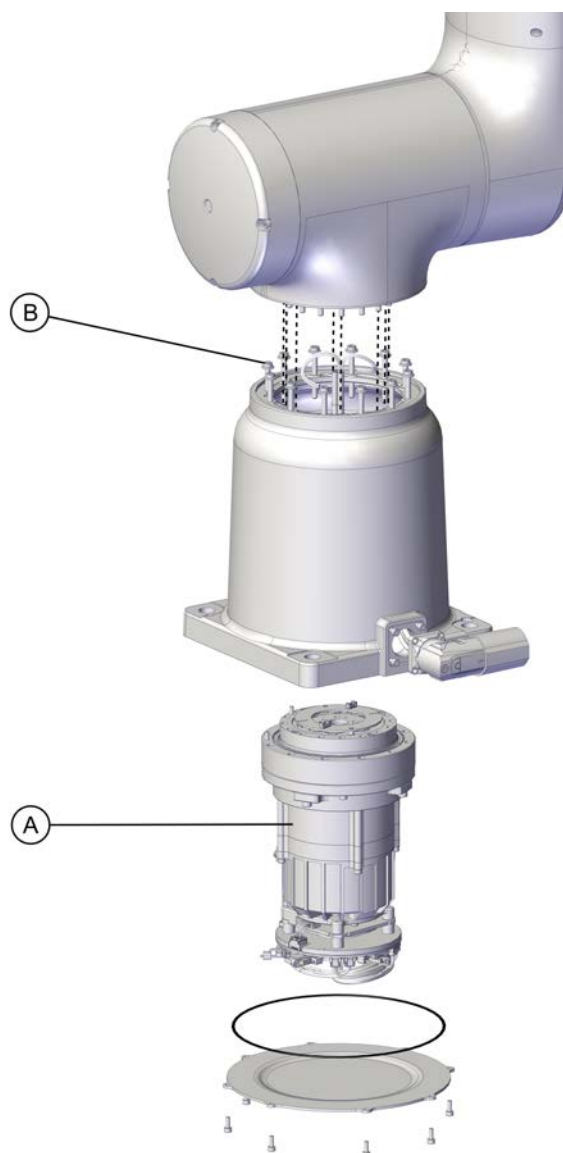
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8 Joint units

8.1 Spare parts - axis-1 joint unit

8.1.1 CRB 15000-5/0.95

Spare part list



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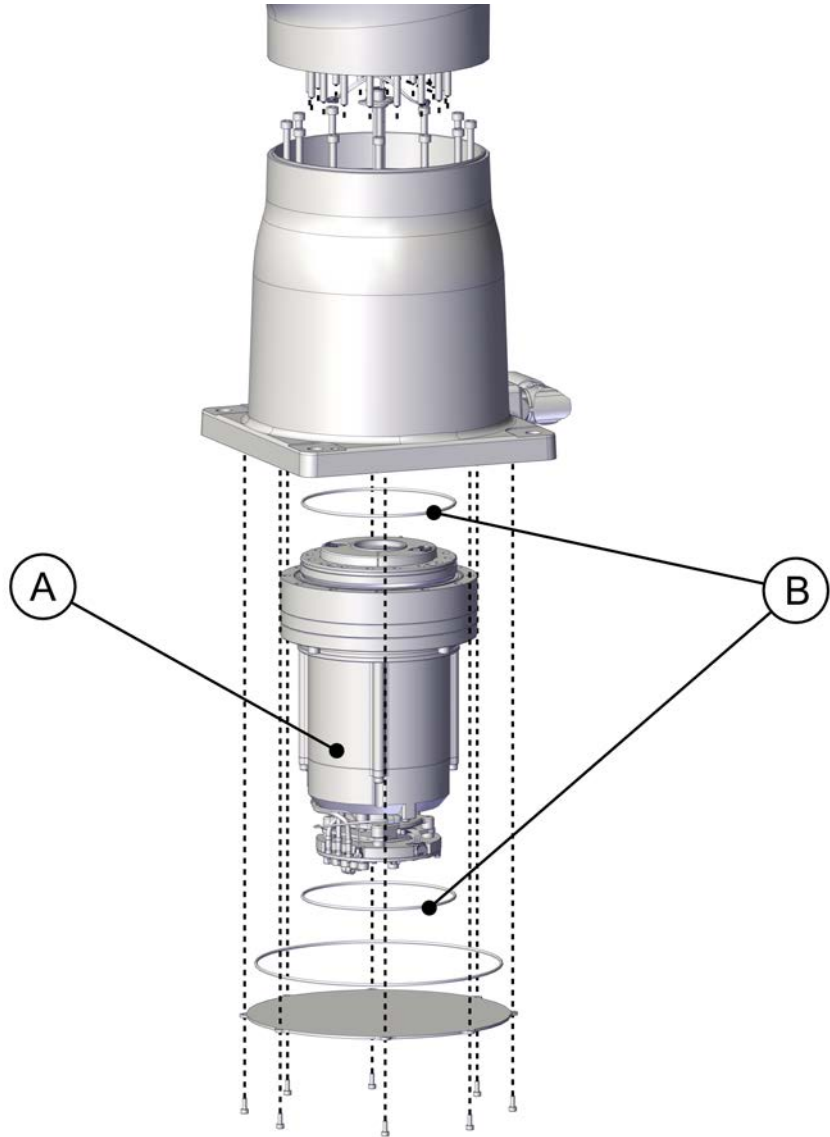
	Spare part	Spare part number	Level
A	Joint unit	3HAC079141-001	L2
B	Flange socket head screw with glue	3HAB3413-435	L2

8 Joint units

8.1.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

8.1.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list



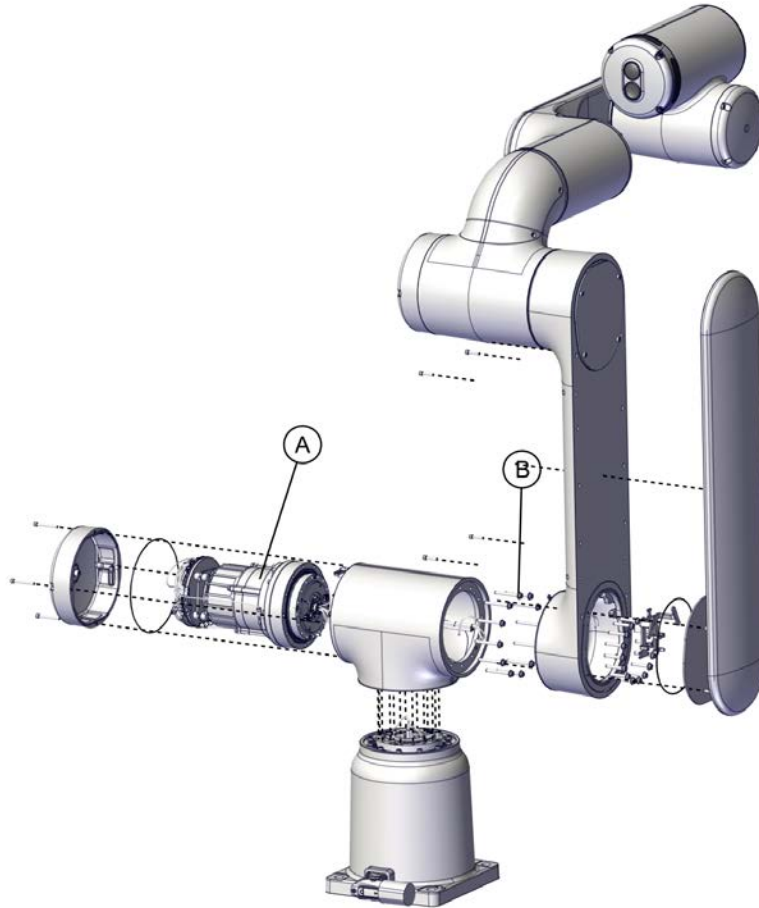
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	Spare part	Spare part number	Level
A	Joint unit	3HAC087472-001	L2
B	O-ring	3HAC061327-044	L2

8.2 Spare parts - axis-2 joint unit

8.2.1 CRB 15000-5/0.95

Spare part list



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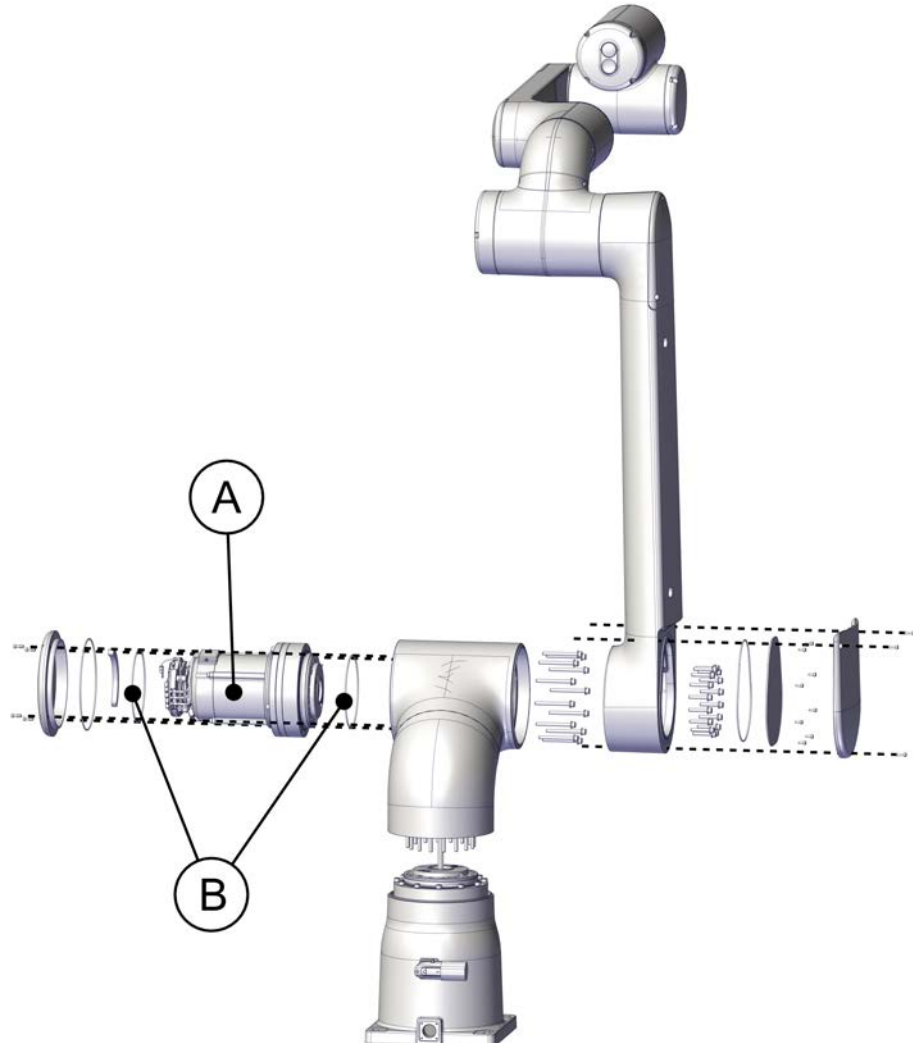
	Spare part	Spare part number	Level
A	Joint unit	3HAC079141-001	L2
B	Flange socket head screw with glue	3HAB3413-435	L2

8 Joint units

8.2.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

8.2.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list



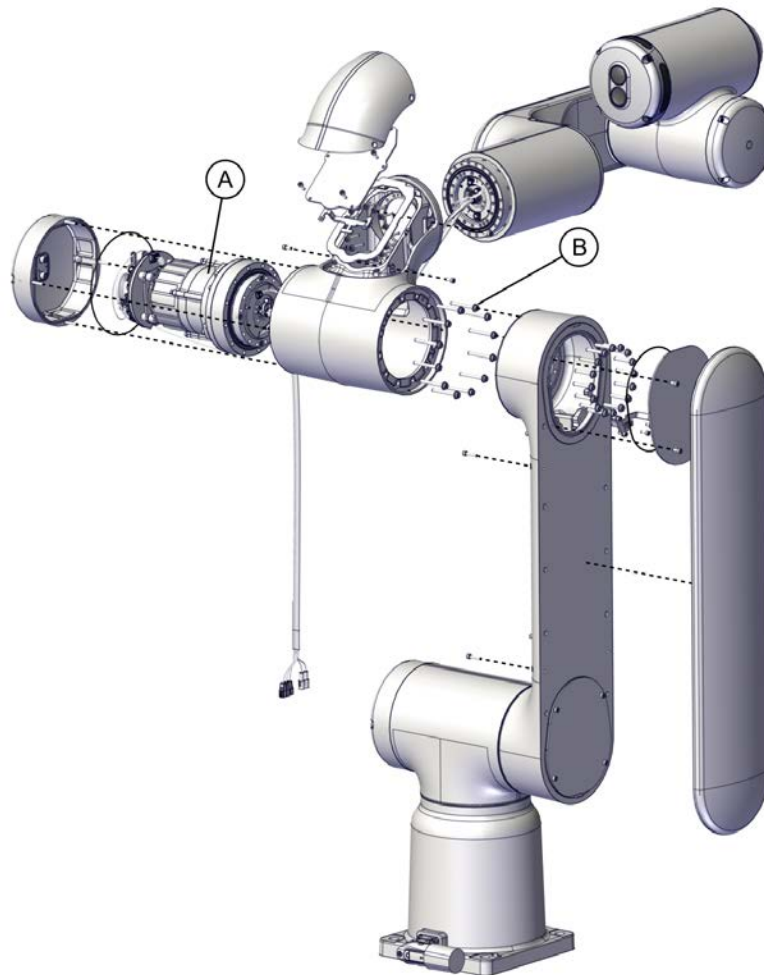
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	Spare part	Spare part number	Level
A	Joint unit	3HAC087472-001	L2
B	O-ring	3HAC061327-044	L2

8.3 Spare parts - axis-3 joint unit

8.3.1 CRB 15000-5/0.95

Spare part list



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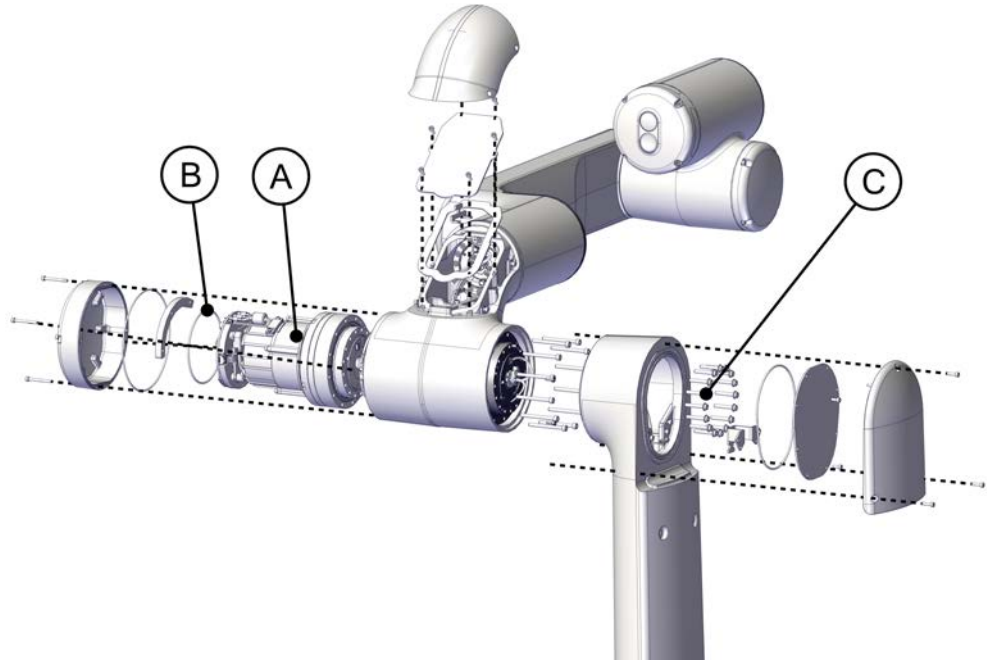
	Spare part	Spare part number	Level
A	Joint unit	3HAC079141-001	L2
B	Flange socket head screw with glue	3HAB3413-435	L2

8 Joint units

8.3.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

8.3.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list



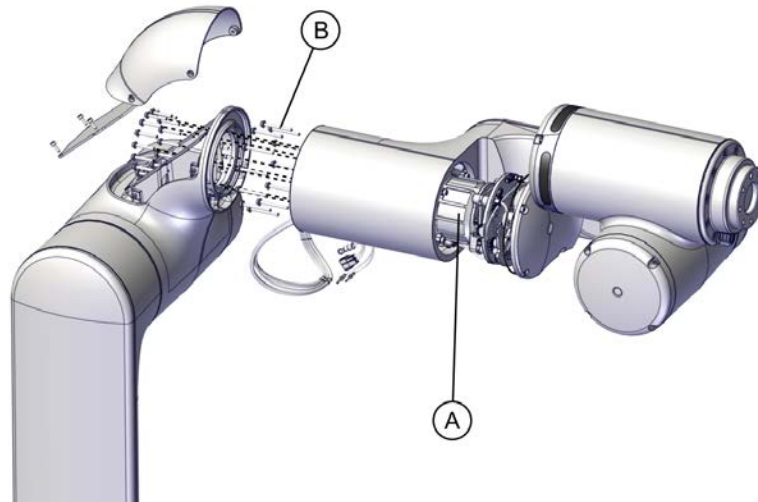
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	Spare part	Spare part number	Level
A	Joint unit	3HAC087474-001	L2
B	O-ring	3HAC061327-036	L2
C	Hex socket head cap flange screw	3HAB3412-425	L2

8.4 Spare parts - axis-4 joint unit

8.4.1 CRB 15000-5/0.95

Spare part list



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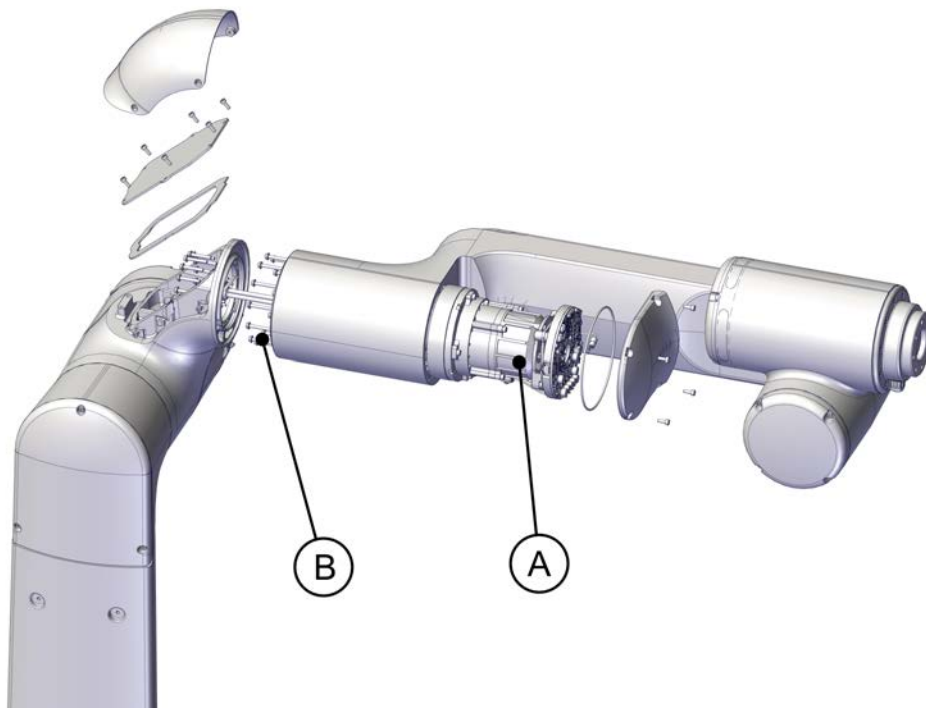
	Spare part	Spare part number	Level
A	Joint unit	3HAC079143-001	L2
B	Flange socket head screw with glue	3HAB3413-330	L2

8 Joint units

8.4.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

8.4.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list



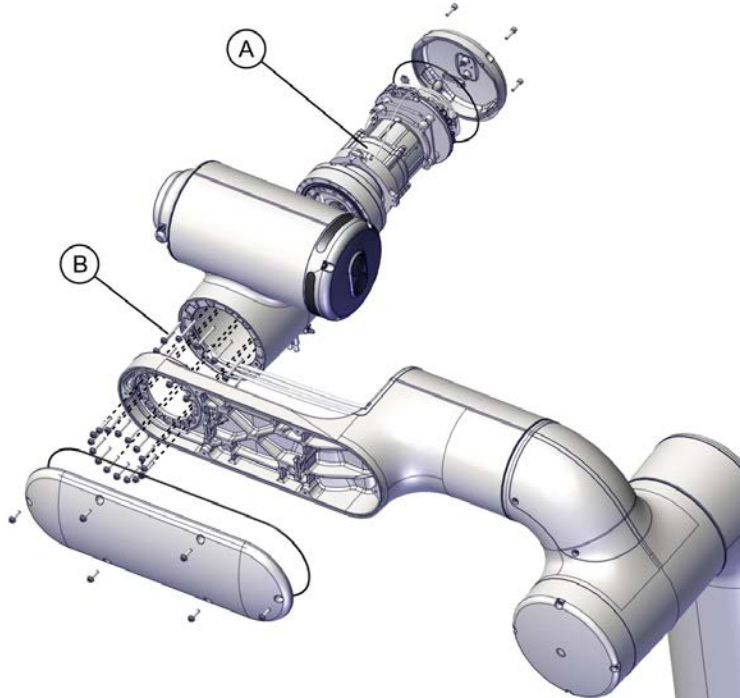
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	Spare part	Spare part number	Level
A	Joint unit	3HAC087546-001	L2
B	Flange socket head screw with glue	3HAB3413-330	L2

8.5 Spare parts - axis-5 joint unit

8.5.1 CRB 15000-5/0.95

Spare part list



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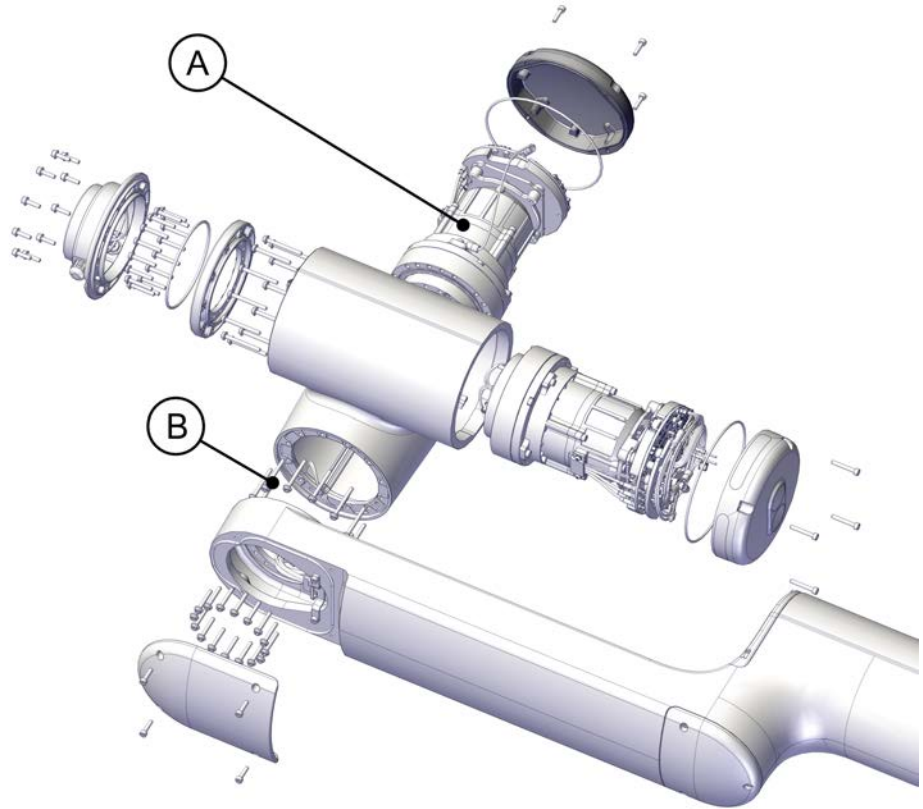
	Spare part	Spare part number	Level
A	Joint unit	3HAC079143-001	L2
B	Flange socket head screw with glue	3HAB3413-330	L2

8 Joint units

8.5.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

8.5.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list



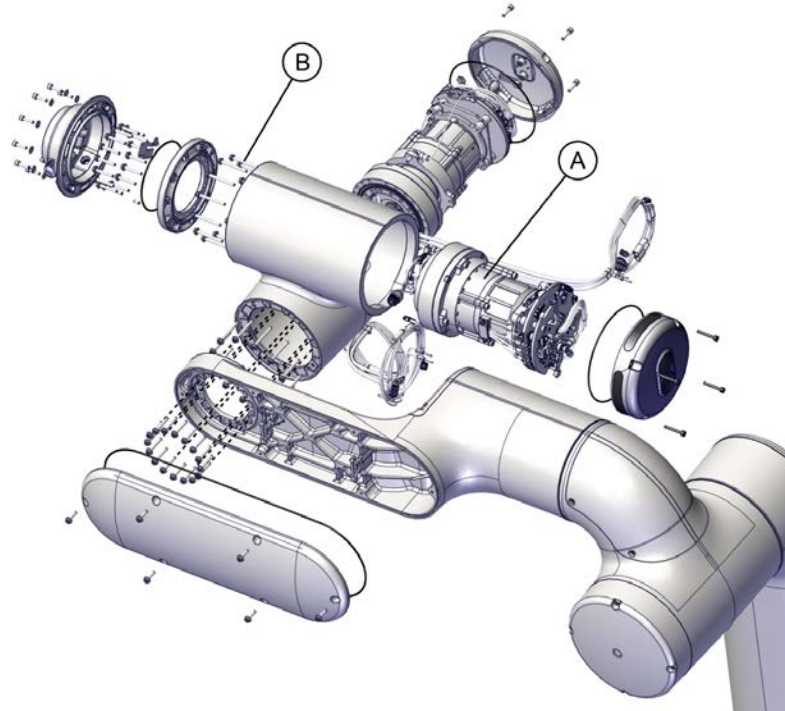
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	Spare part	Spare part number	Level
A	Joint unit	3HAC087546-001	L2
B	Flange socket head screw with glue	3HAB3413-330	L2

8.6 Spare parts - axis-6 joint unit

8.6.1 CRB 15000-5/0.95

Spare part list



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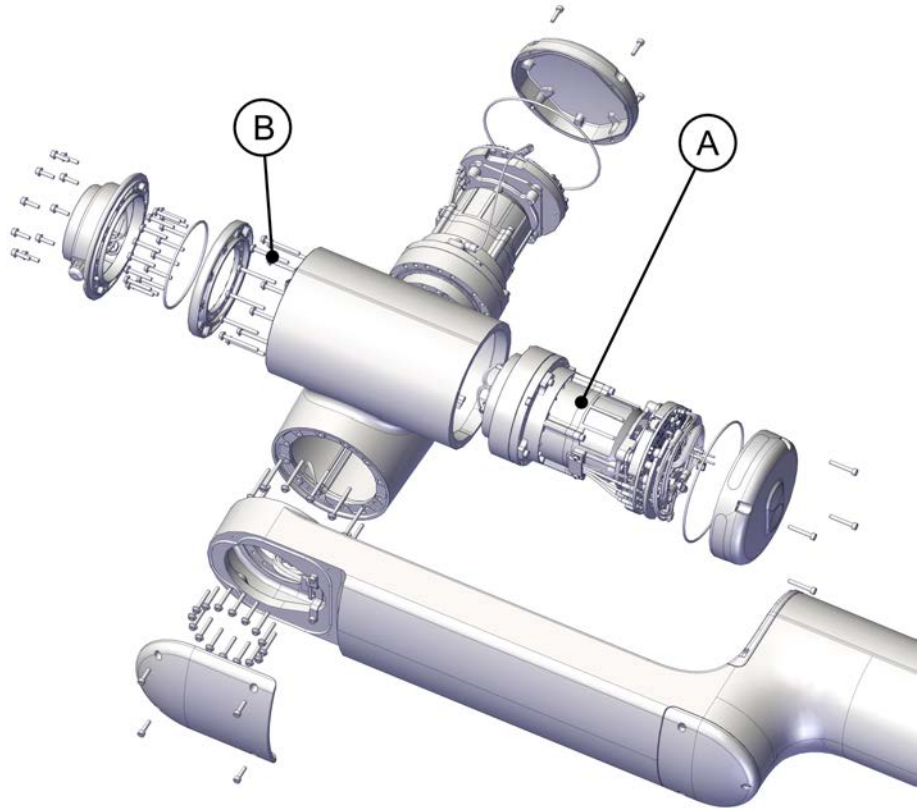
	Spare part	Spare part number	Level
A	Joint unit	3HAC079143-001	L2
B	Flange socket head screw with glue	3HAB3413-330	L2

8 Joint units

8.6.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

8.6.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list



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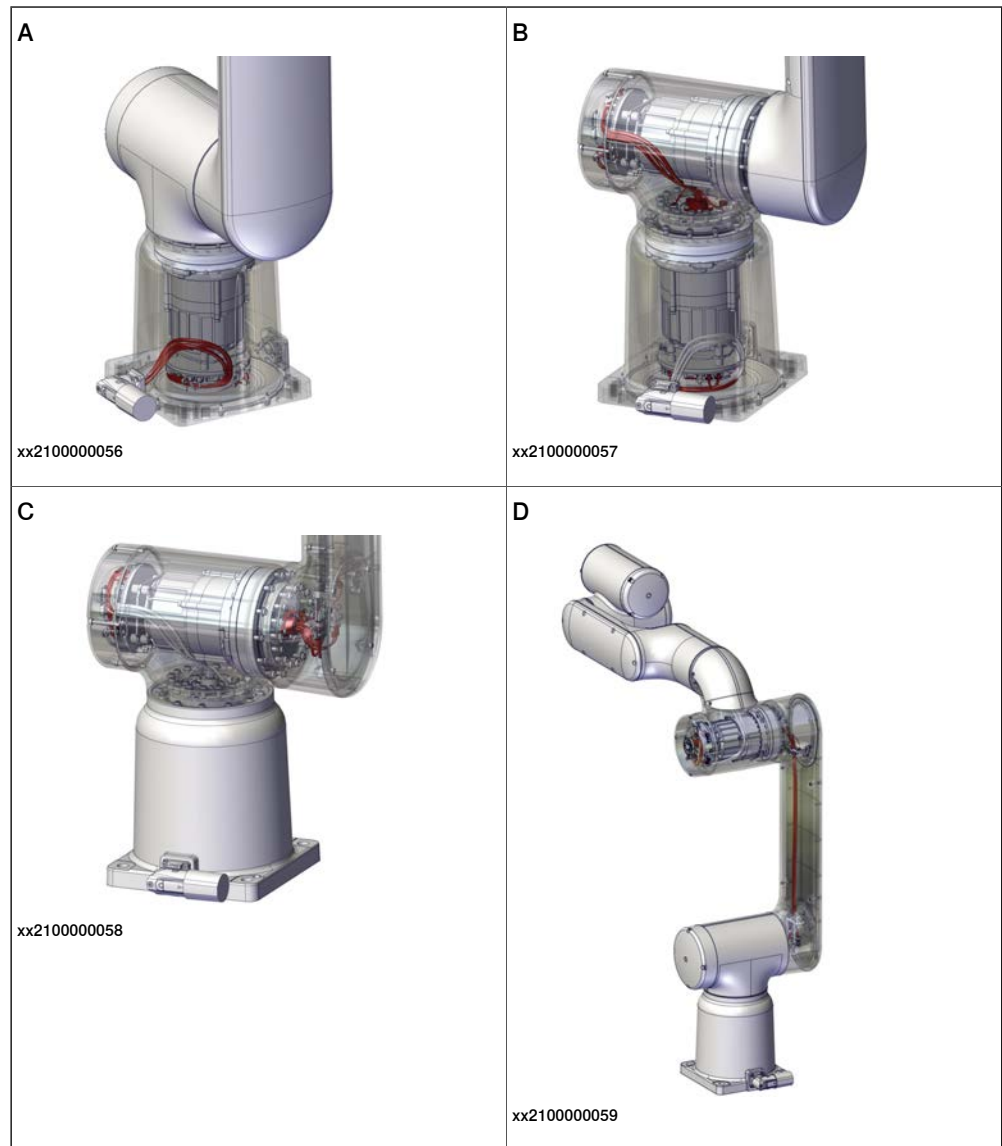
	Spare part	Spare part number	Level
A	Joint unit	3HAC087546-001	L2
B	Flange socket head screw with glue	3HAB3413-330	L2

9 Cable harness

9.1 Spare parts - cable harness in base, swing and lower arm

9.1.1 CRB 15000-5/0.95

Spare part list



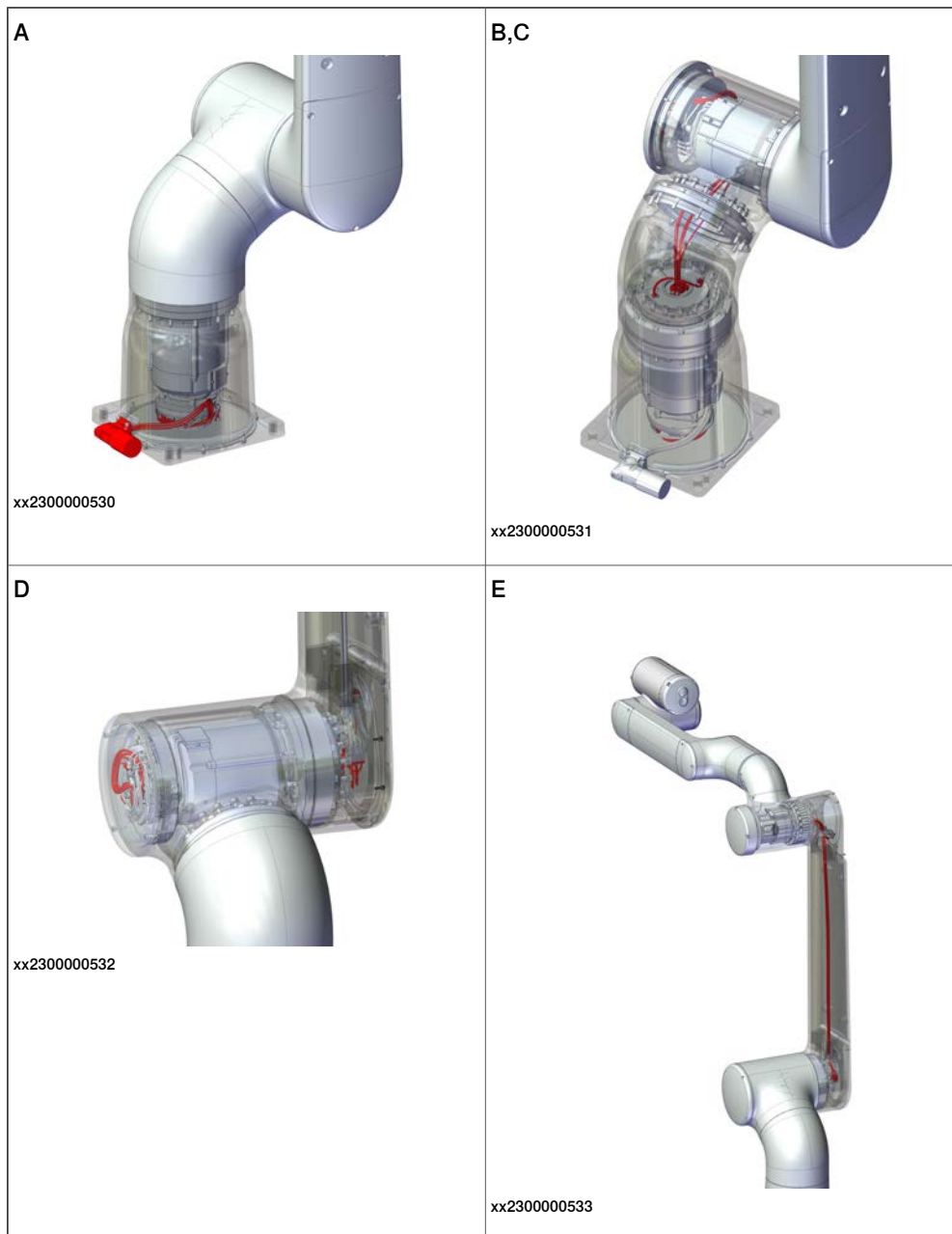
	Spare part	Spare part number	Level
A	Cable harness, base socket	3HAC083725-001	L2
B	Cable harness, joint 1	3HAC073204-001	L2
C	Cable harness, joint 2	3HAC073205-001	L2
D	Cable harness, joint 3	3HAC073207-001	L2

9 Cable harness

9.1.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

9.1.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

Spare part list

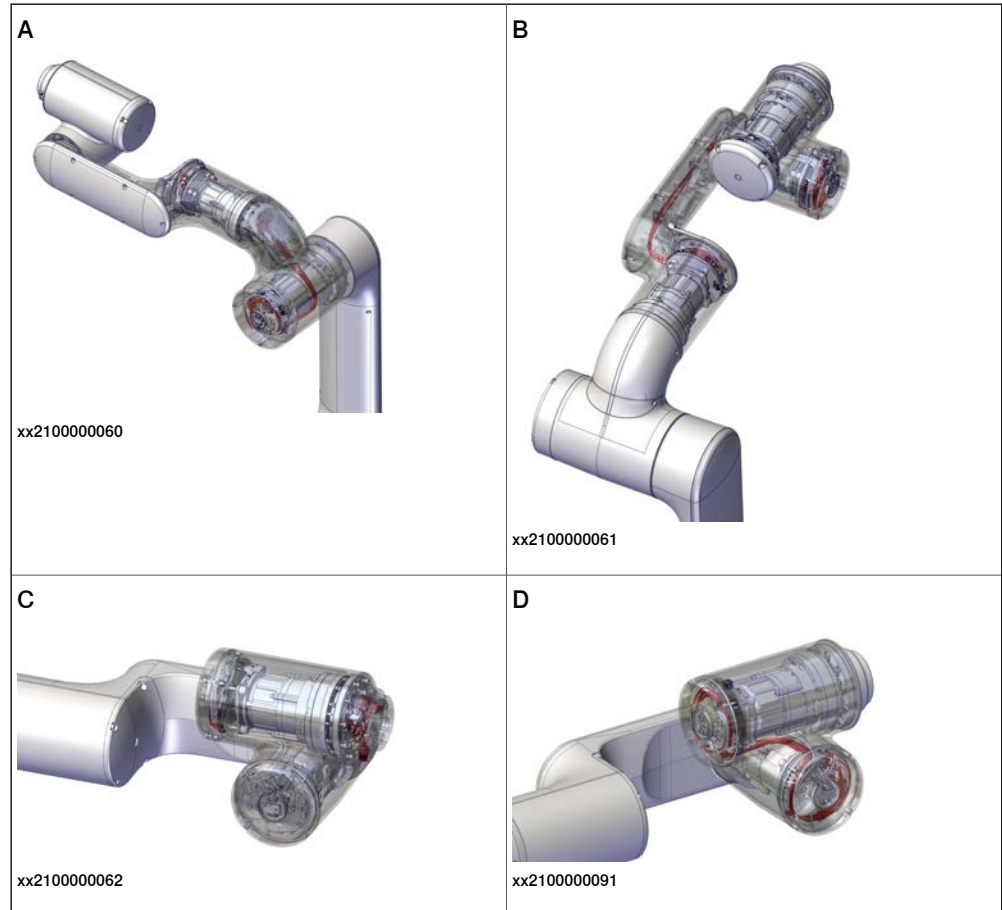


	Spare part	Spare part number	Level
A	Cable harness, base socket	3HAC083725-001	L2
B	Cable harness, joint 1 (CRB 15000-10/1.52)	3HAC083661-001	L2
C	Cable harness, joint 1 (CRB 15000-12/1.27)	3HAC080959-001	L2
D	Cable harness, joint 2	3HAC080960-001	L2
E	Cable harness, joint 3	3HAC080965-001	L2

9.2 Spare parts - cable harness housing, tubular and tilt

9.2.1 CRB 15000-5/0.95

Spare part list



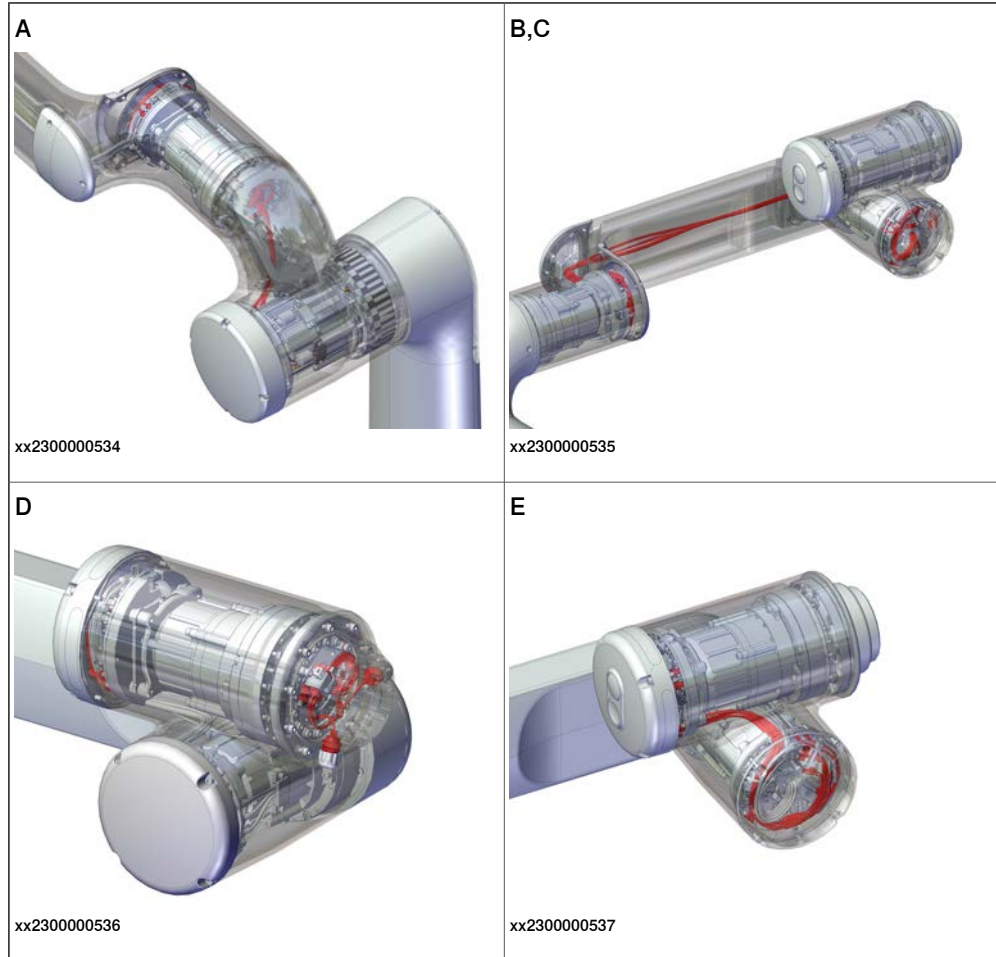
	Spare part	Spare part number	Level
A	Cable harness, joint 4	3HAC073206-001	L2
B	Cable harness, joint 5	3HAC073206-001	L2
C	Cable harness, joint 6	3HAC073208-001	L2
D	Cable harness, transition joint-5 and joint-6	3HAC083726-001	L2

9 Cable harness

9.2.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

9.2.2 CRB 15000-10/1.52 and CRB 15000-12/1.27

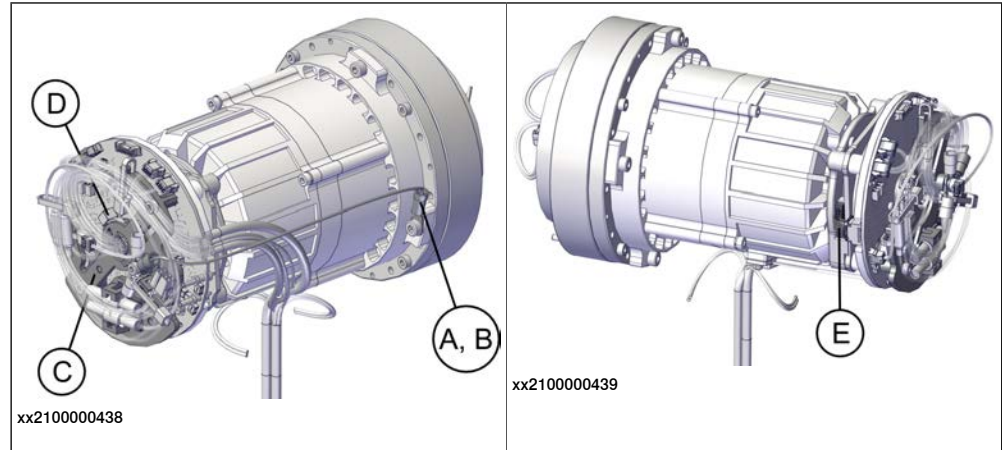
Spare part list



	Spare part	Spare part number	Level
A	Cable harness, joint 4	3HAC080961-001	L2
B	Cable harness, joint 5 (CRB 15000-10/1.52)	3HAC083669-001	L2
C	Cable harness, joint 5 (CRB 15000-12/1.27)	3HAC083668-001	L2
D	Cable harness, joint 6	3HAC073208-001	L2
E	Cable harness, transition joint-5 and joint-6	3HAC083726-001	L2

9.3 Spare parts - joint unit cable parts

Spare part list



CRB 15000-5/0.95

	Spare part	Spare part number	Level
A	FE cable, axes 1, 2 and 3	3HAC075953-001	L2
B	FE cable, axes 4, 5 and 6	3HAC075954-001	L2
C	Cable support	3HAC074329-001	L2
D	Cable tie	3HAC075545-001	L2
E	Position sensor cable	3HAC073210-001	L2

CRB 15000-10/1.52 and CRB 15000-12/1.27

	Spare part	Spare part number	Level
A	FE cable, axes 1 and 2	3HAC084175-001	L2
B	FE cable, axes 3 to 6	3HAC075954-001	L2
C	Cable support	3HAC074329-001	L2
D	Cable tie	3HAC075545-001	L2
E	Position sensor cable	3HAC073210-001	L2

9 Cable harness

9.4 Spare parts - floor cable

9.4 Spare parts - floor cable

Spare part list

	Spare part	Spare part number	Level
A	Hybrid floor cable 3 m	3HAC073212-001	L1
B	Hybrid floor cable 7 m	3HAC073212-002	L1
C	Hybrid floor cable 15 m	3HAC073212-003	L1
D	Drag chain cable 15 m	3HAC086915-003	L1

10 Spare parts - laser scanner

Spare part list

	Spare part number	Description	Spare part level
A	3HAC075977-001	PROFINET-based laser scanner	L1
	3HAC082519-001	SafetyIO-based laser scanner	L1
B	3HAC076487-001	Mounting kit for laser scanner	L1
-	3HAC076489-001	Power cable 5 m (for PROFINET-based laser scanner)	L1
-	3HAC075978-001	Ethernet cable 5 m (for PROFINET-based laser scanner)	L1
-	3HAC076488-001	USB to Mini-USB cable, 3 m (for PROFINET-based laser scanner)	L1
-	3HAC082520-001	Power cable 5 m (for SafetyIO-based laser scanner)	L1
-	3HAC082521-001	Ethernet cable, 5 m (for SafetyIO-based laser scanner)	L1
-	3HAC082529-001	Signal cable 5 m (for SafetyIO-based laser scanner)	L1
-	3HAC082530-001	Ethernet cable, STS, 5 m Used for connecting two laser scanners.	L1

Spare part illustration

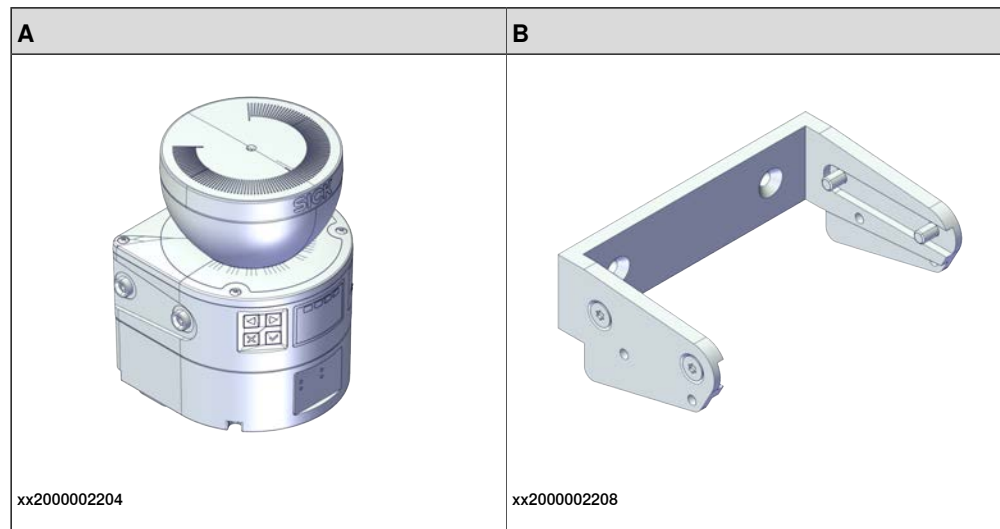




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