

Product manual, spare parts IRB 260

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Product manual, spare parts

IRB 260

IRC5

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Overview of this manual

About this manual

This manual contains spare parts for:

- IRB 260 and all its variants.

Usage

This manual shall be used as a complement to the product manual for IRB 260 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.

Organization of chapters

The manual is organized in the following chapters:

Chapter	Contents
1 Rebuilding robot	Information of rebuilding parts, required when rebuilding the robot to another version.
2 Spare parts and exploded view	Complete spare part list and complete list of robot components shown in exploded views.

References

Reference	Document ID
<i>Product manual - IRB 260</i>	<i>3HAC026048-001</i>
<i>Circuit diagram - IRB 260</i>	<i>3HAC025611-001</i>

Revisions

Revision	Description
-	First edition
A	This edition contains the following changes: <ul style="list-style-type: none">• Spare parts with color Graphite White are added to the spare part lists.
B	This edition contains the following changes: <ul style="list-style-type: none">• Corrections due to updates in SAP terminology.

Product documentation, IRC5

Categories for user documentation from ABB Robotics

The user documentation from ABB Robotics is divided into a number of categories. This listing is based on the type of information in the documents, regardless of whether the products are standard or optional.

All documents listed can be ordered from ABB on a DVD. The documents listed are valid for IRC5 robot systems.

Product manuals

Manipulators, controllers, DressPack/SpotPack, and most other hardware is delivered with a **Product manual** that generally contains:

- Safety information.
- Installation and commissioning (descriptions of mechanical installation or electrical connections).
- Maintenance (descriptions of all required preventive maintenance procedures including intervals and expected life time of parts).
- Repair (descriptions of all recommended repair procedures including spare parts).
- Calibration.
- Decommissioning.
- Reference information (safety standards, unit conversions, screw joints, lists of tools).
- Spare parts list with exploded views (or references to separate spare parts lists).
- Circuit diagrams (or references to circuit diagrams).

Technical reference manuals

The technical reference manuals describe reference information for robotics products.

- *Technical reference manual - Lubrication in gearboxes*: Description of types and volumes of lubrication for the manipulator gearboxes.
- *Technical reference manual - RAPID overview*: An overview of the RAPID programming language.
- *Technical reference manual - RAPID Instructions, Functions and Data types*: Description and syntax for all RAPID instructions, functions, and data types.
- *Technical reference manual - RAPID kernel*: A formal description of the RAPID programming language.
- *Technical reference manual - System parameters*: Description of system parameters and configuration workflows.

Continues on next page

Application manuals

Specific applications (for example software or hardware options) are described in **Application manuals**. An application manual can describe one or several applications.

An application manual generally contains information about:

- The purpose of the application (what it does and when it is useful).
- What is included (for example cables, I/O boards, RAPID instructions, system parameters, DVD with PC software).
- How to install included or required hardware.
- How to use the application.
- Examples of how to use the application.

Operating manuals

The operating manuals describe hands-on handling of the products. The manuals are aimed at those having first-hand operational contact with the product, that is production cell operators, programmers, and trouble shooters.

The group of manuals includes (among others):

- *Operating manual - Emergency safety information*
- *Operating manual - General safety information*
- *Operating manual - Getting started, IRC5 and RobotStudio*
- *Operating manual - IRC5 Integrator's guide*
- *Operating manual - IRC5 with FlexPendant*
- *Operating manual - RobotStudio*
- *Operating manual - Trouble shooting IRC5*

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1 Spare part lists and exploded views

1.1 Spare parts - overview

Overview - spare parts

The location of the different plates, labels and signs are shown in section *Inspection of labels* in *Product manual - IRB 260*.

Item	Qty	Description	Spare part no.	Note/ specified in section:
1	1	Cover Foundry	-	Spare parts - cover on page 12
2	1	Instruction plate	3HAC2814-2	Warning of brake release.
3	1	Robot IRB 260	-	Spare parts - robot IRB 260 on page 14
4	3	Instruction plate	2945 4489-16	
5	1	Rating label	3HAB9549-1	
6	5	Warning sign	3HAC1589-1	Lightning flash.
7	1	Instruction plate	3HAC025469-001	Lifting of robot.
10	1	Conn.set R1.CP/CS, Foundry	3HAC12558-2	
11	1	CP/CS Conn .set	3HAC025223-001	
12	2	ABB Logotype	3HAC0453-2	
13	3	Calibration label	3HAC024307-001	
14	1	Position switch axis 1	3HAC12062-1	Includes one switch.
14	1	Position switch axis 1	3HAC12062-2	Includes two switches.
14	1	Position switch axis 1	3HAC12062-3	Includes three switches.
15	1	Stop axis 1	3HAB 7298-1	
16	1	Signal lamp	3HAC025254-001	
-	-	Material set	3HAC24116-001	Spare parts - material set cabling axis 6 on page 30

1 Spare part lists and exploded views

1.2 Spare parts - cover

1.2 Spare parts - cover

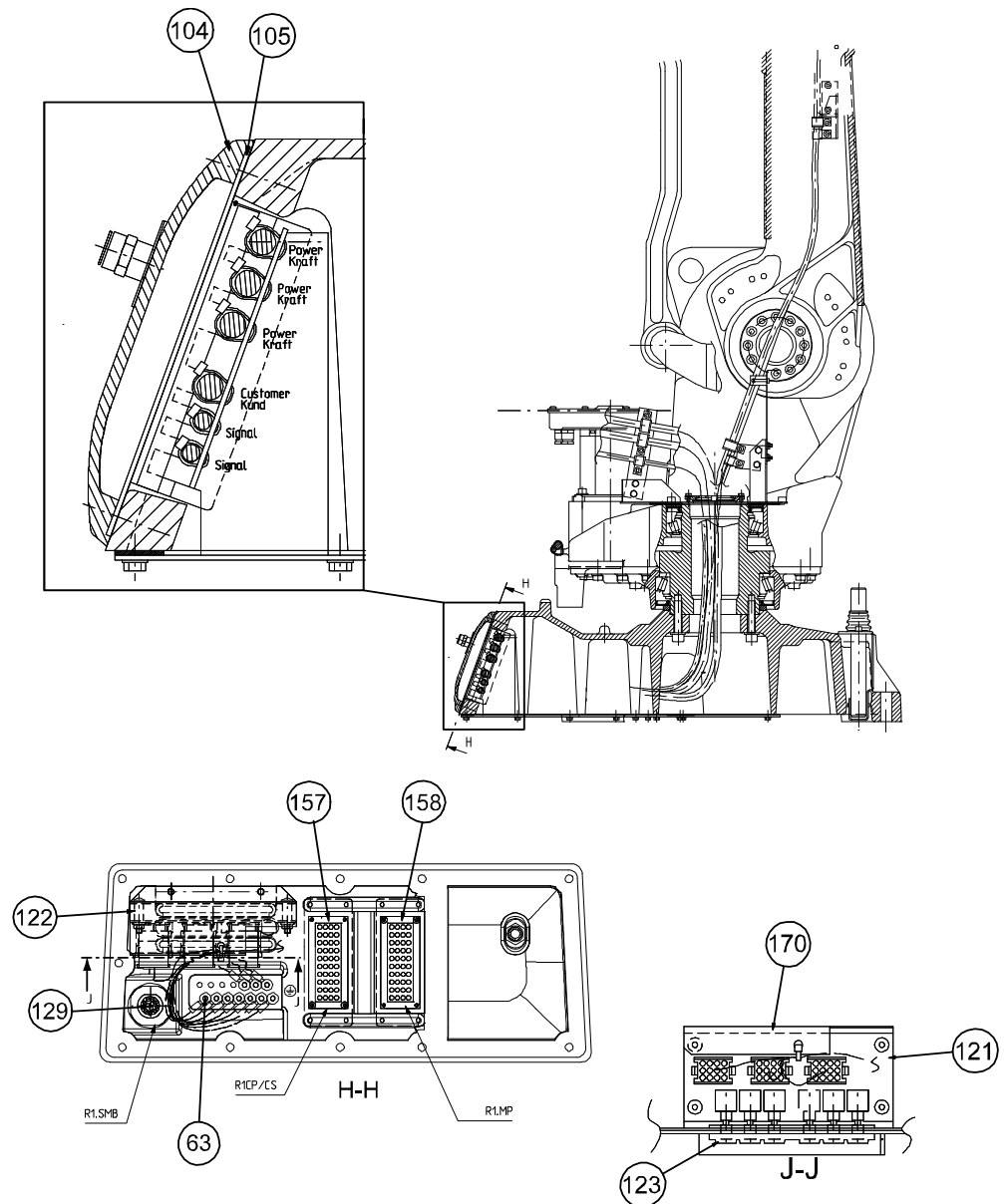
Cover, spare part list

The items specified below are shown in the figure [Cover, spare part view on page 13](#).

Item	Qty	Description	Spare part no.	Protection type	Color	Dimension/Note
63	9	Torx pan head roll. screw	9ADA629-43			
104	1	Cover	3HAC9362-1	Foundry	ABB Orange	
	1	Cover	3HAC050210-001	Foundry	Graphite White	
105	1	Gasket	3HAC3200-1			
121	1	DSQC 563 Brake release board	3HAC16035-1			Recommended spare part.
122	4	Distance bolt	2125 2052-198			M5X15
123	1	Push button guard	3HAC2744-1			Recommended spare part.
129	1	Cable SMB	3HAC7819-1			Recommended spare part.
157	1	Adapter customer cabling	3HAB7328-1			
158	1	Cable power adapter	3HAC2809-1			
170	1	Cover pushbuttons	3HAC3197-1			

Continues on next page

Cover, spare part view



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1 Spare part lists and exploded views

1.3 Spare parts - robot IRB 260

1.3 Spare parts - robot IRB 260

Robot IRB 260, spare part list

The items specified below are shown in the figures *Robot IRB 260, exploded view 1 of 2 on page 15* and *Robot IRB 260, exploded view 2 of 2 on page 16*.

Item	Qty	Description	Spare part no.	Note
1	1	Axis 1-3	-	Spare parts are shown in section <i>Spare parts - axes 1-3 on page 17</i> .
2	1	Upper arm	-	Spare parts are shown in section <i>Spare parts - upper arm on page 25</i> .
3	1	Linkage	-	Spare parts are shown in section <i>Spare parts - linkage on page 29</i> .
4	1	Shaft end	3HAC024592-001	
5	1	Shaft end	3HAC025034-001	
6	1	Spacer, axis 2	3HAC025740-001	
7	1	Spacer, axis 2	3HAC025741-001	
8	1	Shaft stub	3HAB5527-1	
9	2	Lock nut	2126 2851-107	
10	2	Taper roller bearing	3HAA2103-15	
11	2	Radial sealing	3HAB3701-33	
12	1	Lock nut	2126 2851-106	
13	1	Distance	-	
14	2	Hex socket head cap screw	3HAB3409-71	M12x60, UNBRAKO 12.9
15	2	VK-cover	3HAC12165-2	
16	2	Washer	3HAA1001-134	13x19x1,5
17	4	Ring	3HAB6254-1	
18	8	Support washer	3HAB6279-1	
19	4	Lock nut	3HAC6271-1	
20	1	Bearing sealing	3HAC10088-4	
21	1	Locking washer	3HAB5523-1	D=34; T=4
22	1	Hex socket counters, head	2121 2852-449	M8x16 Steel 8,8 Fe/Zn 5c
23		Locking liquid	3HAC7181-1	Loctite 243
24	1	Mechanical stop, axis 3	3HAC024253-001	
25	3	Torx counters. head screw	9ADA624-56	M6x16 Steel 8.8-A2F
26	3	Torx pan head screw	9ADA618-53	M6x8 Steel 8.8-A2F
27	3	Washer	3HAC020537-001	D=6,4/12 T=1,6
28	6	Hex socket head cap screw	3HAB3402-37	M8x25 Steel 8.8 Gleitmo 610
29	2	Damper axis 2	3HAB8284-1	

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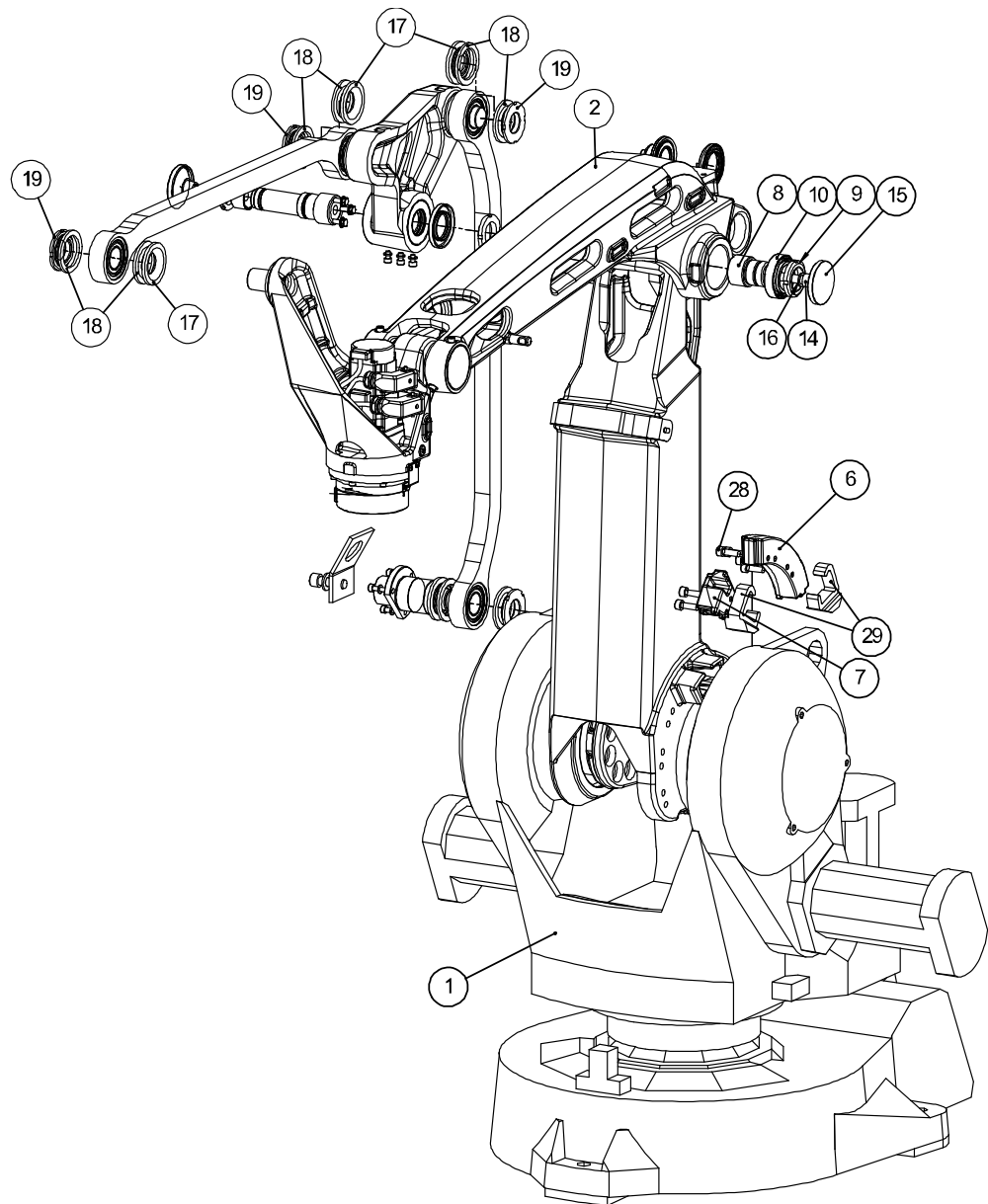
1 Spare part lists and exploded views

1.3 Spare parts - robot IRB 260

Continued

Item	Qty	Description	Spare part no.	Note
30	3	Plain washer	9ADA312-6	
31	3	Flanged bolt	-	
32	3	Hex socket head cap screw	3HAB3409-25	M6x20 Steel 12.9 Gleitmo 610
33	1	Protection hood	2522 2101-17	
35	1	Lifting eye	2179 090-25	
37	1	Plain washer	9ADA312-9	13x24x2,5
38	1	Bearing sealing	3HAC10089-2	

Robot IRB 260, exploded view 1 of 2



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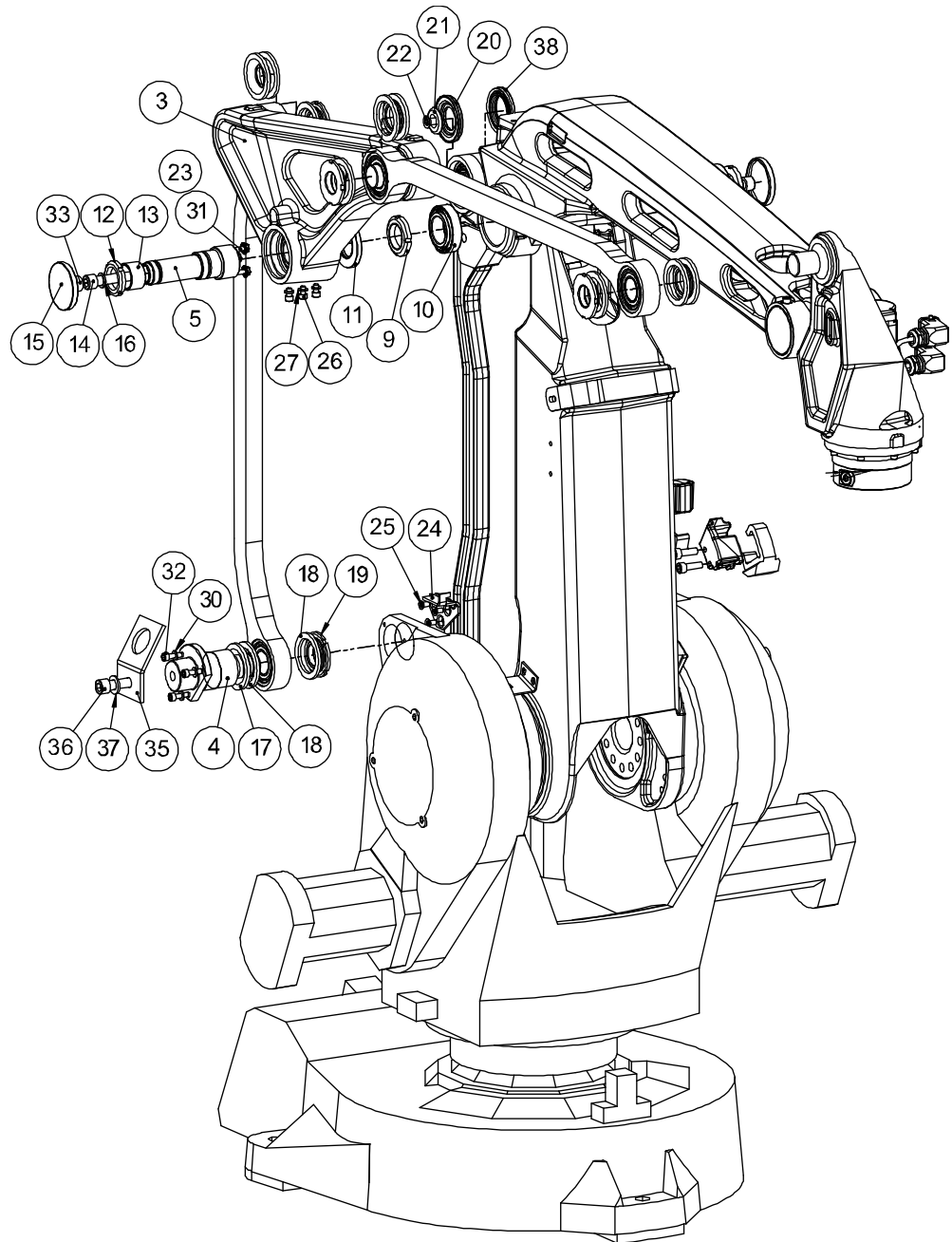
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1 Spare part lists and exploded views

1.3 Spare parts - robot IRB 260

Continued

Robot IRB 260, exploded view 2 of 2



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1.4 Spare parts - axes 1-3

Axes 1-3, spare part list

The items specified below are shown in the figures [Axes 1-3, spare part view 1 on page 19](#) and [Axes 1-3, spare part view 2 on page 20](#).

Item	Qty	Description	Spare part no.	Dimension
1	1	Base Foundry	3HAC025710-001	
2	1	Gearbox, axes 1-3	3HAC025711-001	
3	12	Hex socket head cap screw	-	M12x50 Steel 8.8 Gleitmo 610
4	12	Plain washer	9ADA312-9	13x24x2.5
5	2	Motor unit, axes 1 and 3	3HAC025712-001	
6	3	O-ring	21522012-434	
7	12	Spring washer	21542033-9	8.4x18x2
8	4	Hex socket head cap screw	-	M8x65 Steel 12.9 Gleitmo 610
9	8	Hex socket head cap screw	3HAB3409-37	M8x25
11	8	Spring washer	21542033-10	10.5x23x2.5
12	12	Hex socket head cap screw	3HAB3409-50	M10x40
13	1	Spring tension plate	3HAC2205-1	
14	1	Damper standard, axis 2	3HAC2180-1	
15	1	Damper	3HAB5512-1	Axis 3
16	4	Torx pan head roll. screw	9ADA629-56	M6x16
17	8	Hex socket head cap screw	3HAB3409-57	M10x60
19	2	Sealing ring (V-ring)	3HAB3732-13	
32	1	Bearing sealing	3HAC10088-4	
33	1	Locking washer	3HAB5523-1	D=34; T=4
34	1	Hex socket counters, head	21212852-449	M8x16
35	1	Bearing sealing	3HAC10089-2	
36	1	Motor unit, axis 2	3HAC025713-001	
41	14,700 ml	Mobile gear XP320	3HAC042471-001	
42	-	Shell Alvania WR2	3HAC042536-001	
43	-	Locking liquid	3HAC7181-1	Loctite 243
46	1	Mechanical stop unit, axis 1	3HAB6687-1	
48	6	Washer	21512082-150	6.1x20x2
49	1	Friction washer	3HAC0447-1	
50	1	Calibration mark, axis 2	3HAB5522-1	
51	1	Parallel bar complete	3HAC025714-001	
-	2	Spherical roller bearing	3HAA2167-12	Included in the complete parallel bar.

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1 Spare part lists and exploded views

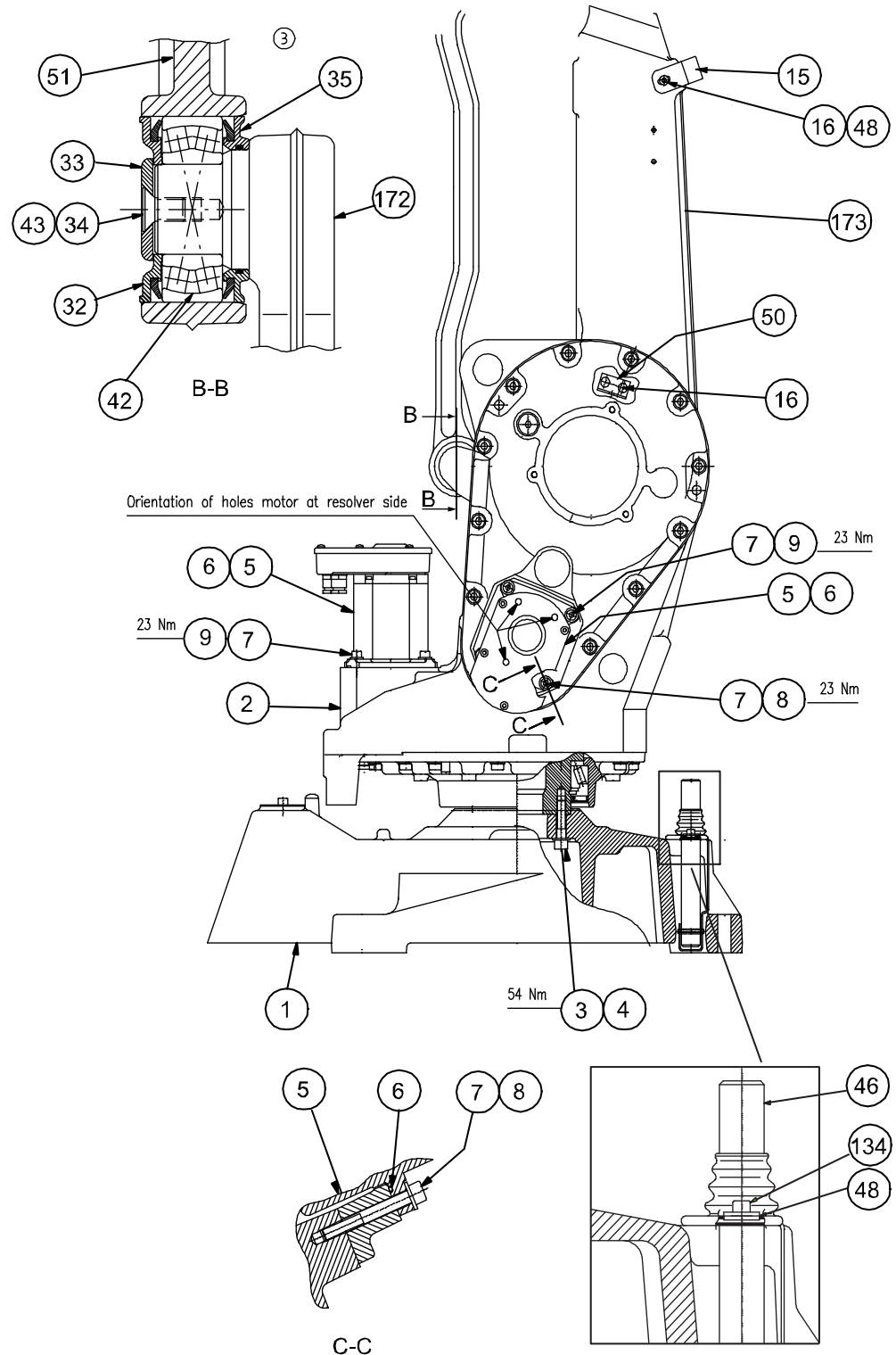
1.4 Spare parts - axes 1-3

Continued

Item	Qty	Description	Spare part no.	Dimension
134	15	Torx pan head tapp. screw	21212477-331	
172	1	Parallel arm complete	3HAC025727-001	
173	1	Lower arm	3HAC025729-001 3HAC025729-002	White Orange

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Axes 1-3, spare part view 1



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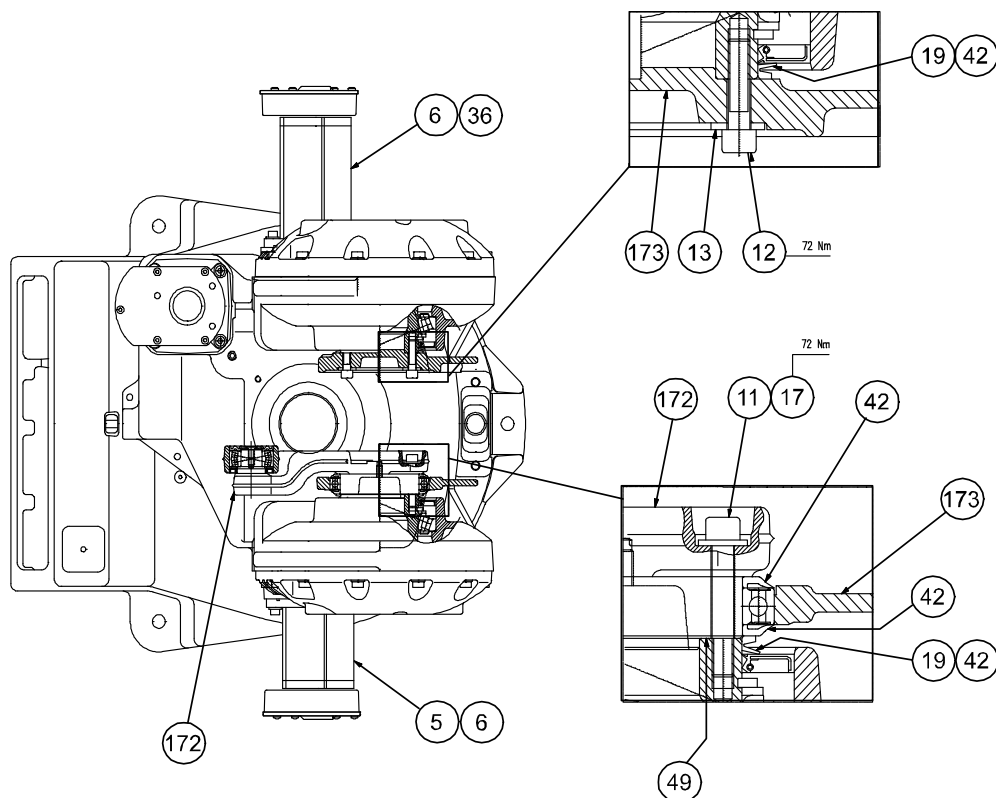
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1 Spare part lists and exploded views

1.4 Spare parts - axes 1-3

Continued

Axes 1-3, spare part view 2



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Axes 1-3, spare part list

The items specified below are shown in the figures [Axes 1-3, spare part view 3 on page 22](#), [Axes 1-3, spare part view 4 on page 23](#) and [Axes 1-3, spare part view 5 on page 24](#).

Item	Qty	Description	Spare part no.	Dimension/Note
100	1	Cable unit, axes 1-3	3HAC025725-001	
102	1	Bottom plate	3HAC2828-1	
103	1	Gasket	3HAC4554-1	
106	1	Sealing	3HAC4113-1	
107	1	Bracket	3HAB5923-1	
108	2	Cable guide bracket	3HAB3299-1	
109	1	Cable guide	3HAB5924-1	
110	1	Spring	3HAB3662-1	
112	3	Cover	3HAC025749-001	White
115	1	Serial measurement unit	3HAC17396-1	Contains serial measurement board 3HAC031851-001 and battery pack 3HAC16831-1.

Continues on next page

1 Spare part lists and exploded views

1.4 Spare parts - axes 1-3

Continued

Item	Qty	Description	Spare part no.	Dimension/Note
115	1	Serial measurement unit	3HAC046277-001	Contains serial measurement board 3HAC044168-001 and battery pack 3HAC044075-001.
115	1	Serial measurement board	3HAC031851-001	DSQC 633A
115	1	Serial measurement board	3HAC044168-001	RMU 101
-	1	Battery pack (2-pole battery contact)	3HAC16831-1	Lithium battery. Can only be used with SMB unit 3HAC17396-1 containing SMB board 3HAC031851-001.
-	1	Battery pack (3-pole battery contact)	3HAC044075-001	RMU Lithium battery Can only be used with SMB unit 3HAC046277-001 containing SMB board 3HAC044168-001.
-	1	SMB replacement set	3HAC046686-001	Contains all parts needed if SMB unit 3HAC17396-1 shall be replaced with SMB unit 3HAC046277-001.
116	1	Torx pan head screw	-	M5x16 Steel 8.8 Fe/ZN 5c
118	12	Hexagon nut with flange	9ADA290-1	M5
119	1	Cable straps, outdoors	21662055-3	
135	63	Hex socket head cap screw	9ADA183-34	M8x12
137	6	Torx pan head roll. screw	9ADA629-44	M5x12
138	1	Cable straps, outdoors	21662055-1	
139	1	Coupling	3HAB3333-20	
140	-	Locking liquid	-	Loctite 542
141	1	Protective hood	25222101-8	
147	3	Gasket	3HAC4419-1	
149	1	Gasket	3HAB7160-1	
150	-	Flange sealing	3HAC042474-001	Loctite 574
151	300 mm	Adhesive tape	11699198-301	
152	1	Bracket	3HAB5921-1	
156	1	Parallel pin, hardened	3HAC3785-3	
161	1	Sealing	3HAC5479-4	
171	-	Profile	3HAC042533-001	

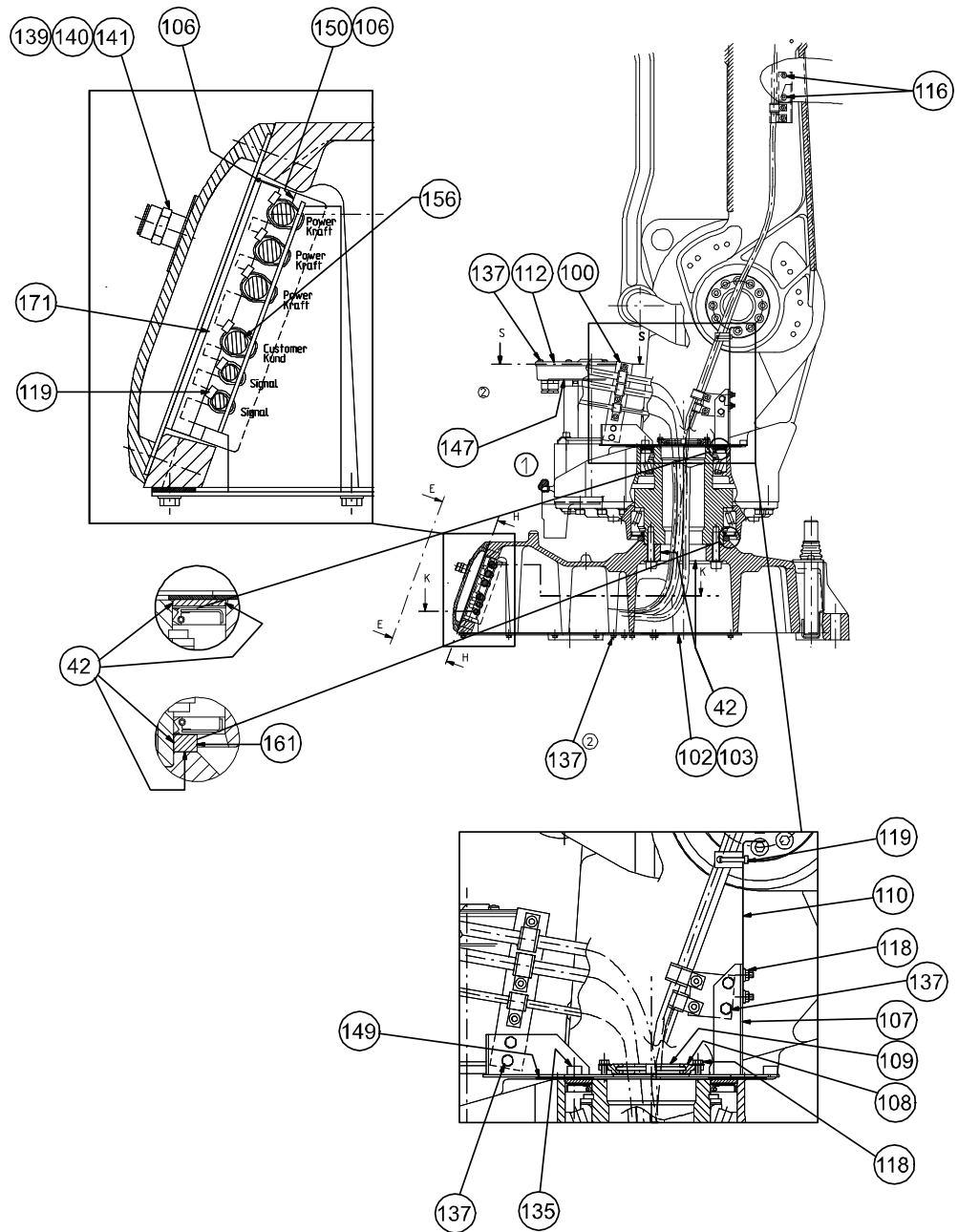
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1 Spare part lists and exploded views

1.4 Spare parts - axes 1-3

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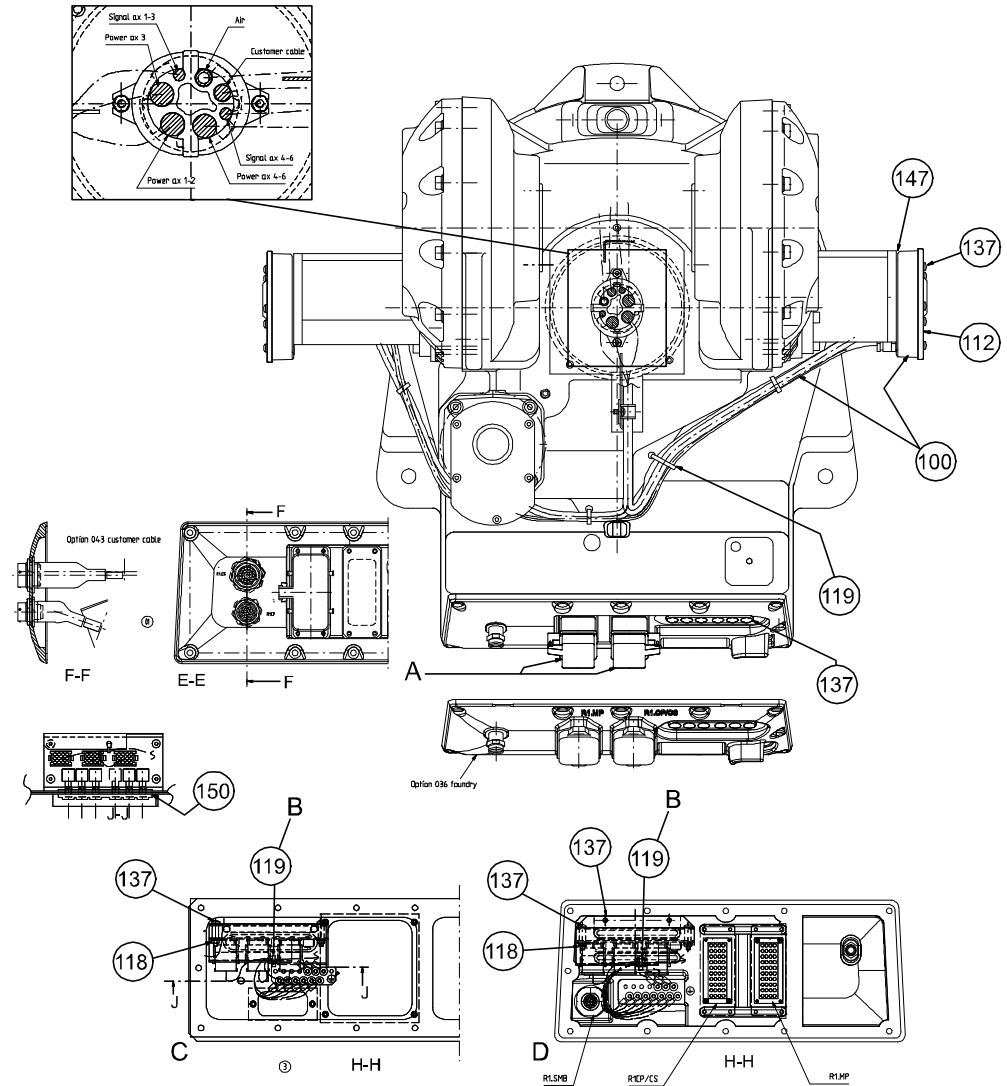
Axes 1-3, spare part view 3



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Axes 1-3, spare part view 4



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A	The housing must be removed from the cabling for foundry option
B	Conductors from R2.BU, R2.BU1-3, R2.BU4-6 and PE conductors under strap
C	Option: internal connectors
D	Option: external connectors

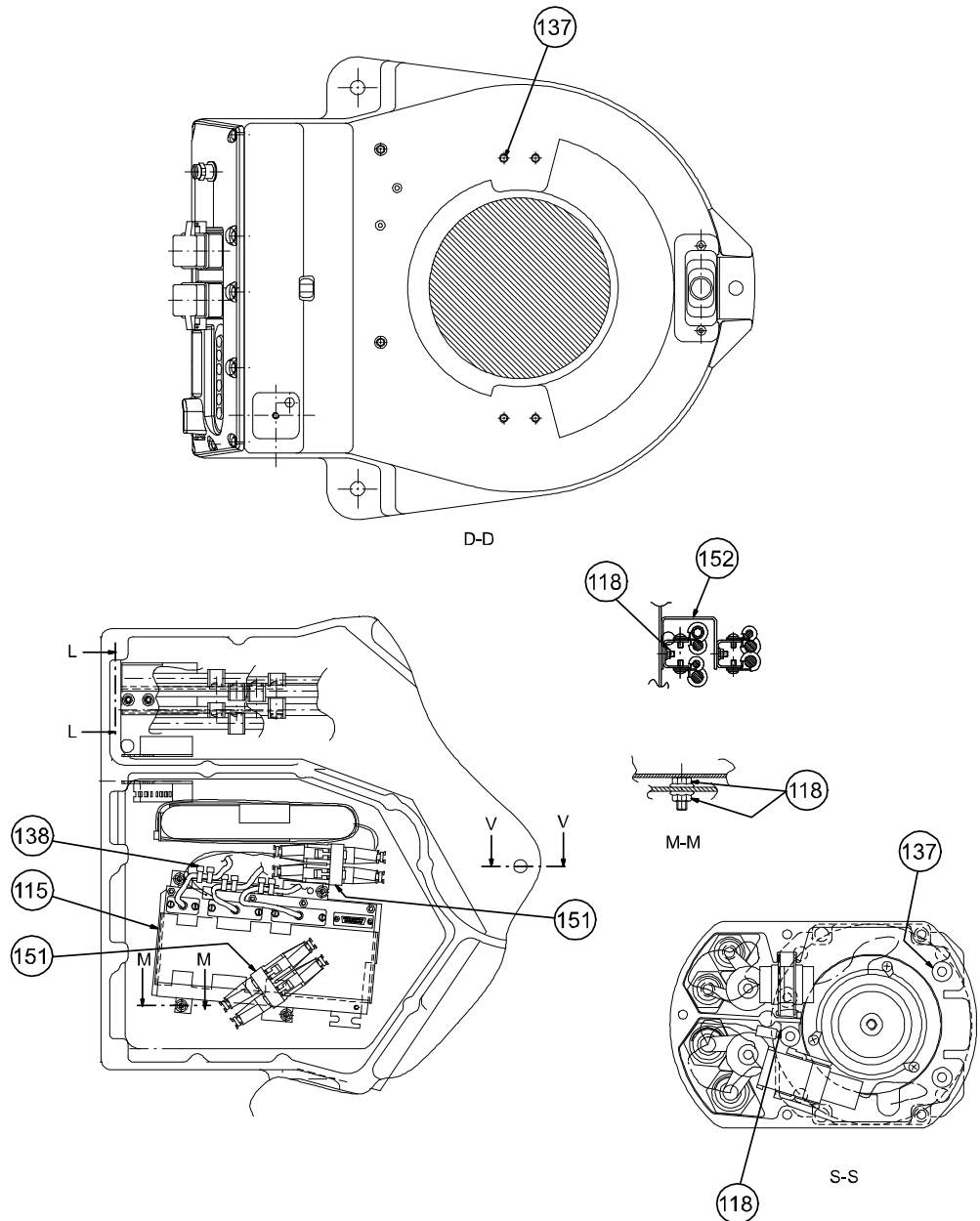
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1 Spare part lists and exploded views

1.4 Spare parts - axes 1-3

Continued

Axes 1-3, spare part view 5



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1.5 Spare parts - upper arm

Upper arm, spare part list

The items specified below are shown in the figure [Upper arm, exploded view on page 26](#).

Item	Qty	Description	Spare part no.	Dimension
1	1	Tilthouse	-	Spare parts are specified in section Spare parts - tilt-house on page 27 .
2	1	Sealing ring with dust lip	3HAB3701-25	
3	2	Protection hood	25222101-17	
4	3	Sealing ring	3HAC7877-2	
5	2	Lock nut	21262851-106	
6	2	Taper roller bearing	3HAA2103-14	
7	2	VK-cover	3HAC12165-2	
8	1	Shaft	3HAC024867-001	
9	1	Upper arm machining	3HAC025737-001	
10	1	Ballplug	3HAC022673-001	
11	1	Protection cap	3HAC023027-001	
12	4	Torx pan head screw	9ADA618-53	M6x8
13	4	Washer	3HAC020537-001	D=6,4/12 T=1,6
14		Locking liquid	-	
15	-	Shell Alvania WR2	3HAC042536-001	

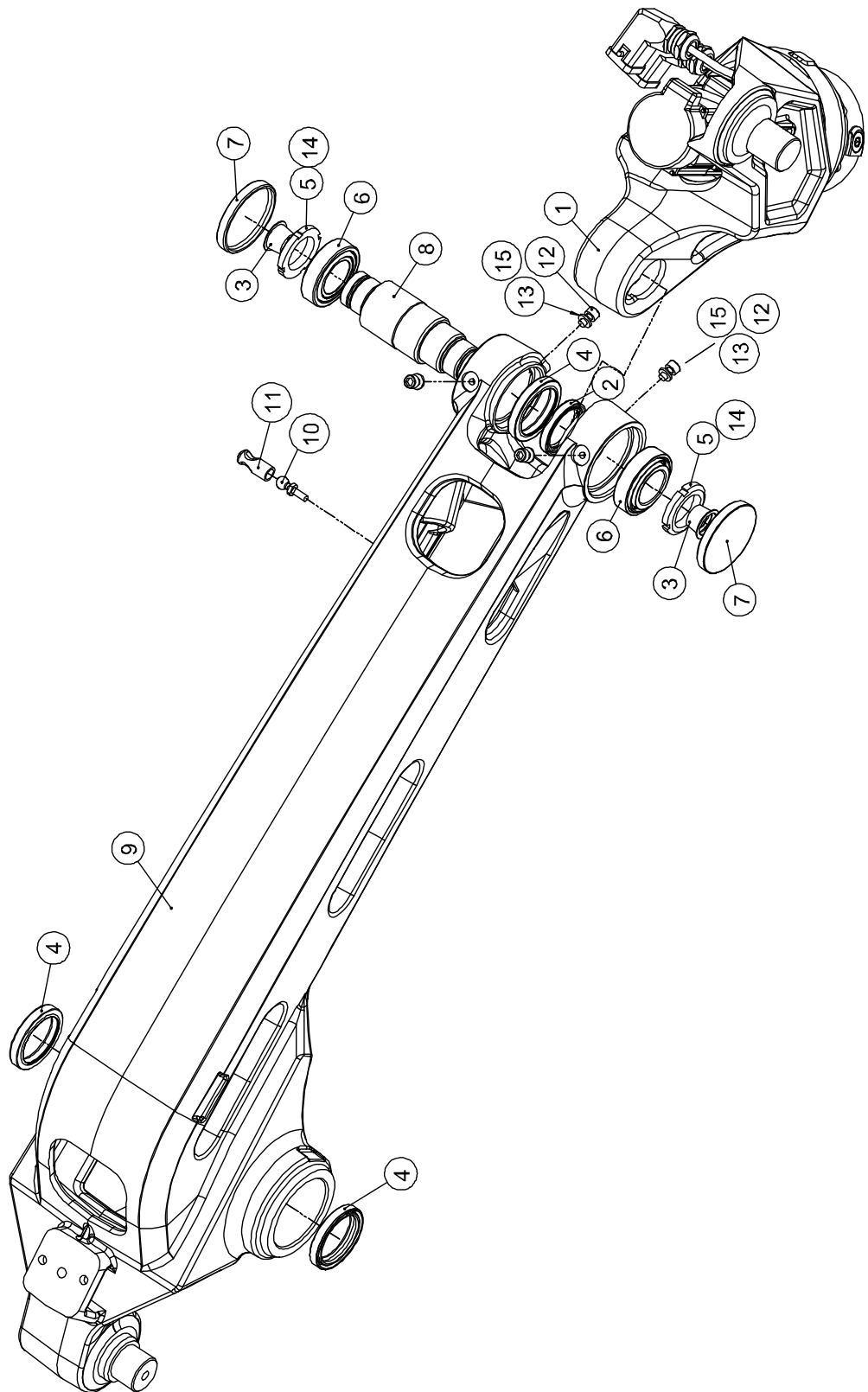
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1 Spare part lists and exploded views

1.5 Spare parts - upper arm

Continued

Upper arm, exploded view



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1.6 Spare parts - tilthouse

Tilthouse, spare part list

The items specified below are shown in the figure *Tilthouse, exploded view on page 28.*

Item	Qty	Description	Spare part no.	Color	Dimension
1	1	Tilthouse, machining	3HAC025733-001		
2	1	Motor incl. pinion	3HAC025734-002	ABB Orange	
		Motor incl. pinion	3HAC025734-004	Graphite White	
3	1	Gear	3HAC029208-001	ABB Orange	RV-6E, i=79
3	1	Gear	3HAC029208-002	Graphite White	RV-6E, i=79
4	8	Hex socket head cap screw	-		M5x25 Steel 12.9 Gleitmo 610
5	8	Plain washer	9ADA312-5		5,3x10x1
6	1	Turning disk	3HAC023881-001		
7	1	Sync. plate	3HAC024689-001		
8	2	Torx pan head screw	9ADA618-32		M4x8
9	2	Magnetic plug	3HAC037925-001		
10	1	Plug	25291920-2		R 1/8"
11	1	Protection cover	3HAC025212-001		
12	6	Hex socket head cap screw	-		M8x20 Steel 12.9 Gleitmo 610
13	6	O-ring	3HAB3772-89		
14	4	Hex socket head cap screw	9ADA183-25		
15	4	Plain washer	9ADA312-6		
17	1	O-ring	3HAB3772-16		
18	-	Kyodo Yushi TMO 150	3HAC032140-004		
19	1	Torx counters.head screw	9ADA624-69		M8x20

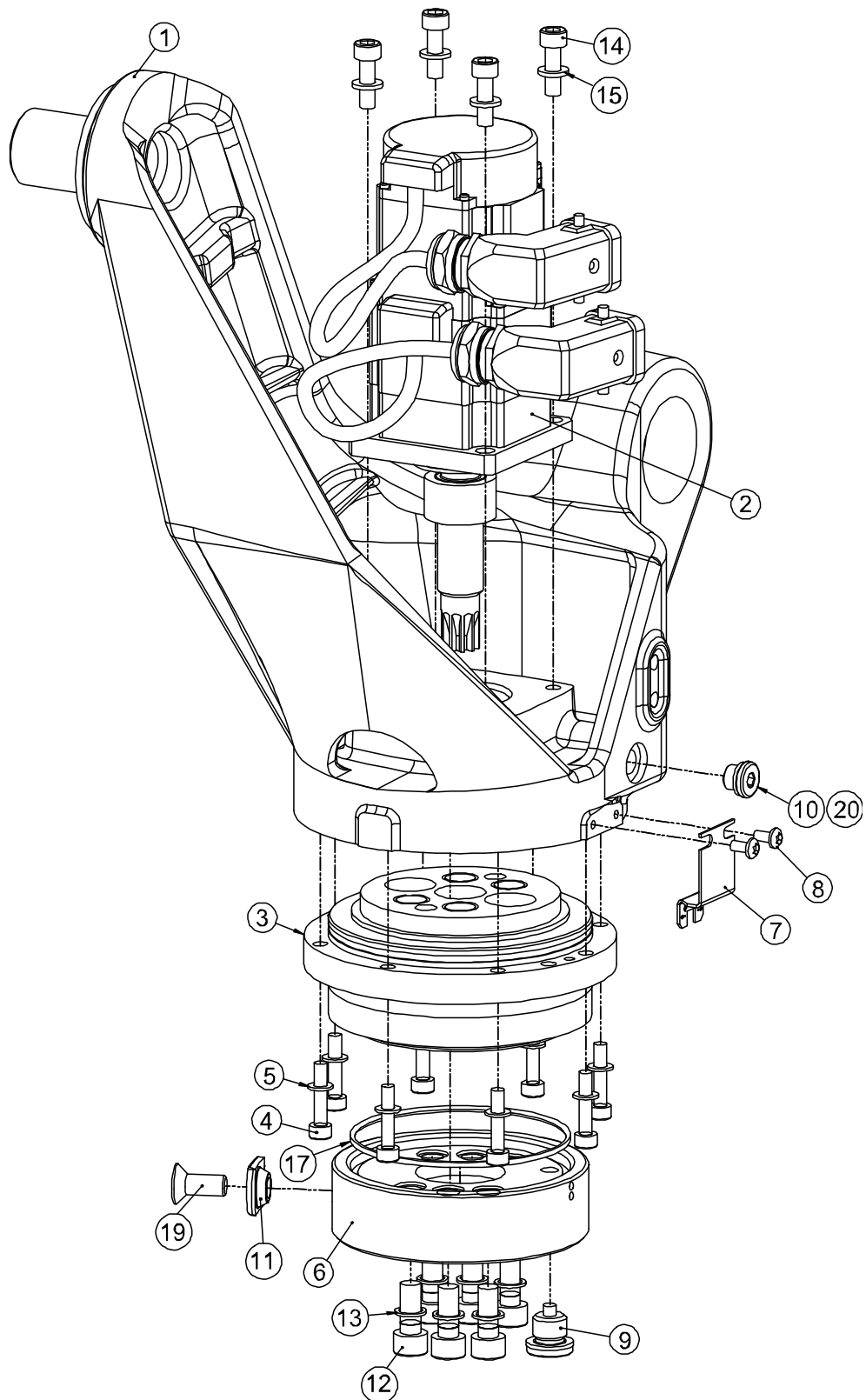
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1 Spare part lists and exploded views

1.6 Spare parts - tilthouse

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Tilthouse, exploded view



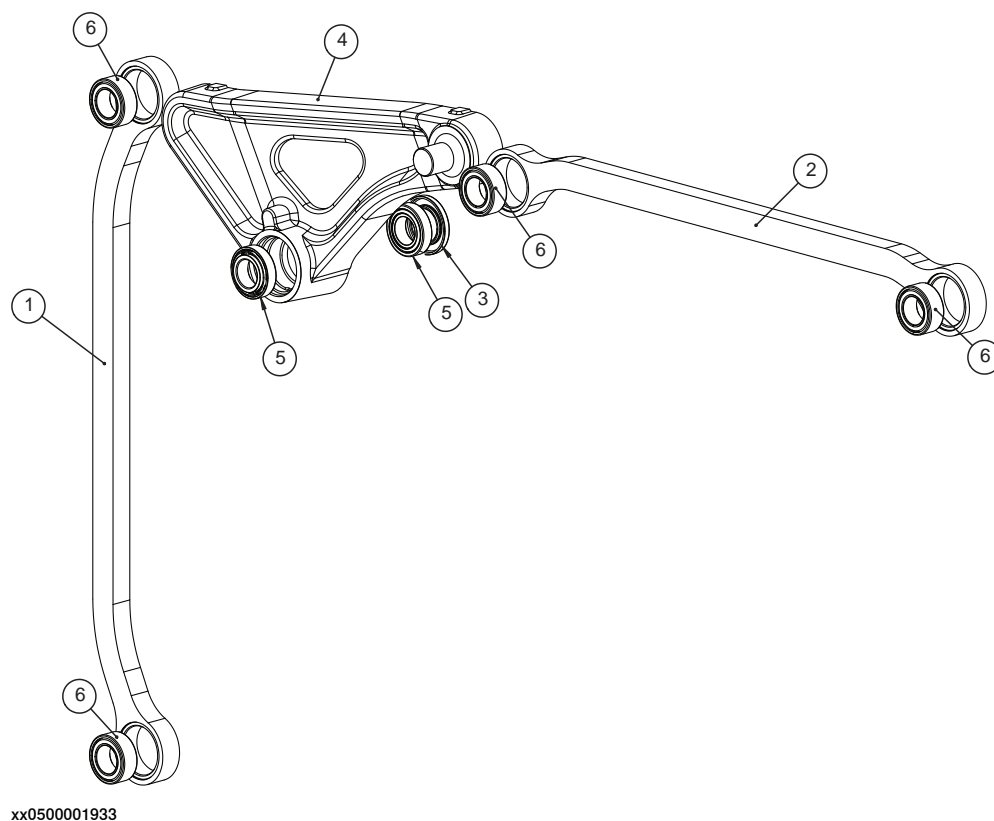
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1.7 Spare parts - linkage

Linkage, spare part list

Item	Qty	Description	Spare part no.	Dimension
1	1	Parallel rod, lower	3HAC025735-001	
2	1	Parallel rod upper	3HAC025736-001	
3	1	Radial Seal 35x62x7	3HAB3701-33	
4	1	Link machining	-	
5	2	Taper roller bearing	3HAA2103-14	
6	4	Needle bearing	3HAB6432-1	

Linkage, exploded view



1 Spare part lists and exploded views

1.8 Spare parts - material set cabling axis 6

1.8 Spare parts - material set cabling axis 6

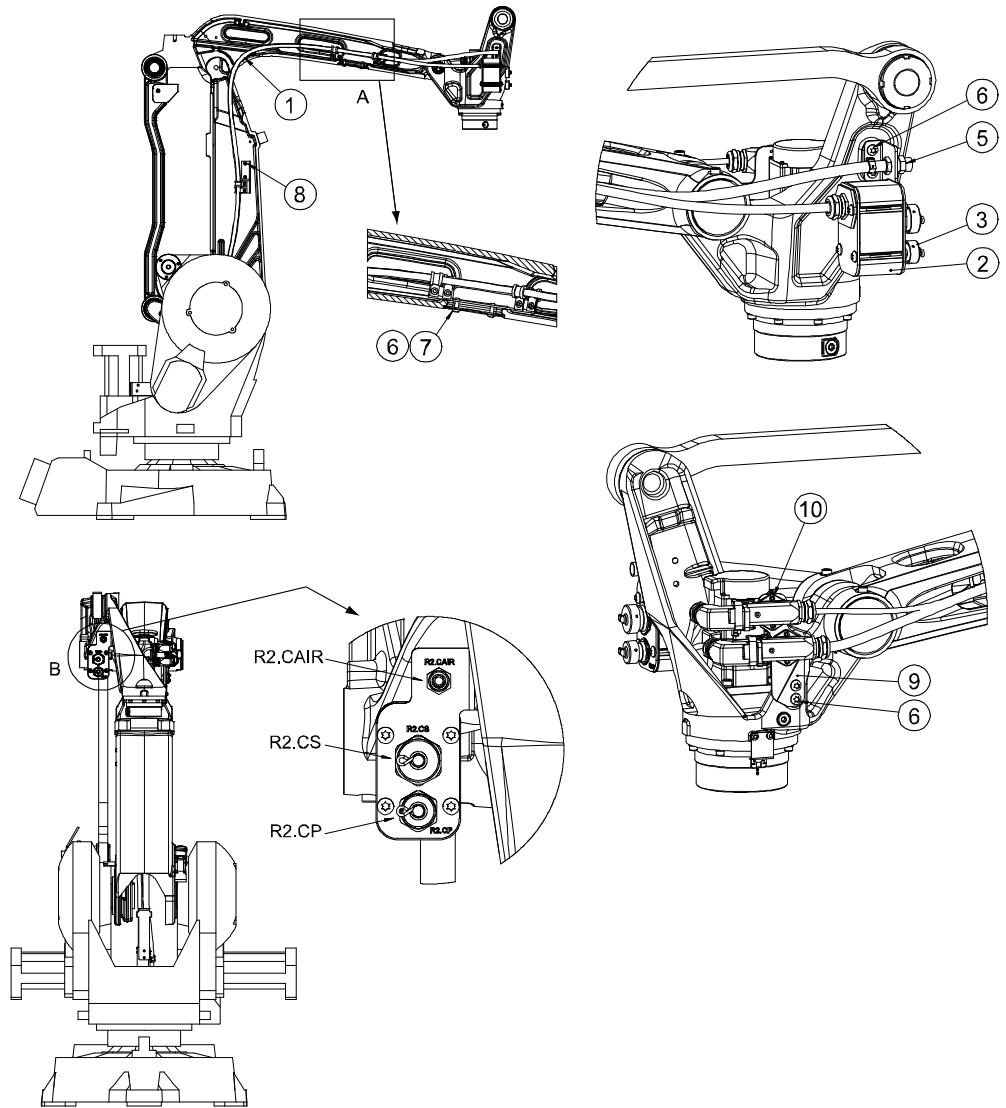
Material set cabling axis 6, spare part list

The items specified below are shown in the figure [Material set cabling axis 6, spare part view on page 31](#).

Item	Qty	Description	Spare part no.	Dimension/Note
1	1	Cable unit axis 6	3HAC024115-001	
2	1	Connection box CP/CS/AIR	3HAC024194-003	
3	1	Dust cap	3HEA800897-002	
5	1	Coupling	3HAB3333-20	
6	6	Torx pan head screw	9ADA618-57	M6x20 Steel 8.8-A2F
7	2	Square washer	-	
8	2	Torx pan head screw	-	M5x16 Steel 8.8 Fe/ZN 5c
9	1	Cable bracket tilt house	3HAC025783-001	
10	4	Torx pan head screw	9ADA618-23	M3x8 Steel 8.8-A2F

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Material set cabling axis 6, spare part view



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