Product manual, spare parts
IRB 2400

ABB

Product manual, spare parts

IRB 2400/L
IRB 2400/10
IRB 2400/16

M2000

Document ID: 3HAC049105-001

Revision: D

Table of contents

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Overview of this manual

About this manual

This manual contains spare parts for:

- IRB 2400 and all its variants.

Usage

This manual shall be used as a complement to the product manual for IRB 2400 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
Product manual - IRB 2400	*3HAC022031-001*
Circuit diagram - IRB 2400	*3HAC6670-3*

Revisions

Revision	Description
-	First edition
A	This edition contains the following changes: • Spare parts with color Graphite White are added to the spare part lists.
B	This edition contains the following changes: • Spare parts changed in upper arm (3HAC2774-1->3HAC050624-003, 3HAC050624-001->3HAC050624-004) • Generally modified due to update of BOL

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Revision	Description
C	This edition contains the following changes: • Corrections due to updates in SAP terminology.
D	Published in release R17.1. The following updates are made in this revision: • New article numbers for wrist, upper arm (3HAB9398-1 --> 3HAC059445-001, 3HAC050646-001 --> 3HAC059445-002, 3HAC034720-001 --> 3HAC059446-003). .

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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.

Product documentation, IRC5

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*

1 Spare parts - base

Base, spare part list

The spare parts for the base are listed below and shown in the figure *Base, spare part view on page 12*.

Item	Qty	Description	Spare part no.	Color	Note / Dimension
1	1	Base	3HAC5945-1	ABB Orange	
	1	Base	3HAC050519-001	Graphite White	
-	1	Cover	3HAC9368-1	ABB Orange	
	1	Cover	3HAC050469-001	Graphite White	
2	1	Gearbox axes 1-3	3HAC4795-1		
4	12	Plain washer	9ADA312-9		13x24x2.5
5	1	Motor with pinion axis 1	3HAC4789-1		IRB 2400 /L, /10, /16 (Elmo)
			3HAC025365-001		IRB 2400 /Wall mounted (Elmo)
			3HAC021961-001		IRB 2400 /Wall mounted (Yaskawa)
			3HAC021346-001	ABB Orange	IRB 2400 /L, /10, /16 (Yaskawa)
			3HAC021346-003	Graphite White	IRB 2400 /L, /10, /16 (Yaskawa)
			3HAC025365-001	ABB Orange	
5	1	Motor with pinion axis 3	3HAC4789-1		(Elmo)
			3HAC021346-001	ABB Orange	(Yaskawa)
			3HAC021346-003	Graphite White	(Yaskawa)
			3HAC025365-001	ABB Orange	
6	3	O-ring	21522012-434		109.5x3
7	12	Spring washer	21542033-9		8.4x18x2
9	8	Hex socket head cap screw	3HAB3409-37		M8x25 12.9 Gleitmo 610

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Base, spare part view

Orientation of holes motor at resolver side

23 Nm

54 Nm

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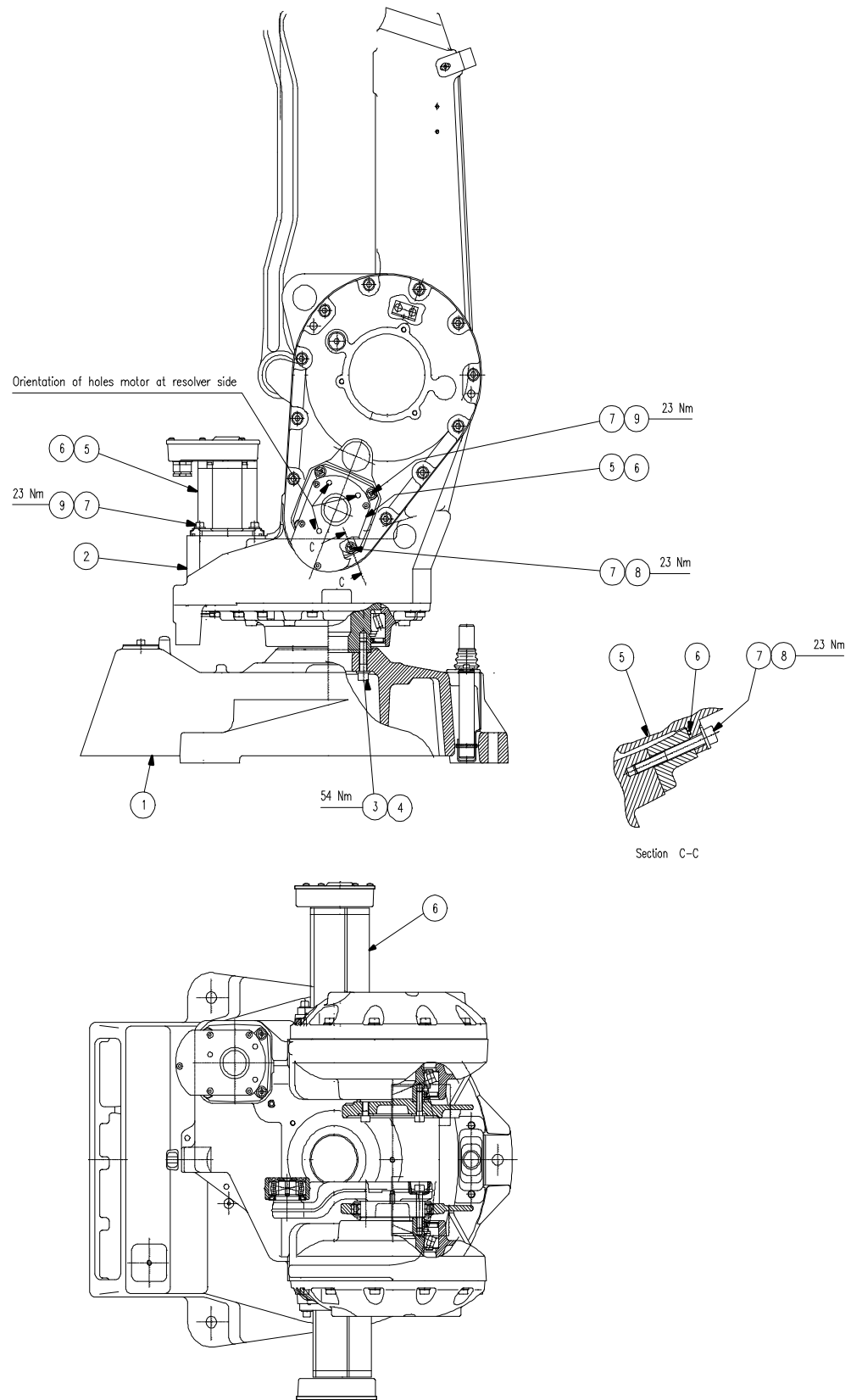
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2 Spare parts - lower arm

Lower arm, spare part list - Spare part view 1

Item	Total Qty*	Description	Spare part no.	Color	Dimension/Note
10	1	Lower arm	3HAC4796-1	ABB Orange	2400/10, /16
	1	Lower arm	3HAC4797-1	ABB Orange	2400L
15	1	Damper axis 3	3HAB5512-1		
18	1	Parallel arm	3HAB9394-1	ABB Orange	
		Parallel arm	3HAC051275-001	Graphite White	
26	2	Hex socket head cap screw	9ADA183-34		M8x12
32	1	Bearing sealing	3HAC10088-4		
33	1	Locking washer	3HAB5523-1		SS 1914-04
34	1	Hex socket counters, head	21212852-449		M8x16 8.8
35	1	Bearing sealing	3HAC10089-2		
41	14,700 ml	Lubricating oil	3HAC042471-001		
43	1 ml	Locking liquid	3HAC7181-1		Loctite 243
46	1	Mechanical stop unit axis 1	3HAB6687-1		
48	6	Washer SRKB	3HAA2356-13		6.4x22x1.5
50	1	Sync. mark, axis 2	3HAB5522-1		
51	1	Upper arm, axes 4-6			
54	2	Lock nut	21262851-107		M35x1.5
55	2	Shaft stub	3HAB5527-1		SS 1672-08
56	2	Hex socket head cap screw	3HAB3409-71		M12x60 12.9 Gle 603+Geo500
57	2	VK-cover	3HAC12165-2		VK 62x8
60	1	Sync. mark, axis 3	3HAB8385-1		
62	2	Washer	3HAA1001-134		
63	9	Torx pan head roll screw	9ADA629-43		

*Some of the articles and spare parts are used at different locations on the robot and therefor also listed in several tables, with identical information. The quantity given in the table is therefor the total quantity of the article, used for the complete robot! For more specified information about exact quantity, see the chapter Repair and the replacement procedure for the part involved!

Spare part view 1

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Lower arm, spare part list - Spare part view 2

The lower arm spare parts listed below are shown in *Spare part view 2 on page 16*.

Item	Total Qty*	Description	Spare part no.	Dimension / Note
10	1	Lower arm	3HAC 4796-1	2400/10, /16
	1	Lower arm	3HAC 4797-1	2400L
11	8	Spring washer	2154 2033-10	10.5x23x2.5
12	12	Hex socket head cap screw	3HAB3409-50	M10x40 12.9
13	1	Spring tension plate	3HAC2205-1	66x116x3
14	1	Damper, standard axis 2	3HAC2180-1	
17	8	Hex socket head cap screw	3HAB3409-57	M10x60 12.9
19	2	Sealing ring	3HAB3732-13	V-110-L 99x10.5

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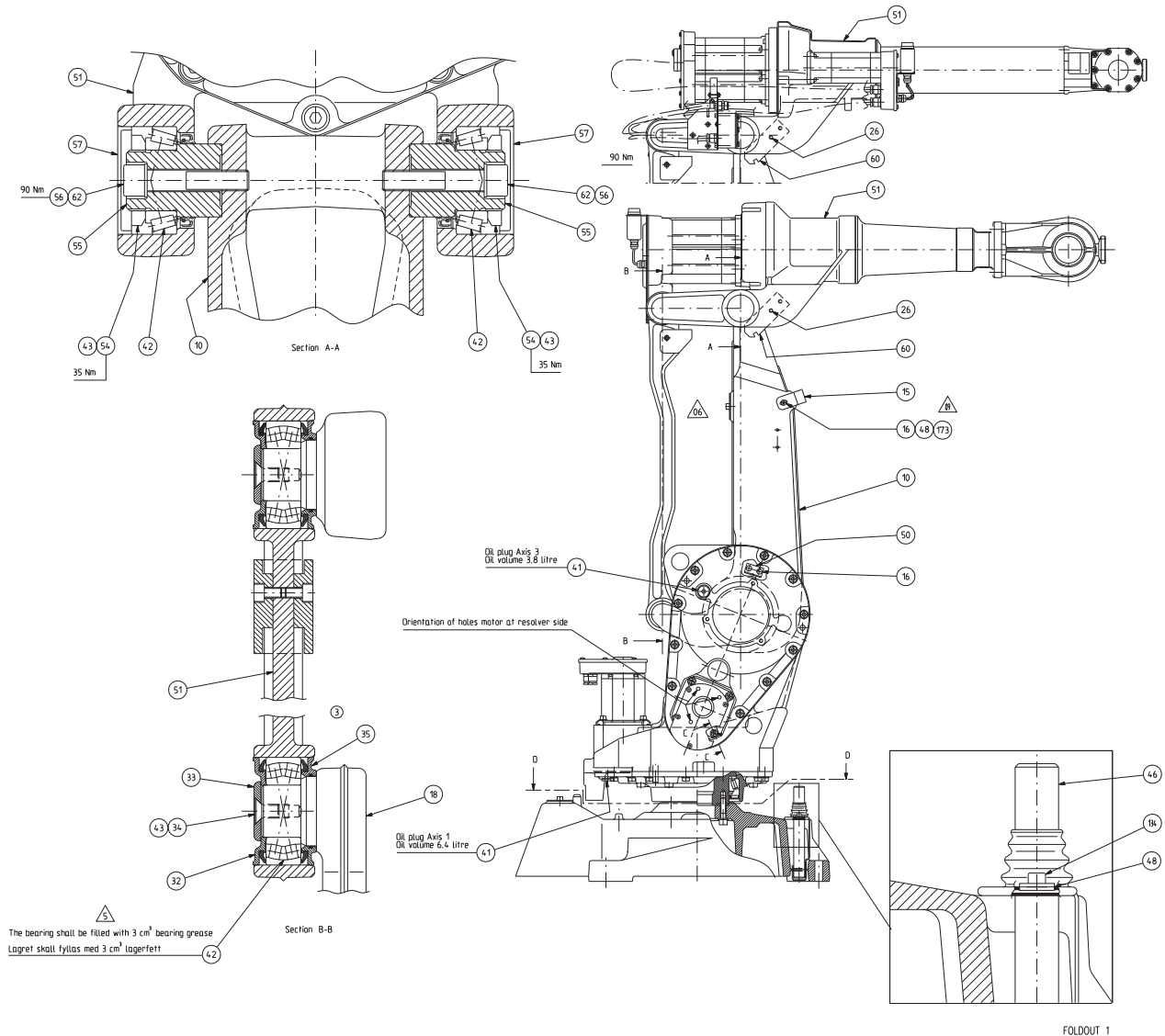| Item	Total Qty*	Description	Spare part no.	Dimension / Note
20	1	Groove ball bearing	3HAB3643-12	61822-2RS1
21	2	Sealing ring	3HAB5515-1	Acetal
36	1	Motor, axis 2	3HAC4790-1	(Elmo)
			3HAC021350-001	ABB Orange (Yaskawa)
			3HAC021350-003	Graphite White
41	14,700 ml	Lubricating oil	3HAC042471-001	Also shown in *Spare part view 1 on page 14*
42	1 g	Bearing grease	3HAC042536-001	Also shown in *Spare part view 2 on page 16*
49	1	Friction washer	3HAC0447-1	

*Some of the articles and spare parts are used at different locations on the robot and therefor also listed in several tables, with identical information. The quantity given in the table is therefor the total quantity of the article, used for the complete robot! For more specified information about exact quantity, see the chapter Repair and the replacement procedure for the part involved!

Spare part view 2

Oil plug Axis 2
Oil volume 4,5 litre

72 Nm

72 Nm
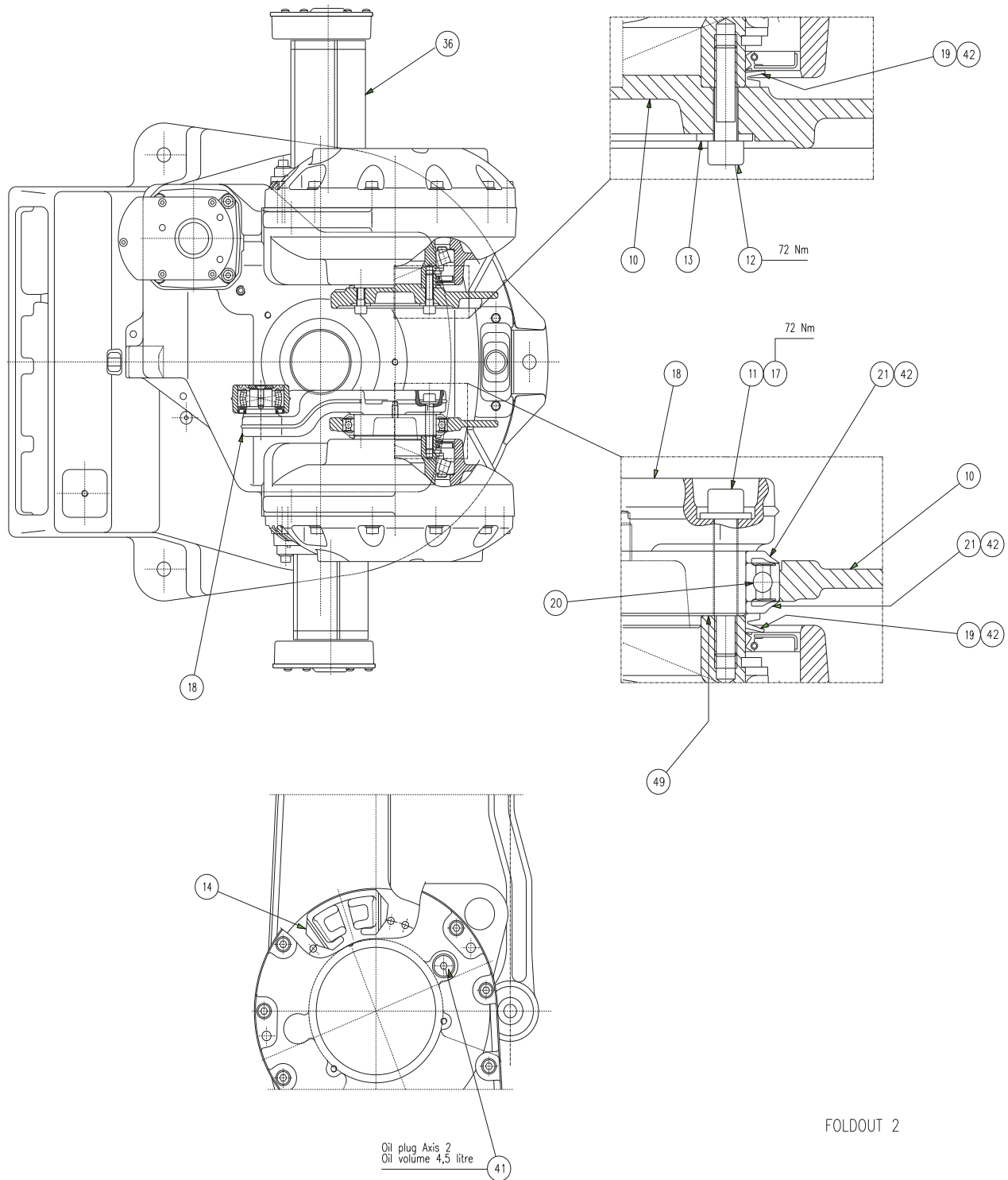
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Lower arm, spare part list - Spare part view 3

The lower arm spare parts listed below are shown in *Spare part view 3 on page 19*.

Item	Total Qty*	Description	Spare part no.	Protection type	Color	Dimension
42	1 g	Bearing grease	3HAC042536-001			Also shown in *Spare part view 2 on page 16*
100	1	Cable unit axes 1-3	3HAC4791-1	Standard	ABB Orange	Also shown in *Spare part view 3 on page 19*
	1	Cable unit axes 1-3	3HAC050554-001	Standard	Graphite White	Also shown in *Spare part view 3 on page 19*
	1	Cable unit axes 1-3	3HAC034712-001	Clean Room		
102	1	Bottom plate	3HAC2828-1			
103	1	Gasket	3HAC4554-1			
104	1	Cover	3HAC9368-1			Standard
			3HAC9362-1			Foundry
			3HAC7242-1			Wire feeder
			3HAC050210-001		Graphite White	
105	1	Gasket	3HAC3200-1			
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			
111	1	Cable guide upper arm	3HAB5928-1			IRB 2400/10/16
112	3	Cover	3HAC4337-3	Standard	ABB Orange	
			3HAC025749-001		White	
116	2	Torx pan head roll. screw	9ADA629-45			M5x16
118	14	Hexagon nut with flange	9ADA290-1			M5 fzb Also in *Spare part view 4 on page 21*, *Spare part view 5 on page 23*
119	12	Cable straps, outdoor	21662055-3			L=208 mm
132	2	Dust cap	3HAC7561-3			
133	1	Dust cap	3HAC7561-4			
135	3	Hex socket head pan screw	9ADA183-34			M8x12 8.8
137	63	Torx pan head roll screw	9ADA629-44			M5x12. Also in *Spare part view 4 on page 21*, *Spare part view 5 on page 23*
139	1	Coupling	3HAB3333-20			
140		Locking liquid	12690014-412			Loctite 542

Item	Total Qty*	Description	Spare part no.	Protection type	Color	Dimension
141	2	Protective hood	25222101-8			D=11.4 - 13
147	3	Gasket, motor axes 1-3	3HAC4419-1			
149	1	Gasket	3HAB7160-1			
150		Flange sealing	12340011-116			Loctite 574 Also shown in *Spare part view 4 on page 21*
156	1	Parallel pin	3HAC3785-1			
160	1	Sealing	3HAC5479-3			
161	1	Sealing	3HAC5479-4			
171		Profile	3HAC042533-001			120 mm

*Some of the articles and spare parts are used at different locations on the robot and therefor also listed in several tables, with identical information. The quantity given in the table is therefor the total quantity of the article, used for the complete robot! For more specified information about exact quantity, see the chapter Repair and the replacement procedure for the part involved!

Spare part view 3

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Lower arm, spare part list - Spare part view 4

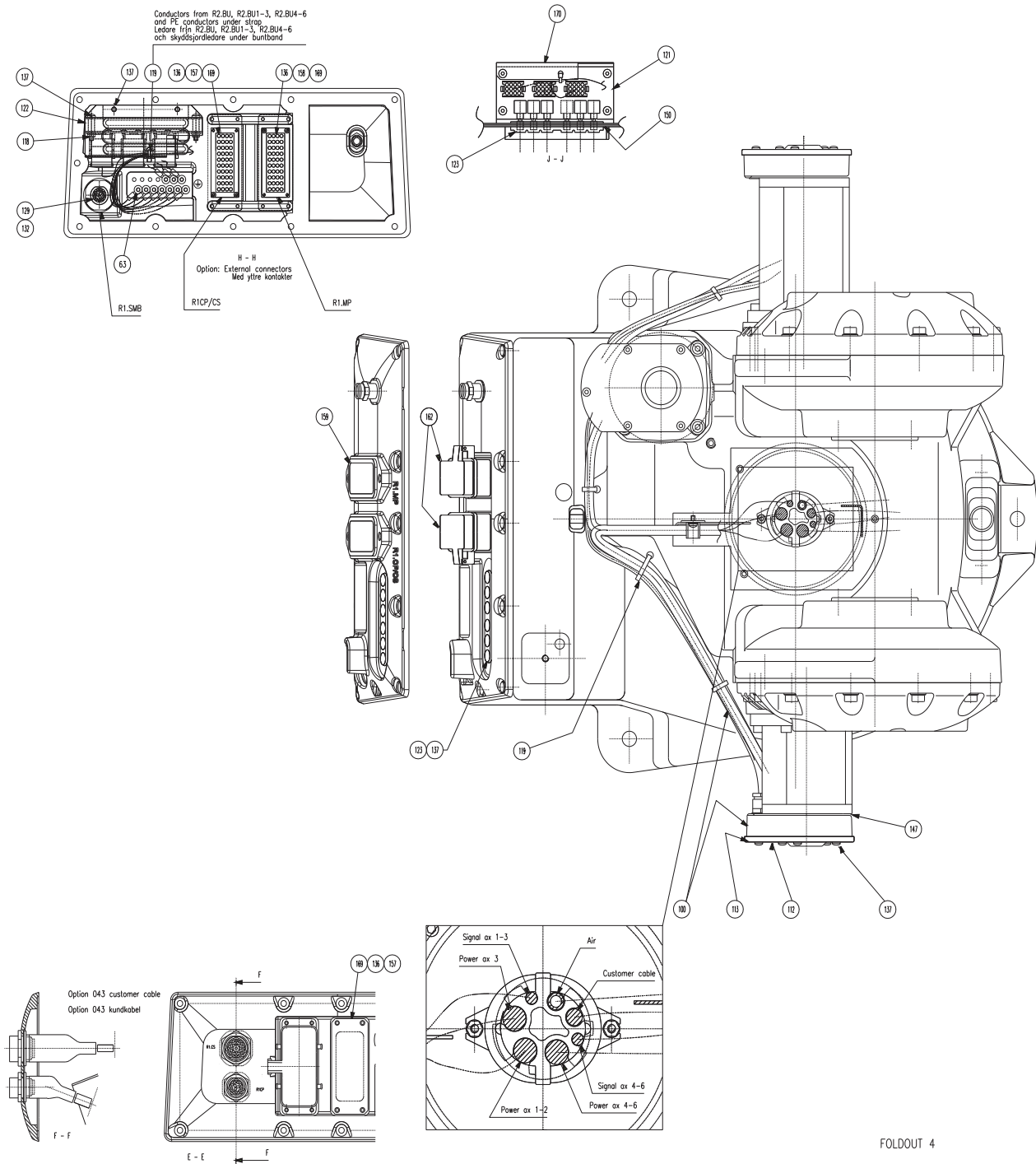The lower arm spare parts listed below are shown in *Spare part view 4 on page 21*.

Item	Total Qty*	Description	Spare part no.	Protection type	Color	Dimension
100	1	Cable unit axes 1-3	3HAC4791-1	Standard	ABB Orange	Also shown in *Spare part view 3 on page 19*
	1	Cable unit axes 1-3	3HAC050554-001	Standard	Graphite White	Also shown in *Spare part view 3 on page 19*
	1	Cable unit axes 1-3	3HAC034712-001	Clean Room		
112	3	Cover	3HAC 4337-1			Also shown in *Spare part view 3 on page 19*
118	14	Hexagon nut with flange	9ADA 290-1			M5 fzb Also shown in *Spare part view 3 on page 19* and *Spare part view 5 on page 23*
119	12	Cable straps, outdoor	21662055-3			L=208 mm
121	1	DSQC 563 Brake re-lease board	3HAC16035-1			Recommended spare part.
122	4	Distance bolt	21252052-198			
123	1	Push button cover	3HAC2744-1			
129	1	Cable SMB	3HAC7819-1			Recommended spare part.
132	2	Dust cap	3HAC7561-3			
136	8	Torx pan head roll screw	9ADA629-34			M4x12 Ext. conn.
137	63	Torx pan head roll screw	9ADA629-44			M5x12. Also in *Spare part view 4 on page 21*, *Spare part view 5 on page 23* Also shown in *Spare part view 3 on page 19*, *Spare part view 5 on page 23*
147	3	Gasket, motor axes 1-3	3HAC4419-1			Also shown in *Spare part view 3 on page 19*
150		Flange sealing	3HAC042581-001			Loctite 574 Also shown in *Spare part view 4 on page 21*
157	1	Adaptor, customer cabling	3HAB7328-1			Also shown in *Spare part view 3 on page 19*
157	1	Cover protection	3HAC6823-1			
158	1	Adaptor, power cabling	3HAB2809-1			
159	2	Cover	3HAC7816-1			Foundry
169	2	Gasket	3HAB9040-1			Standard
170	1	Cover	3HAC0048-1			

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*Some of the articles and spare parts are used at different locations on the robot and therefor also listed in several tables, with identical information. The quantity given in the table is therefor the total quantity of the article, used for the complete robot! For more specified information about exact quantity, see the chapter Repair and the replacement procedure for the part involved!

Spare part view 4

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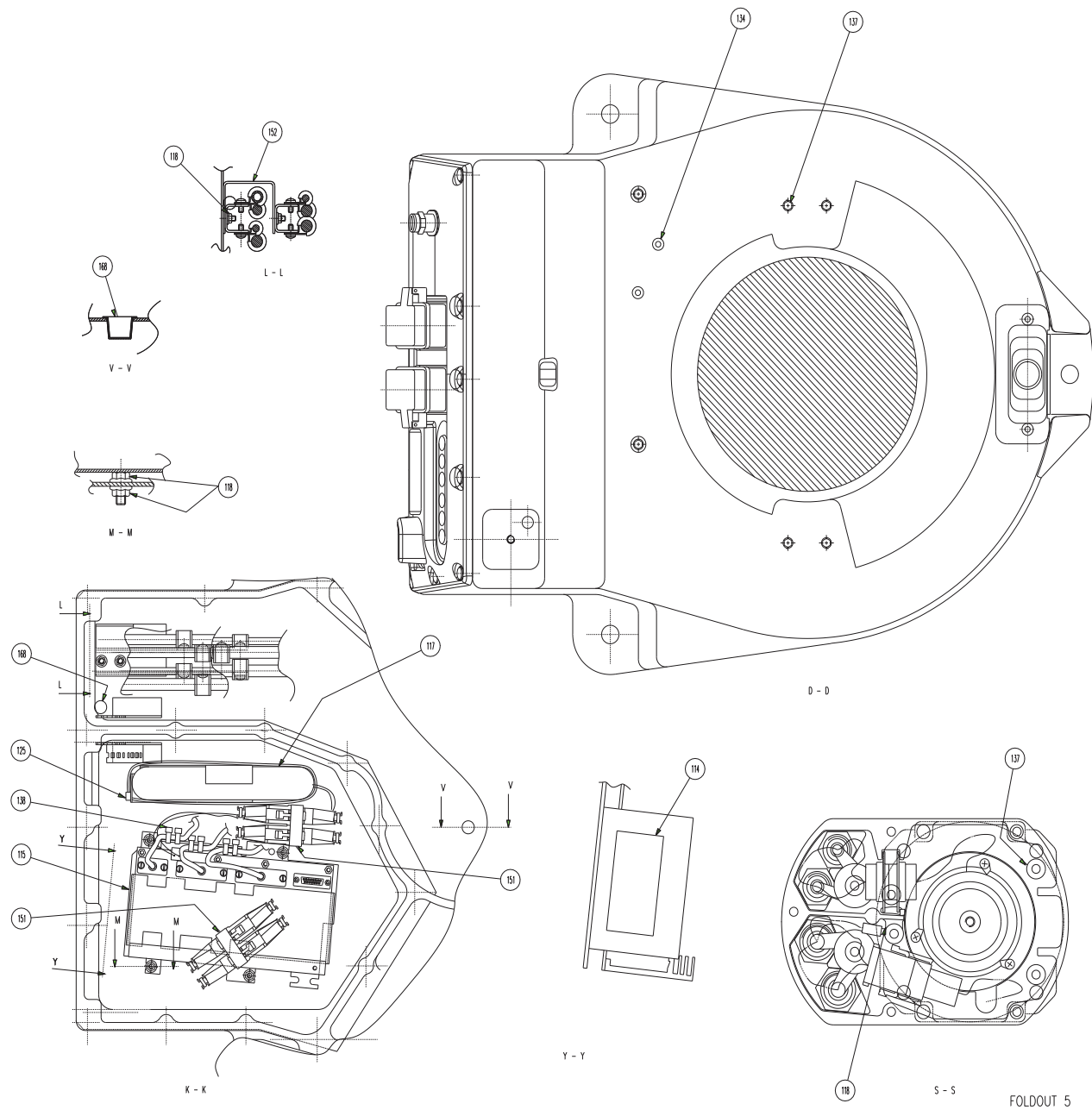### Lower arm, spare part list - Spare part view 5

The lower arm spare parts listed below are shown in *Spare part view 5 on page 23*.

Item	Total Qty*	Description	Spare part no.	Dimension / Note
114	1	Instruction plate	3HAC2589-1	
115	1	SMB replacement unit	3HAC046277-001	Contains serial measurement board3HAC044168-001 and battery pack 3HAC044075-001
155	1	Serial measurement board	3HAC044168-001	RMU 101
117	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.
117	1	Battery pack (3-pole battery contact)	3HAC044075-001	Lithium battery 7.2V 3.6Ah Can only be used with SMB unit 3HAC046277-001 containing SMB board 3HAC044168-001.
118	14	Hexagon nut with flange	9ADA290-1	M5 fzb Also shown in *Spare part view 3 on page 19* and *Spare part view 4 on page 21*
134	15	Torx pan head screw	9ADA618-56	M6x16 8.8
137	63	Torx pan head roll screw	9ADA629-44	M5x12. Also in *Spare part view 4 on page 21*, *Spare part view 5 on page 23* Also shown in *Spare part view 3 on page 19*, *Spare part view 5 on page 23*
138	6	Cable straps, outdoors	21662055-1	L=101 mm
151		Adhesive tape	11699198-301	19x0.18
152	1	Bracket	3HAB5921-1	

*Some of the articles and spare parts are used at different locations on the robot and therefore also listed in several tables, with identical information. The quantity given in the table is therefore the total quantity of the article, used for the complete robot! For more specified information about exact quantity, see the chapter Repair and the replacement procedure for the part involved!

Spare part view 5

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3 Spare parts - upper arm, IRB 2400/10/16

Upper arm, IRB 2400/10/16, spare part list

The spare parts for the upper arm, IRB 2400 version /10 and /16, are listed below and shown in the *Spare part view 6 on page 28* and *Spare part view 7 on page 29*.

Item	Qty	Description	Spare part no.	Protection type	Color	Dimension/Note
1	1	Upper arm without wrist and motors	3HAC16672-1	Standard	ABB Orange	
		Upper arm without wrist and motors	3HAC050194-001	Standard	Graphite White	
		Upper arm without wrist and motors, 5 kg	3HAC18006-2	Standard	ABB Orange	
		Upper arm without wrist and motors	3HAC034691-001	Clean Room	White	
13	4	Disk spring	3HAB3731-14			67.5x50.5x0.7
18	1	Wrist	3HAC059445-001	Standard	ABB Orange	A pin is delivered with the wrist, only used when the robot is calibrated with the Axis Calibration method.
		Wrist	3HAC059445-002	Standard	Graphite White	A pin is delivered with the wrist, only used when the robot is calibrated with the Axis Calibration method.
		Wrist	3HAC059446-003	Clean Room	White	A pin is delivered with the wrist, only used when the robot is calibrated with the Axis Calibration method.
19	1	O-ring	3HAB3772-12			Nitrile rubber 126x4
20	6	Hex socket head cap screw	3HAB3402-38			M8x30 8.8 Gleitmo 610
21	15	Plain washer	9ADA312-7			8.4x16x1.6
25	1	Motor unit axis 5	3HAC10600-1			IRB 2400/10 (Elmo)
			3HAC10601-1			IRB 2400/16 (Elmo)
			3HAC021722-001		ABB Orange	IRB 2400/10/16 (Yaskawa)
			3HAC021722-003		Graphite White	IRB 2400/10/16 (Yaskawa)
			3HAC031026-001			
26	1	Motor unit axis 4	3HAC10602-1			(Elmo)
			3HAC021353-001			(Yaskawa)
			3HAC031024-001			

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Item	Qty	Description	Spare part no.	Protection type	Color	Dimension/Note
27	3	O-ring	3HAB3772-18			Nitrile rubber 34.2x3
28	12	Plain washer	9ADA312-6			6.4x12x1.6
29	12	Hex socket head cap screw	3HAB3409-25			M6x20 12.9 Steel 12.9 Gle 603+Geo500
30	1	Damper axis 4	3HAB5544-1			
32	4	Hex socket head cap screw	3HAB3402-36			M8x20 8.8 Gleitmo 610
33	2425 ml	Lubricating oil	3HAC042564-001			
34	2	Magnetic plug	3HAC037925-001			G 1/4"
35	2	Sealing washer	3HAC029646-001			
39	45 g	Grease	3HAC042536-001			
40	30 ml	Flange sealing	3HAC042536-001			Loctite 574
41	2	Sealing ring without dust lip	3HAC7877-2			
42	2	Taper roller bearing	3HAA2103-15			32007 X
43	1	Parallel bar	3HAC1564-1			
44	2	Spherical roller bearing	3HAA2167-12			22206 CC
45	2	Sealing	3HAC10089-2			
46	1	Damper axis 3	3HAB5511-1			
47	1	Bracket	3HAC0001-1			
48	1	Sealing	3HAC10088-4			
49	1	Hex socket counters, head	21212852-449			M8x16 8.8
50	1	Locking washer	3HAB5523-1			SS 1914-04
51	1 ml	Locking liquid	3HAC7181-1			Loctite 243
52	3	Gasket, motor axes 4-6	3HAC4429-1			
53	1	Cable unit axes 4-6	3HAC9328-1	Standard	ABB Orange	
	1	Cable unit axes 4-6	3HAC050611-001	Standard	Graphite White	
	1	Cable unit axes 4-6	3HAC034713-001	Clean Room		
54	9	Torx pan head screw	9ADA618-46			M5x20 8.8
55	9	Cable straps, outdoor	21662055-1			2.5x101
56		Adhesive tape	11699198-301			500 mm, 19x0.18

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Item	Qty	Description	Spare part no.	Protection type	Color	Dimension/Note
57	1	Cover with lamp unit	3HAC050624-003		ABB Orange	M5x12
	1	Cover with lamp unit	3HAC050624-004		Graphite White	M5x12
58	10	Torx pan head roll. screw	9ADA629-44			M6x10
59	12	Hex socket head cap screw	9ADA183-22			M6x10 Steel 8.8-A2F
60	1	Motor unit axis 6	3HAC10602-2			(Elmo)
			3HAC021731-001		ABB Orange	(Yaskawa)
			3HAC021731-003		Graphite White	(Yaskawa)

Spare part view 6

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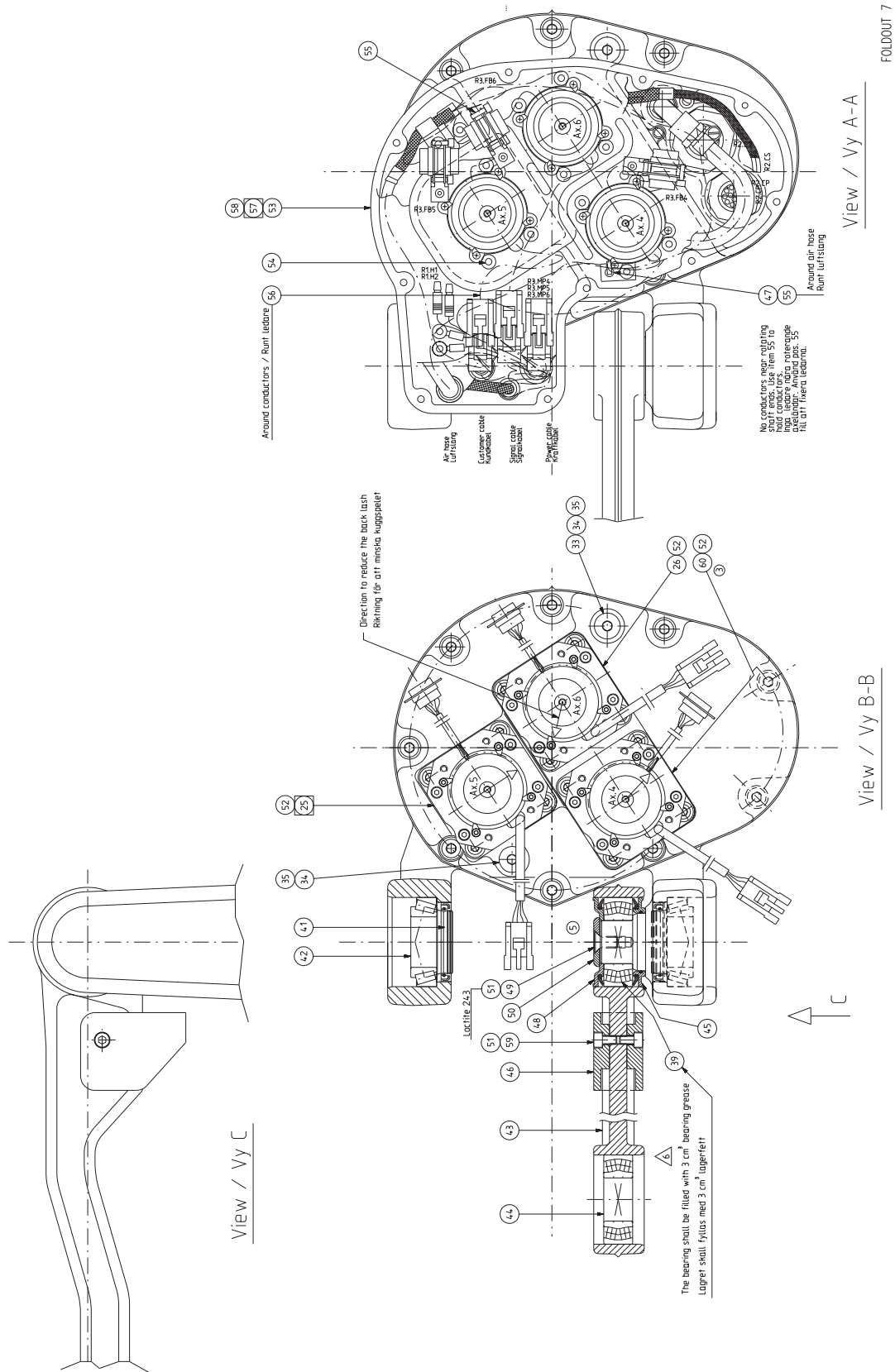
Spare part view 7

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4 Spare parts - upper arm, IRB 2400/L

Upper arm, IRB 2400/L, spare part list

The spare parts for the upper arm, IRB 2400 version L, are listed below and shown in the *Spare part view 8 on page 33* and *Spare part view 9 on page 34*.

Item	Qty	Description	Spare part no.	Color	Dimension/Note
1	1	Tubular shaft	3HAC0235-1		
2	1	Back-up ring	3HAB6354-1		
3	1	Sealing ring	3HAB3732-13		99x10.5 V-110-L
4	2	Ball bearing	2213253-12		105x130x13 61821-2RSI
5	2	Cover plug	2216264-14		IRB 2000
6	1	Housing, axis 4	3HAC0236-1		
7	2	Spacer	2159167-61		D=115/105, T=0.05
8	4	Spacer	2159167-62		D=115/105, T=0.1
9	1	Spacer	2159167-63		D=115/105, T=0.5
10	1	Gear, axis 4, step 2	3HAB3210-1		
11	1	Damper, axis 4	3HAB6356-1		
12	6	Hex socket head cap screw	3HAB3402-24		M6x16 8.8 Gleitmo 610
13	10	Plain washer	9ADA312-6		6.4x12x1.6 A2F
14	4	Hex socket head cap screw	3HAB3402-30		M6x45 8.8, Gleitmo 610
15	1	Drive unit axis 5-6			See section *Spare parts - drive unit, IRB 2400/L on page 35*.
16	1	Motor unit axis 4	3HAC11864-1		(Elmo)
			3HAC021740-001		(Yaskawa)
17	4	Hex socket head cap screw	9ADA183-14		M5x16 8.8, A2F
18	1	O-ring	21522011-414		44.2x3, Nitrile rubber
23	1	Gear unit, axis 4	3HAB3380-1		
24	2	Plain washer	9ADA312-7		8.4x16x1.6, A2F
25	2	Hex socket head cap screw	9ADA183-38		M8x30 8.8, A2F
28	1	Cover	3HAB6355-1		
30	30 ml	Lubricating oil	3HAC042471-001		
31		Locking liquid	3HAC7181-1		Loctite 243
34		Flange sealing	3HAC042581-001		Loctite 574
35		Bearing grease	3HAB3537-1		Shell Retinax MS
36	1	Wrist, 5 kg	3HAC10814-1	ABB Orange	Standard and Foundry.
	1	Wrist, 5 kg	3HAC050647-001	Graphite White	Standard and Foundry.
37	6	Hex socket head cap screw	3HAB3402-25		M6x20 8.8, Gleitmo 610
38	1	Cover	3HAC4350-1		

Continued

Item	Qty	Description	Spare part no.	Color	Dimension/Note
	1	Cover with lamp unit	3HAC2743-1		Option
39	39	Torx pan head roll screw	9ADA629-44		M5x12 8
40	1	Cover	3HAC4405-1		
43	2	Sealing ring (without dust lip)	3HAC7877-2		D=42/55 W=8 Nitrile rubber
44	2	Taper roller bearing	3HAA2103-15		D=35/62 W=18 32007 X
45	10	Cable straps, outdoors	21662055-1		2.5x101 Polyamide 6.6 black
46	1	Clamp	21662018-8		D=6 5562-00-04
47	1	Clamp	21662018-2		D=11 5562-00-07
48	1	Bracket, axes 5-6	3HAB3230-1		
49	2	Torx pan head roll screw	9ADA629-47		M5x25 8 A2F
50	1	Parallel bar	3HAC1563-1		
51	1	Damper, axis 3	3HAB5511-1		
52	2	Hex socket head cap screw	9ADA183-22		M6x10 8.8 A2F
53	2	Spherical roller bearing	3HAA2167-12		D=30/62 W=20 22206 CC Standard
54	2	Sealing	3HAC10088-4		
55	1	Sealing	3HAC10089-2		
56	1	Locking washer	3HAA2356-11		9x35x3
57	1	Hex socket head cap screw	3HAB3402-36		M8x20 8.8 Gleitmo 610
58	1	Cable bracket upper arm	3HAB5927-1		
59	1	Cable unit axes 4-6	3HAC9330-1	ABB Orange	
			3HAC050569-001	Graphite White	
			3HAC13052-1	ABB Orange	Wire feeder
			3HAC050617-001	Graphite White	Wire feeder
60	3	Gasket	3HAC4429-1		
61	1	Cable straps, outdoors	21662055-3		

Product manual, spare parts - IRB 2400
3HAC049105-001 Revision: D
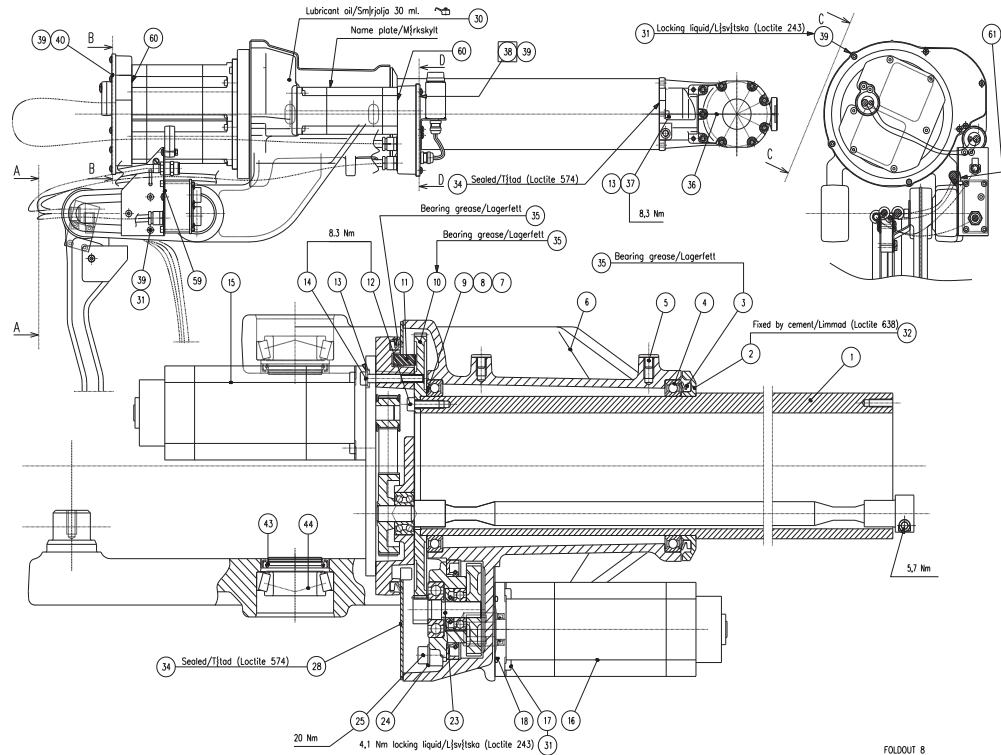
Spare part view 8

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Continued

Spare part view 9

Låsvitska (Loctite 243)
Bearing grease/Lagerfett
Not foundry/ej foundry

No conductors near rotating
shaft ends. Use item 45 to
hold conductors.
Inga ledare nära roterande
axeländar. Använd pos. 45
till att fixera ledarna.

Axis 4
Axel 4

Both sides
Båda sidor

R3.MP4
R3.FB4
R3.H1
R3.H2

Låsvitska (Loctite 243)

D - D

R4.FB6
R4.FB5
R4.MP6
R4.MP5

Axis 6
Axel 6

Axis 5
Axel 5

A - A

B - B

C - C

FOLDOUT 9

xx1100000944

5 Spare parts - drive unit, IRB 2400/L

Drive unit, IRB 2400/L, spare part list

The spare parts for the drive unit, IRB 2400 /L, are listed below and shown in the *Spare part view 10 on page 35*.

Item	Qty	Description	Spare part no.	Dimension/Note
1	1	Drive shaft unit, axes 5-6	3HAC11804-1	
2	2	Motor unit axes 5-6	3HAC11865-1	(Elmo)
			3HAC021741-001	(Yaskawa)
3	1	Motor plate	3HAA2504-1	
4	8	Hexagon nut	9ADA267-5	M5 8.A2F
5	10	Hex socket head cap screw	3HAB3402-14	M5x16 8.8 Gleitmo 610
6	10	Plain washer	9ADA312-5	5.3x10x1. A2F
7	2	Gear belt	3HAA2393-1	
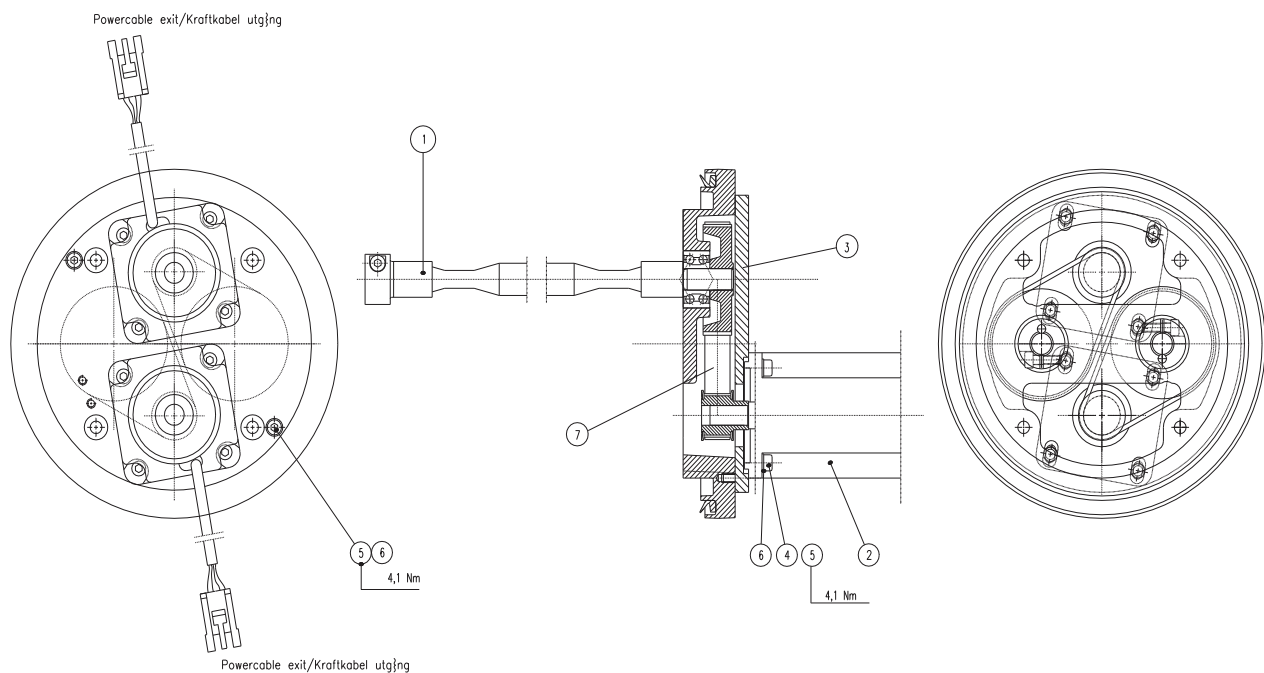
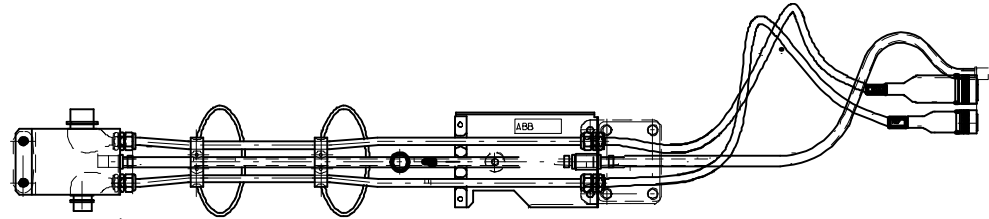**Spare part view 10**

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6 Spare parts - customer cable, axis 4

Customer cable, axis 4, spare part list

The spare part of the customer cable, axis 4, is listed below and shown in the following figure.

Qty	Description	Spare part no.	Note
1	Customer cable extension, axis 4	3HAC8869-1	Option 043

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7 Spare parts - limit switch

Limit switch, spare part list

The spare parts for the limit switch are listed below.

Item	Qty	Description	Spare part no.	Dimension/Note
	3	Switches		
1	2	Holder ring		
2	6	Hexagon screw, button head	3HAC0596-31	M8x12
3	7	Cam, blank	3HAB8086-1	
4	24	Torx pan head screw	9ADA618-55	M6x12
5	1	Attachment plate	3HAC0982-1	
6	2	Torx pan head screw	9ADA618-56	M6x16
7	1	Position switch 1-3	3HAC6448-1	
8	6	Hex socket head cap screw	9ADA183-5	M4x16
9	9	Shims-sheet	3HAB7478-1	
10	4	Torx pan head roll. screw	9ADA629-42	M5x8
11	6	Clamp	21662018-9	D=8
12	1	Cable straps, outdoors	21662055-3	4.8x208
14	2	Torx pan head screw	9ADA618-59	M6x30.

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8 Spare parts - customer connection kits

Customer connection kits

Description	Spare part no.	Note
R1.CP/CS, Standard	3HAC12558-1	Standard protection.
R1.CP/CS, Foundry	3HAC12558-2	Foundry protection.
R1.LS1	3HAC12557-1	
Connector kit R2.CP/R3.CP	3HAC12326-1	
Connector kit R2.CS/R3.CS	3HAC12327-1	

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9 Options

Force sensor package small

Equipment	Art. no.	Note
Force Sensor Small	3HAC046093-001	
Sensor cable 5m	3HAC043521-001	
Adapter plate	3HAC046107-001	
Adapter plate	3HAC047790-001	
Positioning ring	3HAC046099-001	
Parallel pin	9ABA108-25	
Parallel pin	9ABA108-34	
Hex socket head cap screw	9ADA183-22	M6X10
Hex socket head cap screw	9ADA183-24	M6X16

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