ROBOTICS

Product manual, spare parts

IRB 2600

Trace back information:
Workspace 24A version a16
Checked in 2024-03-07
Skribenta version 5.5.019

Product manual, spare parts

IRB 2600-20/1.65
IRB 2600-12/1.65
IRB 2600-12/1.85
IRB 2600-20/1.65 type C
IRB 2600-12/1.65 type C
IRB 2600ID-15/1.85
IRB 2600ID-8/2.0

IRC5, OmniCore

Document ID: 3HAC049106-001

Revision: S

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Original instructions.

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Overview of this manual

About this manual

This manual contains spare parts for:

- IRB 2600 and all its variants.

Usage

This manual shall be used as a complement to the product manual for IRB 2600 during:

- maintenance work
- repair work.

Who should read this manual?

This manual is intended for:

- maintenance personnel
- repair personnel.

Prerequisites

A maintenance/repair/installation craftsman 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

Tip

All documents can be found via myABB Business Portal, *www.abb.com/myABB*.

Reference	Document ID
Product manual - IRB 2600	*3HAC035504-001*
Circuit diagram - IRB 2600	*3HAC029570-007*

Revisions

Revision	Description
-	First edition

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Continued

Revision	Description
A	The following updates have been made in this revision: • Option number changed for spare part number 3HAC16667-1, and option number added for spare part number 3HAC033181-001, see *Options on page 43* • Spare parts with color Graphite White are added to the spare part lists. • Spare parts motors of Type B (IRB 2600) and Type A (IRB 2600ID) added to the spare parts list. • Motors for all axes are now presented in one place separated from other spare parts, in a new section. • All gearboxes are now presented in one place separated from other spare parts, in a new section.
B	The following updates have been made in this revision: • Spare parts "Lower arm, Process (IRB 2600ID)" with number 3HAC037957-004, 007, 005 and 006 changed to "Upper arm Process (IRB 2600ID)" with same numbers. See *Upper arm (IRB 2600ID) on page 29*.
C	The following updates have been made in this revision: • New Spare part numbers for "Connection boxes FS130/FS180". See *Other parts on page 39*. • Spare part number, *Cable harness Upper arm (ID)* added. See *Spare parts list, electrical connections on page 39*. • Generally modified due to update of BOL. • Number for cable harness IRB 2600 ID changed. • Table split and new is created for IRB 2600 for base cover assembly. • Type designations changed on motor sections. • Type designations corrected on upper arm.
D	Published in release R16.2. The following updates are made in this revision: • Corrections due to updates in terminology. • Updated spare parts due to new standard calibration method (Axis Calibration). - Base - Frame - Lower arm - Arm housing - Tubular shaft unit - Upper arm - Wrist unit - Process wrist unit
E	Published in release R17.1. The following updates are made in this revision: • Added spare part number for protective items for calibration bushings and holes (Axis Calibration)
F	Published in release R17.2. The following updates are made in this revision: • O-ring for axis-2 gearbox removed. • Updated and added spare part number for brake release unit set.
G	Published in release R18.1. The following updates are made in this revision: • New spare part numbers for Brake release unit (was 3HAC058158-001 and 3HAC058160-001)
H	Published in release R18.2. The following updates are made in this revision: • New spare part kit for Ax1 mechanical stop pin (was four different article numbers). See *Spare parts list, lower arm and frame on page 23*.
J	Published in release 19B. The following updates are made in this revision: • New spare parts added; wrist and sealing. See *Spare parts, upper arm on page 25*

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Revision	Description
K	Published in release 19B. The following updates are made in this revision: • Minor correction.
L	Published in release 20A. The following updates are made in this revision: • Added IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C to the manual.
M	Published in release 20B. The following updates are made in this revision: • New spare parts added: - Cooling fan set for type A - Connector set R2.Ethernet • Added the section *Robot description on page 45*.
N	Published in release 20C. The following updates are made in this revision: • Updated article numbers for IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C cable harnesses.
P	Published in release 20D. The following updates are made in this revision: • New spare part added: oil plug with sealing on axis-5.
Q	Published in release 23A. The following updates are made in this revision: • Added support for OmniCore V250XT. • Updated the article number for plug with sealing for upper arm (IRB 2600ID). • Updated the article number for cable harness, multibus in section *Cable harness* (IRB 2600). • Updated the article number for brake release unit set (DSQC1050, DSQC1052) in section *Other parts* (IRB 2600).
R	Published in release 23D. The following updates are made in this revision: • Removed the article number for flange sealant in sections *Base and Frame* and *Upper arm* (IRB 2600).
S	Published in release 24A. The following updates are made in this revision: • Removed the article number for flange sealant in sections *Base and Frame* and *Upper arm* (IRB 2600).

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Product documentation

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.

Tip

All documents can be found via myABB Business Portal, *www.abb.com/myABB*.

Product manuals

Manipulators, controllers, DressPack, 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.
- Troubleshooting.
- Decommissioning.
- Reference information (safety standards, unit conversions, screw joints, lists of tools).
- Spare parts list with corresponding figures (or references to separate spare parts lists).
- References to circuit diagrams.

Technical reference manuals

The technical reference manuals describe reference information for robotics products, for example lubrication, the RAPID language, and system parameters.

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, software).
- How to install included or required hardware.
- How to use the application.

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- 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 troubleshooters.

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1 Rebuilding parts

Lower arm

The table shows which *lower arm* can be used on which variant.

Variant	Lower arm 3HAC059433-001/3HAC059433-002	Lower arm 3HAC059434-001/3HAC059434-002	Lower arm 3HAC043192-009/3HAC0043192-010
IRB 2600-20/1.65	X		
IRB 2600-12/1.65	X		
IRB 2600-12/1.85		X	
IRB 2600 Type C-20/1.65			X
IRB 2600 Type C-12/1.65			X
IRB 2600ID - 15/1.85		X	
IRB 2600ID - 8/2.0		X	

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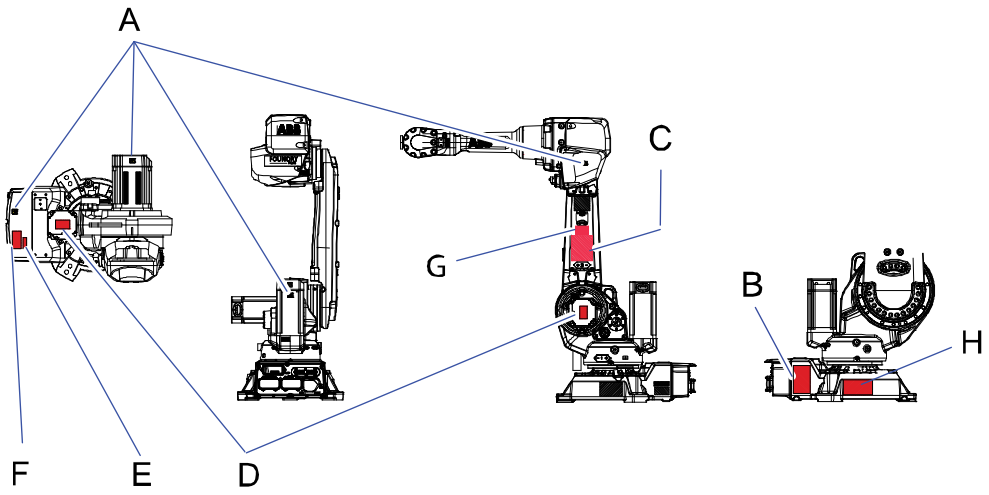
2 Complete robot

Spare parts, complete robot

Position	Base cover parts	Spare part number
-	Labels and plate set, contains the labels shown in the figure.	3HAC035004-001

Illustration, labels and plate set



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A	Warning - Symbol of flash (4 pcs)
B	Warning - Risk of tipping
C	Label - Lifting instruction
D	Warning - "High temperature"
E	Label - Max. air pressure
F	Warning - Brake release unit
G	Label - Calibration
H	Label - Suspended robot

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3 Base cover assembly

Spare parts, base cover assembly

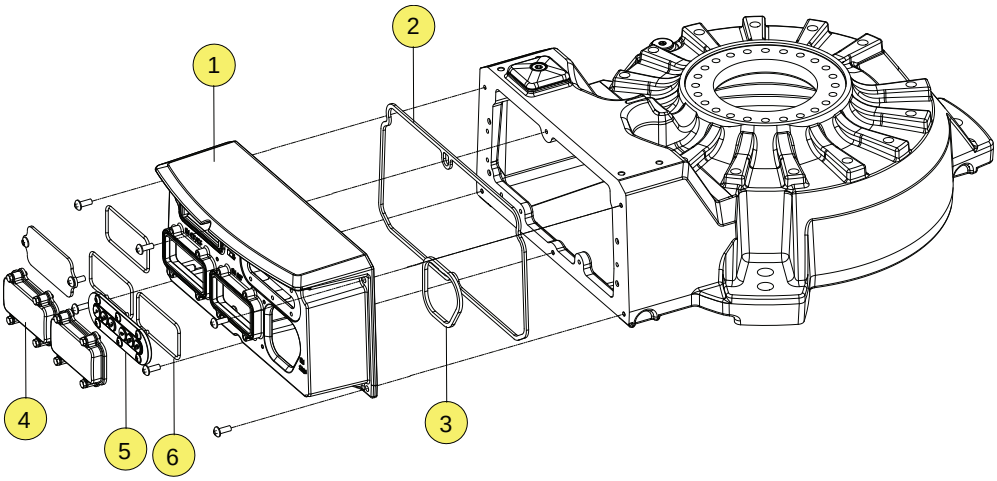
Link to *Illustration, base cover assembly on page 17*

Position	Base cover parts	Spare part number
1	Cover	3HAC029250-002
2	Sealing	3HAC029188-001
3	Sealing	3HAC029187-001
4	Protection cover	3HAC049770-001
5	Push-button guard	3HAC6499-1
6	O-ring (3 pcs)	21522012-428

Illustration, base cover assembly

Link to *Spare parts, base cover assembly on page 17*

Protection type Standard



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4 Base and frame unit

Spare parts, base and frame unit

Position	Parts	Spare part number	Color	IRB 2600-20/1.65, IRB 2600-12/1.65, IRB 2600-12/1.85, IRB 2600ID-15/1.85, IRB 2600ID-8/2.0	IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C
1	Base	3HAC059431-001	ABB Orange	X	
		3HAC059431-002	Graphite White	X	
		3HAC043367-007	ABB Orange		X
		3HAC043367-008	Graphite White		X
2	Frame	3HAC044328-007	ABB Orange	X	
		3HAC044328-006	Graphite White	X	
		3HAC043316-007	ABB Orange		X
		3HAC043316-008	Graphite White		X
3	Radial sealing	3HAB3701-29	-	X	X
-	Sealing washer, oil plug in gearboxes (not shown in figure)	3HAC029646-001	-	X	
9	Cover plate	3HAC030041-001	-	X	X
10	O-ring	3HAB3772-109	-	X	X
12	Flange sealant Loctite 574 (or equivalent)	-	-	X	
13	Gasket, 3 pcs	3HAC065190-001	-		X
231	Cable protection (not shown in the figure)	3HAC027499-004	-	X	X
381	Expansion container, set	3HAC033862-005	-	X	

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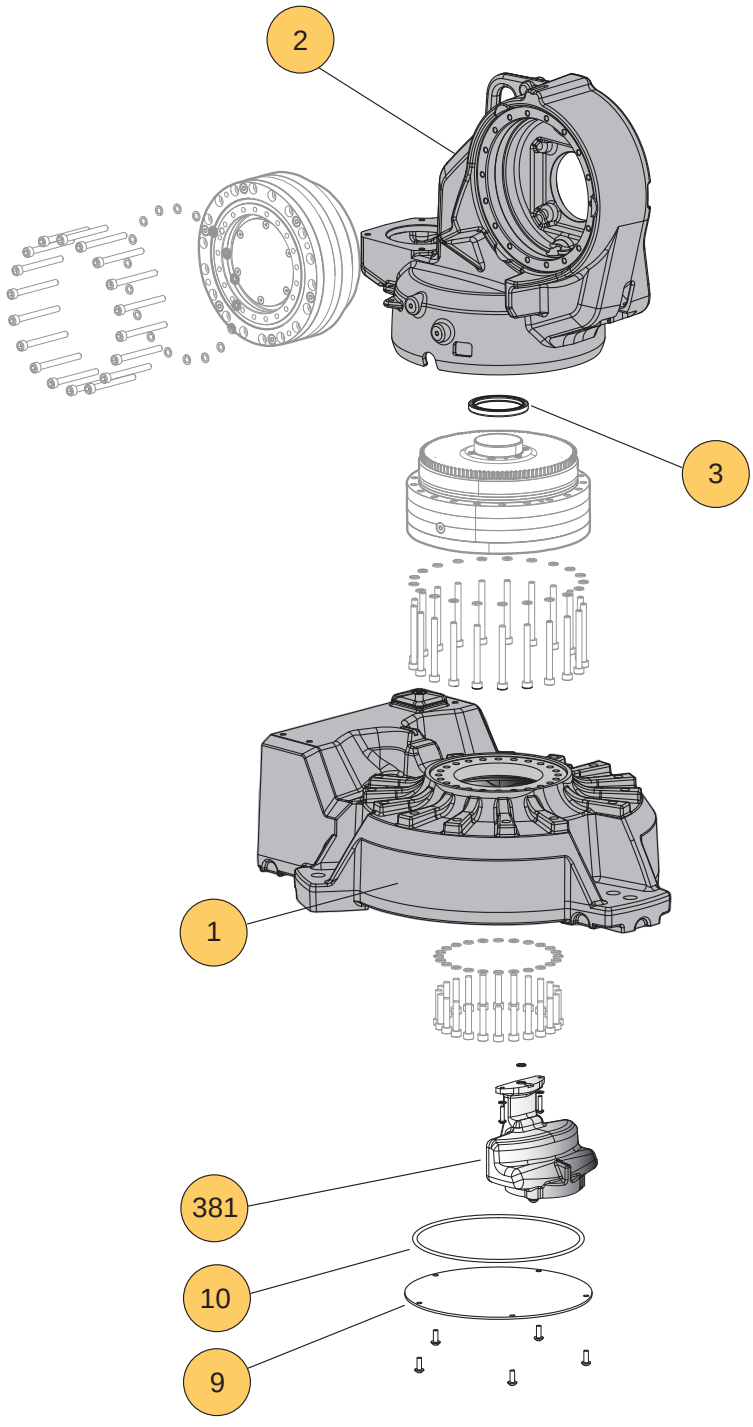
Continued

Illustration base and frame unit

Link to *Spare parts, base and frame unit on page 19*

IRB 2600-20/1.65, IRB 2600-12/1.65, IRB 2600-12/1.85, IRB 2600ID-15/1.85, IRB 2600ID-8/2.0



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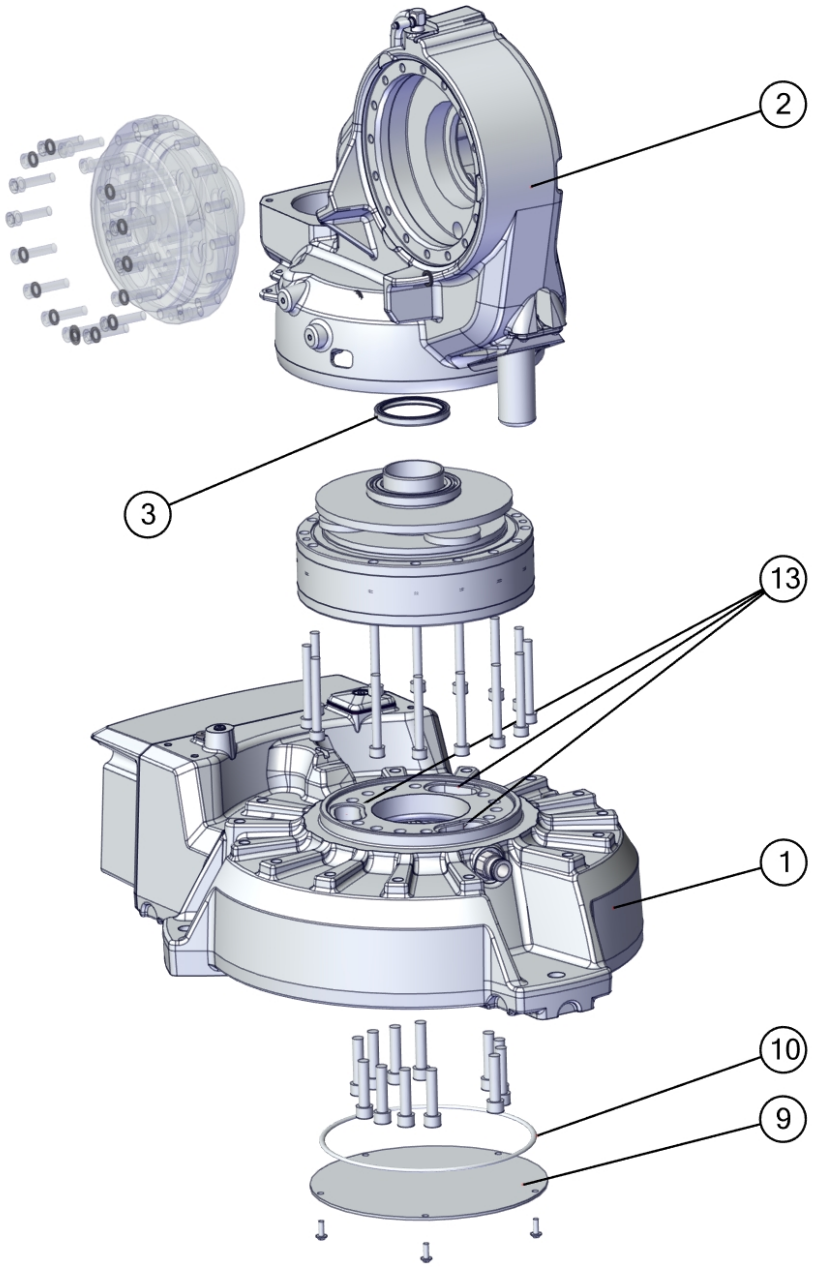
IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C



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5 Lower arm and frame

Spare parts list, lower arm and frame

Link to *Illustration, lower arm and frame on page 24*

Position	Parts lower arm & frame	Spare part	Color	IRB 2600-20/1.65, IRB 2600-12/1.65	IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C	IRB 2600-12/1.85, IRB 2600ID - 15/1.85, IRB 2600ID - 8/2.0
2	Lower arm	3HAC059433-001	ABB Orange	X		
		3HAC059433-002	Graphite White	X		
		3HAC043192-009	ABB Orange		X	
		3HAC043192-010	Graphite White		X	
		3HAC059434-002	ABB Orange			X
		3HAC059434-001	Graphite White			X
14, 15, 16	Mech stop replace kit Ax1, includes: • Stop pin • Bracket • Bracket, mech. stop axis 1 • M6x16 8.8-A2F (2 pcs)	3HAC067653-001		X	X	X
17	Cover	3HAC025310-002	-	X		X
18	V-ring	3HAB3732-23	-	X		X
19	O-ring	3HAB3772-35	-	X		X
20	Damper	3HAC030388-001	-	X	X	X
21	Damper	3HAC029243-001	-	X	X	X
22	Lubricating oil	See *Type of oil, gearboxes* in *Technical reference manual - Lubrication in gearboxes*.	-	X	X	X
23	Magnetic plug	3HAC16721-1	-	X	X	X
27	Plug IF3820 S06-EXT	3HAC045715-001	-	X	X	X
13	O-ring	3HAB3772-107	-	X	X	X
28	Washer (3 pcs)	3HAC043534-001	-		X	
201	See *Electrical connections on page 39*.		-	X	X	X

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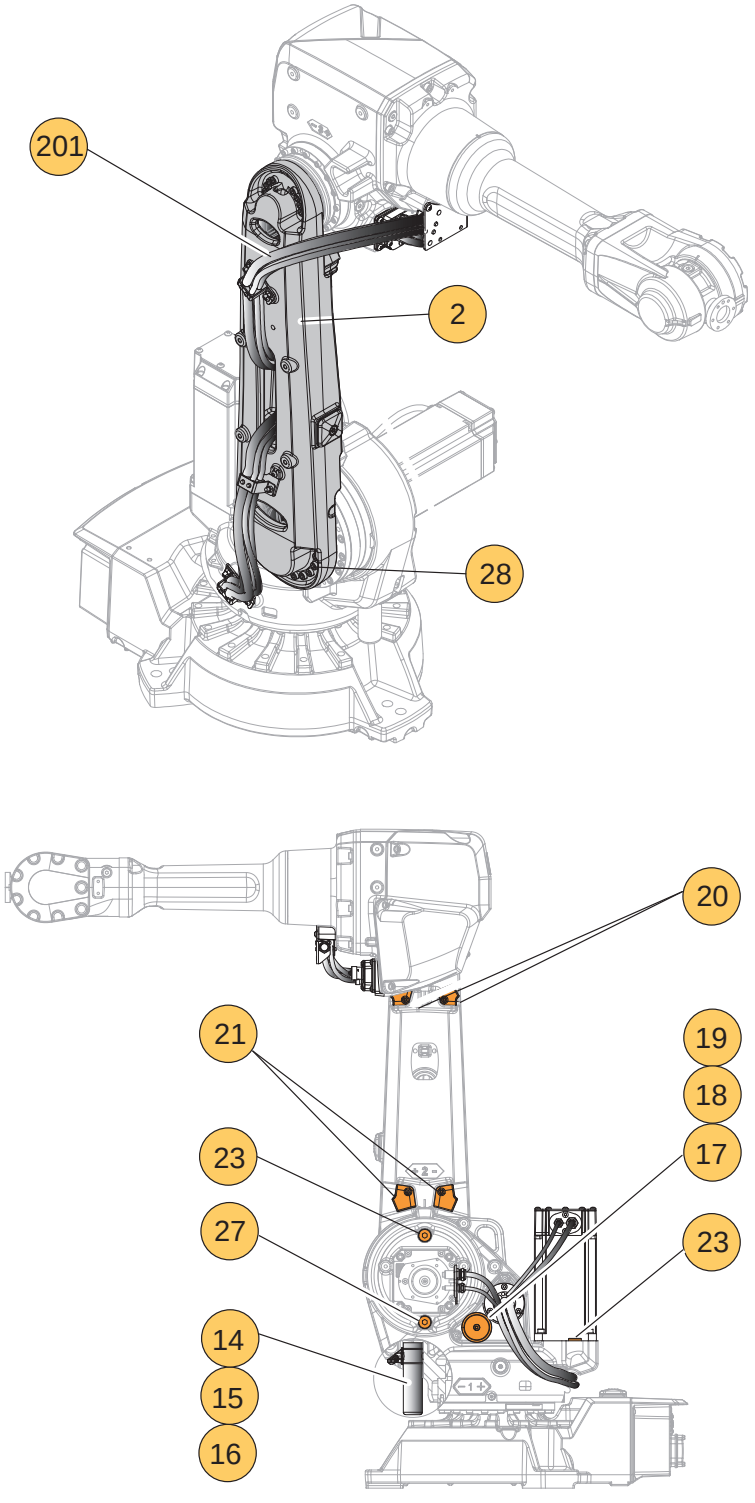
Illustration, lower arm and frame

Link to *Spare parts list, lower arm and frame on page 23*



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6 Upper arm IRB 2600 Standard

Spare parts, upper arm (gearbox oil in vessel)

Type and amount of oil is detailed in a separate manual, *Technical reference manual - Lubrication in gearboxes*.

Spare parts, upper arm

Link to illustration *Illustration upper arm on page 27*.

Pos.	Upper arm parts	Spare part	Color
1	Arm housing	3HAC059435-001	ABB Orange
	Arm housing	3HAC059435-002	Graphite White
2	Parallel pin, hardened	3HAC3785-2	
3	Tubular shaft unit	3HAC059488-001	ABB Orange
	Tubular shaft unit	3HAC059488-002	Graphite White
20	Lubricating oil	See *Type of oil, gearboxes* in *Technical reference manual - Lubrication in gearboxes*.	-
22	Lubricating oil	See *Type of oil, gearboxes* in *Technical reference manual - Lubrication in gearboxes*.	-
18	Magnetic plug	3HAC037925-001	-
24	Sealing washer	3HAC029646-001	-
21	Flange sealant Loctite 574 (or equivalent)	-	-
6	O-ring	3HAB3772-12	To be used with 3HAC059445-001 or 3HAC059445-002.
	Sealing	3HAC064137-001	To be used with 3HAC064583-003 or 3HAC064583-002.
7	Wrist complete (including o-ring pos 6) [i]	3HAC059445-001	ABB Orange
		3HAC059445-002	Graphite White
	Wrist complete [ii]	3HAC064583-003	ABB Orange
		3HAC064583-002	Graphite White
4	Cover, arm housing	3HAC030132-002	ABB Orange
	Cover, arm housing	3HAC030132-003	Graphite White

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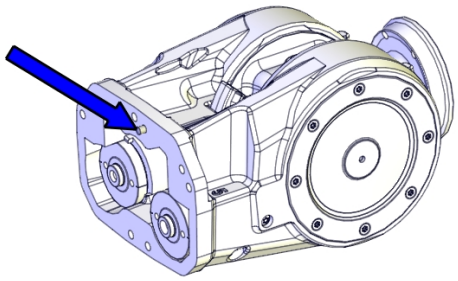
Continued

Pos.	Upper arm parts	Spare part	Color
5	Gasket	3HAC030389-001	-

i A guide pin is enclosed separately with the wrist. It is to be installed in the new wrist spare part if there is a guide pin hole available in the upper arm tube.



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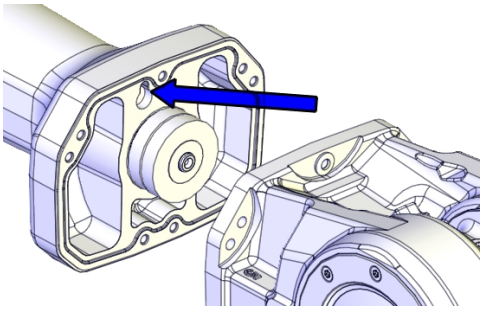
The hole is available on robots introduced with Axis Calibration.



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If the guide pin is not installed on a robot calibrated with Axis Calibration, the calibration result will be affected negatively.

ii NOTE! This wrist will replace the wrist including an o-ring above. The o-ring is replaced by a sealing (pos 6).

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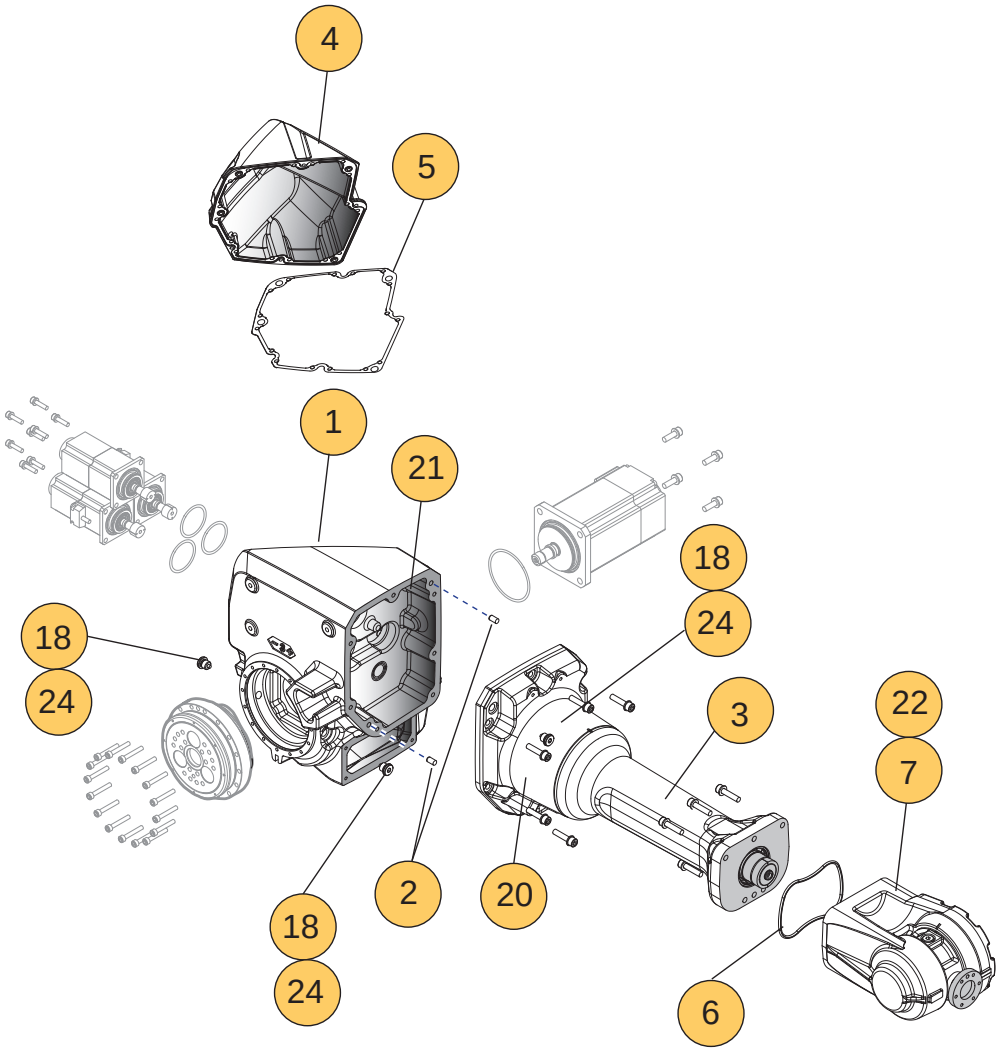
Illustration upper arm

Link to *Spare parts, upper arm on page 25*.



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7 Upper arm (IRB 2600ID)

Spare parts, oil in upper arm gearboxes

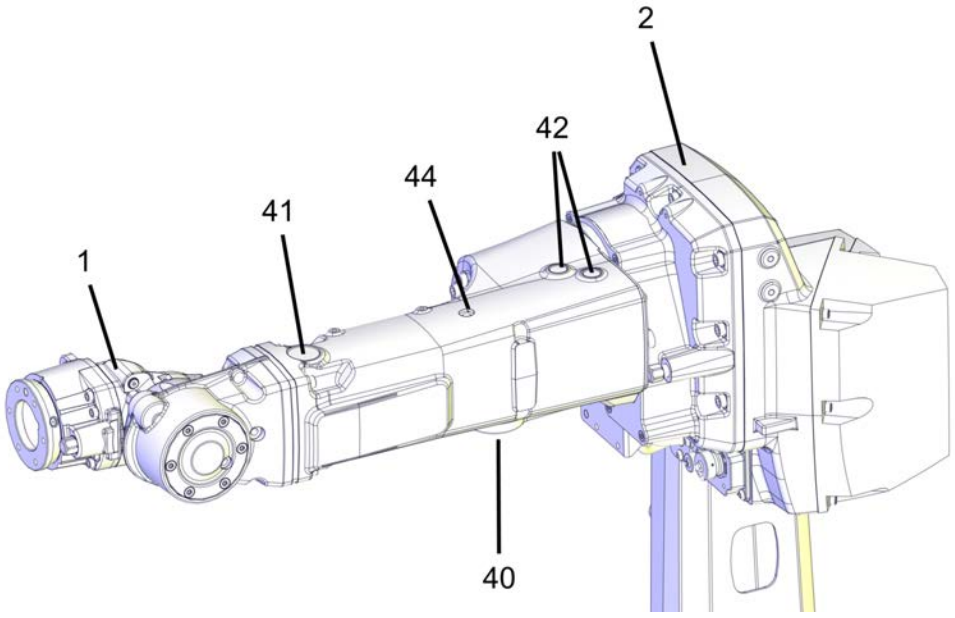
Type and amount of oil is detailed in a separate manual, *Technical reference manual - Lubrication in gearboxes*.

Spare parts, upper arm

Link to illustration *Illustration, upper arm on page 29*.

Position	Upper arm parts	Spare part	Color	IRB 2600ID-15/1.85	IRB 2600ID-8/2.00
1	Process wrist	3HAC059444-001	ABB Orange	X	
		3HAC059444-002	Graphite White	X	
		3HAC059443-001	ABB Orange		X
		3HAC059443-002	Graphite White		X
2	Upper arm, Process	3HAC059438-001	ABB Orange	X	
		3HAC059438-002	Graphite White	X	
		3HAC059439-001	ABB Orange		X
		3HAC059439-002	Graphite White		X
40	VK-cover	3HAA2166-19		x	x
41	VK-cover	3HAA2166-18		x	x
42	VK-cover (2 pcs)	3HAA2166-17		x	x
44	Plug with sealing	3HAC048968-001		x	x

Illustration, upper arm



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8 Motors

Note

Different types of motors are not compatible with each other. Always replace the motor with the same type of motor installed.

Motors for IRB 2600-20/1.65, IRB 2600-12/1.65, IRB 2600-12/1.85, IRB 2600ID-15/1.85, IRB 2600ID-8/2.0

Position	Robot axis	AC motor with pinion	Spare part number	Color
1	Axis-1	Type B	3HAC047586-002	ABB Orange
			3HAC047586-003	Graphite White
		Type A	3HAC034644-003	ABB Orange
			3HAC034644-004	Graphite White
2	Axis-2	Type B	3HAC047584-002	ABB Orange
			3HAC047584-003	Graphite White
		Type A	3HAC031218-003	ABB Orange
			3HAC031218-004	Graphite White
3	Axis-3	Type B	3HAC047575-002	-
		Type A	3HAC030215-003	-
4, 5	Axis-4, axis-5	Type B	3HAC047574-002	-
		Type A	3HAC030216-003	-
6	Axis-6 IRB 2600-20/1.65, IRB 2600-12/1.65, IRB 2600-12/1.85	Type B	3HAC047574-002	-
		Type A	3HAC030216-003	-
	Axis-6 IRB 2600ID-15/1.85, IRB 2600ID-8/2.0	Type B & Type A	3HAC17342-1	-

Motors for IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C

Position	AC motor with pinion	Spare part number	Color
1	Axis-1	3HAC066240-003	ABB Orange
		3HAC066240-004	Graphite White
2	Axis-2	3HAC066241-003	ABB Orange
		3HAC066241-004	Graphite White
3	Axis-3	3HAC047575-002 [i]	-
4, 5, 6	Axis-4, -5 & -6	3HAC047574-002 [i]	-

[i] Same as Type B motor for IRB 2600-20/1.65, IRB 2600-12/1.65, IRB 2600-12/1.85, IRB 2600ID-15/1.85, IRB 2600ID-8/2.0 .

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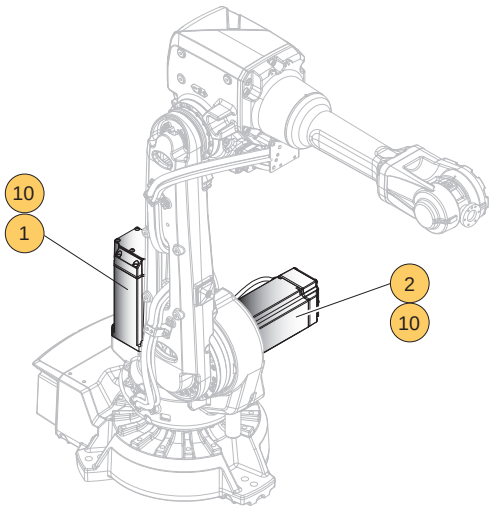
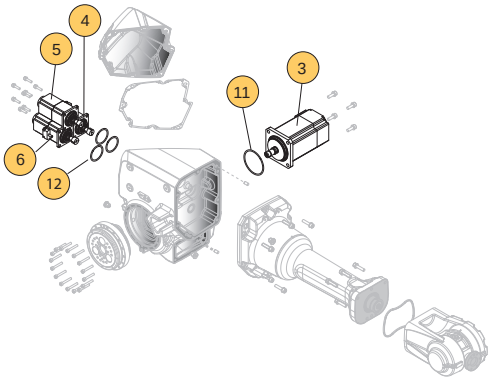
Continued

O-rings

Position	Spare part number	Variant	O-ring
10	3HAB3772-107	IRB 2600 IRB 2600ID	Axis-1
10	3HAB3772-107	IRB 2600 IRB 2600ID	Axis-2
11	3HAB3772-102	IRB 2600 IRB 2600ID	Axis-3
12	3HAB3772-112	IRB 2600 IRB 2600ID	Axis-4
12	3HAB3772-112	IRB 2600 IRB 2600ID	Axis-5
12	3HAB3772-112	IRB 2600	Axis-6

Illustration

Axis 1 and -2 motor	Axis 3, 4, 5 and 6 motor
IRB 2600  xx1400001993	IRB 2600  xx1400001992

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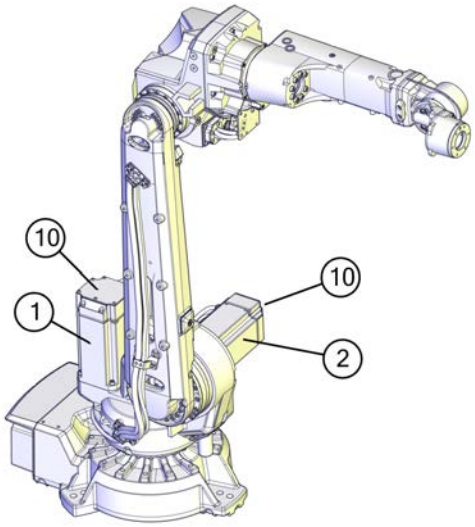
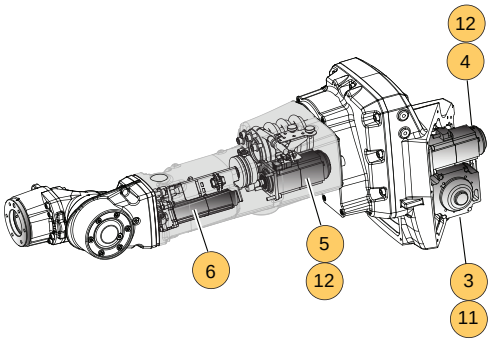
Axis 1 and -2 motor	Axis 3, 4, 5 and 6 motor
IRB 2600ID  xx1400001994	IRB 2600ID  xx1400001991

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9 Gearboxes

Delivery of spare part gearboxes

Spare part gearboxes are delivered with o-ring and gaskets, where applicable.

Gearboxes

For lubrication oil see *Type of oil, gearboxes* in *Technical reference manual - Lubrication in gearboxes*.

Position	Parts	Spare part number	Color	IRB 2600-20/1.65, IRB 2600-12/1.65, IRB 2600-12/1.85, IRB 2600ID-15/1.85, IRB 2600ID-8/2.0	IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C
1	Axis-1 gearbox TS245RHS-125	3HAC028837-004	ABB Orange	X	
		3HAC028837-009	Graphite White	X	
	Axis-1 gearbox RV-120C-122.1	3HAC043130-004	ABB Orange		X
		3HAC043130-005	Graphite White		X
2	Axis-2 gearbox TS225R i = 137	3HAC039109-002	ABB Orange	X	
		3HAC039109-004	Graphite White	X	
	Axis-2 gearbox RV-125N-145.61	3HAC043134-005	ABB Orange		X
		3HAC043134-006	Graphite White		X
3	Axis-3 gearbox RV-42N i = 126	3HAC028705-003	ABB Orange	X	X
	Axis-3 gearbox RV-42N i = 126	3HAC028705-004	Graphite White	X	X

Sealings

Position	Parts	Spare part number	IRB 2600-20/1.65, IRB 2600-12/1.65, IRB 2600-12/1.85, IRB 2600ID-15/1.85, IRB 2600ID-8/2.0	IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C
-	O-ring Axis-1 gearbox	3HAB3772-128	X	
4	O-ring Axis-1 gearbox	3HAB3772-148		X
5	Gasket, 3 pcs Axis-1 gearbox	3HAC065190-001		X
-	O-ring Axis-2 gearbox	3HAB3772-106		X
-	O-ring Axis-3 gearbox	3HAB3772-105	X	X

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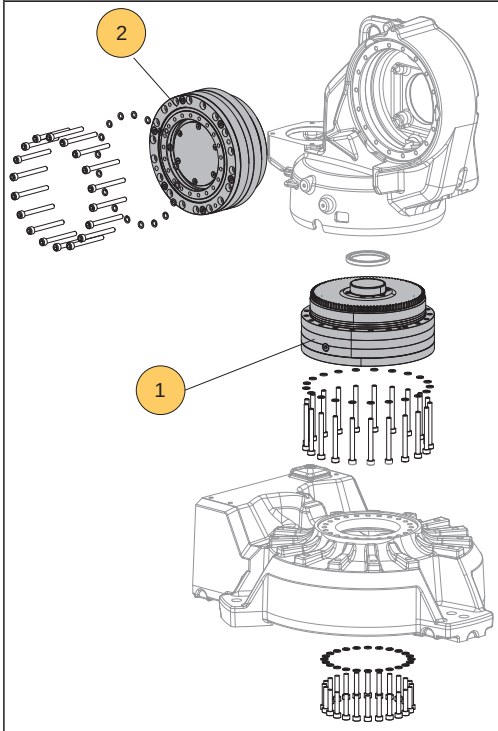
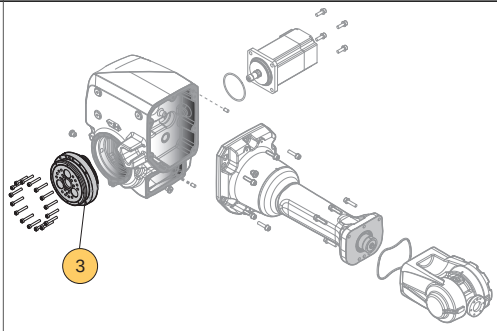
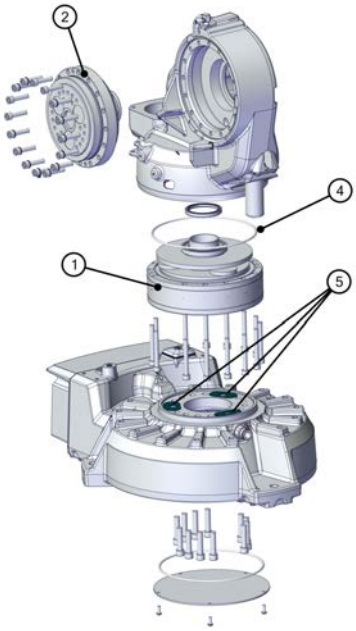
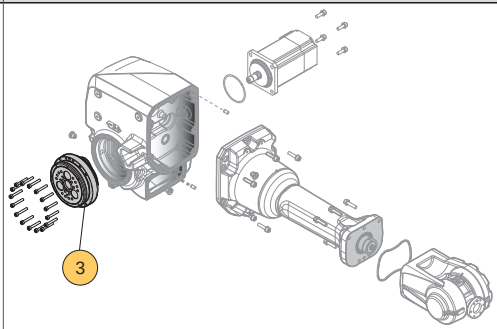
Continued

Illustration

IRB 2600-20/1.65, IRB 2600-12/1.65, IRB 2600-12/1.85, IRB 2600ID-15/1.85, IRB 2600ID-8/2.0

Axis-1 and -2 gearbox	Axis-3 gearbox
 xx1400001987	 xx1400001988

IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C

Axis-1 and -2 gearbox	Axis-3 gearbox
 xx1900002221	 xx1400001988

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10 Calibration items

Calibration items

Description	Spare part number	Note
Protection cover and plug set	3HAC059487-001	Contains replacement calibration pin covers and protective plugs for the bushing.
Protective plug on turning disc	3HAC057676-001 (IRB 2600ID) 3HAC057511-001 (IRB 2600)	Replace if damaged or missing.

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11 Electrical connections

Spare parts list, electrical connections

Cable harness

Spare part	Spare part number	IRB 2600-20/1.65, IRB 2600-12/1.65, IRB 2600-12/1.85, IRB 2600ID-15/1.85, IRB 2600ID-8/2.0	IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C
Cable harness, basic	3HAC030006-001	X	
	3HAC065220-001		X
Cable harness, upper arm (ID)	3HAC035547-001	X	X
Manipulator harness axes 1-6, customer connections	3HAC029896-001	X	
	3HAC065221-001		X
Cable harness, Multi-bus	3HAC062484-001	X	
	3HAC065223-001		X
Cable harness, Profibus	3HAC037799-001	X	
	3HAC065222-001		X

Other parts

Item	Spare part	Color	Spare part number
A	Connection Box FS130, axis-1	ABB Orange	3HAC054659-005 Includes o-ring 3HAC054692-001
	Connection Box FS130, axis-1	Graphite White	3HAC054659-004 Includes o-ring 3HAC054692-001
B	O-ring axis-1, circular profile i		3HAC3772-110
	O-ring axis-1, hexagon profile *i*		3HAC054692-001
C	Cover Box FS130, axis-1	ABB Orange	3HAC029302-002
	Cover Box FS130, axis-1	Graphite White	3HAC029302-006
D	Connection Box FS130, axis-2	ABB Orange	3HAC054659-005 Includes o-ring 3HAC054692-001
	Connection Box FS130, axis-2	Graphite White	3HAC054659-004 Includes o-ring 3HAC054692-001
E	O-ring axis-2, circular profile *i*		3HAC3772-111
	O-ring axis-2, hexagon profile *i*		3HAC054692-001
F	Cover Box FS130, axis-2	ABB Orange	3HAC029302-002
	Cover Box FS130, axis-2	Graphite White	3HAC029302-006

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Continued

Item	Spare part	Color	Spare part number
G	Brake release unit set DSQC1050		3HAC065020-001 [ii]
	Brake release unit set DSQC1052		3HAC065021-001 [iii]
H	Battery unit (2-pole battery contact)		3HAC16831-1 Can not be used with SMB board 3HAC044168-001.
	Battery unit (3-pole battery contact)		3HAC044075-001 Can only be used with SMB board 3HAC044168-001.
J	SMB replacement kit		3HAC046686-001
	Serial measurement board, RMU 101		3HAC044168-001
-	Serial measurement unit		3HAC046277-001 Contains serial measurement board 3HAC044168-001 and battery pack 3HAC044075-001.
-	Signal cable SMB (Not visible in the figure)		3HAC4050-1
-	SMB replacement set		3HAC046686-001

i The cross-section profile is either circular or hexagon. If only ordering the o-ring, order the same profile that is currently installed in the connection box.

ii Valid for robots that are equipped with motors of Type A (see *Motors on page 31*).
Includes brake release board and harness.

iii Valid for robots that are equipped with motors of Type B (see *Motors on page 31*).
Includes brake release board and harness.

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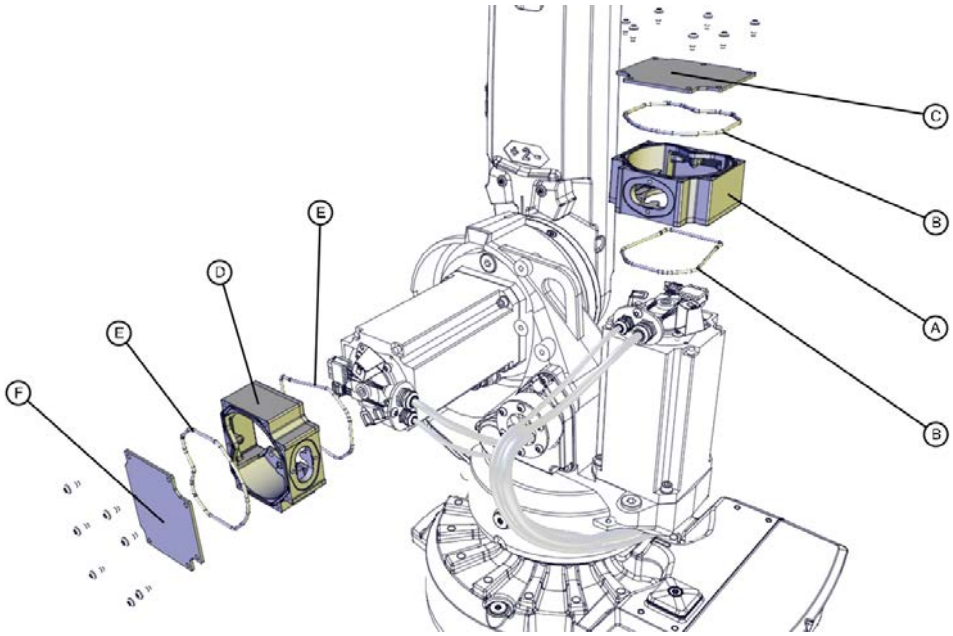
Continued

Illustration electrical connections

Protection type Standard



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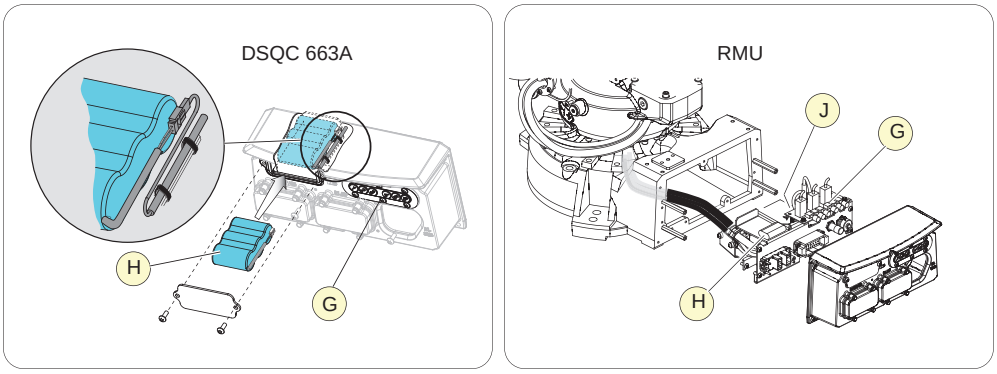

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12 Options

Spare parts options

Spare parts	Spare parts no.
Safety lamp Protection type Standard	3HAC050417-001
Protection type Standard	3HAC033857-002
Cooling fan, set motor type A [i] Protection type Standard	3HAC033857-003
Cooling fan, set motor type B [i] Protection type Standard	3HAC033857-002
Protection type Standard	3HAC033859-002
Expansion container with cover (set) (Suspended position)	3HAC033862-005
CP/CS Proc1, base	3HAC16667-1
(other than Type C and Type D)	3HAC033134-001
(Type C and Type D)	3HAC043603-001
Mechanical stop kit axis 1, adjust (Working range limit, axis 1)	3HAC033134-001
Connector set on base	3HAC033181-001
Connector set R2.CP/R2.CS	3HAC025396-001
Connector set R2.Ethernet	3HAC070439-001
Additional mechanical stop set, axis 1	3HAC033134-001

[i] For description of motor types, see *Robot description on page 45*.

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13 Robot description

13.1 Robot types

Robot types

There are different versions of the IRB 2600, the initial version, Type A, and Type B. The following table explains the differences.

There is also a Type C of IRB 2600, but it only affects two variants of the robot, see the table and see *Non-compatible versions of axis-1 and axis-2 gearboxes on page 46*.

	IRB 2600 (standard variants)	IRB 2600ID
Initial version	motor type A	motor type A
IRB 2600 Type A	Axis 2 changes gearbox	Axis 1-5 change to motor type B Axis 6 keeps motor type A
IRB 2600 Type B	Axis 1-6 change to motor type B	
IRB 2600 Type C - only IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C.	Axis 1 and 2 changes gearbox and motor pinion Axis 3, 4, 5 and 6 has motor type B	

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13.2 Non-compatible versions of axis-1 and axis-2 gearboxes

Gearboxes from different suppliers are not compatible

There are two different versions of the axis-1 and axis-2 gearboxes for robot variants IRB 2600-20/1.65 and IRB 2600-12/1.65.

- Version 1 for IRB 2600-20/1.65, IRB 2600-12/1.65, IRB 2600-12/1.85, IRB 2600ID-15/1.85, IRB 2600ID-8/2.0 (supplier Spinea).
- Version 2 for IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C (supplier Nabtesco).

The different versions affect the surrounding mechanical structure of the robot. Following parts are unique for each version of the gearbox.

- Axis-1 gearbox
- Axis-2 gearbox
- Frame
- Base
- Lower arm
- Axis-1 motor pinion
- Axis-2 motor pinion
- Cable harness

The listed parts are not interchangeable.

The gearbox oils are not interchangeable.

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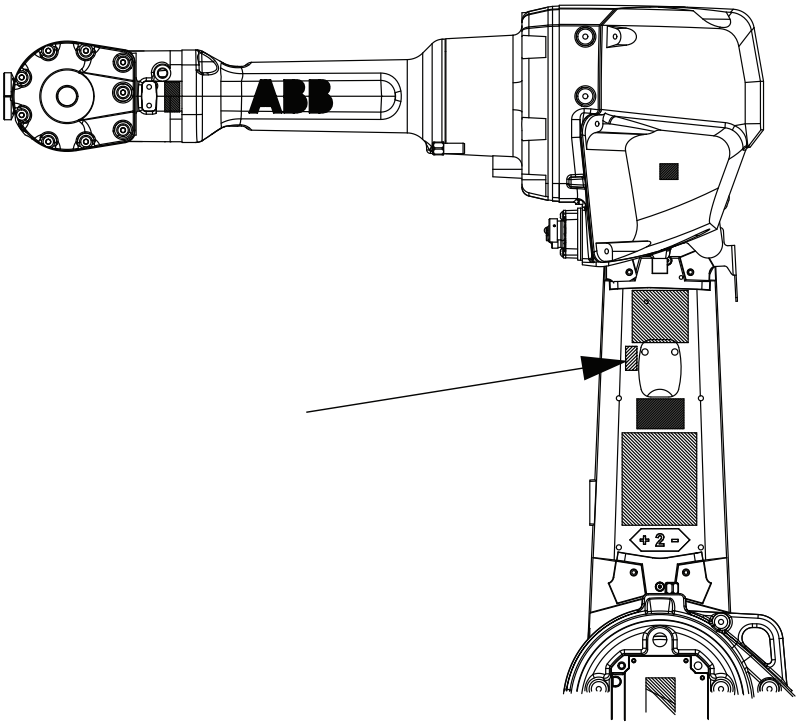
Designation label on lower arm

At delivery there is a designation label fitted to the lower arm of the Type C version of the robot, informing that the robot is a Type C version.



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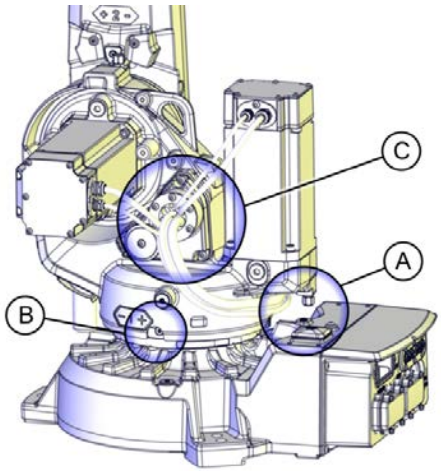
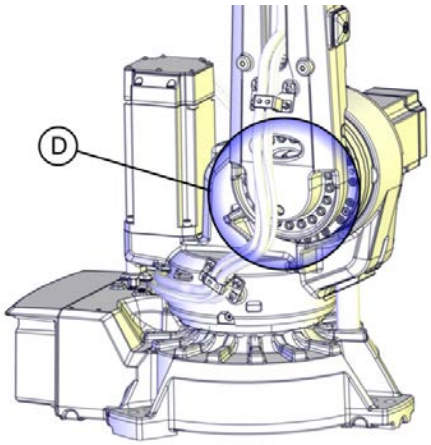
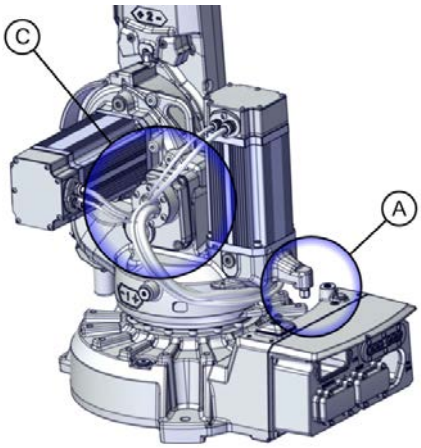
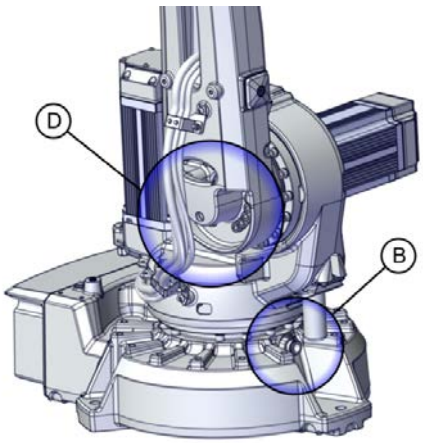
13.2 Non-compatible versions of axis-1 and axis-2 gearboxes
Continued

Identifying the gearbox version visually

The mechanical structure of the robot differs depending on which axis-1 and axis-2 gearbox the robot is equipped with. Some of the differences are visible, as shown in the table.

	Identification of gearbox - mechanical structure **IRB 2600-20/1.65, IRB 2600-12/1.65, IRB 2600-12/1.85, IRB 2600ID-15/1.85, IRB 2600ID-8/2.0**	**Identification of gearbox - mechanical structure** **IRB 2600-20/1.65 type C, IRB 2600-12/1.65 type C**
	 xx1800000551  xx1800000554	 xx1800001133  xx1800001134
A	The fixed calibration pin for Axis Calibration is located straight below the motor flange. The bushing for the calibration tool is centered on the base.	The fixed calibration pin for Axis Calibration is located on a casted arm on the motor flange. The bushing for the calibration tool is located to the right on the base.
B	The oil plug for drainage is located on the left side of the gearbox and visible through an opening in the frame (when robot is standing in synchronization position).	The oil plug for drainage is located in front of the gearbox (when robot is standing in synchronization position).
C	The cable cover shape is triangular.	The cable cover shape is rectangular.
D	Hole pattern for 17 screws that fasten the lower arm to the gearbox.	Hole pattern for 16 screws that fasten the lower arm to the gearbox.

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Identifying the gearbox version by article number

Only robot variants IRB 2600-20/1.65 and IRB 2600-12/1.65 are affected by different gearbox suppliers.

Use the table to identify which gearbox versions are installed on the robot, by article number. If needed, contact your local ABB for further assistance regarding the robot type.

Robot type	Article number, axis-1 gearbox	Article number, axis-2 gearbox
IRB 2600-20/1.65	3HAC028837-001	3HAC039109-001
IRB 2600 Type C-20/1.65	3HAC043130-001	3HAC043134-001
IRB 2600 - 12/1.65	3HAC028837-001	3HAC039109-001
IRB 2600 Type C-12/1.65	3HAC043130-001	3HAC043134-001

Identifying the robot type on the FlexPendant

For an IRC5 robot, the robot type is shown on the **System Info** view on the FlexPendant, in **System properties**, **Drive modules** and **Robot1**, and then tap **Options**.

For an OmniCore robot, the robot type is shown in the **System Info** view, available from the QuickSet menu **Info**.

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