

ROBOTICS

Product manual, spare parts

IRB 6700/IRB 6700Inv



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Product manual, spare parts

IRB 6700 - 235/2.65
IRB 6700 - 220/2.65 LID
IRB 6700 - 205/2.80
IRB 6700 - 200/2.80 LID
IRB 6700 - 175/3.05
IRB 6700 - 155/3.05 LID
IRB 6700 - 150/3.20
IRB 6700 - 145/3.20 LID
IRB 6700 - 200/2.60
IRB 6700 - 175/2.60 LID
IRB 6700 - 155/2.85
IRB 6700 - 140/2.85 LID
IRB 6700 - 300/2.70
IRB 6700 - 270/2.70 LID
IRB 6700 - 245/3.00
IRB 6700 - 220/3.00 LID
IRB 6700Inv - 300/2.60
IRB 6700I - 270/2.60 LID
IRB 6700Inv - 245/2.90
IRB 6700I - 210/2.90 LID

IRC5, OmniCore

Document ID: 3HAC044268-001

Revision: T

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Original instructions.

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Table of contents

Overview of this manual	7
Product documentation	10
1 Spare parts - Electrical parts	13
1.1 Manipulator harness	13
1.2 SMB unit	14
1.3 Brake release unit	15
2 Spare parts - Axis 3-4	17
3 Spare parts - Arm extender	21
4 Spare parts - Wrist	23
4.1 Wrist	23
4.2 Turning disc (standard and process)	26
4.3 Axis-6 synchronization mark plate	27
5 Spare parts - Lower arm	29
6 Spare parts - Balancing device	31
6.1 Balancing device	31
6.2 Cradle parts	33
6.3 Maintenance kits	34
7 Spare parts - Frame and base	39
8 Spare parts - Motors	43
8.1 Axis-1 motor (including pinion)	43
8.2 Axis-2 motor (including pinion)	46
8.3 Axis-3 motor (including pinion)	49
8.4 Axis-4 motor (including pinion)	52
8.5 Axis-5 motor (including pinion)	55
8.6 Axis-6 motor (including pinion)	57
9 Spare parts - Gearboxes	61
9.1 Gearbox axis-1	61
9.2 Gearbox axis-2	63
9.3 Gearbox axis-3	65
9.4 Gearbox axis-6	67
10 Spare parts - Foundry Plus	69
10.1 Axis-4 Foundry Plus set	69
10.2 Axis-1 Foundry Plus protection	70
10.3 Cable protection upper arm house	71
11 Spare parts - Calibration items	73
12 Spare parts - Options	75
13 Type A vs type B motors	77
Index	79

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Overview of this manual

About this manual

This manual contains spare parts for:

- IRB 6700 and all its variants.

Usage

This manual shall be used as a complement to the product manual for IRB 6700 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

Reference	Document ID
<i>Product manual - IRB 6700</i>	<i>3HAC044266-001</i>
<i>Product manual - IRB 6700Inv / IRB 6700I</i>	<i>3HAC058254-001</i>
<i>Circuit diagram - IRB 6700 / IRB 6790</i>	<i>3HAC043446-005</i>

Revisions

Revision	Description
-	First edition
A	The variants IRB 6700 - 200/2.60 and IRB 6700 - 155/2.85 are added.
B	The following updates are done in this revision: <ul style="list-style-type: none"> • The variants IRB 6700 - 300/2.70 and IRB 6700 - 245/3.00 added throughout the manual. • Information about the length of robot variants IRB 6700 - 200/2.60 and IRB 6700 - 205/2.80 were wrong in some places. Has been corrected. • Color "grey" on spare parts is replaced with color Graphite White. • Axis-2 gearbox new on variants IRB 6700 - 200/2.60 and IRB 6700 - 155/2.85. • Frame has new spare part number on variants IRB 6700 - 200/2.60 and IRB 6700 - 155/2.85.

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Revision	Description
C	<p>The following updates are done in this revision:</p> <ul style="list-style-type: none"> • Spare part number on axis 2 motor is changed on variants IRB 6700 - 200/2.60 and IRB 6700 - 150/3.20. • Added spare part number on Sync. plates axes 1 and 6 for variants IRB 6700-300/2.75 and -245/3.00. • Added spare part number on Movable mechanical stop axis 1 for variants IRB 6700-300/2.75 and -245/3.00. • Corrected which frame fits on which variant. Was wrong. • Corrected which arm extender fits on which variant. Was wrong. • Corrected which lower arm fits on which variant. Was wrong.
D	<p>The following updates are done in this revision:</p> <ul style="list-style-type: none"> • Corrected robot designation in table for axis 3-4 spare parts. • Corrected spare part number for process turning disk for robots IRB 6700 - 300/2.70 and IRB 6700 - 245/3.00. • Table header changed for Robot type 245/3.00 gearbox axis 1. • Description for Gearbox, axis-1 3HAC046994-003/ -004 changed in table, description colum. • Spare part numbers for the heat protection plates on the axis-5 motor are changed, due to updated design. See Axis-5 motor on page 55. • Spare part numbers for the connection boxes on axis-1, axis-2, axis-3, axis-4 and axis-5 motors are changed, due to updated design.
E	<p>The following updates are done in this revision:</p> <ul style="list-style-type: none"> • New spare part numbers are introduced due to new standard calibration method (Axis Calibration): <ul style="list-style-type: none"> - frame - lower arm - axis 3-4 - wrist - turning disc - new axis-6 synchronization mark plate, not compatible with previous plate • Spare part numbers for the connection box sets on axis-1, axis-2, axis-3, axis-4 and axis-5 motors are corrected. • Generally modified due to update of BOL.
F	<p>The following updates are done in this revision:</p> <ul style="list-style-type: none"> • Type B motors are introduced throughout the manual, including a new connection box for the axis-6 motor. • Added images for the axis-1 gearbox for robot versions IRB 6700-300/2.70 and IRB 6700-245/3.00. • Added spare part number for an o-ring on the axis-1 gearbox. • Gasket changed for Harness cover axis 5: IRB 6700-300/2.70 and IRB 6700-245/3.00 (from 3HAC048699-001 to 3HAC051359-001). • Changed spare part number for gearbox and o-ring axis 2: (from 3HAC043072 to 3HAC058399, from 3HAB3772-144 to 3HAB3772-48). • Corrections due to updates in SAP terminology.

Revision	Description
G	<p>Published in release R17.1. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Changed spare part number for gearbox axis 1: (from 3HAC043071-003 to 3HAC060576-003, from 3HAC048228-001 to 3HAC060576-002), and o-ring: (from 3HAB3772-164 to 3HAC061327-002). • Added spare parts for robot versions IRB 6700Inv-300/2.60 and IRB 6700Inv-245/2.90. • Changed spare part number for cradle for robot versions IRB 6700-300/2.70 and IRB 6700-245/3.00 (from 3HAC045145-005 to 3HAC058093-003 and 3HAC045145-006 to 3HAC058093-004). • Added spare part number for axes 1-6 manipulator harness for robot versions IRB 6700-300/2.70 and IRB 6700-245/3.00. • Sections and tables are restructured. • Corrected position numbers for brake release unit parts.
H	<p>Published in release R17.2. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Added new frame spare parts for robot versions IRB 6700Inv-300/2.60 and IRB 6700Inv-245/2.90. • Information about pressed pinions in motors added. • Updated spare parts information and images for axis-1 gearbox parts for robot versions IRB 6700Inv-300/2.60 and IRB 6700Inv-245/2.90.
J	<p>Published in release R18.1. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • New spare part number brake release unit (was DSQC563). • Added spare part number for fan unit set. • Updated spare part number for o-ring pos A and pos B at axis-1 gearbox.
K	<p>Published in release 19B. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • O-rings removed from connection box spare part for axis-4 motor. • Added spare part number for axis-6 motor connection box for IRB 6700Inv-300/2.60 and IRB 6700Inv-245/2.90. • Added new o-ring for axis-3 gearbox for IRB 6700-200/2.60, -175/2.60 LID, -155/2.85, -140/2.85 LID, corrected o-ring number for axis-3 gearbox for IRB 6700-235/2.65, -220/2.65 LID, -205/2.80, -200/2.80 LID, -175/3.05, -155/3.05 LID, -150/3.20, -145/3.20 LID.
L	<p>Published in release 20A. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Updated spare part number for shaft link ear. Added new protection plug for the front link ear.
M	<p>Published in release 20B. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Clarified relation of which o-ring belongs to which axis-1 gearbox.
N	<p>Published in release 20D. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Added o-ring for axis-6 gearbox.
P	<p>Published in release 21A. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Manipulator harness number removed. Same harness is used for all variants.
Q	<p>Published in release 21C. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Note + Sparepart number added to motor ax2, 3, 4 and 6.
R	<p>Published in release 21D. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Added information for OmniCore.
S	<p>Published in release R22B. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • O-rings with article number added for magnetic plugs G¹/₂ and G¹/₄. • Added LID robot variants throughout the manual (valid for OmniCore robot controller).
T	<p>Published in release R23A. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Updated article number for o-ring, gearbox axis 2. • Updated the overpressure diagram.

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/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.
- 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.

Continues on next page

- Examples of how to use the application.

Operating manuals

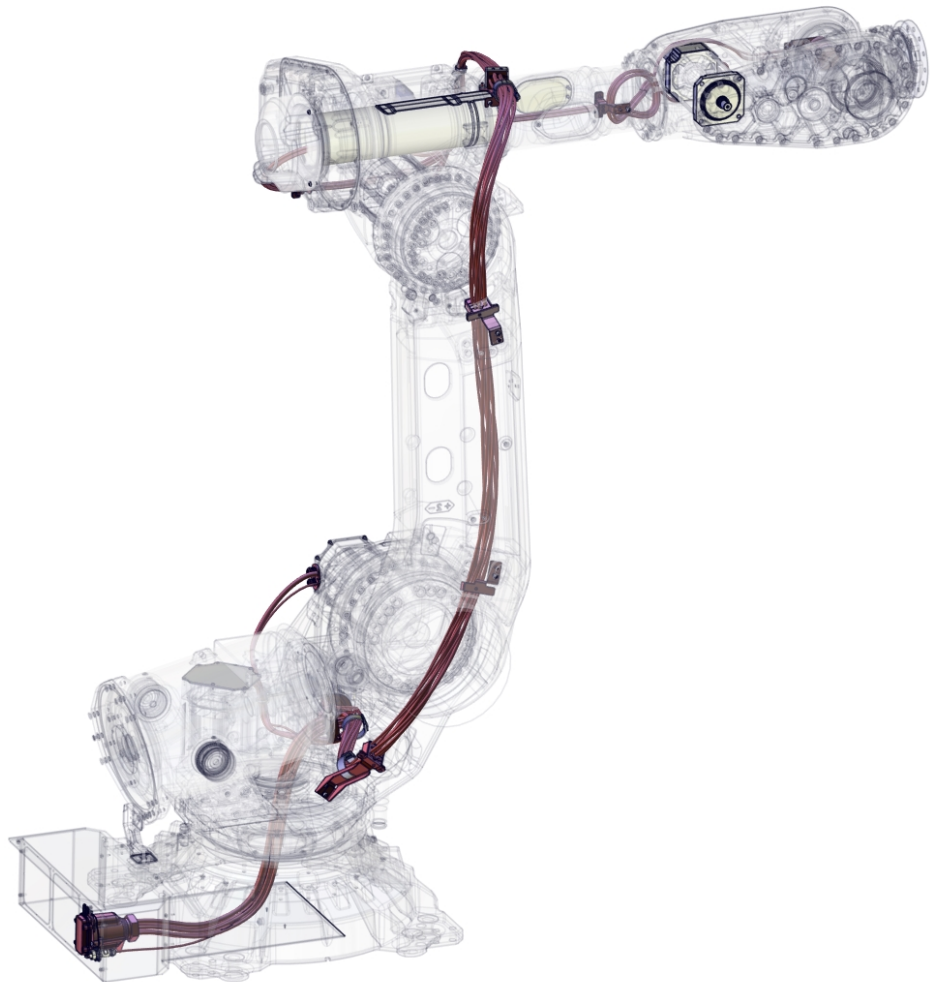
The operating manuals describe hands-on handling of the products. The manuals are aimed at those having first-hand operational contact with the product, that is production cell operators, programmers, and troubleshooters.

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1 Spare parts - Electrical parts

1.1 Manipulator harness

Illustration - Manipulator harness



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Spare part list - Manipulator harness

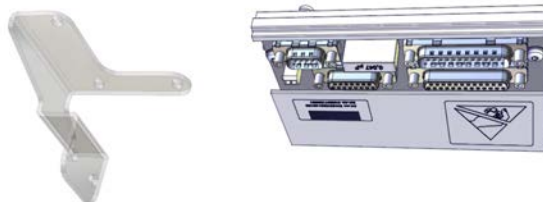
Description	Spare part number
Manipulator harness	3HAC042840-001

1 Spare parts - Electrical parts

1.2 SMB unit

1.2 SMB unit

Illustration - SMB unit



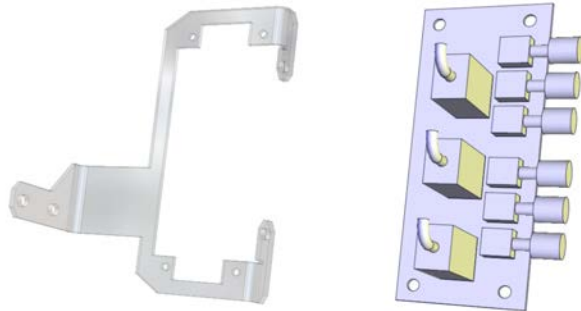
xx1300001976

Spare part list - SMB

Description	All variants	Spare part number
DSQC633C Measurement unit	X	3HAC043904-001

1.3 Brake release unit

Illustration - Brake release unit

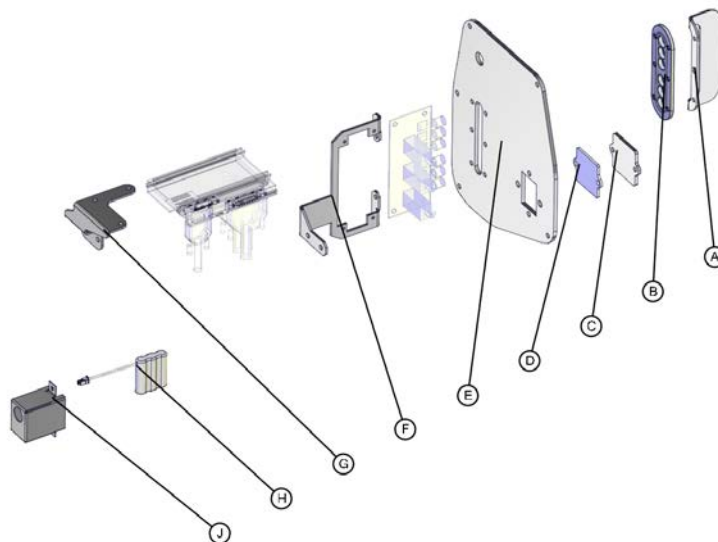


xx1300001977

Spare part list - Brake release unit

Description	All variants	Spare part number
Brake release unit, DSQC1052	X	3HAC065021-001

Illustration - Brake release unit parts



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1 Spare parts - Electrical parts

1.3 Brake release unit

Continued

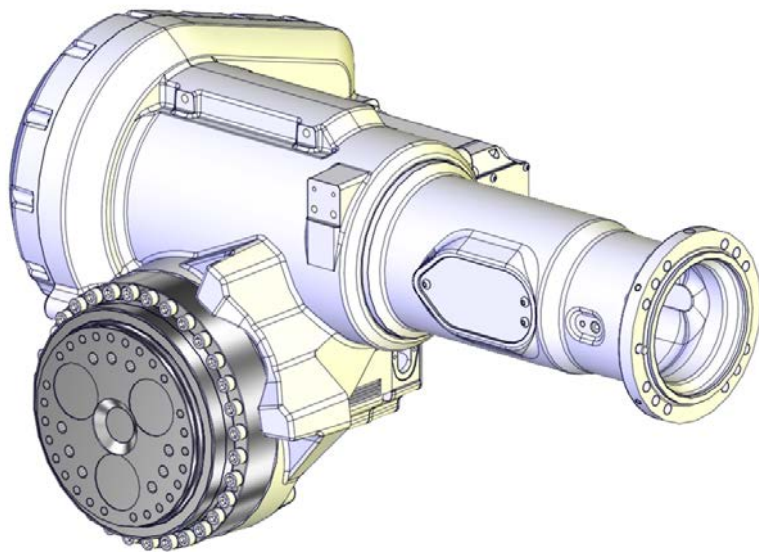
Spare part list - Brake release unit parts

	Description	Spare part number
A	Guard plate, BU buttons	3HAC026331-001
B	Push button guard	3HAC6499-1
C	Cover battery box, with rubber cloth	3HAC044205-001
E	SMB cover Including: • gasket SMB cover Graphite White	3HAC044076-003
	SMB cover Including: • gasket SMB cover ABB Orange	3HAC048332-001
F	Bracket (brake release unit)	3HAC049785-001
G	Bracket (SMB unit)	3HAC044073-001
H	Battery unit	3HAC044075-001
-	Cable battery/SMB	3HAC046287-001
J	Battery holder	3HAC044161-001

2 Spare parts - Axis 3-4

Spare parts - Axis 3-4

Illustration - Axis 3-4



Spare part list - Axis 3-4

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Axis 3-4 Graphite White	X	X	X	X							3HAC059650-001
					X	X					3HAC059651-001
							X	X	X	X	3HAC059652-001
Axis 3-4 ABB Orange	X	X	X	X							3HAC059650-002
					X	X					3HAC059651-002
							X	X	X	X	3HAC059652-002

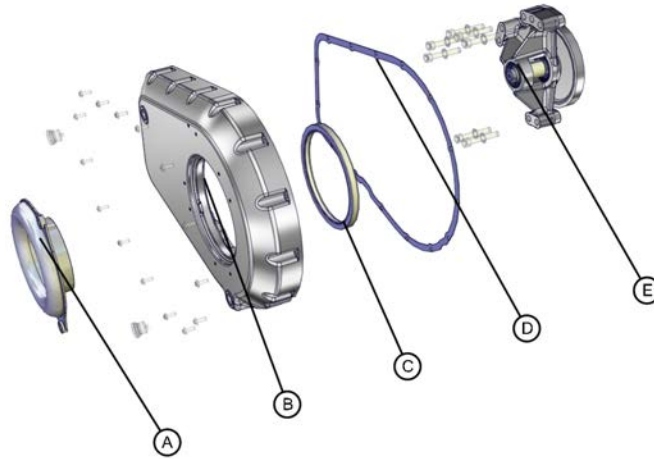
ⁱ IRB 6700Inv

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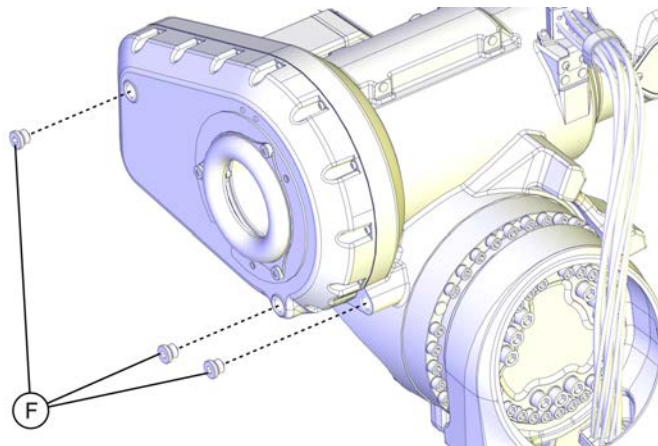
2 Spare parts - Axis 3-4

Continued

Illustration - Axis 3-4 parts



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Spare part list - Axis 3-4 parts

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 [!]	/2.90 [!]	Spare part number
A	Cable guide	X	X	X	X	X	X	X	X	X	X	3HAC11771-1
B	Cover axis-4 (gasket and sealing ring included) Graphite White	X	X	X	X							3HAC043500-003
						X	X					
								X	X	X	X	3HAC045121-003
	Cover axis-4 (gasket and sealing ring included) ABB Orange	X	X	X	X							
					X	X						3HAC044071-004
								X	X	X	X	3HAC045121-004
C	Sealing ring (delivered fitted in cover axis-4)	X	X	X	X	X	X	X	X	X	X	-

Continues on next page

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
D	Gasket axis-4	X	X	X	X							3HAC043442-001
						X	X					3HAC044069-001
								X	X	X	X	3HAC047409-001
E	Intermediate gear unit, axis-4 (pre-assembled)	X	X	X	X							3HAC043499-003
						X	X					3HAC044060-003
								X	X	X	X	3HAC045123-003
F	Magnetic plug, G 1/2" Includes o-ring: 3HAC061327-059	X	X	X	X	X	X	X	X	X	X	3HAC16721-1

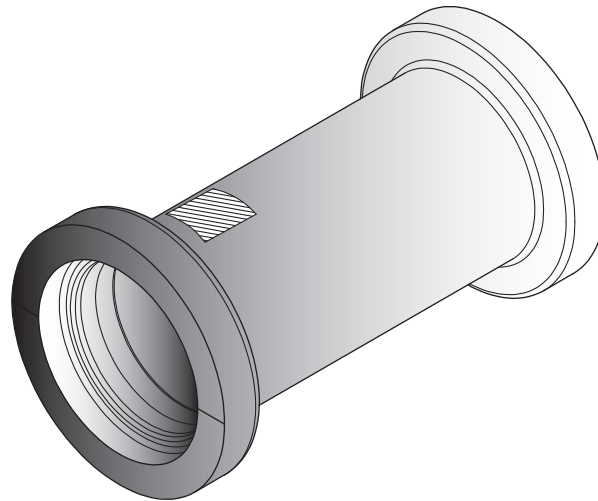
ⁱ IRB 6700Inv

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3 Spare parts - Arm extender

Upper arm extender

Illustration - Arm extender



xx1300002225

Spare part list - Arm extender

The arm extender is delivered with parallel pin (10x20) already fitted.

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ^j	Spare part number
Arm extender 410 mm Graphite White			X	X							3HAC042757-005
Arm extender 410 mm ABB Orange			X	X							3HAC048326-001
Arm extender 250 mm Graphite White						X		X		X	3HAC045084-005
Arm extender 250 mm ABB Orange						X		X		X	3HAC048213-003

ⁱ IRB 6700Inv

Spare part list - Arm extender sets

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ^j	Spare part number
Arm extender set 410 mm Graphite White Includes arm extender (1 pc), attachment screws M12x50 (12 pcs) and washers (12 pcs)			X	X							3HAC042757-007

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3 Spare parts - Arm extender

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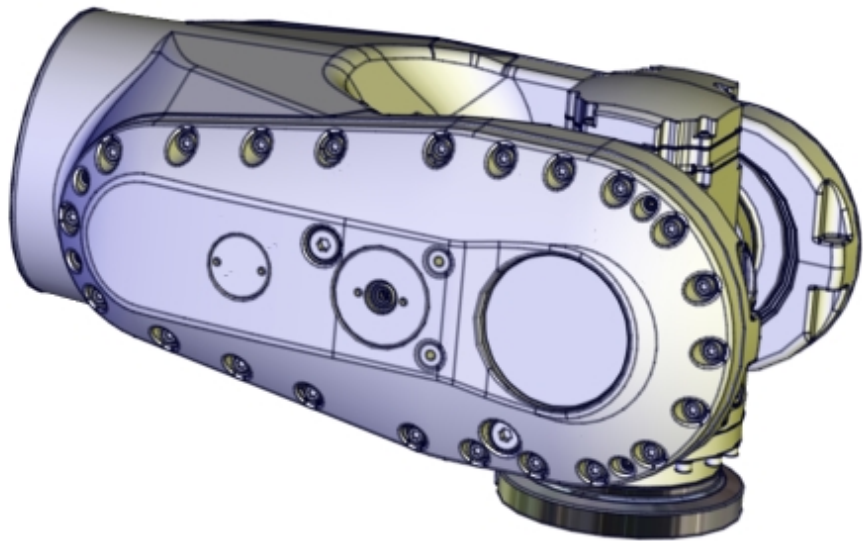
Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ^j	Spare part number
Arm extender set 410 mm ABB Orange Includes arm extender (1 pc), attachment screws M12x50 (12 pcs) and washers (12 pcs)			X	X							3HAC048326-002
Arm extender set 250 mm Graphite White Includes arm extender (1 pc), attachment screws M12x50 (16 pcs) and washers (16 pcs)						X					3HAC045084-007
								X		X	3HAC045084-008
Arm extender set 250 mm ABB Orange Includes arm extender (1 pc), attachment screws M12x50 (16 pcs) and washers (16 pcs)						X					3HAC048213-004
								X		X	3HAC045084-009

ⁱ IRB 6700Inv

4 Spare parts - Wrist

4.1 Wrist

Illustration - Wrist



xx1300001979

Spare part list - Wrist

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Wrist Graphite White	X	X	X	X							3HAC059653-001
					X	X					3HAC059654-001
							X	X	X	X	3HAC059655-001
Wrist ABB Orange	X	X	X	X							3HAC059653-002
					X	X					3HAC059654-002
							X	X	X	X	3HAC059655-002

ⁱ IRB 6700Inv

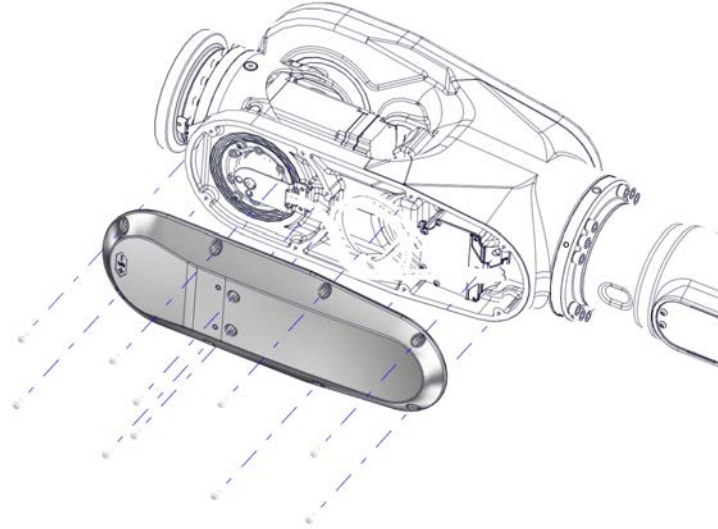
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4 Spare parts - Wrist

4.1 Wrist

Continued

Illustration - Harness cover



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Spare part list - Harness cover

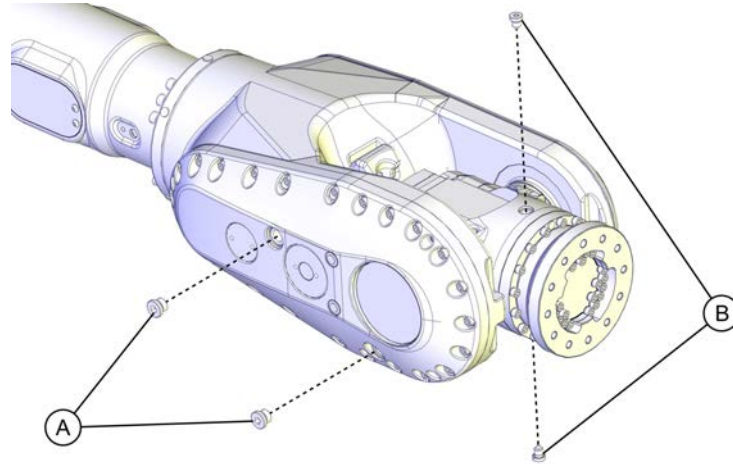
Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Harness cover, axis-5 Graphite White	X	X	X	X							3HAC043543-004
					X	X					3HAC044108-004
							X	X	X	X	3HAC045483-004
Harness cover, axis-5 ABB Orange	X	X	X	X							3HAC048333-001
					X	X					3HAC044108-005
							X	X	X	X	3HAC045483-005
Gasket ⁱⁱ	X	X	X	X							3HAC048699-001
					X	X					3HAC048887-001
							X	X	X	X	3HAC051359-001

ⁱ IRB 6700Inv

ⁱⁱ Protection type Foundry Plus.

Continues on next page

Illustration - Wrist parts



xx220000557

Spare part list - Wrist parts

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
A	Magnetic plug, G 1/2" Includes o-ring: 3HAC061327-059	X	X	X	X	X	X	X	X	X	X	3HAC16721-1
B	Magnetic plug, G 1/4" Includes o-ring: 3HAC061327-060	X	X	X	X	X	X	X	X	X	X	3HAC037925-001

ⁱ IRB 6700Inv

4 Spare parts - Wrist

4.2 Turning disc (standard and process)

4.2 Turning disc (standard and process)

Spare part list - Turning disc

Description	Spare part number	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ
Turning disc	3HAC055222-002 ⁱⁱ	X	X	X	X						
Turning disc	3HAC055223-002 ^{4.3}					X	X				
Turning disc	3HAC055224-002 ^{4.3}							X	X	X	X

ⁱ IRB 6700Inv

ⁱⁱ A set with an axis-6 synchronization mark plate is enclosed and replaces an incompatible plate, if currently installed.

The two versions of the synchronization mark plate are shown in [Axis-6 synchronization mark plate on page 27](#). Installation of the plate is described in *Product manual - Product.ProductName*.

Spare part list - Turning disc parts

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Washer (3-hole)					X	X					3HAC044237-001

ⁱ IRB 6700Inv

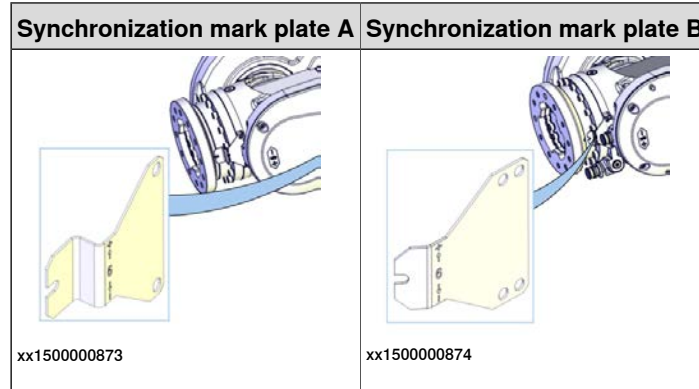
Spare part list - Turning disc - Process (Lean ID)

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Process turning disc, Lean ID	X	X	X	X							3HAC054887-005
Hex socket head cap screw M8x25 quality steel 12.9 Gleitmo 603 (9 pcs)	X	X	X	X							3HAB3409-37
Process turning disc, Lean ID					X	X					3HAC054888-004
Process turning disc, Lean ID							X	X	X	X	3HAC054889-004

ⁱ IRB 6700Inv

4.3 Axis-6 synchronization mark plate

Illustration - Synchronization mark plate



Spare part list - Synchronization mark plate

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/260 ⁱ	/290 ⁱ	Spare part number
A	Synchronization mark plate axis-6 ⁱⁱ	X	X	X	X	X	X					3HAC043641-001
								X	X			3HAC047188-001
B	Synchronization mark plate axis-6 ⁱⁱⁱ	X	X	X	X	X	X	X	X	X	X	3HAC055028-001

ⁱ IRB 6700Inv

ⁱⁱ Compatible with turning discs 3HAC048153-001, 3HAC048165-001, 3HAC045646-001, 3HAC049894-001, 3HAC049895-001, 3HAC046338-001.
(The spare part numbers are obsolete.)

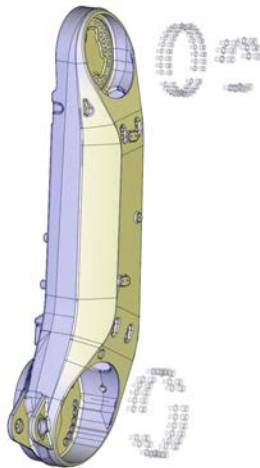
ⁱⁱⁱ Compatible with turning discs 3HAC055222-002, 3HAC055223-002, 3HAC055224-002, 3HAC054887-005, 3HAC054888-004, 3HAC054889-004.

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5 Spare parts - Lower arm

Lower arm

Illustration - Lower arm



xx1300002226

Spare part list - Lower arm

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Lower arm Graphite White	X		X								3HAC042494-008
		X		X							3HAC042495-008
					X	X					3HAC044137-009
							X	X			3HAC046232-008
									X	X	3HAC046232-005
Lower arm ABB Orange	X		X								3HAC048323-002
		X		X							3HAC048324-002
					X	X					3HAC044137-010
							X	X			3HAC046232-009
									X	X	3HAC046232-006

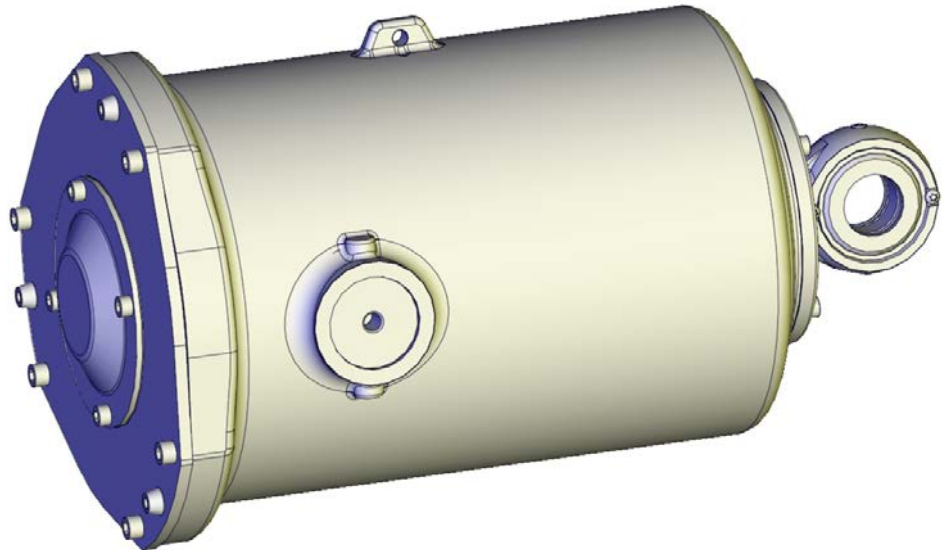
ⁱ IRB 6700Inv

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6 Spare parts - Balancing device

6.1 Balancing device

Illustration - Balancing device



xx1300002227

Spare part list - Balancing device

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Balancing device Graphite White	X	X	X	X	X	X					3HAC043477-002
							X	X			3HAC051384-002
									X	X	3HAC058121-005
Balancing device ABB Orange	X	X	X	X	X	X					3HAC048319-001
							X	X			3HAC051384-003
									X	X	3HAC058121-006

ⁱ IRB 6700Inv

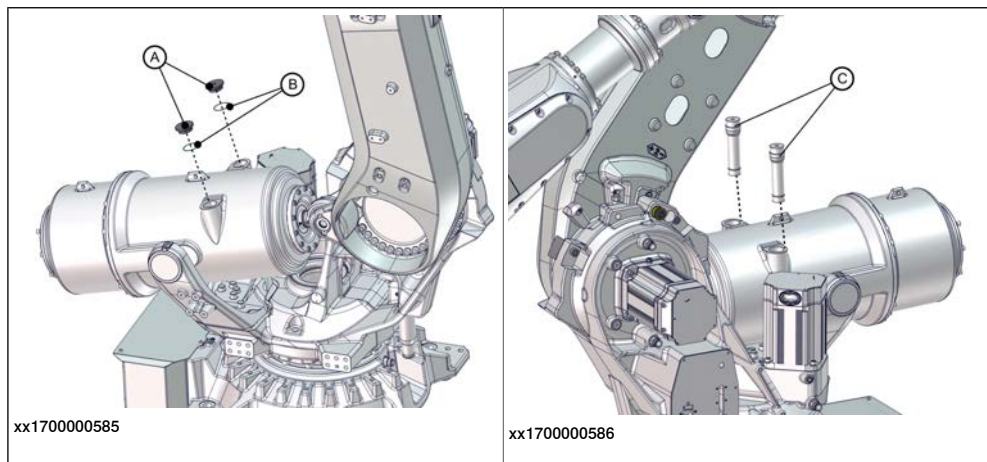
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6 Spare parts - Balancing device

6.1 Balancing device

Continued

Illustration - Balancing device parts - IRB 6700-300/2.70, -270/2.70 LID, -245/3.00, -220/3.00 LID



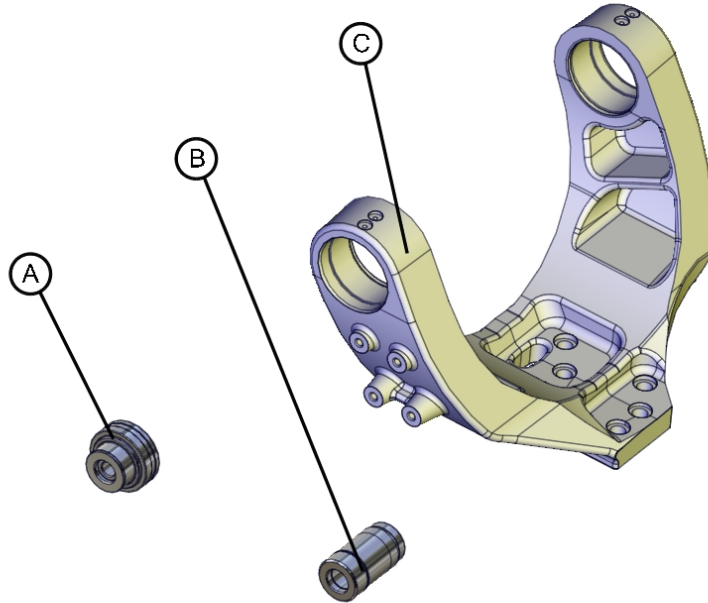
Spare part list - Balancing device parts - IRB 6700-300/2.70, -270/2.70 LID, -245/3.00, -220/3.00 LID

	Description	/2.60 ⁱ	/2.90 ⁱ	Spare part number
A	Protection cover	X	X	3HAC058204-001
B	O-ring	X	X	3HAB3772-132
C	Relief screws	X	X	3HAC058129-001

ⁱ IRB 6700Inv

6.2 Cradle parts

Illustration - Cradle parts



Spare part list - Cradle parts

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
A	Shaft end, cradle	X	X	X	X	X	X					3HAC044118-001
								X	X	X	X	3HAC046681-001
B	Shaft link ear	X	X	X	X	X	X	X	X	X	X	3HAC072597-001
C	Cradle Graphite White	X	X	X	X	X	X					3HAC046404-003
								X	X	X	X	3HAC058093-003
	Cradle ABB Orange	X	X	X	X	X	X					3HAC048327-001
								X	X	X	X	3HAC058093-004

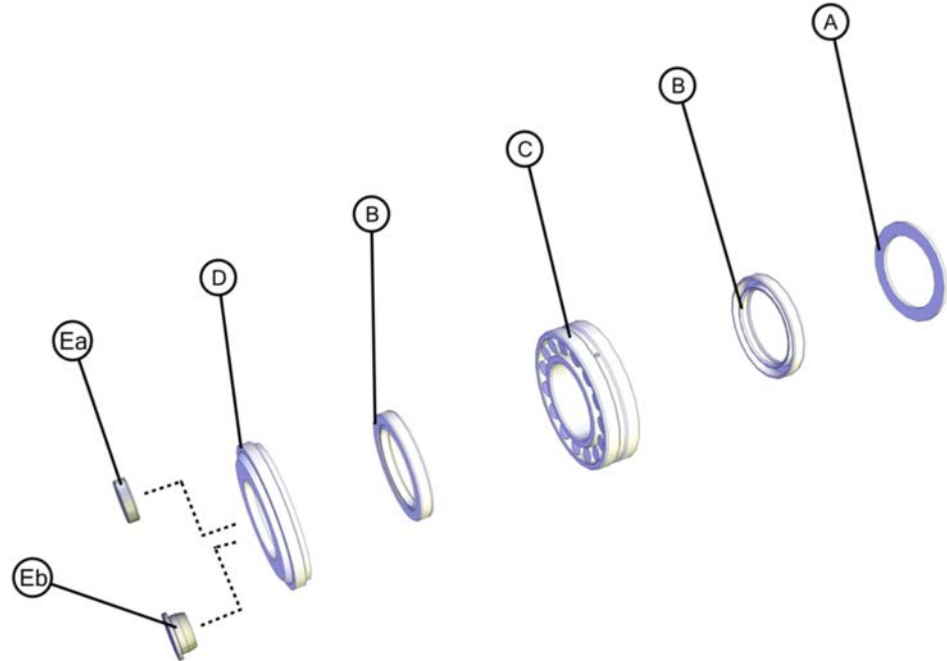
ⁱ IRB 6700Inv

6 Spare parts - Balancing device

6.3 Maintenance kits

6.3 Maintenance kits

Illustration - Maintenance kit link ear



xx1300002229

A	Washer
B	Radial sealing with dust lip (2 pcs)
C	Spherical roller bearing
D	End cover
Ea	VK-cover
Eb	Protection plug

Spare part list - Maintenance kit link ear

Pos	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ^j	Spare part number
-	Maintenance kit, link ear	X	X	X	X	X	X	X	X			3HAC045815-001
										X	X	3HAC062076-001
Ea	VK cover, 28x7 Only compatible with shaft 3HAC044036-001. See Shaft link ear versions on page 35 .	X	X	X	X	X	X	X	X	X	X	3HAA2166-12

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6 Spare parts - Balancing device

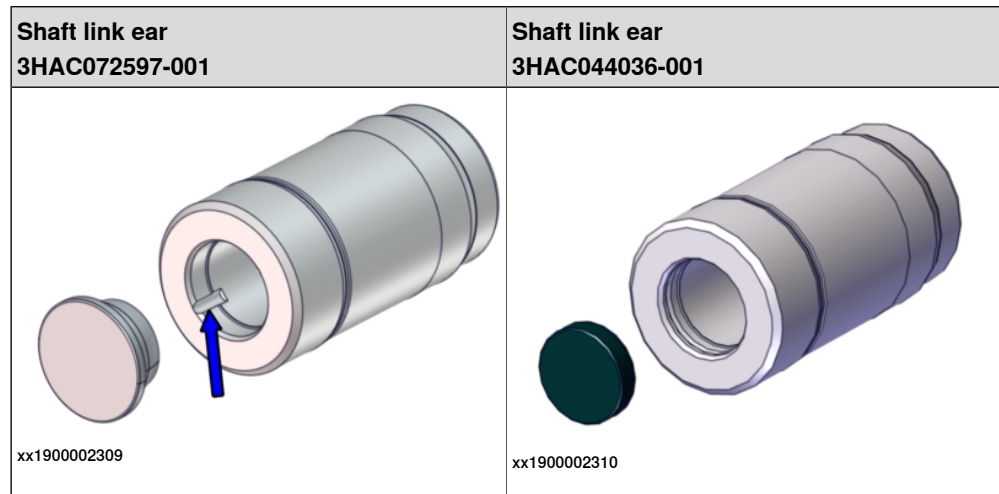
6.3 Maintenance kits

Continued

Pos	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Eb	Protection plug Only compatible with shaft 3HAC072597-001. See Shaft link ear versions on page 35 .	X	X	X	X	X	X	X	X	X	X	3HAC4836-26

ⁱ IRB 6700Inv

Shaft link ear versions



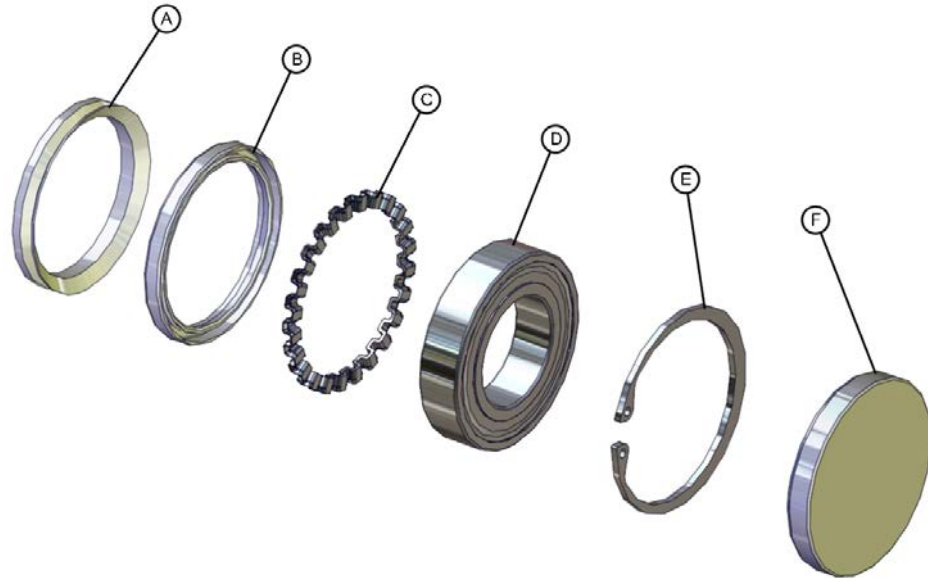
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6 Spare parts - Balancing device

6.3 Maintenance kits

Continued

Illustration - Maintenance kit, cradle - IRB 6700-235/2.65, -220/2.65 LID, -205/2.80, -200/2.80 LID, -175/3.05, -155/3.05 LID, -150/3.20, -145/3.20 LID, IRB 6700-200/2.60, -175/2.60 LID, -155/2.85, -140/2.85 LID



xx1300002230

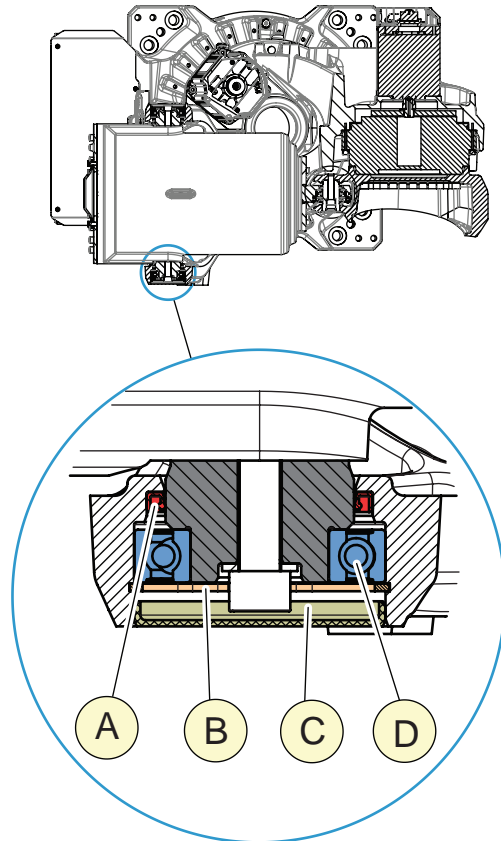
A	Sealing ring(2 pcs)
B	Radial sealing (2 pcs)
C	Spacer (2 pcs)
D	Groove ball bearing (2 pcs)
E	Retaining ring bore (2 pcs)
F	VK-cover (2 pcs)

Spare part list - Maintenance kit cradle - IRB 6700-235/2.65, -220/2.65 LID, -205/2.80, -200/2.80 LID, -175/3.05, -155/3.05 LID, -150/3.20, -145/3.20 LID, IRB 6700-200/2.60, -175/2.60 LID, -155/2.85, -140/2.85 LID

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	Spare part number
Maintenance kit, cradle	X	X	X	X	X	X	3HAC045822-001

Continues on next page

Illustration - Maintenance kit, cradle - IRB 6700-300/2.70, -270/2.70 LID, -245/3.00, -220/3.00 LID, IRB 6700Inv-300/2.60, -270/2.60 LID, -245/2.90, -210/2.90 LID



xx1400001996

A	Radial sealing with dustlip(2 pcs)
B	Retaining ring bore (2 pcs)
C	VK-cover (2 pcs)
D	Groove ball bearing (2 pcs)

Spare part list - Maintenance kit cradle - IRB 6700-300/2.70, -270/2.70 LID, -245/3.00, -220/3.00 LID, IRB 6700Inv-300/2.60, -270/2.60 LID, -245/2.90, -210/2.90 LID

Description	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Maintenance kit, cradle	X	X	X	X	3HAC048834-001

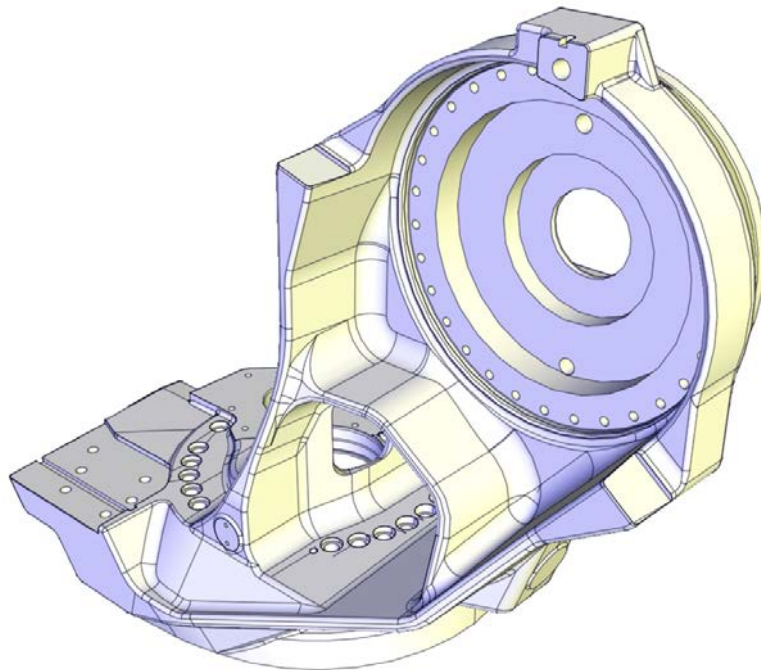
ⁱ IRB 6700Inv

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7 Spare parts - Frame and base

Frame

Illustration - Frame



xx1300002231

Spare part list - Frame

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Frame Graphite White	X	X	X	X	X	X					3HAC048334-003
							X	X			3HAC045146-009
									X	X	3HAC057174-004
Frame ABB Orange	X	X	X	X	X	X					3HAC048334-002
							X	X			3HAC045146-010
									X	X	3HAC057174-005

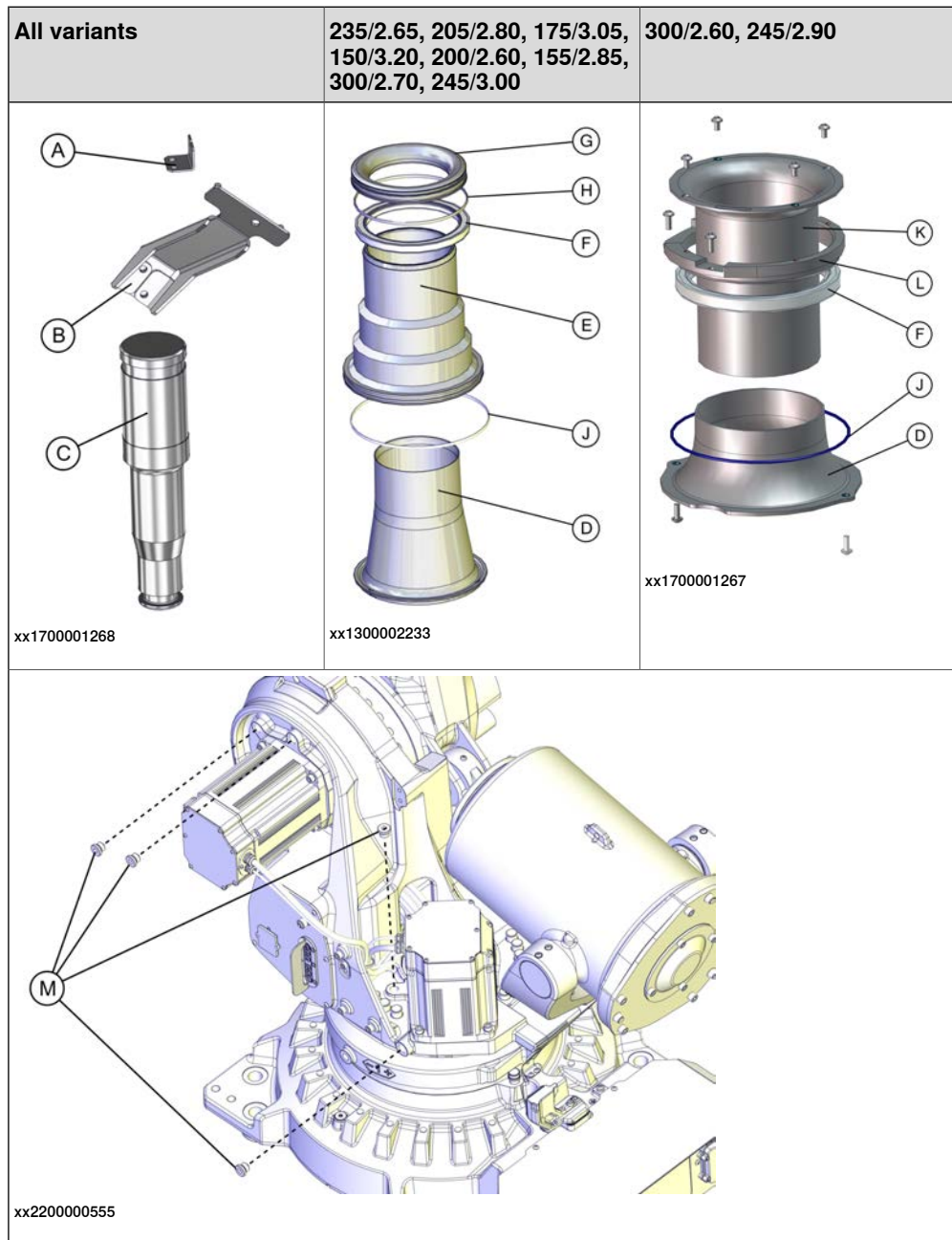
ⁱ IRB 6700Inv

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7 Spare parts - Frame and base

Continued

Illustration - Frame parts



Spare part list - Frame parts

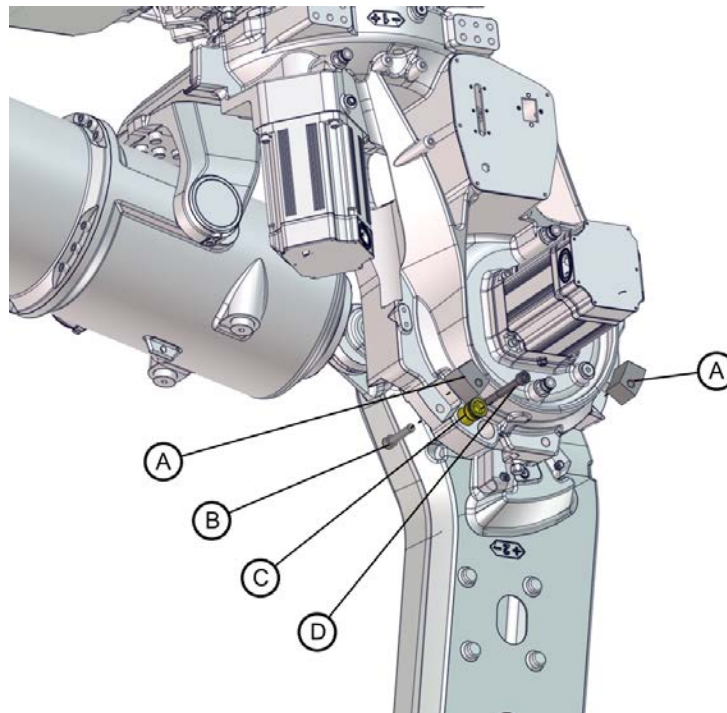
	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
A	Sync. plate axis-1	X	X	X	X	X	X					3HAC043983-001
								X	X	X	X	3HAC028036-001
B	Metal compression clamp frame	X	X	X	X	X	X	X	X	X	X	3HAC043876-001
C	Stop pin axis-1	X	X	X	X	X	X					3HAC024014-001
								X	X	X	X	3HAC047059-001

Continues on next page

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
D	Protection tube	X	X	X	X	X	X					3HAC042961-001
								X	X			3HAC046202-001
											X	X
E	Sealing tube	X	X	X	X	X	X					3HAC042973-001
F	Radial sealing with dustlip	X	X	X	X	X	X					3HAB3701-46
								X	X	X	X	
G	Protection ring axis-1	X	X	X	X	X	X					3HAC042968-001
								X	X			
H	O-ring (151,99x3,53)	X	X	X	X	X	X					3HAB3772-58
J	O-ring (183,74x3,53)	X	X	X	X	X	X			X	X	3HAB3772-150
K	Protection pipe axis-1									X	X	3HAC026892-001
L	Adapter									X	X	3HAC062495-001
M	Magnetic plug, G 1/2" Includes o-ring: 3HAC061327-059	X	X	X	X	X	X	X	X	X	X	3HAC16721-1

ⁱ IRB 6700Inv

Illustration - Safety locking equipment - IRB 6700Inv-300/2.60, -270/2.60 LID, -245/2.90, -210/2.90 LID



xx170000584

Spare part list - Safety locking equipment - IRB 6700Inv-300/2.60, -270/2.60 LID, -245/2.90, -210/2.90 LID

	Description	/2.60 ⁱ	/2.90 ⁱ	Spare part number
A	Service stop	X	X	3HAC058167-001
B	Service stop screw	X	X	3HAB3409-88

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7 Spare parts - Frame and base

Continued

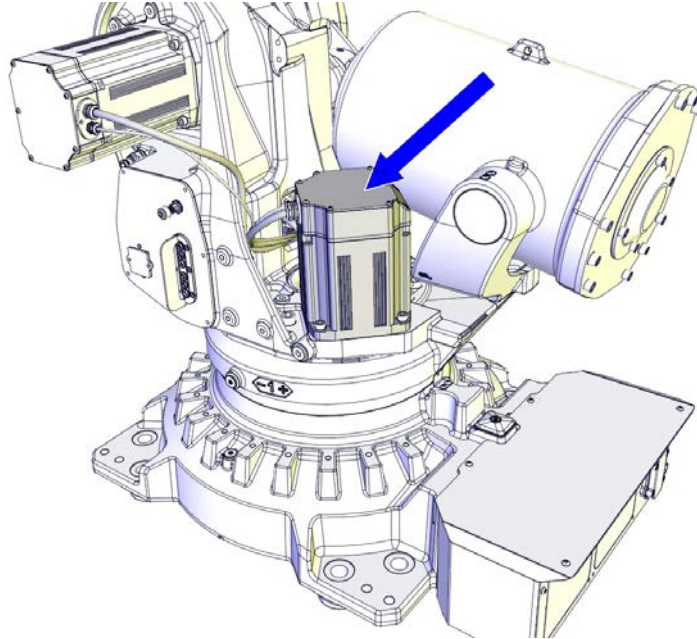
	Description	/2.60 ⁱ	/2.90 ⁱ	Spare part number
C, D	Transportation lock screw	X	X	3HAC059728-001 Sleeve 3HAB3409-93 Screw, M16x120 (class 12.9 or 8.8)

ⁱ IRB 6700Inv

8 Spare parts - Motors

8.1 Axis-1 motor (including pinion)

Axis-1 motor



xx1200001064

Spare part list - axis-1 motor

The spare part motor includes: pinion, connection box, cover and o-rings.

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Motor, axis-1 Type B ⁱⁱ Graphite White	X	X	X	X	X	X					3HAC055447-006
							X	X			3HAC055451-003
									X	X	3HAC058949-003
Motor, axis-1 Type B ⁱⁱ ABB Orange	X	X	X	X	X	X					3HAC055447-004
							X	X			3HAC055451-004
									X	X	3HAC048393-004

ⁱ IRB 6700Inv

ⁱⁱ Type A motor has been replaced by Type B. The motors are fully interchangeable. See [Type A vs type B motors on page 77](#).

The type B motor includes an oil seal that is inspected as a periodic maintenance activity. Make sure to add the activity to periodic maintenance, when replacing a type A motor with type B. See *Product manual - Product.ProductName*.

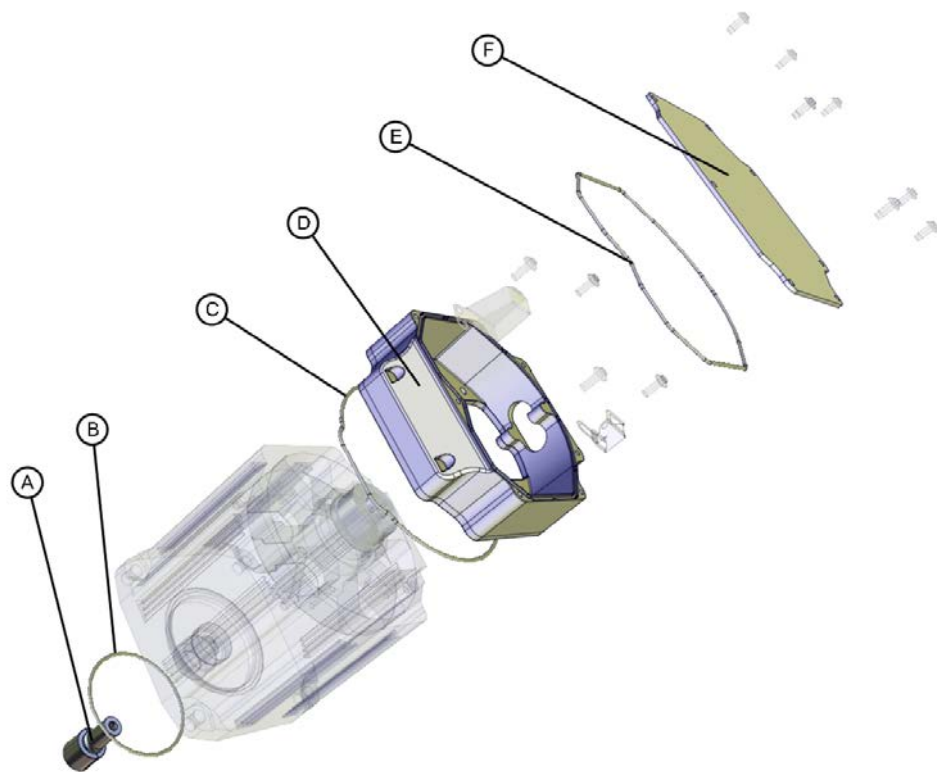
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8 Spare parts - Motors

8.1 Axis-1 motor (including pinion)

Continued

Other parts



xx1300002241

Spare part list - axis-1 motor other parts

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
A	Pinion This is a pressed pinion. ⁱⁱ	X	X	X	X	X	X					3HAC043071-002
	Pinion RV-400CS-29,96 This is a pressed pinion. ⁱⁱ							X	X			3HAC046188-002
B	O-ring (motor flange)	X	X	X	X	X	X	X	X	X	X	3HAB3772-107
C	O-ring Circular profile ⁱⁱⁱ	X	X	X	X	X	X	X	X			3HAB3772-111
	O-ring Hexagon profile ⁱⁱⁱ	X	X	X	X	X	X	X	X			3HAC054692-001
										X	X	3HAC054692-002

Continues on next page

8 Spare parts - Motors

8.1 Axis-1 motor (including pinion)

Continued

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
D	Connection box FS 180	X	X	X	X	X	X	X	X			3HAC054660-004
	Includes o-rings C and E. Graphite White									X	X	3HAC029299-004
	Connection box FS 180	X	X	X	X	X	X	X	X			3HAC054660-005
	Includes o-rings C and E. ABB Orange									X	X	3HAC054660-004
E	O-ring Circular profile ⁱⁱⁱ	X	X	X	X	X	X	X	X			3HAB3772-111
	O-ring Hexagon profile ⁱⁱⁱ	X	X	X	X	X	X	X	X	X	X	3HAC054692-002
F	Cover, box FS 180 Graphite White	X	X	X	X	X	X	X	X	X	X	3HAC029303-004
	Cover, box FS 180 ABB Orange	X	X	X	X	X	X	X	X	X	X	3HAC029303-005

ⁱ IRB 6700Inv

ⁱⁱ Repair shall be performed only by authorized work shops.

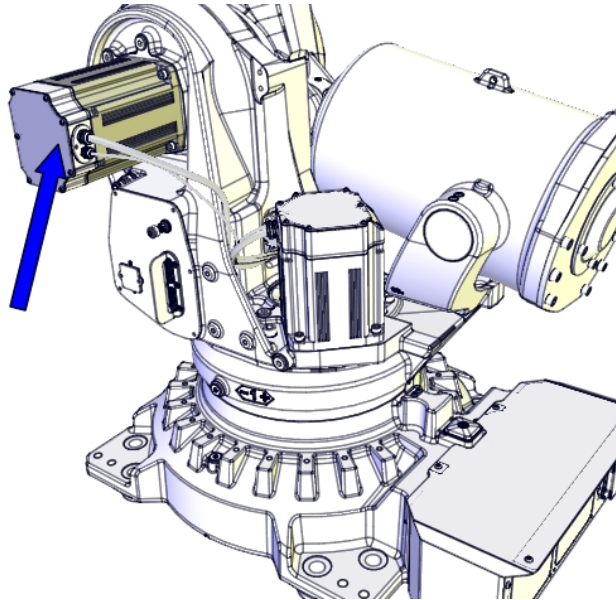
ⁱⁱⁱ The cross-section profile is either circular or hexagon. If only ordering the o-ring, order the same profile that is currently installed in the connection box.

8 Spare parts - Motors

8.2 Axis-2 motor (including pinion)

8.2 Axis-2 motor (including pinion)

Axis-2 motor



xx1200001112

Spare part list - axis-2 motor

The spare part motor includes: pinion, connection box, cover and o-rings.



Note

The spare part motor is delivered with a transparent plug (sight glass). If a protection filter (mesh filter) is needed, please order from BOL. See article number in *Other parts*.

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Motor, axis-2 Type B ⁱⁱ Graphite White	X	X	X	X	X	X					3HAC055450-003
							X	X	X	X	3HAC055688-003
Motor, axis-2 Type B ⁱⁱ ABB Orange	X	X	X	X	X	X					3HAC055450-004
							X	X	X	X	3HAC055688-004

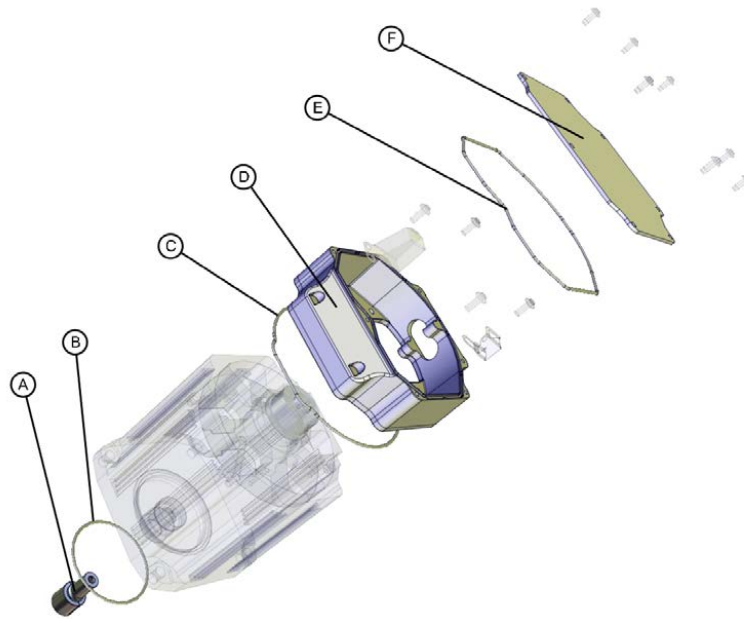
ⁱ IRB 6700Inv

ⁱⁱ Type A motor has been replaced by Type B. The motors are fully interchangeable. See [Type A vs type B motors on page 77](#).

The type B motor includes an oil seal that is inspected as a periodic maintenance activity. Make sure to add the activity to periodic maintenance, when replacing a type A motor with type B. See product manual for the manipulator.

Continues on next page

Other parts



xx1300002241

Spare part list - axis-2 motor other parts

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
A	Pinion This is a pressed pinion. ⁱⁱ	X	X	X	X	X	X					3HAC043072-002
	Pinion RV-700N-302,05 This is a pressed pinion. ⁱⁱ							X	X	X	X	3HAC046186-002
B	O-ring (motor flange)	X	X	X	X	X	X	X	X	X	X	3HAB3772-107
C	O-ring Circular profile ⁱⁱⁱ	X	X	X	X	X	X	X	X			3HAB3772-111
	O-ring Hexagon profile ⁱⁱⁱ	X	X	X	X	X	X	X	X	X	X	3HAC054692-001
D	Connection box FS 180 Includes o-rings C and E. Graphite White	X	X	X	X	X	X	X	X	X	X	3HAC054660-004
	Connection box FS 180 Includes o-rings C and E. ABB Orange	X	X	X	X	X	X	X	X	X	X	3HAC054660-005

Continues on next page

8 Spare parts - Motors

8.2 Axis-2 motor (including pinion)

Continued

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
E	O-ring Circular profile ⁱⁱⁱ	X	X	X	X	X	X	X	X			3HAB3772-111
	O-ring Hexagon profile ⁱⁱⁱ	X	X	X	X	X	X	X	X	X	X	3HAC054692-002
F	Cover, box FS 180 Graphite White	X	X	X	X	X	X	X	X	X	X	3HAC029303-004
	Cover, box FS 180 ABB Orange	X	X	X	X	X	X	X	X	X	X	3HAC029303-005
-	Mesh filter	X	X	X	X	X	X	X	X	X	X	3HAC055826-001

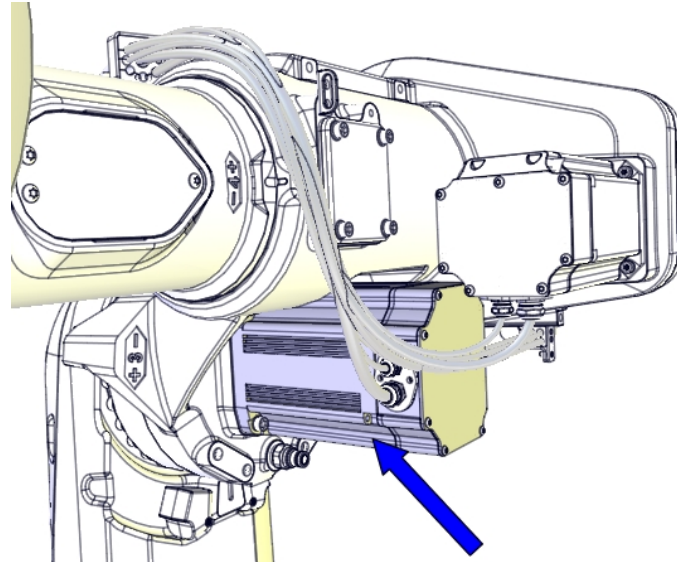
ⁱ IRB 6700Inv

ⁱⁱ Repair shall be performed only by authorized work shops.

ⁱⁱⁱ 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.

8.3 Axis-3 motor (including pinion)

Axis-3 motor



xx1200001113

Spare part list - axis-3 motor

The spare part motor includes: pinion, connection box, cover and o-rings.



Note

The spare part motor is delivered with a transparent plug (sight glass). If a protection filter (mesh filter) is needed, please order from BOL. See article number in *Other parts*.

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Motor, axis-3 Type B ⁱⁱ Graphite White	X	X	X	X							3HAC055448-003
					X	X					3HAC055697-003
							X	X	X	X	3HAC055700-003
Motor, axis-3 Type B ⁱⁱ ABB Orange	X	X	X	X							3HAC055448-004
					X	X					3HAC055697-004
							X	X	X	X	3HAC055700-004

ⁱ IRB 6700Inv

ⁱⁱ Type A motor has been replaced by Type B. The motors are fully interchangeable. See [Type A vs type B motors on page 77](#).

The type B motor includes an oil seal that is inspected as a periodic maintenance activity. Make sure to add the activity to periodic maintenance, when replacing a type A motor with type B. See *Product manual - Product.ProductName*.

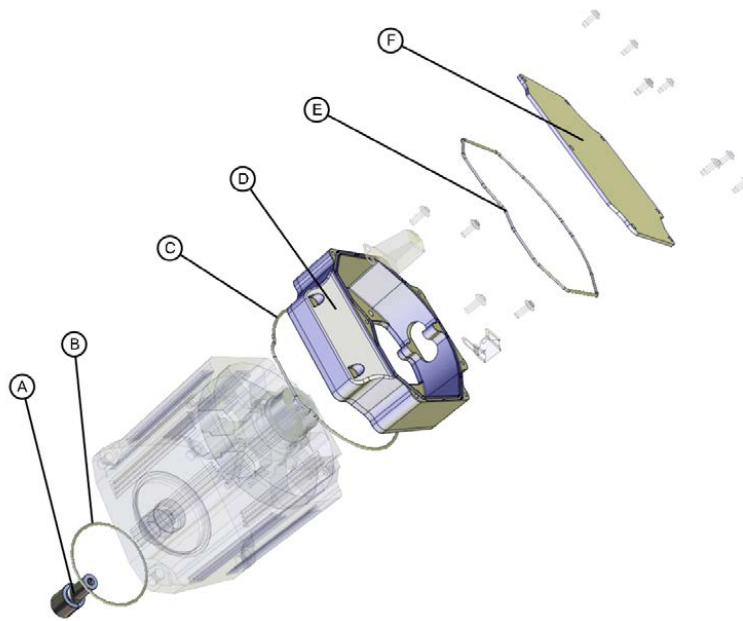
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8 Spare parts - Motors

8.3 Axis-3 motor (including pinion)

Continued

Other parts



xx1300002241

Spare part list - axis-3 motor other parts

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
A	Pinion This is a pressed pinion. ⁱⁱ	X	X	X	X							3HAC043073-002
	Pinion RV320E3 i=201 This is a pressed pinion. ⁱⁱ					X	X					3HAC044063-002
	Pinion RV-550N This is a pressed pinion. ⁱⁱ							X	X	X	X	3HAC043072-002
B	O-ring (motor flange)	X	X	X	X	X	X	X	X	X	X	3HAB3772-107
C	O-ring Circular profile ⁱⁱⁱ	X	X	X	X	X	X	X	X			3HAB3772-111
	O-ring Hexagon profile ⁱⁱⁱ	X	X	X	X	X	X	X	X	X	X	3HAC054692-001

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8 Spare parts - Motors

8.3 Axis-3 motor (including pinion)

Continued

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
D	Connection box FS 180 Includes o-rings C and E. Graphite White	X	X	X	X	X	X	X	X	X	X	3HAC054660-004
	Connection box FS 180 Includes o-rings C and E. ABB Orange	X	X	X	X	X	X	X	X	X	X	3HAC054660-005
E	O-ring Circular profile ⁱⁱⁱ	X	X	X	X	X	X	X	X			3HAB3772-111
	O-ring Hexagon profile ⁱⁱⁱ	X	X	X	X	X	X	X	X	X	X	3HAC054692-002
F	Cover, box FS 180 Graphite White	X	X	X	X	X	X	X	X	X	X	3HAC029303-004
	Cover, box FS 180 ABB Orange	X	X	X	X	X	X	X	X	X	X	3HAC029303-005
-	Mesh filter	X	X	X	X	X	X	X	X	X	X	3HAC055826-001

ⁱ IRB 6700Inv

ⁱⁱ Repair shall be performed only by authorized work shops.

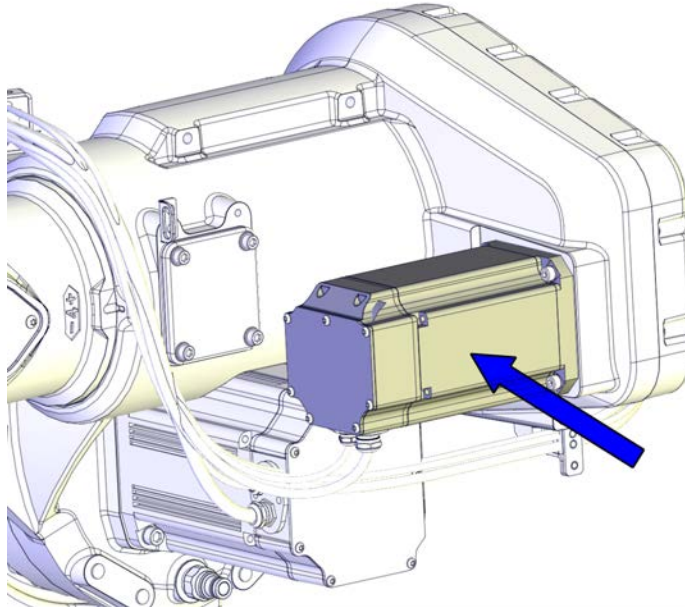
ⁱⁱⁱ The cross-section profile is either circular or hexagon. If only ordering the o-ring, order the same profile that is currently installed in the connection box.

8 Spare parts - Motors

8.4 Axis-4 motor (including pinion)

8.4 Axis-4 motor (including pinion)

Axis-4 motor



xx1300002232

Spare part list - axis-4 motor

The spare part motor includes: pinion, connection box, cover and o-rings.



Note

The spare part motor is delivered with a transparent plug (sight glass). If a protection filter (mesh filter) is needed, please order from BOL. See article number in *Other parts*.

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Motor, axis-4 Type B ⁱⁱ Graphite White	X	X	X	X	X	X					3HAC055440-003
							X	X	X	X	3HAC055441-003
Motor, axis-4 Type B ⁱⁱ ABB Orange	X	X	X	X	X	X					3HAC055440-004
							X	X	X	X	3HAC055441-004

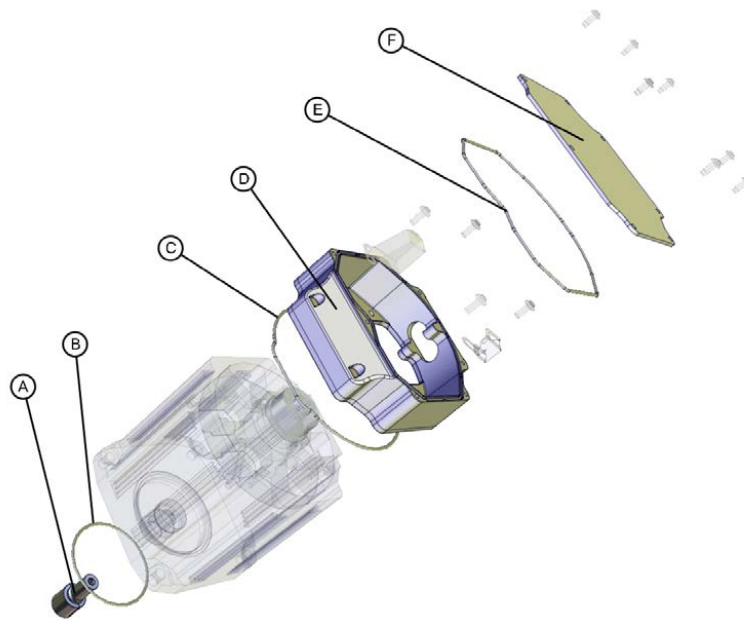
ⁱ IRB 6700Inv

ⁱⁱ Type A motor has been replaced by Type B. The motors are fully interchangeable. See [Type A vs type B motors on page 77](#).

The type B motor includes an oil seal that is inspected as a periodic maintenance activity. Make sure to add the activity to periodic maintenance, when replacing a type A motor with type B. See *Product manual - Product.ProductName*.

Continues on next page

Other parts



xx1300002241

Spare part list - axis-4 motor other parts

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
A	Pinion	X	X	X	X	X	X					3HAC041348-001
	This is a pressed pinion. ⁱⁱ							X	X	X	X	3HAC047164-001
B	O-ring (motor flange)	X	X	X	X	X	X	X	X	X	X	3HAB3772-107
C	O-ring Circular profile ⁱⁱⁱ	X	X	X	X	X	X	X	X			3HAB3772-110
	O-ring Hexagon profile ⁱⁱⁱ	X	X	X	X	X	X	X	X	X	X	3HAC054692-001
D	Connection box FS 130 Graphite White	X	X	X	X	X	X	X	X	X	X	3HAC054659-002
	Connection box FS 130 ABB Orange	X	X	X	X	X	X	X	X	X	X	3HAC054659-003
E	O-ring Circular profile ⁱⁱⁱ	X	X	X	X	X	X	X	X			3HAB3772-110
	O-ring Hexagon profile ⁱⁱⁱ	X	X	X	X	X	X	X	X	X	X	3HAC054692-001
F	Cover, box FS 130 Graphite White	X	X	X	X	X	X	X	X	X	X	3HAC029302-005
	Cover, box FS 130 ABB Orange	X	X	X	X	X	X	X	X	X	X	3HAC029302-004

Continues on next page

8 Spare parts - Motors

8.4 Axis-4 motor (including pinion)

Continued

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
-	Mesh filter	X	X	X	X	X	X	X	X	X	X	3HAC055826-001

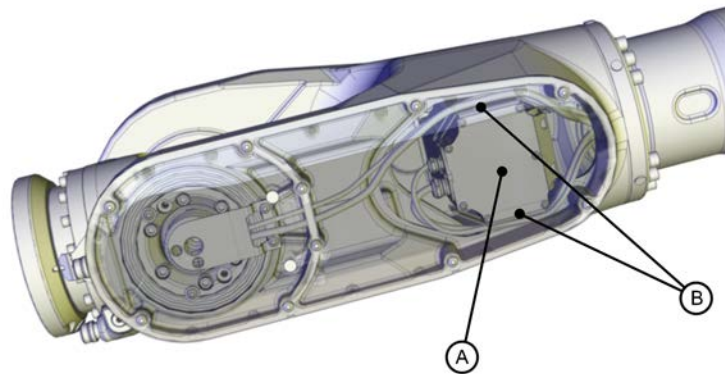
ⁱ IRB 6700Inv

ⁱⁱ Repair shall be performed only by authorized work shops.

ⁱⁱⁱ 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.

8.5 Axis-5 motor (including pinion)

Axis-5 motor



xx1200001002

Spare part list - axis-5 motor

The spare part motor includes: pinion, connection box, cover and o-rings.

	Description	All variants	Spare part number
A	Motor, axis-5 Type B ⁱ ⁱⁱ	X	3HAC055440-005
B	Heat protection plates, 2 pcs ⁱⁱⁱ	X	3HAC052332-001

ⁱ Type A motor has been replaced by Type B. The motors are fully interchangeable. See [Type A vs type B motors on page 77](#).

The type B motor includes an oil seal that is inspected as a periodic maintenance activity. Make sure to add the activity to periodic maintenance, when replacing a type A motor with type B. See *Product manual - Product.ProductName*.

ⁱⁱ When replacing a type A motor with a type B motor, the current heat protection plate must be replaced with two heat protection plates that fit the type B motor (listed below).

ⁱⁱⁱ Fits both the type A and the type B motor.

When replacing a type A motor with a type B motor, the type A heat protection plate (only one plate) must be replaced with these two heat protection plates.

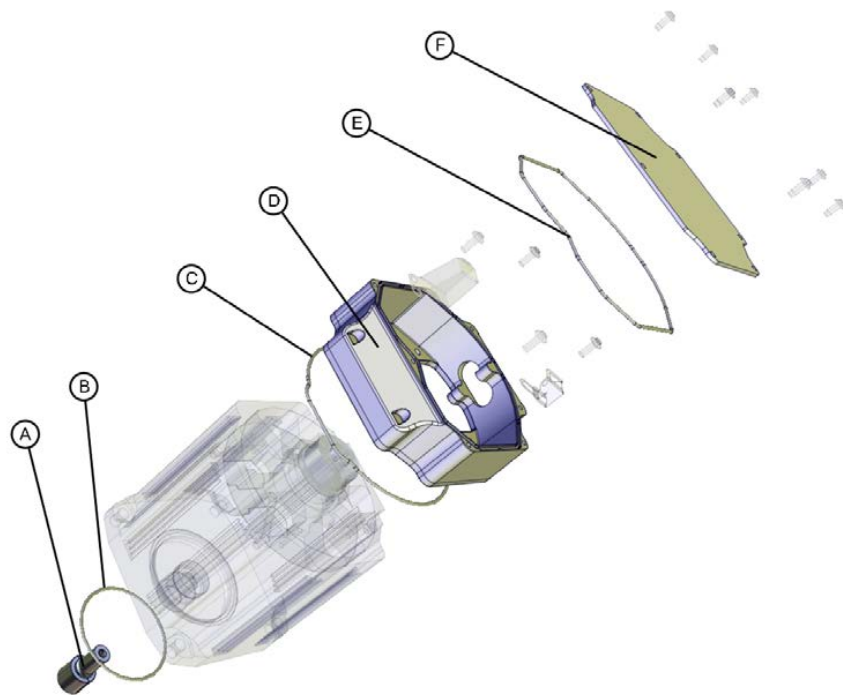
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8 Spare parts - Motors

8.5 Axis-5 motor (including pinion)

Continued

Other parts



xx1300002241

Spare part list - axis-5 motor other parts

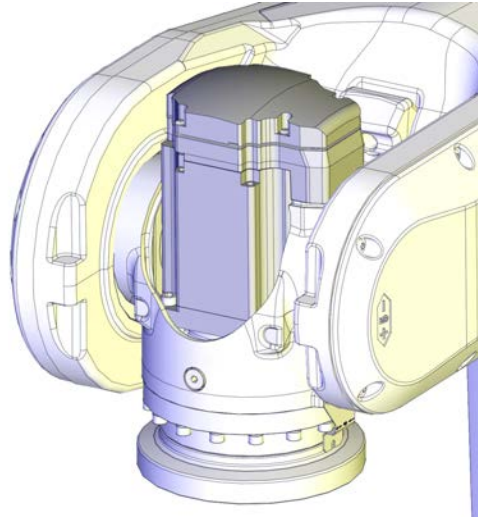
	Description	All variants	Spare part number
A	Pinion This is a pressed pinion. ⁱ	X	3HAC041348-001
B	O-ring (motor flange)	X	3HAB3772-107
C	O-ring Circular profile ⁱⁱ	X	3HAB3772-110
	O-ring Hexagon profile ⁱⁱ	X	3HAC054692-001
D	Connection box FS 130 Includes o-rings C and E.	X	3HAC054659-001
E	O-ring Circular profile ⁱⁱ	X	3HAB3772-110
	O-ring Hexagon profile ⁱⁱ	X	3HAC054692-001
F	Cover, box FS 130	X	3HAC029302-001

ⁱ Repair shall be performed only by authorized work shops.

ⁱⁱ 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.

8.6 Axis-6 motor (including pinion)

Axis-6 motor



xx1300002234

Spare part list - axis-6 motor

The spare part motor includes: pinion, connection box, cover and o-rings.



Note

The spare part motor is delivered with a transparent plug (sight glass). If a protection filter (mesh filter) is needed, please order from BOL. See article number in *Other parts*.

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Motor, axis-6 Type A ⁱⁱ Graphite White	X	X	X	X							3HAC043457-003
					X	X					3HAC046029-003
							X	X			3HAC046337-003
Motor, axis-6 Type A ⁱⁱ ABB Orange	X	X	X	X							3HAC048317-001
					X	X					3HAC046029-004
							X	X			3HAC046337-004
Motor, axis-6 Type B ⁱⁱ Graphite White	X	X	X	X							3HAC055699-003
					X	X					3HAC055437-003
							X	X	X	X	3HAC055439-003
Motor, axis-6 Type B ⁱⁱ ABB Orange	X	X	X	X							3HAC055699-004
					X	X					3HAC055437-004
							X	X	X	X	3HAC055439-004

ⁱ IRB 6700Inv

ⁱⁱ Type A and type B motors are not interchangeable for robots that are equipped with wrists manufactured before October 2015, due to differences in the wrist casting.

If no information about wrist manufacturing date can be gathered, identify which motor is installed on the robot and order the same type of motor.

Continues on next page

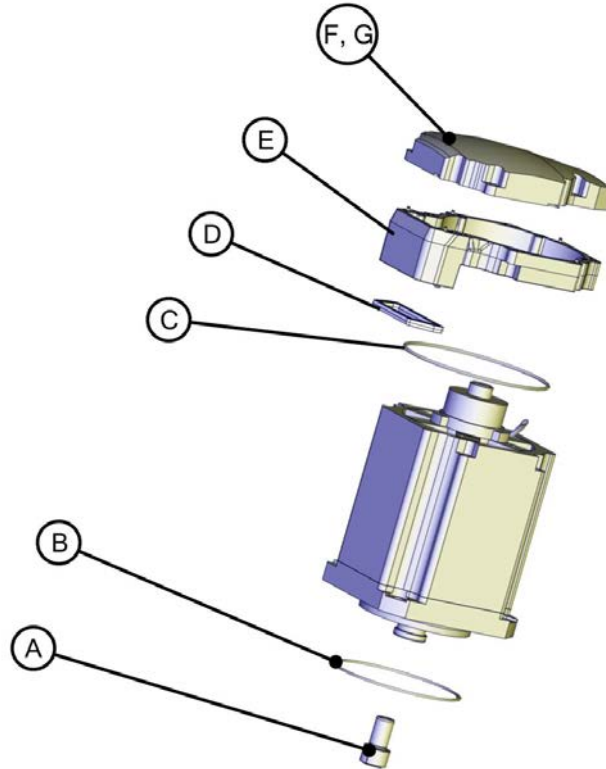
8 Spare parts - Motors

8.6 Axis-6 motor (including pinion)

Continued

See [Type A vs type B motors on page 77](#).

Other parts



xx1300002242

Spare part list - axis-6 motor other parts

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
A	Pinion This is a pressed pinion. ⁱⁱ	X	X	X	X							3HAC043074-002
	Pinion This is a pressed pinion. ⁱⁱ					X	X					3HAC028705-002
	Pinion RV-100N-161 This is a pressed pinion. ⁱⁱ							X	X	X	X	3HAC046336-002
B	O-ring (motor flange)	X	X	X	X			X	X	X	X	3HAB3772-107
						X	X					3HAB3772-102
C	O-ring Circular profile ⁱⁱⁱ	X	X	X	X			X	X			3HAB3772-110
	O-ring Hexagon profile ⁱⁱⁱ	X	X	X	X			X	X	X	X	3HAC054692-001
	Gasket					X	X					3HAC044254-001

Continues on next page

8 Spare parts - Motors

8.6 Axis-6 motor (including pinion)

Continued

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ^f	Spare part number	
D	Gasket, cable gland cover	X	X	X	X			X	X	X	X	3HAC048560-001	
E	Connection box ^{iv} Graphite White	X	X	X	X			X	X			3HAC043343-002	
										X	X		
	Connection box ^{iv} ABB Orange	X	X	X	X			X	X			3HAC048330-001	
										X	X		
	Connection box ^v Graphite White	X	X	X	X			X	X	X	X		3HAC054616-002
										X	X		
Connection box ^v ABB Orange	X	X	X	X			X	X	X	X		3HAC054616-003	
									X	X			
F	Gasket, motor cover (not shown in figure)	X	X	X	X			X	X	X	X	3HAC033489-001	
										X	X		
G	Cover connection box FS 100 Includes gasket. Graphite White	X	X	X	X			X	X	X	X	3HAC026607-006	
										X	X		
	Cover connection box FS 100 Includes gasket. ABB Orange								X	X	X	X	3HAC026607-003
-	Mesh filter	X	X	X	X	X	X	X	X	X	X	3HAC055826-001	

ⁱ IRB 6700Inv

ⁱⁱ Repair shall be performed only by authorized work shops.

ⁱⁱⁱ 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.

^{iv} Fits the type A motor.

See [Type A vs type B motors on page 77](#).

^v Fits the type B motor.

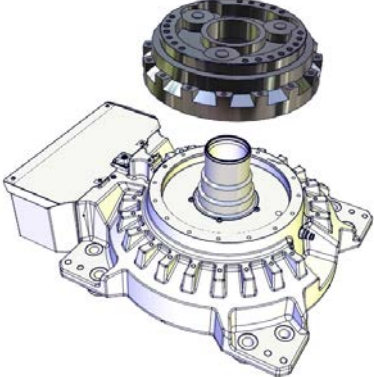
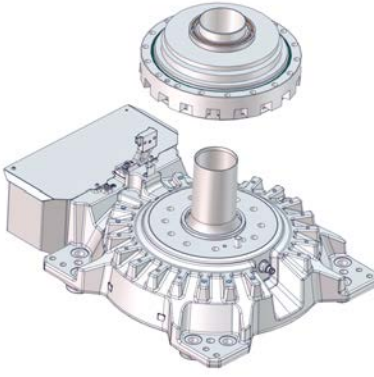
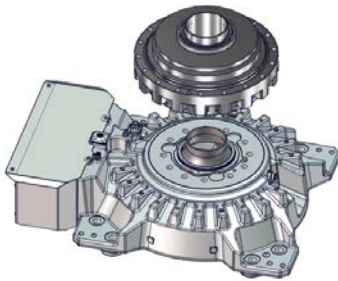
See [Type A vs type B motors on page 77](#).

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9 Spare parts - Gearboxes

9.1 Gearbox axis-1

Axis-1 gearbox

IRB 6700-235/2.65, -220/2.65 LID, -205/2.80, -200/2.80 LID, -175/3.05, -155/3.05 LID, -150/3.20, -145/3.20 LID, IRB 6700-200/2.60, -175/2.60 LID, -155/2.85, -140/2.85 LID	IRB 6700-300/2.70, -270/2.70 LID, -245/3.00, -220/3.00 LID	IRB 6700Inv-300/2.60, -270/2.60 LID, -245/2.90, -210/2.90 LID
 <p>xx1200001188</p>	 <p>xx1600000520</p>	 <p>xx1700001379</p>

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Gearbox, axis-1, RV-320CA-193,84 Graphite White	X	X	X	X	X	X					3HAC060576-003
Gearbox, axis-1, RV-400CS-216.06 Graphite White							X	X	X	X	3HAC046994-003
Gearbox, axis-1, RV-320CA-193,84 ABB Orange	X	X	X	X	X	X					3HAC060576-002
Gearbox, axis-1, RV-400CS-216.06 ABB Orange							X	X	X	X	3HAC046994-004

ⁱ IRB 6700Inv

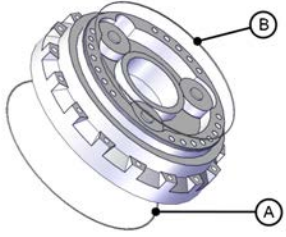
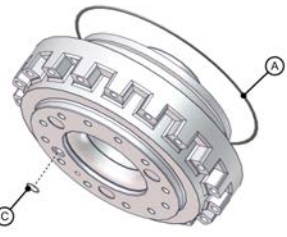
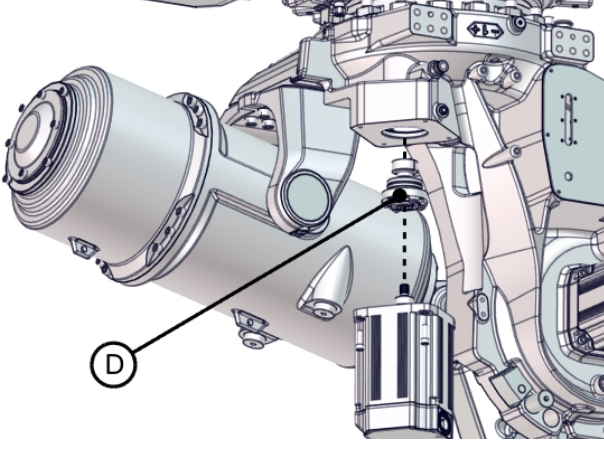
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9 Spare parts - Gearboxes

9.1 Gearbox axis-1

Continued

Other parts

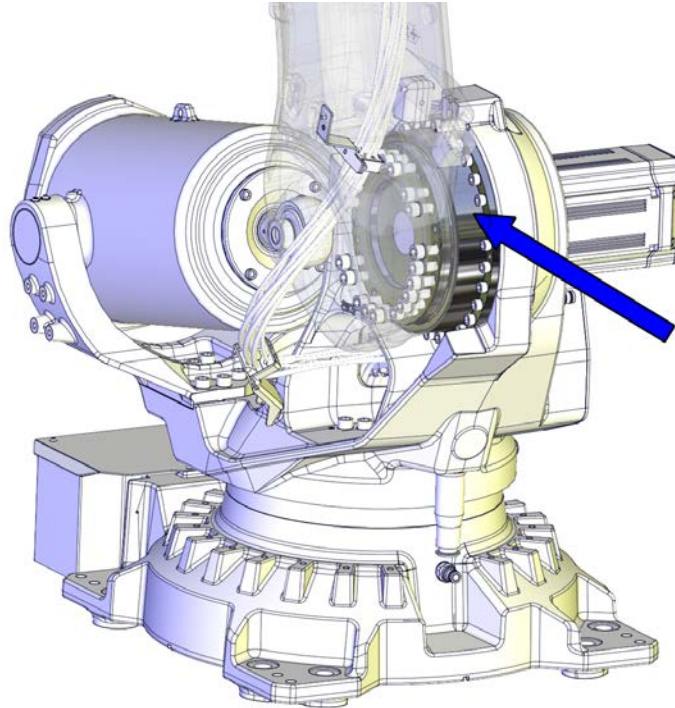
IRB 6700-235/2.65, -220/2.65 LID, -205/2.80, -200/2.80 LID, -175/3.05, -155/3.05 LID, -150/3.20, -145/3.20 LID, IRB 6700-200/2.60, -175/2.60 LID, -155/2.85, -140/2.85 LID	IRB 6700-300/2.70, -270/2.70 LID, -245/3.00, -220/3.00 LID, IRB 6700Inv-300/2.60, -270/2.60 LID, -245/2.90, -210/2.90 LID	IRB 6700Inv-300/2.60, -270/2.60 LID, -245/2.90, -210/2.90 LID
 <p>xx1600000518</p>	 <p>xx1700000583</p>	 <p>xx1700000582</p>

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ^j	Spare part number
A	O-ring Only with gearboxes: 3HAC046163-001	X	X	X	X	X	X					3HAB3772-93
	O-ring Only with gearboxes: 3HAC060576-001	X	X	X	X	X	X					3HAC061327-002
	O-ring							X	X	X	X	3HAB3772-160
B	O-ring	X	X	X	X	X	X					3HAB3772-164
C	O-ring Located at the oil inlet underneath of gear- box.							X	X			3HAB3772-97
D	Hub with pinion									X	X	3HAC058203-003

ⁱ IRB 6700Inv

9.2 Gearbox axis-2

Axis-2 gearbox



xx1300002235

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Gearbox, axis-2, RV-550N-252.33 Graphite White	X	X	X	X	X	X					3HAC058399-002
Gearbox, axis-2, RV-700N-284.4 Graphite White							X	X	X	X	3HAC046186-003
Gearbox, axis-2, RV-550N-252.33 ABB Orange	X	X	X	X	X	X					3HAC058399-003
Gearbox, axis-2, RV-700N-284.4 ABB Orange							X	X	X	X	3HAC046186-004

ⁱ IRB 6700Inv

Continues on next page

9 Spare parts - Gearboxes

9.2 Gearbox axis-2

Continued

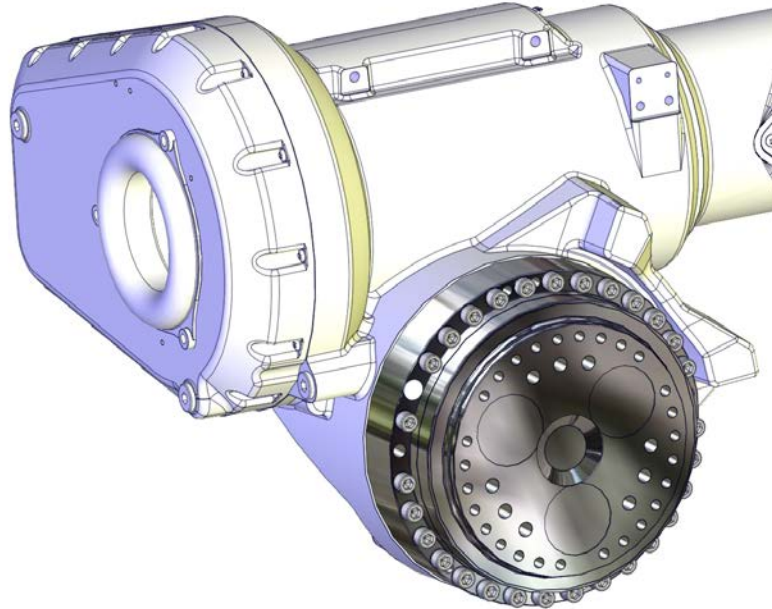
Other parts

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
O-ring	X	X	X	X	X	X					3HAB3772-48 (gearbox 3HAC058399) or 3HAB3772-144 (gearbox 3HAC043072) (or measure the groove)
							X	X	X	X	3HAC061327-079

ⁱ IRB 6700Inv

9.3 Gearbox axis-3

Axis-3 gearbox



xx1300002236

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Gearbox, axis-3, RV-500N Graphite White	X	X	X	X							3HAC043073-003
Gearbox, axis-3, RV-500N ABB Orange	X	X	X	X							3HAC048293-001
Gearbox, axis-3, RV-320E3 i=201 Graphite White					X	X					3HAC044841-002
Gearbox, axis-3, RV-320E3 i=201 ABB Orange					X	X					3HAC044841-003
Gearbox, axis-3, RV-550N-252.33 Graphite White							X	X	X	X	3HAC058399-002
Gearbox, axis-3, RV-550N-252.33 ABB Orange							X	X	X	X	3HAC058399-003

ⁱ IRB 6700Inv

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9 Spare parts - Gearboxes

9.3 Gearbox axis-3

Continued

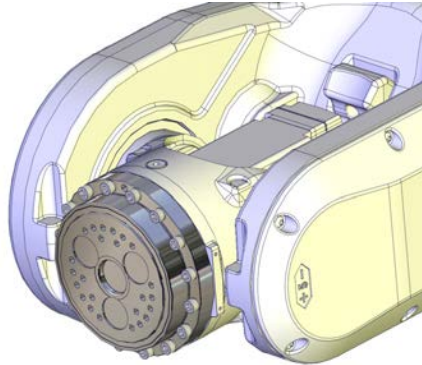
Other parts

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
O-ring	X	X	X	X							3HAB3772-145
					X	X					3HAB3772-120
							X	X	X	X	3HAB3772-48 (gearbox 3HAC058399) or 3HAB3772-144 (gearbox 3HAC043072-003 or 3HAC048232- 001) (or measure the groove)

ⁱ IRB 6700Inv

9.4 Gearbox axis-6

Axis-6 gearbox



xx1300002237

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Gearbox, axis-6, RV-80N Graphite White	X	X	X	X							3HAC043074-003
Gearbox, axis-6, RV-80N ABB Orange	X	X	X	X							3HAC048318-001
Gearbox, axis-6, RV-42N-126 Graphite White					X	X					3HAC043075-002
Gearbox, axis-6, RV-42N-126 ABB Orange					X	X					3HAC043075-003
Gearbox, axis-6, RV-100N-161 Graphite White							X	X	X	X	3HAC046336-003
Gearbox, axis-6, RV-100N-161 ABB Orange							X	X	X	X	3HAC046336-004

ⁱ IRB 6700Inv

Other parts

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
O-ring	X	X	X	X							3HAB3772-58
					X	X					3HAB3772-105
							X	X	X	X	3HAB3772-161

ⁱ IRB 6700Inv

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10 Spare parts - Foundry Plus

10.1 Axis-4 Foundry Plus set

Spare part list - Axis-4 Foundry Plus set

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Axis-4 Foundry plus set	X	X	X	X	X	X	X	X			3HAC050407-001
Cover	X	X	X	X	X	X	X	X			3HAC049072-001
Torx pan head screw (3 pcs)	X	X	X	X	X	X	X	X			9ADA619-56
Cover insert	X	X	X	X	X	X	X	X			3HAC048520-001
Weatherstrip	X	X	X	X	X	X	X	X			3HAC053986-001
Gasket	X	X	X	X	X	X	X	X			3HAC048609-001
Washer (3 pcs)	X	X	X	X	X	X	X	X			3HAC048646-001
Cable protection leather	X	X	X	X	X	X	X	X			3HAC048531-001
Metal strap (2 pcs)	X	X	X	X	X	X	X	X			3HAC033886-001

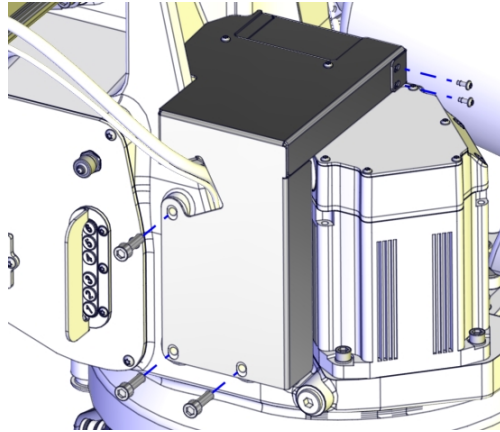
i IRB 6700Inv

10 Spare parts - Foundry Plus

10.2 Axis-1 Foundry Plus protection

10.2 Axis-1 Foundry Plus protection

Illustration - Axis-1 Foundry Plus protection



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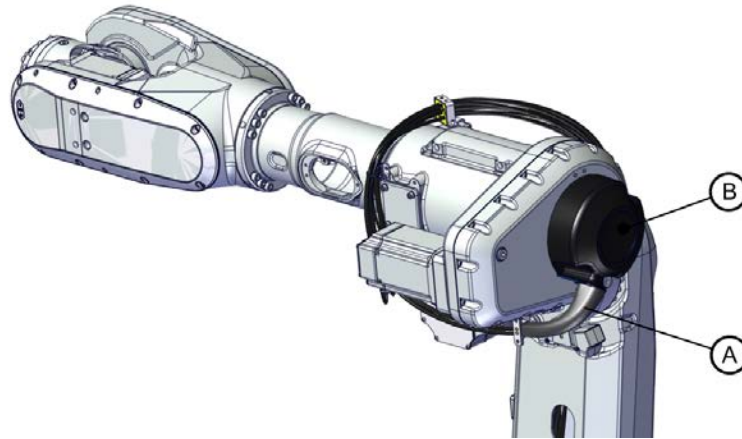
Spare part list - Axis-1 Foundry Plus protection

Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Axis-1 protection set	X	X	X	X	X	X	X	X			3HAC050454-001

ⁱ IRB 6700Inv

10.3 Cable protection upper arm house

Illustration - Cable protection upper arm house



xx170000587

Spare part list - Cable protection upper arm house

	Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ^j	Spare part number
A	Cable protection									X	X	3HAC055411-001
B	Cover	X	X	X	X	X	X	X	X	X	X	3HAC039782-001

ⁱ IRB 6700Inv

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11 Spare parts - Calibration items

Calibration items

Spare part number	Description	Note
3HAC056806-001	Protection cover and plug set	Contains replacement calibration pin covers and protective plugs for the bushing.

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12 Spare parts - Options

Options

Options

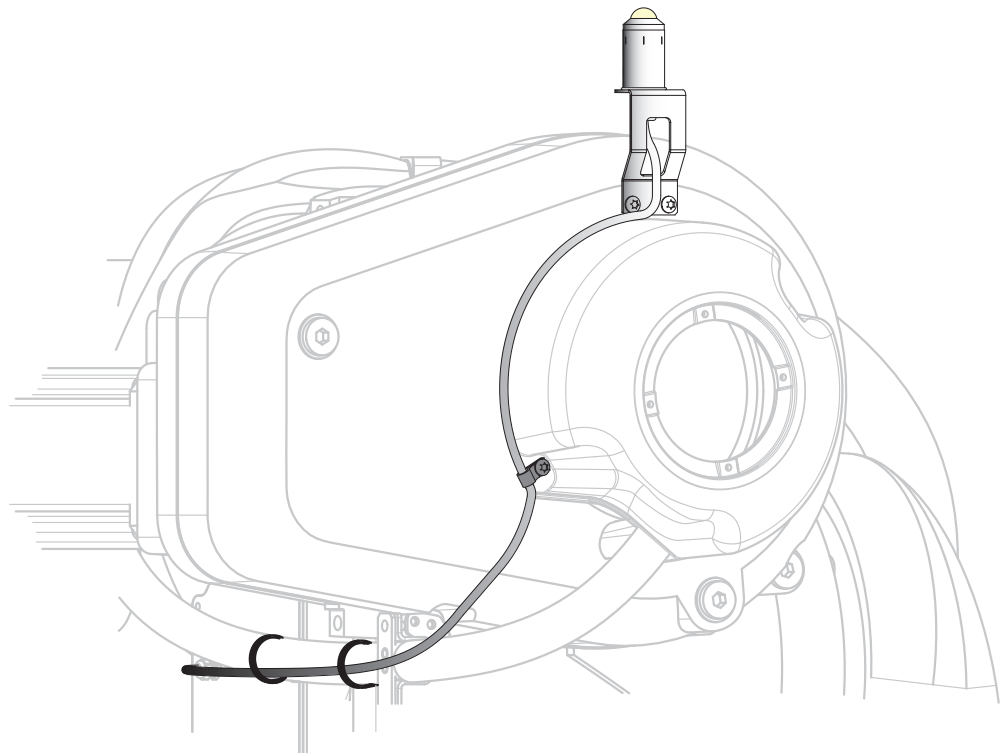
Description	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 ⁱ	/2.90 ⁱ	Spare part number
Movable mechanical stop, axis-1	X	X	X	X	X	X					3HAC055744-001
Movable mechanical stop, axis-1							X	X	X	X	3HAC048533-003
UL lamp	X	X	X	X	X	X	X	X	X	X	3HAC047053-003
Fan unit set ⁱⁱ	X	X	X	X	X	X	X	x	X	X	3HAC051149-001

ⁱ IRB 6700Inv

ⁱⁱ Only available for the axis-1 motor. Can not be used together with protection type Foundry Plus. Includes fan unit, fan cable harness, customer connection plate and required fasteners.

Illustrations - Other parts

UL Signal lamp

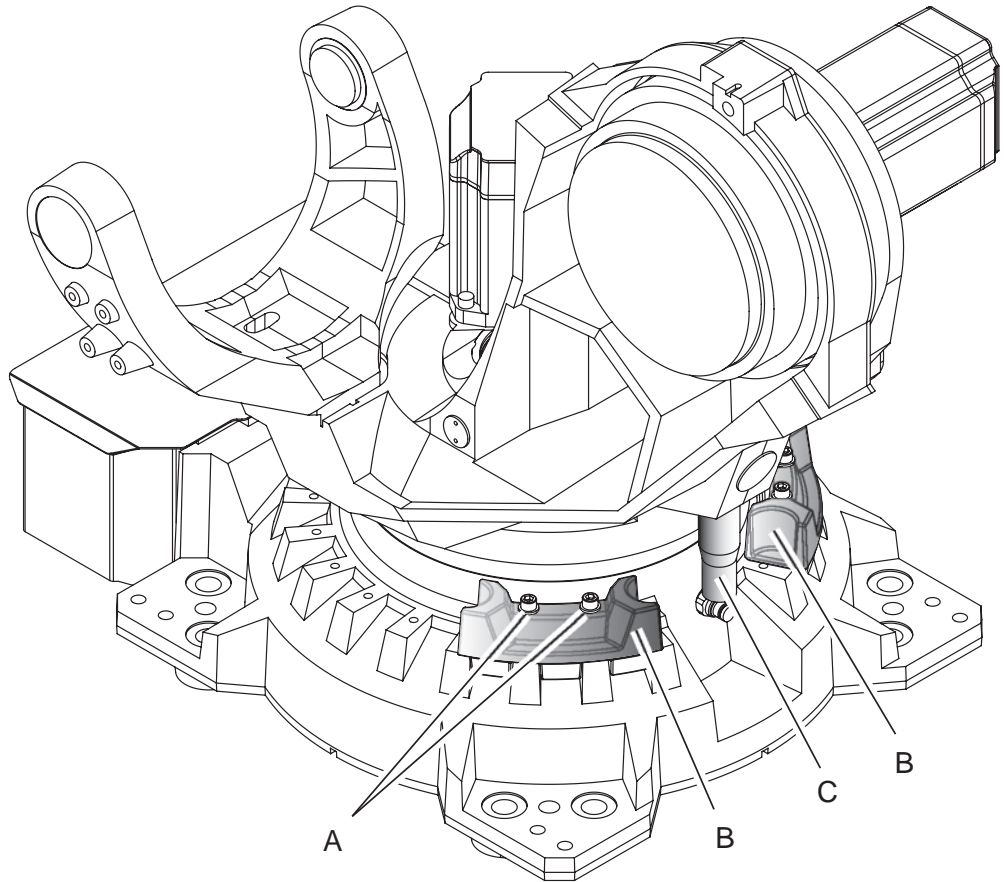


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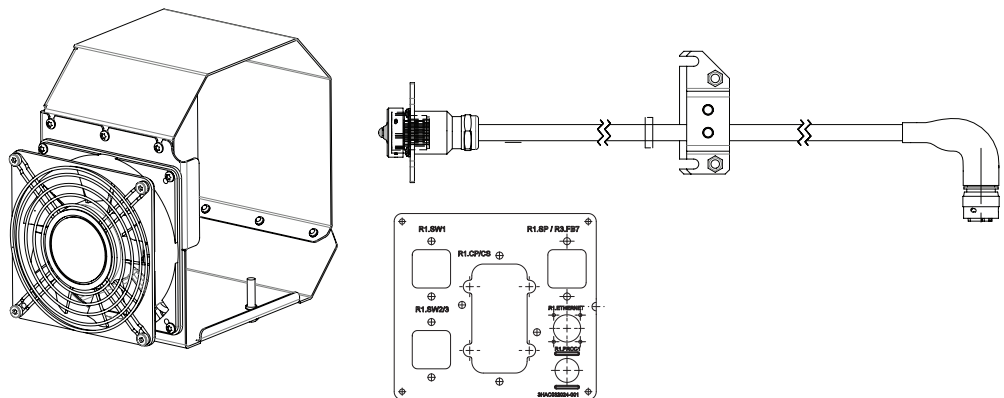
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Movable mechanical stop axis-1



xx1300001971

Fan unit set



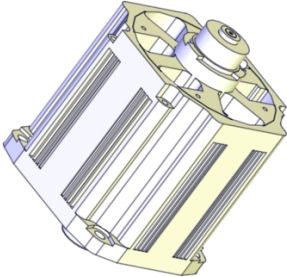
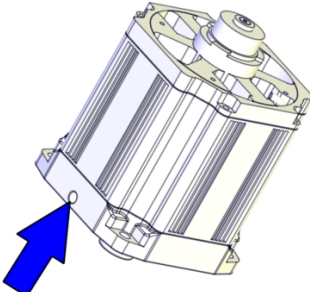
xx180000105

13 Type A vs type B motors

Identifying the motor visually

Type B motors include evacuation on the motor flange to indicate failure of primary sealing between the gearbox and the motor. Robots with protection type Foundry Plus have a sight glass installed in the evacuation holes.

Use the images to identify which type of motor is installed on each robot axis.

Type A motor	Type B motor
 <p>xx1500001058</p>	 <p>xx1500001057</p>
No evacuation on type A motors.	The type B motor include evacuation on the motor flange.
Attachment holes M14 (axis 1, 2, 3)	Attachment holes M12 (axis 1, 2, 3)

Identifying the motor by article number

Use the table to identify which type of motor is installed on each robot axis by article number. The article numbers specified are found in WebConfig.

Contact ABB Service for further assistance regarding which motor type is installed on the robot, if needed.

The columns for reach refer to the robot variant designation.



Note

The article numbers in the table can not be used for ordering spare parts. The numbers are only used for identification of installed motors.

Interchangeable parts

Use the table to see if type A and type B motors are interchangeable on each robot axis.

Robot axis	Motor replacement from type A to type B	Requirements/notes for replacing type A motor with type B motor
1	Fully interchangeable.	
2	Fully interchangeable.	
3	Fully interchangeable.	
4	Fully interchangeable.	

Continues on next page

13 Type A vs type B motors

Continued

Robot axis	Motor replacement from type A to type B	Requirements/notes for replacing type A motor with type B motor
5	Partly interchangeable.	Replacement to type B requires replacement of the heat protection plates that are fitted to the motor.
6	Interchangeable in a wrist that is manufactured in and after October 2015.	A type B motor does not fit a wrist that is manufactured before October 2015.

Index

T
type A motors, 77
type B motors, 77



ABB AB

Robotics & Discrete Automation

S-721 68 VÄSTERÅS, Sweden

Telephone +46 (0) 21 344 400

ABB AS

Robotics & Discrete Automation

Nordlysvegen 7, N-4340 BRYNE, Norway

Box 265, N-4349 BRYNE, Norway

Telephone: +47 22 87 2000

ABB Engineering (Shanghai) Ltd.

Robotics & Discrete Automation

No. 4528 Kangxin Highway

PuDong New District

SHANGHAI 201319, China

Telephone: +86 21 6105 6666

ABB Inc.

Robotics & Discrete Automation

1250 Brown Road

Auburn Hills, MI 48326

USA

Telephone: +1 248 391 9000

abb.com/robotics