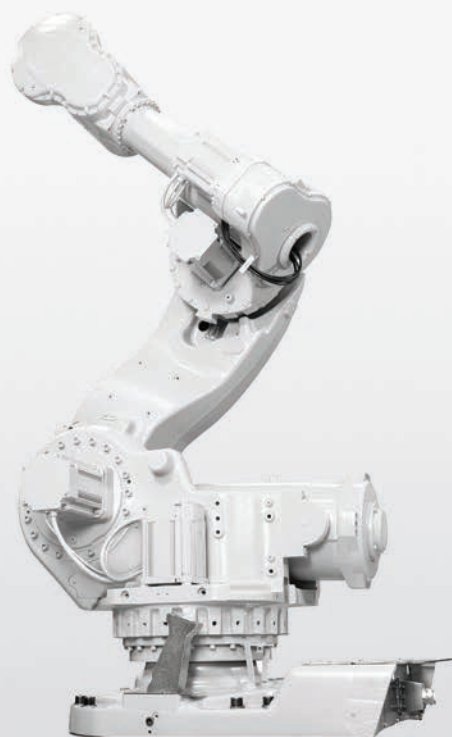


ROBOTICS

Product manual, spare parts

IRB 7600



Trace back information:
Workspace 23D version a14
Checked in 2023-12-12
Skribenta version 5.5.019

Product manual, spare parts

IRB 7600 - 500/2.55

IRB 7600 - 500/2.3

IRB 7600 - 400/2.55

IRB 7600 - 340/2.8

IRB 7600 - 325/3.1

IRB 7600 - 150/3.5

IRC5, OmniCore

Document ID: 3HAC049113-001

Revision: J

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Table of contents

Overview of this manual	7
Product documentation, IRC5, OmniCore	10
1 Spare parts	13
1.1 Spare parts - Electrical parts	13
1.2 Spare parts - Axis 3-4	15
1.3 Spare parts - Arm extender	17
1.4 Spare parts - Wrist	18
1.5 Spare parts - Lower arm	21
1.6 Spare parts - Balancing device	23
1.7 Spare parts - Frame and base	25
1.8 Spare parts - Motors	26
1.8.1 Axis-1 motor (including pinion)	26
1.8.2 Axis-2 motor (including pinion)	28
1.8.3 Axis-3 motor (including pinion)	30
1.8.4 Axis-4 motor (including pinion)	32
1.8.5 Axis-5 motor (including pinion)	34
1.8.6 Axis-6 motor (including pinion)	36
1.9 Spare parts - Gearboxes	38
1.9.1 Axis-1 gearbox	38
1.9.2 Axis-2 gearbox	40
1.9.3 Axis-3 gearbox	42
1.9.4 Axis-4 gearbox	44
1.9.5 Axis-5 gearbox	46
1.9.6 Axis-6 gearbox	48
1.10 Spare parts - Calibration items	50
2 Robot description	51
2.1 Type A vs type B motors	51
Index	53

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Overview of this manual

About this manual

This manual contains spare parts for:

- IRB 7600 and all its variants.

Usage

This manual shall be used as a complement to the product manual for IRB 7600 during:

- maintenance work
- repair work.

Who should read this manual?

This manual is intended for:

- maintenance personnel
- repair personnel.

Prerequisites

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

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

Organization of chapters

The manual is organized in the following chapters:

Chapter	Contents
1 Spare parts and exploded views	Complete spare part lists and spare parts shown in exploded views.

References

Reference	Document ID
<i>Product manual - IRB 7600</i>	3HAC022033-001
<i>Circuit diagram - IRB 7600</i>	3HAC13347-1 3HAC025744-001

Revisions

Revision	Description
-	First edition
A	This revision includes the following updates: <ul style="list-style-type: none"> • Maintenance kit (3HAC15834-1), and upgrade kit (3HAC14965-1), deleted from manual. • Spare parts with color Graphite White are added to the spare part lists.

Continues on next page

Revision	Description
B	<p>This revision includes the following updates:</p> <ul style="list-style-type: none"> • The complete manual has been restructured. All article numbers not considered spare parts are removed from the manual. • Spare parts for Axis Calibration added to the spare part lists. • Spare part numbers for following parts have been updated: <ul style="list-style-type: none"> - Serial measurement unit - Battery box cover - Axis-6 gear (from 3HAC17811-1 to 3HAC037639-002) - Wrist type 3 Foundry Prime - Axis-1 motor Foundry Prime - Axis-3 motor Foundry Prime - Axis-4 motor Foundry Prime - Axis-5 motor Foundry Prime - Axis-6 motor Foundry Prime - Axis-4 gear - Axis-5 gear - Gasket for axis-6 motor
C	<p>This revision includes the following updates:</p> <ul style="list-style-type: none"> • Spare part numbers for following parts have been added/updated: <ul style="list-style-type: none"> - Axis-3 gearbox - Axis-4 gearbox - Axis-5 gearbox - Axis-6 gearbox Foundry Prime - Balancing device Foundry Prime - Support shaft in wrist unit - Axis-2 cover - Wrist covers - Axis-4 motor pinion - Axis-5 motor pinion - Arm extender sets - Hose with flange, axis 1 - Axis-3 synchronization plate - Axis 3-4
D	<p>Published in release R16.2. The following updates are done in this revision:</p> <ul style="list-style-type: none"> • Corrections due to updates in terminology. • Added painted base as spare part. • New denomination for Shaft calibration (was Calibration stand). • Spare part number for the turning disc is updated. • Updated spare parts due to sealing upgrade in the motors: <ul style="list-style-type: none"> - Motors - Axis 3-4 - Wrist

Revision	Description
E	<p>Published in release R17.2. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Spare parts for lower arm added. • Spare part numbers for the following articles have changed: <ul style="list-style-type: none"> - Brake release board - Wrist cover - Motor axis 3, Foundry prime • Brake release unit removed (3HAC14219-1) • Available versions with Foundry prime updated • Updates spare parts and information about pinions. • Updated spare parts frame and base and spare parts arm extender. • Updated spare parts - axis 3-4.
F	<p>Published in release R18.1. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Updated spare parts - axis 3-4. • Updated spare part number brake release unit (was DSQC561, is DSQC1052).
G	<p>Published in release R18.1 . The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Type B motors are introduced throughout the manual. • Spare part numbers for following spare parts has been updated: <ul style="list-style-type: none"> - Axis 3-4 - Wrist - Motors • Updated spare part number for axis 6 insulated (standard, foundry prime), is 3HAC024594-004, was 3HAC024594-005.' • Turning disc, insulated, removed.
H	<p>Published in release R18.2 . The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Other parts, lower arm spare parts for Foundry prime are removed.
J	<p>Published in release 23D. The following updates are made in this revision:</p> <ul style="list-style-type: none"> • Added support for OmniCore robot controller.

Product documentation, IRC5, OmniCore

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.

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

1.1 Spare parts - Electrical parts

Manipulator harness

Spare part list - manipulator harness

Spare part number	Description	All variants
3HAC12782-1	Manipulator harness axes 1-4 Brake release at base	X
3HAC14940-1	Manipulator harness axes 1-4 Brake release in frame	X
3HAC11440-1	Manipulator harness axes 5-6	X
3HAC15431-1	Cable protection	X
3HAC15619-1	Cable, FB7-SMB 1.7	X

SMB and BU unit

Spare part list - SMB

Spare part number	Description	All variants
3HAC031851-001	Serial measurement unit DSQC633A	x
3HAC046277-001	Serial measurement unit Contains serial measurement board 3HAC044168-001 and battery unit 3HAC044075-001.	X

Spare part list - brake release board

Spare part number	Description	All variants
3HAC065021-001	Brake release unit with harness, DSQC1052	X
3HAC12989-1	Brake release unit at the base	

Spare part list - other parts

	Spare part number	Description	Color	All variants
x	3HACxx	Guard plate, BU buttons	-	X
-	3HAC2744-1	Push button guard	-	X
-	3HAC4813-1	Push button cover	-	X
-	3HAC14791-4	Cover battery box	-	X
-	3HAC14788-3	Cover SMB and BRU	ABB Orange	X
-	3HAC050865-001	Cover SMB and BRU	Graphite White	X
-	3HAC14788-2	Gasket, SMB and BRU cover	-	X
-	3HAC14793-1	Bracket (brake release unit)	-	X

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1 Spare parts

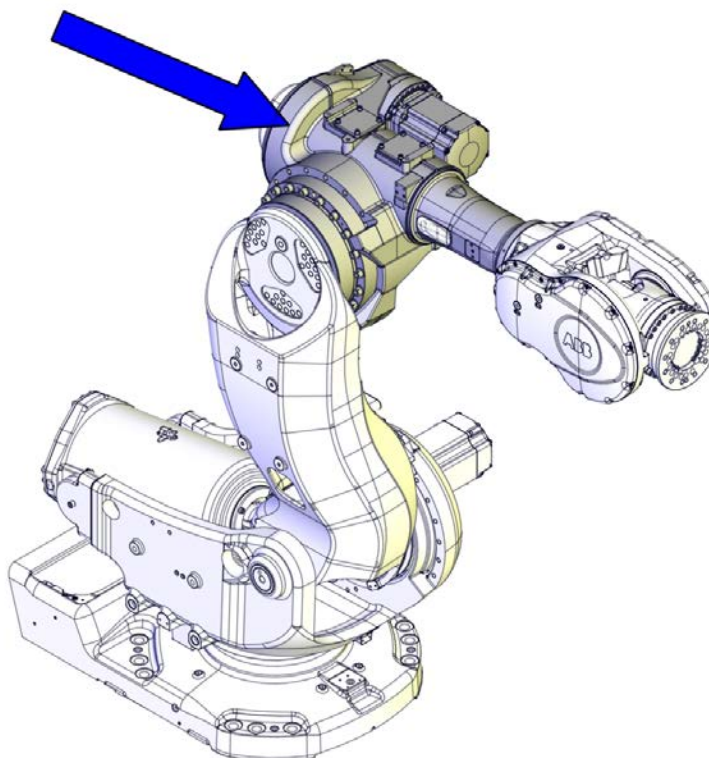
1.1 Spare parts - Electrical parts

Continued

	Spare part number	Description	Color	All variants
-	3HAC16831-1	Battery pack (2-pole battery contact) Can only be used with SMB unit 3HAC022286-001.		
-	3HAC044075-001	Battery unit (3-pole battery contact) Can only be used with SMB unit 3HAC046277-001.	-	X
-	3HAC046520-001	Battery holder Required for installation of battery unit 3HAC044075- 001.	-	X
-	3HAC13151-1	Cable battery/SMB Used with battery pack 3HAC16831-1.		X
-	3HAC046287-001	Cable battery/SMB Used with battery unit 3HAC044075-001.	-	X

1.2 Spare parts - Axis 3-4

Axis 3-4



xx1500002881

Spare part list - axis 3-4

Description	Spare part number	Protection type	Color	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
Axis 3-4	3HAC063553-003	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC063553-002	Standard/Foundry	Graphite White	X	X	X	X	X	X

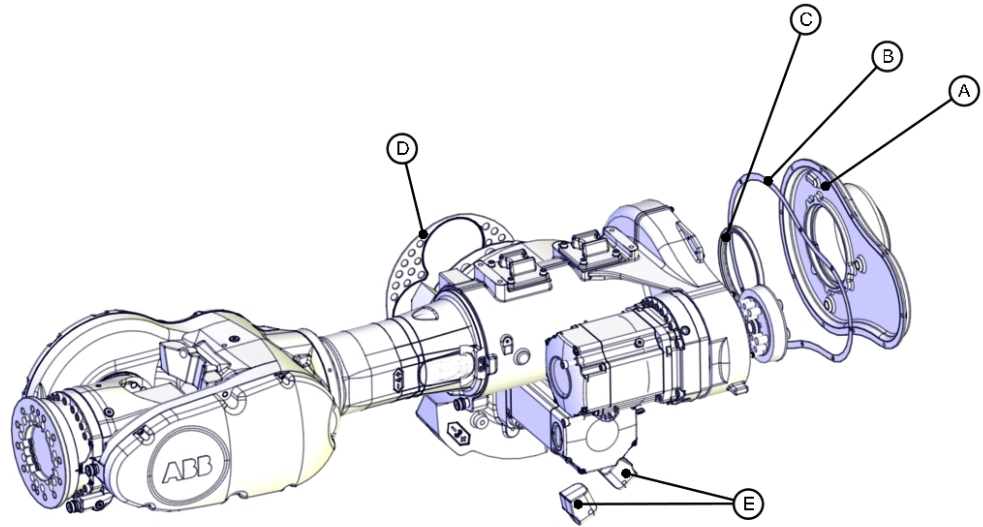
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1 Spare parts

1.2 Spare parts - Axis 3-4

Continued

Other parts



xx1500001597

Spare part list - other parts axis 3-4

	Description	Spare part number	Color	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
A	Cover axis-4 (gasket and sealing ring included)	3HAC064256-001	ABB Orange	X	X	X	X	X	X
		3HAC064256-002	Graphite White	X	X	X	X	X	X
B	Cover axis-4 gasket	3HAC11423-3		X	X	X	X	X	X
C	Sealing, axis-4	3HAA1001-628		X	X	X	X	X	X
D	Sealing, axis-3	3HAC17213-1		X	X	X	X	X	X
E	Damper, axis-3	3HAC11750-1		X	X	X	X	X	X

1.3 Spare parts - Arm extender

Spare part list - upper arm extender

Description	Spare part number	Protection type	Color	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
Arm extension set 250 mm ⁱ	3HAC12311-20	Standard/Foundry	ABB Orange				X	2X	
Arm extender 250 mm	3HAC038667-003	Standard/Foundry	ABB Orange				X	2X	
	3HAC038667-004	Standard/Foundry	Graphite White				X	2X	
Arm extension set 956 mm ⁱⁱ	3HAC12311-10	Standard/Foundry	ABB Orange						X
Arm extender 956 mm	3HAC021842-001	Standard/Foundry	ABB Orange						X
	3HAC021842-002	Standard/Foundry	Graphite White						X
Spacer ring	3HAC022620-001	-	-	X	X	X	X	X	X

ⁱ Contains arm extender 3HAC038667-003, parallel pin, washers and screws.

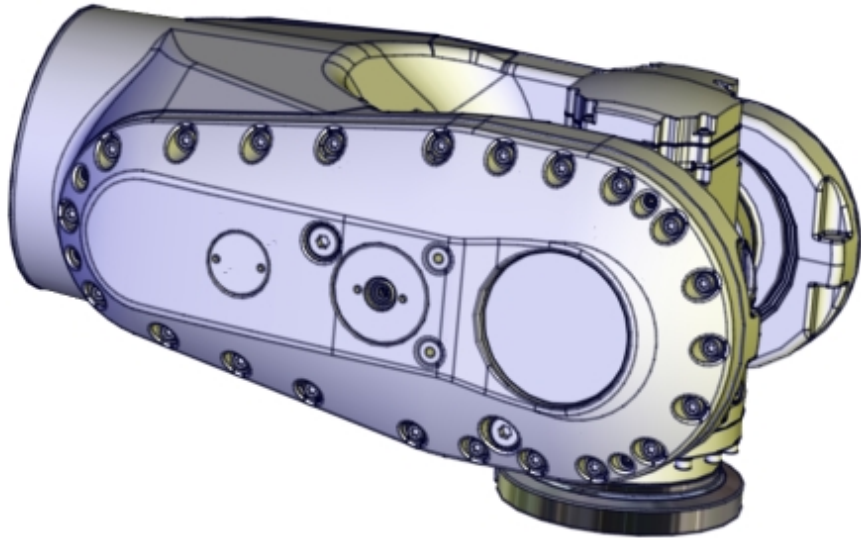
ⁱⁱ Contains arm extender 3HAC021842-001, parallel pin, washers and screws.

1 Spare parts

1.4 Spare parts - Wrist

1.4 Spare parts - Wrist

Wrist



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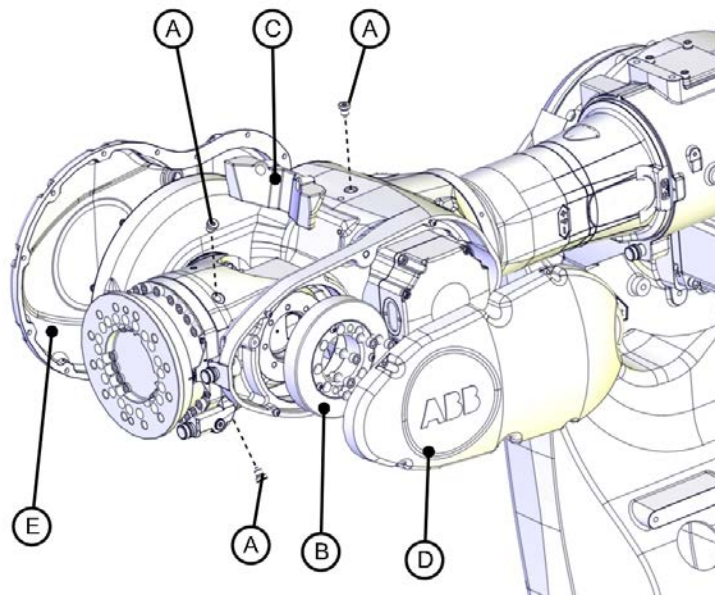
Spare part list - wrist

Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
Wrist, type 3 Valid for robots that are calibrated with Axis Calibration method. ⁱ	3HAC062576-008	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC062576-007	Standard/Foundry	Graphite White	X	X	X	X	X	X
	3HAC036812-001	Foundry Prime	Grey			X			
Wrist, type 3 Valid for robots that are calibrated with Calibration Pendulum method. ⁱ	3HAC062576-005	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC062576-004	Standard/Foundry	Graphite White	X	X	X	X	X	X
Wrist, insulated	3HAC059494-001	Standard/Foundry	ABB Orange	X	X	X	X	X	X

ⁱ The robot is calibrated by either Calibration Pendulum or Axis Calibration at factory. Always use the same calibration method as used at the factory.
Information about valid calibration method is found on the calibration label or in the calibration menu on the FlexPendant.
If no data is found related to standard calibration, Calibration Pendulum is used as default.

Continues on next page

Other parts



xx1500001598

Spare part list - other parts wrist

	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	Magnetic plug	3HAC037925-001	X	X	X	X	X	X
B	Support shaft including bearing	3HAC10503-14	X	X	X	X	X	X
C	Damper, axis-5	3HAC054927-001	X	X	X	X	X	X
D	Wrist cover Graphite White	3HAC062450-004	X	X	X	X	X	X
	Wrist cover ABB Orange	3HAC062450-005	X	X	X	X	X	X
E	Wrist cover Graphite White	3HAC050214-001	X	X	X	X	X	X
	Wrist cover ABB Orange	3HAC11409-9	X	X	X	X	X	X
-	Groove ball bearing	3HAB3710-19	X	X	X	X	X	X

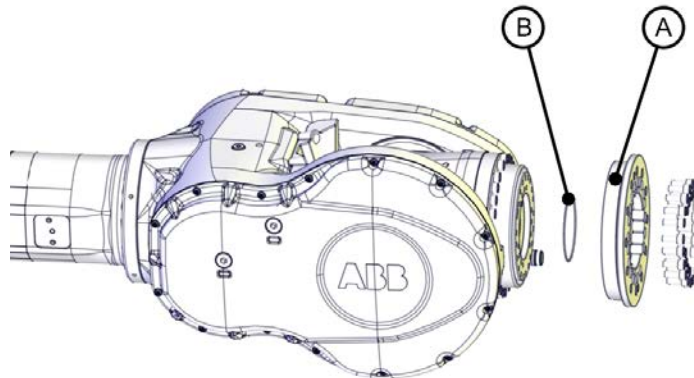
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1 Spare parts

1.4 Spare parts - Wrist

Continued

Turning disc (standard and process)



xx1500002882

Spare part list - turning disc

	Description	Spare part number	Protection type	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
A	Turning disc, dia. 250	3HAC055247-002	Standard/Foundry	X	X	X	X	X	X
	Process turning disc	3HAC053607-004		X	X	X	X	X	X
B	O-ring	3HAB3772-83		X	X	X	X	X	X

Axis 6

Spare part list - axis 6

Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
Axis 6 insulated	3HAC024594-004	Standard Foundry	ABB Orange	X	X	X	X	X	X

Axis-6 synchronization mark plate

Description	Spare part number	Note
Synchronization mark plate axis-6	3HAC11471-1	

1.5 Spare parts - Lower arm

Lower arm

Spare part list - lower arm

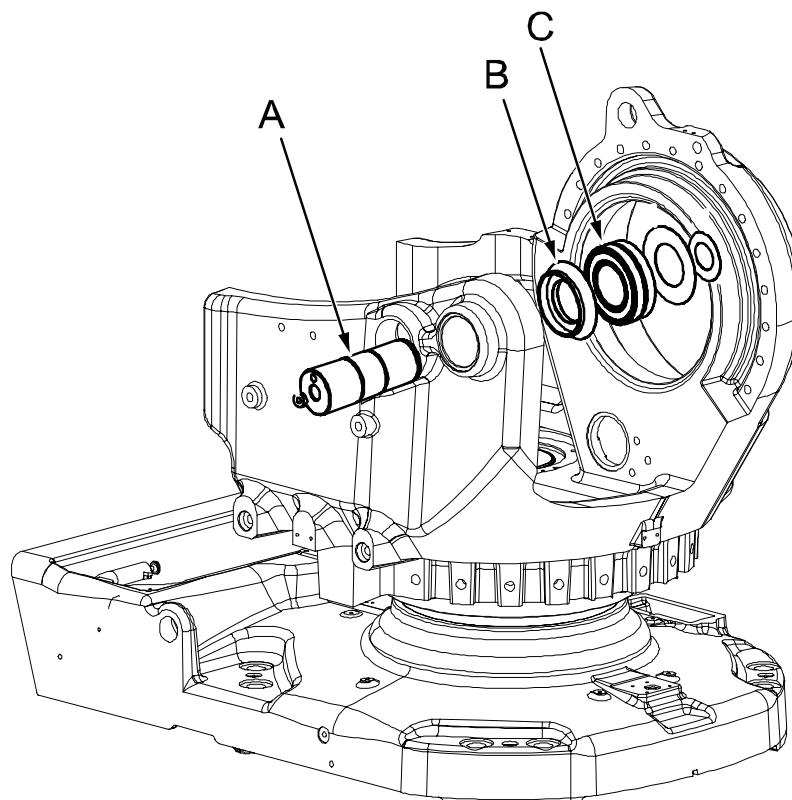
Description	Spare part number	Color	500/	500/	400/	340/	325/	150/
			2.55	2.3	2.55	2.8	3.1	3.5
Lower arm	3HAC062896-002	ABB Orange	X	X	X	X	X	X
	3HAC062896-001	Graphite White	X	X	X	X	X	X

Other parts (all protection types)

Spare part list - other parts lower arm

Description	Spare part number	500/	500/	400/	340/	325/	150/
		2.55	2.3	2.55	2.8	3.1	3.5
- Damper, axis-2	3HAC12990-1	X	X	X	X	X	X
- Synchronization plate, axis-3	3HAC14658-1	X	X	X	X	X	X

Other parts lower arm (protection type Standard)



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1 Spare parts

1.5 Spare parts - Lower arm

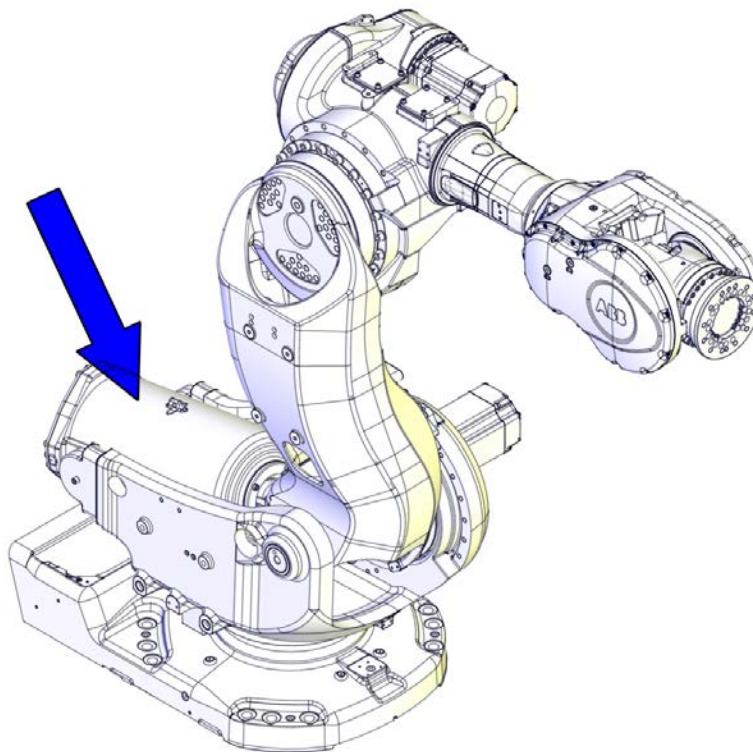
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Spare part list - other parts lower arm

	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	Lower arm shaft (axis-2 shaft)	3HAC13123-1	X	X	X	X	X	X
B	Thrust washer	3HAC13124-1	X	X	X	X	X	X
C	Sealed spherical bearing	3HAC4310-1	X	X	X	X	X	X
	Sealing, axis 2/3	3HAC17213-1	X	X	X	X	X	X

1.6 Spare parts - Balancing device

Balancing device



xx1500002883

Spare part list - balancing device

Description	Spare part number	Protection type	Color	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
Balancing device	3HAC14214-1	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC050587-001	Standard/Foundry	Graphite White	X	X	X	X	X	X
	3HAC036943-003	Foundry Prime	Grey			X			

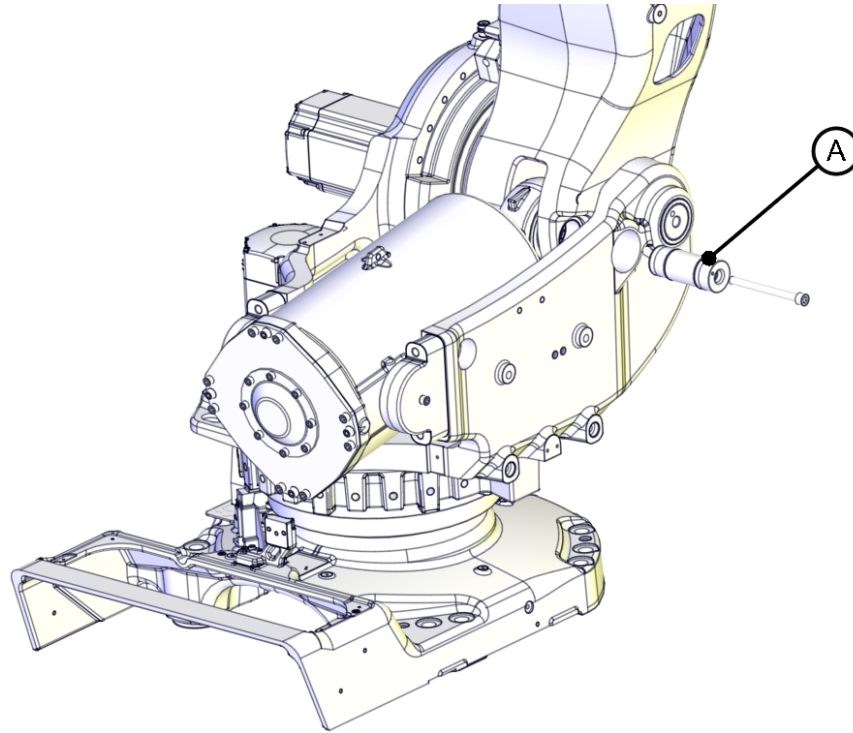
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1 Spare parts

1.6 Spare parts - Balancing device

Continued

Other parts



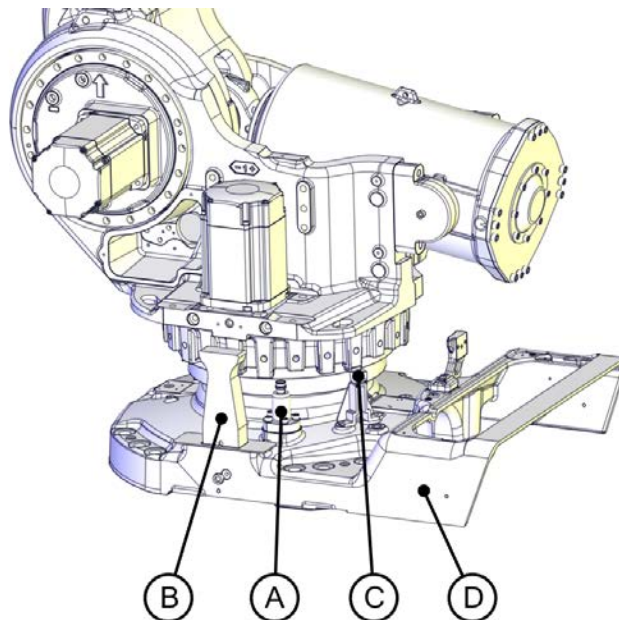
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Spare part list - balancing device other parts

	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	Shaft	3HAC11427-1	X	X	X	X	X	X

1.7 Spare parts - Frame and base

Spare part list - base



xx1700001407

Spare part list - base and frame

	Description	Spare part number	Color	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	Shaft calibration	3HAC053515-002	Graphite White	X	X	X	X	X	X
		3HAC053515-003	ABB Orange	X	X	X	X	X	X
B	Mechanical stop, axis 1	3HAC12812-2		X	X	X	X	X	X
C	Calibration block	3HAC053973-001		X	X	X	X	X	X
D	Base	3HAC058104-001	Graphite White	X	X	X	X	X	X
	Base	3HAC058104-002	ABB Orange	X	X	X	X	X	X
-	Oil hose with flange, axis 1	3HAC14453-1		X	X	X	X	X	X
-	Plug for oil hose	3HAC14453-2		X	X	X	X	X	X

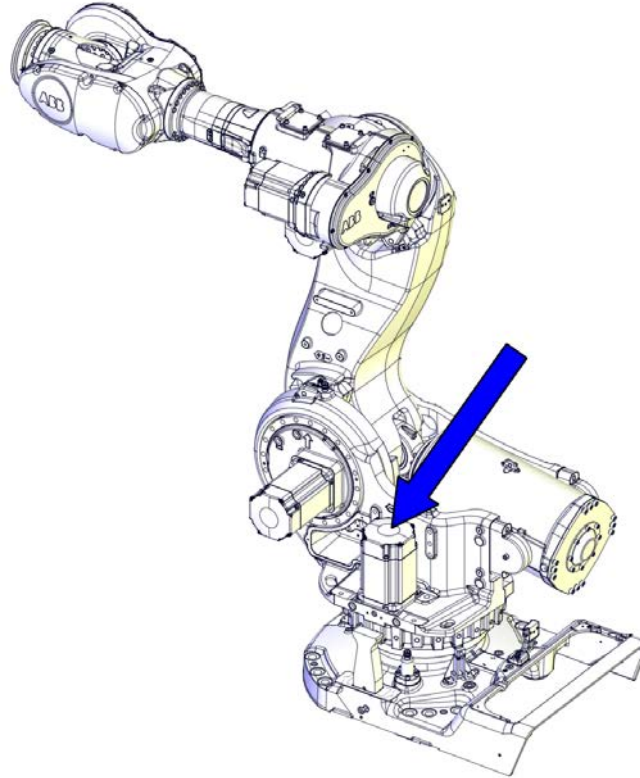
1 Spare parts

1.8.1 Axis-1 motor (including pinion)

1.8 Spare parts - Motors

1.8.1 Axis-1 motor (including pinion)

Axis-1 motor



xx1500002660

Spare part list - axis-1 motor

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

Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
Motor axis 1 Type B ⁱ	3HAC062338-004	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC062338-003	Standard/Foundry	Graphite White	X	X	X	X	X	X
Motor axis 1 Type A ⁱⁱ	3HAC037371-003	Foundry Prime	Grey			X			

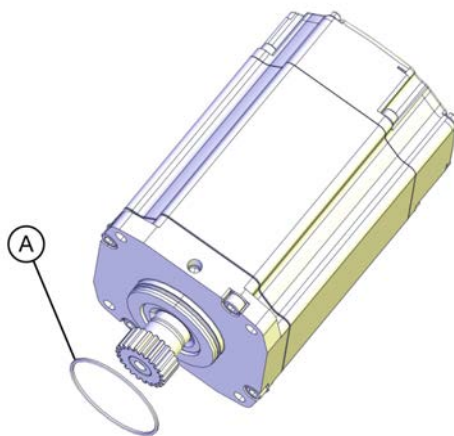
ⁱ Type A motor has been replaced by Type B. The motors are fully interchangeable. See [Type A vs type B motors on page 51](#).

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 - IRB 7600](#).

ⁱⁱ See [Type A vs type B motors on page 51](#).

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Other parts



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Spare part list - other parts axis-1 motor

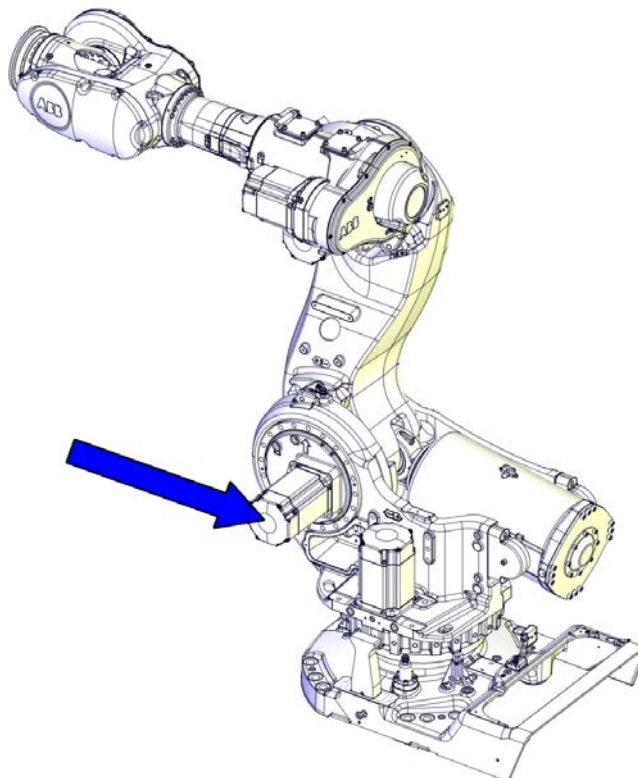
	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	O-ring	21522012-430	X	X	X	X	X	X

1 Spare parts

1.8.2 Axis-2 motor (including pinion)

1.8.2 Axis-2 motor (including pinion)

Axis-2 motor



xx150002662

Spare part list - axis-2 motor

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

Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
Motor axis 2 Type B ⁱ	3HAC062339-004	Standard/Foundry	ABB Orange		X	X	X		X
	3HAC062339-003	Standard/Foundry	Graphite White		X	X	X		X
	3HAC062340-004	Standard/Foundry	ABB Orange	X				X	
	3HAC062340-003	Standard/Foundry	Graphite White	X				X	
Motor axis 2 Type A ⁱⁱ	3HAC037372-003	Foundry Prime	Grey			X			

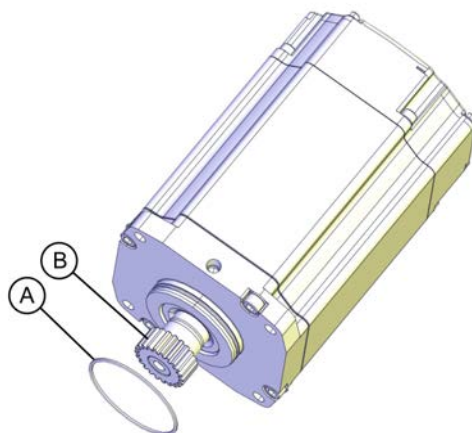
ⁱ Type A motor has been replaced by Type B. The motors are fully interchangeable. See [Type A vs type B motors on page 51](#).

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 - IRB 7600](#).

ⁱⁱ See [Type A vs type B motors on page 51](#).

Continues on next page

Other parts



xx1800000134

Spare part list - other parts axis-2 motor

	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	O-ring	21522012-430	X	X	X	X	X	X
B	Pinion This is a pressed pinion. ⁱ	3HAC11632-1	X	X	X	X	X	X

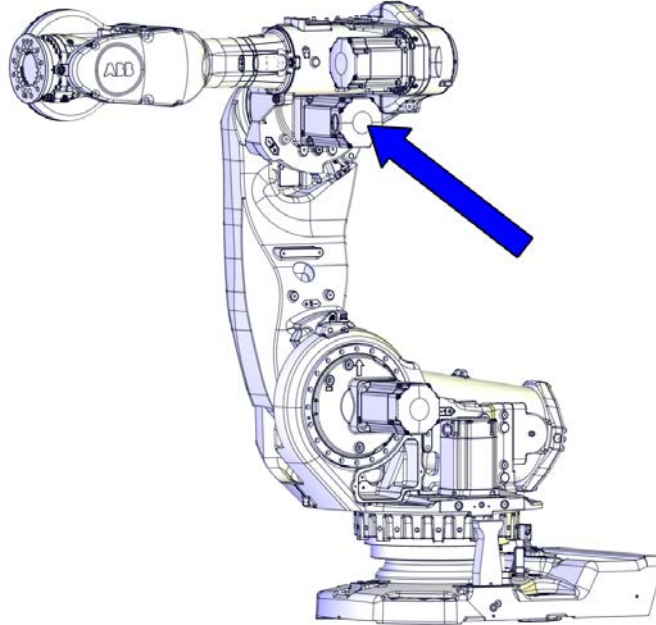
ⁱ Repair shall be performed only by authorized work shops.

1 Spare parts

1.8.3 Axis-3 motor (including pinion)

1.8.3 Axis-3 motor (including pinion)

Axis-3 motor



xx1500002663

Spare part list - axis-3 motor

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

Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
Motor axis 3 Type B ⁱ	3HAC062339-006	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC062339-005	Standard/Foundry	Graphite White	X	X	X	X	X	X
Motor axis 3 Type A ⁱⁱ	3HAC036644-002	Foundry Prime	Grey			X			

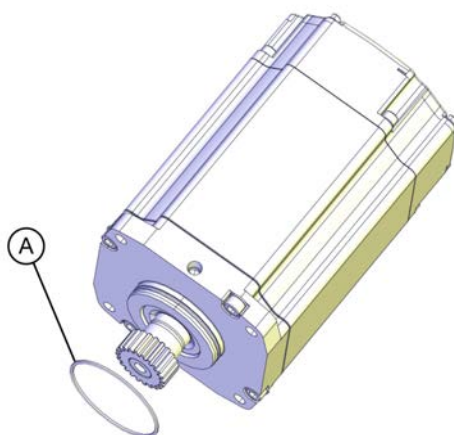
ⁱ Type A motor has been replaced by Type B. The motors are fully interchangeable. See [Type A vs type B motors on page 51](#).

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 - IRB 7600](#).

ⁱⁱ See [Type A vs type B motors on page 51](#).

Continues on next page

Other parts



xx1800000133

Spare part list - other parts axis-3 motor

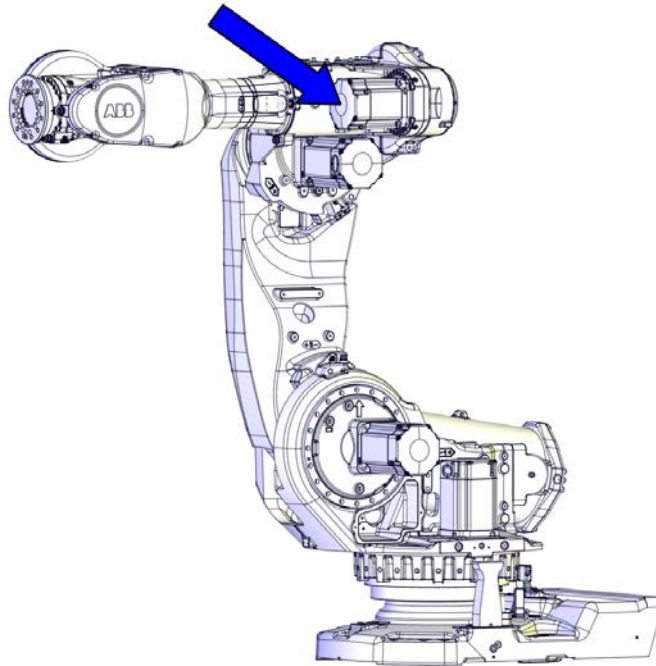
	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	O-ring	21522012-430	X	X	X	X	X	X

1 Spare parts

1.8.4 Axis-4 motor (including pinion)

1.8.4 Axis-4 motor (including pinion)

Axis-4 motor



xx1500002664

Spare part list - axis-4 motor

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

Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
Motor axis 4 Type B ⁱ	3HAC062341-004	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC062341-003	Standard/Foundry	Graphite White	X	X	X	X	X	X
Motor axis 4 Type A ⁱⁱ	3HAC036646-002	Foundry Prime	Grey			X			

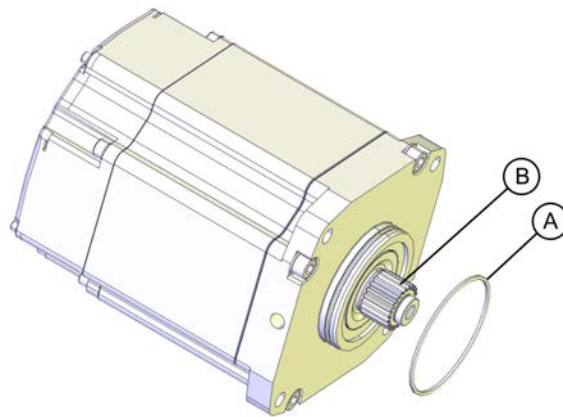
ⁱ Type A motor has been replaced by Type B. The motors are fully interchangeable. See [Type A vs type B motors on page 51](#).

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 - IRB 7600](#).

ⁱⁱ See [Type A vs type B motors on page 51](#).

Continues on next page

Other parts



xx1800000135

Spare part list - other parts axis-4 motor

	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	O-ring	21522012-430	X	X	X	X	X	X
B	Pinion This is a pressed pinion. ⁱ	3HAC10122-17	X	X	X	X	X	X

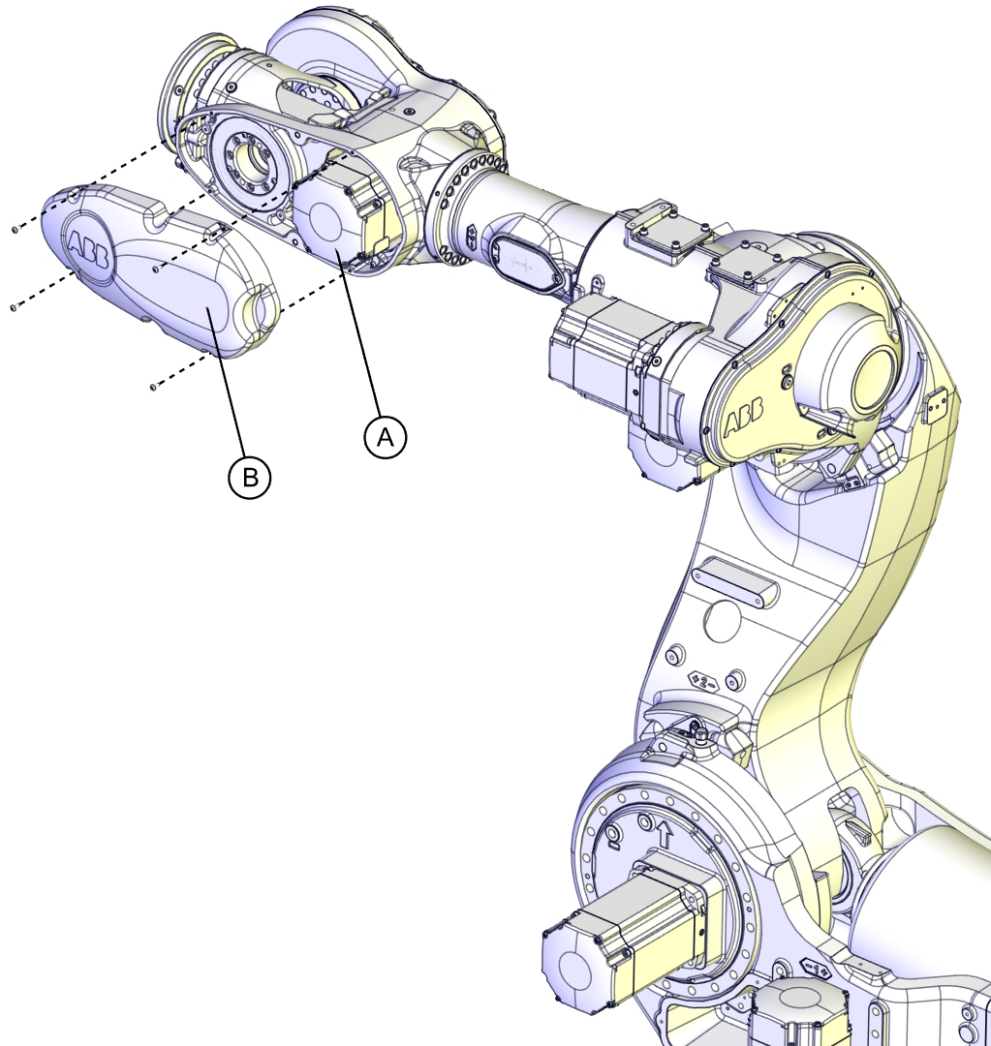
ⁱ Repair shall be performed only by authorized work shops.

1 Spare parts

1.8.5 Axis-5 motor (including pinion)

1.8.5 Axis-5 motor (including pinion)

Axis-5 motor



xx180000136

Spare part list - axis-5 motor

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

	Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
					2.55	2.3	2.55	2.8	3.1	3.5
A	Motor axis 5 Type B ⁱ	3HAC062341-005	Standard/Foundry		X	X	X	X	X	X
	Motor axis 5 Type A ⁱⁱ	3HAC057543-004	Standard/Foundry		X	X	X	X	X	X
		3HAC036646-003	Foundry Prime				X			

Continues on next page

1 Spare parts

1.8.5 Axis-5 motor (including pinion)

Continued

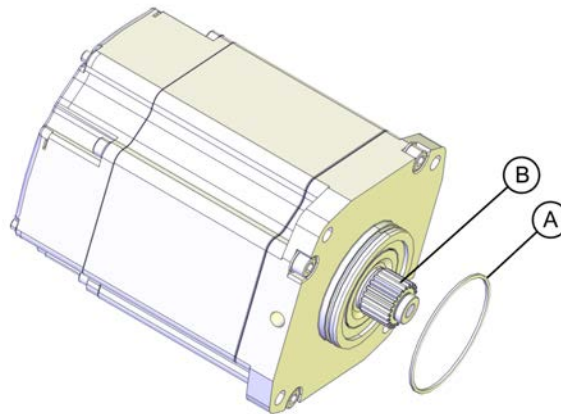
	Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
					2.55	2.3	2.55	2.8	3.1	3.5
B	Wrist cover ⁱⁱⁱ	3HAC062450-005	Standard/Foundry	ABB Orange	X	X	X	X	X	X
		3HAC062450-004	Standard/Foundry	Graphite White	X	X	X	X	X	X

ⁱ Type A motor has been replaced by Type B. The motors are partly interchangeable. When replacing a type A motor with a type B motor, the wrist cover must be replaced. See [Type A vs type B motors on page 51](#).

ⁱⁱ See [Type A vs type B motors on page 51](#).

ⁱⁱⁱ Fits both type A and type B motor.

Other parts



xx180000135

Spare part list - other parts axis-5 motor

	Description	Spare part number	500/	500/	400/	340/	325/	150/
			2.55	2.3	2.55	2.8	3.1	3.5
A	O-ring	21522012-430	X	X	X	X	X	X
B	Pinion This is a pressed pinion. ⁱ	3HAC10122-17	X	X	X	X	X	X

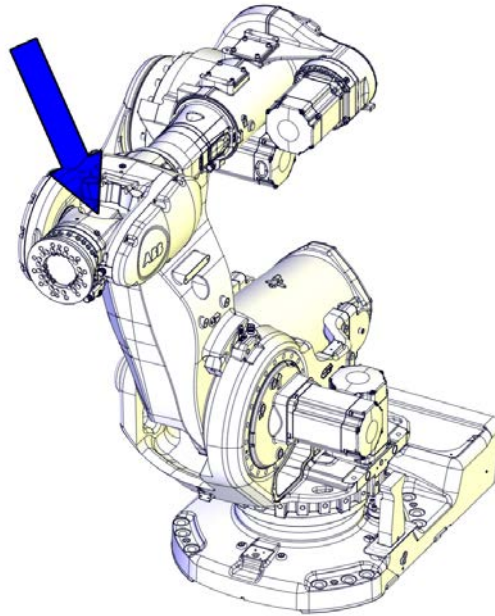
ⁱ Repair shall be performed only by authorized work shops.

1 Spare parts

1.8.6 Axis-6 motor (including pinion)

1.8.6 Axis-6 motor (including pinion)

Axis-6 motor



xx1500002667

Spare part list - axis-6 motor

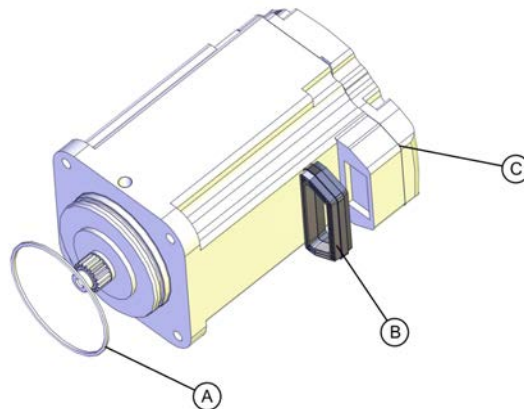
The spare part motor includes: pinion, connection box, cover and o-rings.

Description	Spare part number	Protection type	Color	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
Motor axis 6 Type B ⁱ	3HAC062342-004	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC062342-003	Standard/Foundry	Graphite White	X	X	X	X	X	X
Motor axis 6 Type A ⁱ	3HAC057544-003	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC057544-004	Standard/Foundry	Graphite White	X	X	X	X	X	X
	3HAC036811-003	Foundry Prime	Grey			X			
Wrist ⁱⁱ	See Spare parts - Wrist on page 18.								

- ⁱ Type A and type B motors are not interchangeable due to differences in the wrist casting. Identify which motor is installed on the robot and order the same type of motor. When replacing a type A motor with a type B motor, the complete wrist must be replaced. See [Type A vs type B motors on page 51.](#)
- ⁱⁱ Only compatible with the type B motor.

Continues on next page

Other parts



xx180000137

Spare part list - other parts axis-6 motor

	Description	Spare part number	Protection type	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	O-ring	21522012-430		X	X	X	X	X	X
B	Gasket, type A motor ⁱ	3HAC048560-001	Foundry Plus	X	X	X	X	X	X
	Gasket, type B motor ⁱⁱ	3HAC063071-001	Foundry Plus	X	X	X	X	X	X
C	Gasket, cover	3HAC033489-001	Foundry Plus	X	X	X	X	X	X

- ⁱ Only fits type A motor.
See [Type A vs type B motors on page 51](#).
- ⁱⁱ Only fits type B motor.
See [Type A vs type B motors on page 51](#).

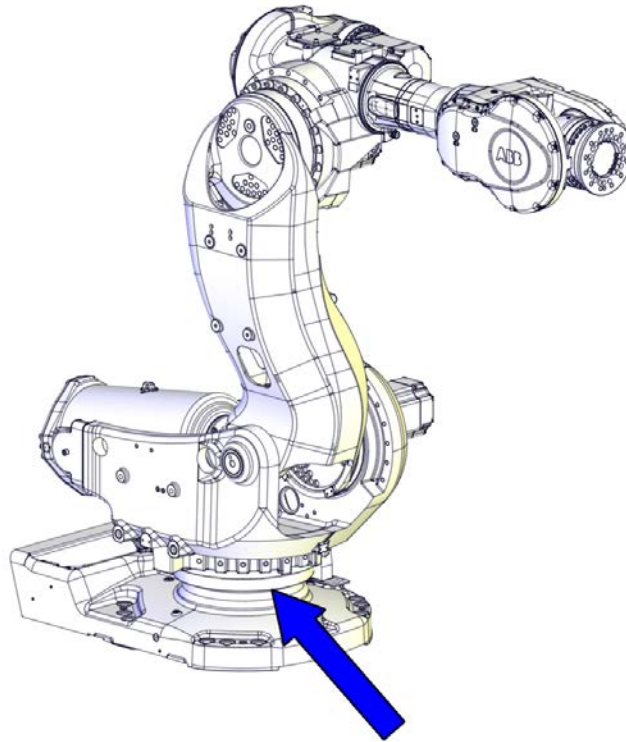
1 Spare parts

1.9.1 Axis-1 gearbox

1.9 Spare parts - Gearboxes

1.9.1 Axis-1 gearbox

Axis-1 gearbox



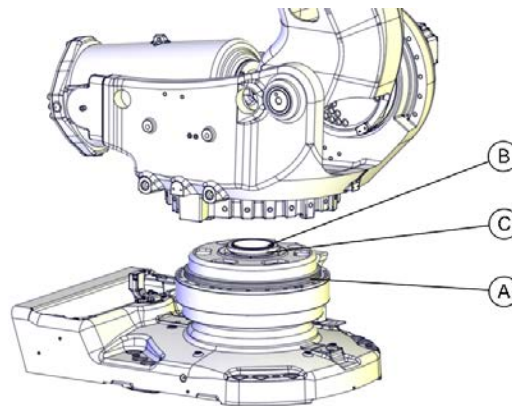
xx1500002669

Spare part list - axis-1 gearbox

Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
Gear axis 1	3HAC037638-002	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC037638-005	Standard/Foundry	Graphite White	X	X	X	X	X	X
	3HAC037638-004	Foundry Prime	Grey			X			

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Other parts



xx1500002823

Spare part list - other parts axis-1 gearbox

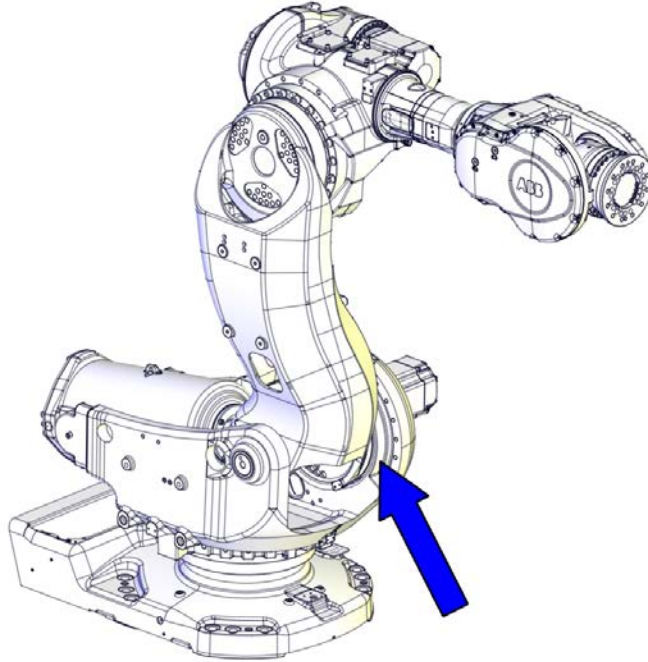
	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	O-ring	3HAB3772-54	X	X	X	X	X	X
B	O-ring	3HAB3772-55	X	X	X	X	X	X
C	Sealing ring	3HAC11581-4	X	X	X	X	X	X

1 Spare parts

1.9.2 Axis-2 gearbox

1.9.2 Axis-2 gearbox

Axis-2 gearbox



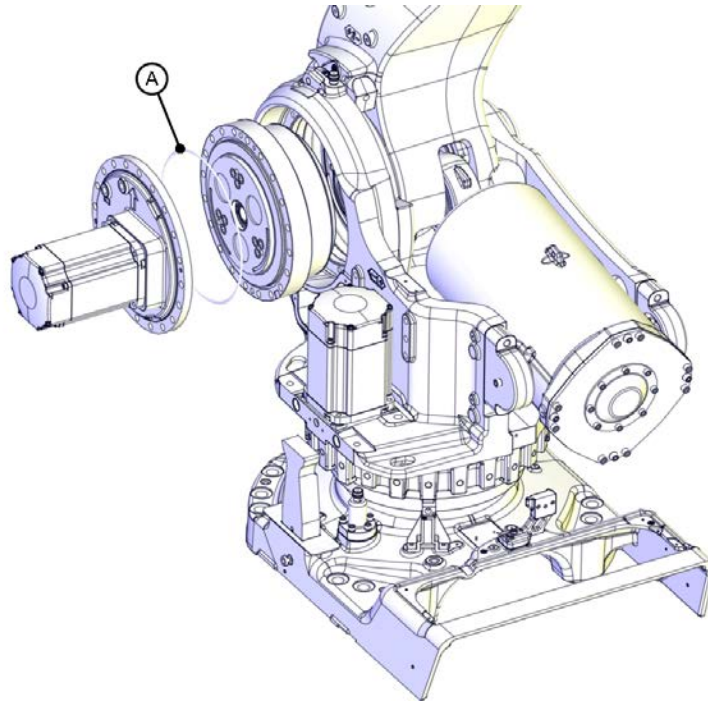
xx1500002825

Spare part list - axis-2 gearbox

Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
Gear axis 2	3HAC037820-002	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC037820-003	Standard/Foundry	Graphite White	X	X	X	X	X	X
	3HAC037820-001	Foundry Prime	Grey			X			

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Other parts



xx1500002824

Spare part list - other parts axis-2 gearbox

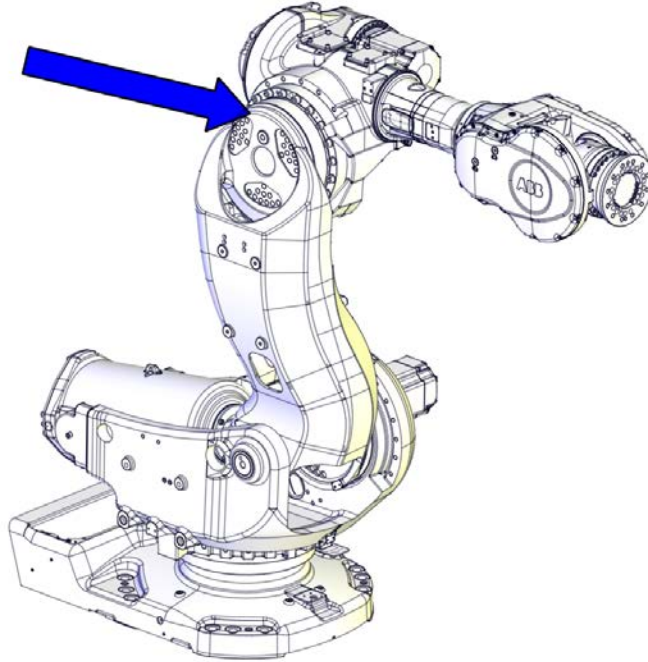
	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	O-ring	3HAB3772-51	X	X	X	X	X	X
-	Magnetic plug	3HAC16721-1	X	X	X	X	X	X

1 Spare parts

1.9.3 Axis-3 gearbox

1.9.3 Axis-3 gearbox

Axis-3 gearbox



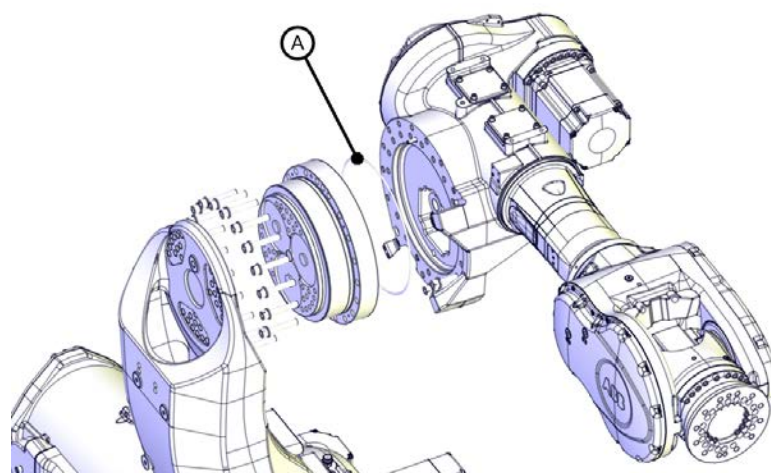
xx1500002826

Spare part list - axis-3 gearbox

Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
Gear axis 3	3HAC031580-001	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC031580-004	Foundry Prime	Grey			X			
	3HAC031580-006	Standard/Foundry	Graphite White	X	X	X	X	X	X

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Other parts



xx1500002827

Spare part list - other parts axis-3 gearbox

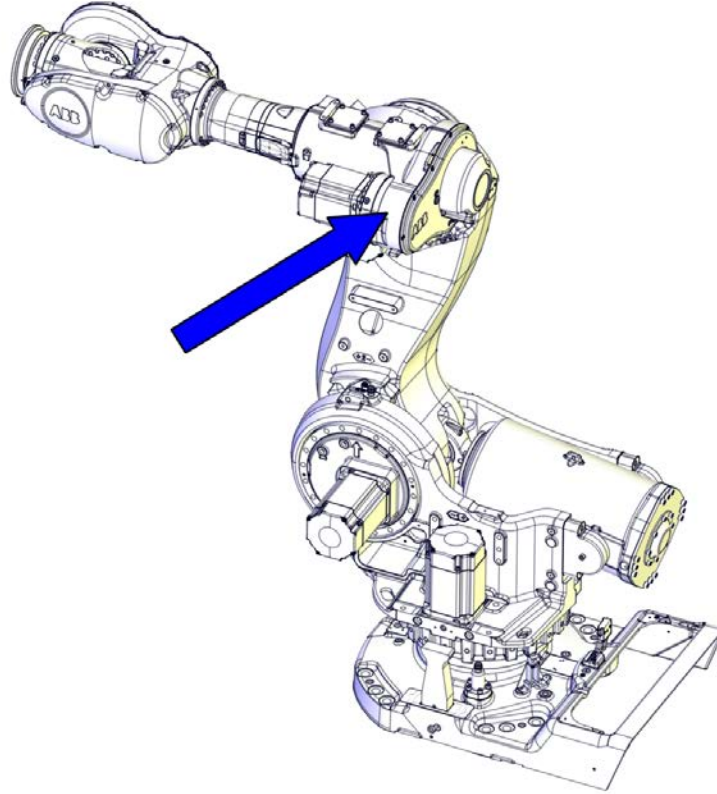
	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	O-ring	3HAB3772-51	X	X	X	X	X	X
-	Magnetic plug	3HAC16721-1	X	X	X	X	X	X

1 Spare parts

1.9.4 Axis-4 gearbox

1.9.4 Axis-4 gearbox

Axis-4 gearbox



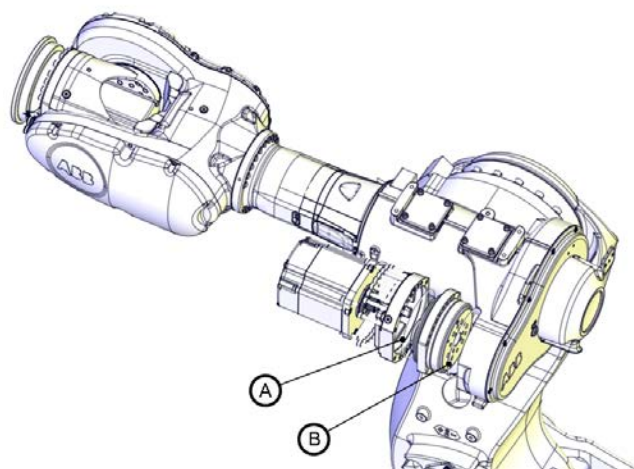
xx1500002828

Spare part list - axis-4 gearbox

Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
Gear axis 4	3HAC037778-002	Standard/Foundry	ABB Orange	X	X	X	X	X	X
	3HAC037778-004	Standard/Foundry	Graphite White	X	X	X	X	X	X
	3HAC037778-001	Foundry Prime	Grey			X			

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Other parts



xx1500002829

Spare part list - other parts axis-4 gearbox

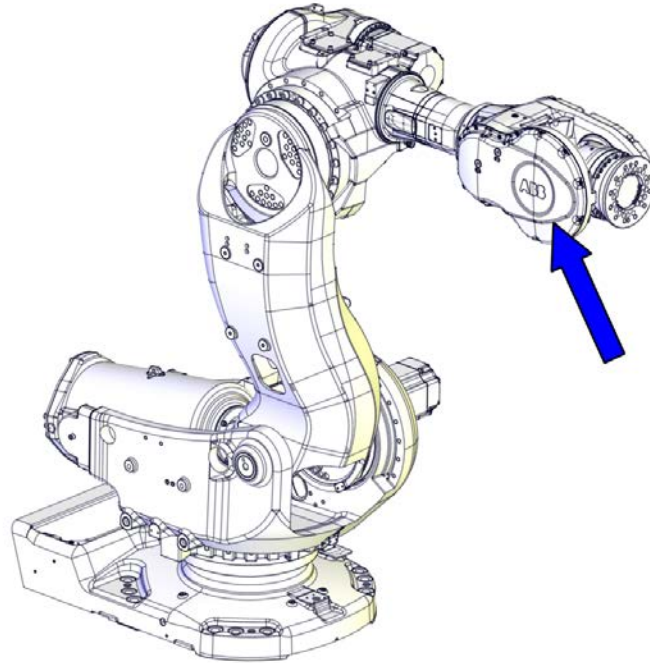
	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	O-ring	3HAB3772-49	X	X	X	X	X	X
B	O-ring	3HAB3772-50	X	X	X	X	X	X
-	Magnetic plug	3HAC16721-1	X	X	X	X	X	X

1 Spare parts

1.9.5 Axis-5 gearbox

1.9.5 Axis-5 gearbox

Axis-5 gearbox

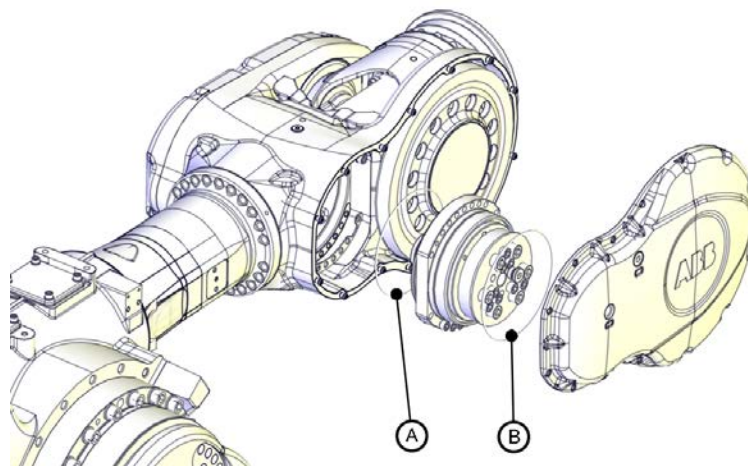


xx1500002830

Spare part list - axis-5 gearbox

Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
Gear axis 5	3HAC037778-003	X	X	X	X	X	X

Other parts



xx1500002831

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Spare part list - other parts axis-5 gearbox

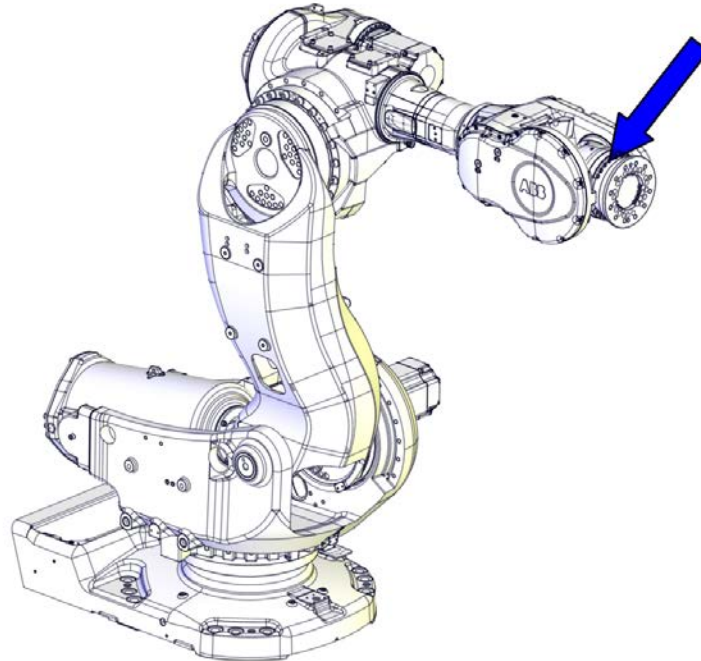
	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	O-ring	3HAB3772-49	X	X	X	X	X	X
B	O-ring	3HAB3772-50	X	X	X	X	X	X
-	Magnetic plug	3HAC16721-1	X	X	X	X	X	X

1 Spare parts

1.9.6 Axis-6 gearbox

1.9.6 Axis-6 gearbox

Axis-6 gearbox

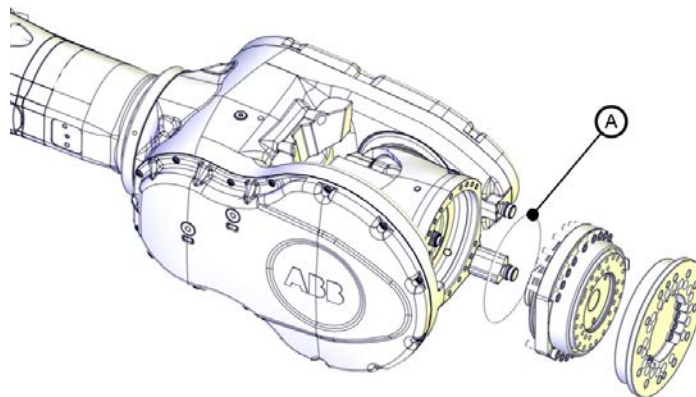


xx1500002832

Spare part list - axis-6 gearbox

Description	Spare part number	Protection type	Color	500/	500/	400/	340/	325/	150/
				2.55	2.3	2.55	2.8	3.1	3.5
Gear axis 6	3HAC037639-002	Standard/Foundry	Black	X	X	X	X	X	X
	3HAC037639-001	Foundry Prime	Grey			X			

Other parts



xx1500002833

Continues on next page

Spare part list - other parts

	Description	Spare part number	500/ 2.55	500/ 2.3	400/ 2.55	340/ 2.8	325/ 3.1	150/ 3.5
A	O-ring	3HAB3772-49	X	X	X	X	X	X

1 Spare parts

1.10 Spare parts - Calibration items

1.10 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.

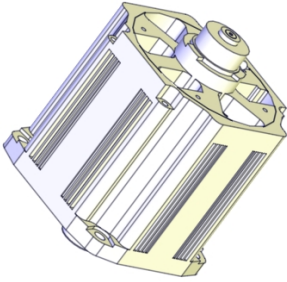
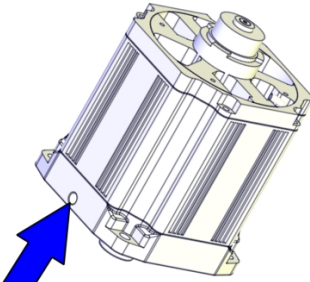
2 Robot description

2.1 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.

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.

See *Product manual, spare parts - IRB 7600* for spare part numbers.

Robot axis	Article number Type A motor	Article number Type B motor	500 2.55	500 2.3	400 2.55	340 2.80	325 /3.10	150 3.50
1	3HAC057539-001	3HAC062338-001	X	X	X	X	X	X
	3HAC060565-001 (Foundry Prime)	N/A			X			
2	3HAC057540-001	3HAC062339-001		X	X	X		X
	3HAC057541-001	3HAC062340-001	X				X	
	3HAC060566-001 (Foundry Prime)	N/A			X			

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2 Robot description

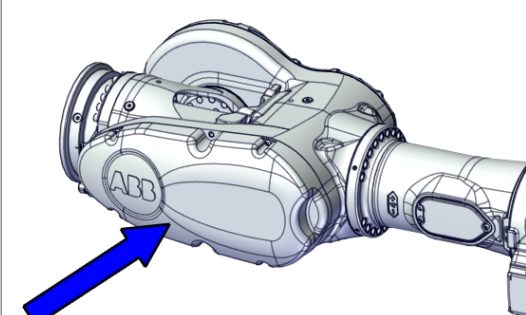
2.1 Type A vs type B motors

Continued

Robot axis	Article number Type A motor	Article number Type B motor	500 2.55	500 2.3	400 2.55	340 2.80	325 /3.10	150 3.50
3	3HAC057540-001	3HAC062339-001	X	X	X	X	X	X
	3HAC060566-001 (Foundry Prime)	N/A			X			
4	3HAC057543-001	3HAC062341-001	X	X	X	X	X	X
	3HAC036644-002 (Foundry Prime)	N/A			X			
5	3HAC057543-001	3HAC062341-001	X	X	X	X	X	X
	3HAC060567-001 (Foundry Prime)	N/A			X			
6	3HAC057544-001	3HAC062342-001	X	X	X	X	X	X
	3HAC060568-001 (Foundry Prime)	N/A			X			

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.	
5	Partly interchangeable.	Replacement to type B requires replacement of the left hand side wrist cover. Spare part number for the cover that fits the type B motor: 3HAC062450-005 (ABB Orange) / 3HAC062450-004 (Graphite White).  xx1800000129
6	Not interchangeable.	The complete wrist unit must be replaced.

Index

I
insulated wrist unit, 18

T
type A motors, 51
type B motors, 51

W
wrist unit, insulated, 18



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