

Product manual, spare parts IRB 6700



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## Product manual, spare parts

IRB 6700 - 235/2.65

IRB 6700 - 205/2.80

IRB 6700 - 175/3.05

IRB 6700 - 155/2.85

IRB 6700 - 200/2.60

IRB 6700 - 150/3.20

IRB 6700 - 300/2.70

IRB 6700 - 245/3.00

IRB 6700Inv - 300/2.60

IRB 6700Inv - 245/2.90

IRC5

Document ID: 3HAC044268-001

Revision: G

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ABB AB, Robotics

Robotics and Motion

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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
Product manual - IRB 6700	3HAC044266-001
Product manual - IRB 6700Inv	3HAC058254-001
Circuit diagram - IRB 6700	3HAC043446-005

#### Revisions

Revision	Description
-	First edition
Α	The variants IRB 6700 - 200/2.60 and IRB 6700 - 155/2.85 are added.
В	The following updates are done in this revision:  • 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.
	<ul> <li>Color "grey" on spare parts is replaced with color Graphite White.</li> <li>Axis-2 gearbox new on variants IRB 6700 - 200/2.60 and IRB 6700 -</li> </ul>
	155/2.85.
	<ul> <li>Frame has new spare part number on variants IRB 6700 - 200/2.60 and IRB 6700 - 155/2.85.</li> </ul>

## Continued

Revision	Description
С	The following updates are done in this revision:  • Spare part number on axis 2 motor is changed on variants IRB 6700 - 200/2.60 and IRB 6700 - 150/3.20.
	<ul> <li>Added spare part number on Sync. plates axes 1 and 6 for variants IRB 6700-300/2.75 and -245/3.00.</li> </ul>
	<ul> <li>Added spare part number on Movable mechanical stop axis 1 for variants IRB 6700-300/2.75 and -245/3.00.</li> </ul>
	Corrected which frame fits on which variant. Was wrong.
	Corrected which arm extender fits on which variant. Was wrong.
	<ul> <li>Corrected which lower arm fits on which variant. Was wrong.</li> </ul>
D	The following updates are done in this revision:  Corrected robot designation in table for axis 3-4 spare parts.
	<ul> <li>Corrected spare part number for process turning disk for robots IRB 6700 - 300/2.70 and IRB 6700 - 245/3.00.</li> </ul>
	Table header changed for Robot type 245/3.00 gearbox axis 1.
	<ul> <li>Description for Gearbox, axis-1 3HAC046994-003/ -004 changed in table, description colum.</li> </ul>
	<ul> <li>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 49.</li> </ul>
	• 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.
Е	The following updates are done in this revision:  New spare part numbers are introduced due to new standard calibration method (Axis Calibration):
	- frame
	- lower arm
	- axis 3-4
	- wrist
	- turning disc
	<ul> <li>new axis-6 synchronization mark plate, not compatible with previous plate</li> </ul>
	<ul> <li>Spare part numbers for the connection box sets on axis-1, axis-2, axis-3, axis-4 and axis-5 motors are corrected.</li> </ul>
	Generally modified due to update of BOL.
F	The following updates are done in this revision:  Type B motors are introduced throughout the manual, including a new connection box for the axis-6 motor.
	<ul> <li>Added images for the axis-1 gearbox for robot versions IRB 6700- 300/2.70 and IRB 6700-245/3.00.</li> </ul>
	Added spare part number for an o-ring on the axis-1 gearbox.
	<ul> <li>Gasket changed for Harness cover axis 5: IRB 6700-300/2.70 and IRB 6700-245/3.00 (from 3HAC048699-001 to 3HAC051359-001).</li> </ul>
	<ul> <li>Changed spare part number for gearbox and o-ring axis 2: (from 3HAC043072 to 3HAC058399, from 3HAB3772-144 to 3HAB3772-48).</li> </ul>
	Corrections due to updates in SAP terminology.

Continued

Revision	Description
G	<ul> <li>Published in release R17.1. The following updates are made in this revision:</li> <li>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).</li> <li>Added spare parts for robot versions IRB 6700Inv-300/2.60 and IRB 6700Inv-245/2.90.</li> <li>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).</li> <li>Added spare part number for axes 1-6 manipulator harness for robot versions IRB 6700-300/2.70 and IRB 6700-245/3.00.</li> </ul>
	Sections and tables are restructured.

## **Product documentation, IRC5**

#### Categories for user documentation from ABB Robotics

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

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

#### **Product manuals**

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

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

#### **Technical reference manuals**

The technical reference manuals describe reference information for robotics products.

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

#### **Application manuals**

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

An application manual generally contains information about:

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

#### **Operating manuals**

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

The group of manuals includes (among others):

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



# 1 Spare parts - Electrical parts

## 1.1 Manipulator harness

### Illustration - Manipulator harness



xx1300001096

#### Spare part list - Manipulator harness

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70 <sup>i</sup>	245 /3.00 <sup>i</sup>	300 /2.60 <sup>ii</sup>		Spare part number
Manipulator harness	Х	Х	Х	Х	Х	Х	Х	Х			3HAC042840-001
							X	X	X	X	3HAC058040-001

i Both variants of manipulator harness fits the robot.

ii IRB 6700Inv

1.2 SMB unit

## 1.2 SMB unit

#### Illustration - SMB unit



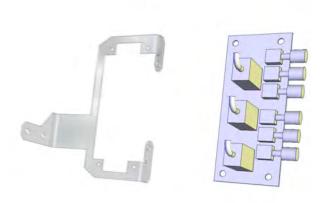
xx1300001976

#### 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, BRK001	x	3HAC046642-001

#### Illustration - Brake release unit parts



## 1 Spare parts - Electrical parts

# 1.3 Brake release unit *Continued*

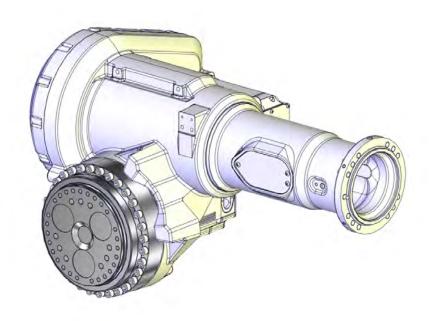
## Spare part list - Brake release unit parts

	Description	Spare part number
Α	Guard plate, BU buttons	3HAC026331-001
В	Push button guard	3HAC6499-1
С	Cover battery box, with rubber cloth	3HAC044205-001
D	SMB cover Including:	3HAC044076-003 3HAC048332-001
E	Bracket (brake release unit)	3HAC049785-001
F	Battery unit	3HAC044075-001
-	Cable battery/SMB	3HAC046287-001
G	Battery holder	3HAC044161-001
Н	Bracket (SMB unit)	3HAC044073-001

# 2 Spare parts - Axis 3-4

Spare parts - Axis 3-4

Illustration - Axis 3-4



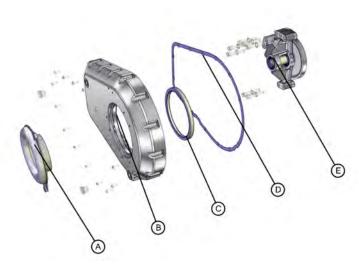
#### Spare part list - Axis 3-4

Description	235	205	175	150	200	155	300	245	300	245	Spare part number
	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Axis 3-4	X	X	X	Х							3HAC059650-001
Graphite White					X	Х					3HAC059651-001
							Х	Х	Х	Х	3HAC059652-001
Axis 3-4	Х	х	Х	Х							3HAC059650-002
ABB Orange					Х	Х					3HAC059651-002
							Х	Х	Х	Х	3HAC059652-002

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#### Continued

## Illustration - Axis 3-4 parts



xx1300002224

## Spare part list - Axis 3-4 parts

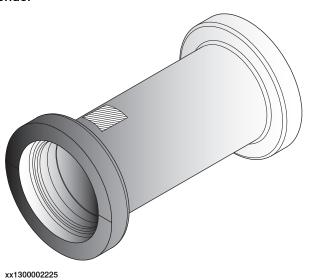
	Description	235	205	175	150	200	155		245	300	245	Spare part number
		/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Α	Cable guide	X	X	X	X	X	X	X	X	X	X	3HAC11771-1
В	Cover axis-4 (gasket and sealing	X	X	X	X							3HAC043500-003
	ring included) Graphite White					X	X					3HAC044071-003
	Graphine trinic							X	X	Х	X	3HAC045121-003
	Cover axis-4 (gasket and sealing	X	X	X	X							3HAC048314-001
	ring included) ABB Orange					Χ	X					3HAC044071-004
	nab orange							X	X	Х	X	3HAC045121-004
С	Sealing ring (delivered fitted in cover axis-4)	X	X	X	X	X	X	X	X	X	X	-
D	Gasket axis-4	Χ	X	Х	Х							3HAC043442-001
						Х	Х					3HAC044069-001
								Χ	X	Х	Χ	3HAC047409-001
Е	Intermediate gear unit, axis-4	Χ	Х	Х	Х							3HAC043499-003
	(pre-assembled)					Х	Х					3HAC044060-003
								Χ	Х	Х	Χ	3HAC045123-003

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# 3 Spare parts - Arm extender

## Upper arm extender

Illustration - Arm extender



Spare part list - Arm extender

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

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Arm extender 410 mm Graphite White			Х	Х							3HAC042757-005
Arm extender 410 mm ABB Orange			Х	X							3HAC048326-001
Arm extender 250 mm Graphite White						Х		Х		Х	3HAC045084-005
Arm extender 250 mm ABB Orange						Х		Х		Х	3HAC048213-003

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#### Spare part list - Arm extender sets

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	245 /2.90 <sup>i</sup>	Spare part number
Arm extender set 410 mm			X	X						3HAC042757-007
Graphite White										
Includes arm extender (1 pc), attachment screws M12x50 (12 pcs) and washers (12 pcs)										

## Continued

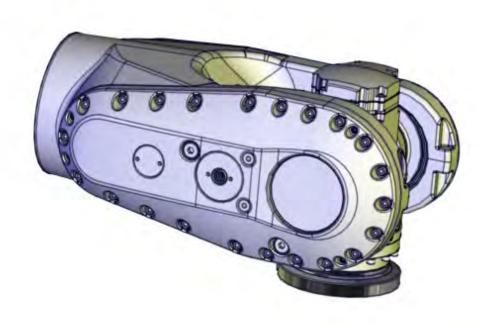
Description	235	205	175	150	200	155	300	245	300	245	Spare part number
	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Arm extender set 410 mm			X	X							3HAC048326-002
ABB Orange											
Includes arm extender (1 pc), attachment screws M12x50 (12 pcs) and washers (12 pcs)											
Arm extender set 250						X					3HAC045084-007
mm Graphite White Includes arm extender (1 pc), attachment screws M12x50 (16 pcs) and washers (16 pcs)								X		X	3HAC045084-008
Arm extender set 250						Х					3HAC048213-004
MM ABB Orange								X		X	3HAC045084-009
Includes arm extender (1 pc), attachment screws M12x50 (16 pcs) and washers (16 pcs)											

i IRB 6700Inv

# 4 Spare parts - Wrist

## 4.1 Wrist

**Illustration - Wrist** 



xx1300001979

## Spare part list - Wrist

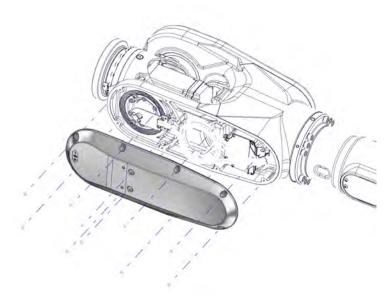
Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Wrist	Х	Х	X	X							3HAC059653-001
Graphite White					Х	Х					3HAC059654-001
							Х	Х	Х	Х	3HAC059655-001
Wrist	Х	Х	Х	Х							3HAC059653-002
ABB Orange					Х	Х					3HAC059654-002
							Х	X	Х	Х	3HAC059655-002

IRB 6700Inv

## 4.1 Wrist

#### Continued

#### Illustration - Harness cover



xx1300001975

## Spare part list - Harness cover

Description	235	205	175	150	200	155	300	245	300	245	Spare part number
	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Harness cover, ax-	Х	Х	X	X							3HAC043543-004
is-5 Graphite White					Х	Х					3HAC044108-004
Grapinio Winto							Х	X	X	X	3HAC045483-004
Harness cover, ax-	X	Х	X	X							3HAC048333-001
is-5 ABB Orange					Х	X					3HAC044108-005
7.55 Grange							X	X	X	X	3HAC045483-005
Gasket	Х	Х	Х	X							3HAC048699-001
					Х	Х					3HAC048887-001
							Х	Х	Х	Х	3HAC051359-001

i IRB 6700Inv

4.2 Turning disc (standard and process)

## 4.2 Turning disc (standard and process)

#### Spare part list - Turning disc

Description	Spare part number	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00		245 /2.90 <sup>i</sup>
Turning disc	3HAC055222-002 ii	x	x	x	x						
Turning disc	3HAC055223-002 <sup>4.3</sup>					х	X				
Turning disc	3HAC055224-002 <sup>4.3</sup>							X	х	X	Х

i IRB 6700Inv

The two versions of the synchronization mark plate are shown in *Axis-6 synchronization mark plate* on page 24. Installation of the plate is described in *Product manual - Product.ProductName*.

#### Spare part list - Turning disc parts

Description	 205 /2.80	 150 /3.20					Spare part number
Washer (3-hole)			X	Х			3HAC044237-001

i IRB 6700Inv

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

Description	235	205	175	150	200 /2.60						Spare part number
	/2.05	/2.00	/3.05	/3.20	/2.00	/2.05	/2./0	/3.00	/2.60¹	/2.901	
Process turning disc, Lean ID	X	X	X	Χ							3HAC054887-005
Hex socket head cap screw M8x25 quality steel 12.9 Gleitmo 603 (9 pcs)	X	X	X	Χ							3HAB3409-37
Process turning disc, Lean ID					Х	х					3HAC054888-004
Process turning disc, Lean ID							X	Х	Х	Х	3HAC054889-004

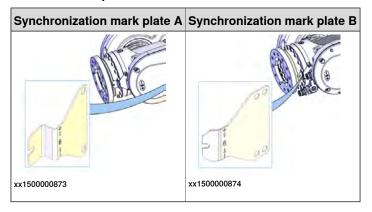
IRB 6700Inv

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

#### 4.3 Axis-6 synchronization mark plate

## 4.3 Axis-6 synchronization mark plate

#### Illustration - Synchronization mark plate



#### Spare part list - Synchronization mark plate

	Description	235 /2.65										Spare part number
Α	Synchronization mark plate axis-6 ii	Х	X	X	X	X	X	X	X			3HAC043641-001 3HAC047188-001
В	Synchronization mark plate axis-6 iii	Х	X	X	X	X	X	Х	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.

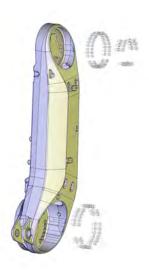
<sup>(</sup>The spare part numbers are obsolete.)

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

# 5 Spare parts - Lower arm

#### Lower arm

Illustration - Lower arm



xx1300002226

## Spare part list - Lower arm

Description	235	205	175	150	200	155	300	245	300	245	Spare part number
	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Lower arm	Х		Х								3HAC042494-008
Graphite White		Х		Х							3HAC042495-008
					Х	Х					3HAC044137-009
							Х	Х			3HAC046232-008
									Х	Х	3HAC046232-005
Lower arm	X		X								3HAC048323-002
ABB Orange		Х		Х							3HAC048324-002
					Х	Х					3HAC044137-010
							Х	Х			3HAC046232-009
									Х	Х	3HAC046232-006

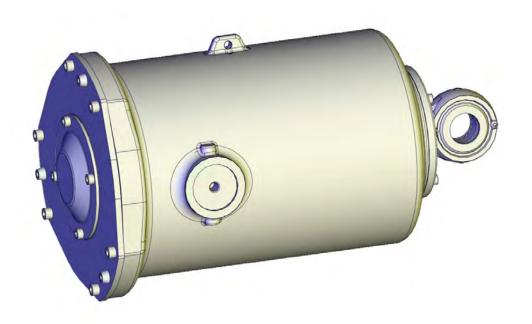
IRB 6700Inv



## 6 Spare parts - Balancing device

## 6.1 Balancing device

Illustration - Balancing device



xx1300002227

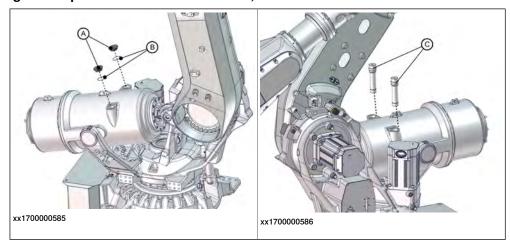
## Spare part list - Balancing device

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Balancing device	X	X	X	X	X	X					3HAC043477-002
Graphite White							X	X			3HAC051384-002
									Х	Х	3HAC058121-005
Balancing device	Х	Х	Х	Х	Х	Х					3HAC048319-001
ABB Orange							Х	Х			3HAC051384-003
									Х	Х	3HAC058121-006

IRB 6700Inv

# 6.1 Balancing device *Continued*

## Illustration - Balancing device parts - IRB 6700Inv -300/2.60, -245/2.90



## Spare part list - Balancing device parts - IRB 6700lnv -300/2.60, -245/2.90

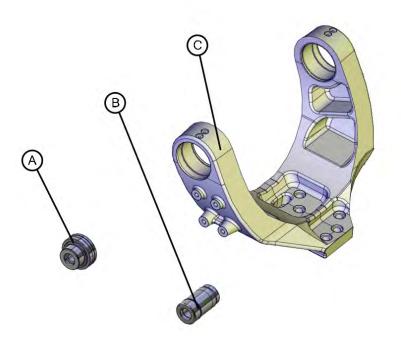
	Description	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Α	Protection cover	X	X	3HAC058204-001
В	O-ring	Х	Х	3HAB3772-132
С	Relief screws	X	X	3HAC058129-001

IRB 6700Inv

6.2 Cradle parts

## 6.2 Cradle parts

## Illustration - Cradle parts



## Spare part list - Cradle parts

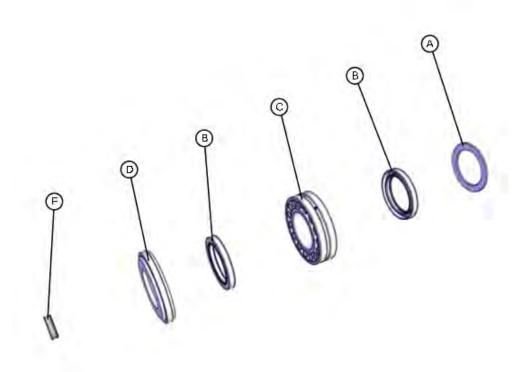
	Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300	245	Spare part number
		/2.05	/2.60	/3.05	/3.20	/2.00	/2.05	/2./0	/3.00	/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Α	Shaft end, cradle	X	X	X	X	X	X					3HAC044118-001
								X	X	X	Х	3HAC046681-001
В	Shaft link ear	X	X	X	X	X	X	X	X	X	Х	3HAC044036-001
С	Cradle	X	Х	Х	X	X	X					3HAC046404-003
	Graphite White							X	X	Х	Х	3HAC058093-003
	Cradle	Х	Х	Х	Х	Х	Х					3HAC048327-001
	ABB Orange							Х	Х	Х	Х	3HAC058093-004

IRB 6700lnv

#### 6.3 Maintenance kits

## 6.3 Maintenance kits

#### Illustration - Maintenance kit link ear



xx1300002229

Α	Washer
В	Radial sealing with dust lip (2 pcs)
С	Spherical roller bearing
D	End cover
E	VK-cover

## Spare part list - Maintenance kit link ear

Pos	Description	235 /2.65	205 /2.80	175 /3.05		200 /2.60	155 /2.85			300 /2.60 <sup>i</sup>		Spare part number
-	Maintenance kit,	x	x	х	х	х	х	х	х			3HAC045815-001
	link ear									X	X	3HAC062076-001
E	VK cover	X	X	X	X	X	X	X	X			3HAA2166-12

i IRB 6700Inv

6.3 Maintenance kits Continued

Illustration - Maintenance kit, cradle - IRB 6700 - 234/2.65, - 205/2.80. - 175/3.05, - 150/3.20, - 200/2.60, - 155/2.85



#### xx1300002230

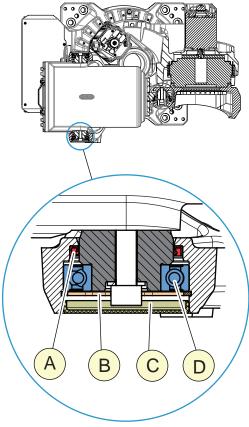
Α	Sealing ring(2 pcs)
В	Radial sealing (2 pcs)
С	Spacer (2 pcs)
D	Groove ball bearing (2 pcs)
E	Retaining ring bore (2 pcs)
F	VK-cover (2 pcs)

# Spare part list - Maintenance kit cradle - IRB 6700 - 234/2.65, - 205/2.80, - 175/3.05, - 150/3.20, - 200/2.60, - 155/2.85

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	Spare part number
Maintenance kit, cradle	X	X	X	X	X	X	3HAC045822-001

# 6.3 Maintenance kits *Continued*

#### Illustration - Maintenance kit, cradle - IRB 6700 - 300/2.70, - 245/3.00, -300/2.60, -245/2.90



xx1400001996

Α	Radial sealing with dustlip(2 pcs)
В	Retaining ring bore (2 pcs)
С	VK-cover (2 pcs)
D	Groove ball bearing (2 pcs)

#### Spare part list - Maintenance kit cradle - IRB 6700 - 300/2.70, - 245/3.00, -300/2.60, -245/2.90

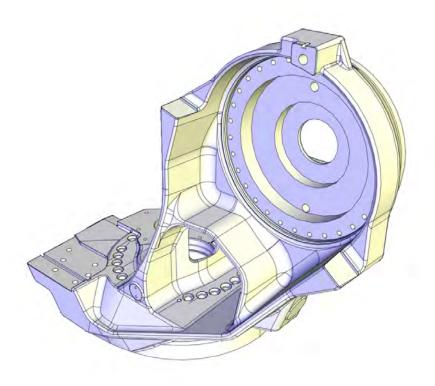
Description		245 /3.00		245 /2.90 <sup>i</sup>	Spare part number
Maintenance kit, cradle	Χ	Χ	X	X	3HAC048834-001

IRB 6700Inv

# 7 Spare parts - Frame and base

#### Frame

Illustration - Frame



xx1300002231

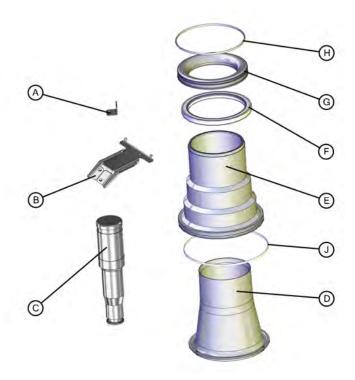
#### Spare part list - Frame

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.75	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Frame	Х	Х	Х	Х	Х	Х					3HAC048334-003
Graphite White							X	X			3HAC045146-009
									Х	Х	3HAC057174-004
Frame	Х	Х	X	Х	Х	Х					3HAC048334-002
ABB Orange							Х	Х			3HAC045146-010
									Х	Х	3HAC057174-005

IRB 6700Inv

#### Continued

## Illustration - Frame parts



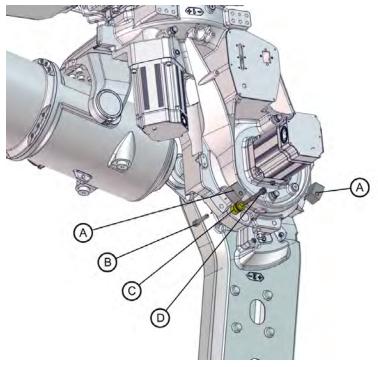
xx1300002233

## Spare part list - Frame parts

	Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Α	Sync. plate axis-1	X	X	X	X	X	X					3HAC043983-001
								X	X	X	X	3HAC028036-001
В	Metal compression clamp frame	X	X	X	X	X	X	X	X	X	X	3HAC043876-001
С	Stop pin axis-1	X	X	X	X	X	X					3HAC024014-001
								X	X	X	X	3HAC047059-001
D	Protection tube	X	X	X	X	X	X					3HAC042961-001
								X	X	X	X	3HAC046202-001
Е	Sealing tube	Х	X	X	X	Х	Х					3HAC042973-001
F	Radial sealing with	X	X	X	X	Х	X					3HAB3701-46
	dustlip							Х	Х	Х	х	3HAB3701-51
G	Protection ring axis-1	X	X	X	X	Х	X					3HAC042968-001
								Х	Х	Х	х	3HAC047474-001
Н	O-ring (151,99x3,53), protection ring	Х	Х	Х	Х	X	X					3HAB3772-58
J	O-ring (183,74x3,53), sealing tube.	X	Х	Х	Х	X	X					3HAB3772-150

IRB 6700Inv





xx1700000584

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

	Description	300	245	Spare part number
		/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Α	Service stop	X	x	3HAC058167-001
В	Service stop screw	X	x	3HAB3409-88
C, D	Transportation lock screw	x	x	3HAC059728-001 Sleeve 3HAB3409-93 Screw, M16x120 (class 12.9 or 8.8)

IRB 6700Inv

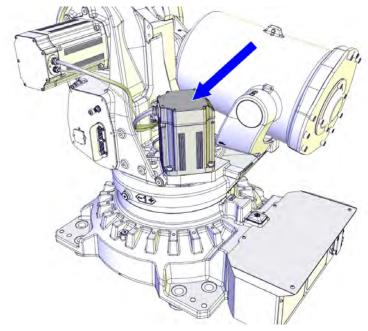


8.1 Axis-1 motor (including pinion)

# 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	235	205	175	150	200	155	300	245	300	245	Spare part number
	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Motor, axis-1	X	X	X	X	X	X					3HAC055447-006
Type B <sup>ii</sup>							X	X			3HAC055451-003
Graphite White									X	X	3HAC058949-003
Motor, axis-1	X	X	X	X	X	X					3HAC055447-004
Type B ii							X	X			3HAC055451-004
ABB Orange									X	X	3HAC048393-004

i IRB 6700Inv

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*.

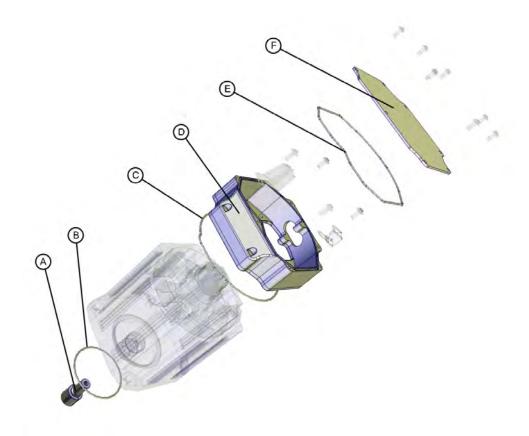
Continues on next page

Type A motor has been replaced by Type B. The motors are fully interchangeable. See Type A vs type B motors on page 71.

8.1 Axis-1 motor (including pinion)

# Continued

# Other parts



xx1300002241

# Spare part list - axis-1 motor other parts

	Description	235	205	175	150	200	155	300	245	300	245	Spare part number
		/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Α	Pinion	X	X	X	X	X	X					3HAC043071-002
	Pinion RV-400CS- 29,96							x	X			3HAC046188-002
В	O-ring (motor flange)	Х	x	X	x	Х	х	х	х	Х	Х	3HAB3772-107
С	O-ring Circular profile <sup>ii</sup>	X	X	X	X	X	X	X	X			3HAB3772-111
	O-ring	X	X	X	X	X	X	Х	X			3HAC054692-001
	Hexagon profile <sup>ii</sup>									X	X	3HAC054692-002

# 8.1 Axis-1 motor (including pinion) *Continued*

	Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
D	Connection box	X	X	X	X	X	X	X	X			3HAC054660-004
	FS 180 Includes o-rings C and E. Graphite White									X	x	3HAC029299-004
	Connection box	х	Х	Х	Х	Х	Х	х	Х			3HAC054660-005
	FS 180 Includes o-rings C and E. ABB Orange									X	X	3HAC054660-004
E	O-ring Circular profile <sup>ii</sup>	Х	х	х	х	х	х	Х	Х			3HAB3772-111
	O-ring Hexagon profile <sup>ii</sup>	Х	х	х	х	х	х	Х	Х	Х	X	3HAC054692-002
F	Cover, box FS 180 Graphite White	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	3HAC029303-004
	Cover, box FS 180 ABB Orange	х	X	X	Х	X	X	Х	Х	Х	X	3HAC029303-005

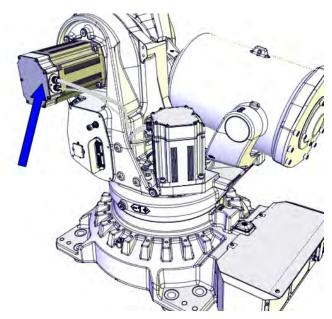
IRB 6700Inv

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.

8.2 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.

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Motor, axis-2	х	х	х	х	х	х					3HAC055450-003
Type B <sup>ii</sup> Graphite White							х	х	x	X	3HAC055688-003
Motor, axis-2	Х	Х	Х	Х	Х	Х					3HAC055450-004
Type B <sup>ii</sup> ABB Orange							Х	Х	х	X	3HAC055688-004

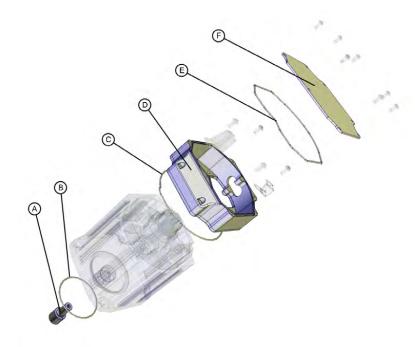
i IRB 6700Inv

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*.

Type A motor has been replaced by Type B. The motors are fully interchangeable. See Type A vs type B motors on page 71.

8.2 Axis-2 motor (including pinion) *Continued* 

# Other parts



xx1300002241

# Spare part list - axis-2 motor other parts

	Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.60	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Α	Pinion	X	X	X	X	X	X					3HAC043072-002
	Pinion RV-700N- 302,05							X	X	X	X	3HAC046186-002
В	O-ring (motor flange)	X	X	X	X	X	X	X	X	X	X	3HAB3772-107
С	O-ring Circular profile <sup>ii</sup>	х	х	х	х	х	х	х	х			3HAB3772-111
	O-ring Hexagon profile <sup>ii</sup>	х	х	х	х	Х	х	х	х	Х	Х	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

# 8.2 Axis-2 motor (including pinion)

### Continued

	Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85		245 /3.00		245 /2.90 <sup>i</sup>	Spare part number
E	O-ring Circular profile <sup>ii</sup>	X	X	X	X	X	X	X	X			3HAB3772-111
	O-ring Hexagon profile <sup>ii</sup>	X	X	X	X	X	X	X	X	X	X	3HAC054692-002
F	Cover, box FS 180 Graphite White	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	3HAC029303-004
	Cover, box FS 180 ABB Orange	Х	X	X	Х	Х	Х	Х	Х	Х	X	3HAC029303-005

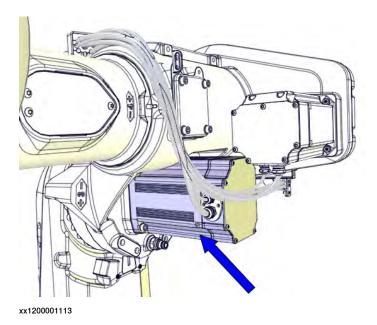
IRB 6700Inv

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)

# 8.3 Axis-3 motor (including pinion)

#### Axis-3 motor



Spare part list - axis-3 motor

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

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Motor, axis-3	Х	х	Х	х							3HAC055448-003
Type B <sup>ii</sup> Graphite White					Х	Х					3HAC055697-003
							Х	Х	Х	Х	3HAC055700-003
Motor, axis-3	Х	Х	Х	Х							3HAC055448-004
Type B ii ABB Orange					Х	Х					3HAC055697-004
							х	Х	Х	Х	3HAC055700-004

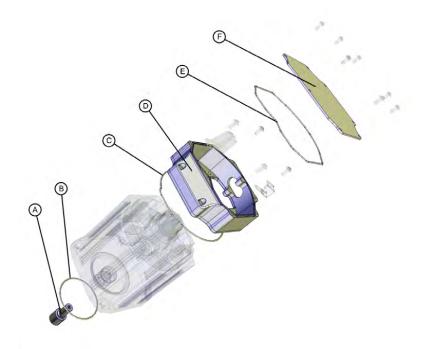
IRB 6700Inv

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*.

Type A motor has been replaced by Type B. The motors are fully interchangeable. See Type A vs type B motors on page 71.

8.3 Axis-3 motor (including pinion) *Continued* 

# Other parts



xx1300002241

# Spare part list - axis-3 motor other parts

	Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.85	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Α	Pinion	X	X	X	X							3HAC043073-002
	Pinion RV320E3 i=201					X	X					3HAC044063-002
	Pinion RV-550N							Х	Х	Х	Х	3HAC043072-002
В	O-ring (motor flange)	Х	x	х	x	х	x	х	x	x	x	3HAB3772-107
С	O-ring Circular profile <sup>ii</sup>	Х	х	х	х	х	х	х	х			3HAB3772-111
	O-ring Hexagon profile <sup>ii</sup>	Х	х	Х	Х	Х	Х	Х	Х	Х	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	Х	Х	X	Х	Х	Х	X	X	X	3HAC054660-005

# Continues on next page

# 8.3 Axis-3 motor (including pinion) *Continued*

	Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.85	245 /3.00		245 /2.90 <sup>i</sup>	Spare part number
E	O-ring Circular profile <sup>ii</sup>	X	X	Х	X	X	X	Х	Х			3HAB3772-111
	O-ring Hexagon profile <sup>ii</sup>	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

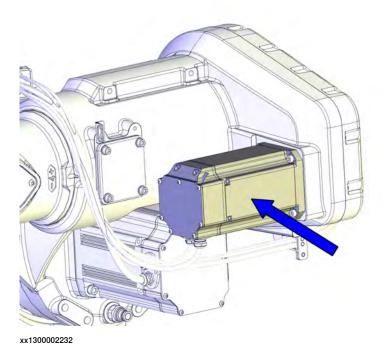
I IRB 6700Inv

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.

8.4 Axis-4 motor (including pinion)

# 8.4 Axis-4 motor (including pinion)

#### Axis-4 motor



### Spare part list - axis-4 motor

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

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 i	245 /2.90 <sup>i</sup>	Spare part number
Motor, axis-4	X	X	X	X	X	X					3HAC055440-003
Type B <sup>ii</sup> Graphite White							X	X	X	x	3HAC055441-003
Motor, axis-4	X	X	X	X	X	X					3HAC055440-004
Type B <sup>ii</sup> ABB Orange							Х	х	Х	Х	3HAC055441-004

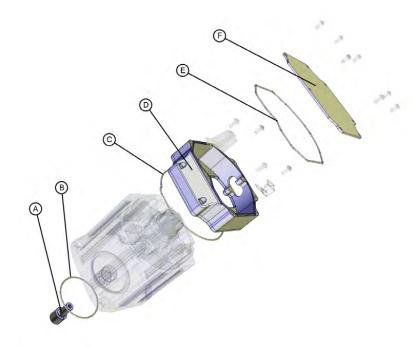
i IRB 6700Inv

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 Type A motor has been replaced by Type B. The motors are fully interchangeable. See *Type A vs* 

8.4 Axis-4 motor (including pinion) *Continued* 

# Other parts



xx1300002241

# Spare part list - axis-4 motor other parts

	Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Α	Pinion	х	Х	Х	Х	Х	Х					3HAC041348-001
								X	Х	Х	X	3HAC047164-001
В	O-ring (motor flange)	x	X	X	X	x	x	X	X	X	x	3HAB3772-107
С	O-ring	х	Х	Х	Х	Х	х	Х	Х			3HAB3772-110
	Circular profile ii											
	O-ring	X	X	X	X	X	X	X	X	X	X	3HAC054692-001
	Hexagon profile ii											
D	Connection box FS 130	X	X	X	X	X	X	X	X	x	X	3HAC054659-002
	Includes o-rings C and E.											
	Graphite White											
	Connection box FS 130	X	X	X	X	X	X	X	X	X	X	3HAC054659-003
	Includes o-rings C and E.											
	ABB Orange											

# 8.4 Axis-4 motor (including pinion)

### Continued

	Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00		245 /2.90 <sup>i</sup>	Spare part number
E	O-ring Circular profile <sup>ii</sup>	X	X	X	X	X	X	X	X			3HAB3772-110
	O-ring Hexagon profile <sup>ii</sup>	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	Х	Х	X	3HAC029302-005
	Cover, box FS 130 ABB Orange	Х	X	X	X	X	X	X	Х	Х	X	3HAC029302-004

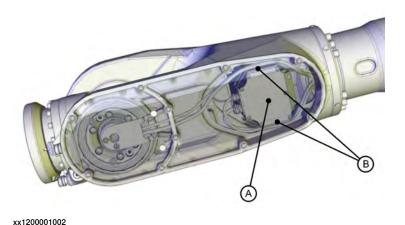
IRB 6700Inv

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)

# 8.5 Axis-5 motor (including pinion)

#### Axis-5 motor



Spare part list - axis-5 motor

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

	Description	All variants	Spare part number
Α	Motor, axis-5	x	3HAC055440-005
	Type B <sup>i ii</sup>		
В	Heat protection plates, 2 pcs iii	X	3HAC052332-001

Type A motor has been replaced by Type B. The motors are fully interchangeable. See *Type A vs type B motors on page 71*.

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*.

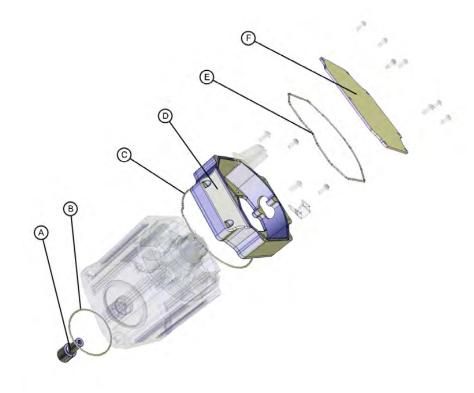
When replacing a type A motor with a type B motor, the current heat protection plate must be replaced with two heat protection plates that fit the type B motor (listed below).

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.

8.5 Axis-5 motor (including pinion) *Continued* 

### Other parts



xx1300002241

### Spare part list - axis-5 motor other parts

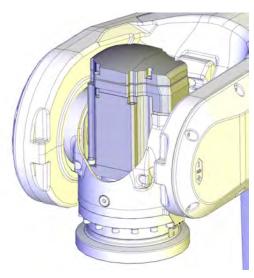
	Description	All variants	Spare part number
Α	Pinion	Х	3HAC041348-001
В	O-ring (motor flange)	X	3HAB3772-107
С	O-ring Circular profile <sup>i</sup>	Х	3HAB3772-110
	O-ring Hexagon profile <sup>i</sup>	Х	3HAC054692-001
D	Connection box FS 130 Includes o-rings C and E.	Х	3HAC054659-001
E	O-ring Circular profile <sup>i</sup>	X	3HAB3772-110
	O-ring Hexagon profile <sup>i</sup>	Х	3HAC054692-001
F	Cover, box FS 130	X	3HAC029302-001

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 motors (including pinion)

# 8.6 Axis-6 motors (including pinion)

#### **Axis-6 motor**



xx1300002234

#### Spare part list - axis-6 motor

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

Description	235	205	175	150	200	155	300	245	300	245	Spare part number
	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Motor, axis-6	X	X	X	X							3HAC043457-003
Type A <sup>ii</sup>					X	X					3HAC046029-003
Graphite White							X	X			3HAC046337-003
Motor, axis-6	Х	Х	Х	Х							3HAC048317-001
Type A <sup>ii</sup>					Х	Х					3HAC046029-004
ABB Orange							Х	Х			3HAC046337-004
Motor, axis-6	Х	Х	Х	Х							3HAC055699-003
Type B <sup>ii</sup>					Х	Х					3HAC055437-003
Graphite White							Х	Х	Х	Х	3HAC055439-003
Motor, axis-6	Х	Х	Х	Х							3HAC055699-004
Type B <sup>ii</sup>					Х	Х					3HAC055437-004
ABB Orange							Х	Х	Х	Х	3HAC055439-004

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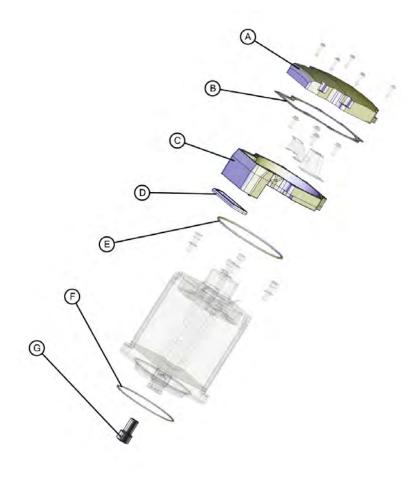
See Type A vs type B motors on page 71.

Continues on next page

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.

8.6 Axis-6 motors (including pinion) *Continued* 

# Other parts



xx1300002242

### Spare part list - axis-6 motor other parts

	Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00		245 /2.90 <sup>i</sup>	Spare part number
Α	Cover connection	X	X	X	X			X	X	X	X	3HAC026607-006
	box FS 100 Includes gasket. Graphite White					X	X					3HAC044232-002
	Cover connection	X	Х	Х	X			Х	Х	X	X	3HAC026607-003
	box FS 100 Includes gasket. ABB Orange					X	Х					3HAC044232-003
В	Gasket, motor	X	Х	Х	Х			Х	Х	Х	Х	3HAC033489-001
	cover					х	х					3HAC044252-001

# Continues on next page

# 8.6 Axis-6 motors (including pinion) Continued

	Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
С	Connection box ii	X	X	X	X			X	X			3HAC043343-002
	Graphite White					X	X					3HAC044231-002
	Connection box ii	Х	X	X	X			X	X			3HAC048330-001
	ABB Orange					X	X					3HAC044231-003
	Connection box iii	Х	Х	Х	X			Х	Х	Х	Х	3HAC054616-002
	Graphite White					Х	Х					3HAC054617-002
	Connection box iii	Х	Х	Х	X			Х	Х			3HAC054616-003
	ABB Orange					Х	Х					3HAC054617-003
D	Gasket, cable gland cover	х	х	x	х			x	х	x	x	3HAC048560-001
E	O-ring Circular profile <sup>iv</sup>	Х	х	Х	Х			х	х			3HAB3772-110
	O-ring Hexagon profile <sup>iv</sup>	х	х	X	Х			х	х	Х	X	3HAC054692-001
	Gasket					Х	Х					3HAC044254-001
F	O-ring (motor	Х	Х	Х	Х			Х	Х	Х	Х	3HAB3772-107
	flange)					Х	Х					3HAB3772-102
G	Pinion	х	Х	Х	X							3HAC043074-002
						Х	Х					3HAC028705-002
	Pinion RV-100N- 161							Х	Х	Х	X	3HAC046336-002

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ii Fits the type A motor.

See Type A vs type B motors on page 71.

iii Fits the type B motor.

See Type A vs type B motors on page 71.

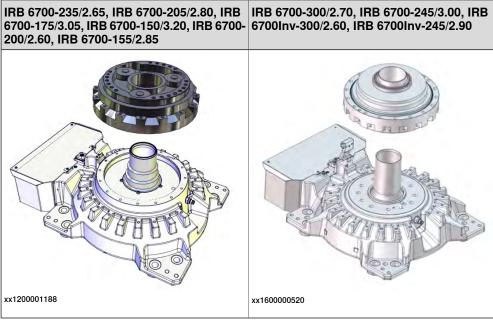
The cross-section profile is either circular or hexagon. If only ordering the o-ring, order the same profile that is currently installed in the connection box.



# 9 Spare parts - Gearboxes

### 9.1 Gearbox axis-1

### Axis-1 gearbox

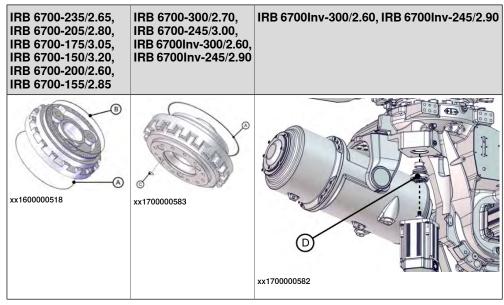


Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Gearbox, axis-1, RV-320CA-193,84 Graphite White	X	X	X	X	X	X					3HAC060576-003
Gearbox, axis-1, RV-400CS-216.06 Graphite White							Х	X	X	X	3HAC046994-003
Gearbox, axis-1, RV-320CA-193,84 ABB Orange	X	Х	X	X	X	X					3HAC060576-002
Gearbox, axis-1, RV-400CS-216.06 ABB Orange							Х	Х	Х	X	3HAC046994-004

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# 9.1 Gearbox axis-1 *Continued*

### Other parts

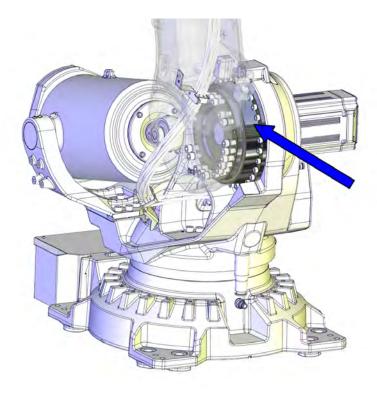


	Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85			300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Α	O-ring	Х	Х	Х	Х	Х	Х					3HAB3772-93
								Х	Х	Х	Х	3HAB3772-160
В	O-ring Only with gearboxes: 3HAC043071-003 3HAC048228-001	X	x	x	x	X	X					3HAB3772-164
	O-ring Only with gearboxes: 3HAC0605765-003 3HAC0605765-002	X	x	x	x	X	X					3HAC061327-002
С	O-ring Located at the oil inlet underneath of gear- box.							x	x	x	x	3HAB3772-97
D	Hub with pinion									X	Х	3HAC058203-003

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# 9.2 Gearbox axis-2

# Axis-2 gearbox



xx1300002235

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Gearbox, axis-2, RV-550N-252.33 Graphite White	Х	Х	Х	Х	Х	Х					3HAC058399-002
Gearbox, axis-2, RV-700N-284.4 Graphite White							Х	Х	X	X	3HAC046186-003
Gearbox, axis-2, RV-550N-252.33 ABB Orange	Х	Х	X	X	X	Х					3HAC058399-003
Gearbox, axis-2, RV-700N-284.4 ABB Orange							X	X	Х	X	3HAC046186-004

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# 9.2 Gearbox axis-2 *Continued*

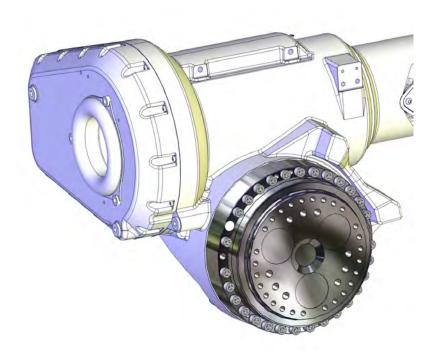
# Other parts

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85		245 /3.00	300 /2.60 <sup>i</sup>		Spare part number
O-ring	X	X	x	X	X	X					3HAB3772-48 (gearbox 3HAC058399) or 3HAB3772-144 (gearbox 3HAC043072) (or meas- ure the groove)
							X	X	X	X	3HAB3772-91

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# 9.3 Gearbox axis-3

# Axis-3 gearbox



xx1300002236

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 <sup>i</sup>	245 /2.90 <sup>i</sup>	Spare part number
Gearbox, axis-3, RV-500N Graphite White	X	X	Х	Х							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							Х	X	X	X	3HAC058399-002
Gearbox, axis-3, RV-550N-252.33 ABB Orange							х	Х	x	Х	3HAC058399-003

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# 9.3 Gearbox axis-3 *Continued*

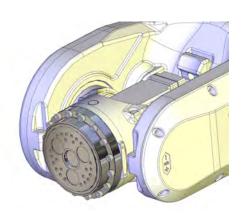
# Other parts

	235 /2.65							245 /3.00			Spare part number
O-ring	X	X	X	X	X	X	X	X	X	X	3HAB3772-144  3HAB3772-48 (gearbox 3HAC058399) or 3HAB3772-144 (gearbox 3HAC043072-003 or 3HAC048232- 001) (or measure the groove)

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# 9.4 Gearbox axis-6

# Axis-6 gearbox



xx1300002237

Description	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00	300 /2.60 i	245 /2.90 <sup>i</sup>	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	х	3HAC046336-003
Gearbox, axis-6, RV-100N-161 ABB Orange							X	X	X	x	3HAC046336-004

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# 10 Spare parts - Foundry Plus

# 10.1 Axis-4 Foundry Plus set

# Spare part list - Axis-4 Foundry Plus set

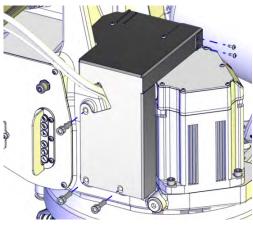
Description	235	205	175	150	200	155	300	245	300	245	Spare part number
	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Axis-4 Foundry plus set	х	Х	Х	Χ	Х	Х	Х	Х			3HAC050407-001
Cover	Х	Х	Х	Х	Х	X	Х	X			3HAC049072-001
Torx pan head screw (3 pcs)	х	Х	Х	Χ	Х	Х	Х	Х			9ADA619-56
Cover insert	Х	Х	Х	Χ	Х	Х	Х	Х			3HAC048520-001
Weatherstrip	х	Х	Х	Χ	Х	Х	Х	Х			3HAC053986-001
Gasket	Х	Х	Х	Χ	Х	Χ	Х	Х			3HAC048609-001
Washer (3 pcs)	Х	Х	Х	Х	Х	X	Х	X			3HAC048646-001
Cable protection leather	Х	Х	Х	Χ	Х	Х	Х	Χ			3HAC048531-001
Metal strap (2 pcs)	х	Х	Х	Х	Х	Х	Х	Χ			3HAC033886-001

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10.2 Axis-1 Foundry Plus protection

# 10.2 Axis-1 Foundry Plus protection

# Illustration - Axis-1 Foundry Plus protection



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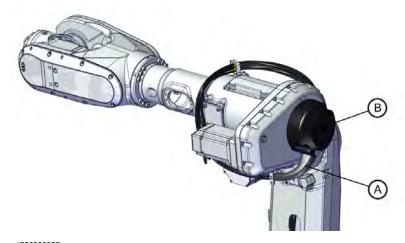
# Spare part list - Axis-1 Foundry Plus protection

Description		205 /2.80			200 /2.60					Spare part number
Axis-1 protection set	x	X	X	X	X	X	X	X		3HAC050454-001

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# 10.3 Cable protection upper arm house

# Illustration - Cable protection upper arm house



xx1700000587

# Spare part list - Cable protection upper arm house

	Description		205				155		245			Spare part number
		/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Α	Cable protection									X	X	3HAC055411-001
В	Cover	X	X	Х	X	X	X	X	X	X	X	3HAC039782-001

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# 11 Spare parts - Calibration items

### **Calibration items**

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



# 12 Spare parts - Options

# **Options**

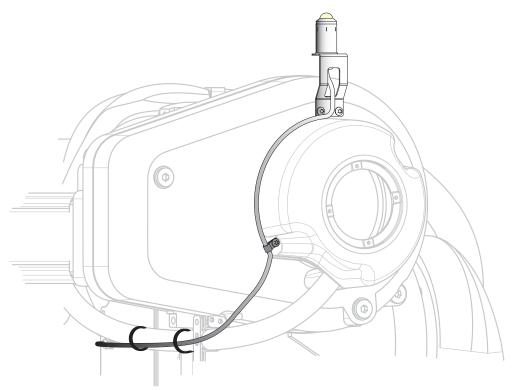
# Options

Description		205			200						Spare part number
	/2.65	/2.80	/3.05	/3.20	/2.60	/2.85	/2.70	/3.00	/2.60 <sup>i</sup>	/2.90 <sup>i</sup>	
Movable mechanical stop, axis-	X	X	X	X	X	X					3HAC055744-001
Movable mechanical stop, axis-							X	X	X	X	3HAC048533-003
UL lamp	X	X	X	X	X	X	X	X	X	X	3HAC047053-003

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### Illustrations - Other parts

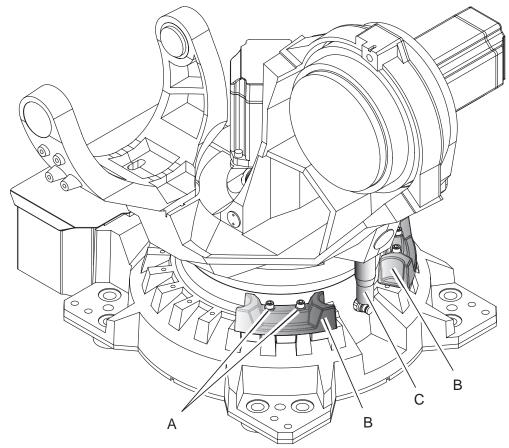
**UL Signal lamp** 



xx1300002243

# Continued

# Movable mechanical stop axis-1



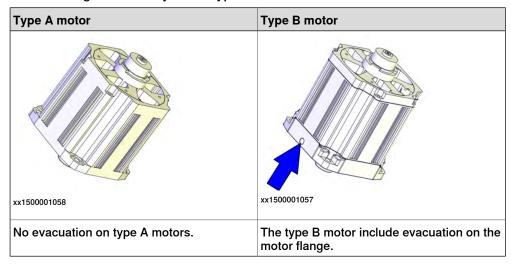
xx1300001971

# 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.



#### 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.



### 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 6700 for spare part numbers.

Robot axis	Article number Type A motor	Article number Type B motor	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85	300 /2.70	245 /3.00
1	3HAC045060-001	3HAC055433-001	Х	Х	Х	Х	Х	Х		
	3HAC051321-001	3HAC055442-001							Х	Х
2	3HAC045061-001	3HAC055434-001	Х	Х	Х	Х	Х	Х		
	3HAC051323-001	3HAC055443-001							Х	Х
3	3HAC045063-001	3HAC055435-001	Х	Х	Х	Х	Х	Х		
	3HAC051323-001	3HAC055443-001							Х	Х
4	3HAC045064-001	3HAC055436-001	Х	Х	Х	Х	Х	Х		
	3HAC045762-001	3HAC055449-001							Х	Х
5	3HAC045064-001	3HAC055436-001	X	Х	Х	Х	X	X	X	Х

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### Continued

	Article number Type A motor	Article number Type B motor	235 /2.65	205 /2.80	175 /3.05	150 /3.20	200 /2.60	155 /2.85		245 /3.00
6	3HAC045066-001	3HAC055445-001	X	X	X	X			X	X
	3HAC045067-001	3HAC055438-001					X	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	Fully 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.

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T type A motors, 71 type B motors, 71

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