



# Product manual, spare parts IRB 910SC

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**Product manual, spare parts**

**IRB 910SC-3/0.45**

**IRB 910SC-3/0.55**

**IRB 910SC-3/0.65**

**IRC5**

**Document ID: 3HAC056433-001**

**Revision: C**

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# Overview of this manual

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## About this manual

This manual contains spare parts for:

- IRB xxxx and all its variants.

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## Usage

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

- maintenance work
- repair work.

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## Who should read this manual?

This manual is intended for:

- maintenance personnel
- repair personnel.

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## Prerequisites

A maintenance/repair/installation craftsman working with an ABB Robot must:

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

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## Organization of chapters

The manual is organized in the following chapters:

| Chapter                        | Contents  |
|--------------------------------|---|
| Spare parts and exploded views | Complete spare part list and complete list of robot components shown in exploded views. |

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## References

Documentation referred to in the manual, is listed in the table below.

| Document name                      | Document ID    |
|------------------------------------|----------------|
| <i>Product manual - IRB 910SC</i>  | 3HAC056430-001 |
| <i>Circuit diagram - IRB 910SC</i> | 3HAC056159-002 |

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## Revisions

| Revision | Description  |
|----------|--|
| -        | First edition.   |
| A        | Spare part numbers of base and lifting label have been changed.  |
| B        | Published in release R16.2. The following updates are done in this revision: <ul style="list-style-type: none"><li>• Spare part item for the fixing calibration block of axes 3 and 4 removed and related spare part illustration updated. See <a href="#">Upper arm parts - body, covers, mechanical stop on page 12</a>.</li><li>• R3.CP/CS connector set removed.</li></ul> |

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| Revision | Description   |
|----------|---|
| C        | <p>Published in release R17.1. The following updates are done in this revision:</p> <ul style="list-style-type: none"><li>• The spare part number of the lower cover of the upper arm is changed from 3HAC055203-001 to 3HAC060106-001.</li><li>• Upper and lower axis-3 and axis-4 stop blocks of the ball screw spline unit are added as spare parts.</li></ul> |



# 1 Spare parts and exploded views

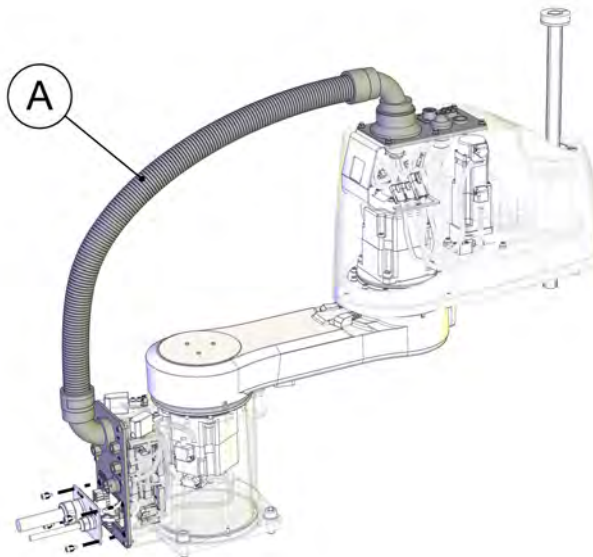
## 1.1 Spare parts - electrical parts

### Main cable parts

#### Spare part list

|   | Spare part number | Description        | IRB<br>910SC-<br>3/0.45 | IRB<br>910SC-<br>3/0.55 | IRB<br>910SC-<br>3/0.65 |
|---|-------------------|--------------------|-------------------------|-------------------------|-------------------------|
| A | 3HAC056165-001    | Main cable, 450 mm | X                       |                         |                         |
|   | 3HAC056080-001    | Main cable, 550 mm |                         | X                       |                         |
|   | 3HAC056166-001    | Main cable, 650 mm |                         |                         | X                       |

#### Spare part illustration



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### Control cable parts

#### Spare part list

|   | Spare part number | Description             | IRB<br>910SC-<br>3/0.45 | IRB<br>910SC-<br>3/0.55 | IRB<br>910SC-<br>3/0.65 |
|---|-------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| A | 3HAC057784-001    | Power floor cable, 3 m  | X                       | X                       | X                       |
|   | 3HAC057785-001    | Power floor cable, 7 m  | X                       | X                       | X                       |
|   | 3HAC057786-001    | Power floor cable, 15 m | X                       | X                       | X                       |

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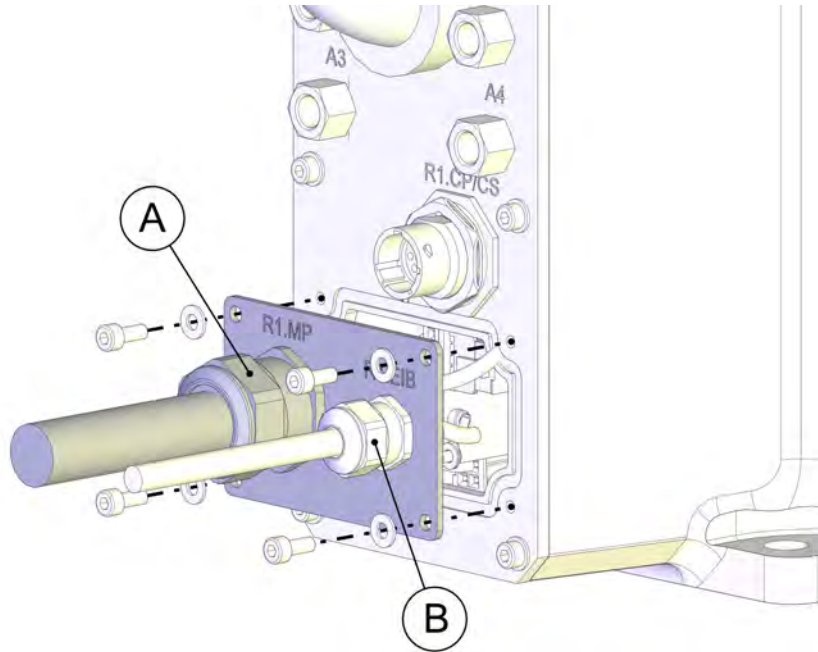
## 1 Spare parts and exploded views

### 1.1 Spare parts - electrical parts

*Continued*

|   | Spare part number | Description              | IRB 910SC-3/0.45 | IRB 910SC-3/0.55 | IRB 910SC-3/0.65 |
|---|-------------------|--------------------------|------------------|------------------|------------------|
| B | 3HAC057787-001    | Signal floor cable, 3 m  | X                | X                | X                |
|   | 3HAC057788-001    | Signal floor cable, 7 m  | X                | X                | X                |
|   | 3HAC057789-001    | Signal floor cable, 15 m | X                | X                | X                |

#### Spare part illustration



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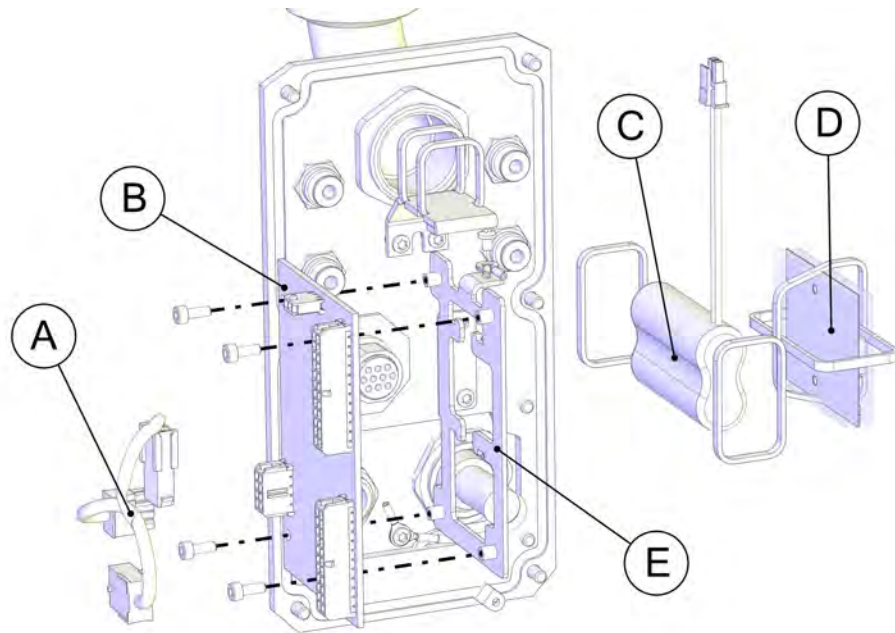
#### Cable harness parts

##### Spare part list

|   | Spare part number | Description            | IRB 910SC-3/0.45 | IRB 910SC-3/0.55 | IRB 910SC-3/0.65 |
|---|-------------------|------------------------|------------------|------------------|------------------|
| A | 3HAC056703-001    | EIB connection cable   | X                | X                | X                |
| B | 3HAC045759-001    | EIB unit               | X                | X                | X                |
| C | 3HAC051036-001    | Battery pack           | X                | X                | X                |
| D | 3HAC057687-001    | PCB board              | X                | X                | X                |
| E | 3HAC055165-001    | EIB mounting plate     | X                | X                | X                |
| - | 3HAC037038-001    | R1.CP/CS connector set | X                | X                | X                |
| - | 3HAC037070-001    | R3.CP/CS connector set | X                | X                | X                |

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#### Spare part illustration



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## 1 Spare parts and exploded views

### 1.2 Spare parts - upper arm

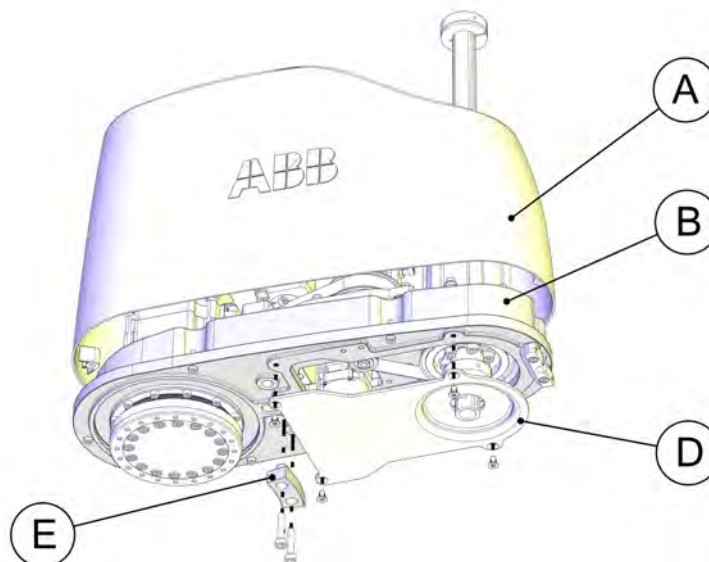
### 1.2 Spare parts - upper arm

#### Upper arm parts - body, covers, mechanical stop

##### Spare part list

|   | Spare part number | Description                  | IRB<br>910SC-<br>3/0.45 | IRB<br>910SC-<br>3/0.55 | IRB<br>910SC-<br>3/0.65 |
|---|-------------------|------------------------------|-------------------------|-------------------------|-------------------------|
| A | 3HAC057615-001    | Upper cover unit             | X                       | X                       | X                       |
| B | 3HAC057711-001    | Upper arm body               | X                       | X                       | X                       |
| D | 3HAC060106-001    | Lower cover                  | X                       | X                       | X                       |
| E | 3HAC055185-001    | Axis-2 mechanical stop block | X                       | X                       | X                       |

##### Spare part illustration



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#### Upper arm parts - Cable plate, ball screw spline unit, axis-2 drive unit

##### Spare part list

|   | Spare part number | Description                                   | IRB<br>910SC-<br>3/0.45 | IRB<br>910SC-<br>3/0.55 | IRB<br>910SC-<br>3/0.65 |
|---|-------------------|---|-------------------------|-------------------------|-------------------------|
| A | 3HAC056086-001    | Plate for upper arm cable harness             | X                       | X                       | X                       |
| B | 3HAC056153-001    | Axis-2 drive unit                             | X                       | X                       | X                       |
| C | 3HAC061259-001    | Upper axis-3 and axis-4 mechanical stop block | X                       | X                       | X                       |
| D | 3HAC056148-001    | Ball screw spline unit                        | X                       | X                       | X                       |

*Continues on next page*

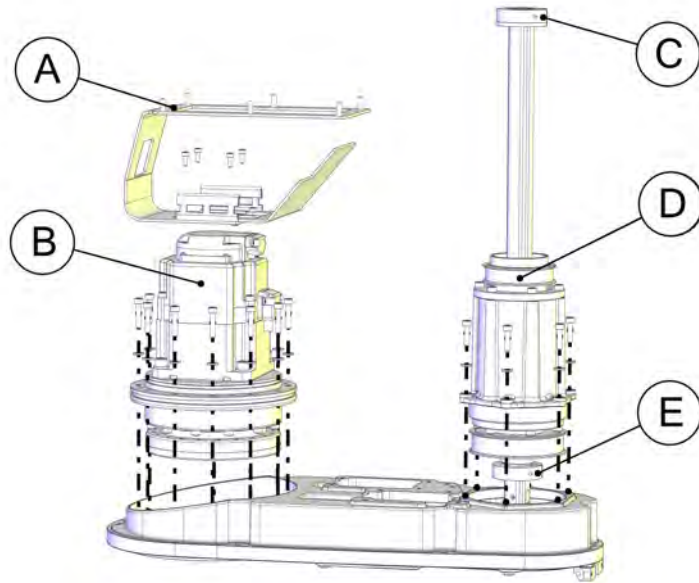
## 1 Spare parts and exploded views

### 1.2 Spare parts - upper arm

*Continued*

|   | Spare part number | Description                                   | IRB<br>910SC-<br>3/0.45 | IRB<br>910SC-<br>3/0.55 | IRB<br>910SC-<br>3/0.65 |
|---|-------------------|---|-------------------------|-------------------------|-------------------------|
| E | 3HAC055208-001    | Lower axis-3 and axis-4 mechanical stop block | X                       | X                       | X                       |

Spare part illustration



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#### Upper arm parts - Axis-3 drive unit parts

Spare part list

|   | Spare part number | Description                            | IRB<br>910SC-<br>3/0.45 | IRB<br>910SC-<br>3/0.55 | IRB<br>910SC-<br>3/0.65 |
|---|-------------------|--|-------------------------|-------------------------|-------------------------|
| A | 3HAC055209-001    | Axis-3 timing belt                     | X                       | X                       | X                       |
| B | 3HAC056111-001    | Axis-3 drive unit                      | X                       | X                       | X                       |
| C | 3HAC056650-001    | Adjusting block for axis-3 timing belt | X                       | X                       | X                       |
| D | 3HAC056937-001    | Plain washer                           | X                       | X                       | X                       |
| E | 3HAC055184-001    | Axis-3 drive unit housing              | X                       | X                       | X                       |

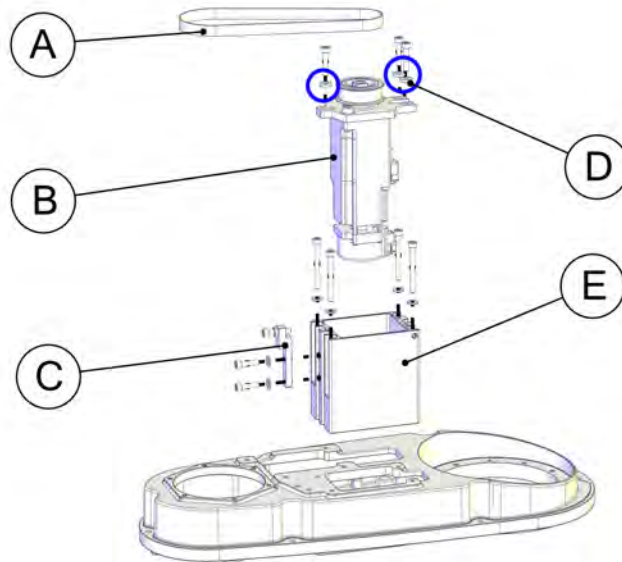
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## 1 Spare parts and exploded views

### 1.2 Spare parts - upper arm

*Continued*

Spare part illustration



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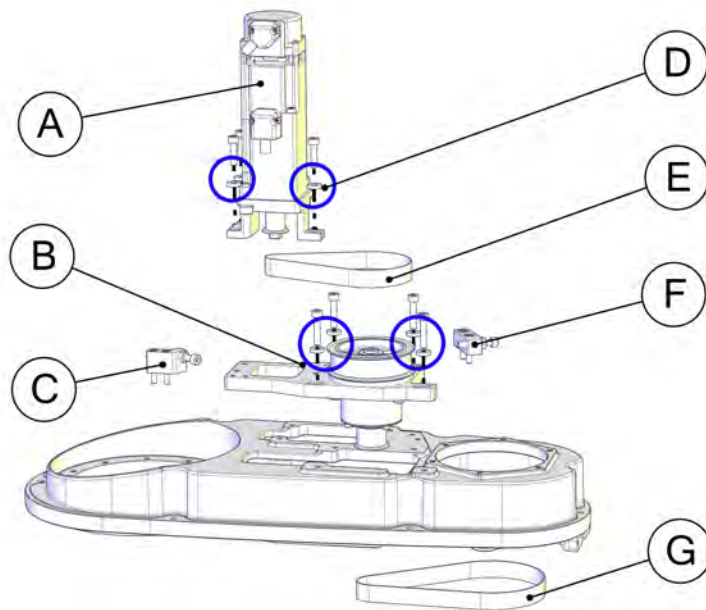
### Upper arm parts - Axis-4 drive unit parts

Spare part list

|   | Spare part number | Description                                  | IRB<br>910SC-<br>3/0.45 | IRB<br>910SC-<br>3/0.55 | IRB<br>910SC-<br>3/0.65 |
|---|-------------------|--|-------------------------|-------------------------|-------------------------|
| A | 3HAC056112-001    | Axis-4 drive unit                            | X                       | X                       | X                       |
| B | 3HAC056121-001    | Axis-4 housing with idler                    | X                       | X                       | X                       |
| C | 3HAC056651-001    | Adjusting block for upper axis-4 timing belt | X                       | X                       | X                       |
| D | 3HAC056937-001    | Plain washer                                 | X                       | X                       | X                       |
| E | 3HAC055206-001    | Upper axis-4 timing belt                     | X                       | X                       | X                       |
| F | 3HAC056652-001    | Adjusting block for lower axis-4 timing belt | X                       | X                       | X                       |
| G | 3HAC055201-001    | Lower axis-4 timing belt                     | X                       | X                       | X                       |

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#### Spare part illustration



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# 1 Spare parts and exploded views

## 1.3 Spare parts - lower arm

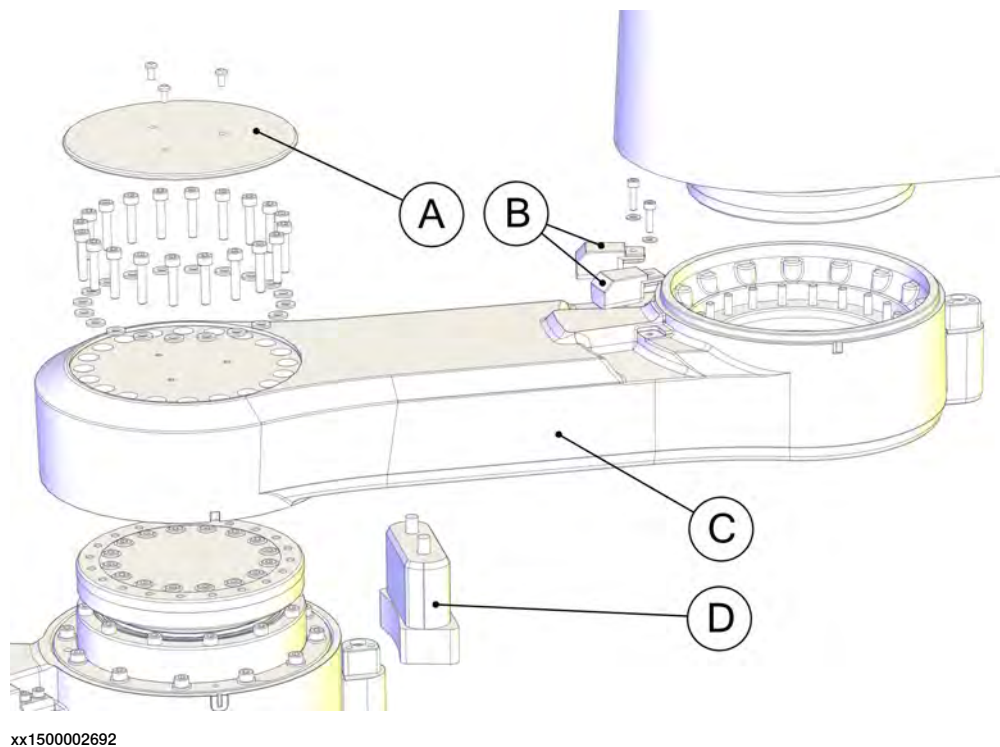
### 1.3 Spare parts - lower arm

#### Lower arm parts

##### Spare part list

|   | Spare part number | Description                   | IRB<br>910SC-<br>3/0.45 | IRB<br>910SC-<br>3/0.55 | IRB<br>910SC-<br>3/0.65 |
|---|-------------------|-------------------------------|-------------------------|-------------------------|-------------------------|
| A | 3HAC056065-001    | Lower arm cover               | X                       | X                       | X                       |
| B | 3HAC056017-001    | Axis-2 mechanical stop rubber | X                       | X                       | X                       |
| C | 3HAC057609-001    | Lower arm, 450 mm             | X                       |                         |                         |
|   | 3HAC057612-001    | Lower arm, 550 mm             |                         | X                       |                         |
|   | 3HAC057613-001    | Lower arm, 650 mm             |                         |                         | X                       |
| D | 3HAC055164-001    | Axis-1 mechanical stop block  | X                       | X                       | X                       |

##### Spare part illustration





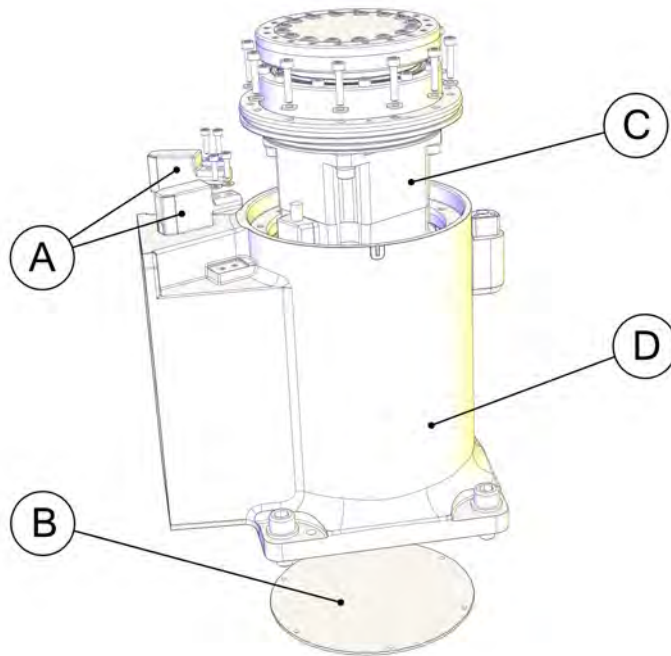
### 1.4 Spare parts - base

#### Base parts

#### Spare part list

|   | Spare part number | Description                   | IRB 910SC-3/0.45 | IRB 910SC-3/0.55 | IRB 910SC-3/0.65 |
|---|-------------------|-------------------------------|------------------|------------------|------------------|
| A | 3HAC056042-001    | Axis-1 mechanical stop rubber | X                | X                | X                |
| B | 3HAC055216-001    | Base bottom cover             | X                | X                | X                |
| C | 3HAC055900-001    | Axis-1 drive unit             | X                | X                | X                |
| D | 3HAC057614-001    | Base                          | X                | X                | X                |

#### Spare part illustration



# 1 Spare parts and exploded views

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## 1.5 Spare parts - drive units

### 1.5 Spare parts - drive units

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#### Axis-1 drive unit

The axis-1 drive unit is illustrated in the whole base assembly, see [Spare parts - base on page 17](#).

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#### Axis-2 drive unit

The axis-2 drive unit is illustrated in the upper arm assembly, see [Upper arm parts - Cable plate, ball screw spline unit, axis-2 drive unit on page 12](#).

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#### Axis-3 drive unit

The axis-3 drive unit is illustrated in the upper arm assembly, see [Upper arm parts - Axis-3 drive unit parts on page 13](#).

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#### Axis-4 drive unit

The axis-4 drive unit is illustrated in the upper arm assembly, see [Upper arm parts - Axis-4 drive unit parts on page 14](#).

### 1.6 Spare parts - information labels

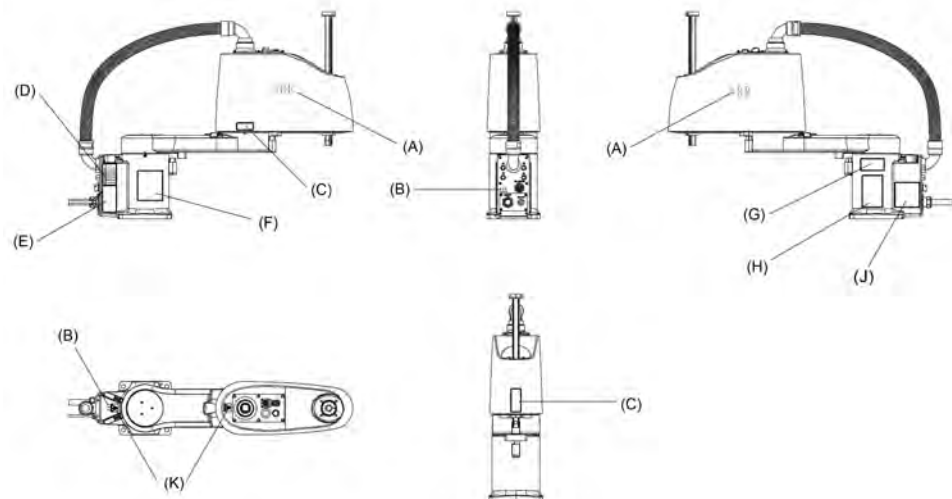
#### Information labels

##### Spare part list

|   | Spare part number | Description                          | IRB 910SC-3/0.45 | IRB 910SC-3/0.55 | IRB 910SC-3/0.65 |
|---|-------------------|--------------------------------------|------------------|------------------|------------------|
| A | 3HAC0453-2        | ABB logo, large size                 | X                | X                | X                |
| B | 3HAC0453-6        | ABB logo, small size                 | X                | X                | X                |
| C | 3HAC057089-001    | Calibration mark (axis 2)            | X                | X                | X                |
|   | 3HAC057090-001    | Calibration mark (axis 3 and axis 4) | X                | X                | X                |
| D | 3HAC13488-1       | Calibration label                    | X                | X                | X                |
| E | 3HAC057068-001    | Warning label<br>Risk of tipping     | X                | X                | X                |
| F | 3HAB9549-1        | Rating label                         | X                | X                | X                |
| G | 3HAC037252-001    | UL label                             | X                | X                | X                |
| H | 3HAC058299-001    | Lifting label                        | X                | X                | X                |
| J | 3HAC057070-001    | Instruction label                    | X                | X                | X                |
| K | 3HAC1589-1        | Warning sign<br>Electrical shock     | X                | X                | X                |

##### Spare part illustration

The figure shows all labels included in the labels and plate set.



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