# **Service Manual**





# **Label Printer**



Made in Germany

# 2 Service Manual

# for the following products

| Description   | Туре         |
|---------------|--------------|
| Label Printer | EOS1 / 200   |
|               | EOS1 / 300   |
|               | EOS1 / 200 C |
|               | EOS1 / 300 C |
|               | EOS4 / 200   |
|               | EOS4 / 300   |
|               | EOS4 / 200 C |
|               | EOS4 / 300 C |
|               | EOS4 / 200 P |
|               | EOS4 / 300 P |

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#### Topicality

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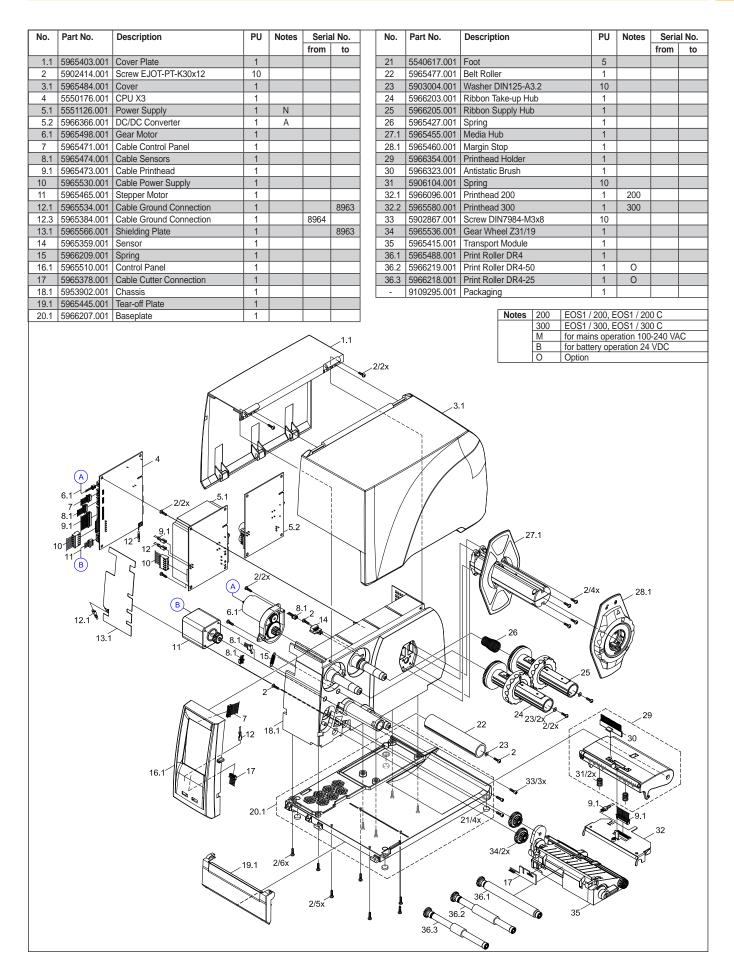
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# **Spare Parts - EOS1 Print Mechanics**



# 4 Spare Parts - Cutter EOS1 C

| No.  | Part No.    | Description    | PU | Notes   | Seria<br>Cut |                   |     | No.  | Part No.    | Description         | PU | Notes | Seria<br>Cut | al No.<br>tter |
|------|-------------|----------------|----|---------|--------------|-------------------|-----|------|-------------|---------------------|----|-------|--------------|----------------|
|      |             |                |    |         | from         | to                |     |      |             |                     |    |       | from         | to             |
| 37.1 | 5965987.001 | Cover          | 1  |         |              | 917               |     | 42   | 5965502.001 | Shaft               | 1  |       |              |                |
| 37.2 | 5966331.001 | Cover          | 1  |         | 918          |                   |     | 43   | 5965524.001 | Blade               | 1  |       |              |                |
| 38.1 | 5965529.001 | Cutter Module  | 1  |         |              | 917               |     | 44   | 5965528.001 | Blade               | 1  | İ     |              |                |
| 38.2 | 5966350.001 | Cutter Module  | 1  |         | 918          |                   |     | 45   | 5906221.001 | Spring              | 1  |       |              |                |
| 39   | 5540637.001 | Spring         | 1  |         |              |                   |     | 46.1 | 5965507.001 | Chassis             | 1  |       |              | 917            |
| 40   | 5965501.001 | Gear Wheel Z12 | 1  |         |              |                   |     | 46.2 | 5966912.001 | Chassis             | 1  |       | 918          |                |
| 41   | 5541379.001 | Gear Motor     | 1  |         |              |                   |     |      |             |                     |    |       |              |                |
|      |             |                |    | 37.37.2 |              | 39/2x<br>40<br>41 | 3.1 | 40   |             | 44 <sup>45/3x</sup> |    |       |              |                |

Note!

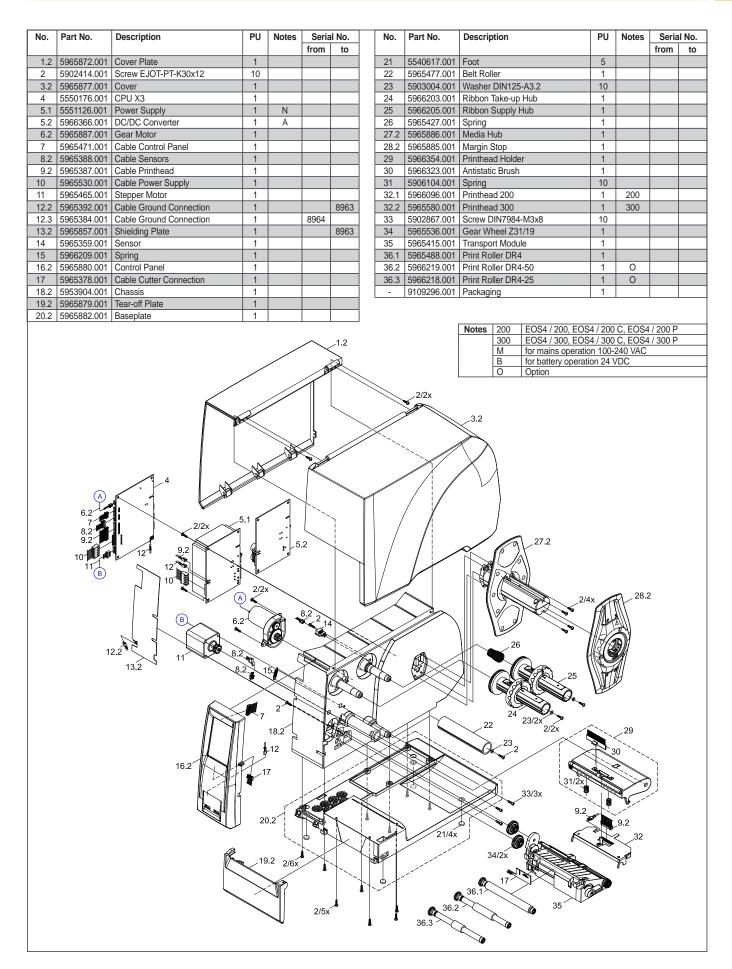
A

To upgrade the EOS1 up to SN 14372 with the Cutter EOS1 C to an EOS1 / 200 C or EOS1 / 300 C the Cable Cutter Connection (Art. No.: 5965378.001) must also be ordered .

# Spare Parts - External Unwinder EOS1/205

| No. | Part No.    | Description          | PU | Notes | Seria | I No. | No. | Part No.    | Description PU | Notes | Notes Seria | l No. |    |
|-----|-------------|----------------------|----|-------|-------|-------|-----|-------------|----------------|-------|-------------|-------|----|
|     |             |                      |    |       | from  | to    |     |             |                |       |             | from  | to |
| 2   | 5902414.001 | Screw EJOT-PT-K30x12 | 10 |       |       |       | 48  | 5965504.001 | Media Hub      | 1     |             |       |    |
| 47  | 5965349.001 |                      | 1  |       |       |       | 49  | 5959588.001 | Margin Stop    | 1     |             |       |    |
|     |             | 47                   |    | 2/4x  |       |       | 48  | 4           | 9              |       |             |       |    |

# **Spare Parts - EOS4 Print Mechanics**



# 6 Spare Parts - Cutter EOS4 C

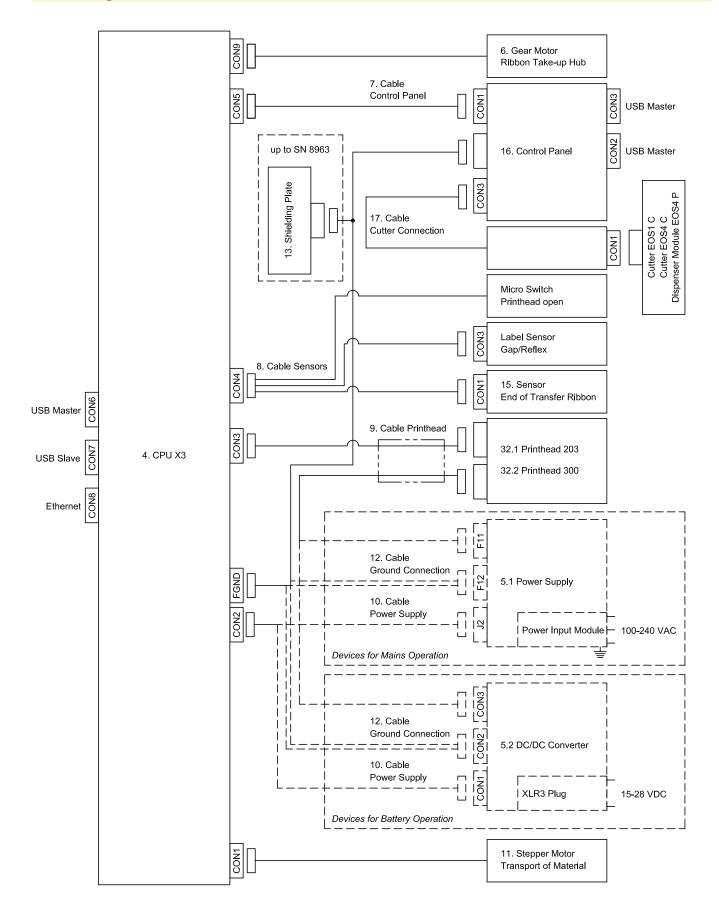
|      | Part No.    | Description    | PU | PU Notes Serial No. |      | No.   | Part No. | Description | PU      | Notes | Serial No. |      |    |
|------|-------------|----------------|----|---------------------|------|-------|----------|-------------|---------|-------|------------|------|----|
|      |             |                |    |                     | from | to    |          |             |         |       |            | from | to |
| 37.3 | 5966341.001 | Cover          | 1  |                     |      |       | 42       | 5965502.001 | Shaft   | 1     |            |      |    |
| 38.2 | 5966350.001 | Cutter Module  | 1  |                     |      |       | 43       | 5965524.001 | Blade   | 1     |            |      |    |
| 39   | 5540637.001 |                | 1  |                     |      |       | 44       | 5965528.001 | Blade   | 1     |            |      |    |
| 40   |             | Gear Wheel Z12 | 1  |                     |      |       | 45       | 5906221.001 | Spring  | 1     |            |      |    |
| 41   | 5541379.001 | Gear Motor     | 1  |                     |      |       | 46.2     | 5966912.001 | Chassis | 1     |            |      |    |
|      |             |                |    |                     |      | 39/2x |          |             | 445/3x  |       |            |      |    |

# Spare Parts - Dispenser Module EOS4 P

| No. | Part No.    | Description          | PU | Notes | Seria | I No. | No. | Part No.    | Description                | PU | Notes | Serial No. |    |
|-----|-------------|----------------------|----|-------|-------|-------|-----|-------------|----------------------------|----|-------|------------|----|
|     |             |                      |    |       | from  | to    |     |             |                            |    |       | from       | to |
| 2   | 5902414.001 | Screw EJOT-PT-K30x12 | 10 |       |       |       | 58  | 5905567.001 | Belt 68MXL 037             | 1  |       |            |    |
| 33  | 5902867.001 | Screw DIN7984-M3x8   | 10 |       |       |       | 59  |             | Ball Bearing DIN625-685-ZZ | 1  |       |            |    |
| 41  | 5541379.001 | Gear Motor           | 1  |       |       |       | 60  | 5965255.001 |                            | 1  |       |            |    |
| 50  | 5965273.001 |                      | 1  |       |       |       | 61  | 5903525.001 |                            | 10 |       |            |    |
| 51  | 5965285.001 | Cover                | 1  |       |       |       | 62  | 5965252.001 | Roller                     | 1  |       |            |    |
| 52  | 5965261.001 | Spring               | 1  |       |       |       | 63  | 5965260.001 | Dispense Plate             | 1  |       |            |    |
| 53  | 5965262.001 | Latch                | 1  |       |       |       | 64  | 5965259.001 |                            | 1  |       |            |    |
| 54  | 5965263.001 |                      | 1  |       |       |       | 65  | 5965258.001 |                            | 1  |       |            |    |
| 55  | 5965274.001 | Cover                | 1  |       |       |       | 66  | 5905013.001 |                            | 10 |       |            |    |
| 56  | 5902838.001 | Screw DIN7984-M3x6   | 10 |       |       |       | 67  |             | Dispense Plate             | 1  |       |            |    |
| 57  | 5965254.001 |                      | 1  |       |       |       | -   | 9109252.001 |                            | 1  |       |            |    |
|     | 50          | 50                   | ~  |       |       |       |     |             | 67<br>66/2x<br>56          |    | -     |            |    |

6

# **Block Diagram**



# 8 Technical Documents

| No. | Part. No.   | Description                  |   | Serial-No. |    |  |
|-----|-------------|------------------------------|---|------------|----|--|
|     |             |                              |   | from       | to |  |
| 1   | 9009113.001 | Operator's Manual EOS1 de/en | 1 |            |    |  |
| 2   | 9009118.001 | DVD EOS                      | 1 |            |    |  |

Further technical documents are available on the internet at www.cab.de in the menu "Support & Downloads".

# Tools

| No.     | Description                                        | Туре | Notes / Application                                      | Figure       |
|---------|----------------------------------------------------|------|----------------------------------------------------------|--------------|
| 3       | Torx screwdriver                                   | TX10 | replace printhead, adjust feed path of transfer ribbon   | Acamit Texas |
| 4       | Adjusting pliers<br>flat-nosed, form A<br>straight | 135  | dismount / mount of<br>ground connections and<br>springs |              |
| Table 1 | Tools                                              |      | -                                                        |              |

# Test Equipment

| No. | Description                                                                                                                                            | Туре  | Notes / Application                                                         | Figure |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------|--------|
| 5   | Cylindrical<br>dynamometer<br>(spring scale)<br>cab Part No. 5966017<br>to use with cylinder<br>test collar Pos. 6                                     | 0-5 N | adjusting the winding<br>torques<br>transfer ribbon supply hub<br>1,6 - 2 N |        |
| 6   | Cylinder Test Collar<br>cab Part No. 5966016<br>approx. 1 m string<br>with 30 N traction and<br>not elastic)<br>cab specific tools /<br>test equipment |       | adjusting the winding<br>torques<br>transfer ribbon supply hub              |        |



# Auxiliary Materials

| No. | Description                                                | Туре | Notes / Application      | Figure |
|-----|------------------------------------------------------------|------|--------------------------|--------|
| 7   | Grease (for plastic<br>materials),<br>cab Part No. 5966279 |      | grease plastic materials |        |

# **Checking Braking Force**

During printing operation the spring on the transfer ribbon supply hub functions as a brake. The braking force on the supply hub influences the transport of the transfer ribbon.

The braking force on the transfer ribbon supply hub is measured with a test collar.

The set values for the braking force at the test collar are:

| Spring on                  | Direction of rotation | Braking Force |
|----------------------------|-----------------------|---------------|
| Transfer Ribbon Supply Hub | any direction         | 1,6 - 2,0 N   |

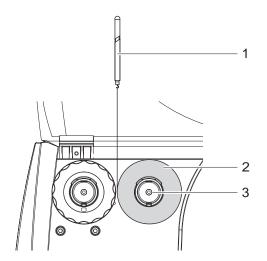


Fig. 1 Measure braking force on supply hub - outside wound transfer ribbon

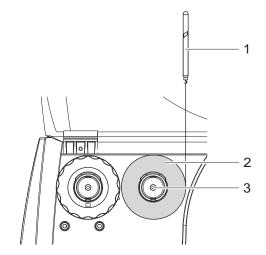


Fig. 2 Measure braking force on supply hub - inside wound transfer ribbon

- 1. Remove transfer ribbon from the printer.
- 2. Put test collar (2) on the supply hub (3).
- 3. Wind the cord around the test collar several times.
- 4. Secure spring scale (1) at the end of the cord.
- 5. Pull at the spring scale until the supply hub begins turning.
- 6. Allow the cord to unwind from the test collar at least one full turn and read the pulling force on the spring scale at the same time.
- 7. Compare the braking force with the set values.

## **Adjustments**

The following adjustments are described in the Operator's Manual:

• Setting the feed path of the transfer ribbon



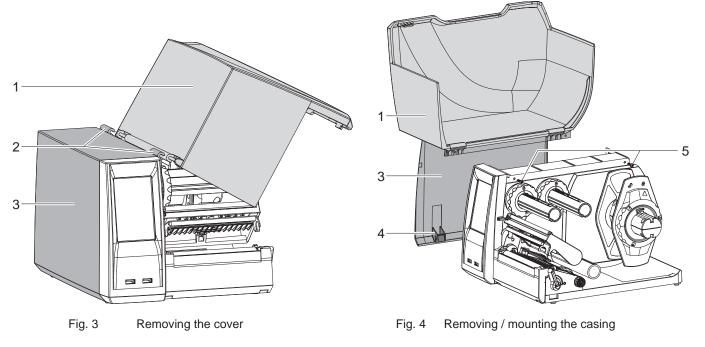
# Danger!

Risk of death via electric shock!
Before opening the rear cover, disconnect the device from the mains supply and wait at least one minute until the power supply unit has discharged.

# Tear-off Plate / Cutter / Printhead / Print Roller

Replacement and mounting of these units are described in the  $\triangleright$  Operator's Manual EOS.

# Casing



### Removing the cover

- ▶ Lift the cover (1) by turning by 60°.
- Push the cover out of the hinges (2) of the cover plate (3) diagonally to the ground.

### Notice!

i

For service work it is recommended to remove the casing consisting of cover (1) and cover plate (3) connectedly. It is not necessary to separate the cover from the cover plate.

#### Removing the casing

- Open the cover (1).
- Loosen 2 screws (5).
- Push the cover plate (3) with the cover (1) to the connector side.
- ▶ Lift the cover plate (3) with the cover (1) from the printer.

#### Mounting the casing

- ▶ Insert the hooks (4) into the slot of the bottom and push the casing to the control panel side.
- Fix the cover plate with 2 screws (5).

# **Replacing Assembly Units**

# **Control Panel**

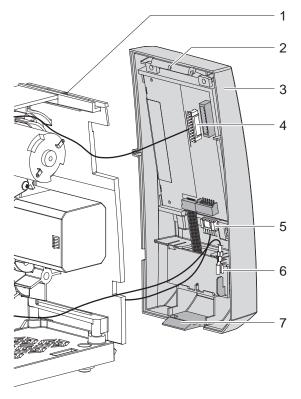


Fig. 5 Removing / mounting the control panel

## Removing

- Remove the casing.
- ▶ Unlock the control panel (3) at the latch (7) swing it away from the printer and remove it by lifting.
- Unplug the connectors of the display cable (4), the cutter connection cable (5) and the ground connection cable (6).

## Mounting

- Re-connect the cables (4 to 6).
- Hook the slot (2) of the cover into the guide (1) and press the control panel against the printer until the latch (7) clicks into place.
- Mount the casing.

# 12 Replacing Assembly Units

# **Transport Module**

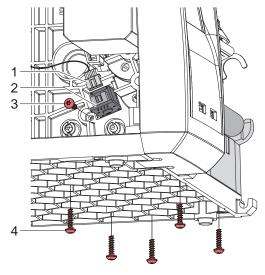


Fig. 6 Removing / mounting transport module 1

## Removing

- Remove the tear-off plate/cutter.
- Remove the casing.
- Unplug the connector (1) of the label sensor (2).
- ▶ Move the label sensor as far as possible to the operator's side ▷ Operator's Manual.
- Remove screw (3) and 5 screws (4).

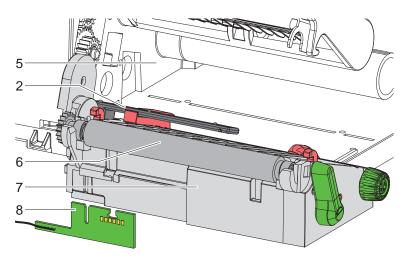


Fig. 7 Removing / mounting transport module 2

- If the printer is equipped with a cutter connection cable :
  - Remove control panel.
  - Unplug connector (5 / fig. 5) from the control panel.
- Remove the transport module (7) with the printing roller (6) by tilting from the chassis (5).
- ▶ Pull the cutter connection cable (8) downward out of the transport module (7).

#### Mounting

Mount the assembly units in reverse order.

# **Replacing Assembly Units**

# **Stepper Motor**

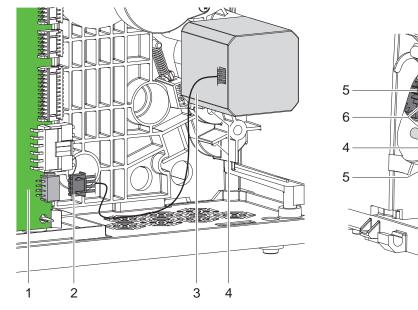


Fig. 8 Removing / mounting stepper motor 1

### Removing

- Remove the casing
- Remove the transport module.
- ▶ Unplug the connector (2) of the stepper motor (3) from the CPU (1).
- Remove the gearwheels (5) from the axles (6).

# Notice!

i.

The gearwheels (5) are reachable from the inner side of the chassis through the holes (4) with a pointed tool and can be pushed that way from the axles.

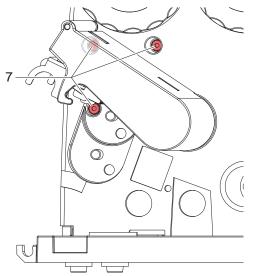


Fig. 9 Removing / mounting stepper motor 2

▶ Loosen 3 screws (7) and remove the stepper motor (3).

### Mounting

Mount the assembly units in reverse order.

# **Printhead Holder**

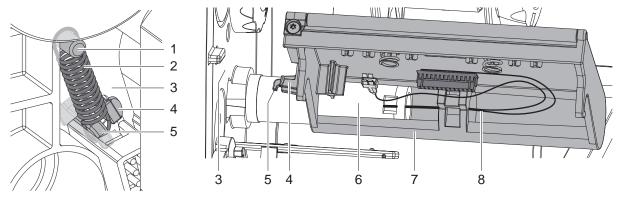


Fig. 10 Removing / mounting printhead holder

## Removing

- Remove the casing.
- Remove the printhead.
- Remove the spring (2) from the spring bolt (1).
- Lift the printhead holder (7), unlock the latch (4) and push the printhead holder with the spring (2) to the operator's side out of the chassis (3).
- Remove the printhead holder (7) with the spring (2) completely from the retainer (6). In doing so remove the printhead cable (8) from the printhead holder.
- Keep the spring (2).

## Mounting

- Push the printhead holder (7) onto the retainer (6). In doing so insert the printhead cable (8) into the printhead holder.
- ▶ Push latch (4) and spring hook (5) of the printhead holder through the gap of the chassis (3).

### Notice!

f

For the following mounting of the spring (2) it is recommended to push the printhead holder in a position, where the latch (4) is clamped by the chassis but not completely locked yet.

- Mount the spring (2) onto the spring hook (5).
- Push the printhead holder (7) further until the latch (4) clicks into place.
- Mount the spring (2) onto spring bolt (1).
- Mount the printhead.
- Mount the casing.