## **Servicing Instructions Work Chair**

Troubleshooting, re-use, and destruction



Servicing, inspection, and repairs may only be carried out by personnel who possess the relevant technical knowledge of the product in order to maintain the validity of the CE mark. No-one may sit in the product whilst it is being serviced.

Customised products can be restored if the relevant parts are replaced with original parts from Eurovema and the restoration is carried out by an authorised technician. A new label showing the CE mark can be ordered.

During servicing, it is important that a visual inspection of the product's metal components is carried out in order to rule out the presence of damage or cracks that may impact the safety of the product. Check brakes, seat functions, tilt and lift, attachment, and function.

Any defects identified must be addressed. If parts need to be replaced, only Eurovema original parts must be used - except in the case of screws and nuts, where replacements of the right model, length, and grade are to be sourced.

Instructions about how to fit/remove and adjust components can be found on our website in the section **Assembly Instructions**.

Instructions in respect of batteries and electronics can also be found on the website in the section **Batteries and Electronics**.

Suitable tools

Allen key kit Torx wrench kit Box wrenches 8,10, 13, 17, 19mm Flat head screwdrivers Phillips screwdrivers Snips

## Troubleshooting

#### Manual chairs

Symptom	Cause	See assembly instructions or separate instruction
Brakes do not engage well or allow the chair to move when the central brake is applied	Wheel brake incorrectly adjusted	Centrally braked wheels
Brakes do not engage well or allow the chair to move when cable brake is applied	Brake cables incorrectly adjusted	Seat-mounted brake.
Gas seat lift does not work	Cables incorrectly adjusted or gas spring broken	Gas piston
Seat tilt gas spring does not work	Cables incorrectly adjusted or gas spring broken	Seat tilt gas spring
Seat rotation cannot rotate or doe not lock	Lock mechanism broken or loose	Seat rotation
Back tilt gas spring does not work	Cables incorrectly adjusted or gas spring broken	Gas back tilt
Accessory not functioning	Wear, incorrectly fitted, or damaged.	For the accessory

## Troubleshooting

#### **Electric chairs**

Symptom	Cause	See assembly instructions or separate instruction
Brakes do not engage well or allow the chair to move when the central brake is applied	Brake incorrectly adjusted at wheel	Centrally braked wheels
Brakes do not engage well or allow the chair to move when cable brake is applied	Brake cables incorrectly adjusted	Seat-mounted brake
Electric brake not working	Actuator broken, cable break. Battery discharged	Electric brake, battery, circuit diagram
Seat lift does not work	Lifting pillar broken, cable break. Battery discharged	Lifting pillar, battery, circuit diagram
Electric seat tilt does not work	Actuator broken, cable break. Battery discharged.	Electric tilt, battery, circuit diagram
Electric back tilt does not work	Actuator broken, cable break. Battery discharged	Electric back, battery, circuit diagram
No electrical functions working	Battery discharged, thermal fuse tripped, or damaged cabling.	See separate instruction for battery. Circuit diagram.
Accessory not functioning	Wear, incorrectly fitted, or damaged	For the accessory

# Reconditioning

In this instruction, "reconditioning" does not constitute a full refurbishment as outlined in Regulation (EU) 2017/745 MDR with the aim of reintroducing the product on the market with a reset expected service life.

Products that are prescribed by a licensed medical practitioner are not subject to periodic maintenance requirements. The prescriber and care organisation are responsible for following-up the prescription.

The reconditioning instructions state that products sold directly to the user without prescription must undergo periodic maintenance at least every two years.



Care must be taken when carrying out servicing work on the product as incorrect assembly or disassembly may result in crushing or other form of injury.



Check that all components are correctly fitted and screw joints are firmly tightened. All cables must be secured using cable ties.



No-one may sit in the chair whilst it is being serviced, with the possible exception of when armrests and leg supports are being replaced, and then provided that steps are taken to ensure that the person cannot fall out of the chair.



Only use denatured alcohol in a well-ventilated area and away from any naked flames.



There is a risk of burn injury if metal jewellery comes into contact with battery terminals.

## Service points and intervals

In order to ensure the usability of the product for the duration of its expected service life, the following servicing schedule should be followed.

1= visual inspection	2= function test	3= replacement	4= lubrication 5= cleaning
6= adjustment if nec	essary 7= check s	crew joint tightenir	ng

Service point	year 2	year 4	year 6	year 8
Chassis: Screw joints, welds, cracks	1, 7	1, 7	1, 7	1, 7
Wheels: Screw joints, bearings, wear	1, 2, 5	1, 2, 5	1.2, 5	1, 2, 5
tracks, rims				
Wheel forks: Fork, bearings, play,	1, 2, 5	1, 2, 5	1, 2, 5	1, 2, 5
Chassis-mounted brake:	1, 2, 6	1, 2, 6	1, 2, 6	1, 2, 6
Seat-mounted brake:	1, 2, 4, 6	1 ,2, 4, 6	1, 2, 4, 6	1, 2, 4, 6
Seat lift, gas:	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7
Seat lift, electric:	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7
Seat cross:	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7
Seat and back tilt device, manual:	1, 2, 4, 5, 7	1, 2, 4, 5, 7	1, 2, 4, 5, 7	1, 2, 4, 5, 7
Seat and back tilt device, electric:	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7
Back mechanism:	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7
Width adjuster, armrest:	1, 2, 5	1, 2, 5	1, 2, 5	1, 2, 5
Height adjuster, armrest:	1, 2, 5	1, 2, 5	1, 2, 5	1, 2, 5
Footplate, leg support:	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7
Seat, back cushions:	1, 5, 7	1, 5, 7	1, 5, 7	1, 5, 7
Armrest cushions:	1, 5, 7	1, 5 , 7	1, 5, 7	1, 5, 7
Battery:	2	2, 3	2	2, 3
Electronics, control units:	1, 2, 5	1, 2, 5	1, 2, 5	1, 2, 5
Cabling:	1	1	1	1
Lock wheels, lever knob:	1, 2, 4, 5	1, 2, 4, 5	1, 2, 4, 5	1, 2, 4, 5
Accessories:	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7	1, 2, 5, 7

#### Tightening torque, tightened screw joint in accordance with EN 1090-2

Metric coarse thread / fine thread durability class compliant with ISO-898-1:2013

Coarse thread		Fine threa	Fine thread			
Grade	8.8	10.9		8.8	10.9	
M4	2.9N	4.0N	M4*0.5	3.1N	4.3N	
M5	5.7N	8.1N	M5*0.5	6.2N	8.7N	
M6	9.8N	14N	M6*0.75	10N	15N	
M8	24N	33N	M8*1	25N	35N	
M10	47N	65N	M10*1.25	48N	68N	
M12	81N	114N	M12*1.5	83N	117N	
			M12*1.25	85N	120N	

## Reconditioning

### Reconditioning instructions for Sigma Work Chair

Eurovema chairs are intended to be reused throughout their expected service life.

For relevant service life, see product manual. Reconditioning does not mean that the expected service life of the chair is extended.

Specially adapted products may be restored provided that such restoration has been carried out by an authorised assistive device technician and that modified parts have been replaced with original parts. If a new label is required, notify Eurovema and quote the chair serial number.

#### Cleaning

The product can be flushed with water. **Do not use a high pressure washer or washing cabinet** and remove stuffed parts. Electronics protection class IP65.

Clean the chassis using a mild detergent/non-abrasive disinfectant. Only use agents that have been approved by the Swedish Medical Products Agency. Only use denatured alcohol in a well-ventilated area and away from any naked flames.

Upholstery on stuffed parts can be cleaned using upholstery cleaner/foam cleaner. Replace worn/heavily soiled cushions.

Removable covers can be machine washed at 60 degrees, see washing advice label on the inside of the cover.



There is a risk of crush injury if the correct procedure is not followed.

#### 1.Chassis

1.1 Check that chassis is not damaged or shows signs of cracking. If visible damage is found, the damaged part must be replaced with a perfect original part before the chair is put back into use.

1.2 The wheels must have a low roll resistance and there must be no damage on the rubber tracks. Any hair that has collected around the bearings in the hub must be removed. Replace any defective wheels with perfect original wheels. **See Assembly Instructions, Sigma chassis wheel**.

1.3 The wheel forks must swing without resistance. Replace defective wheels/forks with perfect original wheels, **see Assembly Instructions, Sigma wheel chassis.** Check that all wheels are in contact with the floor on a flat surface.

1.4 Try rolling the chair, loaded and unloaded, on a flat surface. It should not swing significantly. If the chair veers abnormally to one side, check the wheel forks and chassis.

#### 2. Brakes

2.1 Check that the brakes engage properly and that the brake lever is securely screwed in position. On chairs with seat-mounted brakes, check cables and lubricate if necessary. If it is not possible to achieve the approved braking effect on a chair with single wheels, make the adjustment on the wheels, **see Assembly Instructions, brake lever, wheels braked, seat-mounted brake.** 

2.2 If the brakes do not fully disengage in unbraked position on a chair with cable brakes, the cables must be adjusted, **see instructions for adjusting seat-mounted brakes**.

#### 3. Lifting actuator, Electric

3.1 Check that the actuator is firmly attached to the chassis by four M8 screws in the bottom part of the chassis, inserted from the underside.

3.2 Listen for any abnormal noises from the lifting pillar. Raise the seat to its highest position and wipe the lifting pillar with a cloth. If there is any play or any abnormal noise can be heard, the pillar must be replaced with a perfect original part, **see Assembly Instructions, Sigma work chair lifting pillar** 

#### 4. Lifting device, gas

4.1 Check that the gas piston sits securely in the chassis and does not rotate, **see Assembly Instructions, Sigma gas pillar** 

4.2 Check that the seat lift goes all the way up. If you feel that it is seizing or is falling more than normal whilst under load, or if the seat rises unintentionally whilst not under load, adjust the cable tension screw, If this does not remedy the issue, there is a fault in gas piston and it need to be replaced with a perfect original part. **See Assembly Instructions, Sigma work chair gas piston**.

#### 5. Seat cross

5.1 Check that there is no abnormal play between moving parts.

5.2 Perform a visual inspection of the cross, paying particular attention to weld joints in order to ensure that no cracks have formed. If you suspect that cracks have formed or that there is any other form of damage, replace the seat cross with a perfect original part. **See Assembly Instructions, Sigma seat cross** 

5.3 Check that the seat cross tilt axle is tightened. If there is abnormal play between the upper and lower section, the axle must be removed for inspection. If the axle is intact, the seat cross is worn or damaged and must be replaced with a perfect original part, **See Assembly Instructions, Sigma seat cross** 

5.4 Check the armrest, back support, and leg support attachments. These must be adjustable without seizing and do not become scratched when adjusted. It must be possible to tighten lock wheels/levers without seizing, lubricate threads with grease.

#### 6. Electronics

6.1 Connect the charger and check that charging starts. **Charging instructions can be found in the User Manual** 

6.2 Charge the battery to full. Test all electrical functions a few times.

6.3 Check that all cables are undamaged and secured so that they cannot be crushed.

#### 7. Battery

7.1 Check attachment and that the cabling is intact.

7.2 Charge the battery to full and test electrical functions under load. If the capacity of the battery falls significantly after a short period of use, the battery must be replaced with a new original part. **See Assembly Instructions, Sigma battery** 

## Reconditioning

### Reconditioning Instructions, Flexbase, Junior, Basic & EXL

Eurovema chairs are intended to be reused throughout their expected service life.

For relevant service life, see product manual. Reconditioning does not mean that the expected service life of the chair is extended.

Specially adapted products may be restored provided that such restoration has been carried out by an authorised assistive device technician and that modified parts have been replaced with original parts. If a new label is required, notify Eurovema and quote the chair serial number.

#### Cleaning

Do not clean using a high pressure washer or washing cabinet, water, or any other liquid! Clean the chassis using a mild detergent/non-abrasive disinfectant. Only use agents that have been approved by the Swedish Medical Products Agency. Only use denatured alcohol in a well-ventilated area and away from any naked flames.

Upholstery on stuffed parts can be cleaned using upholstery cleaner/foam cleaner. Replace worn/heavily soiled cushions.

Loose covers can be machine washed at 60 degrees



There is a risk of crush injury if the correct procedure is not followed.

#### 1.Chassis

1.1 Check that chassis is not damaged or shows signs of cracking. If visible damage is found, the damaged part must be replaced with a perfect original part before the chair is put back into use, **see Assembly Instructions for the relevant chassis** 

1.2 M10 screw *Flexbase* that connects the chassis halves together is torque tightened to 78Nm. If the screw is to be replaced, Locktite 2700 permanent thread lock must be used, along with a spring washer, **see Assembly Instructions, Flexbase chassis** 

1.3 The wheels must have a low roll resistance and there must be no damage on the rubber tracks. Any hair that has collected around the bearings in the hub must be removed. Replace defective wheels with perfect original wheels, **see Assembly Instructions, relevant chassis.** 

1.4 The wheel forks must swing without resistance. Replace any defective wheels/forks with perfect original wheels, see Service Manual. Check that all wheels are in contact with the floor on a flat surface.

1.5 Try rolling the chair, loaded and unloaded, on a flat surface. It should not swing significantly. If the chair veers abnormally to one side, check the wheels, forks, and chassis.

#### 2. Brakes

2.1 Check that the brakes engage properly and that the brake lever is securely screwed in position. On chairs with seat-mounted brakes, check cables and lubricate if necessary. If it is not possible to achieve the approved braking effect on a chair with single wheels, adjust the brake shoe on the underside of the wheel fork using an Allen key. See **Assembly Instructions, centrally braked single wheel, adjustment instructions, seat-mounted brake** 

2.2 If the brakes do not fully disengage in unbraked position on a chair with cable brakes, the cables must be adjusted, **see separate instructions for adjusting seat-mounted brakes**.

#### 3. Lifting actuator, Electric

3.1 Check that the actuator sits securely in the chassis and does not rotate. Check ground clearance under the lifting device.

#### See Assembly Instructions, lifting device for the relevant chassis.

3.2 Listen for any abnormal noises from the electric actuator. Raise the seat to its highest position, wipe the lifting pillar clean with a cloth and then lubricate pillar with thin oil. If there is any play or any abnormal noise can be heard, the pillar must be replaced with a perfect original part, **see Assembly Instructions, lifting device for the relevant chassis.** 

3.3 Test operate the lifting actuator in the chair

#### 4. Lifting device, gas

4.1 Check that the gas piston sits securely in the chassis, does not rotate, and the ground clearance is correct, **see Assembly Instructions, lifting device for the relevant chassis** 

4.2 Check that the seat lift goes all the way up. If you feel that it is seizing or is falling more than normal whilst under load, or if the seat rises unintentionally whilst not under load, check the play between the lifting lever and the gas spring activation pin. If the correct amount of play is present, there is a fault in gas piston and it need to be replaced with a perfect original part. **See the Service Manual.** 

4.3 Check the the clamp jaws connecting the seat cross to the gas piston are properly tighten, **see Assembly Instructions, gas piston in seat cross for the relevant chair model** 

#### 5. Seat cross

5.1 Check that there is no abnormal play between moving parts.

5.2 Perform a visual inspection of the cross, paying particular attention to weld joints in order to ensure that no cracks have formed. If you suspect that cracks have formed or that there is any other form of damage, replace the seat cross with a perfect original part. **See Assembly Instructions, seat cross for the relevant chair model**.

5.3 Check that the seat cross tilt axle is tightened. If there is abnormal play between the upper and lower section, the axle must be removed for inspection. If the axle is intact, the seat cross is worn or damaged and must be replaced with a perfect original part, **See Assembly Instructions, seat cross for the relevant chair model.** 

5.4 Check the armrest, back support, and leg support attachments. These must be adjustable without seizing and do not become scratched when adjusted. It must be possible to tighten lock wheels/levers without seizing, lubricate threads with grease.

#### 6. Electronics

6.1 Connect the charger and check that charging starts. Charging instructions can be found in the User Manual.

6.2 Charge the battery to full and test all electrical functions.

6.3 Check that all cables are undamaged, secured, and cannot be crushed.

#### 7. Battery

7.1 Check attachment and that the cable and connector are intact.

7.2 Charge the battery to full and test electrical functions under load. If the capacity of the battery falls significantly after a short period of use, the battery must be replaced with a new original part. **See Assembly Instructions, battery for the relevant chair model.** 

## **Reconditioning checklist**

Sigma Work Chair

Eurovema Mobility products are intended to be reused during their expected service life. Reconditioning does not mean that the expected service life of the chair is extended. **Cleaning** 

The product may be flushed with water, but not using a high pressure washer, provided that stuffed parts have been removed. Chair electronics are rated as protection class IP65.

Metal parts are to be cleaned using a mild detergent of pH 7 - 12, e.g. soap solution, or appropriate cleaning cloths. Disinfectant of a grade approved by the Swedish Medical Products Agency may be used. Let the disinfectant sit for 1 - 5 minutes and leave to air dry. Only use denatured alcohol in a well-ventilated area and away from any naked flames.

Upholstery on padded parts can be cleaned using upholstery cleaner. Removable covers are machine washable at 60°, see washing instructions on label.

Reconditioning instructions pertaining to these points can be found in the Service Manual



#### There is a risk of crush injury if the correct procedure is not followed.

1.	Chassis	Approved	Comments
1.1	Visually inspect the entire chassis.		
1.2	Check screw joints.		
1.3	Link wheel, attachment, function, wear.		
1.4	Link wheel forks, attachment, bearings.		
1.5	Check wheel contact with surface.		

#### 2. Brakes

2.1	Check that braked wheels lock.	
2.2	Try to release the brakes.	

#### 3. Lifting pillar, electric

3.1	Check screw joints in chassis.	
3.2	Test operate, listen for abnormal noise.	
3.3	Test operate with someone sitting in the chair.	

#### 4. Seat lift, gas

4.1	Fastening	
4.2	Function	

#### 5. Seat cross

5.1	Check play	
5.2	Visual inspection	
5.3	Tilt axle	
	Attachment of armrests, back support, leg support	

#### 6. Electronics

6.1	Charging	
6.2	Test of all electrical functions	
6.3	Cables correctly routed, protected	

### 7. Battery

7.1	Cabling	
7.2	Test of electrical functions.	

### Product

### serial number

**Reconditioned by** 

### Date

## Reconditioning checklist, work chair

Flexbase, Junior, Basic & EXL

Eurovema Mobility products are intended to be reused during their expected service life. Reconditioning does not mean that the expected service life of the chair is extended. **Cleaning** 

The product may not be cleaned using a high pressure washer or washing cabinet.

Metal parts are to be cleaned using a mild detergent of pH 7 - 12, e.g. soap solution, or appropriate cleaning cloths. Disinfectant of a grade approved by the Swedish Medical Products Agency may be used. Let the disinfectant sit for 1 - 5 minutes and leave to air dry. Only use denatured alcohol in a well-ventilated area and away from any naked flames.

Upholstery on padded parts can be cleaned using upholstery cleaner. Removable covers are machine washable at 60°, see washing instructions on label.

Reconditioning instructions pertaining to these points can be found in the Service Manual



There is a risk of crush injury if the correct procedure is not followed.

1.	Chassis	Approved	Comments
1.1	Visually inspect the entire chassis.		
1.2	Check screw joints.		
1.3	Link wheel, attachment, function, wear.		
1.4	Link wheel forks, attachment, bearings.		
1.5	Check wheel contact with surface.		

#### 2. Brakes

2.1	Check that braked wheels lock.	
2.2	Try to release the brakes.	

#### 3. Lifting pillar, electric

3.1	Check screw joints in chassis.	
3.2	Test operate, listen for abnormal noise.	
3.3	Test operate with someone sitting in the chair.	

#### 4. Seat lift, gas

4.1	Fastening	
4.2	Function	

#### 5. Seat cross

5.1	Check play	
5.2	Visual inspection	
5.3	Tilt axle	
	Attachment of armrests, back support, leg support	

#### 6. Electronics

6.1	Charging	
6.2	Test of all electrical functions	
6.3	Cables correctly routed, protected	

#### 7. Battery

7.1	Cabling	
7.2	Test of electrical functions.	

Product

### serial number

Reconditioned by

### Date

## **Destruction Instructions**

Products that are to be permanently put out of use must be disassembled and sorted at source. Assembly and disassembly instructions can be found on the **eurovema.se** website in the Assembly Instructions section, along with exploded diagrams in the Exploded Diagrams section. Removed components are to be sorted in accordance with the **table below**.



The disassembly process is not risk-free. There is a risk of crush injury and burn injury if the correct procedure is not followed. Disassembly must be carried out by an authorised technician

Metal	Electronics	Combustible
Chassis	Control electronics	Seats
Seat cross	Connection boxes	Back support
Back mechanism	Hand controls	Armrest cushions
Armrest posts	Rocker switches	Removable covers
Leg supports	Cables	Neck support cushions
Attachments on accessories	Lifting pillar, electric	Trunk support cushions
Seat lift, gas	Electric actuator	Other filling materials
Foot ring		Empty battery box
-		

Batteries Discarded lead batteries must be taken to a recycling station.



Notes	

Eurovema

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