



# FRICTION TRANSPORTER TPE 100 INSTALLATION & SERVICE MANUAL

2021-01-18

**Original Instructions** 



## Installation.

The TPE 100 must be mounted so that the tray can move without obstruction in both directions. Mount the Transporter so that no risk of crushing hazard might occur to personnel. The TPE 100 should be connected to 380 V 3 phase 16 A via a motor protection circuit breaker.

## Direction of rotation.

The motor rotates counter-clockwise, see arrow on motor.

#### Note:

The TPE 100 does *NOT* feed in the other direction if you switch the rotation direction. It will only lower performance. If the worm gear is turned upside down, you will need to change the rotation direction.

## Changing motor position.

Pos. 2: by removing these three (3) screws the motor can be positioned in 90 degree intervals. **WARNING**, this requires two (2) persons as the motor is spring loaded.

## **Operation Switch.**

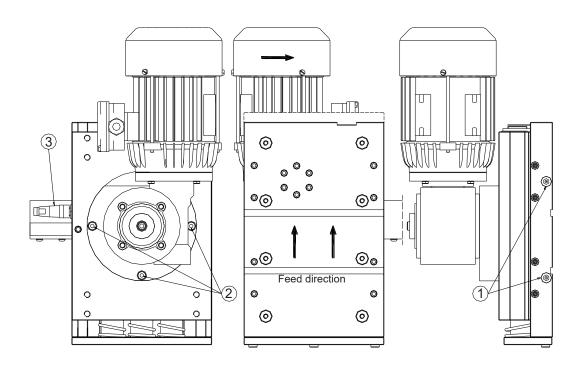
Pos. 3: Connector to speed monitor.

A speed monitor is mounted on the Transporter. This can be used to indicate a disruption warning in case the Transporters stops.

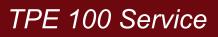
#### Maintenance.

Pos. 1: Grease nipples (4 pcs).

Lubricate with a few pulls of a grease gun once a month.





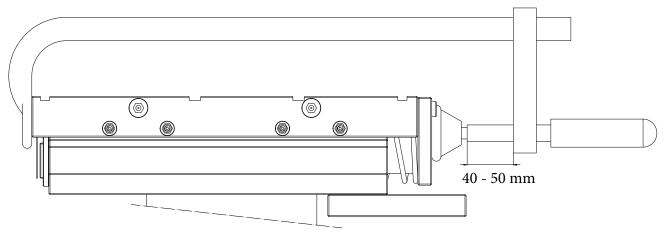




Please note that some parts may not be available because they are not field replaceable. If this is the case, a subassembly must be used. Some parts are only available as a subassembly and cannot be purchased individually. Check the spare parts reference lists for details.

#### Disassembly.

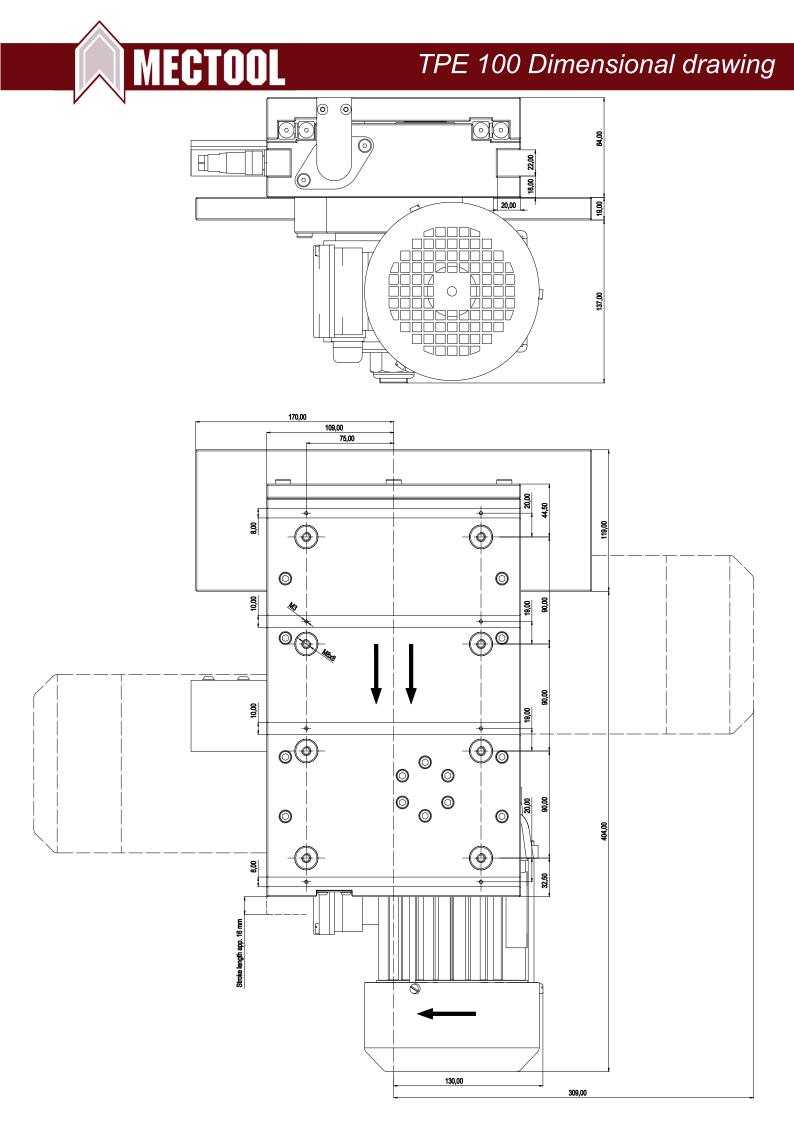
**1.** Apply a vise to the TPE100 according to the schematic below.



- 2. Remove screws 100-204 (3 pcs).
- **3.** Slowly loosen the vise 40 50 mm, the tension is ca 100 kg.
- **4.** Remove the yoke with springs and spring guides.
- 5. Loosen the set screws 100-230 (4 pcs).
- 6. Remove the screws 100-203 (8 pcs) and remove the slide frame.
- 7. Disassemble the bearing support by removing screws 40-054.
- **8.** Remove the locking nut 100-244 and remove the curve with the shaft.

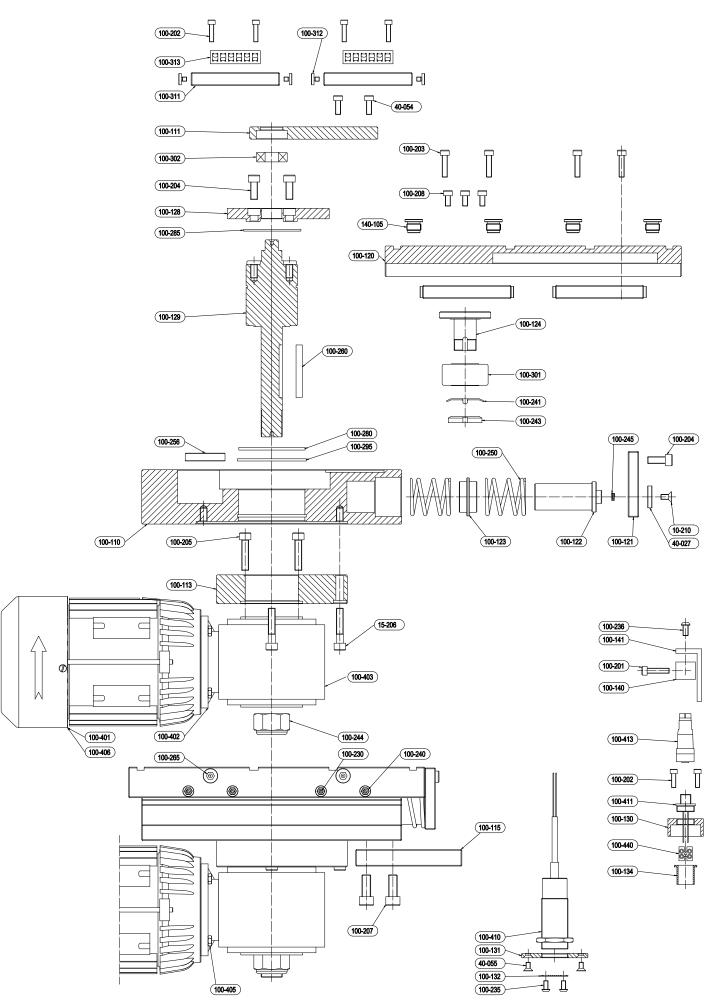
## Reassembly.

- 1. Reassemble in reverse order.
- **2.** Adjust the set screws 100-230 so that the slide frame slides effortlessly without side-to-side play.



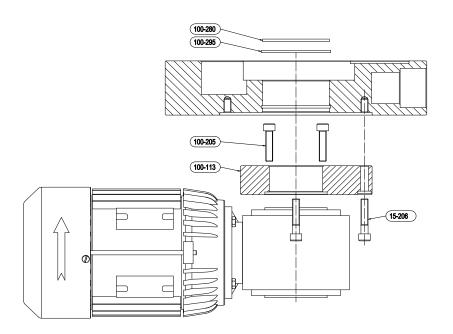
# TPE 100 Spare parts

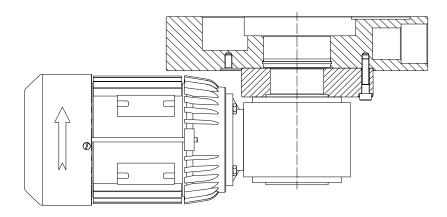


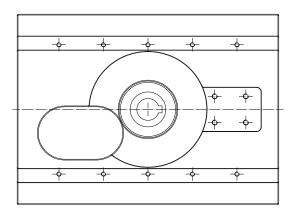


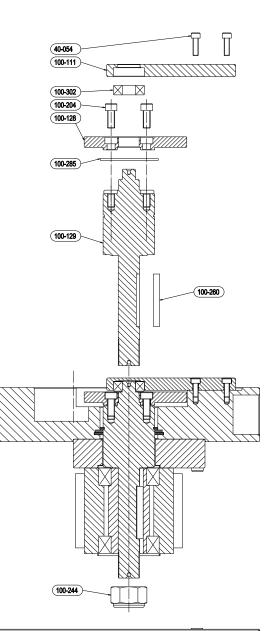


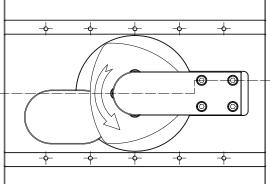






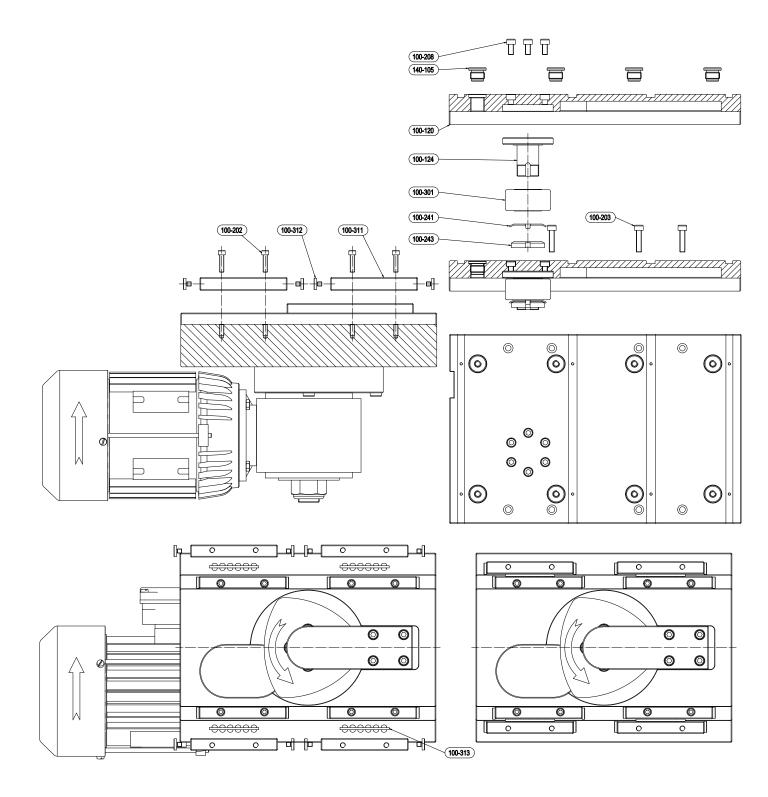






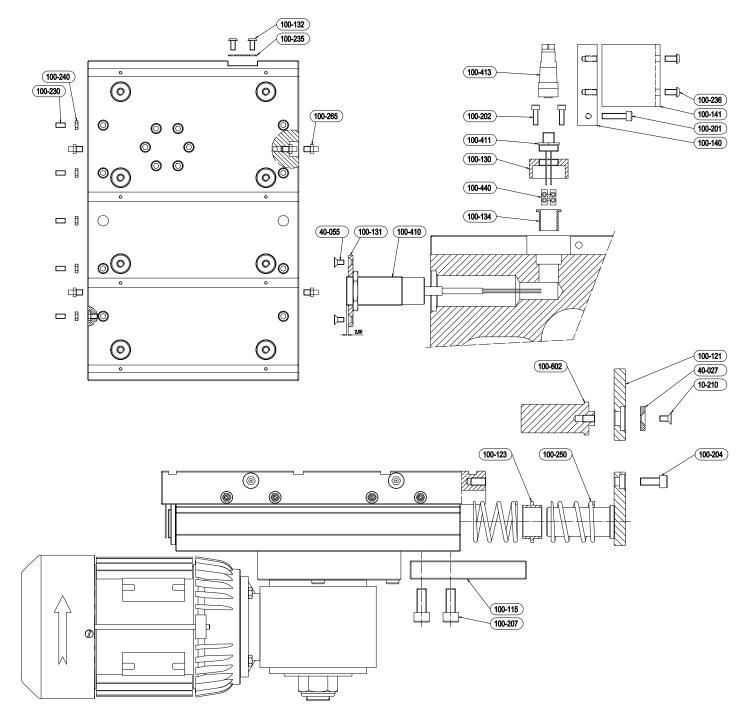


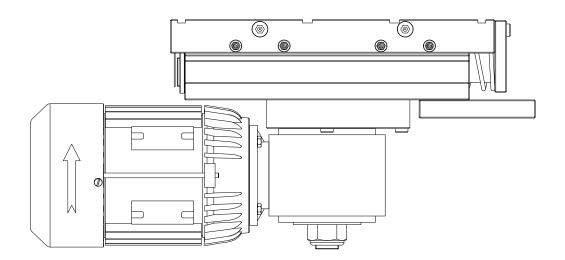




# TPE 100 Spare parts







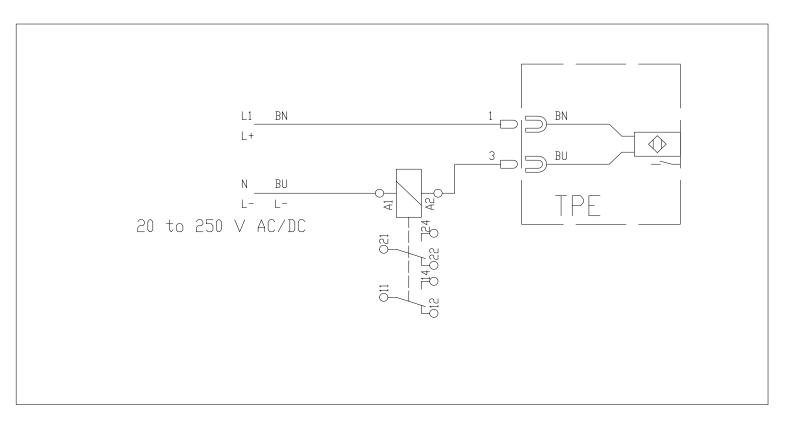


Part No.	Description	Qty
10-210	Screw	3
15-206	Screw	3
40-027	Washer	3
40-054	Screw	4
40-055	Screw	2
100-111	Bearing support	1
100-113	Guide plate	1
100-115	Attachment plate	1
100-120	Slide frame	1
100-121	Rear holder	1
100-123	Spring sleeve	3
100-124	Bearing shaft	1
100-128	Curve	1
100-129	Shaft	1
100-130	Adapter attachment	1
100-131	Sensor attachment	1
100-132	Plate	1
100-134	Tube	1
100-140	Attachment	1
100-141	Guard	1
100-201	Screw	1
100-202	Screw	10
100-203	Screw	9
100-204	Screw	7
100-205	Screw	4
100-207	Screw	4
100-208	Screw	6
100-230	Screw	4
100-235	Screw	2
100-236	Screw	2
100-240	Nut	4
100-241	Washer	1
100-243	Nut	1
100-244	Nut	4

Part No.	Description	Qty
100-250	Spring	6
100-260	Wedge	1
100-265	Grease nipple	4
100-280	Support ring	1
100-285	Circlip	1
100-295	Circlip	1
100-301	Track runner bearing	1
100-302	Ball bearing	1
100-401	Electric motor 3 phase	1
100-404	Motor coupling	1
100-406	Electric motor 1 phase	1
100-410	Speed monitor	1
100-411	Socket	1
100-413	Plug in	1
100-440	Plint	1
140-105	Mounting insert	8
	Subassemblies	

100-601	Liner Guide	Qty
100-311	Prism *	8
100-312	Stop *	16
100-313	Roller guide *	4
100-602	Spring guide	Qty
100-122	Spring guide *	1
100-123	Spring sleeve *	1
100-245	Insert *	1
100-605	Worm gear	Qty
100-402	Motor attachment *	1
100-403	Worm gear *	1
100-405	Screw *	4
	* Not sold separately	

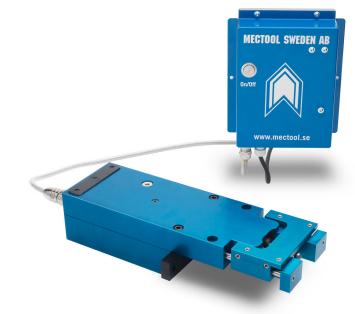






## TPE 15/19

Max load capacity	15 kg
Max tray weight	5 kg
Stroke length	19 mm
Feed rate	4 - 8 m/min
Sound level	55 dB (A)
Motor effect	0,1 kw
Electrical connection	110 - 240 V



## **TPE 100**

Max load capacity	100 kg
Max tray weight	35 kg
Stroke length	16 mm
Feed rate	4 m/min
Sound level	62 dB (A)
Motor effect	0,5 kw
Electrical connection	380-415 V 50-60 Hz optional 110-120 V





#### Factory repair service.

If your Transporter requires repair, return it to our Service Center. A technician will examine your Transporter and get back to you with a quote of estimated costs.

Repairs include fault tracing and repair or replacement of failed components, as well as final testing to ensure your Transporter is functioning according to specifications.

All items with the warranty period are evaluated by technicians to verify warranty eligibility.

All Transporters repaired by Mectool receive a new three month manufacturer's warranty period (wear parts excluded).

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## EC DECLARATION OF CONFORMITY FOR MACHINERY

Original

Directive 2006/42/EC, Annex II 1A

## Manufacturer (and where appropriate his authorised representative):

Company:	Mectool Sweden AB	
Address:	Box 132, 293 23 Olofström	

#### Hereby declares that:

Type of machinery:	Friktionstransportör
No. of machinery:	TP-3, TP-10, TP-40, TP-70, TP-140, TPE-15, TPE-100

#### Complies with the requirements of Machinery Directive 2006/42/EC.

#### Complies also with applicable requirements of the following EC directives:

2014/30/EU, EMC (elektromagnetisk kompabilitet)

#### The following harmonized standards have been applied:

SS-EN ISO 12100 (Maskinsäkerhet, allmänna konstruktionsprinciper - Riskbedömning och riskreducering) SS-EN 13857 (Skyddsavstånd) SS-EN 60204-1 (Maskiners el-utrustning)

#### The following other standards and specifications have been applied:

#### Authorized to compile the technical file:

Name:

Kenneth Brodin

Address:

Mectool Sweden AB, Box 132, 293 23 Olofström

Signature:

Place and date:

Signature:

Name:

Position:

VD

Fstrom 2021-01-12 0-Kenneth Brodin