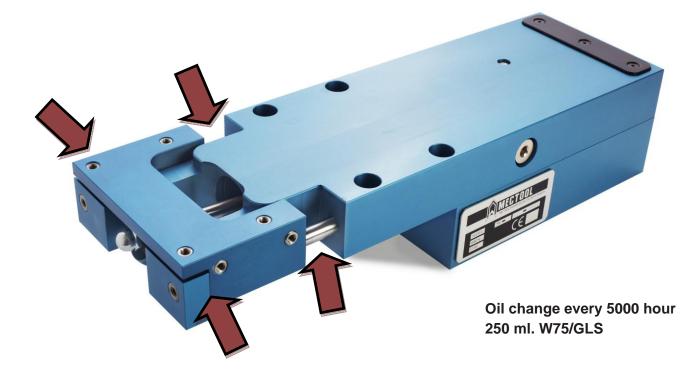


Friction Transporter Installation & Service Manual

2013-04-12

_ TPE 15/19 Installation & operation



Installation instructions

TPE 15 must be mounted horizontally, may not be mounted on the side or pitched. A custom tray or chute must be designed. We recommend aluminum or any light gauge material to reduce tray weight.

Maximum weight, tray only: 3 kg Transportation capacity: 15 kg

Using metric screws, fasten tray or chute to the TPE 15 using all holes. Tray or chute must be supported at both ends to minimize vibration & deflection.

Important

TPE 15 must be mounted so no danger is provided for working personnel.

Operating the TPE 15

Connect the Controller power cable to a power outlet (**110-240 Volt AC**, **50/60 Hz**).

Do not change or replace the cable between the transporter and the controller.

Make sure that the tray can move freely in both directions.

Push the power button on the Controller, the TPE 15 will start after a few seconds.

If you want to restart the TPE 15 you must wait 5 seconds for the controller to be ready.

CRUSHING HAZARD! (See arrows in picture)







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. Disconnect the electrical connections.
- 2. Drain the oil.
- 3. Move the slide 15-604 to its rear position.
- 4. Remove the dome nut 30-276.
- 5. Remove the threaded washer 30-157 while holding a screwdriver in the slot on the truss rod 30-147.
- 6. Remove urethane washer 30-158.
- 7. Remove guides 15-150 (2 pcs).
- 8. Remove the slide 15-604.
- Remove cover 15-111 and disconnect the stator. Remove the plastic plug to the stator (requires special tools)
- 10. Loosen the lower screw 15-246.
- 11. Turn the TPE 15 upside down.
- 12. Remove the guide pins 15-286 (2 pcs).
- 13. Remove the screws 15-204 (4 pcs).
- 14. Remove the motor bracket while the mechanism remains in the machine body.
- 15. Remove the truss rod 15-147.
- 16. Loosen the upper screw 15-246.
- 17. Remove gear 30-143 with a slide hammer and remove the rocker mechanism 15-601.
- 18. Clean the TPE 15 and remove all silicon residue.
- 19. To remove the motor cover 30-121 and blow compressed air into the hole where the cables are located.
- 20. Remove circlip 30-282 to remove the rotor.

N.B. The flywheel 15-139 has a left-handed thread.

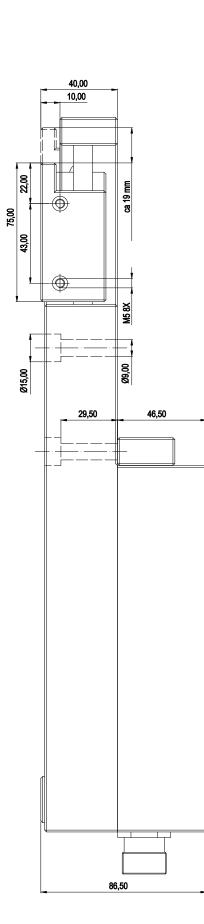
Reassembly.

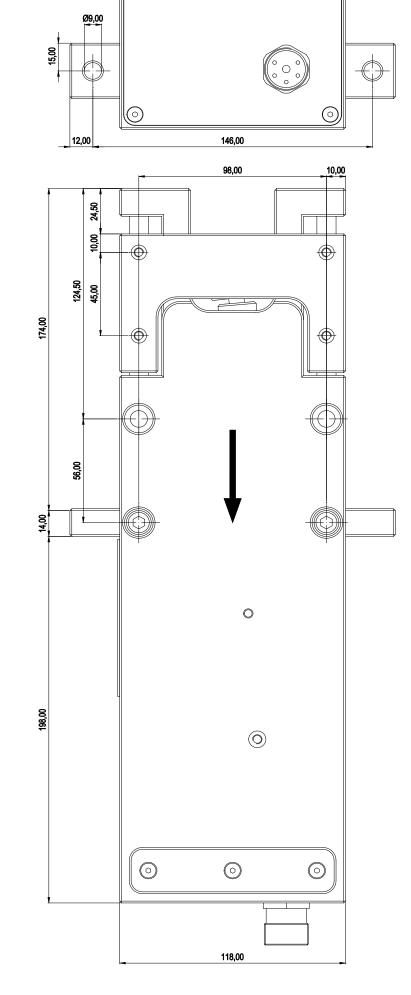
- 1. Install the connecting rod with the bearings on the gear.
- 2. Install the gear in the machine body.
- 3. Install the link 30-602 on the rocker mechanism and shim between the shaft end and the washer 30-271 to a play of approx. 0.2 mm with washer 30-274.
- 4. Mount the rocker mechanism, make sure the screw head 15-256 fits in its socket.
- 5. Install the truss rod 15-147 in the link 30-602 and glue with Loctite 243.
- 6. Install the pins 15-286 in the machine body.
- 7. Apply a bead of silicone along the groove of the motor bracket.
- 8. Fit O-ring 30-351 together with a little grease in the indentation of the motor bracket.
- 9. Mount the motor bracket to the pins of the machine body and fit the motor shaft teeth with the gear, then tighten the screws.
- 10. Tighten the screws 15-246.
- 11. Mount slide in reverse order.
- 12. Let the silicon dry overnight.
- 13. Fill 250 ml. of Oil W 80/90 GL5.

MECTOOL TPE 15/19 Dimensional drawing

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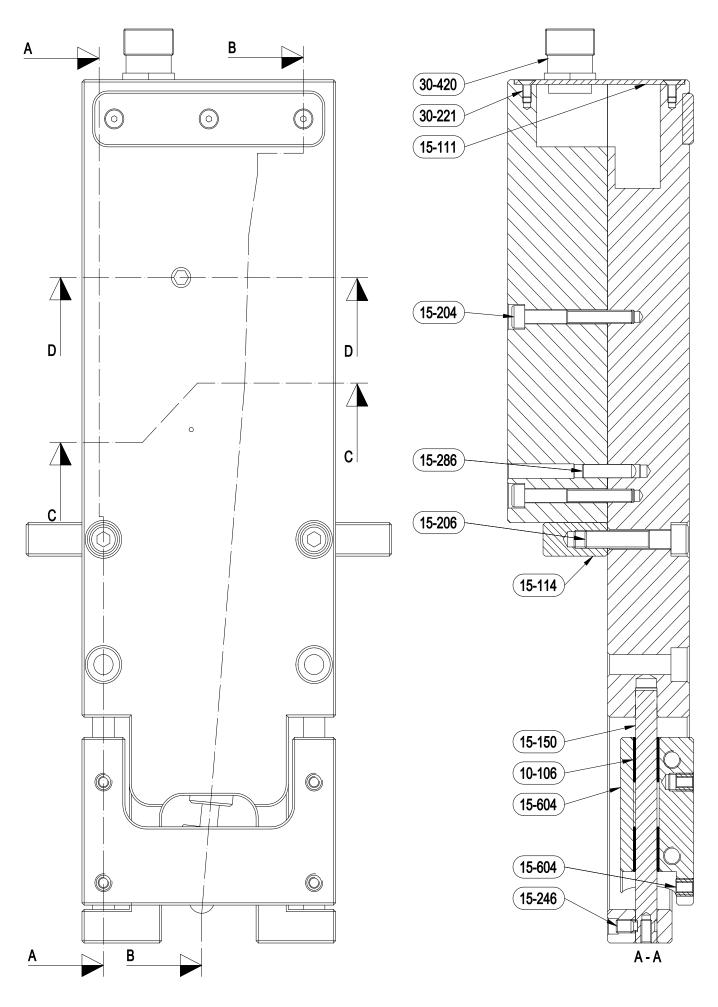


Part No.	Description	Qty	Part No.	Description	Qty
3-325	O-ring	2	30-156	Nut	1
10-106	Bearing	4	30-157	Threaded washer	1
15-111	Cover	1	30-158	Urethane washer	2
15-114	Attachment	1	30-221	Screw	8
15-115	Center screw	1	30-222	Screw	2
15-116	Slide block	1	30-271	Washer	1
15-139	Fly wheel	1	30-274	Washer	3
15-145	Bushing	1	30-276	Dome nut	1
15-146	Sleeve	1	30-282	Snap ring	1
15-147	Truss rod	1	30-301	Bearing	1
15-150	Guide	2	30-307	Bearing	1
15-204	Screw	4	30-308	Bearing	1
15-206	Screw	2	30-336	Bushing	1
15-246	Screw	4	30-351	O-ring	1
15-260	Mounting insert	8	30-353	O-ring	1
15-270	Sealing washer	1	30-361	Radial shaft sealing	1
15-286	Guide pin	2	30-362	Radial shaft sealing	1
15-351	O-ring	1	30-370	Plug	1
30-121	Motor cover	1	30-420	Socket	1
30-143	Gear	1			

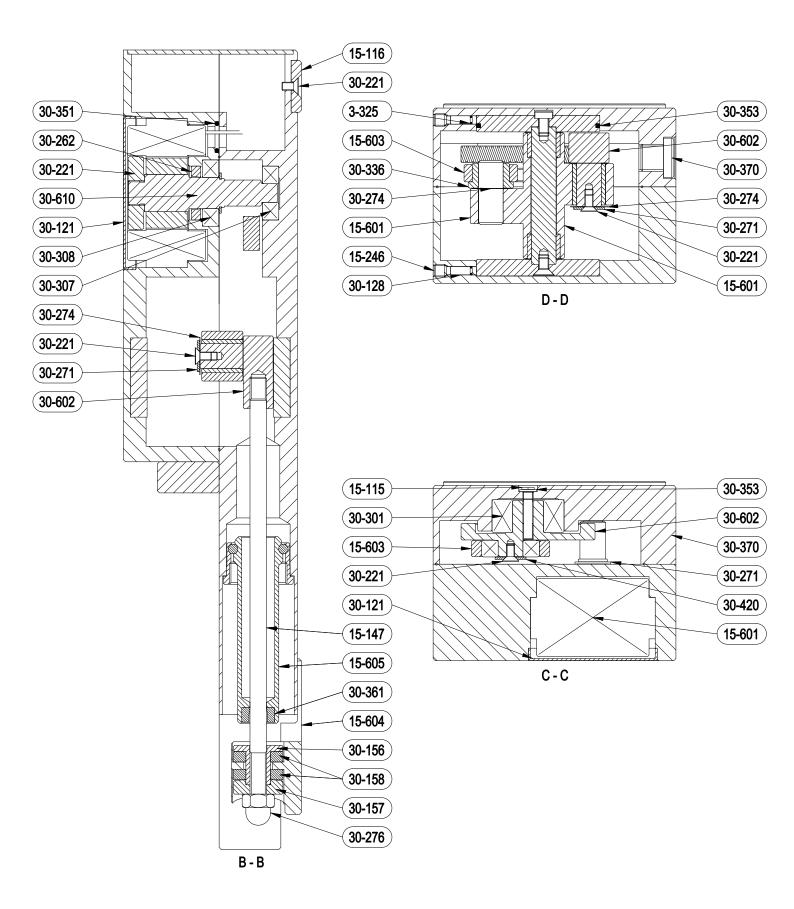


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TPE 15/19 Spare parts

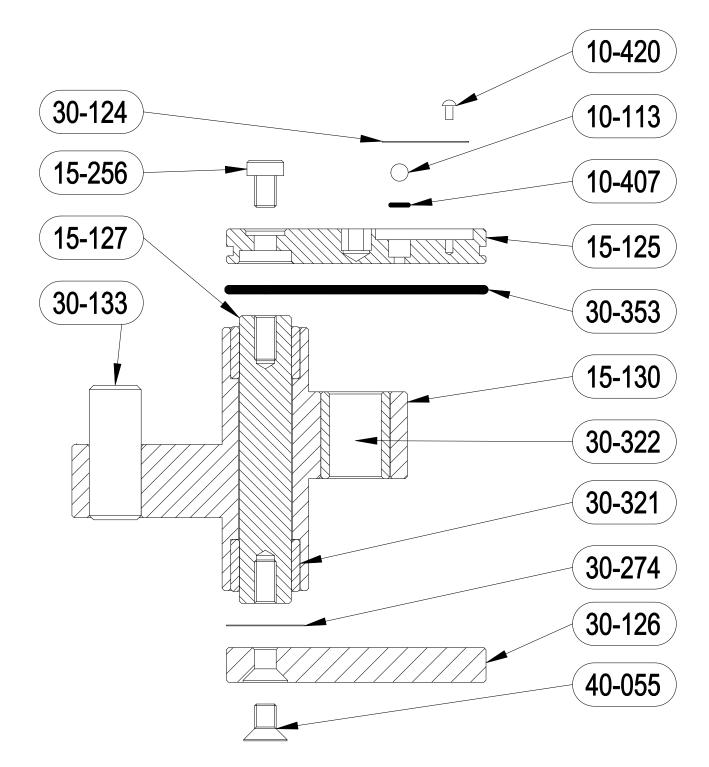


TPE 15/19 Spare parts



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15-601 Rocker mechanism



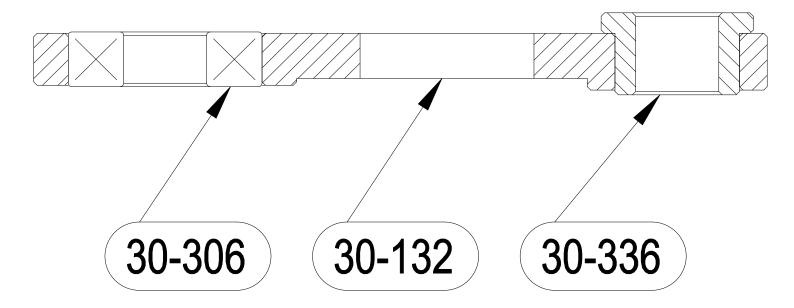
Part No.	Description	Qty	Part No.	Description	Qty
10-133	Ball *	1	30-126	Eccentric lower *	1
10-407	O-ring *	1	30-133	Shaft *	1
10-420	Rivet *	1	30-235	Screw *	1
15-125	Eccentric upper *	1	30-274	Washer	1
15-127	Eccentric shaft *	1	30-321	Bushing *	2
15-130	Rocker *	1	30-322	Bushing *	1
15-256	Screw *	1	30-353	O-ring	1
30-124	Spring *	1	40-055	Screw *	1

* Not sold separately

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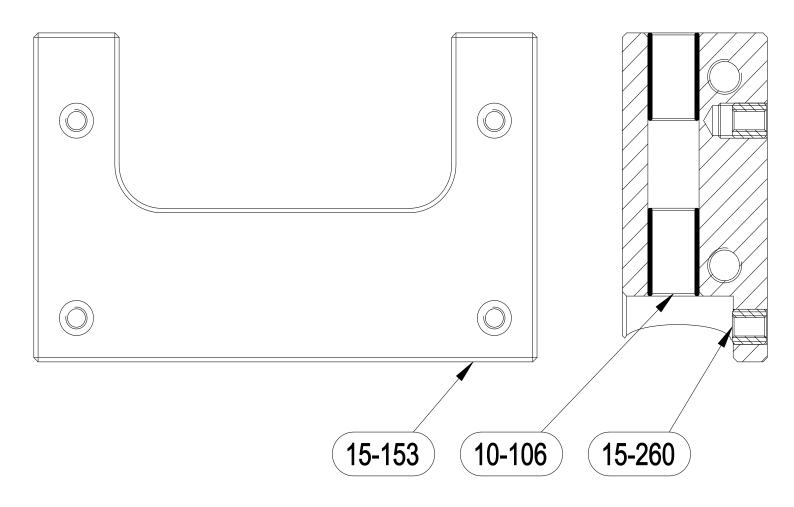


15-603 Connecting rod



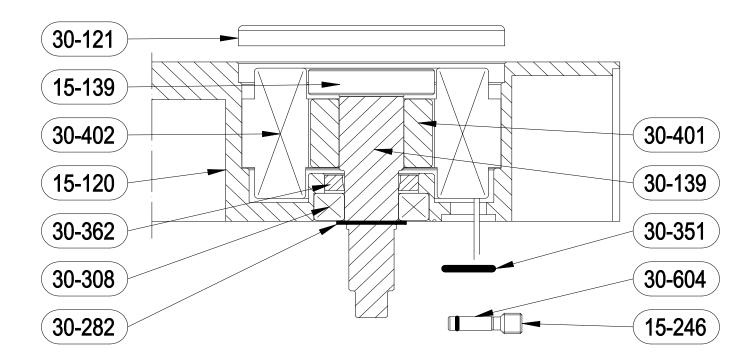
Part No.	Description	Qty	Part No.	Description	Qty
30-132	Connecting rod *	1	30-336	Bushing	1
30-306	Bearing *	1			





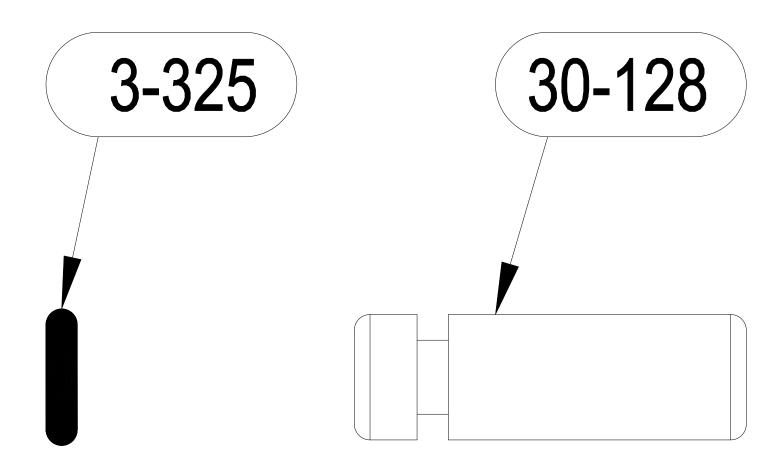
Part No.	Description	Qty	Part No.	Description	Qty
10-106	Bearing	4	15-260	Threaded insert	8
15-153	Slide frame	1			





Part No.	Description	Qty	Part No.	Description	Qty
15-120	Motor house *	1	30-308	Bearing	1
15-139	Fly wheel	1	30-351	O-ring	1
15-246	Screw	1	30-362	Radial shaft sealing	1
30-121	Motor cover	1	30-401	Rotor	1
30-139	Motor shaft *	1	30-402	Stator	1
30-282	Snap ring	1	30-604	Retaining pin	1

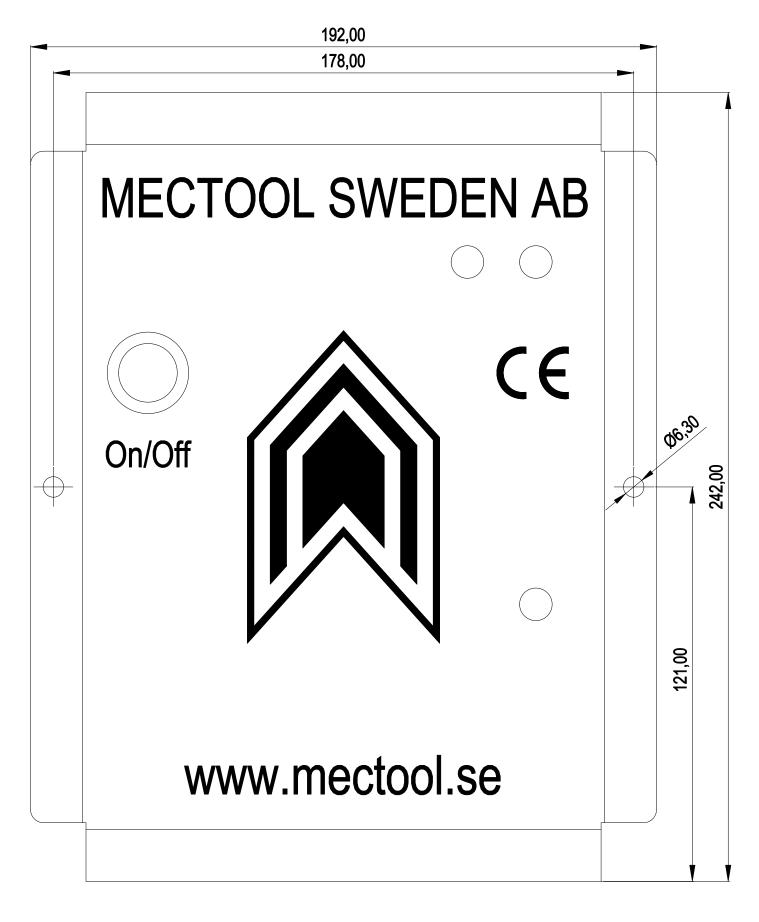




Part No.	Description	Qty	Part No.	Description	Qty
3-325	O-ring	1	30-128	Retaining pin *	1



30-611 Motor controller unit



1.5 meter

Motor cable

1.5 meter





TPE 15/19

Max load capacity Max tray weight Stroke length Feed rate Sound level Motor effect Electrical connection 15 kg 3 kg 19 mm 4-8 m/min 55 dB (A) 0,1 kw 110-240 V



TPE 30/19

Max load capacity Max tray weight Stroke length Feed rate Sound level Motor effect Electrical connection 30 kg 5 kg 19 mm 4-8 m/min 60 dB (A) 0,1 kw 110-240 V



TPE 100

Max load capacity Max tray weight Stroke length Feed rate Sound level Motor effect Electrical connection 100 kg 35 kg 16 mm 8-10 m/min 62 dB (A) 0,5 kw 380-415 V 50-60 Hz. alternatively 110-120 V





Factory repair service.

If your Transporter requires repair, return it *prepaid* to our Service Center.

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 within the warranty period are evaluated by technicians to verify warranty eligibility.

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

Mectool Sweden AB

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