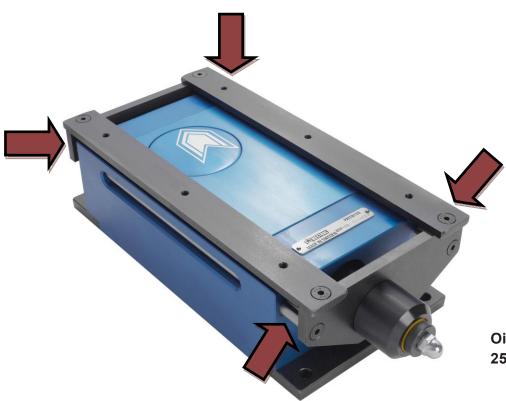


Friction Transporter Installation & Service Manual

2013-04-12

TPE 30/19 Installation & operation



Oil-change every 5000 hour 250 ml. W75/GLS

Installation instructions

TPE 30 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: 5 kg Transportation capacity: 30 kg

Using metric screws, fasten tray or chute to the TPE 30 using all holes. Tray or chute must be supported at both ends to minimize vibration & deflection.

Important

TPE 30 must be mounted so no danger is provided for working personnel.

Operating the TPE 30

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.

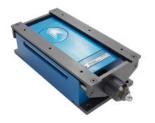
Push the power button on the Controller, the TPE 30 will start after a few seconds.

If you want to restart the TPE 30 you must wait 5 seconds for the controller to be ready.

CRUSHING HAZARD! (See arrows in picture)

TPE 30/19 Service





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.

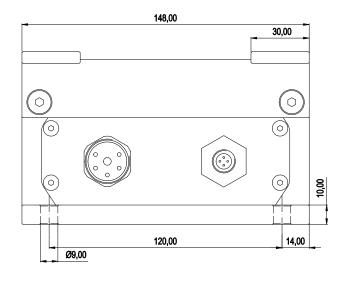
- 1. Disconnect the electrical connections.
- 2. Drain the oil.
- 3. Remove the dome nut 30-276.
- 4. Remove the threaded washer 30-157 while holding a screwdriver in the slot on the truss rod 30-147.
- 5. Remove the rulers and yoke.
- 6. Remove cover 30-111 and disconnect the operation guard and the stator. Remove the plastic plug to the stator (requires special tools)
- 7. Loosen the upper screw 30-230.
- 8. Remove the screws 30-202 (5 pcs).
- 9. Three of the holes in the motor bracket are threaded M8, use three flat set screws to remove the motor bracket while the mechanism remains in the lower part.
- 10. Loosen the lower screw 30-230.
- 11. Remove the truss rod 30-147.
- 12. Remove gear 30-143 with a slide hammer and remove the rocker mechanism 30-601.
- 13. Clean the TPE 30 and remove all silicon residue.
- 14. To remove the engine cover 30-121: blow compressed air into the hole where the cables are located.
- 15. Remove circlip 30-282 to remove the rotor.

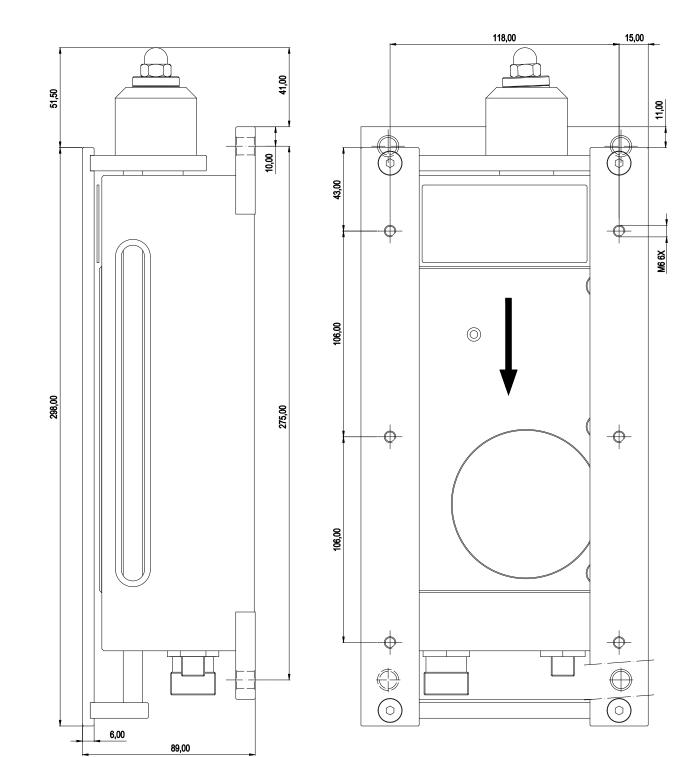
N.B. The flywheel 15-139 has a left-handed thread.

Reassembly.

- 1. Install the link 30-602 on the rocker mechanism.
- 2. Install the connecting rod with bearings on the gear.
- 3. Install the connecting rod and gear on the rocker mechanism.
- 4. Attach the gear with the connecting rod and rocker mechanism simultaneously into the machine body.
- 5. Turn the rocker mechanism so the distance between the screw head 15-256 and the left indentation edge becomes 43 mm.
- 6. Tighten the lower screw 30-230.
- 7. Install the truss rod 30-147 on the link 30-602 and glue with Loctite 243.
- 8. Place the O-ring 30-351 in the indentation of the cable fitting.
- 9. Apply silicon around the indentation edge. *N.B. inside the screw holes location.*
- 10. Mount the motor bracket and fit the motor shaft teeth with the gear, then tighten the screws.
- 11. Fit the cover, stand, yoke and rulers.
- 12. Let the silicon dry overnight.
- 13. Fill 250 ml. of Oil W 80/90 GL5.

NECTOOL TPE 30/19 Dimensional drawing





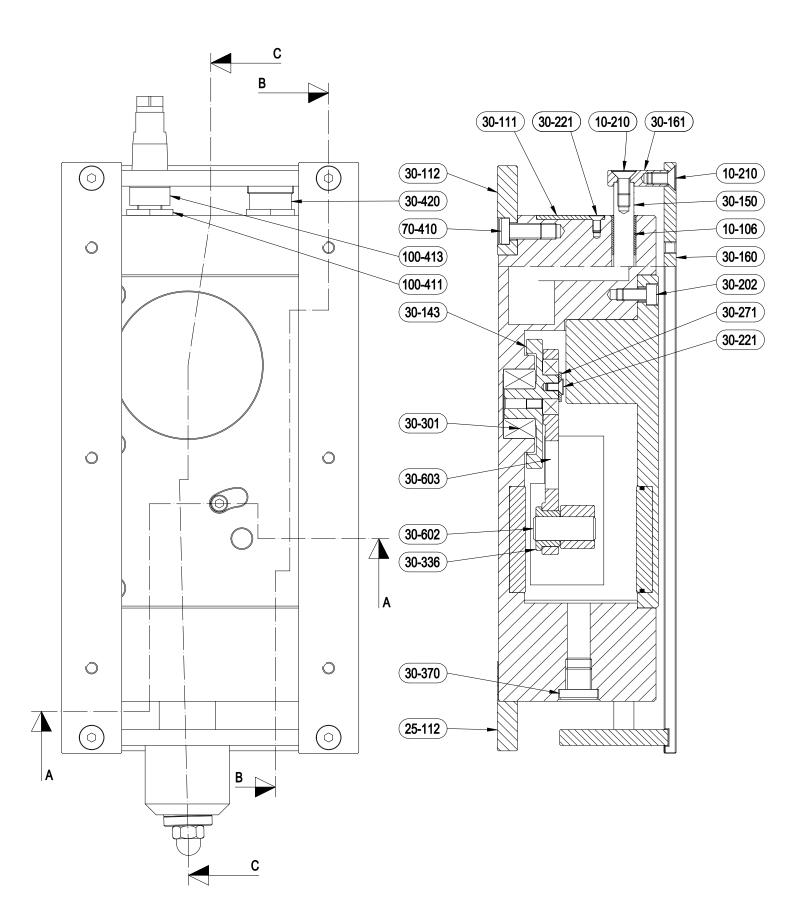
MECTOOL

TPE 30/19 Spare parts

Part No.	Description	Qty	Part No.	Description	Qty
3-325	O-ring	2	30-230	Screw	2
10-106	Bearing	4	30-245	Screw	1
10-210	Screw	8	30-271	Washer	2
15-139	Fly wheel	1	30-274	Washer	3
30-111	Cover	1	30-276	Dome nut	1
30-112	Attachment plate	2	30-282	Snap ring	1
30-121	Motor cover	1	30-301	Bearing	1
30-143	Gear	1	30-307	Bearing	1
30-145	Bushing	1	30-308	Bearing	1
30-146	Sleeve	1	30-336	Bushing	1
30-147	Truss rod	1	30-351	O-ring	1
30-150	Guide column	2	30-352	O-ring	1
30-155	Sleeve	1	30-353	O-ring	1
30-156	Nut	1	30-361	Radial shaft seal	1
30-157	Threaded washer	1	30-362	Radial shaft seal	1
30-158	Urethane washer	2	30-370	Plug	1
30-160	Tray holder	2	30-420	Socket	1
30-161	Rear holder	1	70-410	Screw	4
30-162	Front holder	1	100-410	Speed monitor	1
30-170	Sensor attachment	1	100-411	Socket	1
30-202	Screw	5	100-413	Connector	1
30-221	Screw	7	100-440	Plint	1
30-222	Screw	2			

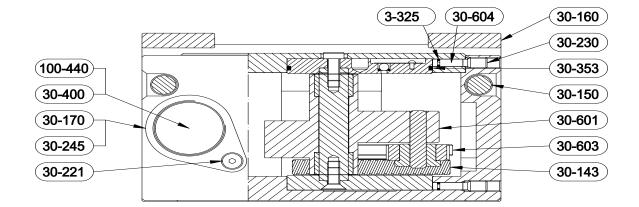


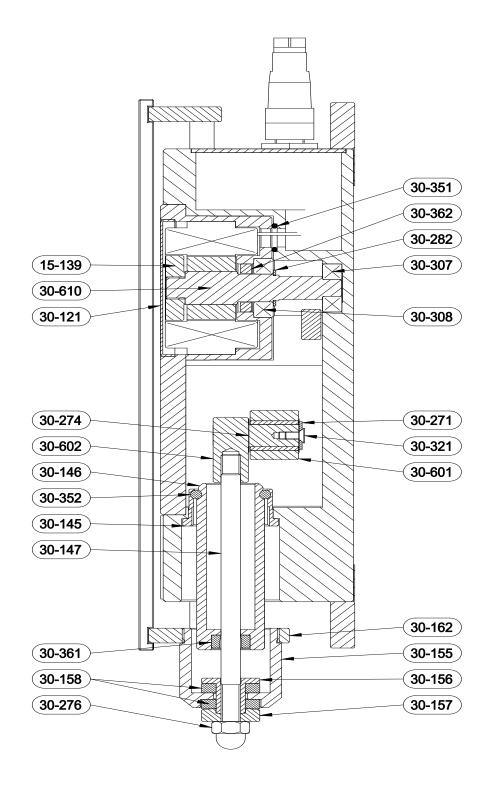
TPE 30/19 Spare parts



MECTOOL







MECTOOL 30-601 Rocker mechanism 10-420 30-124 10-113 15-256 10-407 30-127 30-125 30-222 30-353 30-130 30-133 30-321

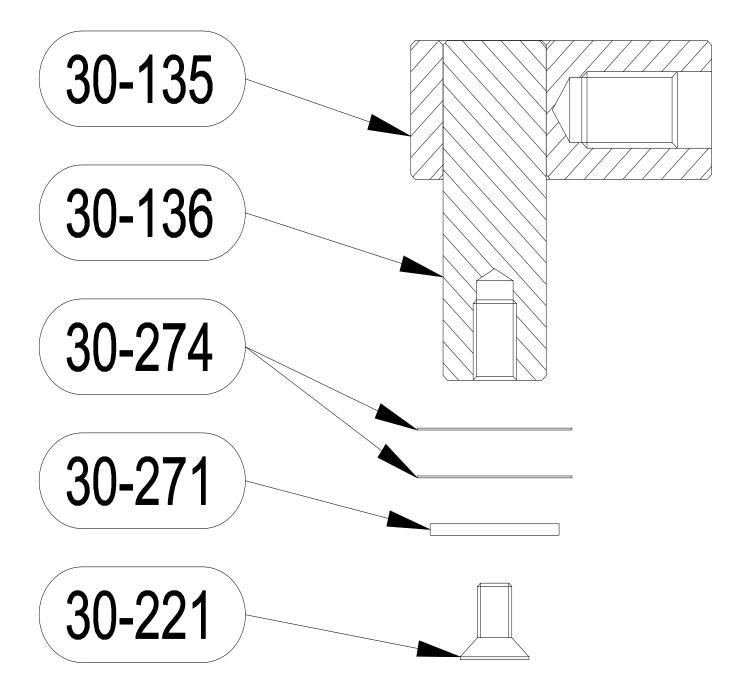
Part No.	Description	Qty	Part No.	Description	Qty
10-133	Ball *	1	30-130	Rocker *	1
10-407	O-ring *	1	30-133	Shaft *	1
10-420	Rivet *	1	30-235	Screw *	1
15-256	Screw *	1	30-274	Washer	1
30-124	Spring *	1	30-321	Bushing *	2
30-125	Eccentric upper *	1	30-322	Bushing *	1
30-126	Eccentric lower *	1	30-353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

30-274

30-126

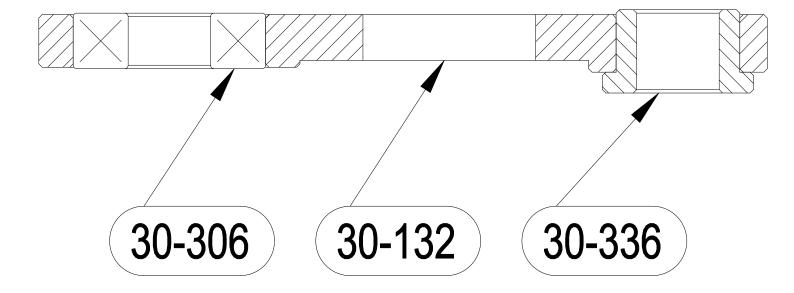
40-055





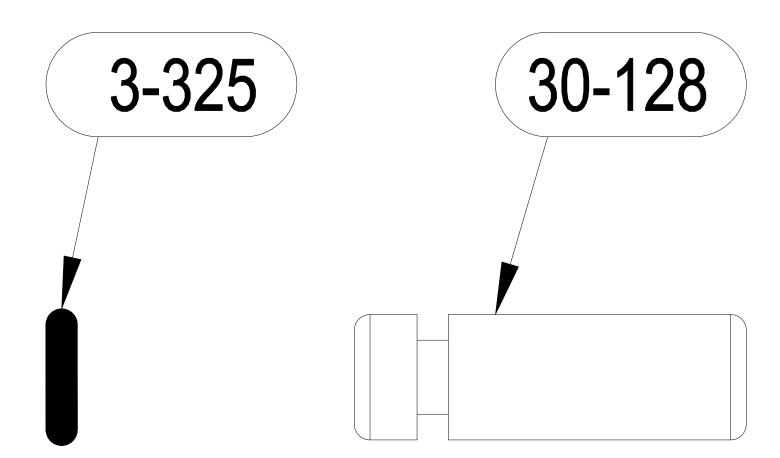
Part No.	Description	Qty	Part No.	Description	Qty
30-135	Link *	1	30-271	Washer	1
30-136	Link shaft *	1	30-274	Washer	2
30-221	Screw	1			





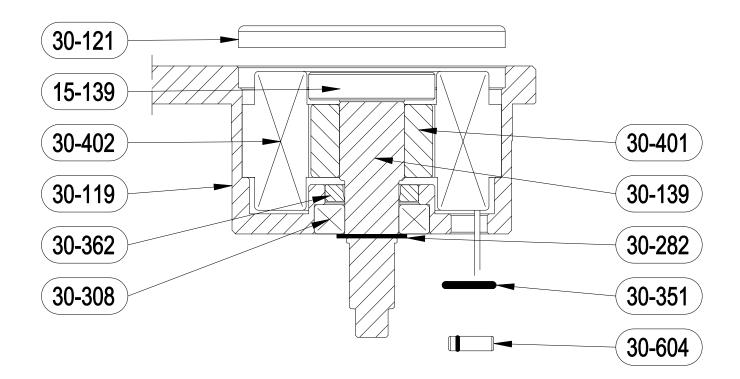
Part No.	Description	Qty	Part No.	Description	Qty
30-132	Connecting rod *	1	30-336	Bushing	1
30-306	Bearing *	1			





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

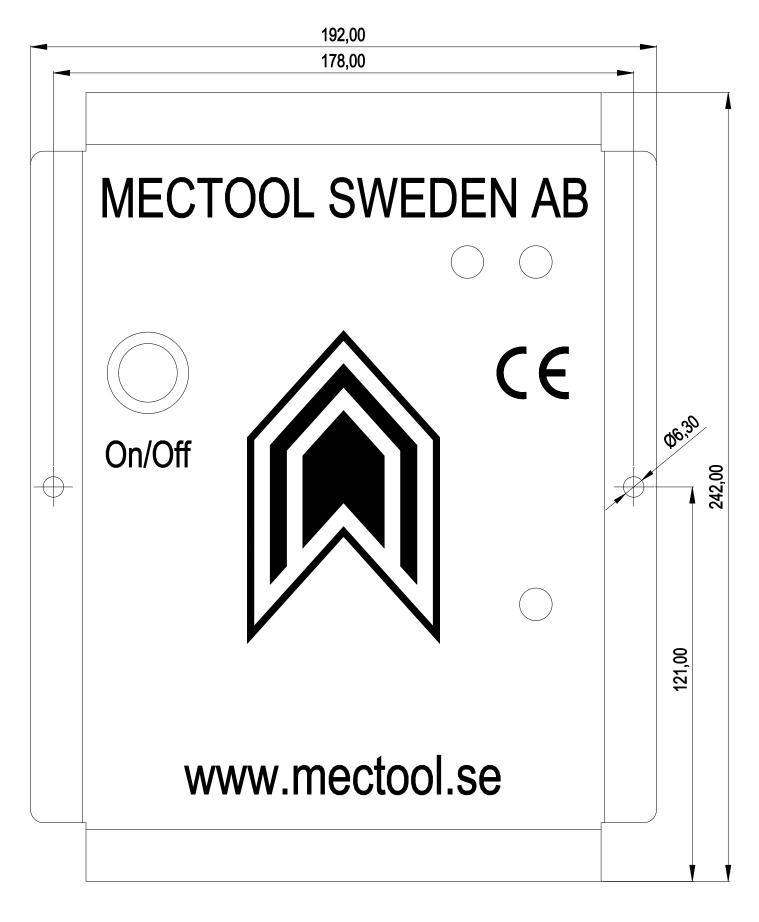




Part No.	Description	Qty	Part No.	Description	Qty
15-139	Fly wheel	1	30-351	O-ring	1
30-120	Motor house *	1	30-362	Radial shaft seal	1
30-121	Motor cover	1	30-401	Rotor	1
30-139	Motor shaft *	1	30-402	Stator	1
30-282	Snap ring	1	30-604	Retaining pin	1
30-308	Bearing	1			



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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