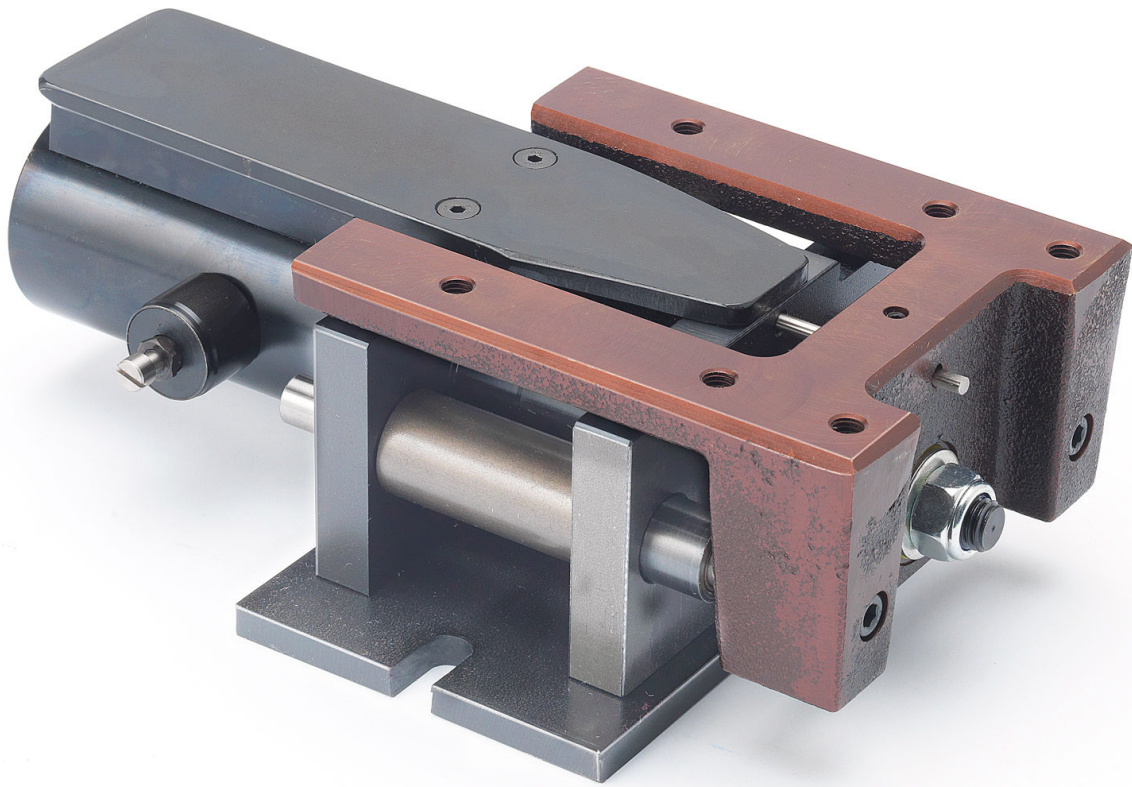




**MECTOOL**  
MADE IN SWEDEN



FRICION TRANSPORTER TP 40

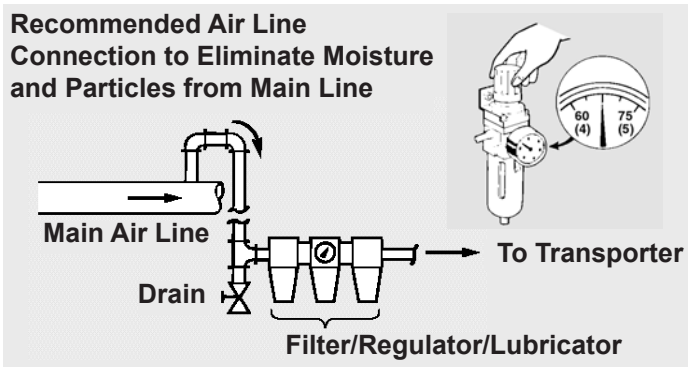
# INSTALLATION & SERVICE MANUAL



1. Rigidly mount the Transporter to a solid surface using these recommended bolt sizes:

Model	Quantity	Metric	Inch
TP3	4	M8	5/16
TP10	4	M8	5/16
TP40	2	M10	3/8
TP70	6	M8	5/16
TP140	6	M8	5/16

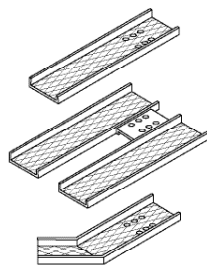
2. Air line requires use of an oil mist-type combination filter/regulator/lubricator, and pressure gauge. Set pressure to 4-5 bar (60-75 psi). Do not exceed 5.5 bar (80 psi) as excess pressure will damage the Transporter.



3. Fill the lubricator with a good grade of hydraulic oil such as Shell Tellus 32 or equivalent. Set the lubricator for one (1) drop per minute.

4. Connect the air line with flexible poly-flow tubing into the threaded inlet. On model TP3 use 1/4" tubing for 1/8" NPT. Models TP10, TP40, TP70 and TP140 use 3/8" tubing for 1/4" NPT.

5. A custom "U" profile tray or chute must be designed to handle each specific application or tool. Any material can be used but we recommend aluminum or any light gauge material to reduce tray weight. Maximum tray weight should not exceed the following table data:

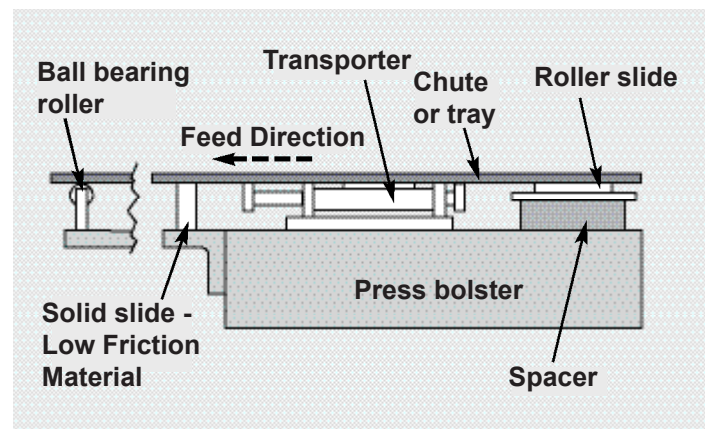


Model	Max. weight tray only		Max. weight of parts	
	Kg	Lbs.	Kg	Lbs.
TP3	1,5	3,3	3	6,6
TP10	3	6,6	10	20
TP40	15	33	40	80
TP70	50	110	70	140
TP140	100	200	140	300

6. Fasten the tray or chute to the Transporter with metric screws at all holes. Be sure to use spacers or washers between the Transporter and the tray to reduce contact friction between the moving tray and the Transporter body. Refer to the following table:

Model	Quantity	Screw size	Depth
TP3	6	M6	8 mm
TP10	6	M6	8 mm
TP40	6	M8	9 mm
TP70	6	M8	8 mm
TP140	6	M8	8 mm

7. The conveyor tray or chute must be supported at both ends to minimize vibration and deflection. A block of Delrin GP-500 or Nylon, low friction material can be used for the tray to slide.



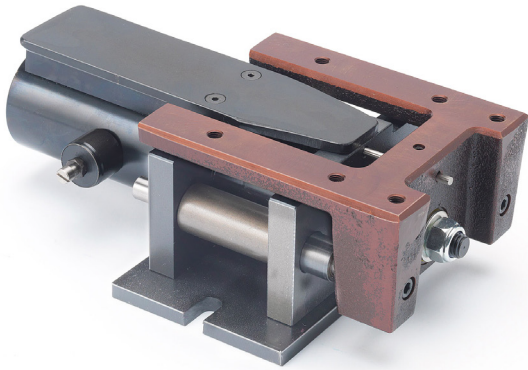
8. The speed adjustment is preset at the factory with the correct frequency for a lightweight tray or chute. The speed can be adjusted by turning the screw or knob clockwise to decrease the movement on the models TP3, TP10 and TP40. The TP70 and TP140 are adjusted by turning the screw or knob counter-clockwise to decrease the movement. Maximum speed is not required to move parts or scrap efficiently.

9. If the TP40 speed frequency is inadequate, release the air regulator rod 40-029 and gently push forward to increase speed or backwards to decrease.

10. The TP10 may require a slight adjustment to maintain proper speed frequency after a period of operation. If speed adjustment screw 10-405 does not slow the unit sufficiently, it may be necessary to slightly snug the two screws at the air regulator valve 10-603. This reduces the air being released from the valve and decreases speed. Snugging the screws too tightly will cause bending of the air regulator rod and poor performance.

11. Spray the same Tellus oil used in lubrication on the pistons every week.

12. If there is a build-up of sticky oil on the conveyor tray or if the scrap parts are very oily, they may stick to the surface and reduce movement. To reduce friction, try dimpling the surface of the conveyor chute with a ballpeen hammer or use a different material like expanded metal or profiled, roll-formed material.



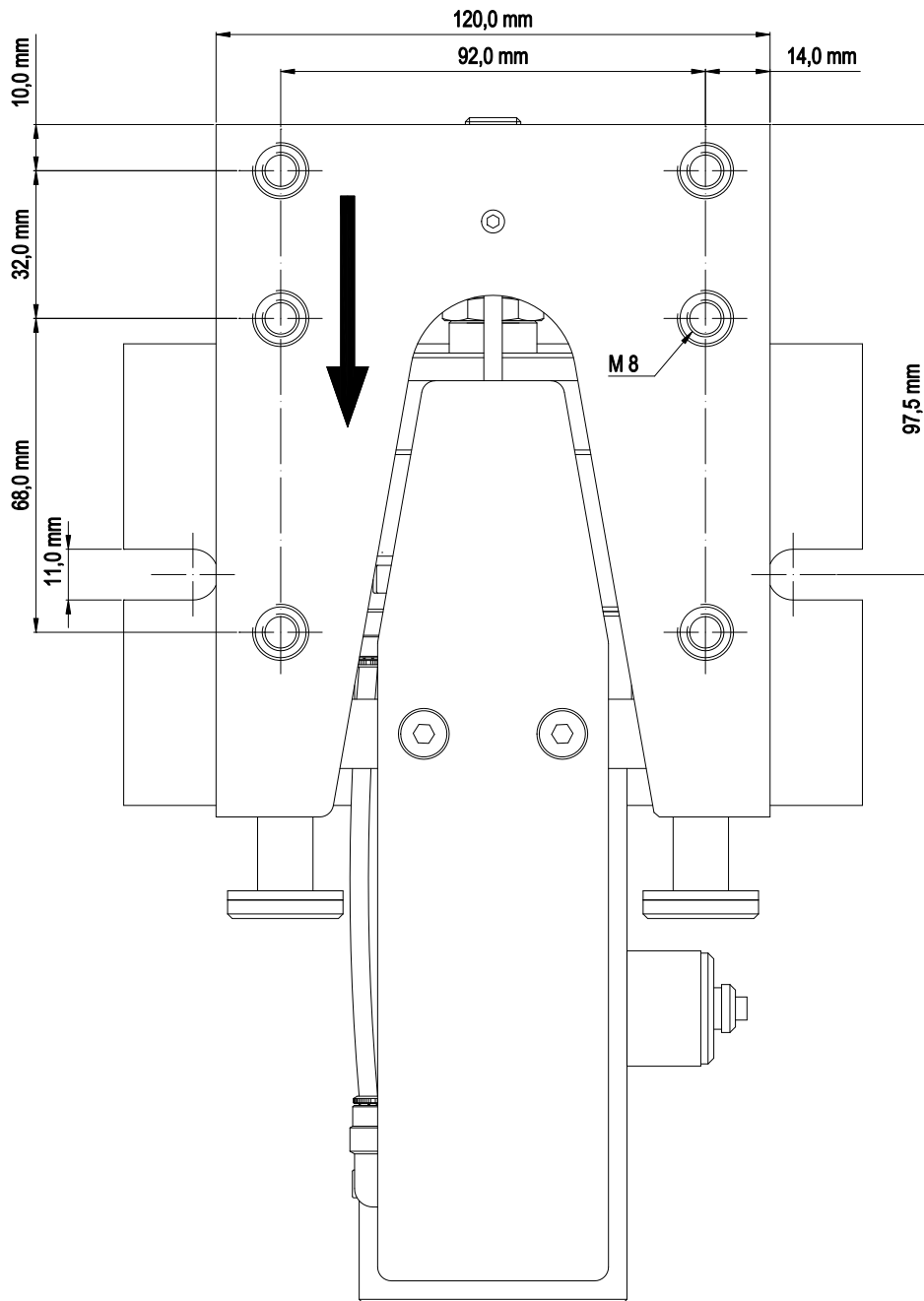
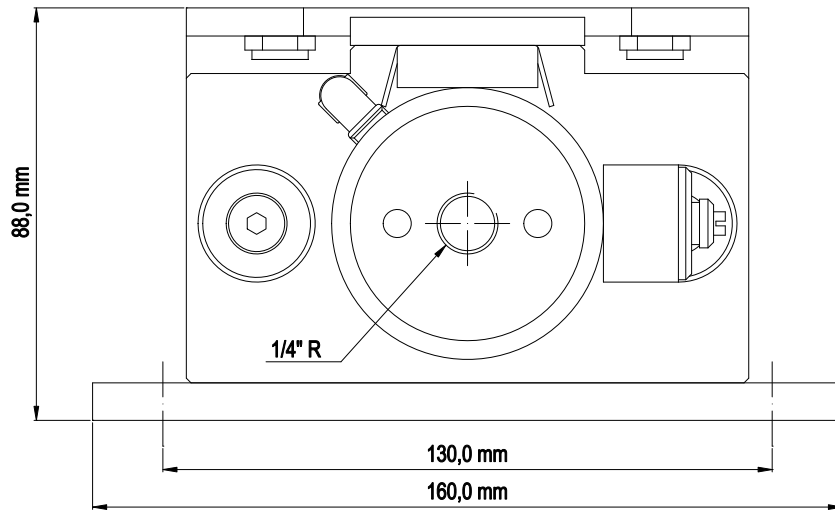
*Please note that some parts may not be available because they are not field replaceable. If this is the case, a subassembly must be used. Some parts are only available as a subassembly and cannot be purchased individually. Check the spare parts reference lists for details.*

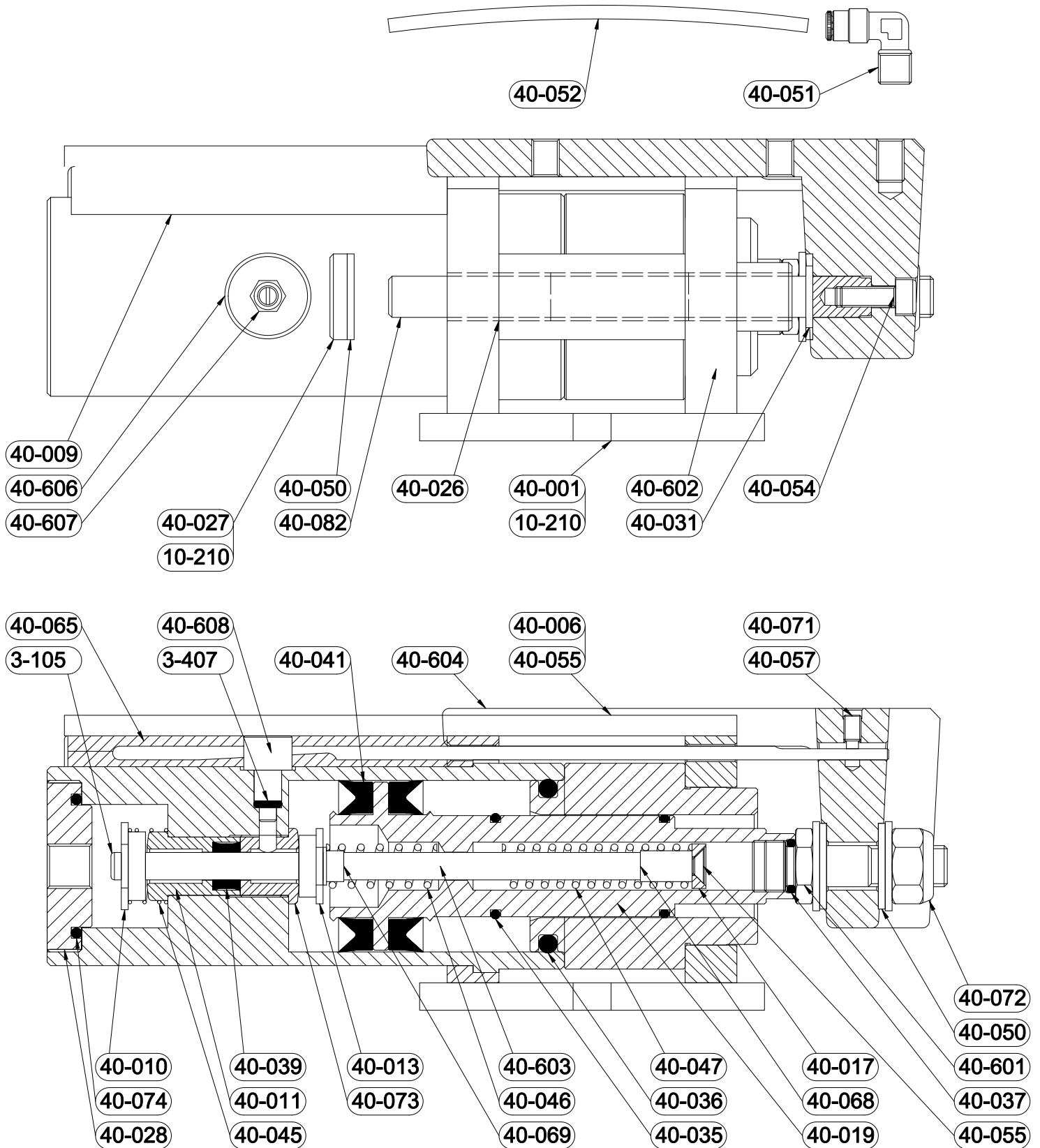
### Disassembly.

1. Remove the air regulator rod 40-029 by loosening the screw 40-057 at the top of the slide frame and slide the rod out. **If the slide frame is deformed, it must be replaced.**
2. Remove the screw 10-210 that secures the washer 40-027 to the slide frame. Remove nut 40-072 and remove the slide frame.
3. Remove the top plate 40-006 which holds the air regulator 40-608 and felt cover 40-009. Check O-ring 3-407 for damage.
4. Disconnect the tube 40-052 from one of the air connections 40-051. Remove plug 40-601 and check O-ring 40-037 for damage.
5. Remove air inlet 40-028. Check O-ring 40-074 for damage.
6. Remove the eight (8) screws 10-210 from the bottom plate 40-001 and slide the front cylinder housing 40-602 away from the machine body.
7. Remove valve disc 40-010 by unscrewing the screw 3-105. Hold a 3 mm hex wrench at the washer 40-017 to prevent rotation. It is now possible to remove the piston 40-019.
8. To remove the valve rod assembly 40-603 from the piston, hold the exposed valve disc 40-013 gently in a vise. Use a 3 mm hex wrench to remove the screw.
9. Replace the springs 40-046 and 40-047.

### Reassembly.

1. Reassemble in reverse order, taking care not to bend the valve rod assembly.



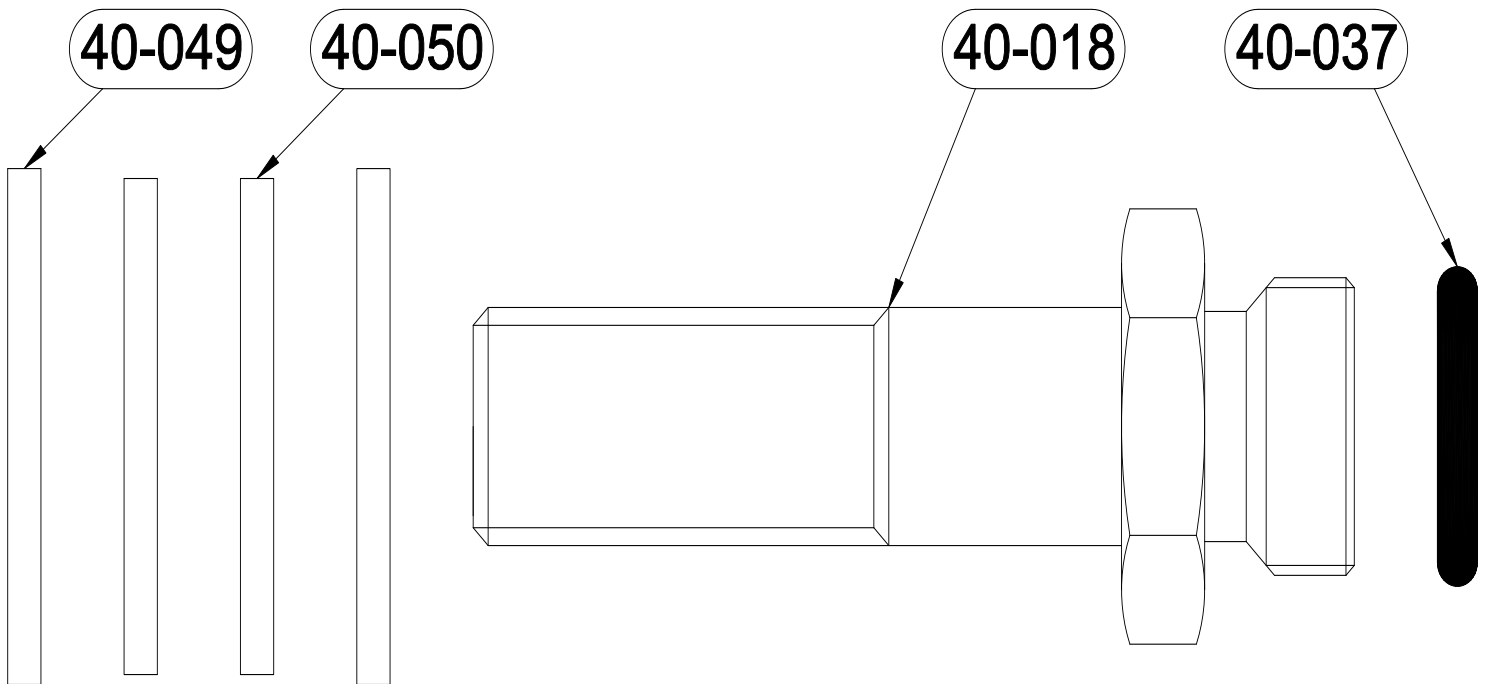




Part No.	Description	Qty
3-105	Screw	1
3-407	O-ring	1
10-210	Screw	9
10-407	O-ring	1
40-001	Bottom plate	1
40-006	Top plate	1
40-009	Silencer	1
40-010	Valve disc	1
40-011	Valve seat	1
40-013	Valve disc	1
40-017	Washer	1
40-019	Piston	1
40-026	Composite bearing	4
40-027	Washer	1
40-028	Air inlet	1
40-031	Urethane washer	2
40-035	O-ring	2
40-036	O-ring	1
40-037	O-ring	1
40-039	Cup seal	2
40-041	Cup seal	2
40-045	Spring	1
40-046	Spring	1
40-047	Spring	1
40-050	Urethane washer	4
40-051	Air connection	2

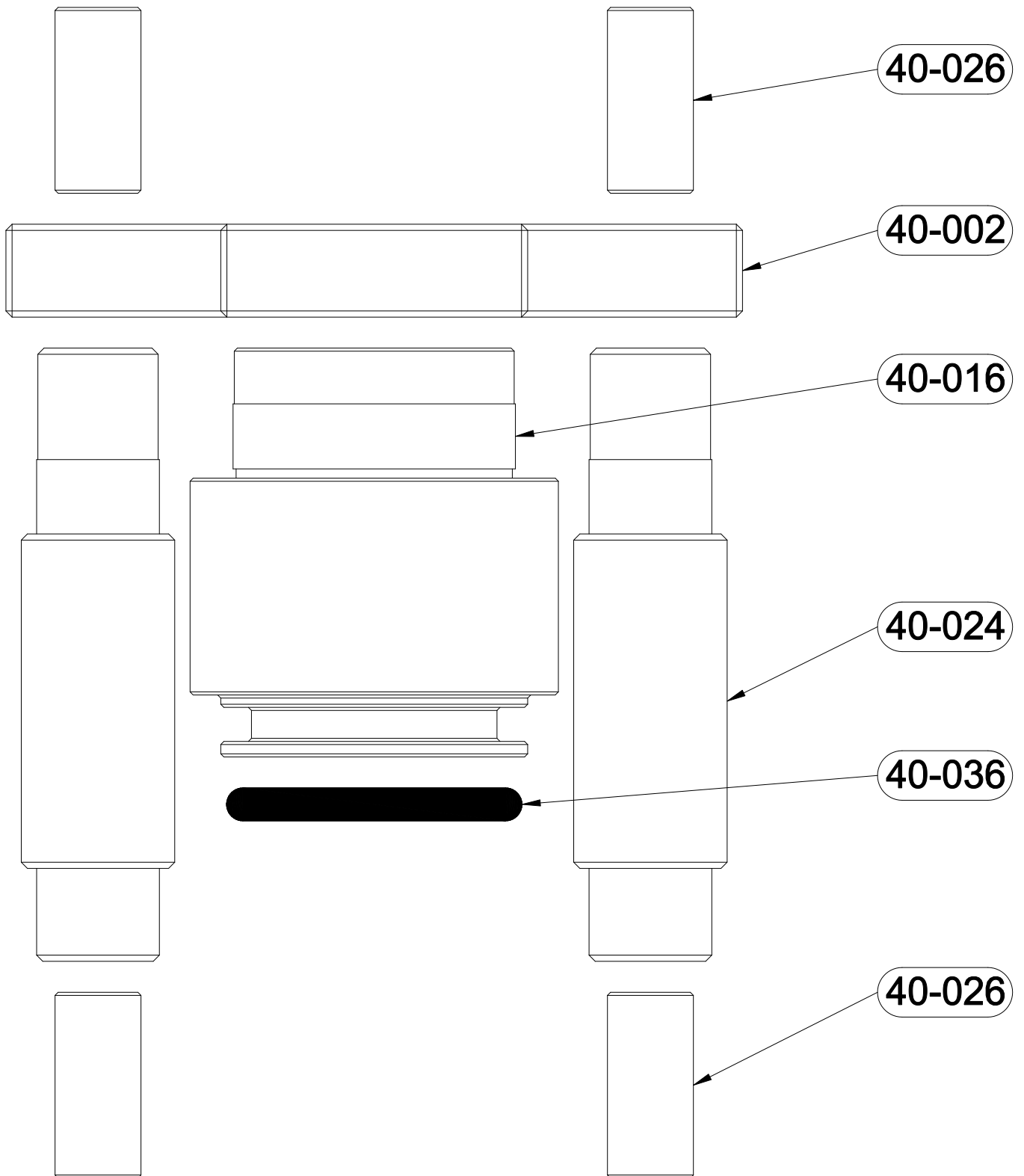
Part No.	Description	Qty
40-052	Tube	1
40-054	Screw	2
40-055	Screw	3
40-057	Screw	1
40-065	Felt	2
40-068	Guide sleeve 9	1
40-069	Guide sleeve 11	1
40-072	Nut	1
40-073	Threaded valve seat	1
40-074	O-ring	1
40-081	Guide column left	1
40-082	Guide column right	1
40-405	Speed adjustment screw	1
<b>Subassemblies</b>		
Part No.	Description	Qty
40-100	Repair kit	-
40-601	Plug	1
40-602	Front Cylinder	1
40-603	Valve rod	1
40-604	Slide frame	1
40-606	Silencer	1
40-607	Speed adjustment assembly	1
40-608	Air regulator	1





Part No.	Description	Qty
40-018	Plug *	1
40-037	O-ring	1
* Not sold separately		

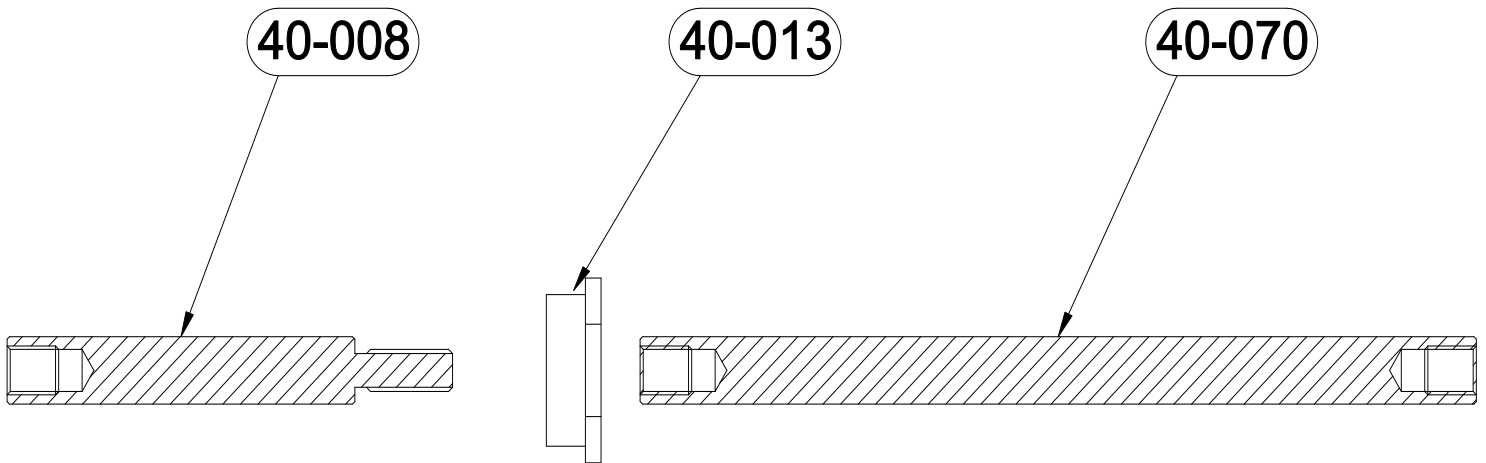
Part No.	Description	Qty
40-049	Washer	2
40-050	Urethane washer	2



Part No.	Description	Qty
40-002	Front holder *	1
40-016	Front cylinder *	1
40-024	Spacer *	2
* Not sold separately		

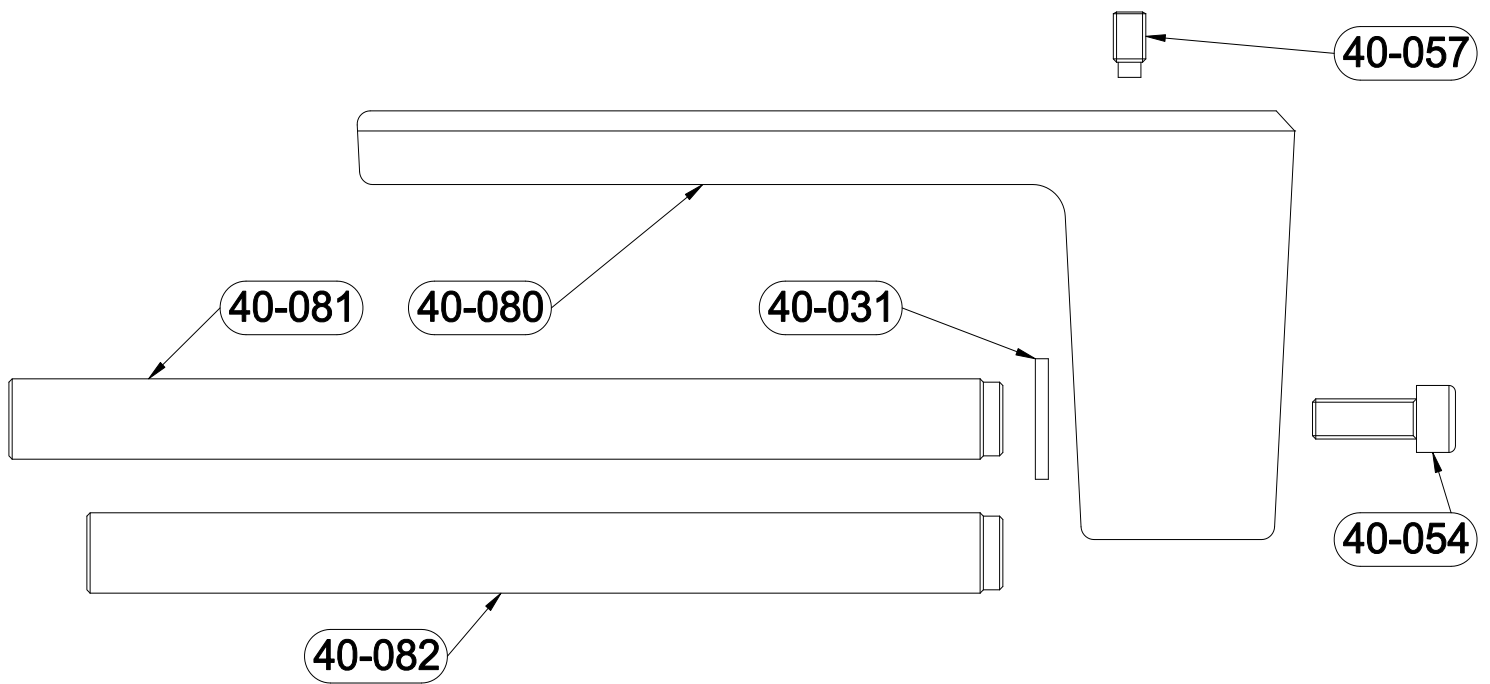
Part No.	Description	Qty
40-026	Composite bearing	4
40-036	O-ring	1





Part No.	Description	Qty
40-008	Valve rod *	1
40-013	Valve disc	1
* Not sold separately		

Part No.	Description	Qty
40-070	Extension *	1



Part No.	Description	Qty
40-031	Urethane washer	2
40-054	Screw	2
40-057	Screw	1
* Not sold separately		

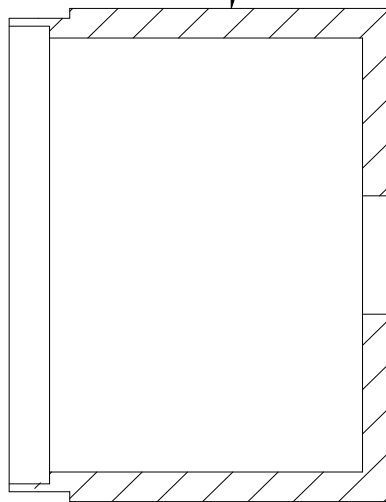
Part No.	Description	Qty
40-080	Slide frame *	1
40-081	Guide column left *	1
40-082	Guide column right *	1



40-067

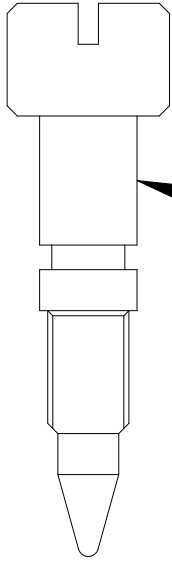


40-059



Part No.	Description	Qty
40-059	Sleeve *	1
* Not sold separately		

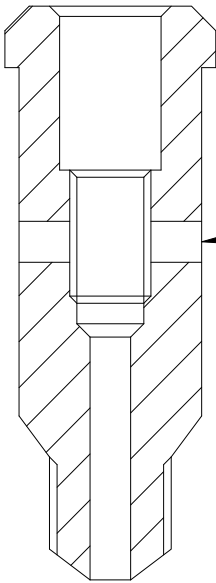
Part No.	Description	Qty
40-067	Washer *	1



**40-405**



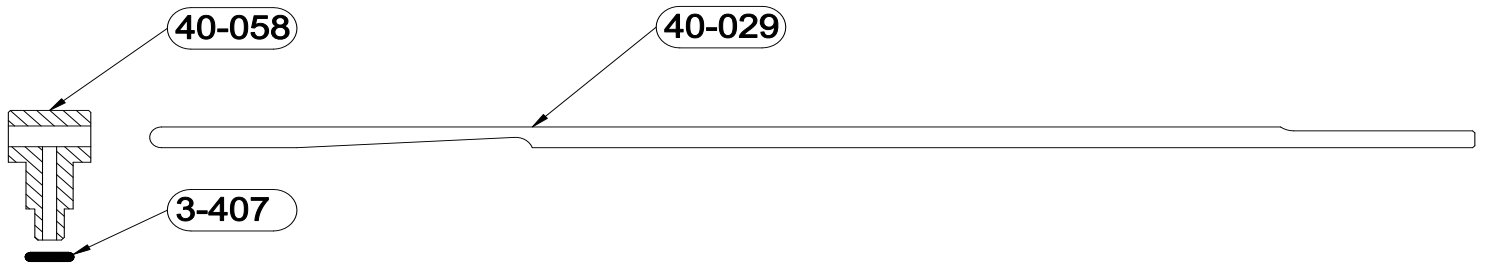
**10-407**



**40-060**

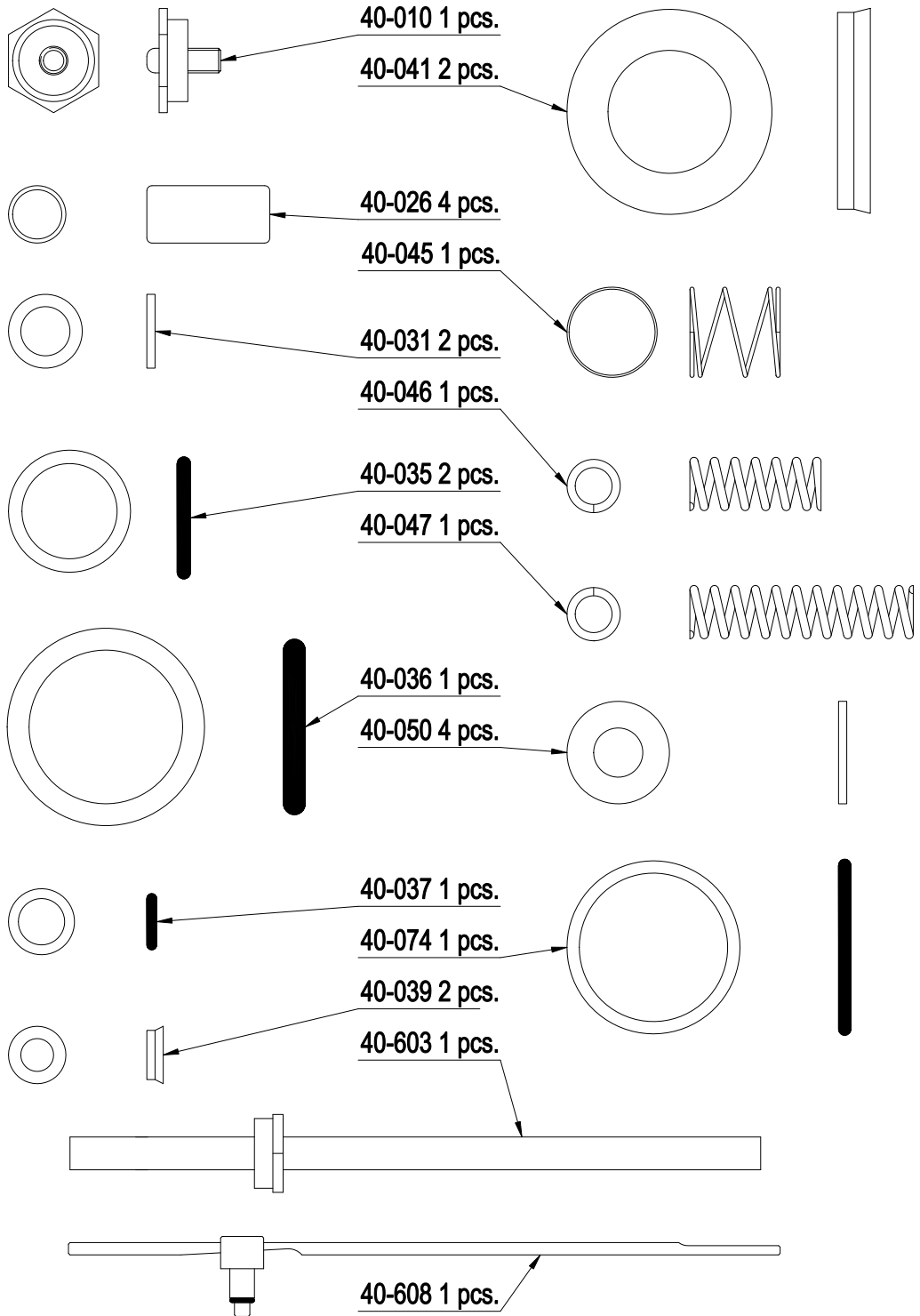
Part No.	Description	Qty
10-407	O-ring	1
40-060	Valve *	1
* Not sold separately		

Part No.	Description	Qty
40-405	Speed adjustment screw	1



Part No.	Description	Qty
3-407	O-ring	1
40-029	Air regulator rod *	1
* Not sold separately		

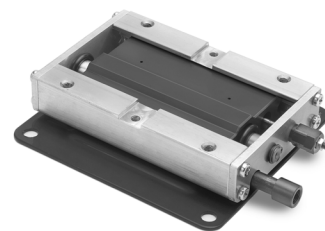
Part No.	Description	Qty
40-058	Air regulator *	1





### TP 3

Air pressure	4 - 5,5 bar
Air consumption	5 l/min
Length of stroke	23 mm
Rate of feed	8 - 10 m/min
Max gradient on feed chute	8 °
Sound level	56 dB (A)
Weight	1,5 kg
Transportation capacity	3 kg
Max weight chute	1,5 kg



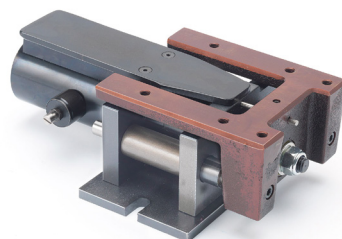
### TP 10

Air pressure	4 - 5,5 bar
Air consumption	11 l/min
Length of stroke	23 mm
Rate of feed	8 - 10 m/min
Max gradient on feed chute	8 °
Sound level	60 dB (A)
Weight	3 kg
Transportation capacity	10 kg
Max weight chute	3 kg



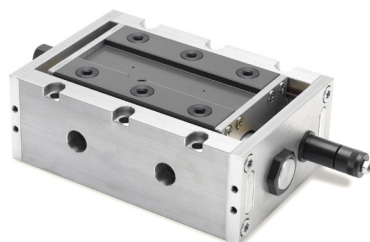
### TP 40

Air pressure	4 - 5,5 bar
Air consumption	31 l/min
Length of stroke	27 mm
Rate of feed	8 - 10 m/min
Max gradient on feed chute	8 °
Sound level	68 dB (A)
Weight	8,5 kg
Transportation capacity	40 kg
Max weight chute	15 kg



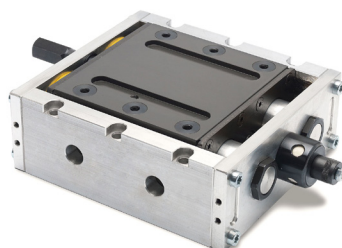
### TP 70

Air pressure	4 - 5,5 bar
Air consumption	44 l/min
Length of stroke	27 mm
Rate of feed	8 - 10 m/min
Max gradient on feed chute	8 °
Sound level	68 dB (A)
Weight	6 kg
Transportation capacity	70 kg
Max weight chute	50 kg



### TP 140

Air pressure	4 - 5,5 bar
Air consumption	42 l/min
Length of stroke	27 mm
Rate of feed	8 - 10 m/min
Max gradient on feed chute	8 °
Sound level	62 dB (A)
Weight	8,5 kg
Transportation capacity	140 kg
Max weight chute	100 kg



Air consumption is measured at a pace of 120 strokes per minute and an air pressure of 4 bar.





### 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).

### Mectool Sweden AB

P.J. Rösjös Väg 121-3

293 40 Olofström

**SWEDEN**

**Phone:**

+46 454 30 90 40

**Email:**

[info@mectool.se](mailto:info@mectool.se)

**Website:**

[www.mectool.se](http://www.mectool.se)



# 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 kompatibilitet)

## 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:

Olofström 2021-01-12

Signature:



Name: Kenneth Brodin

Position: VD