

# TD-13 13-Inch Twin-Directional Autoscrubber Parts Lists and Schematic Drawings



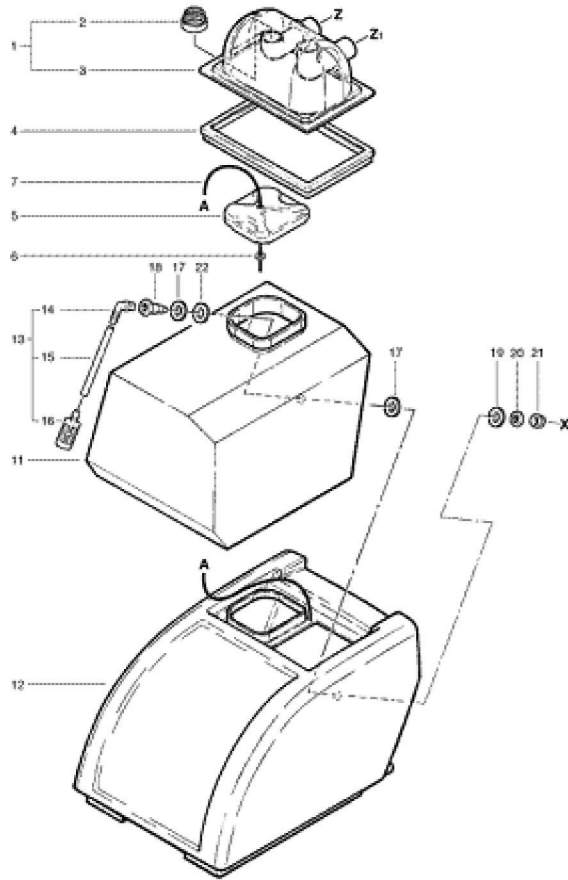
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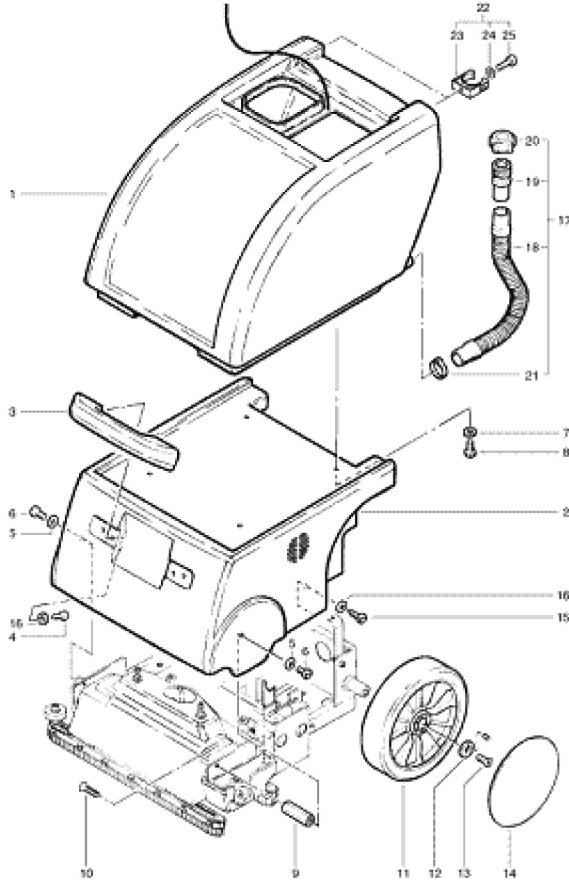
# TD-13 13-Inch Twin-Directional Autoscrubber Cover Parts List and Schematic Drawing



Pos.	Description	Reference
01	Tank cover including Items 2+3	400.756
02	Filter	400.754
02	Filter (after week 39/98)	400.766
03	Tank cover	400.751
04	Seal for cover	420.723
05	Clean water tank cover	530.758
06	Washer M 4	P...497F
07	Cordle	490.750
11	Fresh water tank	420.722
12	Tank	411.723
13	Suction hose complete including Items 14-16	400.725
14	Angled fitting G 1/4"	P...541I
15	Suction hose 8/6 x 100	400.261B
16	Fresh water filter	P...528
17	Washer dm 35 mm	P...098
18	Fitting SW 22 G 3/8"	400.724
19	Gasket 30/17 x 2	P...097
20	Nut G 3/8"	P...535B
21	Sleeved nut	P... 523G

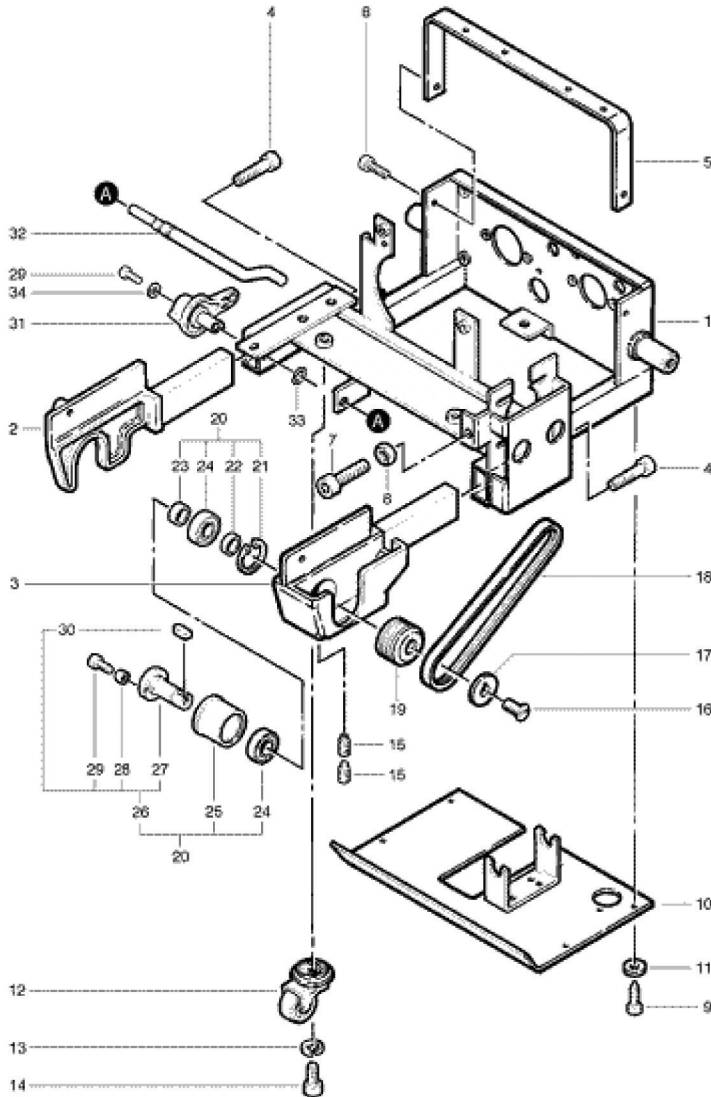


# TD-13 13-Inch Twin-Directional Autoscrubber Tank Parts List and Schematic Drawing



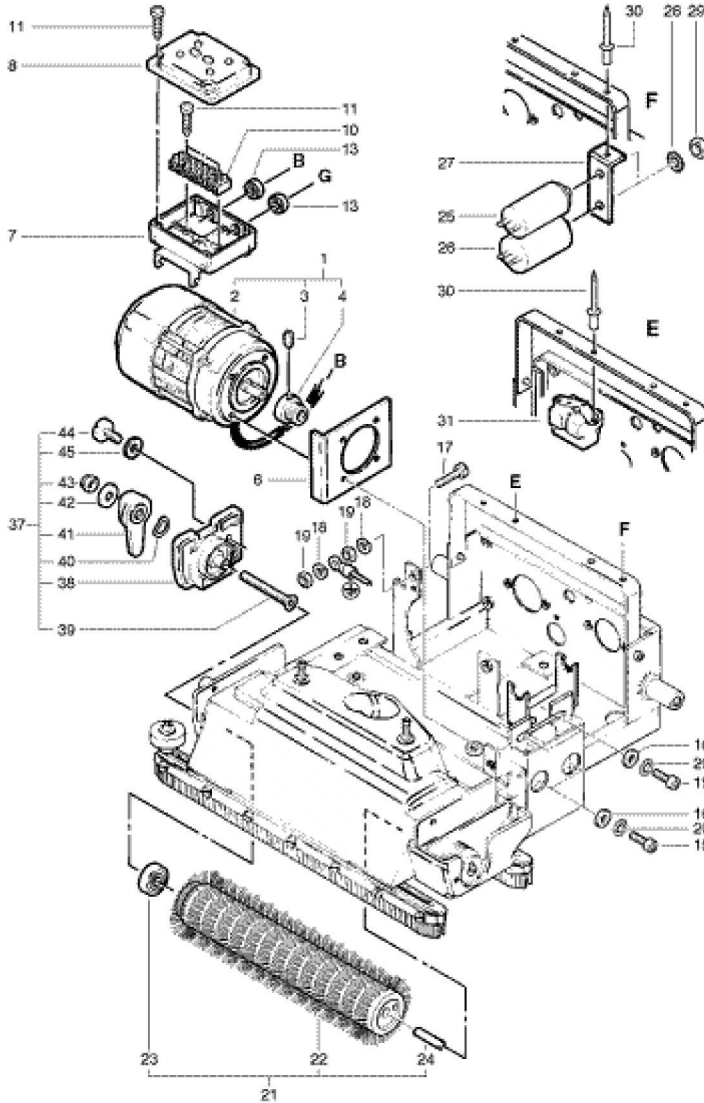
Pos.	Description	Reference
01	Tank	411.721
02	Chassis cover	411.711
03	Handle	077.560
04	PT-screw 50x18 mm	P...516Q
05	Washer M 5	P...497E
06	Pan Head screw M 5x12	P...475I
07	Washer M 6	P...496L
09	Pan Head screw M 6x12	P...475T
10	Countersunk screw M 6x12	P...480 B
11	Wheel 200x54	411.240
12	Attaching washer 30x3	P...499
13	Countersunk screw M 6x12	P...487U
14	Wheel cover	530.242
15	Screw 4,8x13	P...482L
16	Washer M6	P...496G
17	Discharge hose complete including Items 18-21	480.740
18	Discharge hose 330 mm	480.741
19	Hose socket	500.409A
20	Hose socket cap	500.410
21	Hose clamp 36,5-39,6	P...553R
22	Hose support complete including Items 23-25	400.445
23	Hose support	P...109A
24	Washer M 5	P...497G
25	Hexagon socket srew M 5x14	P...488F

# TD-13 13-Inch Twin-Directional Autoscrubber Chassis Parts List and Schematic Drawing



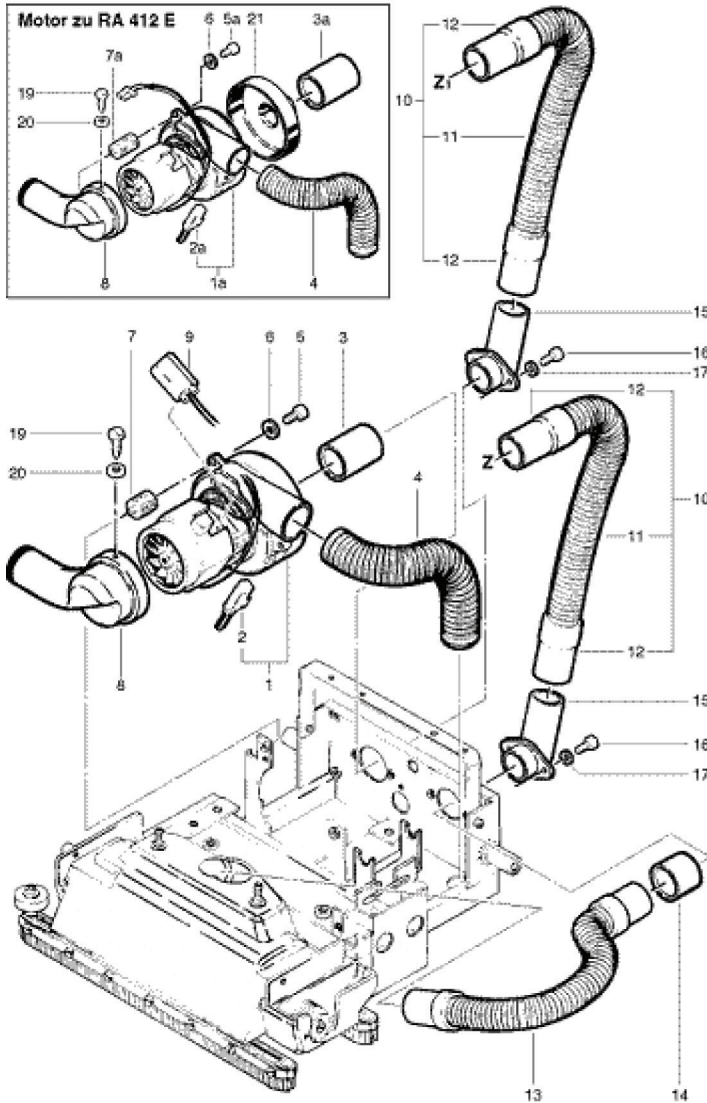
Pos.	Description	Reference
01	Chassis	411.111
02	Right support	411.114
03	Left support	400.113
04	Hexagon socket screw M 6x25 mm	P...486T
05	Frame	420.352
06	Hexagon socket screw M 4x12 mm	P...486A
07	Hexagon socket screw M 8x25 mm	P...487D
08	Hexagon nut M8	P...490E
09	Screw 2,9x9,5 mm	P...483G
10	Bottom plate	411.800
11	Washer M3	P...497B
12	Castor	P...205B
13	Spring ring M10	P...498E
14	Hexagon socket screw M 10x20 mm	P...487H
15	Thread pin M 5x5 mm	P...482Z
16	Countersunk screw M 6x12 mm	P...487U
17	Attaching washer	P...499
18	Driving belt	420.425
19	Belt pulley	400.415
20	Brush axle complete including Items 21-30	400.401
21	Retaining ring I 32	P...514K
22	Distance ring 18/15x4 mm	400.414
23	Distance ring 13/15x6,8 mm	400.413
24	Ball bearing	P...316M
25	Bearing box	400.410
26	Axe complete including Items 27-30	400.405
27	Axle	400.411
28	Distance ring	400.418
29	Hexagon socket screw M 4x8 mm	P...488D
30	Wedge	400.420
31	Lever	411.460
32	Schwenkhebel	411.140
33	Security washer dm 6,35 mm	P...499X
34	Washer M5	P...496H

# TD-13 13-Inch Twin-Directional Autoscrubber Motor Parts List and Schematic Drawing



Pos.	Description	Reference
01	Brush motor complete including Items 2-4	400.281
02	Brush motor 370 W	400.281A
03	Threaded pin M 6x10 mm	P...484Y
04	Belt pulley	400.284
06	Motor holder 110x90x3 mm	400.291
07	Distribution box	400.320A
08	Cover of distribution box	P...379A
10	Terminal 8 poles	P...383D
11	PT-Screw KA 30x14 mm	P...516S
13	Rubber clamp	P...408K
15	Hexagon socket screw M 5x16 mm	P...486I
16	Washer M5	P...496G
17	Cyl. screw M 4x20 mm	P...478L
18	Spring ring M4	P...498A
19	Hexagon nut M4	P...491Q
21	Brush complete including Items 22-24	400.470
22	Brush (bristles dm 0,18)	400.471
23	Ball bearing dm 12x32 mm	P...316D
24	Centrepin dm 8x38 mm	400.478
25	Capacitor 12uF/450V	P...385B
26	Capacitor 16uF/450V	P...385C
27	Angled holder for capacitor	480.185
28	Serrated lock washer M8	P...499F
29	Hexagon nut M8	P...490E
30	Blind rivet 4x8 mm	P...485C
31	Relais	420.331
32	Distance ring	P...485D
37	Brush support complete including Items 38-45	400.450
38	Brush support	400.465
39	Countersunk screw M 6x60 mm	P...479T
40	Spring washer	P...498X
41	Support	400.461
42	Washer M6	P...496L
43	Stopp-nut M6	P...492K
44	Special screw M 5x12 mm	400.475
45	Washer M5	P...497E

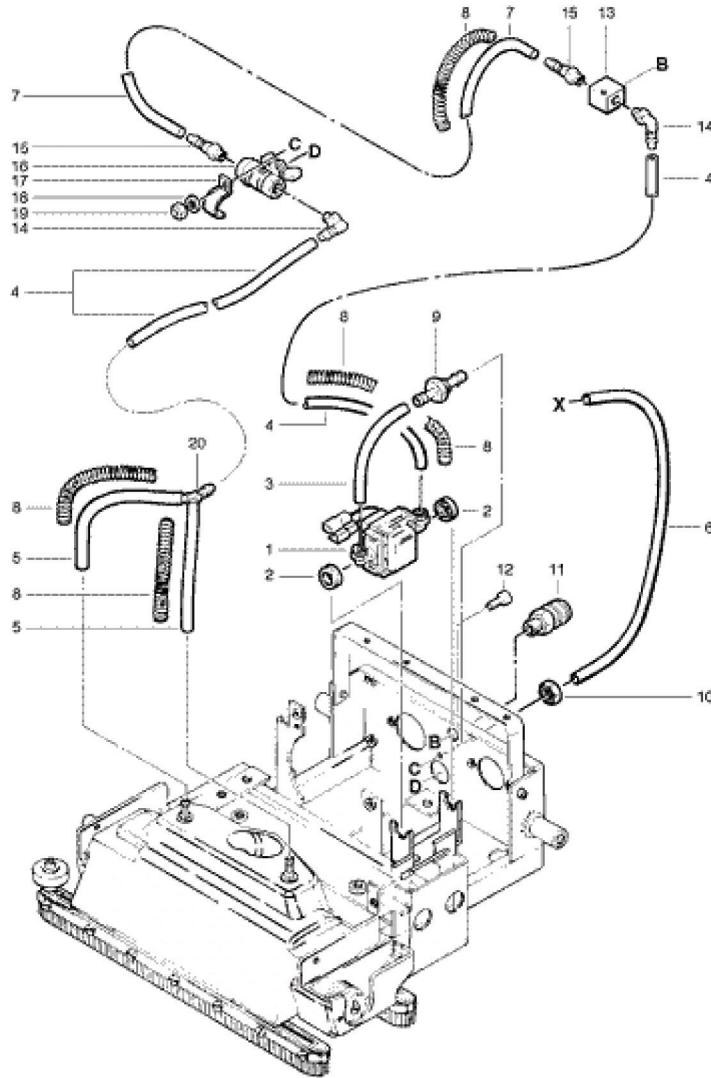
# TD-13 13-Inch Twin-Directional Autoscrubber Vacuum Motor Parts List and Schematic Drawing



Pos.	Description	Reference
01	Suction motor EMC 240 V	400.211
01	Suction motor for RA 412 E	400.211
02	Pair of carbon brushes	P...870V
02	Pair of carbon brushes for RA 412 E	P...870KH
03	Connection piece	411.215
03	Connection piece for RA 412 E	420.212
04	Noise absorbing hose	400.227
05	Hexagon socket screw M 6x12 mm	P...486Q
05	Hexagon socket screw M 6x16 mm for RA 412 E	P...486V
06	Washer M6	P...496L
07	Round buffer dm 20x25 mm	400.217
07	Round buffer dm 20x30 mm for RA 412 E	400.214
08	Tube for motor cooling	420.361
09	Capacitor 0,15uF	P...387C
10	Complete hose including Items 11+12	411.770
11	Hose 40/33x310 mm	411.772
12	Socket NW 32	P...575B
13	Suction hose NW 32x490 mm	500.408A
14	Socket dm 43x35,5 mm	400.224
15	Connection piece	420.220
16	Hexagon socket screw M 4x12 mm	P...486A
17	Washer M4	P...496C
19	Screw 2,9x6,5 mm	P...483H
20	Washer M3	P...497B
21	Hose connection cap for RA 412 E	500.445



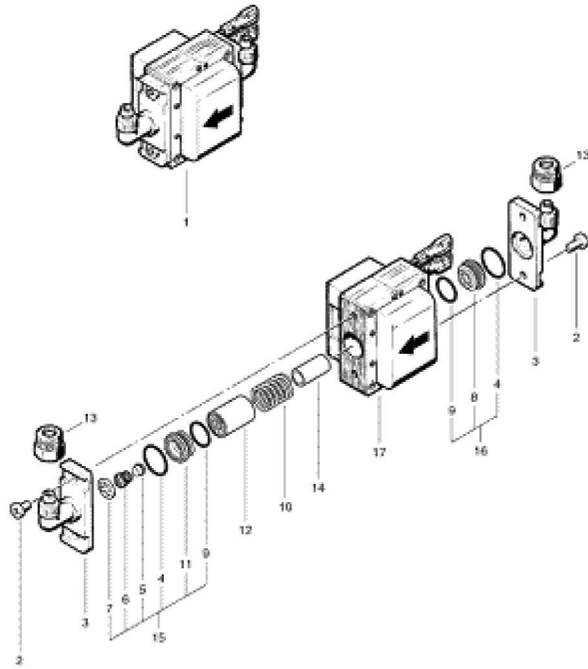
# TD-13 13-Inch Twin-Directional Autoscrubber Pump Assembly Parts List and Schematic Drawing



Pos.	Description	Reference
01	NDS-C-pump	P...812
02	Grommet dm 14 mm	P...207A
03	Suction hose 8/6x170 mm	400.261A
04	Pressure hose 8/6x330 mm	400.262
05	Pressure hose 8/6x120 mm	400.261
06	Suction hose 8/6x330 mm	480.341
07	Pressure hose 8/6x210 mm	400.341
08	Protection spring	900.162A
09	Double fitting	400.342
10	Hexagon nut G 1/8««	P...535I
11	Female quick connector	P...500B
12	Hexagon socket screw M 5x12 mm	P...488B
13	Distribution piece	480.353
14	Angled nipple 6R 1/8««	P...541E
15	Nipple 6R 1/8««	P...540B
16	Ball tap	P...508B
17	Clamp	450.336A
18	Washer M5	P...496H
19	Stop nut M5	P...493G
20	Y-piece 6 mm	P...542D



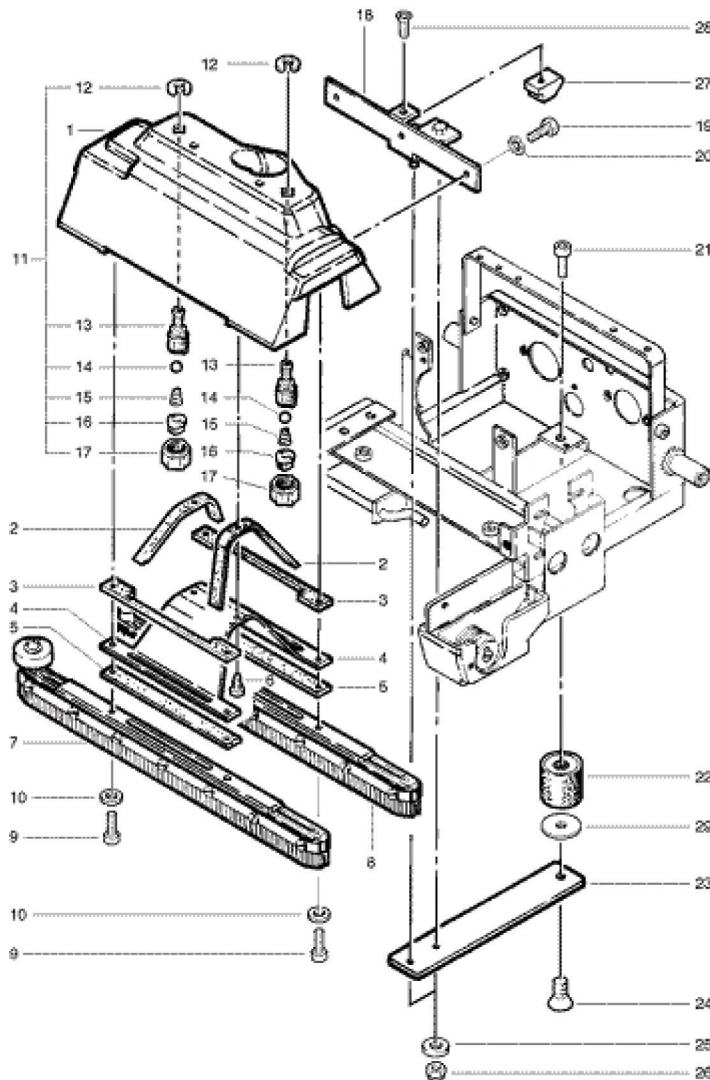
# TD-13 13-Inch Twin-Directional Autoscrubber Pump Parts List and Schematic Drawing



Pos.	Description	Reference
01	NDS-XC NDS-C - pump	P...812
02	Raised head screw M 4x10 mm	P...481M
03	Angled fitting NW 6	P...810M
04	O-ring 14x1,5 mm	P...809K
05	Valve cone	P...810S
06	Valve spring	P...809P
07	Counter ring	P...809N
08	Spring support	P...809F
09	O-ring 12x1,5 mm	P...809L
10	Pressure spring for piston	P...809E
11	Valve seating	P...809Q
12	Piston	P...809B
13	Sleeved nut 8/6-M 12	P...523G
14	Distance piece	P...809 S
15	Valve seating compl. Including: items 4-7, 9+11	P...810 Y
16	Spring support compl. Including: items 4,8+9	P...810 X
17	Magnet coil 230 V/50 Hz	P...809 A



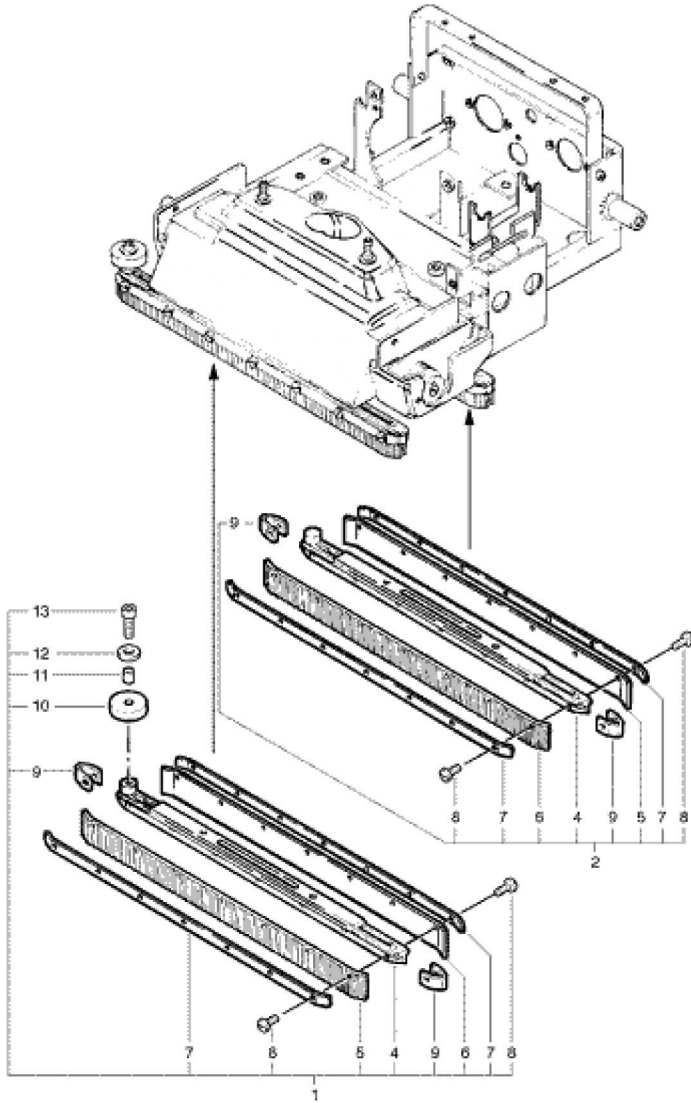
# TD-13 13-Inch Twin-Directional Autoscrubber Suction Canal Parts List and Schematic Drawing



Pos.	Description	Reference
01	Suction nozzle	400.510
02	Top seal 200x10x3 mm	400.561
03	Top seal 190x18x3 mm	400.561A
04	Cover 219,6x190x2 mm	400.560
05	Lower seal 190x18x3 mm	400.563
06	Pan Head screw M 4x10 mm	P...475V
08	Front suction nozzle complete	400.530
09	Hexagon socket screw M 5x14 mm	P...488F
10	Washer M 5	P...497G
11	Spraying nozzle complete including Items 12-17	400.550
12	Security washer 9 mm	P...499N
13	Holder for nozzle	P...602E
14	Ball for spraying nozzle	P...172W
15	Pressure spring	P...444E
16	Spraying jet yellow	P...602N
17	Cup nut 3/8«	P...602D
18	Nozzle holder 230x115x3 mm	400.394
19	Hexagon screw M 5x12 mm	P...470H
20	Serrated lock washer M5	P...498D
21	Hexagon socket screw M 8x10 mm	P...487A
22	Round buffer	400.393
23	Arch 262x45x5 mm	411.396
24	Countersunk screw M 8x12 mm	P...479R
25	Washer M5	P...496G
26	Stopp-nut M5	P...493G
27	Glider	411.391
28	Hexagon socket screw M 4x10 mm	P...489D
29	Washer 8x30x2 mm	P...497Z



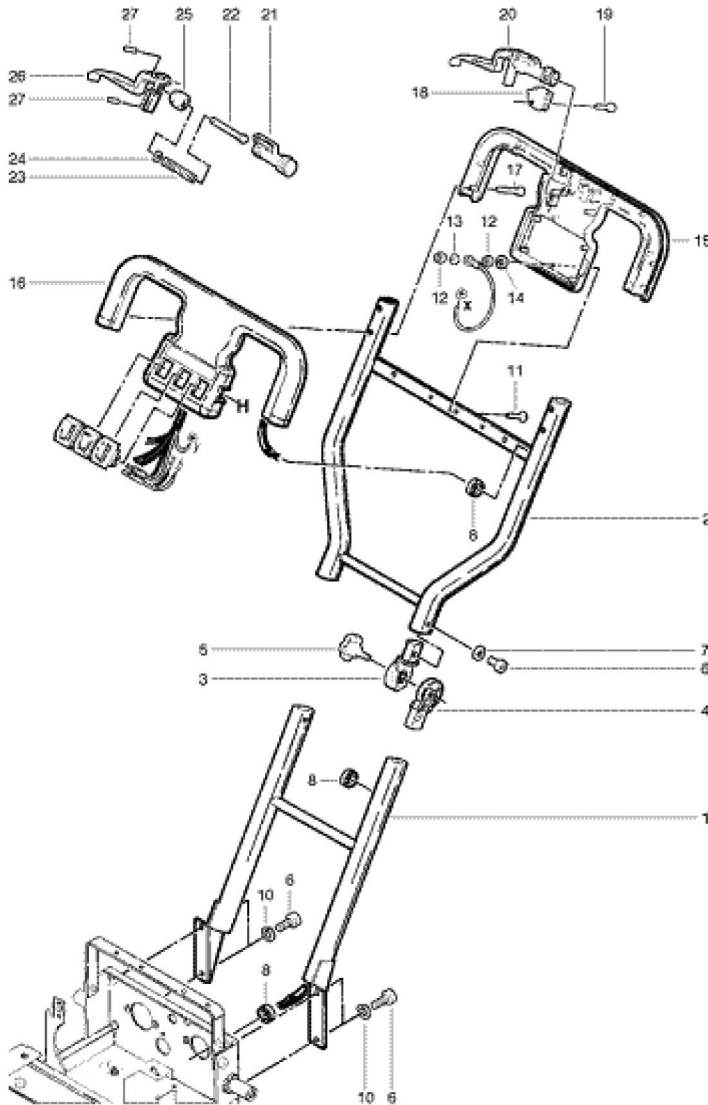
# TD-13 13-Inch Twin-Directional Autoscrubber Suction Nozzle Parts List and Schematic Drawing



Pos.	Description	Reference
01	Front suction nozzle compl. including Items 4-13	400.520
02	Rear suction nozzle compl. including Items 4-9	400.530
04	Suction nozzle	400.538
05	Outer lamella (blue)	400.540
06	Inner lamella (green)	400.545
07	Clamping plate 448x10x2,5 mm	400.534
08	Pan head M 4x10 mm	P...475V
09	Protection piece 50/10x1 mm	400.535
10	Fender wheel 40x10 mm	400.521
11	Distance piece 8/5x5,5x10,5 mm	400.522
12	Washer M5	P...497E
13	Hexagon Socket screw M 5x16 mm	



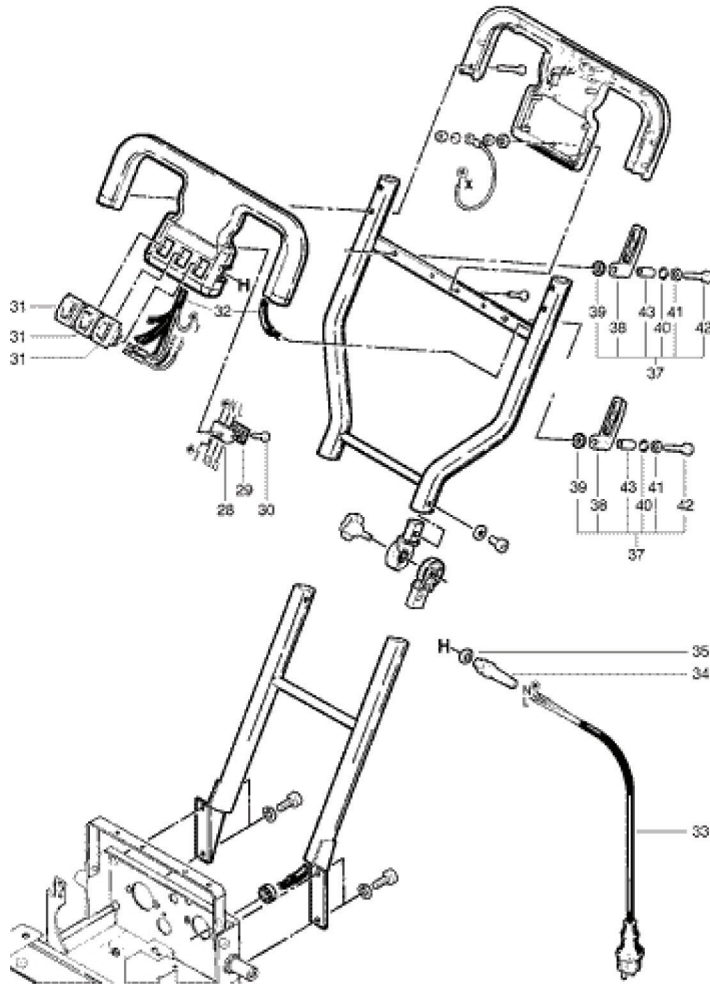
# TD-13 13-Inch Twin-Directional Autoscrubber Push Bar 1 Parts List and Schematic Drawing



Pos.	Description	Reference
01	Lower pushbar	420.651
02	Upper pushbar	420.650
03	Upper joint	420.601
04	Lower joint	420.602
05	Screw knob	P...253
06	Hexagon socket screw M 6x12 mm	P...486Q
07	Washer M6	P...496L
08	Rubber clamp	P...207A
10	Spring ring M6	P...498U
11	Screw M 4x20 mm	P...481E
12	Hexagon nut M4	P...491Q
13	Spring ring M4	P...498A
14	Washer M4	P...496C
15	Lower handle housing	400.615
16	Upper handle housing	400.611
17	PT screw KA 30x30 mm	P...516B
18	Switch	P...242
19	PT screw KA 30x20 mm	P...482P
20	Lever complete including Items 21-27	400.620
21	Valve body	400.622
22	Valve pin	P...681D
23	Valve spring	P...681E
24	Washer M5	P...497G
25	Cap nut	P...681B
26	Lever	400.621
27	Cyl. Pin dm 1,5x14,5 mm	P...681K



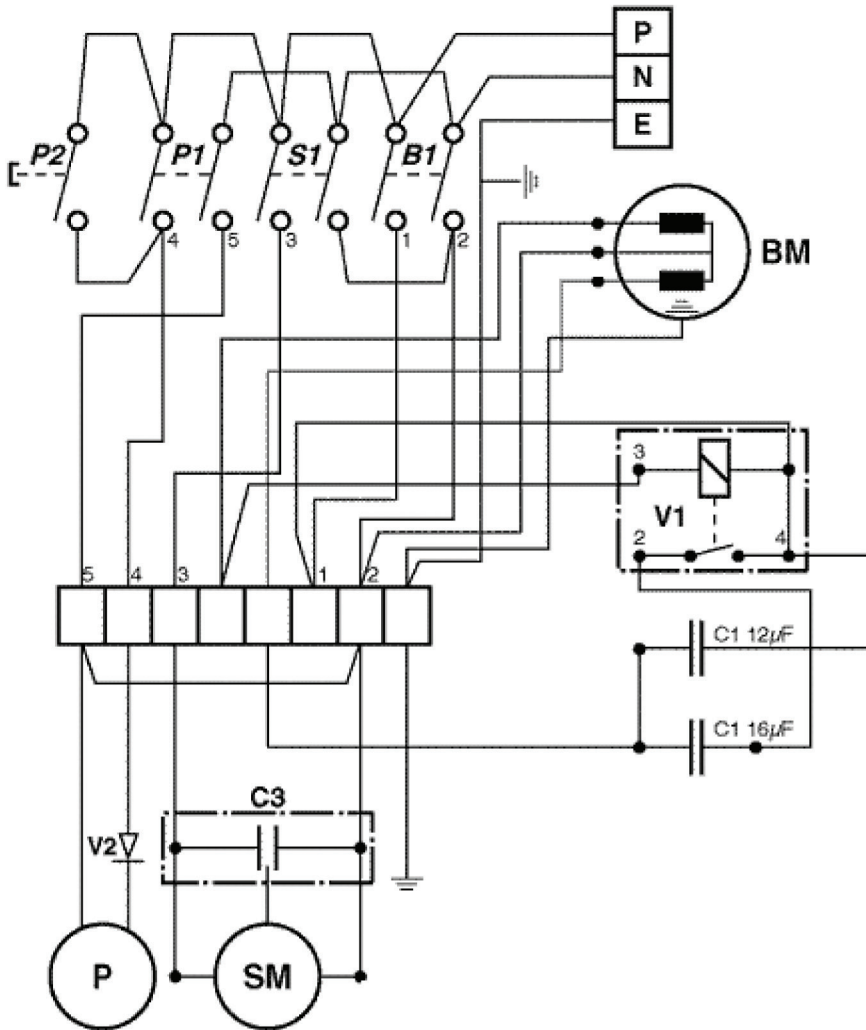
# TD-13 13-Inch Twin-Directional Autoscrubber Pushbar 2 Parts List and Schematic Drawing



Pos.	Description	Reference
28	Terminal 3 poles	P...383A
29	Marking plate	P...390
30	Screw 2,9x16 mm	P...516S
31	Tumbler switch	P...240
32	Wiring to handle	410.310S
33	Harness 600 mm	P...400B
34	Cable attachmen	P...280D
35	Counter nut PG 9	P...279H
37	Catch for cable complete including Items 38-43	P...087
38	Catch for cable	P...087A
39	Washer dm 6/16x1 mm	P...497M
40	O-Ring 8,73x1,78 mm	P...088
41	Washer M6	P...496K
42	Hexagon socket screw M 6x30 mm	P...488S
43	Distance piece 6/8x18,8 mm	P...087B



# TD-13 13-Inch Twin-Directional Autoscrubber Wiring Diagram



Pos.	Description	Reference
B1	Main switch for brush motor	
	Brush motor	400.281
	Working capacitor	
	Starting capacitor	
	Capacitor 0,47uF	
	Pump	P...812
	Main switch for continous fuctionning	
	Main switch for interrupted fonctionning	
	Main switch for vacuum motor	
	Vacuum motor	400.211
	Starting capacitor	
	Diode	