

PARTS LIST FOR PN 28403, 12000 RPM, 4" GRINDER, TYPE-27

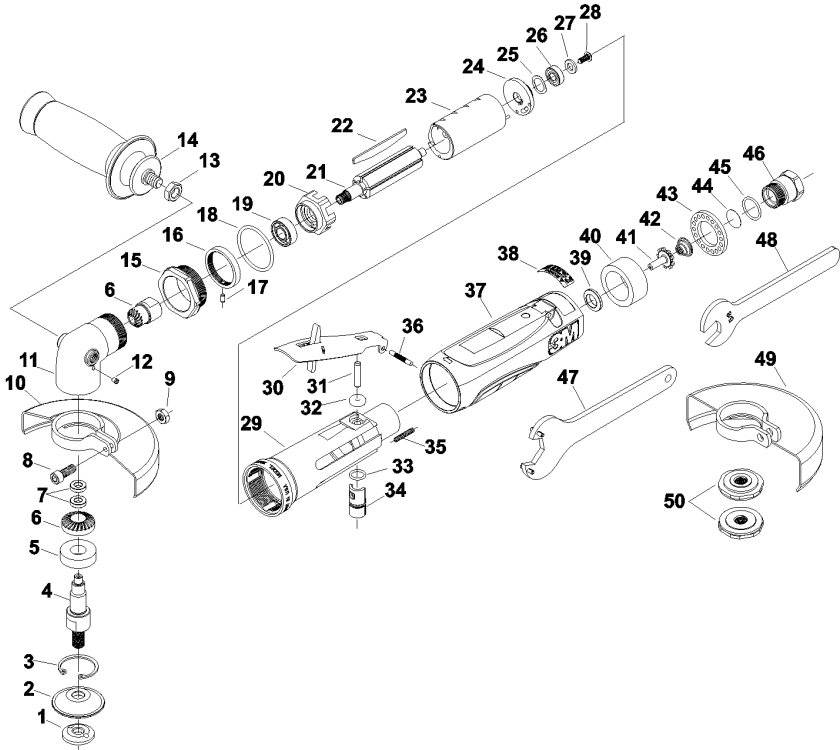


Fig. Number	3M P/N	Description	Qty	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
1	55082	Retainer-Grinding Wheel	1	06638	Housing	1																			
2	55085	Wheel Flange	1	06642	Lever	1																			
3	55088	Retaining Ring	1	06558	Torr Pin, 3/16" x 7/8"	1																			
4	55101	Output Spindle 3/8-24 Thread	1	06543	O-Ring	1																			
5	55078	Ball Bearing	1	06511	O-Ring	1																			
6	55113	Gear Set	1	06536	Regulator	1																			
7	55114	Ball Bearing .500" x .25" x .125" (2)	2	06537	Screw, 6-32 x 3/4 Set Soc Hex	1																			
8	55076	Socket Head Hex Screw, 1/4-20	1	06538	Groove Pin, 1/8" x 7/8" Type E	1																			
9	55083	Hex Nut, 1/4-20	1	06539	Housing Cover	1																			
10	55109	4" Type 27 Guard	1	06540	Warning Label	1																			
11	55111	Angle Head	1	06541	Throttle Valve Seat	1																			
12	06523	Grease Fitting	1	06542	Muffler	1																			
13	06503	Jam Nut	1	06543	Throttle Valve	1																			
14	28402	Side Handle 3/8-16 EXT Thread, 3M PN28402	1	06544	Taper Spring	1																			
15	06653	Angle Head Clamp Nut	1	06545	Exhaust Deflector	1																			
17	06520	Pin, 1/8" x 1/4"	1	06546	Screen	1																			
18	06609	O-Ring	1	06608	O-Ring, 1/16" x 5/8" x 3/4"	1																			
19	06510	Ball Bearing 3/8" x 7/8" x 9/32"	1	55107	Bushing, 3/8" NPT	1																			
20	06639	Front End Plate	1	55081	Spanner Wrench	1																			
21	06562	Rotor	1	06524	5/8" Wrench	1																			
22	06643	Vane, Set of 5	1	55106	4.5" Guard (flat back)	1																			
23	06563	Cylinder	1	55100	Flange (2)	1																			
24	06560	Rear End Plate	1	NA	Commercially Available	1																			
25	06527	Wave Washer .440" x .618" x .008"	1																						
26	06508	Ball Bearing	1																						
27	06567	Washer .251" x .468" x .063"	1																						
28	06568	Screw #8-32 X 3/8 But Hd Cap	1																						

PARTS LIST FOR PN 28405, 12000 RPM, 4 1/2" GRINDER, TYPE-27

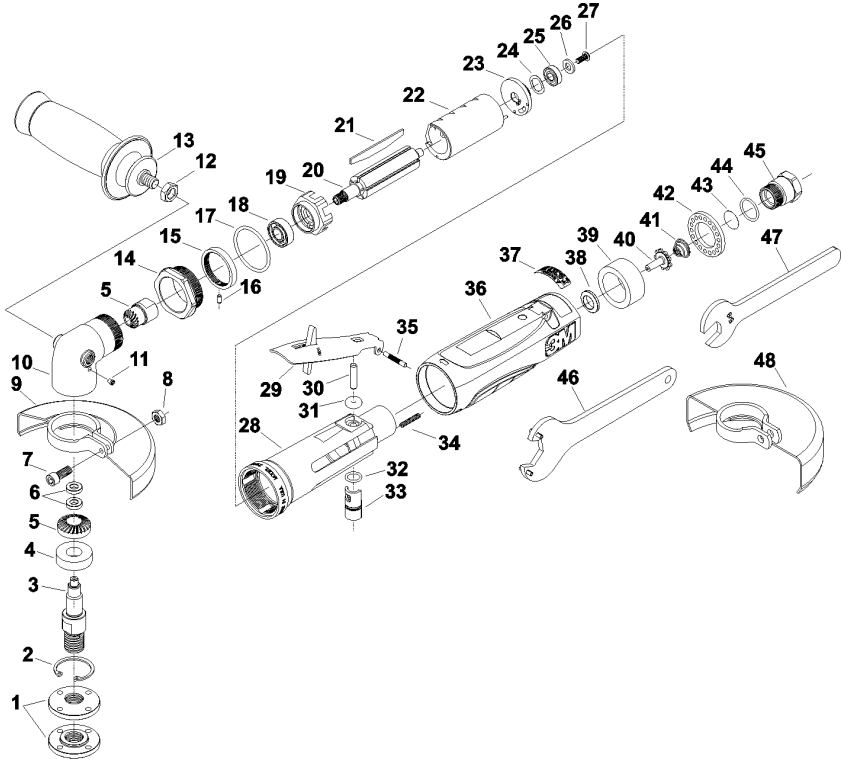


Fig. Number	3M P/N	Description	Qty				
1	06589	Wheel Arbor	2	26	06567	Washer .251" x .468" x .063"	1
2	55088	Retaining Ring	1	27	06568	Screw #8-32 x 3/8 But Hd Cap	1
3	55112	Output Spindle 5/8-11 Thread	1	28	06638	Housing	1
4	55078	Ball Bearing	1	29	06642	Lever	1
5	55113	Gear Set	1	30	06558	Torr Pin, 3/16" x 7/8"	1
6	55114	Ball Bearing .500" x .25" x .125" (2)	2	31	06543	O-Ring	1
7	55076	Socket Head Hex Screw, 1/4-20	1	32	06511	O-Ring	1
8	55083	Hex Nut, 1/4-20	1	33	06556	Regulator	1
9	55108	4-1/2" Type 27 Guard	1	34	06501	Screw, 6-32 x 3/4 Set Soc Hex	1
10	55111	Angle Head	1	35	06559	Groove Pin, 1/8" x 7/8" Type E	1
11	06523	Grease Fitting	1	36	06598	Housing Cover	1
12	06503	Jam Nut	1	37	06566	Warning Label	1
13	28402	Side Handle 3/8-16 EXT Thread, 3M PN28402	1	38	06552	Throttle Valve Seat	1
14	06653	Angle Head Clamp Nut	1	39	06557	Muffler	1
15	06655	Lock Ring	1	40	06553	Throttle Valve	1
16	06520	Pin, 1/8" x 1/4"	1	41	06554	Taper Spring	1
17	06609	O-Ring	1	42	55084	Exhaust Deflector	1
18	06510	Ball Bearing 3/8" x 7/8" x 9/32"	1	43	06555	Screen	1
19	06639	Front End Plate	1	44	06608	O-Ring, 1/16" x 5/8" x 3/4"	1
20	06562	Rotor	1	45	55107	Bushing, 3/8" NPT	1
21	06643	Vane, Set of 5	1	46	55115	Spanner Wrench	1
22	06563	Cylinder	1	47	06524	5/8" Wrench	1
23	06560	Rear End Plate	1	48	55106	4.5" Guard (flat back)	OPT
24	06527	Wave Washer .440" x .618" x .008"	1	NA	Commercially Available	Adapter 3/8" NPT - 1/4" NPT	1
25	06508	Ball Bearing	1				

PARTS LIST FOR PN 28413, 12000 RPM, 4" GRINDER, TYPE-27 EXTENDED

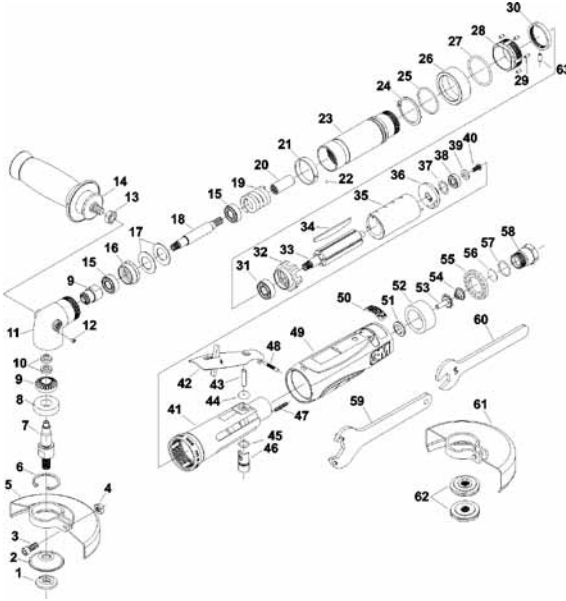


Fig. number	3M P/N	Description	Qty				
1	55082	Retainer-Grinding Wheel	1	35	06563	Cylinder	1
2	55085	Wheel Flange	1	36	06560	Rear End Plate	1
3	55076	Socket Head Hex Screw, 1/4-20	1	37	06527	Wave Washer .440" x .618" x .008"	1
4	55083	Hex Nut, 1/4-20	1				
5	55109	4" Type 27 Guard	1	38	06508	Ball Bearing	1
6	55088	Retaining Ring	1	39	06567	Washer .251" x .468" x .063"	1
7	55101	Output Spindle 3/8-24 Thread	1	40	06568	Screw #8-32 X 3/8 But Hd Cap	1
8	55078	Ball Bearing	1	41	55099	Housing	1
9	55113	Gear Set	1	42	06642	Lever	1
10	55114	Ball Bearing .500" x.25" x.125" (2)	2	43	06558	Torr Pin, 3/16" x 7/8"	1
11	55111	Angle Head	1	44	06543	O-Ring	1
12	06523	Grease Fitting	1	45	06511	O-Ring	1
13	06503	Jam Nut	1	46	06556	Regulator	1
14	28402	Side Handle 3/8-16 EXT Thread, 3M PN28402	1	47	06501	Screw, 6-32 x 3/4 Set Soc Hex	1
15	06510	Ball Bearing 3/8" x 7/8" x 9/32"	1	48	06559	Groove Pin, 1/8" x 7/8" Type E	1
16	55092	Bearing Holder	1	49	06598	Housing Cover	1
17	55110	Disc Spring (2)	2	50	06566	Warning Label	1
18	55093	Shaft	1	51	06552	Throttle Valve Seat	1
19	55097	Spring	1	52	06557	Muffler	1
20	55091	Coupler	1	53	06553	Throttle Valve	1
21	55095	Retainer	1	54	06554	Taper Spring	1
22	55077	Set Screw	1	55	55084	Exhaust Deflector	1
23	55096	Extension Housing	1	56	06555	Screen	1
24	55103	Retaining Ring	1	57	06608	O-Ring, 1/16" x 5/8" x 3/4"	1
25	55079	O-Ring	1	58	55098	LH Thread Bushing 3/8" NPT	1
26	55090	Cover	1	59	55081	Spanner Wrench	1
27	06609	O-Ring	1	60	06524	5/8" Wrench	1
28	55089	Locking Clamp Nut	1	61	55106	4.5" Guard (flat back)	OPT
29	06520	Pin, 1/8" x 1/4"	5	62	55100	Flange (2)	2
30	55218	Lock Ring with 6-32 Thread	1	63	55217	6-32 x 1/4" Socket Head Set Screw	1
31	06510	Ball Bearing 3/8" x 7/8" x 9/32"	1				
32	06639	Front End Plate	1				
33	06562	Rotor	1				
34	06643	Vane, Set of 5	1				

PARTS LIST FOR PN 28414, 12000 RPM, 4 1/2" GRINDER, TYPE-27 EXTENDED

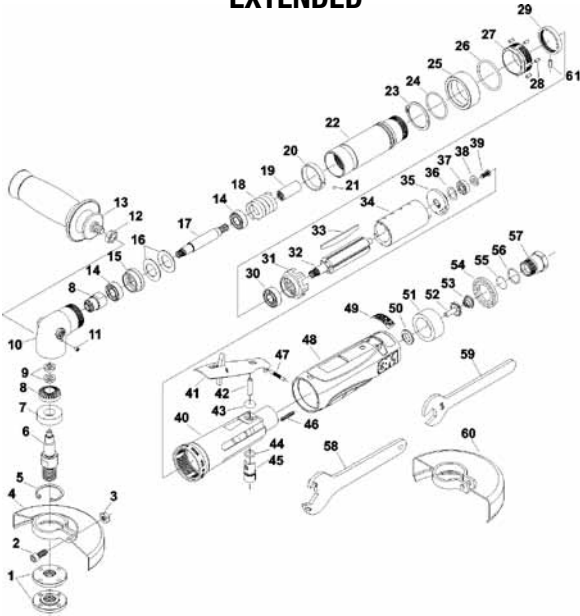


Fig. number	3M P/N	Description	Qty				
				33	06643	Vane, Set of 5	1
1	06589	Wheel Arbor	2	34	06563	Cylinder	1
2	55076	Socket Head Hex Screw, 1/4-20	1	35	06560	Rear End Plate	1
3	55083	Hex Nut, 1/4-20	1	36	06527	Wave Washer .440" x .618" x .008"	1
4	55108	4-1/2" Type 27 Guard	1	37	06508	Ball Bearing	1
5	55088	Retaining Ring	1	38	06567	Washer .251" x .468" x .063"	1
6	55112	Output Spindle 5/8-11 Thread	1	39	06568	Screw #8-32 x 3/8 But Hd Cap	1
7	55078	Ball Bearing	1	40	06638	Housing	1
8	55113	Gear Set	1	41	06642	Lever	1
9	55114	Ball Bearing .500" x .25" x .125" (2)	2	42	06558	Torr Pin, 3/16" x 7/8"	1
10	55111	Angle Head	1	43	06543	O-Ring	1
11	06523	Grease Fitting	1	44	06511	O-Ring	1
12	06503	Jam Nut	1	45	06556	Regulator	1
13	28402	Side Handle 3/8-16 EXT Thread, 3M PN28402	1	46	06501	Screw, 6-32 x 3/4 Set Soc Hex	1
14	06510	Ball Bearing 3/8" x 7/8" x 9/32"	1	47	06559	Groove Pin, 1/8" x 7/8" Type E	1
15	55092	Bearing Holder	1	48	06598	Housing Cover	1
16	55110	Disc Spring (2)	2	49	06566	Warning Label	1
17	55093	Shaft	1	50	06552	Throttle Valve Seat	1
18	55097	Spring	1	51	06557	Muffler	1
19	55091	Coupler	1	52	06553	Throttle Valve	1
20	55095	Retainer	1	53	06554	Taper Spring	1
21	55077	Set Screw	1	54	55084	Exhaust Deflector	1
22	55096	Extension Housing	1	55	06555	Screen	1
23	55103	Retaining Ring	1	56	06608	O-Ring, 1/16" x 5/8" x 3/4"	1
24	55079	O-Ring	1	57	55098	LH Thread Bushing 3/8" NPT	1
25	55090	Cover	1	58	55115	Spanner Wrench	1
26	06609	O-Ring	1	59	06524	5/8" Wrench	1
27	55089	Locking Clamp Nut	1	60	55106	4.5" Guard (flat back)	1
28	06520	Pin, 1/8" x 1/4"	5	61	55217	6-32 x 1/4" Socket Head Set Screw	1
29	55218	Lock Ring with 6-32 Thread	1				
30	06510	Ball Bearing 3/8" x 7/8" x 9/32"	1				
31	06639	Front End Plate	1				
32	06562	Rotor	1				