

AIR DIE GRINDER

■ 501 7" Vertical Grinder



■ 502 9" Vertical Grinder



■ 503 9" Vertical Grinder



■ 520 4" Grinder



■ 502 4" Grinder



■ 521 5" Grinder
■ 522A 4-1/2" Grinder
■ 522 5" Grinder



■ 515 3" Cut-off Tool



■ 515 3" Cut-off Tool
(plastic housing & guard)



■ 521 7" Grinder



■ 526 7" Grinder



■ 507 3" Straight Line Grinder



■ 507L 3" Straight Line Grinder



• SPECIFICATION •

Model	Disc Size (in)	Free Speed (rpm)	Spindle Thread	Air Inlet (in)	Hose Size (in)	Net Weight kg	Net Weight lbs	Length mm	Length in	Avg. Air Consumption
501	7"	7,000	5/8"-11	1/2	1/2	3.88	8.55	340	13-2/5	1.00 m ³ /min
502	9"	6,000	5/8"-11	1/2	1/2	4.12	9.07	340	13-2/5	1.00 m ³ /min
503	9"	6,000	5/8"-11	1/2	1/2	4.97	10.95	355	14	1.00 m ³ /min
507	3"	18,000		1/4	3/8	2.27	5.00	381	15	0.30 m ³ /min
507L	3"	18,000		1/4	3/8	2.00	4.40	425	16-3/4	0.30 m ³ /min
515	3"	22,000		1/4	3/8	0.91	2.00	194	7-5/8	0.20 m ³ /min
515S	3"	20,000		1/4	3/8	0.63	1.40	186	7-5/16	0.20 m ³ /min
520	4"	12,000	3/8"-24 (M10)	1/4	3/8	1.54	3.40	230	9	0.43 m ³ /min
520L	4"	12,000	3/8"-24 (M10)	1/4	3/8	1.69	3.72	232	9-1/2	0.43 m ³ /min
521	4"	11,000	3/8"-24 (M10)	1/4	3/8	1.80	3.96	230	9	0.43 m ³ /min
522A	4-1/2"	11,000	3/8"-24 (M10)	1/4	3/8	1.80	3.96	230	9	0.43 m ³ /min
522	5"	11,000	3/8"-24 (M10)	1/4	3/8	1.80	3.96	230	9	0.43 m ³ /min
525	7"	7,000	5/8"-11 (M14)	3/8	7/16	3.04	6.70	333	13-1/8	0.70 m ³ /min
526	7"	7,000	5/8"-11 (M14)	3/8	7/16	3.05	6.72	331	13-1/16	0.70 m ³ /min

OIL PULSE TOOLS



2501

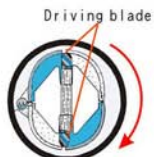
Character

- Single-hand reverse lever allows quick & easy operation.
- 9-blade & double chamber air motor make tools achieve efficient & smooth fastening.
- Two-blade pulse mechanism with powerful air motor to provide more power.
- Lower noise and less vibration.

Mechanism



Double Chamber



Two-blade Pulse Unit

SPECIFICATIONS

Model No.	Driver		Free Speed	Torque Range		Air Inlet		Weight		Over Length		Sound Level	Avg. Air Consumption
	IN	MM	RPM	FT-LBS	NM	IN	KG	LB	MM	IN	DB	M ³ /Min	
Screwdriver													
1201	1/4	6.35	7000	17-25	23-34	1/4	0.96	2.1	161	6.3	77	0.44	
1301	1/4	6.35	7000	11-17	15-23	1/4	0.86	1.9	152	5.9	77	0.29	
1401	1/4	6.35	6000	08-12	11-16	1/4	0.86	1.9	152	5.9	77	0.25	
Wrench													
2201	3/8	9.5	7000	18-30	24-41	1/4	0.96	2.1	161	6.3	77	0.44	
2301	3/8	9.5	7000	15-22	21-30	1/4	0.86	1.9	152	5.9	77	0.29	
2401	3/8	9.5	6000	11-16	15-22	1/4	0.86	1.9	152	5.9	77	0.25	
2501	3/8	9.5	6300	20-40	27-54	1/4	1.40	3.0	168	6.6	75	0.45	

AIR SCREWDRIVER

Clutch Type :

■ 101



■ 102



■ 103



■ 104



■ 105



■ 106



■ 122



■ 123



SPECIFICATIONS

Model	INTERNAL HEX DRIVER in	Free Speed rpm	Max. Torque in-lbs	Bolt Capacity mm	Air Inlet in	Recom Hose Size in (mm)	Length mm	Weight kg
101	1/4	1500	10-30	4	1/4	1/4	235	0.66
102	1/4	600	35-50	5	1/4	1/4	265	0.95
103	1/4	1800	20-115	5	1/4	3/8	190	1.13
104	1/4	1800	45-115	5	1/4	3/8	215	1.23
105	1/4	1600	20-45	5	1/4	1/4	235	0.9
106	1/4	1300	20-40	4	1/4	1/4	245	0.9
122	1/4	1800	45-115	5	1/4	3/8	265	1.16
123	1/4	800	45-145	6	1/4	3/8	220	1.25

TORQUE CONTROL SCREWDRIVERS



• 160



• 162



• 164



• 165



• 166

- 160: Air cushion clutch screwdriver
- 162: Air cushion clutch screwdriver
- 164: Push-to-start and shut-off screwdriver
- 165: Air angle screwdriver
- 166: Air angle screwdriver

• SPECIFICATIONS •

Model	Hex Shank Size in. (mm)	Capacity (mm)	Torque range (kg/cm)	Weight (Kg)	Length in (mm)	Free Speed rpm	Air Inlet in	Min House Size in (mm)	Avg. Air Cons. cfm (l/min)
160	3/16 (4.8)	5	2-15	0.63	220	1000	1/4	3/8 (10)	4 (113)
162A 162B	1/4 (6.3) HEX 5mm HEX	5 2-3.5	2-18	0.62	220	1000	1/4	3/8 (10)	4 (113)
164 164A	1/4 (6.3) HEX 5mm HEX	5 2.5-4	4-18	0.63	230	1000	1/4	3/8 (10)	4 (113)
165	3/16 (4.8)	5	2.5-4	0.80	280	1000	1/4	3/8 (10)	4 (113)
166	1/4 (6.3) HEX	5	9-22	0.85	290	1000	1/4	3/8 (10)	4 (113)

AIR SCREWDRIVER

Two-Hammer Type :

111



113



116



117



112



114



107



151



151 KIT



161



1023

2 steps throttle trigger

Available to drive 3" wooden screw



1024

2 steps throttle trigger

Available to drive 3" wooden screw



1025

4 posititons regulator

Super power type



SPECIFICATIONS

Model	Sq. Drive in	Max. Torque ft-lb(Nm)	Free Speed rpm	Air Inlet in	Length mm	Weight kg	Std. Bolt Cap. mm	Avg. Air Cons. cfm(l/min)	Min Hose Size in(mm)
111	1/4	18 (24)	8000	1/4	180	0.75	2-5	2.5 (70)	1/4 (6.35)
113	1/4	18 (24)	8000	1/4	180	0.75	2-5	2.5 (70)	1/4 (6.35)
116	1/4	25 (34)	8000	1/4	190.5	0.75	3-6	2.5 (70)	1/4 (6.35)
117	1/4	25 (34)	8000	1/4	190.5	0.75	3-6	2.5 (70)	1/4 (6.35)
151	1/4	18 (24)	8000	1/4	140	0.9	2-5	2.5 (70)	1/4 (6.35)
161	1/4	30 (41)	7000	1/4	205	1.1	3-8	2.5 (70)	1/4 (6.35)
107	1/4	25 (34)	6000	1/4	260	1.5	6	2.5 (70)	1/4 (6.35)
WS-301	1/4	155 (210)	8000	1/4	217	1.3	6-8	2.5 (70)	1/4 (6.35)
WS-302	1/4	120 (160)	8000	1/4	198	1.0	6-8	2.8 (80)	1/4 (6.35)
WS-303	1/4	145 (195)	9000	1/4	172	1.05	6-8	3 (85)	1/4 (6.35)

Working Air Pressure: 90PSI (6.3 Bar)

IMPACT WRENCHES

221



227



2311



2312



221



227



New

2311



2312



Lighter & Powerful

2312-2



2342



2342-2



• SPECIFICATION •

	SQ Driver		Free Speed RPM	Max. Torque		Air Inlet IN	Hose Size IN	Net Weight KG	Length MM	Air Exhaust	Impact Mechanism
	IN	MM		FT-LBS	NM						
201	3/8	9.5	10000	75	102	1/4	3/8 ID	1.24	140	Front	Rocking Dog
213	3/8	9.5	5000	75	102	1/4	3/8 ID	1.10	171	Front	Rocking Dog
2153	3/8	9.5	9000	195	264	1/4	3/8 ID	1.05	164	Handle	Two Hammer
2154	3/8	9.5	8000	190	258	1/4	3/8 ID	1.00	190	Front	Two Hammer
2155	3/8	9.5	9000	205	278	1/4	3/8 ID	1.30	210	Front	Two Hammer
221	1/2	12.7	7000	230	311	1/4	3/8 ID	2.30	178	Front	Rocking Dog
227	1/2	12.7	7000	380	515	1/4	3/8 ID	2.80	192	Front	Pin Clutch
2311	1/2	12.7	6000	500	678	1/4	3/8 ID	1.90	174	Handle	Twin Hammer
2312	1/2	12.7	7000	410	556	1/4	3/8 ID	2.60	190	Front	Twin Hammer
2312-2	1/2	12.7	7000	410	556	1/4	3/8 ID	2.80	250	Front	Twin Hammer
2342	1/2	12.7	6000	420	569	1/4	3/8 ID	2.70	190	Handle	Twin Hammer
2342-2	1/2	12.7	6000	420	569	1/4	3/8 ID	2.90	250	Handle	Twin Hammer

IMPACT WRENCHES

2711



2721 / 2771



2811 / 2813
2911 / 2913



2821 / 2823
2921 / 2923



2811/2821/2911/2921: Internal Trigger
2813/2823/2913/2923: External Trigger

2620
(wz 8" extended anvil)



2941 / 2943



2981 / 2983
(wz 8" extended anvil)



2941/2981: Internal Trigger
2943/2983: External Trigger

255



2592



2592-2



2612



• SPECIFICATION •

	SQ Driver		Free Speed	Max. Torque		Air Inlet	Hose Size	Net Weight	Length	Air Exhaust	Impact Mechanism
	IN	MM		RPM	FT-LBS						
255	3/4	19.05	5,000	1000	1356	1/4	3/8 ID	5.20	244	Front	Pin Clutch
2592	3/4	19.05	5,000	1000	1356	3/8	1/2 ID	5.50	230	Handle	Twin Hammer
2592-2	3/4	19.05	4,500	900	1220	3/8	1/2 ID	6.20	280	Handle	Twin Hammer
2612	1	25.4	5,000	1000	1356	3/8	1/2 ID	5.80	235	Handle	Twin Hammer
2711	1	25.4	3,500	1400	1898	1/2	3/4 ID	10.50	365	Up	Rocking Dog
2771	1	25.4	3,000	1400	1898	1/2	3/4 ID	12.70	565	Up	Rocking Dog
2721/2723	1	25.4	3,500	1300	1763	1/2	3/4 ID	12.50	545	Up	Rocking Dog
2811/2813	1	25.4	6,000	1500	2034	1/2	3/4 ID	9.40	365	Up	Twin Hammer
2821/2823	1	25.4	5,000	1400	1898	1/2	3/4 ID	11.00	555	Up	Twin Hammer
2911/2913	1	25.4	5,000	2000	2712	1/2	3/4 ID	10.50	385	Up	Twin Hammer
2921/2923	1	25.4	3,000	1900	2576	1/2	3/4 ID	12.40	613	Up	Twin Hammer
2620	1	25.4	2,500	1800	2440	1/2	3/4 ID	16.30	650	Up	Rocking Dog
2981/2983	1	25.4	3,000	2600	3525	1/2	3/4 ID	17.20	650	Up	Twin Hammer
2941/2943	1-1/2	38.1	3,750	3000	4067	1/2	3/4 ID	15.50	475	Up	Twin Hammer

AIR RATCHET WRENCH

■ **311** (1/4")
MINI RATCHET WRENCH



■ **312** (1/4")
STUBBY RATCHET WRENCH



■ **313** (1/4")
MINI RATCHET WRENCH



■ **317** (3/8")
STUBBY RATCHET WRENCH



■ **316** (1/2")
RATCHET WRENCH



■ **321/323** (3/8" / 1/2")
RATCHET WRENCH



■ **331** (3/8")
RATCHET WRENCH



■ **333** (1/2")
RATCHET WRENCH



■ **3350/3370** (3/8" / 1/2")
RATCHET WRENCH



■ **3410** (1/2")
RATCHET WRENCH



■ **322** (3/8")
RATCHET WRENCH KIT



■ **324** (1/2")
RATCHET WRENCH KIT



• SPECIFICATIONS •

MODEL NO.0	SQ. Driver	Free Speed	Max. Torque		Air Inlet	Recom. Hose Size	Weight		Overall Length		Avg. 1Air Consumption
	IN		FT-LBS	NM			IN	KG	LBS	IN	
311	1/4	240	18	24	1/4	5/16	0.62	1.3	8	203	3.0
312	1/4	240	18	24	1/4	5/16	0.50	1.1	6-5/16	160	3.0
313	1/4	240	20	27	1/4	5/16	0.62	1.3	8-1/4	210	3.0
317	3/8	240	18	24	1/4	5/16	0.50	1.1	6-5/16	160	3.0
316	1/2	160	50	78	1/4	3/8	1.05	2.3	10	254	4.0
321	3/8	150	45	61	1/4	3/8	1.25	2.7	10	254	4.0
323	1/2	150	45	61	1/4	3/8	1.25	2.7	10	254	4.0
331	3/8	150	60	81	1/4	3/8	1.25	2.7	10	254	4.0
333	1/2	150	60	81	1/4	3/8	1.25	2.7	10	254	4.0
3350	3/8	200	60	81	1/4	3/8	1.13	2.5	10-1/4	260	4.5
3370	1/2	200	60	81	1/4	3/8	1.13	2.5	10-1/4	260	4.5
3410	1/2	150	90	122	1/4	3/8	2.00	4.4	14-3/8	365	6.0

AIR DRILL

■ 411 (3/8")
DRILL



■ 413 (3/8")
REVERSIBLE DRILL



■ 421 (1/2")
DRILL



■ 422 (1/2")
REVERSIBLE DRILL



■ 431 / 433
3/8" DRILL / REVERSIBLE DRILL



■ 441 / 442
1/2" DRILL / REVERSIBLE DRILL



■ 435 (3/8")
STRAIGHT DRILL



■ 450 (3/8")
STRAIGHT DRILL



■ 451 (3/8")
DRILL



■ 412 (3/8")
REVERSIBLE ANGLE DRILL



■ 414 (3/8")
ANGLE DRILL



■ 415 (3/8")
REVERSIBLE ANGLE DRILL



■ 416
SPOT DRILL



■ 417
SPOT DRILL WZ HOOK



■ 418
SPOT DRILL WZ HOOK



■ 419
SPOT DRILL WZ HOOK



• SPECIFICATIONS

MODEL NO.	Chuck Size		Free Speed RPM	Spindle Thread	Air Inlet		Recom. Hose Size		Weight		Overall Length		Avg. Air Consumption CFM
	IN	MM			IN	MM	IN	MM	KG	LBS	IN	MM	
411	3/8	9.5	2200	3/8"-24	1/4	3/8	1.06	2.3	7	177	4.0		
413	3/8	9.5	2000	3/8"-24	1/4	3/8	1.20	2.6	7	177	4.0		
421	1/2	12.7	800	3/8"-24	1/4	3/8	1.76	3.9	8	203	4.0		
422	1/2	12.7	750	3/8"-24	1/4	3/8	1.76	3.9	8	203	4.0		
431	3/8	9.5	2300	3/8"-24	1/4	3/8	1.30	2.9	7-1/2	191	4.0		
433	3/8	9.5	2300	3/8"-24	1/4	3/8	1.30	2.9	7-1/2	191	4.0		
441	1/2	12.7	500	3/8"-24	1/4	3/8	1.80	4.0	9	228	4.0		
442	1/2	12.7	500	3/8"-24	1/4	3/8	1.80	4.0	9	228	4.0		
451	3/8	9.5	4800	3/8"-24	1/4	3/8	1.14	2.5	6-1/2	165	4.0		
450	3/8	9.5	4500	3/8"-24	1/4	3/8	1.00	2.0	7-1/2	191	4.0		
435	3/8	9.5	2500	3/8"-24	1/4	3/8	1.00	2.2	9-3/16	230	4.0		
412	3/8	9.5	1800	3/8"-24	1/4	3/8	1.10	2.4	8-1/4	210	4.0		
414	3/8	9.5	1900	3/8"-24	1/4	3/8	1.14	2.5	8	203	4.0		
415	3/8	9.5	1500	3/8"-24	1/4	3/8	1.80	4.0	7	178	4.0		

MODEL NO.	Drill Holder		Free Speed RPM	Air Inlet	Recom. Hose Size	Weight		Overall Length		Avg. Air Consumption CFM
	MM	IN				KG	LBS	IN	MM	
416	6.5	0.8	1800	1/4	3/8	1.40	3.1	7-7/8	200	4.5
417	6.5	0.8	1600	1/4	3/8	1.90	4.2	9-1/4	235	4.5
418	8	0.8	500	1/4	3/8	1.64	3.6	11-1/2	292	3.5
419	8	0.8	1200	1/4	3/8	1.64	3.6	11-7/16	290	5.0

AIR DIE GRINDER

■ 512
1/4" (6 mm)
AIR DIE
GRINDER KIT



■ 531
AIR MICRO GRINDER



■ 532
AIR MICRO
GRINDER
KIT



■ 541
AIR MICRO GRINDER



■ 440 (chuck type)
AIR MICRO GRINDER



■ NAK-A90
90° AIR GRINDER



■ NAK-A45
45° AIR GRINDER



■ 516 (1/4")
EXTENSION DIE GRINDER



■ 537
AIR MICRO GRINDER



■ 538
AIR MICRO GRINDER



■ 506 (3/8" chuck)
AIR DIE GRINDER



■ 510 (1/4")
AIR MEDIUM GRINDER



■ 511 (1/4")
AIR DIE GRINDER



■ 513 (1/4")
AIR DIE GRINDER



■ 513A (1/4")
AIR DIE GRINDER



■ 514 (1/4")
AIR ANGLE DIE GRINDER



■ 514A (1/4")
AIR ANGLE DIE GRINDER



■ 514A1 (1/4")
AIR ANGLE DIE GRINDER



■ 514A2 (1/4")
AIR ANGLE DIE GRINDER



■ 514A3 (1/4")
AIR ANGLE DIE GRINDER



• SPECIFICATION •

Model	Collet Size (in) (mm)	Free Speed (rpm)	Air Inlet (in)	Hose Size (in)	Net Weight kg lbs	Length mm in	Avg. Air Consumption
506	3/8	22,000	1/4	1/4	0.70 1.55	198 7-13/16	0.25 m ³ /min
510	1/4	25,000	1/4	1/4	0.37 0.82	154 6-1/16	0.22 m ³ /min
511	1/4	20,000	1/4	1/4	0.54 1.20	171 6-3/4	0.22 m ³ /min
513	1/4	22,000	1/4	1/4	0.60 1.30	165 6-1/2	0.22 m ³ /min
513A	1/4	22,000	1/4	1/4	0.60 1.30	165 6-1/2	0.22 m ³ /min
514	1/4	25,000	1/4	1/4	0.50 1.10	155 6-1/8	0.22 m ³ /min
514A	1/4	18,000	1/4	1/4	0.74 1.63	140 5-1/2	0.22 m ³ /min
514A1	1/4	18,000	1/4	1/4	0.74 1.63	160 6-5/16	0.22 m ³ /min
514A2	1/4	15,000	1/4	1/4	0.74 1.63	140 5-1/2	0.22 m ³ /min
514A3	1/4	15,000	1/4	1/4	0.74 1.63	160 6-5/16	0.22 m ³ /min
516	1/4	25,000	1/4	1/4	0.90 1.98	254 10	0.22 m ³ /min
531	1/8	56,000	1/4	1/4	0.21 0.45	156 6-1/8	0.16 m ³ /min
537	1/8	70,000	1/4	1/4	0.22 0.49	156 6-1/8	0.16 m ³ /min
538	1/8	82,000	1/4	1/4	0.22 0.49	156 6-1/8	0.16 m ³ /min
540	1/8	60,000	1/4	1/4	0.13 0.29	155 6-1/8	0.16 m ³ /min
440	3/16	30,000	1/4	1/4	0.35 0.80	175 6-7/8	0.16 m ³ /min
NAK-A45	1/8	35,000	1/4	1/4	0.27 0.60	136 5-3/8	0.16 m ³ /min
NAK-A90	1/8	35,000	1/4	1/4	0.27 0.60	136 5-3/8	0.16 m ³ /min

AIR DIE GRINDER

■ 501 7" Vertical Grinder



■ 502 9" Vertical Grinder



■ 503 9" Vertical Grinder



■ 520 4" Grinder



■ 502 4" Grinder



■ 521 5" Grinder
■ 522A 4-1/2" Grinder
■ 522 5" Grinder



■ 515 3" Cut-off Tool



■ 515 3" Cut-off Tool
(plastic housing & guard)



■ 521 7" Grinder



■ 526 7" Grinder



■ 507 3" Straight Line Grinder



■ 507L 3" Straight Line Grinder



• SPECIFICATION •

Model	Disc Size (in)	Free Speed (rpm)	Spindle Thread	Air Inlet (in)	Hose Size (in)	Net Weight kg	Net Weight lbs	Length mm	Length in	Avg. Air Consumption
501	7"	7,000	5/8"-11	1/2	1/2	3.88	8.55	340	13-2/5	1.00 m ³ /min
502	9"	6,000	5/8"-11	1/2	1/2	4.12	9.07	340	13-2/5	1.00 m ³ /min
503	9"	6,000	5/8"-11	1/2	1/2	4.97	10.95	355	14	1.00 m ³ /min
507	3"	18,000		1/4	3/8	2.27	5.00	381	15	0.30 m ³ /min
507L	3"	18,000		1/4	3/8	2.00	4.40	425	16-3/4	0.30 m ³ /min
515	3"	22,000		1/4	3/8	0.91	2.00	194	7-5/8	0.20 m ³ /min
515S	3"	20,000		1/4	3/8	0.63	1.40	186	7-5/16	0.20 m ³ /min
520	4"	12,000	3/8"-24 (M10)	1/4	3/8	1.54	3.40	230	9	0.43 m ³ /min
520L	4"	12,000	3/8"-24 (M10)	1/4	3/8	1.69	3.72	232	9-1/2	0.43 m ³ /min
521	4"	11,000	3/8"-24 (M10)	1/4	3/8	1.80	3.96	230	9	0.43 m ³ /min
522A	4-1/2"	11,000	3/8"-24 (M10)	1/4	3/8	1.80	3.96	230	9	0.43 m ³ /min
522	5"	11,000	3/8"-24 (M10)	1/4	3/8	1.80	3.96	230	9	0.43 m ³ /min
525	7"	7,000	5/8"-11 (M14)	3/8	7/16	3.04	6.70	333	13-1/8	0.70 m ³ /min
526	7"	7,000	5/8"-11 (M14)	3/8	7/16	3.05	6.72	331	13-1/16	0.70 m ³ /min