

Parts Manual
45-8063EN
04/08/2011

Cleco®

22 Series Single Reduction Rotary Vane Power Motors



For additional product information visit our website at <http://www.apextoolgroup.com>



Zampini Industrial Group

AirToolPro.com

1-800-353-4676

Industrial Air & Electric Tools

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OUTPUT SPEED — R.P.M.		3,200	4,700	EXHAUST
RIGHT HAND ROTATION	ROUND	22-5300	22-5400	SIDE
	HOUSING	22-5340	22-5440	REAR
	MOUNTING	22M5300	22M5400	SIDE
	HOUSING	22M5340	22M5440	REAR
LEFT HAND ROTATION	ROUND	22D5300	22D5400	SIDE
	HOUSING	22D5340	22D5440	REAR
	MOUNTING	22V5300	22V5400	SIDE
	HOUSING	22V5340	22V5440	REAR

SAFETY INSTRUCTIONS AND WARNING

DOTCO Portable and Mountable Tools are air powered. USE THIS POWER PROPERLY FOR PERSONAL SAFETY.

ALWAYS COMPLY WITH:

1. General Industry Safety & Health Regulations, Part 1910, OSHA 2206, available from: Sup't. of Documents, Gov't. Printing Office, Washington, D. C. 20402.
2. Safety Code for Portable Air Tools — ANSI B186.1 available from: American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018.
3. State and Local Regulations.

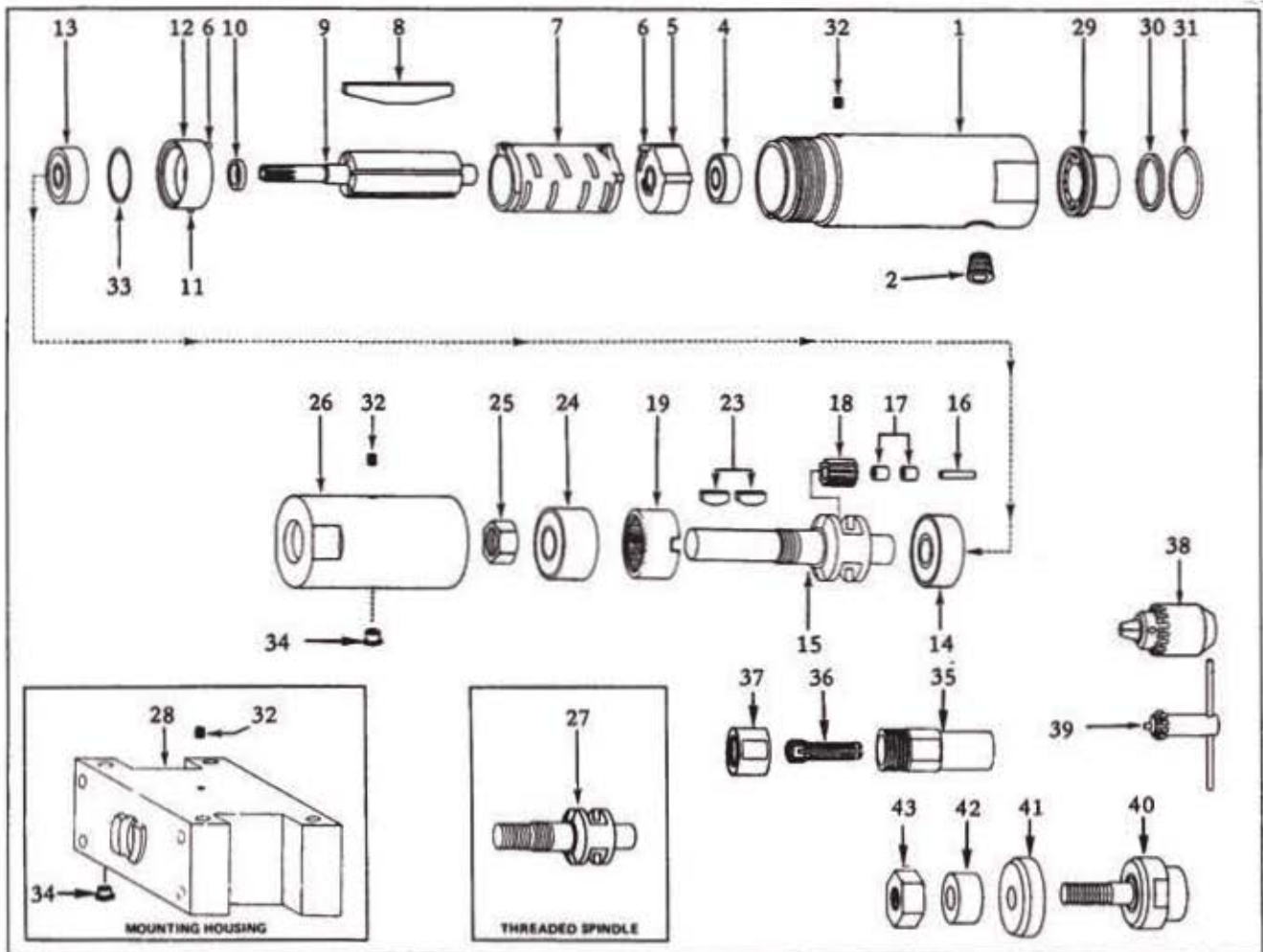
Portions of the above abbreviated below for quick reference to some of the most important regulations. THESE REGULATIONS ARE NOT ALL INCLUSIVE — STUDY AND COMPLY WITH ALL ABOVE REGULATIONS.

1. Tool Speed Check — Before mounting any abrasive wheel, buffing wheel, wire brush, saw blade, flap wheel, or other product, after all tool repairs and whenever a tool is issued for use, the RPM shall be checked with a tachometer to insure that its actual speed does not exceed rated speed. GOVERNED TOOLS, IN USE ON THE JOB, SHALL BE CHECKED AT LEAST ONCE EVERY TWENTY HOURS OF USE, OR ONCE WEEKLY, WHICHEVER IS MORE FREQUENT.
2. Tool Intent — Tools shall be used only for purposes intended in their design (refer to product catalog).
3. Air Supply — Test and operate tools at 90 PSIG maximum unless tool is marked otherwise. Use recommended air-line filters-regulators-lubricators.
4. Unusual Sound or Vibration — If tool vibrates or produces an unusual sound, repair immediately for correction.
5. Speed Rating of Wheels, etc. — Speed rating of abrasive wheel, buffing wheel, wire brush, saw blade, flap wheel, or other products used, must equal or exceed speed rating of tool.
6. Mounting of Wheels, etc. — Each type of wheel, wire brush, saw blade, flap wheel, and other product, has specific mounting procedures and regulations concerning spindles, flanges, blotters, collets, etc., which shall be used. REFER TO REGULATIONS AND/OR WHEEL MANUFACTURERS' INSTRUCTIONS.
7. Wheel Guards — Select proper guards for application and mount securely and properly. SEE REGULATIONS.
8. Inspection of Wheels, etc. — Regularly inspect all wheels, etc., and discard cracked, chipped or otherwise damaged units. Redress out-of-balance wheels. SEE REGULATIONS.
9. Operator Protective Equipment — Wear goggles or face shield at all times tool is in operation. Other protective clothing shall be worn, if necessary, for spark protection deflection. SEE REGULATIONS.
10. Safety Maintenance Program — Employ a safety program to provide inspection and maintenance of all phases of tool operation and air supply equipment in accordance with "Safety Code for Portable Air Tools."

WARNING!! FAILURE TO COMPLY WITH ALL SAFETY REGULATIONS MAY RESULT IN SERIOUS INJURY.



EXPLODED VIEW



NOTE: ALL NUMBERS IN ABOVE DRAWING AND IN DISASSEMBLY AND ASSEMBLY INSTRUCTIONS ARE INDEX NUMBERS ONLY. REFER TO PARTS LIST FOR PART NUMBERS WHEN ORDERING.

INSTALLATION

For best tool performance, a working air pressure of **90 pounds per square inch** is recommended. Piping, fittings and hose should be adequate to maintain **90 psig** while the tool is in operation. An air line filter and lubricator should be used. Hose should be blown out before attaching to the tool.

LUBRICATION

The motor must be lubricated and free of moisture. Use a high grade SAE spindle oil, #45-0918 (*one quart*). Two or three drops per minute should be sufficient.

LOSS OF POWER

A loss of power may not be related to the tool. First, check the air line pressure. It should be **90 psi at the tool while operating**. Check the size of hose and fittings to be certain they are not causing air restrictions.

SERVICE INSTRUCTIONS

Do not squeeze tool or parts in a vise except as specified in **ASSEMBLY** or **DISASSEMBLY** instructions. Care must be used in the assembly and disassembly of ball bearings. When pressing bearings onto a shaft, press only on the inner race. When pressing bearings into a bore, press on the outer race only. NOTE: Ball Bearings are the shielded type. They are lubricated for life by the bearing manufacturer and should not be washed out with solvents to clean.



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PARTS LIST

I N D E X N O.	DESCRIPTION	PART NUMBERS LISTED BELOW EACH MODEL								
		MODEL NO.	22-5300 22M5300	22-5340 22M5340	22-5400 22M5400	22-5440 22M5440	22D5300 22V5300	22D5340 22V5340	22D5400 22V5400	22D5440 22V5440
		R.P.M.	3,200		4,700		3,200		4,700	
1	MOTOR HOUSING		2926	2870	2926	2870	2926	2870	2926	2870
2	PIPE PLUG		2957	2957	2957	2957	2957	2957	2957	2957
4	BALL BEARING		538	538	538	538	538	538	538	538
5	BEARING PLATE w/Index 6		7404	7013	7404	7013	7194	7198	7194	7198
6	PIN		1041	1041	1041	1041	1041	1041	1041	1041
7	CYLINDER		2255	2255	2255	2255	2519	2519	2519	2519
8	BLADE (4 Req'd)		2253	2253	2253	2253	2253	2253	2253	2253
9	ROTOR		7656	7656	7658	7658	7656	7656	7658	7658
10	SPACER		2017	2017	2017	2017	2017	2017	2017	2017
11	PIN			2964		2964		2964		2964
12	BEARING PLATE		2508		2508		2508		2508	
12	BEARING PLATE w/Index 6 & 11			2959		2959		2424		2424
13	BALL BEARING		500	500	500	500	500	500	500	500
18	SPUR GEAR (2 req'd) w/Index 17		2809	2809	2956	2956	2809	2809	2956	2956
26	PLANETARY HOUSING		Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1
28	MOUNTING HOUSING		Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1
29	MUFFLER			2685		2685		2685		2685
30	"O" RING			1838		1838		1838		1838
31	RETAINING RING			2690		2690		2690		2690
32	LOCK SCREW		2831	2831	2831	2831	2831	2831	2831	2831
33	SHIM PACKET		2488	2488	2488	2488	2488	2488	2488	2488
34	GREASE FITTING		1664	1664	1664	1664	1664	1664	1664	1664

NOTE 1: Models with prefix 22M and 22V use Mounting Housing No. 2819. Models with prefix 22-and 22D use Planetary Housing No. 2893.



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TERMINATION PARTS LIST

TERMINATION NO.	APPLICATION	INDEX NO.	DESCRIPTION	PART NO.
01	SERIES 200	14	BEARING	556
		24	BEARING	557
		16	PLANETARY SHAFT (2)	2509
		27	PLANETARY CARRIER	2513
		19	RING GEAR	2533
		35	CHUCK BODY	2801
		37	CHUCK CAP	2058
		36	COLLET (1/4") WRENCH (9/16") WRENCH (3/4")	208 14-0809 14-0812
38	JACOBS CHUCK 1/4" MAX	14	BEARING	556
		24	BEARING	557
		16	PLANETARY SHAFT (2)	2509
		19	RING GEAR	2533
		27	PLANETARY CARRIER	2864
		25	HEX NUT	2958
		38	CHUCK w/INDEX 39	14-2545
39	KEY	14-2548		
50	1/2" KEYED SPINDLE	14	BEARING	556
		24	BEARING	557
		16	PLANETARY SHAFT (2)	2509
		19	RING GEAR	2533
		15	PLANETARY CARRIER	2927
		25	HEX NUT	2958
		23	KEY (2)	613
51	JACOBS CHUCK 3/8" MAX	14	BEARING	556
		24	BEARING	557
		16	PLANETARY SHAFT (2)	2509
		19	RING GEAR	2533
		27	PLANETARY CARRIER	2864
		25	HEX NUT	2958
		38	CHUCK w/INDEX 39	14-2546
39	KEY	14-2169		
53	JACOBS CHUCK 1/2 MAX	14	BEARING	556
		24	BEARING	557
		16	PLANETARY SHAFT (2)	2509
		19	RING GEAR	2533
		27	PLANETARY CARRIER	2864
		25	HEX NUT	2958
		38	CHUCK w/INDEX 39	14-2547
39	KEY	14-2549		
60	1/2-20 EXTERNAL THREADED SPINDLE	14	BEARING	556
		24	BEARING	557
		16	PLANETARY SHAFT (2)	2509
		19	RING GEAR	2533
		27	PLANETARY CARRIER	2864
		25	HEX NUT	2958
			WRENCH (3/4")	14-0812
62	SERIES "K" CHUCK	14	BEARING	556
		24	BEARING	557
		16	PLANETARY SHAFT (2)	2509
		27	PLANETARY CARRIER	2513
		19	RING GEAR	2533
		35	CHUCK BODY	14-2254
		37	CHUCK CAP	4255
36	COLLET (3/8") WRENCH (7/8) WRENCH (1-1/8)	124 14-0814 14-0818		
63	4" x 1" x .50" POLISHING WHEELS	14	BEARING	556
		24	BEARING	557
		16	PLANETARY SHAFT (2)	2509
		19	RING GEAR	2533
		27	PLANETARY CARRIER	2864
		25	HEX NUT	2958
		40	WHEEL ADAPTER	14-2216
41	WHEEL FLANGE	14-4072		
43	HEX NUT	14-4073		
42	SPACER	14-4082		
	WRENCH (7/8") WRENCH (1-3/8")	14-0814 14-0836		
64	8" x 1" x .82" POLISHING WHEELS	14	BEARING	556
		24	BEARING	557
		16	PLANETARY SHAFT (2)	2509
		19	RING GEAR	2533
		27	PLANETARY CARRIER	2864
		25	HEX NUT	2958
		40	WHEEL ADAPTER	14-2212
41	WHEEL FLANGE	14-4045		
43	HEX NUT	14-4037		
42	SPACER	14-4009		
	WRENCH (15/16") WRENCH (1-3/8")	14-0815 14-0836		



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Sales & Service Centers

Note: All locations may not service all products. Please contact the nearest Sales & Service Center for the appropriate facility to handle your service requirements.

Dallas, TX
**Apex Tool Group
Sales & Service Center**
1470 Post & Paddock
Grand Prairie, TX 75050
Tel: 972-641-9563
Fax: 972-641-9674

Detroit, MI
**Apex Tool Group
Sales & Service Center**
2630 Superior Court
Auburn Hills, MI 48326
Tel: 248-391-3700
Fax: 248-391-7824

Houston, TX
**Apex Tool Group
Sales & Service Center**
6550 West Sam Houston
Parkway North, Suite 200
Houston, TX 77041
Tel: 713-849-2364
Fax: 713-849-2047

Lexington, SC
Apex Tool Group
670 Industrial Drive
Lexington, SC 29072
Tel: 800-845-5629
Tel: 803-951-7544
Fax: 803-358-7681

Los Angeles, CA
**Apex Tool Group
Sales & Service Center**
15503 Blackburn Avenue
Norwalk, CA 90650
Tel: 562-623-4457
Fax: 562-802-1718

Seattle, WA
**Apex Tool Group
Sales & Service Center**
2865 152nd Avenue N.E.
Redmond, WA 98052
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Fax: 425-497-0496

York, PA
**Apex Tool Group
Sales & Service Center**
3990 East Market Street
York, PA 17402
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Fax: 717-757-5063

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