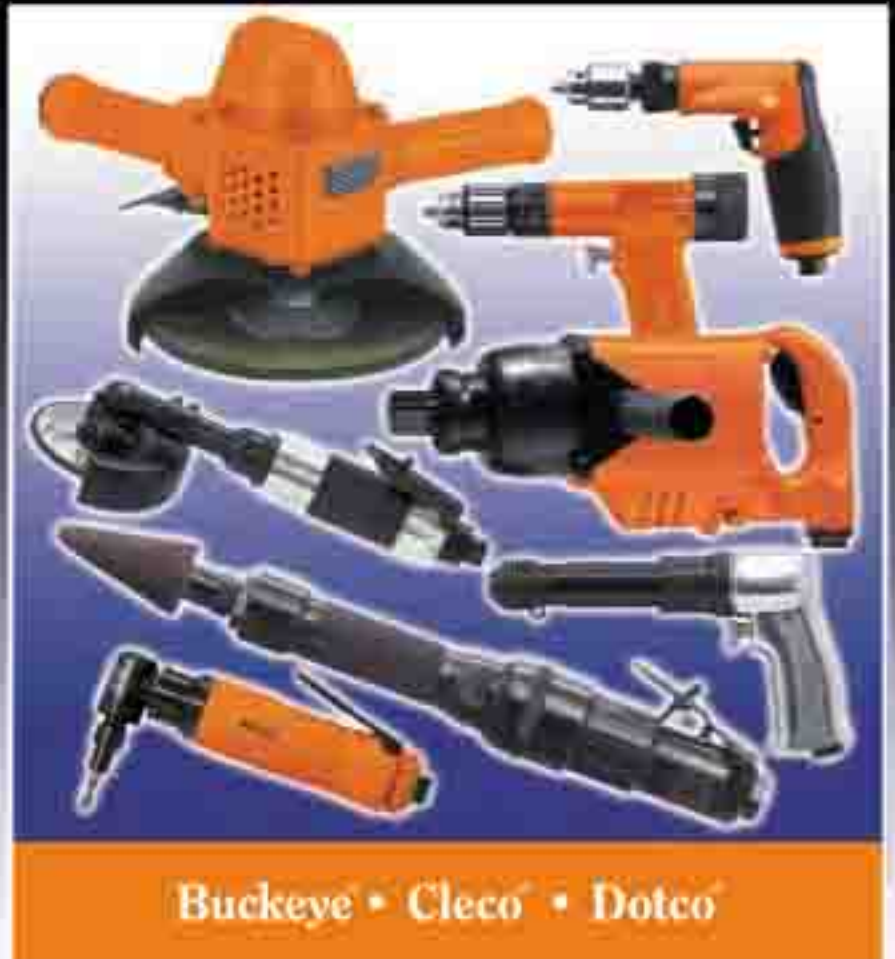


Cooper Tools



FABRICATION TOOLS

**COOPER** Tools

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• 12S1200-36M6	14	• 136GLSB-135A-D3T4	34	15GELC-140-P3T	26	31G-610	22	• B1-C-PT	52	CSBA-12-WM	68	R0B-B2	54	WP-2110B-8	10
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136DL-10M-43	64	• 14CFS91-38	59	15GL-85A-D5T7	35	45DL-6M-43	65	BL-6A	71	CSBA-30-WM	68	R1F-B2	54	• WT-2119-12	11
136DL-20K-38	64	• 14CFS92-38	59	15NGELC-180-P3T	26	45DL-7M-43	65	BL-8A	71	E2-BWD-HX-B	50	R1F-M1	54	WT-2120-12	11
136DL-20M-43	64	• 14CFS93-38	59	15NWELC-30-F5T	40	5120BHL-14	30	BLL-6A	71	E2-BWD-HX-O	50	R1F-P1	54	• WTS-2109	11
136DL-30K-38	64	14CFS94-38	59	15VS-45	35	• 5120BHL-P	26	BLL-8A	71	E2-BWD-RD-B	50	R4B-D-B3	54	• WTS-2119	11
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◆ Denotes a Rapid Select item.  Refer to page 7 for description of Rapid Select. ◆ "S" models also available as Rapid Select.

◆ Denotes a Rapid Select item.  Refer to page 7 for description of Rapid Select. ◆ "S" models also available as Rapid Select.

Warranty

Cooper warrants products and parts sold by it, insofar as they are of its own manufacture, against defects of material and workmanship, under normal use and service in accordance with its written instructions, recommendations, and ratings for installation, operation, maintenance, and service of products, for a period of **ONE YEAR FROM THE DATE OF INITIAL USE, BUT IN NO EVENT SHALL THE WARRANTY EXCEED 24 MONTHS FROM DATE OF DELIVERY TO DISTRIBUTOR.** Proof of Purchase with shipment date must be furnished by the user to validate the warranty. This warranty applies only to products manufactured by Cooper and specifically excludes products manufactured by others. Products not manufactured by Cooper are warranted only to the extent and in the manner warranted to Cooper by the manufacturer and then only to

the extent Cooper is able to enforce such warranty. Cooper's warranty with respect to products manufactured by it is limited to the repair or replacement, as Cooper may elect, of any defective part regarding which the Distributor has given 5 days written notice from the discovery of such defect. Installation and transportation costs are not included. Cooper shall have the option of requiring the return to it of the defective material, transportation prepaid, for inspection. No allowance will be made for repairs without Cooper's approval. **COOPER MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, AND HEREBY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

Lubrication Products

CooperTools' products are classified as non-hazardous manufactured items, defined in the OSHA 1910.1200 Hazard Communication Standard as "Articles". These products, under conditions of normal use, do not release or cause exposure to a hazardous chemical.

Under normal conditions of use, lubrication products sold separately for or used within these tools should not cause an exposure hazard. Refer to the Material Safety Data Sheet (M.S.D.S.) for Safety and Disposal Information. M.S.D.S. sheets are available upon request from CooperTools or on our website at www.coopertools.com.

Cooper is also aware of, and complies with, the provisions of section 611 amendments to the Clean Air Act of 1990. No

ozone depleting chemicals have been used in the manufacture of our products.

If you resell or distribute these products, you have the responsibility for ensuring that the Material Safety Data Sheets are provided to the purchaser.

Proper lubrication is essential to the economical operation of pneumatic and electric tools. CooperTools products perform better and their life is extended by using the recommended lubricants. All lubricants that are listed in the accessory section of this catalog have undergone extensive testing and are recommended for use with CooperTools products.

Safe Work Practices Symbols

WARNING

The signal word "WARNING" indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury; and, identifies safe work practices in this operating instruction. Observe these notes and proceed with special care in these cases. Pass all safety instructions on to other users. In addition to these instructions, the general local safety and accident prevention rules must be observed.

CAUTION

The signal word "CAUTION" identifies all situations meriting special attention to ensure that guidelines, rules, hints and the correct work procedures are observed; and, to prevent damage to and destruction of the machine and/or parts.

Operational Instructions

- These CooperTools portable and mountable tools are air powered. **ALWAYS USE CAUTION WHEN USING POWER TOOLS FOR PERSONAL SAFETY.**
- General Industry Safety & Health Regulations, part 1910, OSHA 2206, available from Superintendent of Documents; Government Printing Office; Washington, DC 20402**

- Safety Code for Portable Air Tools – ANSI B1861 available from American National Standards Institute, Inc.; 1430 Broadway; New York, NY 10018**
- State and local regulations.**
- Use only genuine CooperTools replacements parts.**

It is the user's responsibility to refer and comply with ANSI B7.1

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must be equal or exceed speed of air tool @ 90 psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

WARNING

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.** Tachometers must be checked and calibrated on a regular basis according to the manufacturer's recommendations.

WARNING

Tools shall be used for purposes intended in their design. Refer to product catalog. Modification of the tool, or use of non specified accessories, may result in serious injury.

WARNING

Test and operate tools at 90 PSIG (620 kPa/6.2 bar) maximum pressure (measured at the tool while the tool is running) unless tool is marked otherwise. Use recommended air line filters – regulators – lubricators. Always remove the air supply hose before working on the tool or changing accessories.

WARNING

Immediately shut off the tool if unusual sound or vibration is detected. Remove and inspect the wheel and check the tool speed (RPM). Use of over-speeding grinder or unbalanced wheels may result in serious injury.

WARNING

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. Wheels must mount on tool's spindle freely but not loosely. Spindle nuts must be tightened so as not to crack the wheel with too much force. Nuts must have all thread engagement.

WARNING

Regularly inspect all wheels, etc., and discard cracked, chipped or otherwise damaged units. Redress out-of-balance wheels. SEE REGULATIONS.

WARNING

Select proper guards for the application and mount securely and properly. Always mount guards so that abrasive debris, sparks, etc., are deflected away from the operator. Safety guards shall be in good condition. Any guard which has been subjected to a wheel failure shall be discarded and replaced.

WARNING

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. Exceeding the speed of accessories may cause failure of these products and serious operator injury. Wheels must clearly show the rated speed for its use.

WARNING

Wear impact resistant goggles or face shield at all times the tool is in operation. Other protective clothing shall be worn, if necessary, for spark protection deflection. SEE REGULATIONS.

WARNING

High sound levels can cause permanent hearing loss. use hearing protection as recommended by your employer or OSHA. See 29CFR Part 1910.

WARNING

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," ANSI B186.1. Make sure that all repairs are by trained personnel only and that these safety instructions are understood by the user.

WARNING

When mounting any grinding wheel, the tool shall be run at operating speed with the safety guard in place, in a protected area such as under a work bench, for at least one minute. A damaged wheel should fail within that time. Any suspect wheel of unknown origin shall not be used and must be properly disposed.

It is the user's responsibility to refer and comply with ANSI B7.1

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must be equal or exceed speed of air tool @ 90 psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

CooperTools Division has attained ISO 9001 Quality System Certification for eight of our facilities. The driving force behind the implementation of the Quality System is the commitment "to provide our customers with the **best value delivered** by offering only products and services **that meet or exceed their expectations**".



Lexington, South Carolina



Dayton, Ohio



Hicksville, Ohio



Houston, Texas



Springfield, Ohio



Westhausen, Germany



Ozoir-la-Ferrière, France



Braunschweig, Germany



Welcome to our new CooperTools fabrication catalog. Because durability and productivity are important factors for fabrication applications, tools were carefully selected from three well-known brands in the CooperTools family of products – Buckeye®, Cleco® and Dotco®. Each of these brands contains products that are regarded as among the best in the industry.

By bringing these three brands together in one catalog, CooperTools offers fabrication operators one of the most extensive ranges of tools in the industry. The Buckeye, Cleco and Dotco products in this catalog reflect state-of-the-art design, precision parts, and high quality standards.



Rapid Select means fast delivery

Models indicated with the **Rapid Select** icon represent our most popular tools, and are available for fast delivery on limited quantities.

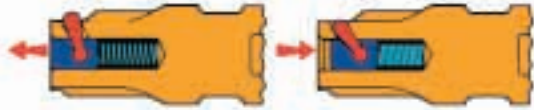


WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

Cleco Impact Wrenches

Cleco®

New Generation Telescopic Impact Wrenches



Patented Positive Lock Socket Retainer

With the patented positive lock socket retainer (U.S. Pat 3, 890,051), sockets snap on...and stay on until released. Offered on spline drives, the retainer can be serviced without disassembling the tool.

Exclusive through-bolt construction reduces replacement costs

Steel front end/motor housing/handle are clamped together by four high-strength steel bolts. This exclusive feature provides better tool performance, eliminates stripped threads and loose inserts in motor housing.

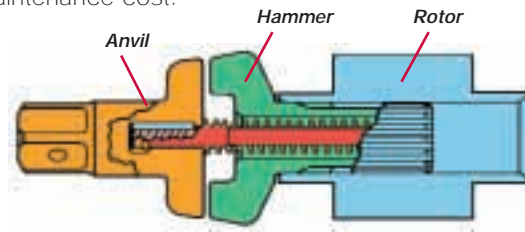
Positive oil-foam lubrication system reduces major cause of impact wrench maintenance.

Cleco impact wrenches feature a unique oil-foam bath that provides positive lubrication for the hammer, anvil and other working parts.

The system is designed so that if the impact mechanism runs low on 30 wt. oil, the tool will stop running, thus eliminating one of the major causes of impact wrench failure ... lack

of lubrication. By simply refilling the oil reservoir, the tool can be returned to service.

Other impact wrenches soon throw off grease; run dry causing extra wear that shortens tool life and increases maintenance cost.

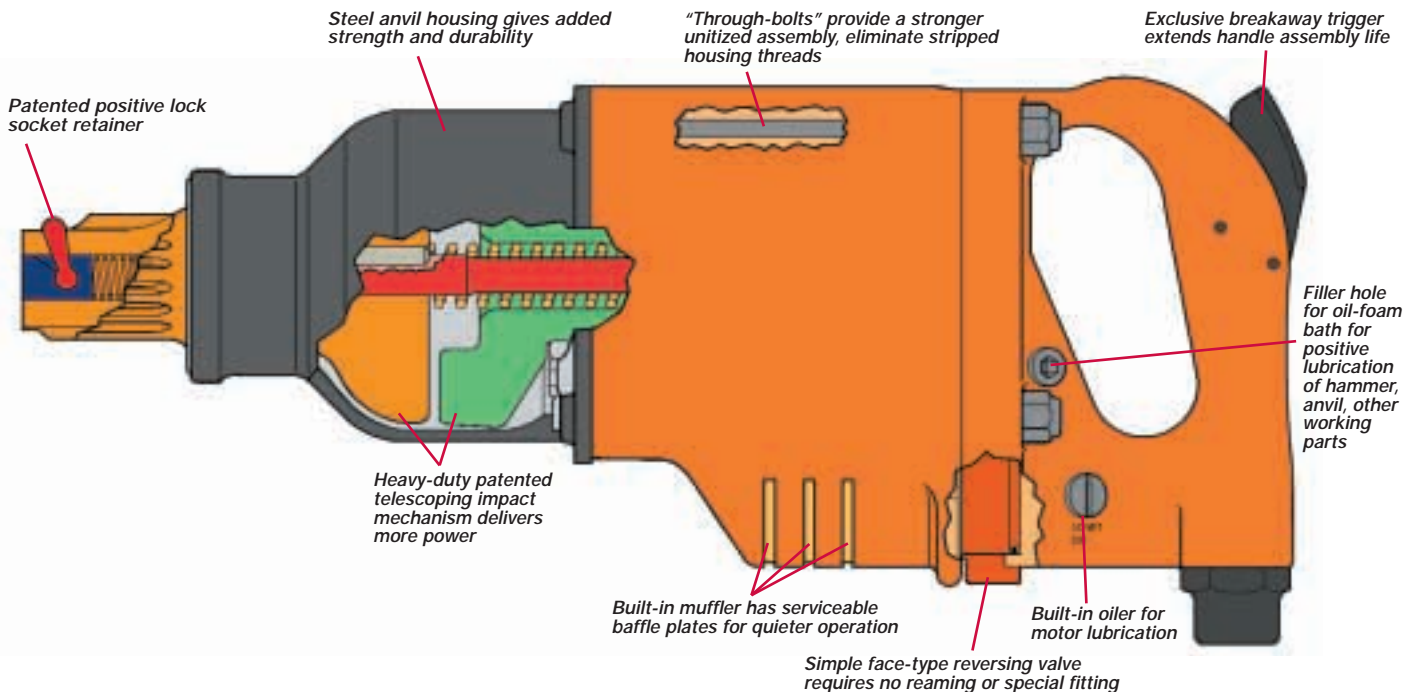


Proven heavy-duty patented telescoping impact mechanism adds power...cuts weight...reduces shock to the operator.

The smooth-hitting Cleco telescopic impact mechanism is patented (U.S. Pat. 3,156,3340) and has only three major parts - hammer, anvil and rotor...providing more power directly to the fastener. The hammer is splined to the inside of the motor, which then impacts directly on the anvil, delivering more power per blow.

Other important features include:

- Comfortable grip handle
- Outside, inside triggers and pistol grip models
- Multiposition dead handle, and spade type "D" handle available
- Throttle can be feathered for speed control
- Simple face-type reversing valve simplifies maintenance
- Forged hammer and anvil for greater durability
- Rotor bearings and steel motor end plates fit either end of motor, reducing spare parts inventory and repair time.



Cleco Impact Wrenches

Impact Wrench Bolt Selection Chart

The Impact Wrench Bolt Selection Chart will assist you in selecting impact wrenches for specific applications. Torque and tension figures are based on 70% of the proof load of a given size and grade UNC bolt. Torque values are based on non-lubricated (dry) conditions. Bolt grades and sizes are those which are the most commonly secured with impact wrenches.

Bolt Diameter		1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	1-3/8"	1-1/2"	1-5/8"	1-3/4"								
SAE Grade 1																									
Torque	Ft.-lb.	3	6	11	18	28	43	55	97	155	230	340	480	660	860	-	-								
	Nm	(4.1)	(8.1)	(15)	(24)	(38)	(58)	(75)	(132)	(210)	(312)	(460)	(650)	(900)	(1,170)	-	-								
Recommended Impact Wrench		W-200		1/2" sq. 3/8" sq.		WP-455		1/2" sq. WP-2050 & WP-2049		3/4" sq. 5/8" sq.		1" sq. & #4 spline WP-2060 & WP-2059		3/4" sq. 3/4" sq.		1" sq. & #4 spline WP-2110 & W-2109		#5 spline 1" sq.		W-2120 & W-2119		#5 spline		1-1/2" sq.	
Tension	lb.	730	1,210	1,800	2,460	3,280	4,200	5,200	7,000	10,000	14,000	18,200	23,000	28,000	34,600	-	-								
	kN	(3.24)	(5.38)	(8.0)	(10.9)	(14.6)	(18.7)	(23.1)	(31.1)	(47.1)	(62.3)	(81)	(102)	(126)	(154)	-	-								
SAE Grade 5																									
Torque	Ft.-lb.	8	16	28	46	70	110	140	250	405	600	770	1,080	1,470	1,950	-	-								
	Nm	(10.8)	(21.7)	(38)	(62)	(95)	(149)	(190)	(340)	(550)	(810)	(1,040)	(1,460)	(1,930)	(2,640)	-	-								
Recommended Impact Wrench		W-200		1/2" sq. 3/8" sq.		WP-455		1/2" sq. WP-2050 & WP-2049		3/4" sq. 5/8" sq.		1" sq. & #4 spline WP-2060 & WP-2059		3/4" sq. 3/4" sq.		1" sq. & #4 spline WP-2110 & W-2109		#5 spline 1" sq.		W-2120 & W-2119		1-1/2" sq. #5 spline			
Tension	lb.	1,900	3,100	4,600	6,350	8,450	10,900	13,500	20,000	27,400	36,000	41,000	52,000	64,000	77,000	-	-								
	kN	(8.4)	(13.8)	(20.4)	(28.2)	(37.6)	(48.5)	(60)	(89)	(122)	(160)	(182)	(231)	(285)	(342)	-	-								
SAE Grade 8 / ASTM-A354 Grade BD																									
Torque	Ft.-lb.	11	23	40	65	99	159	198	350	566	848	1,245	1,750	2,375	3,135	-	-								
	Nm	(14.9)	(31.2)	(54.2)	(88)	(134)	(216)	(268)	(475)	(767)	(1,150)	(1,690)	(2,370)	(3,220)	(4,250)	-	-								
Recommended Impact Wrench		W-200		1/2" sq. 3/8" sq.		WP-455		1/2" sq. WP-2050 & WP-2049		3/4" sq. 5/8" sq.		1" sq. & #4 spline WP-2060 & WP-2059		3/4" sq. 3/4" sq.		1" sq. & #4 spline WP-2110 & W-2109		#5 spline 1" sq.		W-2120 & W-2119		1-1/2" sq. #5 spline			
Tension	lb.	2,740	4,400	6,510	8,930	11,920	15,290	18,980	28,050	38,800	50,900	66,360	84,000	103,570	125,330	-	-								
	kN	(12.2)	(19.6)	(28.9)	(39.7)	(53)	(68)	(84.4)	(125)	(172)	(226)	(295)	(374)	(461)	(557)	-	-								
ASTM A325*																									
Torque	Ft.-lb.	1						200	355	570	850	1,060	1,495	1,960	2,600	-	-								
	Nm							(271)	(481)	(773)	(1,150)	(1,440)	(2,030)	(2,660)	(3,530)	-	-								
Recommended Impact Wrench								WP-2050		3/4" sq.		WP-2060		1" sq. 7 #4 spline		WS-2110		#5 spline		WS-2120		#5 spline			
Tension	lb.							10,000	28,000	39,000	51,000	56,000	71,000	85,000	103,000	-	-								
	kN							(44.5)	(124)	(173)	(227)	(249)	(316)	(378)	(458)	-	-								
ASTM A490*																									
Torque	Ft.-lb.	1						250	435	715	1,070	1,580	2,125	2,780	3,700	-	-								
	Nm							(339)	(590)	(970)	(1,451)	(2,125)	(2,882)	(3,770)	(5,020)	-	-								
Recommended Impact Wrench								WP-2050		3/4" sq.		WP-2060		1" sq. 7 #4 spline		WS-2110		#5 spline		WS-2120		#5 spline			
Tension	lb.							24,000	35,000	49,000	64,000	80,000	102,000	121,000	148,000	-	-								
	kN							(107)	(156)	(218)	(285)	(356)	(454)	(538)	(658)	-	-								

*Note: ASTM-325 and ASTM A490 bolts are used on structural steel applications. Torque and tension values are based on running the nut beyond the proof load of the bolt by the turn-of-the-nut method. For detailed information, consult the bolt manufacturer.

Cleco®

Torque Range:
20 – 2450 Nm
15 – 1800 Ft. Lbs.

Bolt Size:
M10 – M30
7/16 – 1 1/2"

- Lever and trigger start
- Reverse or forward bias
- 6" extended and spline drives available



Model Number	Bolt Size		Square Drive	Recommended Torque Range		Impacts Per Minute	Free Speed RPM	Length		Weight		Side to Center	
	GR. 5	GR. 9.8		ft.-lbs.	Nm			in.	mm	lbs.	kg	in.	mm
	in	mm											
Inline – Lever Start													
WL-200-BQ	7/16	M10	7/16*	50-15	68-20	3,200	3,000	8.5	216	3.1	1.4	1	25
WL-200-3	7/16	M10	3/8	50-15	68-20	3,200	3,000	8.5	216	3.1	1.4	1	25
WL-200-4	1/2	M10	1/2	60-15	81-20	3,200	3,000	8.5	216	3.4	1.5	1	25
Pistol Grip – Trigger Start													
WP-200-BQ	7/16	M10	7/16*	50-15	68-20	3,200	3,000	6.5	165	3.4	1.6	1	25
WP-200-3	7/16	M10	3/8	50-15	68-20	3,200	3,000	6.5	165	3.4	1.5	1	25
WP-200-4	1/2	M10	1/2	60-15	81-20	3,200	3,000	6.5	165	3.4	1.5	1	25
WP-455-4R	1/2	M20	1/2	370-37	502-50	1,400	6,500	7	176	5.3	2.4	-	-
WP-455-4P***	1/2	M20	1/2	370-37	502-50	1,400	6,500	7	176	5.3	2.4	-	-
WP-2050-6	7/8	M20	3/4	600-125	800-170	1,000	6,000	6.4	162	7.8	3.5	1.6	42
WP-2060B-6	1 1/8	M24	3/4	700-250	950-350	1,000	4,000	7.8	197	12	5.4	1.8	46
WP-2060B-8	1 1/8	M24	1	900-250	1200-350	1,000	4,000	7.8	197	12.1	5.5	1.8	46
WP-2110B-8	1 3/8	M30	1	1650-750	2250-1000	880	4,600	9.5	241	20.8	9.4	2.2	56
Pistol Grip – Trigger Start – Biased Reverse Power****													
WP-2049-6	7/8	M20	3/4	550-125	750-170	1,000	6,200	6.4	162	7.8	3.5	1.6	42
WP-2059-6	1 1/8	M24	3/4	700-250	950-350	1,000	4,000	7.8	197	12	5.4	1.8	46
WP-2059-8	1 1/8	M24	1	800-250	1100-350	1,000	4,000	7.8	197	12.1	5.5	1.8	46
WP-2059-8-6E**	1 1/8	M24	1	750-250	1000-350	1,000	4,000	13.8	350	14.3	6.5	1.8	46
WP-2109B-8	1 3/8	M30	1	1650-750	2250-1000	880	4,300	9.5	241	20.8	9.4	2.2	56
WPS-2109B	1 3/8	M30	#5 SPLINE	1800-750	2450-1100	880	4,300	9.8	248	21.3	9.6	2.2	56

* Quick change chuck
** 6" Extended spindle
*** Pin retainer
**** Breakaway torque capacity in reverse:
2049 Series: 750 ft.-lbs. (1000 Nm)
2059 Series: 1200 ft.-lbs. (1600 Nm)
2109 Series: 2500 ft.-lbs. (3400 Nm)

GENERAL:
Air Inlet: 1/4" NPT (WL-200, WP-200, WP-455 series) 3/8" NPT (WP-2049, WP-2050, WP-2059, WP-2060 series) 1/2" NPT (WP-2109, WP-2110 series)
Min. Hose Size: 1/4" (WL-200, WP-200, WP-455 series) 3/8" (WP-2049, WP-2050, WP-2059, WP-2060 series)

Tool performance rated at 90 psi (620kPa) air pressure.
STANDARD EQUIPMENT:
Operating instructions & service manual
OPTIONAL EQUIPMENT:
Additional accessories: Page 12

Refer to Page 7 for description of Rapid Select

Cleco®

Torque Range:
1000 – 4000 Nm.
750 – 3000 Ft. Lbs.

Bolt Size:
M30 – M36
1 3/8 – 1 1/2"

- Inside or outside lever
- Positive lock socket retainer (spline drive)
- Multiposition dead handle
- Oil foam bath
- Reverse or forward bias



Model Number		Suitable for Bolt Size		Square Drive	Recommended Torque Range		Impacts Per Minute	Free Speed RPM	Length		Weight		Side to Center		
Inside Trigger	Outside Trigger	in.	mm	in	ft.-lbs.	Nm			in.	mm	lbs.	kg	in.	mm	
Trigger Start - Spade handle															
	WT-2110-8		1 1/2	M30	1	1650-750	2250-1000	880	4,600	12.9	327	21	9.5	2.2	56
	WTS-2120		1 1/2	M36	#5 Spline	2800-1200	3800-1600	850	3,300	14.3	362	27.6	12.5	2.3	59
	WT-2120-12	W-2120-12	1 1/2	M36	1 1/2	3000-1200	4000-1600	850	3,300	14.3	362	27.6	12.5	2.3	59
Trigger Start - Spade Handle - Biased Reverse Power**															
	WT-2109-8-6E*		1 3/8	M30	1	1550-750	2100-1000	880	4,300	18.9	479	24.6	11.2	2.2	56
	WT-2109-8	W-2109-8	1 3/8	M30	1	1650-750	2250-1000	880	4,300	12.9	327	21	9.5	2.2	56
	WT-2109		1 3/8	M30	#5 Spline	1800-800	2450-1100	880	4,300	13.1	333	21.5	9.8	2.2	56
	WT-2119-12		1 1/2	M36	1 1/2	2600-1200	3500-1600	820	3,300	14.3	362	29	13.1	2.3	59
	WTS-2119	WS-2119	1 1/2	M36	#5 Spline	2500-1200	3400-1600	820	3,300	14.25	362	29	13.1	2.3	59

*6" Extended spindle
**Breakaway torque capacity in reverse:
2109 Series: 2500 ft.-lbs. (3400 Nm)
2119 Series: 3500 ft.-lbs. (4700 Nm)

GENERAL:
Air Inlet: 1/2" NPT
Min. Hose Size: 1/2" (WP-2109, WP-2110 series)

1/2" NPT (WP-2109, WP-2110 series)
5/8" (WP-2119, WP-2120 series) Tool performance rated at 90 psi (620kPa) air pressure.
STANDARD EQUIPMENT:
Operating instructions & service manual
Dead handle
OPTIONAL EQUIPMENT:
Additional accessories: Page 12

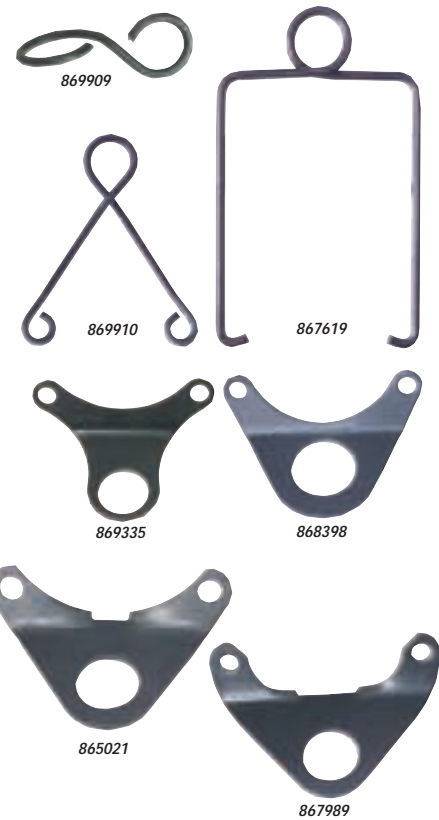
Refer to Page 7 for description of Rapid Select



6 Point Impact Sockets

Part No.	Hex Opening	Overall Length	Diameter Nose End	Diameter Drive End	Opening Depth
3/8" Square Drive Sockets, SAE					
3112	3/8	1-1/4	19/32	3/4	1/4
3114	7/16	1-1/2	11/16	3/4	9/32
3116	7/16	1/2	1-1/2	13/16	11/32
3118	7/16	9/16	1-1/2	7/8	7/16
1/2" Square Drive Sockets, SAE					
5112	3/8	1-1/2	5/8	15/16	1/4
5114	7/16	1-1/2	11/16	15/16	9/32
5116	1/2	1-1/2	13/16	15/16	11/32
5120	5/8	1-1/2	1	1	7/16
5122	11/16	1-1/2	1-1/8	1-1/8	7/16
5124	3/4	1-1/2	1-1/8	1-1/8	15/32
3/4" Square Drive Sockets, SAE					
7128	7/8	2	1-1/2	1-1/2	9/16
7132	1	2	1-5/8	1-5/8	5/8
7136	1-1/8	2-1/8	1-3/4	1-3/4	3/4
7140	1-1/4	2-1/8	2	1-3/4	13/16
7144	1-3/8	2-1/8	2-1/8	2-1/8	13/16
7148	1-1/2	2-1/4	2-1/4	2-1/8	120
1" Square Drive Sockets, SAE					
8132	1	2-1/8	1-5/8	2	13/16
8140	1-1/4	2-1/8	2-1/8	2-1/8	13/16
8144	1-3/8	2-1/8	2-1/8	2-1/8	13/16
8148	1-1/2	2-1/4	2-1/4	2-1/8	15/16
8156	1-3/4	2-3/8	2-5/8	2-5/8	11/16
8164	2	2-5/8	3	2-5/8	1-3/16
1-1/2" Square Drive Sockets, SAE					
9156	1-3/4	2-7/8	2-7/8	3	1-1/8
9160	1-7/8	3	3-1/8	3	1-1/4
9164	2	3-1/8	3-1/4	3-1/4	1-3/8
9172	2-1/4	3-1/4	3-3/8	3-1/4	1-1/2
3/8" Square Drive Sockets, Metric					
12mm13	12	38.1	19.1	19.1	7.2
14mm13	14	38.1	22.2	22.2	11.1
16mm13	16	38.1	23.8	23.8	11.1
1/2" Square Drive Sockets, Metric					
16mm15	16	38.1	25.4	25.4	11.1
18mm15	18	38.1	28.6	28.6	11.1
20mm15	20	38.1	31.7	31.7	11.9
22mm15	22	38.1	33.3	33.3	14.3
5/8" Square Drive Sockets, Metric					
24mm16	24	51	38.1	38.1	15.9
3/4" Square Drive Sockets, Metric					
28mm17	28	54	44.4	44.4	19.1
30mm17	30	54	47.6	44.4	19.1
32mm17	32	54	50.8	44.4	20.6
34mm17	34	54	54.0	54.0	20.6
36mm17	36	57	57.1	54.0	23.8
1" Square Drive Sockets, Metric					
32mm18	32	54	54.0	54.0	20.6
34mm18	34	54	54.0	54.0	20.6
36mm18	36	57	57.1	54.0	23.9
38mm18	38	57	57.1	54.0	23.9
42mm18	42	60	63.5	54.0	23.9
46mm18	46	64	69.8	66.7	26.9
1-5/8" Spline Drive, SAE Hex Opening Sockets					
SPL-140	1-1/4	3-1/4	2-3/8	2-3/8	1-3/4
SPL-148	1-1/2	3-3/8	2-3/8	2-3/8	1-1/2
SPL-156	1-3/4	3-1/2	2-7/8	2-7/8	1-3/4
SPL-164	2	3-5/8	3-1/4	3-1/4	21

Suspension Brackets and Bails



Part Number	Description	For use with Impact Wrench Model Number
869910	Bail	WP-200
869909	Hanger	WL-200
867619	End mount bail	WP-421D
869335	Bracket	WP-2049/2050
869398	Bracket	WP-2059/2060
865021*	Bracket	W-2109/2110
867989	Bracket	W-2119/2120

Hex Extensions

Part Number	Hex Drive (In.)	Type of Lock	Overall Length	
			In.	mm
Male Hex Drive with 1/2" Male Square				
EX-501-3	7/16	Pin	3	76
EX-501-4	7/16	Pin	4	102
EX-501-6	7/16	Pin	6	152
Male Hex Drive with 3/8" Male Square				
EX-371-3	7/16	Pin	3	76
EX-371-4	7/16	Pin	4	102
EX-371-6	7/16	Pin	6	152

Hex Drive Nutsetters

Part Number	Size (In.)	Overall Length (In.)	Socket Nose Diameter (In.)
7/16" 6 Point			
6N-1416-3	1/2	3	13/16
6N-1416-4	1/2	4	13/16
6N-1418-3	9/16	3	7/8
6N-1418-4	9/16	4	7/8
6N-1420-3	5/8	3	1
6N-1420-6	5/8	6	1



When it comes to fine finishing applications such as die grinding or de-burring, no tools are better suited for the job than Dotco® grinders. Dotco's reputation for durability, dependability and versatility is among the highest for fine finishing applications. This is the result of years of continuous improvements in engineering design and manufacturing processes.



Dotco products are designed with the operator in mind. They are small, lightweight and comfortable to use, without sacrificing durability. Plus, Dotco products incorporate elastomer coatings, and perfectly balanced moving parts to keep vibration to a minimum. This optimal combination of tool characteristics allows the operator to focus doing the best job possible, in the least amount of time.

Parts interchangeability

Maintenance of tools can be time consuming...and expensive. That is why Dotco products have been designed with high parts interchangeability. With fewer parts required to repair our tools, less inventory of parts is required and tools are easier to repair.



Precision parts

It's simple, precision parts let operators manufacture precision products. Whether it is a spindle, a chuck, a motor or an angle head, our parts are manufactured from the finest materials available and are machined to the highest tolerances. It is understandable why we are proud of the .0005" runout on our collet model tools.

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

DOTCO

12-12, 12-13 & 12-23 Series

Nominal Motor Power
0.3 & 0.5 hp
0.22 & 0.38 kW

- Geared or Gearless
- Front or Rear Exhaust
- Suitable for a wide range of finishing and deburring applications
- Contoured handle for operator comfort



12-12 SERIES



Tools must be ordered with lock-off lever throttle to be CE compliant. See ordering details below. ⚠

Model Number		Abrasives Capacity	Free Speed rpm	Weight		Head Height*		Length		Collet Size
Front Exhaust	Rear Exhaust			lbs.	kgs	in.	mm	in.	mm	
12-12 Series – 0.3 hp (0.22 kW) – 300 Series Collet										
12L1201-36	12L1281-36	1/2" Carbide Bur, 1" Mt. Wheel	20,000	1.1	0.5	2.7	69	6.3	160	1/4"
12L1200-36	12L1280-36	1/2" Carbide Bur, 1" Mt. Wheel	12,000	1.1	0.5	2.7	69	6.3	160	1/4"
12S1200-36M6		1/2" Carbide Bur, 1" Mt. Wheel	12,000	1.1	0.5	2.7	69	6.3	160	6 mm
12-12 Series – 0.3 hp (0.22 kW) – Universal Collet										
	12L1281-45	1/2" Carbide Bur, 1" Mt. Wheel	20,000	1.1	0.5	2.3	58	6.3	160	1/4"
	12L1280-45	1/2" Carbide Bur, 1" Mt. Wheel	12,000	1.1	0.5	2.3	58	6.3	160	1/4"
12-13 Series – 0.3 hp (0.22 kW) – Gearless - 300 Series Collet										
	12L1380-36	1/2" Carbide Bur, 1" Mt. Wheel	30,000	1.1	0.5	3.7	94	7.1	180	1/4"
	12L1381-36	1/2" Carbide Bur, 1" Mt. Wheel	25,000	1.1	0.5	3.7	94	7.1	180	1/4"
12L1302-36	12L1382-36	1/2" Carbide Bur, 1" Mt. Wheel	20,000	1.1	0.5	3.7	94	7.1	180	1/4"
12-23 Series – 0.5 hp (0.38 kW) – Gearless - 200 Series Collet										
	12L2384-01	3/4" Carbide Bur, 1 1/4" Mt. Wheel	20,000	2.0	0.91	5.5	140	7.5	190	1/4"

* Over spindle

GENERAL:

Air Inlet: 1/4" NPT – Use 1/4" (4.8mm) I.D. Hose
All tools performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:

Applicable collet, collet wrenches, oilless blades(•)

EXTRA EQUIPMENT:

Collets: See page 17; Overhose: See page 17

OPTIONAL THROTTLES:

For lock-off lever throttle, substitute "S" for "L" in model number.
For button throttle, substitute "B" for "L" in model number.

Refer to Page 7 for description of Rapid Select.

◆ "S" models are also available as Rapid Select.

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

DOTCO

12-22 & 12-27 Series

Nominal Motor Power
0.6 & 0.9 hp
0.45 & 0.67 kW

- Rear Exhaust



Tools must be ordered with lock-off lever throttle to be CE compliant. See ordering details below. ⚠

Model Number		Abrasives Capacity	Free Speed rpm	Weight		Head Height*		Length		Collet Size
Rear Exhaust				lbs.	kgs	in.	mm	in.	mm	
12-22 Series – 0.6 hp (0.45 kW) – 300 Series Collet										
	12L2218-36	1/2" Carbide Bur, 1" Mounted Wheel	18,000	1.7	0.8	2.7	69	7.5	191	1/4"
12-27 Series – 0.9 hp (0.67 kW) – 300 Series Collet										
	12L2718-36	3/4" Carbide Bur, 1 1/4" Mounted Wheel	18,000	1.9	0.9	2.9	74	8.0	203	1/4"

* Over spindle

GENERAL:

Air Inlet: 1/4" NPT – Use 5/16" (7.9mm) I.D. Hose
All tools performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:

Applicable collet, collet wrenches

EXTRA EQUIPMENT:

Collets: See page 17
Overhose (rear exhaust): See page 17

OPTIONAL THROTTLES:

For lock-off lever throttle, substitute "S" for "L" in model number.
For button throttle, substitute "B" for "L" in model number.

Refer to Page 7 for description of Rapid Select.

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

DOTCO®

15Z Series

- In-line Piston Motor
- Sliding Sleeve Throttle
- Carbide Tipped Stylus
- Great for marking materials ranging from aluminum to titanium
- Weighs only 4 oz.



15Z-710



15Z SERIES KIT

Model Number	Speed	Weight		Length		Diameter	
	spm	lbs.	kgs	in.	mm	in.	mm
15Z Series – 0.06 hp (0.044 kW)							
15Z-710	20,000	.25	0.1	5.5	140	0.6	15
15Z Series – Kit							
15Z-720	20,000	.25	0.1	5.5	140	0.6	15

GENERAL:
 Air Inlet: 1/8" NPT – Use 3/16" (4.7mm) I.D. hose
 All tools performance rated @ 90psi (620 kPa) air pressure.

Five (5) foot air hose assembly, 3/16" I.D. with 1/8" NPT fittings
 Two (2) 1/2" wrenches
 Carrying case

STANDARD EQUIPMENT - 15Z-710 SERIES:
 Carbide tipped stylus

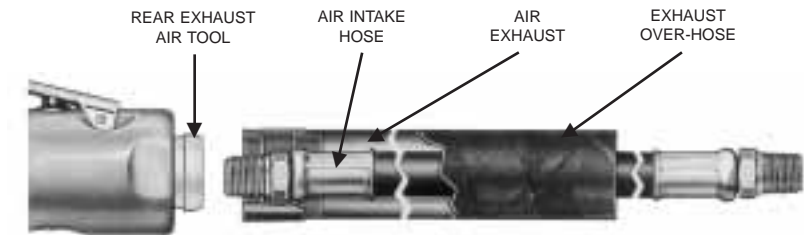
EXTRA EQUIPMENT:
 Replacement carbide tipped stylus - 1018081

STANDARD EQUIPMENT - 15Z-720 SERIES:
 15Z-710 Air Marking Pen

Refer to Page 7 for description of Rapid Select.

Overhose Assemblies

For use with Dotco series rear exhaust tools:



Tool Series	Non-Overhose to Overhose Conversion Kit	Overhose Only			Airhose Only		
		Number	Length		Number	Length	
			ft.	m		ft.	m
12-12	45-2783	45-2629	2.0	0.6	45-1408	8.0	2.4
12-13, 12-23	45-2784	45-2687	4.0	1.2	45-1408	8.0	2.4
12-22, 12-27	45-2788	45-2688	8.0	2.4	45-1508	8.0	2.4

Part Number	Collet Size	Tool Termination	Capacity		Tool Series*			
			Min.	Max.	12-12	12-23	12-22 12-27	12-22 12-27

"K" Series Collets

120	1/8"	-6208	3/32"	1/8"				
121	3/16"	-6212	5/32"	3/16"				
122	1/4"	-6216	7/32"	1/4"				
123	5/16"	-6220	9/32"	5/16"				
124	3/8"	-62	11/32"	3/8"				
125	7/16"	-6228	13/32"	7/16"				
126	1/2"	-6232	15/32"	1/2"				
133	6mm	-62M6	-	6mm				
134	8mm	-62M8	-	8mm				
135	10mm	-6270	-	10mm				
136	12mm	-6271	-	12mm				

Universal Collets

7809	1/8"	-4508	-	1/8"				OPT
7812	3/16"	-4512	-	3/16"				OPT
7808	1/4"	-45	-	1/4"				STD
7810	3mm	-45M3	-	3mm				OPT
7811	6mm	-45M6	-	6mm				OPT

Series 200 Collets

204	1/8"	-0108	3/32"	1/8"			OPT	OPT
205	5/32"	-0110	1/8"	5/32"			OPT	OPT
206	3/16"	-0112	5/32"	3/16"			OPT	OPT
207	7/32"	-0114	3/16"	7/32"			OPT	OPT
208	1/4"	-01	7/32"	1/4"			STD	STD
209	9/32"	-0118	1/4"	9/32"			OPT	OPT
210	5/16"	-0120	9/32"	5/16"			OPT	OPT
211	11/32"	-0122	5/16"	11/32"			OPT	OPT
212	3/8"	-0124	11/32"	3/8"			OPT	OPT
213	6mm	-01M6	5.2mm	6mm			OPT	OPT
216	8mm	-01M8	7.2mm	8mm			OPT	OPT

Series 300 Collets

301	3/64"	-3603	1/64"	3/64"	OPT	OPT		OPT
302	5/64"	-3605	3/64"	5/64"	OPT	OPT		OPT
303	3/32"	-3606	1/16"	3/32"	OPT	OPT		OPT
304	1/8"	-3608	3/32"	1/8"	OPT	OPT		OPT
305	5/32"	-3610	1/8"	5/32"	OPT	OPT		OPT
306	3/16"	-3612	5/32"	3/16"	OPT	OPT		OPT
307	7/32"	-3614	3/16"	7/32"		OPT		OPT
308	1/4"	-36	7/32"	1/4"	STD			STD
311	3mm	-36M3	2.2mm	3mm	OPT	OPT		OPT
310	6mm	-36M6	5.2mm	6mm	OPT	OPT		OPT

* Std = Standard Collet OPT = Optional Collet

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

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Introduction

Cleco® and Buckeye® grinders meet the demanding requirements of industries including ship building, pipe fabricating, transportation equipment manufacturing, and welding applications. Since these types of applications typically require a high material removal rate, Cleco and Buckeye grinders incorporate high horsepower/high RPM motors. To achieve maximum durability, Cleco and Buckeye grinders use top quality precision components, and motor assemblies are protected by either aluminum or steel housings.



Grinder Abrasives Guide

Precision Grinders, Carbide Burr and Mounted Wheel Grinders

Used in finishing applications that require a high degree of durability. Buckeye and Cleco grinders feature steel housings for maximum protection. These models incorporate powerful motors for maximum stock removal.

Cone and Plug Wheels

Used for general purpose grinding work on mild steel, stainless steel, metal alloys, and cast steel.

Applications include:

- Grinding and smoothing fillets, corners
- Beveling workpiece edges prior to welding
- Internal grinding
- Mild bending contours
- General grinding in confined areas

Type 1 Wheels

Used on portable horizontal shaft tools.

Applications include:

- Notch free grinding
- Smoothing out weld seams
- Removing seam lines from castings
- Pre-weld cleaning
- Grinding concrete or masonry products

Type 6 and 11 Cup Wheels

Used on right angle or vertical shaft tools.

- Type 6 – Straight Cup Wheels
- Type 11 – Flared Cup Wheels

Type 27 Depressed Center Wheels

Used at an angle to the workpiece between 30° and 45°. These wheels do not "flat grind."

Type 28 Depressed Center Wheels

Saucer shaped wheels, which are contoured to provide a correct "built-in" grinding angle. Consequently, Type 28 wheels may be used for flat contact on the workpiece.

Cut-Off Wheels

Applications include cutting carbon and stainless steel, ferrous metals, and cast iron

Flap & Buff Wheel Machines

Applications include fine grinding and polishing on alloys, cast steel, aluminum



Cleco®

220G Series

Nominal Motor Power

.1 hp

.074 kW

■ Front Exhaust

■ Lever or Push-Pull Throttle

Model Number		Free Speed rpm	Weight (tool only)		Length		Collet Size	Abrasive** Capacity
Tool Only	Kit*		oz.	kg	in.	mm		
Push-Pull Start – .1 hp (.74 kW)								
220G-600-C1		60,000	4	0.11	4.6	118	3/32"	1/4" Carbide Burr
220G-600-C2	220G-600-C2-K	60,000	4	0.11	4.6	118	1/8"	1/4" Carbide Burr
Lever Start – .1 hp (.74 kW)								
220GL-600-C1		60,000	6	0.11	4.6	118	3/32"	1/4" Carbide Burr
220GL-600-C2		60,000	6	0.11	4.6	118	1/8"	1/4" Carbide Burr

* Kit includes grinder, hose, collet, collet wrench, cylindrical plain burr (413680), cylindrical radius end burr (413681), cone & taper burr (413682), and tree point burr (413683).

** Mounted wheel capacity depends on wheel diameter, thickness and overhang. Consult wheel manufacturer for speed recommendations.

GENERAL:

Air Inlet: 1/8" NPTF
 Minimum Hose Size: 3/16" (5mm)
 Tools performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:

Operating instructions & service manual
 Collet, Collet Nut Wrench, Collet Locking Pin

OPTIONAL EQUIPMENT:

Additional Accessories: Pages 41-43

Refer to page 7 for description of Rapid Select.

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BUCKEYE

14G & 18G Series

Nominal Motor Power
0.1 & 0.2 hp
0.074 & 0.15 kW

- Steel Housing
- Front Exhaust



14G-830-KIT



Model Number	Housing	Abrasives Capacity	Free Speed	Weight		Length		Collet Size
			rpm	lbs.	kgs	in.	mm	
14G Series – 0.1 hp (0.074 kW)								
14G-810	Steel	1/4" Carbide Bur, 1/2" Mounted Wheel	50,000	0.3	0.1	3.9	99	1/8"
14G Series – 0.1 hp (0.074 kW) – Kit								
14G-820	Steel	1/4" Carbide Bur, 1/2" Mounted Wheel	50,000	0.3	0.1	3.9	99	1/8"
14G-830	Steel	1/4" Carbide Bur, 1/2" Mounted Wheel	50,000	0.3	0.1	3.9	99	1/8"
18G Series – 0.2 hp (0.15 kW)								
18G-810D	Steel	1/4" Carbide Bur, 1/2" Mounted Wheel	40,000	0.9	0.7	5.9	150	1/4"

NOTE: Capacities for the above models are for non-reinforced wheels. Refer to wheel manufacturer for speed capacities on reinforced wheels.

GENERAL:

Air Inlet: 1/8" NPT – Use 1/8" (3.2mm) I.D. Hose
All Tools performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT - 18G SERIES:

1/4" collet - 7808, Nosepiece - 1011790,
7/16" Spindle Wrench - 1011691,
11/16" Collet Nut Wrench - 1014472

Refer to page 7 for description of Rapid Select.

OPTIONAL EQUIPMENT - 18G SERIES:

No extra cost: Any one of the collets shown on page 44 may be furnished in place of standard equipment if ordered with the tool.

STANDARD EQUIPMENT - 14G-810:

Two collet wrenches - 1006626, Nosepiece - 1010896

STANDARD EQUIPMENT - 14G-820 & 14G-830 (KIT):

Two collet wrenches – 1006626
Three grinding wheels – 1005327, 1005338, 1005344
Dressing stone – 1004908
Hose assembly – 1021393
Carrying case – 1021743
Filter-Lubricator (14G-830) – 1020888

Cleco®

116 & 136 Series

Nominal Motor Power
0.6 & 0.8 hp
0.4 & 0.6 kW

- Steel Housing
- Front, Side & Rear Exhaust



Model Number		Free Speed rpm	Max. Power		Exhaust	Weight		Length		Collet Size	Abrasive** Capacity
Tool Only	Kit*		hp	kw		lbs.	kg	in.	mm		
116 Series											
116GLFB-250-C4	116GLFB-250-C4-K	25,000	0.6	0.4	Front	1.8	0.8	6.3	160	1/4"	3/4" Carbide Burr
116GLSB-250-C4	116GLSB-250-C4-K	25,000	0.6	0.4	Side	1.8	0.8	6.3	160	1/4"	3/4" Carbide Burr
136 Series											
136GLR-250-C4		25,000	0.8	0.6	Rear	1.9	0.9	7.4	188	1/4"	1" Carbide Burr
136GLF-250-C4		25,000	0.8	0.6	Front	2.0	0.9	6.8	173	1/4"	1" Carbide Burr
136GLS-240-C4		24,000	0.8	0.6	Side	2.0	0.9	6.8	173	1/4"	1" Carbide Burr
136GLR-200-C4		20,000	0.7	0.5	Rear	1.9	0.9	7.4	188	1/4"	1" Carbide Burr
136GLS-180-C4		18,000	0.6	0.4	Side	2.0	0.9	6.8	173	1/4"	1" Carbide Burr
136GLF-180-C4		18,000	0.6	0.4	Front	2.0	0.9	6.8	173	1/4"	1" Carbide Burr
136GLR-180-C4		18,000	0.6	0.4	Rear	1.9	0.9	7.4	188	1/4"	1" Carbide Burr

* Kit includes grinder, hose, collet, collet wrench, cylindrical plain burr (889006), cone round end burr (889103), ball burr (889048), tree radius burr (889967), and case.

**Mounted wheel capacity depends on wheel diameter, thickness and overhang. Consult wheel manufacturer for speed recommendations.

GENERAL:

Air Inlet: 1/4" NPTF
Minimum Hose Size: 1/4" (116 series), 5/16" (136 series)
Tool performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:

Operating instructions & service manual
Collet & Collet Wrenches

OPTIONAL EQUIPMENT:

Additional Accessories: Pages 41-43

Refer to page 7 for description of Rapid Select.

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Precision Grinders

BUCKEY®

21G & 31G Series

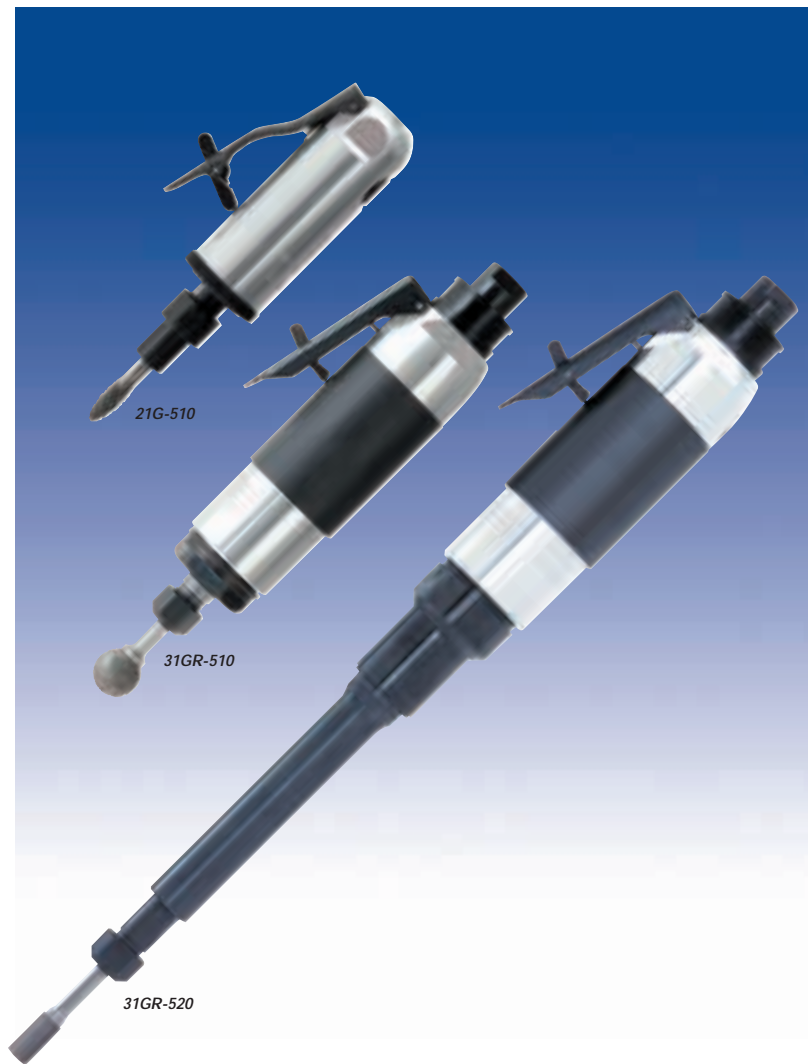
Nominal Motor Power

0.3 & 0.6 hp

0.22 & 0.45 kW

■ Aluminum or Steel Housing

■ Front or Rear Exhaust



Model Number		Housing	Abrasives Capacity	Free Space rpm	Weight		Length*		Collet Size
Front Exhaust	Rear Exhaust				lbs.	kgs	in.	mm	
21G Series – 0.3 hp (0.22 kW) – 300 Series Collet									
21G-510	21GR-510	Aluminum	1/2" Carbide Bur, 1" Mtd. Wheel	25,000	1.0	0.5	6.1	155	1/4"
31G Series – 0.6 hp (0.45 kW) – Universal Collet									
31G-610	31GR-610	Steel	3/4" Carbide Bur, 1 1/2" Mtd. Wheel	20,000	2.6	1.2	6.8	173	1/4"
31G-510	31GR-510	Aluminum	3/4" Carbide Bur, 1 1/2" Mtd. Wheel	20,000	1.6	0.7	6.8	173	1/4"
31G Series – 0.6 hp (0.45 kW) – Extended – Universal Collet									
31G-620	31GR-620	Steel	3/4" Carbide Bur, 1 1/2" Mtd. Wheel	20,000	3.9	1.8	12.6	320	1/4"
31G-520	31GR-520	Aluminum	3/4" Carbide Bur, 1 1/2" Mtd. Wheel	20,000	2.9	1.3	12.6	320	1/4"

* For 21G & 31G series rear exhaust models, add 0.6" (18mm)
For 42G series rear exhaust models, add 0.9" (23mm)

GENERAL:

Air Inlet: 1/4" NPT – Use 5/16" (7.9mm) I.D. Hose
All Tools performance rated @ 90psi (620 kPa) air pressure.

Refer to page 7 for description of Rapid Select.

STANDARD EQUIPMENT:

Applicable collet, collet wrenches

EXTRA EQUIPMENT:

Collets: See page 44

Overhose (rear exhaust): See page 43

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

Carbide Bur & Mounted Wheel Grinders

Cleco®

136 & 15 Extended Series

Nominal Motor Power
0.8 & 1.2 hp
0.67 & 0.97 kW

- Extended Housing
- Rugged Steel Housing



Model Number	Free Speed rpm	Max. Power		Exhaust	Weight		Length		Collet Size	Abrasive* Capacity
		hp	kw		lbs.	kg	in.	mm		
136 Series										
136GELR-250-C4	25,000	0.8	0.6	Rear	3.4	1.5	13.0	330	1/4"	1" Carbide Burr
136GEL-240-C4	24,000	0.8	0.6	Side	3.5	1.6	12.4	315	1/4"	1" Carbide Burr
15 Series - Governed										
15GELC-180-C4	18,000	1.2	0.9	Side	4.3	2.0	14.5	368	1/4"	1 1/4" Carbide Burr

* Mounted wheel capacity depends on wheel diameter, thickness and overhang. Consult wheel manufacturer for speed recommendations.

GENERAL:

Air Inlet: 1/4" NPTF (136 & non-governed 15 series);
3/8" (governed 15 series)
Minimum Hose Size: 5/16" (136 & non-governed 15 series),
3/8" (governed 15 series)
Tool performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:

Operating instructions & service manual
Collet & Collet Wrenches

OPTIONAL EQUIPMENT:

Collets: Page 44
Additional Accessories: Pages 41-43

Refer to page 7 for description of Rapid Select.

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Cleco®

116 & 136 Right Angle Series

Nominal Motor Power
0.6 & 0.8 hp
0.4 & 0.6 kW



Cleco®

136 Extended Series

Nominal Motor Power
0.6 - 0.8 hp
0.4 - 0.6 kW

- Extended Series
- Side & Rear Exhaust
- Steel Housing



Model Number	Free Speed	Max. Power		Exhaust	Weight		Length		Collet Size	Abrasive* Capacity
	rpm	hp	kw		lbs.	kg	in.	mm		

116 Series - Heavy Duty Head

116GLF-115A-C4	11,500	0.6	0.4	Front	3.3	1.5	7.1	180	1/4"	1" Carbide Burr
116GLS-115A-C4	11,500	0.6	0.4	Side	3.3	1.5	7.1	180	1/4"	1" Carbide Burr

136 Series - Heavy Duty Head

136GLF-115A-C4	11,500	0.8	0.6	Front	3.5	1.6	7.6	193	1/4"	1" Carbide Burr
136GLSC-115A-C4	11,500	0.8	0.6	Side	3.5	1.6	7.6	193	1/4"	1" Carbide Burr
136GLR-115A-C4	11,500	0.8	0.6	Rear	3.4	1.5	8.3	211	1/4"	1" Carbide Burr

116 Series - Extended Head

116GLFC-165A-C4	16,500	0.6	0.4	Front	2.6	1.2	9.1	231	1/4"	3/4" Carbide Burr
116GLSC-165A-C4	16,500	0.6	0.4	Side	2.6	1.2	9.1	231	1/4"	3/4" Carbide Burr

* Mounted wheel capacity depends on wheel diameter, thickness and overhang. Consult wheel manufacturer for speed recommendations.

GENERAL:

Air Inlet: 1/4" NPT
Minimum Hose Size: 1/4" (116 series), 5/16" (136 series)
Tool performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:

Operating instructions & service manual
Collet & Collet Wrenches

OPTIONAL EQUIPMENT:

Collets: Pages 44
Additional Accessories: Pages 43-46
Refer to page 5 for description of Rapid Select.

Model Number	Free Speed	Max. Power		Exhaust	Weight		Length		Spindle Thread	Cone/Plug Capacity
	rpm	hp	kw		lbs.	kg	in.	mm		

136 Series Extended

136GEL-240-P3T	24,000	0.8	0.6	Side	3.5	1.6	12.3	312	3/8"-24	1 1/4"
136GELR-180-P3T	18,000	0.6	0.4	Rear	3.4	1.5	12.9	328	3/8"-24	1 1/2"

136 Series - 6" Extended

136GEL-240-6P3T	24,000	0.8	0.6	Side	4.0	1.8	18.3	465	3/8"-24	1 1/4"
136GEL-240-6P4T	24,000	0.8	0.6	Side	4.0	1.8	18.3	465	1/2"-13	1 1/4"

GENERAL:

Air Inlet: 1/4" NPT
Minimum Hose Size: 5/16"

STANDARD EQUIPMENT:

Operating instructions & service manual

OPTIONAL EQUIPMENT:

Additional Accessories: Pages 43-46

Refer to page 5 for description of Rapid Select.

Cleco®

15 Extended & 500B Horizontal Series

Nominal Motor Power
1.0 & 2.4 hp
0.7 & 1.8 kW

- Steel Housing
- Side Exhaust
- Governed or Non-Governed (15 series)
- Rotatable Exhaust Deflector



Cleco®

136 Series

Nominal Motor Power
0.5 - 0.8 hp
0.4 - 0.6 kW

- Steel Housing
- Short & Extended
- Side & Rear Exhaust

Model Number	Free Speed	Max. Power		Weight		Length		Spindle Thread	Cone/Plug Capacity
	rpm	hp	kw	lbs.	kg	in.	mm		
15 Extended Series - Non-governed									
15NGELC-180-P3T	18,000	1.0	0.7	4.3	2.0	13.5	343	3/8"-24	2"
15 Extended Series - Governed									
15GELC-180-P3T	18,000	1.2	0.9	4.3	2.0	14.5	368	3/8"-24	2"
15GELC-180-P5T	18,000	1.2	0.9	4.5	2.0	14.9	378	5/8"-11	2"
15GELC-140-P3T	14,000	1.1	0.8	4.3	2.0	14.5	368	3/8"-24	2"
15GELC-120-P3T	12,000	1.0	0.7	4.3	2.0	14.5	368	3/8"-24	2"
15GELC-120-P4T	12,000	1.0	0.7	4.3	2.0	14.6	371	1/2"-13	2 1/2"
15GELC-120-P5T	12,000	1.0	0.7	4.5	2.0	14.9	378	5/8"-11	2 1/2"
500B Horizontal Series									
590BHL-P	9,000	2.1	1.6	7.6	3.4	17.9	455	5/8"-11	3"
5120BHL-P	12,000	2.4	1.8	7.6	3.4	17.9	455	5/8"-11	3"

<p>GENERAL: Air Inlet: 1/4" NPT Minimum Hose Size: 5/16" Tool performance rated @ 90psi (620 kPa) air pressure. Refer to page 7 for description of Rapid Select.</p>	<p>STANDARD EQUIPMENT: Operating instructions & service manual</p> <p>OPTIONAL EQUIPMENT: Additional Accessories: Pages 41-43</p>
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Model Number	Free Speed	Max. Power		Exhaust	Weight w/Guard		Length		Spindle Thread	Type 1 Wheel Capacity	Wheel Guard Size
	rpm	hp	kw		lbs.	kg	in.	mm			
136 Series											
136GLR-180-W3T4	18,000	0.5	0.4	Rear	2.4	1.1	7.3	185	3/8"-24	3" x 1/2"	4"
136GLR-150-W3T3	15,000	0.5	0.4	Rear	2.4	1.1	7.3	185	3/8"-24	3" x 1/2"	3"
136 Series - Extended											
136GEL-240-W3T25	24,000	0.8	0.6	Side	4.0	1.8	12.3	312	3/8"-24	2 1/2" x 1/2"	2 1/2"
136GELR-200-W3T3	20,000	0.7	0.5	Rear	4.0	1.8	12.9	328	3/8"-24	3" x 1/2"	3"
136GELR-180-W3T3	18,000	0.6	0.4	Rear	4.0	1.8	12.9	328	3/8"-24	3" x 1/2"	3"
136GELR-150-W3T3	15,000	0.5	0.4	Rear	4.0	1.8	12.9	328	3/8"-24	4" x 1/2"	3"

<p>GENERAL: Air Inlet: 1/4" NPT Minimum Hose Size: 5/16" Tool performance rated @ 90psi (620 kPa) air pressure.</p>	<p>STANDARD EQUIPMENT: Operating instructions & service manual Wheel Guard & Flange Wrench</p> <p>OPTIONAL EQUIPMENT: Wheel Guards: Page 44 Additional Accessories: Pages 41-43</p>
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Cleco®

116 & 136 Right Angle Series

Nominal Motor Power
0.5 - 0.8 hp
0.4 - 0.6 kW

- Steel Housing
- Front, Side & Rear Exhaust



Cleco®

15 Right Angle Series

Nominal Motor Power
1.1 - 1.2 hp
0.8 - 0.9 kW

- Steel Housing
- Side Exhaust
- Governor Controlled Speed



Model Number	Free Speed rpm	Max. Power		Exhaust	Weight w/Guard		Length		Head Height		Type 1 Wheel Capacity	Wheel Guard Size
		hp	kw		lbs.	kg	in.	mm	in.	mm		
116 Series - Heavy Duty Head												
116GLF-115A-W3T4	11,500	0.6	0.4	Front	3.6	1.6	7.1	180	3.2	81	4" x 1/8"	4"
136 Series - Heavy Duty Head												
136GLF-115A-W3T4	11,500	0.8	0.6	Front	3.8	1.7	8.3	211	3.2	81	4" x 1/8"	4"
136GLS-115A-W3T4	11,500	0.8	0.6	Side	3.8	1.7	8.3	211	3.2	81	4" x 1/8"	4"
136GLR-115A-W3T4	11,500	0.8	0.6	Rear	3.8	1.7	8.3	211	3.2	81	4" x 1/8"	4"
116 Series - Extended Head												
116GLFB-135A-W3T4	13,500	0.5	0.4	Front	3.0	1.4	9.1	231	2.2	56	4" x 1/8"	4"
116GLSB-135A-W3T4	13,500	0.5	0.4	Side	3.0	1.4	9.1	231	2.2	56	4" x 1/8"	4"
116GLSB-165A-W3T3	16,500	0.6	0.4	Side	2.9	1.3	9.1	231	2.2	56	3" x 1/8"	3"
136 Series - Extended Head												
136GLFB-135A-W3T4	13,500	0.7	0.5	Front	3.3	1.5	9.6	244	2.2	56	4" x 1/8"	4"
136GLSB-135A-W3T4	13,500	0.7	0.5	Side	3.3	1.5	9.6	244	2.2	56	4" x 1/8"	4"
136GLRB-135A-W3T4	13,500	0.7	0.5	Rear	3.1	1.4	10.3	262	2.2	56	4" x 1/8"	4"
136GLFB-165A-W3T3	16,500	0.8	0.6	Front	3.1	1.4	9.6	244	2.2	56	3" x 1/8"	3"
136GLRB-135A-W3T3	13,500	0.7	0.5	Rear	3.1	1.4	9.6	244	2.2	56	3" x 1/8"	3"

GENERAL:
Air Inlet: 1/4" NPT
Minimum Hose Size: 1/4" (116 series), 5/16" (136 series)
Tool performance rated @ 90psi (620 kPa) air pressure.
Refer to page 7 for description of Rapid Select.

STANDARD EQUIPMENT:
Operating instructions & service manual
Wheel Guard, Wheel Adapter, Spindle Wrench
OPTIONAL EQUIPMENT:
Wheel Guards: Page 41
Additional Accessories: Pages 41-43

Model Number	Free Speed rpm	Max. Power		Weight w/Guard		Length		Head Height		Type 1 Wheel Capacity	Wheel Guard Size
		hp	kw	lbs.	kg	in.	mm	in.	mm		
15 Series - Lock-Off Lever Throttle											
15GL-60A-W5T7	6,000	1.1	0.8	7.1	3.2	10.0	254	4.0	102	7" x 1/8"	7"
15GL-77A-W5T7	7,700	1.2	0.9	7.1	3.2	10.0	254	4.0	102	7" x 1/8"	7"

GENERAL:
Air Inlet: 3/8" NPT
Minimum Hose Size: 3/8"
Spindle length: 31/32"
Tool performance rated @ 90psi (620 kPa) air pressure.
Refer to page 7 for description of Rapid Select.

STANDARD EQUIPMENT:
Operating instructions & service manual
Wheel Guard
OPTIONAL EQUIPMENT:
Wheel Guards: Page 41
Additional Accessories: Pages 41-43

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

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Cleco®

500B Horizontal Series

Nominal Motor Power
1.9 - 2.4 hp
1.4 - 1.8 kW

- Rotatable Exhaust Deflector
- Incline Lever or Spade Handle
- Steel Motor Housing



Model Number	Free Speed	Max. Power		Weight w/Guard		Length		Arbor Size	Type 1 Wheel Capacity	Wheel Guard Size
	rpm	hp	kw	lbs.	kg	in.	mm			
500B Series - Lock-off Lever Throttle										
560BHL-16	6,000	1.9	1.4	10.8	4.9	18.4	467	5/8"	6" x 1"	6"
590BHL-14	9,000	2.2	1.6	8.9	4.0	18.4	467	5/8"	4" x 1"	4"
5120BHL-14	12,000	2.4	1.8	8.9	4.0	18.8	478	5/8"	4" x 1"	4"
500B Series - Spade Handle										
560BHX-16	6,000	1.9	1.4	11.6	5.3	18.8	478	5/8"	6" x 1"	6"
5120BHX-14	12,000	2.4	1.8	9.8	4.4	18.8	478	5/8"	4" x 1"	4"

GENERAL:
Air Inlet: 1/2" NPT
Minimum Hose Size: 1/2"
Tool performance rated @ 90psi (620 kPa) air pressure.

Refer to page 7 for description of Rapid Select.

STANDARD EQUIPMENT:
Operating instructions & service manual
Wheel Guard & Flange Wrench

OPTIONAL EQUIPMENT:
Wheel Guards: Page 41
Additional Accessories: Pages 41-43

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

Cleco®

1700 & 1900 Horizontal Series

Nominal Motor Power
3.1 & 4.1 hp
2.3 & 3.1 kW

- Governed
- Overspeed Shutoff
- Lock-off, Quick Release Thumb & Spade Handle



Model Number	Free Speed	Max. Power		Weight w/Guard		Length		Arbor Size	Type 1 Wheel Capacity	Wheel Guard Size
	rpm	hp	kw	lbs.	kg	in.	mm			
1700 Series - Lock-off Lever Throttle										
1760HL-16	6,000	3.1	2.3	14.5	6.6	19.6	498	5/8"	6" x 1"	6"
1700 Series - Quick Release Thumb Throttle										
1760H-16	6,000	3.1	2.3	14.5	6.6	19.6	498	5/8"	6" x 1"	6"
1900 Series - Spade Handle										
1960HG-16	6,000	4.1	3.1	16.8	7.6	21.4	544	5/8"	6" x 1"	6"

GENERAL:
Air Inlet: 1/2" NPT
Minimum Hose Size: 3/4"
Tool performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:
Operating instructions & service manual
Wheel Guard & Flange Wrench

OPTIONAL EQUIPMENT:
Wheel Guards: Page 41
Additional Accessories: Pages 41-43

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

Cleco®

136 Vertical Series

Nominal Motor Power
0.4 - 0.6 hp
0.3 - 0.4 kW

- Gearless
- Lock-Off Lever Throttle



BUCKEYE®

31A Series

Nominal Motor Power
0.6 hp
0.45 kW

- Aluminum Housing
- Front or Rear Exhaust
- Steel Angle Heads

Model Number	Free Speed rpm	Max. Power		Weight w/Guard		Length		Height		Type 27 Wheel Capacity	Wheel Guard Size
		hp	kw	lbs.	kg	in.	mm	in.	mm		
136 Series											
136VGL-180-D3T3	18,000	0.6	0.4	2.4	1.1	7.3	185	4.0	102	3"	3"
136VGL-135-D3T4	13,500	0.4	0.3	2.4	1.1	7.3	185	4.0	102	4"	4"
136VGL-115-D3T4	11,500	0.4	0.3	2.4	1.1	7.3	185	4.0	102	4"	4"

GENERAL:
Air Inlet: 1/2" NPT
Minimum Hose Size: 3/4"
Spindle Length: 7/8"
Tool performance rated @ 90psi (620 kPa) air pressure.
Refer to page 7 for description of Rapid Select.

STANDARD EQUIPMENT:
Operating instructions & service manual
Wheel Guard & Flange Wrench
OPTIONAL EQUIPMENT:
Wheel Guards: Page 41
Additional Accessories: Pages 41-43

Model Number		Housing	Type 27 Wheel Capacity	Free Speed rpm	Weight		Length		Arbor Size
Front Exhaust	Rear Exhaust				lbs.	kgs	in.	mm	
31A Series – 0.6 hp (0.45 kW)									
31A-530	31AR-530	Aluminum	4"	13,500	2.3	1.0	10.8	274	3/8"

GENERAL:
Air Inlet: 1/4" NPT – Use 5/16" (7.9mm) I.D. Hose
All tools performance rated @ 90psi (620 kPa) air pressure.
Refer to page 7 for description of Rapid Select.

STANDARD EQUIPMENT:
Wheel guard, proper flanges, spindle wrench
EXTRA EQUIPMENT:
Overhose (rear exhaust): See page 43

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

Cleco®

116 & 136 Right Angle Series

Nominal Motor Power
0.5 & 0.8 hp
0.4 & 0.6 kW

- Steel Housing
- Governed
- Front, Rear & Side Exhaust
- Lock-Off Lever Throttle



Model Number	Free Speed rpm	Max. Power		Exhaust	Weight w/Guard		Length		Head Height		Type 27 Wheel Capacity	Wheel Guard Size
		hp	kw		lbs.	kg	in.	mm	in.	mm		
116 Series - Heavy Duty Head												
116GLF-115A-D3T4	11,500	0.6	0.4	Front	3.6	1.6	7.1	180	3.2	81	4"	4"
116GLF-115A-D3T45	11,500	0.6	0.4	Front	3.6	1.6	7.1	180	3.2	81	4 1/2"	4 1/2"
116GLS-115A-D3T4	11,500	0.6	0.4	Side	3.6	1.6	7.1	180	3.2	81	4"	4"
136 Series - Heavy Duty Head												
136GLF-115A-D3T4	11,500	0.8	0.6	Front	3.9	1.8	7.6	193	3.2	81	4"	4"
136GLR-115A-D3T45	11,500	0.8	0.6	Rear	3.8	1.7	8.3	211	3.2	81	4 1/2"	4 1/2"
136GLR-115A-D3T4	11,500	0.8	0.6	Rear	3.8	1.7	8.3	211	3.2	81	4"	4"
136GLS-115A-D3T4	11,500	0.8	0.6	Side	3.9	1.8	7.6	193	3.2	81	4"	4"
116 Series - Extended Head												
116GLFB-135A-D3T4	13,500	0.5	0.4	Front	3.0	1.4	9.1	231	3.2	81	4"	4"
116GLSB-135A-D3T4	13,500	0.5	0.4	Side	3.0	1.4	9.1	231	3.2	81	4"	4"
116GLSB-165A-D3T3	16,500	0.6	0.4	Side	2.9	1.3	9.1	231	3.2	81	3"	3"
136 Series - Extended Head												
136GLFB-135A-D3T4	13,500	0.7	0.5	Front	3.3	1.5	9.6	244	3.2	81	4"	4"
136GLSB-135A-D3T4	13,500	0.7	0.5	Side	3.3	1.5	9.6	244	3.2	81	4"	4"
136GLRB-135A-D3T4	13,500	0.7	0.5	Rear	3.1	1.4	10.3	262	3.2	81	4"	4"

GENERAL:
Air Inlet: 1/4" NPT
Minimum Hose Size: 1/4" (116 series), 5/16" (136 series)
Tool performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:
Operating instructions & service manual
Wheel Guard, Wheel Adapter, Spindle Wrench

OPTIONAL EQUIPMENT:
For 4 1/2" Type 27 Wheels with 7/8" hole
Wheel Guards: Page 43
Additional Accessories: Pages 41-43

Refer to page 7 for description of Rapid Select.

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

Cleco®

15 Right Angle & Vertical Series

Nominal Motor Power
1.0 - 1.2 hp
0.7 - 0.9 kW

- Steel Housing (Right Angle)
- Governed (Right Angle)
- Geared Speed (Vertical)
- Side Exhaust



Model Number	Free Speed rpm	Max. Power		Weight w/Guard		Length		Height		Type 27 & 28 Wheel Capacity	Wheel Guard Size
		hp	kw	lbs.	kg	in.	mm	in.	mm		
115 Right Angle Series - Lock-off Lever Throttle											
15GL-60A-D5T7	6,000	1.1	0.8	7.1	3.2	10.0	254	4.0	102	7"	7"
15GL-77A-D5T7	7,700	1.2	0.9	7.1	3.2	10.0	254	4.0	102	7"	7"
15GL-85A-D5T7	8,000	1.2	0.9	7.1	3.2	10.0	254	4.0	102	7"	7"
15 Vertical Series - Self Closing Thumb Throttle											
15VS-45	4,500	1.0	0.7	5.4	2.4	-	-	6.6	168	7"	7"
15VSB-60	6,000	1.0	0.7	5.4	2.4	-	-	6.6	168	7"	7"

GENERAL:
Air Inlet: 3/8" NPT
Minimum Hose Size: 3/8"
Tool performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:
Operating instructions & service manual
Wheel Guard & Flange Wrench

OPTIONAL EQUIPMENT:
Wheel Guards: Page 41
Additional Accessories: Pages 41-43

Refer to page 7 for description of Rapid Select.

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

Type 27 & 28 Wheel Grinders

Cleco®

1200 Vertical Series

Nominal Motor Power
2.0 - 2.2 hp
1.5 - 1.6 kW

- Governed
- Lock-Off Lever Throttle



1260DVL-07

Model Number	Free Speed rpm	Max. Power		Weight w/Guard		Height		Type 27 & 28 Wheel Capacity	Wheel Guard Size
		hp	kw	lbs.	kg	in.	mm		
1200 Series									
1260DVL-07	6,000	2.0	1.5	7.5	3.4	7.5	191	7"	7"
1277DVL-07	7,700	2.2	1.6	7.5	3.4	7.5	191	7"	7"

GENERAL:

Air Inlet: 1/2" NPT
Minimum Hose Size: 1/2"
Tool performance rated @ 90psi (620 kPa) air pressure.

Refer to page 7 for description of Rapid Select.

STANDARD EQUIPMENT:

Operating instructions & service manual
Wheel Guard & Spindle Wrench

OPTIONAL EQUIPMENT:

Wheel Guards: Page 41
Additional Accessories: Pages 41-43

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

Type 27 & 28 Wheel Grinders

Cleco®

1700 & 1900 Vertical Series

Nominal Motor Power
2.6 - 4.1 hp
1.9 - 3.1 kW

- Durable Sand-Cast Governor Housing
- Thru-bolt Construction
- Safety Lever Throttle
- Governed
- Overspeed Shut-Off



Model Number	Free Speed rpm	Max. Power		Weight w/Guard		Height		Type 27 & 28 Wheel Capacity	Wheel Guard Size
		hp	kw	lbs.	kg	in.	mm		
1700 Series - Lock-off Lever Throttle									
1745BVL-09	4,500	2.6	1.9	10.5	4.8	7.0	178	9"	9"
1760BVL-07	6,000	3.0	2.2	9.1	4.1	7.0	178	7"	7"
1760BVL-09	6,000	3.0	2.2	9.1	4.1	7.0	178	9"	9"
1777BVL-07	7,700	3.2	2.4	9.1	4.1	7.0	178	7"	7"
1900 Series - Lock-off Lever Throttle									
1945BVL-09	4,500	3.7	2.8	12.8	5.8	8.3	211	9"	9"
1960BVL-07	6,000	4.1	3.1	12.8	5.8	8.3	211	7"	7"
1960BVL-09	6,000	4.1	3.1	12.8	5.8	8.3	211	9"	9"

GENERAL:

Air Inlet: 1/2" NPT
Minimum Hose Size: 3/4"
Tool performance rated @ 90psi (620 kPa) air pressure.

Refer to page 7 for description of Rapid Select.

STANDARD EQUIPMENT:

Operating instructions & service manual
Wheel Guard & Spindle Wrench

OPTIONAL EQUIPMENT:

Wheel Guards: Page 41
Additional Accessories: Pages 41-43

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

Cleco®

1200 Vertical Series

Nominal Motor Power
2.0 hp
1.5 kW

- Durable sand-cast governor housing
- Thru-bolt construction
- Lock-off Lever Throttle
- Governed
- Overspeed Shutoff



1260DVL-04

Model Number	Free Speed	Max. Power		Weight w/Guard		Height		Type 6 & 11 Wheel Capacity	Wheel Guard Size
		rpm	hp	kw	lbs.	kg	in.		

1200 Series

1260DVL-04	6,000	2.0	1.5	7.4	3.4	7.5	191	4" x 2"	4"
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GENERAL:
Air Inlet: 1/2" NPT
Minimum Hose Size: 3/4"
Tool performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:
Operating instructions & service manual
Wheel Guard, Spindle Wrench, Wheel Retainer Washer & Bolt

OPTIONAL EQUIPMENT:
Wheel Guards: Page 41
Additional Accessories: Pages 41-43

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

Cleco®

1700 & 1900 Vertical Series

Nominal Motor Power
3.0 & 4.1 hp
2.2 & 3.1 kW

- Governed Speed
- Durable Sand-Cast Governor Housing
- Thru-bolt Construction
- Overspeed Shut-Off



1760BVL-06

1960BVL-06

Model Number	Free Speed	Max. Power		Weight w/Guard		Height		Type 6 & 11 Wheel Capacity	Wheel Guard Size
		rpm	hp	kw	lbs.	kg	in.		

1700 Series - Lock-off Lever Throttle

1760BVL-05	6,000	3.0	2.2	11.1	5.0	7.0	178	5" x 2"	5"
1760BVL-06	6,000	3.0	2.2	11.1	5.0	7.0	178	6" x 2"	6"
1772BVL-05	7,200	3.2	2.4	10.4	4.7	7.0	178	5" x 2"	5"

1700 Series - Self Closing Thumb Throttle

1760BVS-06	6,000	3.0	2.2	11.1	5.0	7.0	178	6" x 2"	6"
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1700 Series - Quick Release Thumb Throttle

1760BV-06	6,000	3.0	2.2	11.1	5.0	7.0	178	6" x 2"	6"
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1900 Series - Lock-off Lever Throttle

1960BVL-06	6,000	4.1	3.1	13.4	6.1	8.3	211	6" x 2"	6"
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1900 Series - Self Closing Thumb Throttle

1960BVS-06	6,000	4.1	3.1	13.4	6.1	8.3	211	6" x 2"	6"
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GENERAL:
Air Inlet: 1/2" NPT
Minimum Hose Size: 3/4"
Tool performance rated @ 90psi (620 kPa) air pressure.

Refer to page 7 for description of Rapid Select.

STANDARD EQUIPMENT:
Operating instructions and service manual
Wheel Guard, Spindle Wrench, Wheel Retainer Washer & Bolt

OPTIONAL EQUIPMENT:
Wheel Guards: Page 41
Additional Accessories: Pages 41-43

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.



15 Series

Nominal Motor Power
1.0 hp
0.7 kW

- Steel Housing
- Geared Speed
- Lock-Off Lever Throttle
- Extended Length



15NWELC-30-F5T

Model Number	Free Speed rpm	Max. Power		Weight		Length	
		hp	kw	lbs.	kg	in.	mm

15 Series - 3" Extended

15NWELC-30-F5T	3,000	1.0	0.7	5.6	2.5	17.3	439
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GENERAL:
Air Inlet: 1/4" NPT
Minimum Hose Size: 5/16"
Tool performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:
Operating instructions & service manual
OPTIONAL EQUIPMENT:
Additional Accessories: Pages 41-43


Precision Carbide Burs for Die Grinders

Size	Code No. 1/4" Shank	Max. Speed
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Cylindrical Radius End

 3/16" x 5/8"	889033	133,000
1/4" x 5/8"	889127	100,000
1/16" x 3/4"	889035	80,000
3/8" x 3/4"	889036	66,000
1/2" x 1"	889038	50,000
5/8" x 1"	889039	40,000
3/4" x 1"	889040	33,000


Cylindrical Plain

 3/16" x 5/8"	889003	133,000
5/16" x 3/4"	889005	80,000
3/8" x 3/4"	889006	66,000
1/2" x 1"	889008	50,000
5/8" x 1"	889009	40,000
3/4" x 3/4"	889011	33,000
1" x 1"	889014	25,000


Oval

 1/4" x 3/8"	889056	100,000
3/8" x 5/8"	889057	66,000
1/2" x 7/8"	889058	50,000
5/8" x 1"	889059	40,000
3/4" x 1"	889060	33,000


Cone Round End 14°

 1/4" x 5/8"	889135	100,000
5/16" x 7/8"	889101	66,000
3/8" x 1 1/16"	889102	50,000
1/2" x 1 1/8"	889103	40,000
3/4" x 1 1/2"	889106	33,000


Cone or Taper

 1/4" x 3/4"	889108	100,000
3/8" x 5/8"	889132	66,000
1/2" x 7/8"	889133	50,000


Ball

 3/16"	889045	133,000
1/4"	889046	100,000
5/16"	889047	80,000
3/8"	889048	66,000
1/2"	889050	50,000
3/8"	889051	40,000

Tree Pointed

 1/4" x 3/4"	889128	100,000
3/8" x 3/4"	889080	66,000
1/2" x 1"	889082	50,000
5/8" x 1"	889083	40,000
3/4" x 1"	889084	33,000

Tree Radius End

 1/4" x 3/4"	889128	100,000
3/8" x 3/4"	889064	66,000
1/2" x 1"	889067	50,000
5/8" x 1"	889068	40,000
3/4" x 1"	889069	33,000
3/4" x 1 1/2"	889071	33,000

Cleco Wheel Guards

Tool Series	Size	Part No.	Speed (rpm)
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Type 1 Wheel

116RA, 136RA	3"	202226	13,500 & 16,500
116RA, 136RA	4"	889208	11,500
116RA, 136RA	4"	202227	13,500 & 16,500
136, 15	2 1/2"	202277	
136, 15	3"	202278	
136, 15	4"	202245	
15RA	7"	204131	
15H	2 1/2"	865787	
15H	3"	865786	
15H	4"	865988	
500BH	4"	881608	9,000 & 12,000
500BH	6"	865993	6,000
1700V, 1900V	6"	202022	
1700V, 1900V	8"	202025	

Type 27 Wheel

15RA	7"	865986	
136V	3"	849905	
136V	4"	203382	
116RA, 136RA	4"	889208	11,500
116RA, 136RA	4 1/2"	202063	11,500
116RA, 136RA	3"	202226	13,500 & 16,500
116RA, 136RA	4"	202227	13,500 & 16,500
116RA, 136RA	5"	203142	11,500
15V	7"	849760	
1200V	7"	202374	
1200V	9"	202608	
1700V, 1900V	9"	867741	
1700V, 1900V	7"	867740	

Type 28 Wheel

15V	7"	849760	
1200V	7"	202374	
1700V, 1900V	7"	867740	
15RA	7"	865986	
1200V	9"	202607	
1700V, 1900V	9"	869067	

Type 6 & 11 (Cup) Wheel

1200V	4"	202465	
1700V, 1900V	5"	861892	
1700V, 1900V	6"	861893	

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Grinder Accessories

Cleco

Spiral Cool Sanding Kits



Part No.	Size	Used On
861791	4"	116RA, 136RA
861792	5"	116RA, 136RA
861654	5"	15RA
861655	7"	15RA, 15V, 1200V, 1700V, 1900V
861656*	9"	1700V, 1900V

* For use on 4,500 and 6,000 rpm models only



Governor Adjustment Wrenches

Part No.	Used On
867796	1700H, 1900H
867739	1700V, 1900V

External Mufflers

Part No.	Used On
861996	1700V
861997	1900V



4 1/2" Wheel Guard Kit

Part No.	Used On
861983	116RA, 136RA



Type 27 & 28 Wheel Adapter Kit*

Part No.	Used On
849269	15V, 1200V, 1700V, 1900V

* For 7/8" plain whole wheels



Router Attachment

Part No.	Used On
861804	116, 136

Cone or Plug Wheel Driving Flange

Part No.	Used On
869699	1700H, 1900H



Sanding Shrouds



Part No.	Used On
202592	1200V
203988	1700V



Grip Sleeve

Part No.	Used On
203647	220G



Overhose for 136* Grinders

Part No.	Description
869580	Exhaust Overhose
869204	Overhose Adapter
202343	Hose Clamp

* Rear exhaust models only

Rubber Flex Accessories

Part No.	Size	Used On
Rubber Flex Collets		
847532	1/8"	116, 136
847533	1/4"	116, 136
Rubber Flex Chuck		
847512		116, 136

Collets

Tool Series	Size	Part No.
220G	1/8"	415432
220G	3/32"	415433
220G	3mm	415434
116, 136	1/8"	865421
116, 136	6mm	864158
116, 136, 15	3/16"	865423
116, 136, 15	1/4"	847811
116, 136, 15	5/16"	865501
116, 136, 15	3/8"	847805

Buckeye Wheel Guards

Tool Series	Series	Guard Number
Type 1 (Cut-Off) Wheel		
31A	4"	1024872
42H	3"	14-2676
42H	4"	14-2677

Type 27 Depressed Center Wheel

31A	3"	1023487
31A	4"	1022312
31A	4" Thin	1024745
31A	4 1/2"	1024788
42H	3"	14-2674
42H	4"	14-2675

Exhaust Hose Clamp

Part No.	Description
1018422	Overhose (5')
1018429	Clamp

Use with any Buckeye 31 series straight housing tool

Secures over the exhaust bushing at the rear of the tool to carry exhaust debris away from the work area.

Depressed Center Wheel Adapter

Adapt abrasive with a 7/8" arbor to run on a tool with 5/8"-11 thread

Part No.	Description
1021767	Use with type 27 & 28 wheels

Overhose Assemblies

For use with Buckeye 42H & 42G series tools

Tool Series	Complete Overhose Assembly	Overhose Only		Airhose Only			
		Number	Length	Number	Length		
			ft.	m		ft.	m
	45-2786	45-2629	2.0	0.6			
42H & 42G	45-2787	45-2687	4.0	1.2	45-1508	8.0	2.4
	45-2788	45-2688	8.0	2.4			

Sanding Belts – Aluminum Oxide, Resin Bond

For use with Buckeye coated abrasive belt sander attachments

Minimum order: 10 of any one belt

Grit Size	Belt Number
	1" x 12
60	14-1582
80	14-1583
120	14-1585
180	14-1588

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Buckeye

Introduction


Part Number	Collet Size	Tool Termination	Capacity		Tool Series*			
			Min.	Max.	10-04	10-90	12-03	12-04
Series HG Collets								
103	1/16"	-04 or -14	-	1/16"	OPT	OPT		
102	3/32"	-06 or -16	-	3/32"	STD	OPT		STD
01-0102	3/32"	-16	-	3/32"			STD	
100	1/8"	-08 or -18	-	1/8"	STD	STD		STD
01-0100	1/8"	-18	-	1/8"			STD	
146	1mm	-00 or -10	-	1mm	OPT	OPT		
131	2.35mm	-02 or -12	-	2.35mm	OPT	OPT		
01-0131	2.35mm	-12	-	2.35mm			OPT	
148	3mm	-03 or -13	-	3mm	STD	STD		STD
01-0148	3mm	-13	-	3mm			STD	

Part Number	Collet Size	Tool Termination	Capacity		Tool Series*					
			Min.	Max.	10-95	12-10 12-11 12-12	12-20 12-25	12-21 12-22 12-26 12-27 12-31	10-43 11-43	12-05 12-22 12-27 12-27


Universal Collets

 7809	1/8"	-4508	-	1/8"						OPT
7812	3/16"	-4512	-	3/16"						OPT
7808	1/4"	-45	-	1/4"						STD
7810	3mm	-45M3	-	3mm						OPT
7811	6mm	-45M6	-	6mm						OPT


"K" Series Collets

120	1/8"	-6208	3/32"	1/8"						OPT
121	3/16"	-6212	5/32"	3/16"						OPT
122	1/4"	-6216	7/32"	1/4"						OPT
 123	5/16"	-6220	9/32"	5/16"						OPT
124	3/8"	-62	11/32"	3/8"						STD
125	7/16"	-6228	13/32"	7/16"						OPT
126	1/2"	-6232	15/32"	1/2"						OPT
133	6mm	-62M6	-	6mm						OPT
134	8mm	-62M8	-	8mm						OPT
135	10mm	-6270	-	10mm						OPT
136	12mm	-6271	-	12mm						OPT

Series 200 Collets

204	1/8"	-0108	3/32"	1/8"		OPT	OPT			
205	5/32"	-0110	1/8"	5/32"		OPT	OPT			
206	3/16"	-0112	5/32"	3/16"		OPT	OPT			
 207	7/32"	-0114	3/16"	7/32"		OPT	OPT			
208	1/4"	-01	7/32"	1/4"		STD	STD			
209	9/32"	-0118	1/4"	9/32"		OPT	OPT			
210	5/16"	-0120	9/32"	5/16"		OPT	OPT			
211	11/32"	-0122	5/16"	11/32"		OPT	OPT			
212	3/8"	-0124	11/32"	3/8"		OPT	OPT			
213	6mm	-01M6	5.2mm	6mm		OPT	OPT			
216	8mm	-01M8	7.2mm	8mm		OPT	OPT			

Series 300 Collets

301	3/64"	-3603	1/64"	3/64"		OPT	OPT			OPT
302	5/64"	-3605	3/64"	5/64"		OPT	OPT			OPT
303	3/32"	-3606	1/16"	3/32"		OPT	OPT			OPT
 304	1/8"	-3608	3/32"	1/8"	STD	OPT	OPT			OPT
305	5/32"	-3610	1/8"	5/32"		OPT	OPT			OPT
306	3/16"	-3612	5/32"	3/16"		OPT	OPT			OPT
307	7/32"	-3614	3/16"	7/32"		OPT	OPT			OPT
308	1/4"	-36	7/32"	1/4"	OPT	STD	STD			STD
311	3mm	-36M3	2.2mm	3mm		OPT	OPT			OPT
310	6mm	-36M6	5.2mm	6mm		OPT	OPT			OPT

* Std = Standard Collet
OPT = Optional Collet

Buckeye® sanders are available in two styles to provide flexibility in choosing the best tool to complete the job - right angle and vertical.

Motor ratings for Buckeye sanders range from 0.6 – 1.6HP. All sanders feature aluminum or steel housings to protect the internal parts as much as possible.

Buckeye sanders are ideal for jobs ranging from burnishing metal to smoothing welds.



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BUCKEYE

31T Series

Nominal Motor Power
0.6 hp
0.45 kW

- One Piece Steel Angle Head
- Aluminum or Steel Housing
- Front or Rear Exhaust



BUCKEYE

58SR Series

Nominal Motor Power
1.6 hp
1.19 kW

- Governed
- Geared
- Rear Exhaust
- Lock-Off Lever Throttle



Model Number / Exhaust	Housing	Sanding Disc Capacity	Free Speed		Weight		Length		Collet Size
			rpm		lbs.	kgs	in.	mm	
31T Series – 0.6 hp (0.45 kW) – 3/8" - 24 Thread									
31TR-550 Rear	Aluminum	4"	13,500		2.3	1.0	10.8	274	—

GENERAL:
Air Inlet: 1/4" NPT – Use 5/16" (7.9mm) I.D. Hose
All Tools performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:
31T Series: Spindle adapter, clamp washer, backing adapter and spindle wrench

EXTRA EQUIPMENT:
Overhose (rear exhaust): See page 43

Model Number	Sanding Disc Capacity (max.)	Buffing Wheel Capacity (max.)	Wire Brush Capacity (max.)	Free Speed		Weight		Height		Spindle Size
				rpm		lbs.	kgs	in.	mm	
58SR Series – 1.6 hp (1.19 kW) – Governed										
58SR-552 Rear Exhaust	7"	7"	6"	6,000		5.8	2.6	6.3	160	5/8"-11
58SR-556	7"	8"	6"	3,000		5.8	2.6	6.3	160	5/8"-11

GENERAL:
Air Inlet: 3/8" NPT - Use 3/8" (9.5mm) I.D. Hose
All Tools performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:
Auxiliary side handle, spindle wrench
Refer to page 7 for description of Rapid Select.

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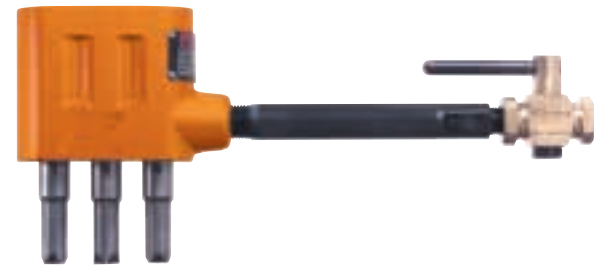
Introduction

Cleco® offers a complete line of heavy-duty percussion tools for applications ranging from preparation of metal surfaces for painting to light demolition.

All Cleco tools are especially engineered for quality, durability and performance.

Triple Scalers

Our Cleco Triple Scalers are designed for heavy-duty removal of paint, rust, slag and scaling from metal structures, as well as pipes and boilers



Cleco®

SC Series

- Piston Type
- Carbide Tipped Pistons (SC-3AC)



Riveters & Chippers

Our Cleco Riveters & Chippers are used for both riveting and for applications including slag removal and chipping concrete.

Needle Scalers

Our Cleco Needle Scalers are used for light to medium duty removal of welding flux, slag, paint and scaling.



Chipping Hammers

Our Cleco Chipping Hammers are used for fettling of castings, chipping rust and paint off metal surfaces and light demolition work.

Bench & Floor Rammers



Our Cleco Bench & Floor Rammers are designed for ramming casting sand in castings and core boxes, or for

Model Number	Bore		Stroke		Blows Per Minute	Length		Weight		
	in.	mm	in.	mm		in.	mm	in.	mm	
SC3A Series – Standard										
SC 3A	0.88	22	0.81	21	5,200	13.3	338	7.9	3.6	
SC3A Series – Carbide Tipped Pistons										
SC 3AC	0.88	22	0.81	21	5,200	13.3	338	7.9	3.6	

GENERAL:
 Air Inlet: 3/8" NPT
 Minimum Hose Size: 3/8"
 Tool performance rated at 90 psi (620kPa) air pressure.

STANDARD:
 Operating instructions & service manual

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Cleco®

E & 16 Series

- Inline or Pistol Grip
- Rotatable Exhaust Deflector



Model Number		Bore		Stroke		Blows Per Minute	Length*		Weight	
Open Retainer	Bee Hive Retainer	in.	mm	in.	mm		in.	mm	lbs.	kg
E Series – Round Nose – Pistol Grip										
E2-BWD-RD-O	E2-BWD-RD-B	0.50	13	2.25	57	2,400	6.6	168	2.3	1.0
E3-BWD-RD-O	E3-BWD-RD-B	0.50	13	3.00	76	1,900	7.8	198	2.4	1.1
E4-BWD-RD-O	E4-BWD-RD-B	0.50	13	4.00	102	1,600	8.4	213	2.6	1.2
E5-BWD-RD-O	E5-BWD-RD-B	0.50	13	5.00	127	1,400	9.4	239	2.9	1.3
E Series – Hex Nose – Pistol Grip										
E2-BWD-HX-O	E2-BWD-HX-B	0.50	13	2.25	57	2,400	6.6	168	2.3	1.0
E3-BWD-HX-O	E3-BWD-HX-B	0.50	13	3.00	76	1,900	7.8	198	2.4	1.1
E4-BWD-HX-O	E4-BWD-HX-B	0.50	13	4.00	102	1,600	8.4	213	2.6	1.2
E5-BWD-HX-O	E5-BWD-HX-B	0.50	13	5.00	127	1,400	9.4	239	2.9	1.3
E Series – Round Taper Nose – Pistol Grip										
E2-BWD-RT-O	E2-BWD-RT-B	0.50	13	2.25	57	2,400	6.6	168	2.3	1.0
E3-BWD-RT-O	E3-BWD-RT-B	0.50	13	3.00	76	1,900	7.8	198	2.4	1.1
E4-BWD-RT-O	E4-BWD-RT-B	0.50	13	4.00	102	1,600	8.4	213	2.6	1.2
E5-BWD-RT-O	E5-BWD-RT-B	0.50	13	5.00	127	1,400	9.4	239	2.9	1.3
16 Series – Round Nose – Inline										
16-AJ-RD-O	16-AJ-RD-B	0.625	16	1.44	36	5,200	6.1	155	2.1	1.0
16 Series – Hex Nose – Inline										
16-AJ-HX-O	16-AJ-HX-B	0.625	16	1.44	36	5,200	6.1	156	2.1	1.0
16 Series – Round Taper Nose – Inline										
16-AJ-RT-O	16-AJ-RT-B	0.625	16	1.44	36	5,200	6.1	156	2.1	1.0

* Length is less retainer; add .25" (6mm) to length & reduce weight .1 lbs. (.06 kg) for inline E series models and add .5" (13mm) to length and add .1 lbs (.06 kg) for inline 16 series models

GENERAL:

Air Inlet: 1/4" NPTF;
 Minimum Hose Size: 1/4"
 Tool performance rated at 90 psi (620kPa) air pressure.
 Note: Substitute B for O in model number for bee hive style retainer

Refer to page 7 for description of Rapid Select.

STANDARD EQUIPMENT:

Operating instructions & service manual

OPTIONAL EQUIPMENT:

Additional accessories: Page 55

CAPACITY: ALUMINUM OR IRON COLD RIVETS

E2-AJ: 1/8" (3.2 mm)
 E2-BWD: 1/8" (3.2 mm)
 E3-BWD: 5/32" (4.0 mm)
 E4-BWD: 3/16" (4.8 mm)
 E5-BWD: 1/4" (6.4 mm)

Cleco®

B1, BR Series

- Built-in Chisel Retainer
- Front Exhaust
- Lever, Push-Pull & Pistol Grip Models
- Needle Type



Model Number		Type	Bore		Stroke		Blows Per Minute	Length*		Weight*		
Round Nose	Rectangular Nose		in.	mm	in.	mm		in.	mm	lbs.	kg	
Push-Pull Start												
	B1-CNB-PT-RD	Needle	1.0	25	1.1	28	4,600	16.8	427	6.3	2.9	
	BR-CNB-PT-RD	Needle	1.0	25	1.1	28	4,200	17.3	439	6.3	2.9	
Lever Start												
■	B1-CNB-LT-RD	B1-CNB-LT-RET	Needle	1.0	25	1.1	28	4,600	15.0	381	6.3	2.9
■	BR-CNB-LT-RD		Needle	1.0	25	1.1	28	4,200	15.5	394	6.3	2.9
Pistol Handle												
	B1-CNB-BV-RD		Needle	1.0	25	1.1	28	4,600	17.4	442	8.4	3.8
	BR-CNB-BV-RD		Needle	1.0	25	1.1	28	4,200	17.9	455	8.3	3.8
Lever Start Kits**												
■	B1-CNB-LT-RD-K		Needle	1.0	25	1.1	28	4,600	15.0	381	6.3	2.9

* Length and weight include needles.

** Specs are for tool only

GENERAL:

Air Inlet: 1/4" NPTF

Minimum Hose Size: 5/16"

Tool performance rated at 90 psi (620kPa) air pressure.

Note: Kit includes tool, whip hose, extra set of needles, two chisels, extra chisel retainer, retainer parts and metal case.

STANDARD EQUIPMENT:

Operating instructions & service manual

OPTIONAL EQUIPMENT:

Additional Accessories: Page 55

■ Refer to page 7 for description of Rapid Select.

Cleco®

B1, BR Series

- Built-in Chisel Retainer
- Lever, Push-Pull & Pistol Grip Models
- Chisel Type



Cleco®

CL & CH Series

- Adjustable Exhaust Deflector
- Forged Handles
- Pistol Grip



Model Number	Type	Bore		Stroke		Blows Per Minute	Length*		Weight*		
		in.	mm	in.	mm		in.	mm	lbs.	kg	
Push-Pull Start											
■ B1-C-PT	Chisel	1.0	25	1.1	28	4,600	12.0	305	4.3	2.0	
■ BR-C-PT	Chisel	1.0	25	1.1	28	4,200	12.1	307	4.3	2.0	
Lever Start											
■ B1-C-LT	Chisel	1.0	25	1.1	28	4,600	10.3	262	4.3	2.0	
■ BR-C-LT	Chisel	1.0	25	1.1	28	4,200	10.4	264	4.3	2.0	
Pistol Handle											
■ B1-C-BV	Chisel	1.0	25	1.1	28	4,600	12.6	320	6.4	2.9	
■ BR-C-BV	Chisel	1.0	25	1.1	28	4,200	12.8	325	6.3	2.9	

*Length and weight does not include chisel

GENERAL:
Air Inlet: 1/4" NPTF
Minimum Hose Size: 5/16"
Tool performance rated at 90 psi (620kPa) air pressure.

STANDARD EQUIPMENT:
Operating instructions & service manual
Spoon Chisel: 829310

OPTIONAL EQUIPMENT:
Additional Accessories: Page 55

■ Refer to page 7 for description of Rapid Select.

Model Number		Retainer Type	Bore		Stroke		Blows Per Minute	Length*		Weight*	
Round Nose	Hex Nose		in.	mm	in.	mm		in.	mm	lbs.	kg
CL Series											
■ CL-3-RD-L	■ CL-3-HX-L	Standard	1.3	33	3.0	76	3,500	11.8	300	6	2.7
CH Series											
■ CH-22-RD-H	■ CH-22-HX-H	Standard	1.1	28	2.3	58	2,000	13.8	351	14	6.3
■ CH-22-RD-C	■ CH-22-HX-C	Cleco	1.1	28	2.3	58	2,000	13.8	351	14	6.3
■ CH-22-RD-Q		Quick Change	1.1	28	2.3	58	2,000	13.8	351	14	6.3
■ CH-32-RD-H	■ CH-32-HX-H	Standard	1.1	28	3.3	84	1,650	14.3	363	15	6.8
■ CH-32-RD-C	■ CH-32-HX-C	Cleco	1.1	28	3.3	84	1,650	14.3	363	15	6.8
■ CH-32-RD-Q	■ CH-32-HX-Q	Quick Change	1.1	28	3.3	84	1,650	14.3	363	15	6.8

* Less chisel

GENERAL:
Air Inlet: 3/8" NPT
Minimum Hose Size: 3/8"
Tool performance rated at 90 psi (620kPa) air pressure.

STANDARD EQUIPMENT:
Operating instructions & service manual

OPTIONAL EQUIPMENT:
Additional Accessories: Page 55

■ Refer to page 7 for description of Rapid Select.

Cleco®

RO, R1 & R4 Series

- Built-in Oiler
- Lever Start
- Self-cleaning Valve



Type	Model Number				Bore		Stroke		Blows Per Minute	Length*		Weight*	
	Pein	Malleable Iron Butt	Polyurethane 2 3/8" Butt	Polyurethane 3 3/8" Butt	in.	mm	in.	mm		in.	mm	lbs.	kg
RO, R1 Series													
BENCH	R0B-P1	R0B-M1	R0B-B1	R0B-B2	1.0	25	2.0	51	2,500	17.0	432	8.8	4.0
BENCH	R1B-P1	R1B-M1	R1B-B1	R1B-B2	1.0	25	4.0	102	1,700	20.5	521	12.3	5.6
FLOOR	R1F-P1	R1F-M1	R1F-B1	R1F-B2	1.0	25	4.0	102	1,700	43.0	1092	18	8.2
R4 Series													
BENCH	R4B-D-P2	R4B-D-M2	R4B-D-B3	R4B-D-B4	1.3	33	5.0	127	800	24.0	610	17.8	8.1
FLOOR	R4F-D-P2	R4F-D-M2	R4F-D-B3	R4F-D-B4	1.3	33	5.0	127	800	48.0	1219	23	10.4

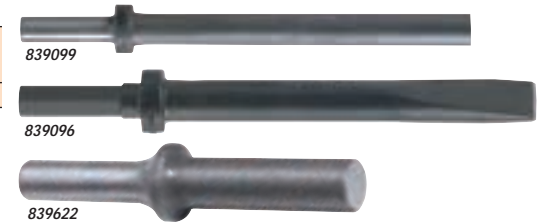
GENERAL:
 Air Inlet: 1/4" NPT (Bench Rammers), 3/8" (Floor Rammers)
 Minimum Hose Size: 5/16" (Bench Rammers), 1/2" (Floor Rammers)
 Tool performance rated at 90 psi (620kPa) air pressure.
 *Length and weight do not include termination.

STANDARD EQUIPMENT:
 Operating instructions & service manual

OPTIONAL EQUIPMENT:
 Additional Accessories: Page 55

E & 16 Series Chisels & Shank Rivet Sets

Type	Style	Cutting Edge Dimensions		Round Stock Size		Overall Length		Shank Style Code	
		in.	mm	in.	mm	in.	mm	Round	Hexagon
Chisel Blank	G	—	—	1/2	12.7	6	152	839099	839095
Cold Chisel	G	1/2 x 1/16	12.7 x 1.6	1/2	12.7	6	152	839098	839096
Rivet Set Hard Blank	GP	—	—	1/2	12.7	3 1/2	89	839622	—



B1 Series Chisels (Safety Retainer Type)

Type	Cutting Edge		Square Stock Size		Overall Length		Code Number
	in.	mm	in.	mm	in.	mm	
Hardened Blank	—	—	1/2	12.7	7 1/2	190	839052
Hardened Blank	—	—	1/2	12.7	12	305	839053
Hardened Blank	—	—	1/2	12.7	18	457	839054
Cold Chisel	3/4	19	1/2	12.7	7 1/2	190	839051
Cold Chisel	3/4	19	1/2	12.7	12	305	839341
Cold Chisel	3/4	19	1/2	12.7	18	457	839335
Cold Chisel	1 1/2	38	1/2	12.7	8	203	839467
Spoon Chisel	1 3/8	35	1/2	12.7	7 1/4	184	839050
Spoon Chisel	1 3/8	35	1/2	12.7	12	305	839299
Spoon Chisel	1 3/8	35	1/2	12.7	18	457	839334
Spoon Chisel	1	25	1/2	12.7	7 1/4	184	839740

BR Series Chisels (Safety Retainer Type)

Type	Cutting Edge		Round Stock Size		Overall Length		Code Number
	in.	mm	in.	mm	in.	mm	
Blank	—	—	5/8	16	6 1/2	165	829172
Blank	—	—	5/8	16	7 1/2	190	829173
Short Wide Blade	1 1/4 x 1/8	31.8 x 3.2	5/8	16	4 3/8	111	829167
Narrow Blade	5/8 x 5/32	15.9 x 2.4	5/8	16	4 3/8	98	829168
Long Wide Blade	1 3/4 x 3/32	44.5 x 2.4	5/8	16	7	203	829165
Cold	3/4 x 3/32	19.1 x 2.4	5/8	16	8 1/2	216	829150
Scaling	1 1/4 x 3/32	31.8 x 2.4	5/8	16	9	229	829301
Spoon	1 3/8 x 3/32	34.9 x 2.4	5/8	16	7 1/2	190	829310
Diamond Point	7/32 x 1/4	5.6 x 6.4	5/8	16	6	152	829182



CL & CH Series Chisels & Chisel Blanks



Type	Octagon Stock Size		Overall Length		Shank Style Code	
	in.	mm	in.	mm	Round	Hexagon
Cold	3/4	19	9	229	839014	839008
Cold	3/4	19	12	305	839083	839009
Cold	3/4	19	18	457	—	839010
Moil Point	3/4	19	9	229	839023	839018
Moil Point	3/4	19	12	305	839190	839084
Blank	3/4	19	8	203	839004	839001
Blank	3/4	19	12	305	839005	—
Blank	3/4	19	18	457	—	839003

R0, R1 & R4 Series Peins & Butts

Part No.	Size	Material	Used on
Peins			
829557	1" x 2 7/8"	Polyurethane	ROB, R1B & R1F
829556	1" x 2 5/8"	Polyurethane	R4B & R4F
Butts			
832825	2 3/8"	Malleable Iron	ROB, R1B & R1F
832824	3"	Malleable Iron	R4B & R4F
829558	2 3/8"	Polyurethane	ROB, R1B & R1F
829559	3 3/8"	Polyurethane	ROB, R1B & R1F
829560	3 3/8"	Polyurethane	R4B & R4F
829561	4 3/8"	Polyurethane	R4B & R4F



WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1.

Cleco®

136 Series Reciprocating Saw

- Spade Handle
- Pivoting Front Shoe
- Feather Throttle



Model Number	Strokes per Minute	Length of Stroke		Length		Weight	
		in.	mm	in.	mm	in.	mm
136 Series - .75 hp (.56 kW) - Spade Handle 136RX	2,600	1.1	28	17.8	452	9.3	4

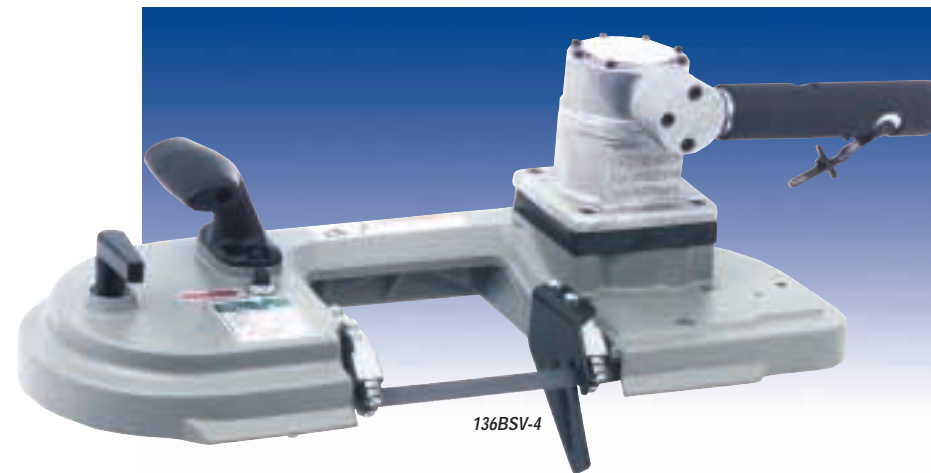
GENERAL:
Air Inlet: 1/2" NPTF
Minimum Hose Size: 3/8" (9mm)
Tool performance rated at 90 psi (620kPa) air pressure.

STANDARD EQUIPMENT:
Operating instructions and service manual
3/16 Hex wrench

Cleco®

136 Series Band Saw

- Variable Speed Control
- Adjustable Handle
- Lock-off Lever Start



Model	Cutting Capacity		Blade Capacity		Length		Height		Width		Weight	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg
136 Series - .75 hp (.56 kW) 136BSV-4	4.8	122	44 7/8 x 1/2 x .02	1140 x 12.7 x .5	22.25	565	7.0	178	8.3	211	12.5	5.7

GENERAL:
Air Inlet: 1/4" NPTF
Minimum Hose Size: 1/4"
Tool performance rated at 90 psi (620kPa) air pressure.

STANDARD EQUIPMENT:
Operating instructions and service manual
18 teeth/in. blade: 204271

STANDARD EQUIPMENT IF SPECIFIED*:
14 teeth/in. blade: 204270
24 teeth/in. blade: 204272
*replaces standard blade

Refer to page 7 for description of Rapid Select.

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.



Cleco® and Dotco® drills are used daily in applications ranging from aerospace to oil fields and refineries. Three styles are available - pistol grip, straight handle, and right angle models. Drills in this section range from 0.3 – 1.5HP. Plus, dead handles are available for several Cleco 15 Series models.

Parts interchangeability

Maintenance of tools can be time consuming...and expensive. That is why our products have been designed with high parts inter-changeability. With fewer parts required to repair our tools, less inventory of parts is required and tools are easier to repair.

Precision parts

It's simple, precision parts let operators manufacture precision products. Whether it is a spindle, a chuck, a motor or an angle head, our parts are manufactured from the finest materials available and are machined to the highest tolerances. It is understandable why we are proud of the .0005" runout on our collet model tools.



WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

DOTCO

Extraordinary new drills, inspired by an extraordinary device called the human hand.

The familiar gray Dotco drill has long been the industry workhorse for the high-volume, high-repetition, high-precision demands of today's assembly line.

The new Dotco drills have been dramatically redesigned ergonomically to deliver increased comfort and productivity, while assuring decreased operator fatigue, potential for injury and downtime on the line.

And we not only changed the way Dotco drills look. We also changed the way they perform.

The Miracle Of Technology And Human Engineering

Technology has allowed us to make these extraordinary improvements. Rapid prototypes are now available through our proprietary design-engineering platform, so we can do modeling in real time and put prototypes in the hands of operators to get immediate feedback on ergonomic and performance criteria.

The handles of the new 14 Series are more oval, for example, because that's what fits the human hand better

and ensures less slippage. Our human engineering research also led to the addition of a new rubber grip for better temperature control, because compressed air exhaust in a metal housing makes the tool cold to the hand and reduces speed and efficiency.

Moreover, the ideal is to have the line of action straight down the barrel so that the operator is pushing forward on the tool with the greatest control, the greatest in-line force, the least angular force and the least fatigue to the wrist. That's why we designed the new drills with ergonomically-critical finger and thumb guides. That's also why we added a finger lip under the trigger, which keeps the other fingers from interfering with the trigger action.

The trigger, by the way, is practically forceless. It requires only 4 ounces of pressure to engage the trigger. And the trigger mechanism is designed with a pressurized tip-valve, so that once you overcome the initial resistance, you're off to the races.



Design features double ball bearings for the spindle, pre-loaded for longer bearing life and more accurate spindle control. Vibration and runout are reduced.

Time-proven motor and gear design is well balanced to reduce vibration and extend tool life.

Full feathering is accomplished with our pressurized tip-valve design for speed control while drilling.

Rubber grip acts as a thermal protector and isolates vibration for improved operator comfort.

Each tool is individually checked, aligned and adjusted on our assembly line for minimum chuck runout. Vibration is minimized.

Gears are machined from alloy steel and heat-treated, with fixed cages to control centers for smooth operation.

The trigger is practically forceless requiring only 4 ounces of pressure to engage.

Rubber grip acts as a thermal protector and isolates vibration for improved operator comfort.

Housing is made of durable lightweight industrial grade aluminum.

Ergonomically critical finger and thumb guides fit the hand and aid in control.

Finger lip under the trigger keeps other fingers from interfering with the trigger action.

Handles are shaped to fit the human hand. They are flat where they need to be flat and round where they need to be round.

Minimal noise levels enhance operator comfort.

The handles of the new 14 Series are more oval because that's what fits the human hand better. They are flat where they need to be flat and round where they need to be round ensuring less slippage.



DOTCO

14CF Series

- **Nominal Motor Power**
0.4 hp
0.30 kW
- **Non-Reversible**
- **Excellent for aerospace, metal fab and woodworking**

Model Number	Drill Diameter Capacity	Free Speed rpm	Weight		Length		Geared Chuck Size
			lbs.	kgs	in.	mm	
14CF Series - 0.4 hp (0.30 kW) - Non-reversible							
14CFS90-38	1/4"	29,000	1.5	0.7	5.7	145	3/8"
14CFS91-38	1/4"	5,200	1.5	0.7	5.7	145	3/8"
14CFS92-38	1/4"	3,800	1.5	0.7	5.7	145	3/8"
14CFS93-38	1/4"	3,200	1.5	0.7	5.7	145	3/8"
14CFS94-38	1/4"	2,400	1.6	0.7	5.7	145	3/8"
14CFS95-38	1/4"	1,000	1.8	0.8	6.9	175	3/8"
14CFS96-38	1/4"	700	1.8	0.8	6.9	175	3/8"
14CFS97-38	1/4"	600	1.8	0.8	6.9	175	3/8"

GENERAL:
Air Inlet: 1/4" NPT - Use 5/16" (7.9mm) I.D. Hose
All tools performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:
Jacobs geared chuck, chuck key

OPTIONAL EQUIPMENT:
Add "NL" to end of model number for oilless blades
Add "OH" to end of model number for 4' overhose

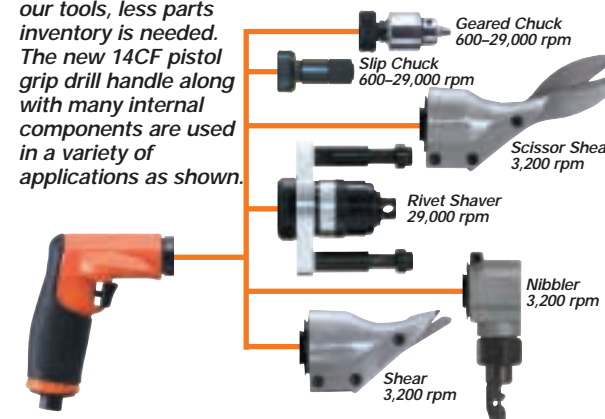
EXTRA EQUIPMENT:
1025750 Dead Handle with 01-1204 Thread Guard

CHUCK GUARD:
Extra Cost: To add a chuck guard to the standard models shown in the table, specify 1110903 Adapter, 1110900 Guard.

OPTIONAL CHUCK TERMINATIONS:
-37=5/32" Jacobs -47=3/8" Jacobs (22BA)
-38=1/4" Jacobs (1B) -51=3/8" Jacobs (41BA)
-40=No Chuck -53=1/2" Jacobs (33BA-with dead handle)
-42=1/4" HD Jacobs (7BA) -54 = 1/4" Slip Chuck
-43=3/8" Jacobs (2BA) -56 = 3/8" Keyless

Refer to Page 7 for description of Rapid Select.

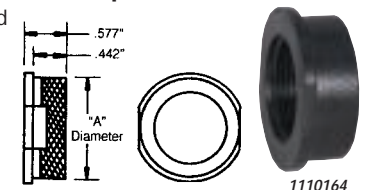
Standardizing on Dotco means fewer service parts are needed across various applications. With fewer parts required to repair our tools, less parts inventory is needed. The new 14CF pistol grip drill handle along with many internal components are used in a variety of applications as shown.



Quick Change Pressure Foot Adapter

For tools with a 1"-20 external thread

Part Number	Diameter "A"
1110164	1.375/1.373
1110165	1.437/1.435
1110166	1.501/1.499
1110167	1.626/1.623



Retrofit Kits

Retrofit your existing Dotco 15CFS and Buckeye 21D drills to the new Dotco 14CFS series.

Part No.	Retrofit kit for
01-1401	Dotco 15CFS series
01-1402	Buckeye 21D series

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

DOTCO

15CS & 15CN Series

Nominal Motor Power
0.6 & .9 hp
0.45 & 0.67 kW

- Non-Reversible
- Excellent for aerospace, metal fab and woodworking



Model Number	Drill Diameter Capacity	Free Speed	Weight*		Length*		Geared Chuck Size
		rpm	lbs.	kgs	in.	mm	
15CS Series – 0.6 hp (0.45 kW)							
15CSL90-38	1/4"	20,000	2.0	0.9	6.1	155	1/4"
15CSL99-38	1/4"	9,000	2.8	1.3	7.9	201	1/4"
15CSL98-38	1/4"	6,000	2.0	0.9	6.1	155	1/4"
15CSL91-38	1/4"	5,200	2.0	0.9	6.1	155	1/4"
15CSL92-38	1/4"	3,200	2.0	0.9	6.1	155	1/4"
15CSL93-38	1/4"	1,900	2.6	1.2	7.5	191	1/4"
15CSL94-51	3/8"	1,600	2.8	1.3	7.9	201	3/8"
15CSL95-51	3/8"	1,300	2.8	1.3	7.9	201	3/8"
15CSL96-51	3/8"	800	2.8	1.3	7.9	201	3/8"
15CSL97-51	3/8"	500	2.8	1.3	7.9	201	3/8"
15CN Series – 0.9 hp (0.67 kW)							
15CNL90-38	1/4"	20,000	2.1	1.0	6.6	168	1/4"
15CNL99-38	1/4"	9,000	3.4	1.5	8.9	226	1/4"
15CNL98-38	1/4"	6,000	2.1	1.0	6.6	168	1/4"
15CNL91-51	3/8"	5,200	2.3	1.0	7.0	178	3/8"
15CNL92-51	3/8"	3,200	2.3	1.0	7.0	178	3/8"
15CNL93-51	3/8"	1,900	2.7	1.2	8.4	213	3/8"
15CNL94-51	3/8"	1,600	2.7	1.2	8.4	213	3/8"
15CNL95-51	3/8"	1,300	2.7	1.2	8.4	213	3/8"
15CNL96-51	3/8"	800	2.7	1.2	8.4	213	3/8"
15CNL97-53	1/2"	500	3.4	1.5	8.9	226	1/2"

* For weight and length of large handle models, add 0.2 lb (0.1kg) and 0.12 in. (3mm)

GENERAL:
Air Inlet: 1/4" NPT – Use 5/16" (7.9mm) I.D. Hose
All tools performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:
Jacobs geared chuck, chuck key, dead handle
(All models with a chuck opening greater than 1/2")

OPTIONAL EQUIPMENT:
Oilless blades

EXTRA EQUIPMENT:
Overhose: See page 17
Dead Handle: 15CF Models - 1025750; 15CS Models - 1023972

CHUCK GUARD:
Extra Cost: To add a chuck guard to the standard models shown in the table, specify 1110903 Adapter, 1110900 Guard (-38 models), or 1110901 Guard (-51 models).

OPTIONAL CHUCK TERMINATIONS:
-37 = 5/32" Jacobs -47 = 3/8" Jacobs (22BA)
-38 = 1/4" Jacobs (1B) -51 = 3/8" Jacobs (41BA)
-40 = No Chuck -53 = 1/2" Jacobs (33BA - with dead handle)
-42 = 1/4" HD Jacobs (7BA) -54 = 1/4" Slip Chuck
-43 = 3/8" Jacobs (2BA) -56 = 3/8" Keyless

Refer to Page 7 for description of Rapid Select.

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

DOTCO

56CT, 56CS & 56CN Series

Nominal Motor Power
0.3, 0.5 & 0.75 hp
0.22, 0.37 & 0.56 kW

- Reversible
- Small or Large Handles
- Excellent for aerospace, metal fab and woodworking



Model Number		Drill Diameter Capacity	Free Speed	Weight*		Length*		Geared Chuck Size
Small Handle	Large Handle		rpm	lbs.	kgs	in.	mm	
56CT Series – 0.3 hp (0.22 kW)								
	56CTS91-38	1/4"	4,500	1.8	0.8	6.7	170	1/4"
	56CTS92-38	1/4"	2,800	1.8	0.8	6.7	170	1/4"
	56CTS93-38	1/4"	1,700	1.8	0.8	6.7	170	1/4"
	56CTS94-38	1/4"	1,400	1.9	0.9	7.1	180	1/4"
	56CTS95-38	1/4"	1,000	2.1	1.0	7.9	201	1/4"
	56CTS96-38	1/4"	620	2.1	1.0	7.9	201	1/4"
	56CTS97-38	1/4"	370	2.1	1.0	7.9	201	1/4"
56CS Series – 0.5 hp (0.22 kW)								
	56CSL91-38	1/4"	4,500	1.9	0.9	7.1	180	1/4"
	56CSL92-38	1/4"	2,800	1.9	0.9	7.1	180	1/4"
	56CSL93-38	1/4"	1,700	1.9	0.9	7.1	180	1/4"
	56CSL94-38	1/4"	1,400	2.0	0.9	7.5	191	1/4"
	56CSL95-51	3/8"	1,000	2.7	1.2	8.9	226	3/8"
	56CSL96-51	3/8"	620	2.7	1.2	8.9	226	3/8"
	56CSL97-51	3/8"	370	2.7	1.2	8.9	226	3/8"
56CN Series – 0.75 hp (0.56 kW)								
	56CNL91-38	1/4"	4,000	2.1	1.0	7.6	193	1/4"
	56CNL92-38	1/4"	2,500	2.1	1.0	7.6	193	1/4"
	56CNL93-38	1/4"	1,500	2.1	1.0	7.6	193	1/4"
	56CNL94-38	1/4"	1,200	2.2	1.0	8.0	203	1/4"
	56CNL95-51	3/8"	900	2.8	1.3	9.4	239	3/8"
	56CNL96-51	3/8"	650	2.8	1.3	9.4	239	3/8"
	56CNL97-51	3/8"	330	2.8	1.3	9.4	239	3/8"

* For weight and length of large handle models, add 0.1 lb (0.05kg) and 0.2 in. (5mm)

GENERAL:
Air Inlet: 1/4" NPT – Use 5/16" (7.9mm) I.D. Hose
All tools performance rated @ 90psi (620 kPa) air pressure.

STANDARD EQUIPMENT:
Jacobs geared chuck, chuck key, dead handle
(All models with a chuck opening greater than 1/2")

OPTIONAL EQUIPMENT:
Oilless blades

EXTRA EQUIPMENT:
Overhose: See page 17
Dead Handle: 56CT Models – 1025750
56CS Models – 1023972
56CN Models – 1023972

OPTIONAL CHUCK TERMINATIONS:
-37 = 5/32" Jacobs -47 = 3/8" Jacobs (22BA)
-38 = 1/4" Jacobs (1B) -51 = 3/8" Jacobs (41BA)
-40 = No Chuck -53 = 1/2" Jacobs (33BA - with dead handle)
-42 = 1/4" HD Jacobs (7BA) -54 = 1/4" Slip Chuck
-43 = 3/8" Jacobs (2BA) -56 = 3/8" Keyless

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

Cleco®

15 Series

Speed Range:
160 – 3000 rpm

Nominal Motor Power
1.0 HP
0.75 kW

- Trigger & Lever Start
- Non-reversible



Model Number	Free Speed	Stall Torque		Chuck Capacity*		Length		Weight	
	rpm	ft. lb.	Nm	in.	mm	in.	mm	lb.	kg

Pistol Grip models

15DP-1.6B-53	160	160†	217†	1/2	13	9 3/4	248	6	2.7
15DP-4B-53	400	44†	60.0†	1/2	13	8 1/2	216	5 1/2	2.5
15DP-8B-53	800	22	30.0	1/2	13	8 1/2	216	5 1/2	2.5
15DP-14B-49	1400	14	19.0	3/8	10	8 1/4	210	4 1/2	2.0
15DP-20B-49	2000	10	13.5	3/8	10	7 1/4	184	4 1/4	1.9
15DP-30B-49	3000	7	9.5	3/8	10	7 1/4	184	4 1/4	1.9

Straight handle models

15DL-4B-49	400	44†	60.0†	3/8	10	10	254	5 1/4	2.4
15DL-8B-49	800	22	30.0	3/8	10	10	254	5 1/4	2.4
15DL-14B-49	1400	14	19.0	3/8	10	10	254	5 1/4	2.4

GENERAL:
Air Inlet: 3/8" NPTF
Minimum Hose Size: 3/8"
Spindle Thread: 1/2"-20
Spindle Offset: Pistol Grip: 31/32"
Lever Grip: 1 3/32"

STANDARD EQUIPMENT:
Operating instructions and service manual
Dead handles on all models except 15DP-14B, 15DP-20B and 15DP-30B
3-jaw Chuck and Key

Refer to page 7 for description of Rapid Select.

***CAPACITY CAUTION NOTE:**
Pistol Grip 15 Series Drills must be equipped with support handle (881580) when used with chucks larger than 3/8" capacity. Straight handle 15 series drills should not be equipped with chucks larger than 3/8" capacity.

†Theoretical stall torque based on gear reduction. These tools are intended for slow speed applications and not high torque applications. High maintenance should be expected if tools are operated in their upper torque range.

CAUTION:
High reaction torque may be experienced with any drill at break-through. Caution must be exercised when using any cutting tool because of the possibility of the cutting tool bending or breaking. Cutting tool maximum speed rating must equal or exceed speed of tool. Eye protection must be worn while operating power tools.

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1.

Cleco®

135 Series

Speed Range:
600 – 2600 rpm

Nominal Motor Power
0.7 HP
0.5 kW

- Sand Cast Handle
- Hardened Steel Back Cap
- Governed Speed Control
- Variable Speed
- Calibrated Speed Control
- Non-reversible



Model Number	Speeds rpm		Chuck Capacity*		Length		Weight	
	Free	Governed	in.	mm	in.	mm	lb.	kg
135DPV-7B-43	600	150 - 550	3/8	10	9 5/8	244	3 5/8	1.6
135DPV-7B-50	600	150 - 550	1/2	13	9 5/8	244	3 5/8	1.6
135DPV-14B-50	1250	400 - 1200	1/2	13	9 1/4	235	3 3/8	1.5
135DPV-14B-51	1250	400 - 1200	3/8	10	9 1/4	235	3 3/8	1.5
135DPV-28B-51	2600	700 - 2400	3/8	10	8 1/2	216	3 1/8	1.4

GENERAL:
Air Inlet: 1/4" NPT
Minimum Hose Size: 1/4" (6mm)
Spindle Offset: 25/32" (20mm)
Tool performance rated at 90 psi (620kPa) air pressure.

STANDARD EQUIPMENT:
Operating instructions and service manual
3-jaw Chuck and Key

***CAPACITY CAUTION NOTE:**
135DPV Drills must be equipped with support handle (861006) if 1/2" (13mm) capacity chuck is specified.

CAUTION:
High reaction torque may be experienced with any drill at break-through. Caution must be exercised when using any cutting tool because of the possibility of the cutting tool bending or breaking. Cutting tool maximum speed rating must equal or exceed speed of tool. Eye protection must be worn while operating power tools.

Refer to page 7 for description of Rapid Select.

WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1.

Right Angle Drills

Cleco®

136 Series

Speed Range:
450 – 3300 rpm

Nominal Motor Power
0.8 HP
0.6 kW

- Inline Handle
- Lever Start
- Non-reversible



Model Number	Free Speed	Stall Torque		Length		Weight		External Spindle Thread	Chuck Capacity	Head Size
	rpm	in. lbs.	Nm	in.	mm	lb.	kg			
136 Series - .8 hp (.6 kW) - Right Angle										
136DL-5M-43	450	400	45	11.3	287	3.8	1.7	3/8"-24	3/8"	M
136DL-7K-38	600	300	34	10.9	277	2.9	1.3	3/8"-24	1/4"	K
136DL-7M-43	600	300	34	11.3	287	3.8	1.7	3/8"-24	3/8"	M
136DL-10K-38	900	200	23	10.9	277	2.9	1.3	3/8"-24	1/4"	K
136DL-10M-43	900	200	23	10.4	264	3.8	1.7	3/8"-24	3/8"	M
136DL-20K-38	1,800	120	14	10.1	257	2.6	1.2	3/8"-24	1/4"	K
136DL-20M-43	1,800	120	14	10.4	264	3.5	1.6	3/8"-24	3/8"	M
136DL-30K-38	2,500	80	9.0	10.1	257	2.6	1.2	3/8"-24	1/4"	K
136DL-40K-38	3,300	65	7.3	10.1	257	2.6	1.2	3/8"-24	1/4"	K

GENERAL:

Air Inlet: 1/4" NPT
Minimum Hose Size: 5/16"
Tool performance rated at 90 psi (620 kPa) air pressure

†Theoretical stall torque based on gear reduction. These tools are intended for slow speed applications and not high torque applications. High maintenance should be expected if tools are operated in their upper torque range.

STANDARD EQUIPMENT:

Operating instructions and service manual
Chuck & Key

OPTIONAL EQUIPMENT:

Additional Accessories: Page 66

CAUTION:

High reaction torque may be experienced with any drill at break-through. Caution must be exercised when using any cutting tool because of the possibility of the cutting tool bending or breaking. Cutting tool maximum speed rating must equal or exceed speed of tool. Eye protection must be worn while operating power tools.

Cleco®

45 & 55 Series

Speed Range:

No. 45: 580 – 1080 rpm

No. 55: 220 – 1350 rpm

Nominal Motor Power

0.9 & 1.5 HP

0.7 & 1.2 kW

- Inline Handle
- Lever Start
- Non-reversible



Model Number	Free Speed	Stall Torque		Length		Weight		External Spindle Thread	Chuck Capacity	Head Size
	rpm	ft. lbs.	Nm	in.	mm	lb.	kg			
45 Series - 0.9 hp (0.7 kW) - Right Angle										
45DL-6M-43	580	30	41	12.5	318	5.4	2.4	3/8"-24	3/8"	M
45DL-7M-43	740	23	31	11.9	302	4.1	1.9	3/8"-24	3/8"	M
45DL-10M-43	1,080	16	22	11.4	290	4.9	2.2	3/8"-24	3/8"	M
55 Series - 1.5 hp (1.2 kW) - Right Angle										
55DL-2T-53	220	140†	190†	16.7	424	7.3	3.3	1/2"-20	1/2"	T
55DL-3T-53	300	105†	142†	16.7	424	7.3	3.3	1/2"-20	1/2"	T
55DL-4T-53	440	72	98	16.7	424	7.3	3.3	1/2"-20	1/2"	T
55DL-6T-53	590	54	73	16.7	424	7.3	3.3	1/2"-20	1/2"	T
55DL-7M-43	920	35†	47†	15.9	404	6.1	2.8	3/8"-24	3/8"	M
55DL-10M-43	1,350	24	33	15.4	391	5.9	2.7	3/8"-24	3/8"	M

GENERAL:

Air Inlet: 1/4" NPT (45 Series); 1/2" NPT (55 Series)
 Minimum Hose Size: 5/16" (45 Series); 1/2" (55 Series)
 Tool performance rated at 90 psi (620kPa) air pressure.

† Theoretical stall torque based on gear reduction. These tools are intended for slow speed applications and not high torque applications. High maintenance should be expected if tools are operated in their upper torque range.

STANDARD EQUIPMENT:

Operating instructions and service manual
 3-jaw Chuck and Key

OPTIONAL EQUIPMENT:

Additional Accessories: Page 66

CAUTION:

High reaction torque may be experienced with any drill at break-through. Caution must be exercised when using any cutting tool because of the possibility of the cutting tool bending or breaking. Cutting tool maximum speed rating must equal or exceed speed of tool. Eye protection must be worn while operating power tools.

Quick-Change Chuck

Thread Size	Capacity	Part Number
3/8"-24	1/4" Hex	849414



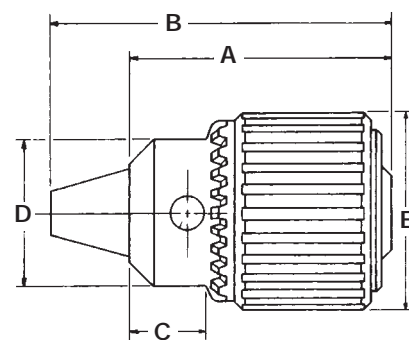
Dead Handles

Drill Model	Part Number
8	861006
111	861006
135	861006
15	881580
136	861006



Collet Chuck (1/4-28 Male Thread)

Drill Size	Part Number
3/32"	863816
1/8"	863814
5/32"	863812
3/16"	863810
1/4"	863806



Three Jaw Chucks

Capacity	Thread Size	Chuck Part Number	Chuck Key Part Number	General Dimensions										Weight	
				A		B		C		D		E		oz.	kgs
				in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
1/4"	3/8"-24	849102	849116	1 9/16	40	1 15/16	49	1/2	13	7/8	22	1 3/16	30	5	.14
1/4"	3/8"-24	849106	849118	1 13/16	46	2 1/4	57	1/2	13	15/16	24	1 5/16	33	7	.20
3/8"	3/8"-24	849108	849120	1 15/16	49	2 7/16	62	5/8	16	1	25	1 7/16	36	8	.23
3/8"	3/8"-24	849103	849123	2 3/16	56	2 13/16	71	11/16	17	1 1/4	32	1 13/16	46	13	.37
3/8"	1/2"-20	849122	849121	2 5/16	59	3 1/16	78	11/16	17	1 1/4	32	1 13/16	46	16	.46
1/2"	3/8"-24	889335	849121	2 7/16	62	3 1/8	79	3/4	19	1 1/4	32	1 13/16	46	16	.46
1/2"	1/2"-20	849415	849121	2 7/16	62	3 1/8	79	3/4	19	1 1/4	32	1 13/16	46	16	.46



Cleco®

Balance arms absorb torque, support weight and improve productivity.

Cleco balance arms are engineered to deliver longer service life using durable components, rugged design and operator-sensitive features.

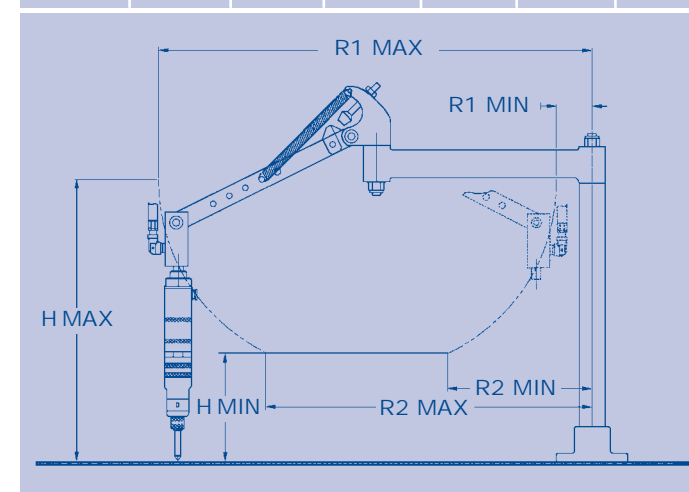
These arms absorb the torque produced by the screwdriver, eliminating torque reaction to the operator. Balanced by springs or air cylinders, the arm and not the operator supports the weight of the tool. By reducing the fatigue factors, operator productivity is improved.

Tool movement and placement over the fastener is virtually effortless since most moving parts of the balance arm are mounted on ball bearings. Access to the tool is easily changeable by adjusting the springs or cylinder supporting the forearm.

Arm components and materials are selected for strength and rigidity. Precision aluminum sand castings used in the articulating arm section are light but sturdy.

Over 60 models of the Cleco balance arms are available. Air cylinder models are capable of supporting tools weighing up to 10 lbs. (4.5 kg.). Spring models will support tools weighing up to 5 lbs. (2.3 kg.). Both styles have torque capacities of 10 ft. lbs. (13.5 Nm). Arms can be post mounted, wall mounted or mounted on an adjustable height post. Tool holders for all models will accommodate most major brands of air tools...straight and pistol.

MODEL	Balance Arm Operating Envelope										Weight			
	R1 MAX		R1 MIN		R2 MAX		R2 MIN		H MAX		H MIN		oz.	kgs
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
SBA-12	24	610	2	51	18	457	8	203	15	381	6	152		
SBA-18	30	762	6	152	20	508	7	178	15	381	0	0		
PBA-12	26	660	3	76	20	508	7	178	17	432	8	203		
PBA-18	32	813	8	203	22	559	6	152	17	432	2	51		



Tool Holders

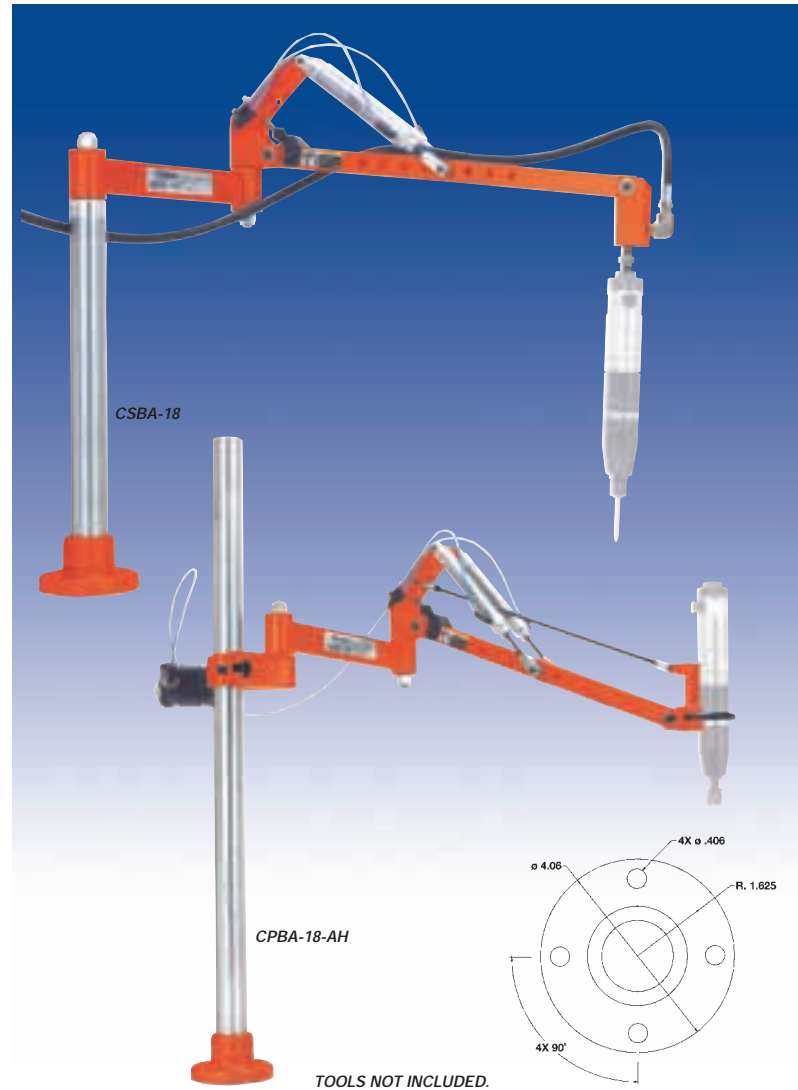
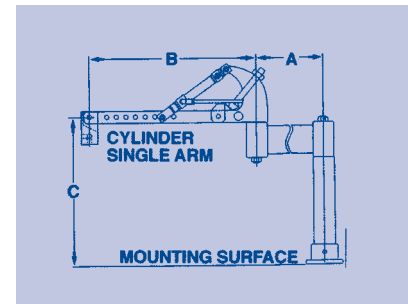
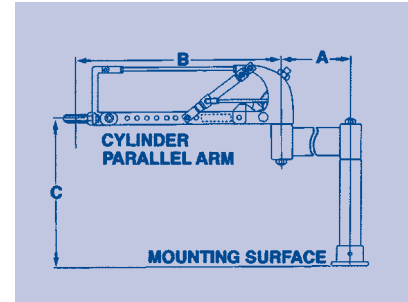
Selecting the proper tool holder for the tool used on Cleco balance arms enhances the ergonomic benefits of the arm. Tool holders allow the tool to swing, swivel and rotate, enabling the operator to work more comfortably and productively.

Standard and extended tool holders are available for parallel balance arms. Both models hold the tool perpendicular to the work, and are ideal for self-tapping and thread forming applications. Tool diameter capacity is up to 1 3/4 inch (45mm).

Manifold tool holders used on SBA and CSBA balance arms suspend the tool from the air inlet. They allow the tool to swing (or swivel when equipped with the optional swivel assembly) for ease of tool movement.



- Ball bearing construction
- Supports tools weighing up to 10 lbs.
- Post, wall, or adjustable height post mounting
- Single or parallel arms



Single Arms		Parallel Arms		Dimensions							
Model No.	Code No.	Model No.	Code No.	A		B		C		Post Height	
				in.	mm	in.	mm	in.	mm	in.	mm
CSBA-12	520163	CPBA-12	520176	12	305	12	305	18	457	-	-
CSBA-18	520160	CPBA-18	520170	12	305	18	457	18	457	-	-
CSBA-24	520200	CPBA-24	520202	12	305	24	610	18	457	-	-
CSBA-30	520201	CPBA-30	520203	12	305	30	762	18	457	-	-
CSBA-12-AH	520165	CPBA-12-AH	520178	12	305	12	305	-	-	30	762
CSBA-18-AH	520162	CPBA-18-AH	520172	12	305	18	457	-	-	30	762
CSBA-30-AH	520167	CPBA-30-AH	520215	12	305	30	762	-	-	30	762
CSBA-12-WM	520164	CPBA-12-WM	520177	12	305	12	305	-	-	-	-
CSBA-18-WM	520161	CPBA-18-WM	520171	12	305	18	457	-	-	-	-
CSBA-24-WM	520204	CPBA-24-WM	520206	12	305	24	610	-	-	-	-
CSBA-30-WM	520205	CPBA-30-WM	520207	12	305	30	762	-	-	-	-

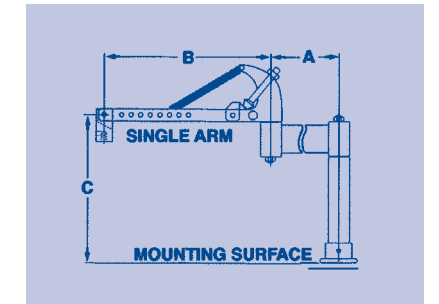
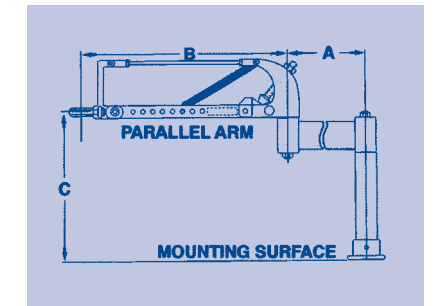
AH = Adjustable Height
 WM = Wall Mounted
 Tool weight capacity: 10 lbs. (4.6 kg)
 Torque capacity: 10 ft. lbs. (13.5 Nm)

STANDARD EQUIPMENT
 Operating Instructions and Service Manual.
 Regulator for Air Cylinders.
 Threaded Nipples for CSBA Models
 1/4 NPT Hex Nipple: 204032-7
 1/4 NPT x 1/8 NPT Hex Reducer
 Nipple: 204137-4

OPTIONAL EQUIPMENT
 Additional accessories: See page 70.



- Ball bearing construction
- Supports tools weighing up to 5 lbs.
- Post, wall, or adjustable height post mounting
- Single or parallel arms



Single Arms		Parallel Arms		Dimensions							
Model No.	Code No.	Model No.	Code No.	A		B		C		Post Height	
				in.	mm	in.	mm	in.	mm	in.	mm
SBA-12	520001	PBA-12	520007	12	305	12	305	18	457	-	-
SBA-18	520004	PBA-18	520010	12	305	18	457	18	457	-	-
SBA-24	520040	PBA-24	520045	12	305	24	610	18	457	-	-
SBA-30	520042	PBA-30	520048	12	305	30	762	18	457	-	-
		PBA-18-18	520034	18	457	18	457	18	457	-	-
SBA-12-AH	520003	PBA-12-AH	520009	12	305	12	305	-	-	30	762
SBA-18-AH	520006	PBA-18-AH	520012	12	305	18	457	-	-	30	762
SBA-24-AH	520110	PBA-24-AH	520047	12	305	24	610	-	-	30	762
SBA-30-AH	520044	PBA-30-AH	520050	12	305	30	762	-	-	30	762
		PBA-18-18-AH	520036	18	457	12	305	-	-	30	762
SBA-12-24-AH	520063			24	610	12	305	-	-	30	762
SBA-12-WM	520002	PBA-12-WM	520008	12	305	12	305	-	-	-	-
SBA-18-WM	520005	PBA-18-WM	520011	12	305	18	457	-	-	-	-
SBA-24-WM	520041	PBA-24-WM	520046	12	305	24	610	-	-	-	-
SBA-30-WM	520043	PBA-30-WM	520049	12	305	30	762	-	-	-	-
		PBA-18-18-WM	520035	18	457	18	457	-	-	-	-

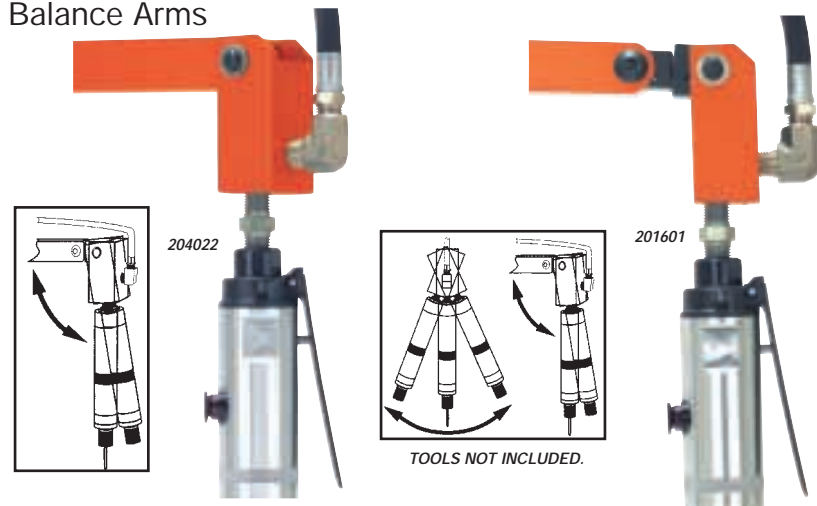
AH = Adjustable Height
 WM = Wall Mounted
 Tool weight capacity: 5 lbs. (2.3 kg)
 Torque capacity: 10 ft. lbs. (13.5 Nm)

STANDARD EQUIPMENT
 Operating Instructions and Service Manual.
 Threaded Nipples for SBA Models
 1/4 NPT Hex Nipple: 204032-7
 1/4 NPT x 1/8 NPT Hex Reducer
 Nipple: 204137-4

OPTIONAL EQUIPMENT
 Additional accessories: See page 70.

Accessories

Balance Arms



Single Arm Tool Holders

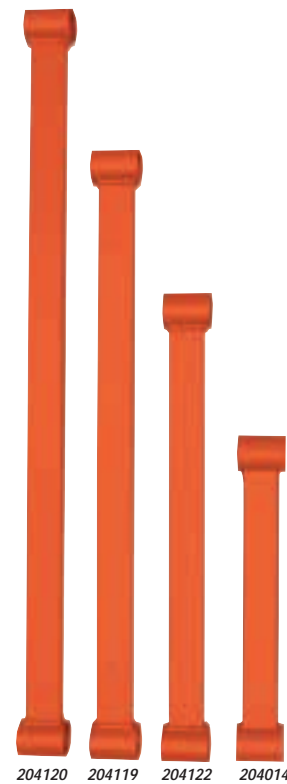
Part No.	Description
204022	Manifold tool holder
201601	Swivel manifold tool holder

Parallel Arm Tool Holders

Part No.	Description
204015	Parallel tool holder
204167	Extended parallel tool holder
201607	Swivel tool holder (small)
201608	Swivel tool holder (large)



Articulating Arm Extensions



Part No.	Length (in.)
204014	12
204122	18
204119	24
204120	30

Conversion Kits for Cleco Balance Arms

To Convert Balance Arms		Part No.
From	To	
SBA-12	PBA-12*	521041
SBA-18	PBA-18*	521042
Spring	Cylinder	201606
SBA or PBA	SBA or PBA	
Standard Duty	Heavy Duty**	521060

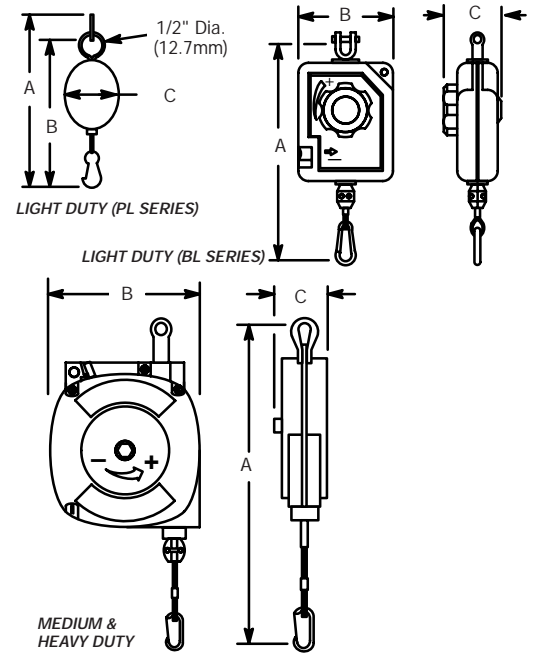
* Conversion kits for -24 and -30 models are available upon request.
 ** Has four springs to support heavier tools or longer arms.

General Accessories

Ergonomic Tool Balancers

Capacity:
 0.5 - 20.5 kg
 1.0 - 45 Lbs

- External tension Adjustment
- 360° Swivel
- Retracting In-Line Cable



Model Number	Lock Feature	Capacity		"A"		"B"		"C"		Weight	
		lbs.	kg	in	mm	in	mm	in.	mm	lbs.	kg
Light Duty - 4.6 ft. (1.4m) Cable Travel											
PL-12A	-	12.0-1.0	5.5-0.5	6.8	171	5.1	130	2.3	58	-	-
Light Duty - 5.0 ft. (1.5m) Cable Travel											
200427	-	2.0-0	.9-0	10.9	277	4.4	112	1.6	41	1.3	0.6
200428	-	4.0-2.0	1.8-9	10.9	277	4.4	112	1.6	41	1.3	0.6
200429	-	5.0-3.0	2.3-1.4	10.9	277	4.4	112	1.6	41	1.3	0.6
Light Duty - 5.2 ft. (1.6m) Cable Travel											
BL-2A	-	2.0-1.0	0.9-0.5	10.4	263	4.0	102	2.2	56	1.1	0.5
BL-4A	-	4.0-2.0	1.8-0.9	10.4	263	4.0	102	2.2	56	1.1	0.5
Light Duty - 6.7 ft. (2.0m) Cable Travel											
BL-6A	-	6.0-4.0	2.7-1.8	12.9	327	5.5	140	3.1	79	3.3	1.5
BLL-6A	Ratchet	6.0-4.0	2.7-1.8	12.9	327	5.5	140	3.1	79	3.3	1.5
BL-8A	-	8.0-6.0	3.6-2.7	12.9	327	5.5	140	3.1	79	3.3	1.5
BLL-8A	Ratchet	8.0-6.0	3.6-2.7	12.9	327	5.5	140	3.1	79	3.3	1.5
Medium Duty - 6.6ft. (2.0m) Cable Travel											
BM-13A	Automatic	13-9.0	5.9-4.1	13.8	350	6.9	175	4.5	114	9.0	4.1
BML-13A	Automatic/Ratchet	13-9.0	5.9-4.1	13.8	350	6.9	175	4.5	114	9.0	4.1
BM-18A	Automatic	18-13	8.2-5.9	13.8	350	6.9	175	4.5	114	9.0	4.1
Medium Duty - 6.0ft. (1.8m) Cable Travel											
BM-25A	Automatic	25-18	11.4-8.2	20.7	527	7.8	197	6.6	169	19	8.6
BM-35A	Automatic	35-25	15.9-11.4	20.7	527	7.8	197	6.6	169	19	8.6
BM-45A	Automatic	45-35	20.5-15.9	20.7	527	7.8	197	6.6	169	19	8.6

*4.9 ft. cable travel

Refer to page 7 for description of Rapid Select.

Cleco®

AS 750 Series

- Governor Controlled
- Cast Iron or Bronze Pump Body
- Semi-Screw Closed Type Impeller



AS750-C

Measured Capacities

Air at 90 lbs. Gauge Pressure (6.2 bar)
Maximum head, 90 feet (27.43m)

Against 10-ft. head	370 gallons per minute (1400 L/min.)
Against 20-ft. head	285 gallons per minute (1079 L/min.)
Against 30-ft. head	208 gallons per minute (787 L/min.)
Against 40-ft. head	165 gallons per minute (625 L/min.)
Against 50-ft. head	128 gallons per minute (484 L/min.)
Against 60-ft. head	94 gallons per minute (356 L/min.)
Against 70-ft. head	66 gallons per minute (250 L/min.)

Model Number	Discharge Outlet		Opening Required		Height		Weight	
	in.	mm	in.	mm	in.	mm	in.	mm
AS750 Series - Cast Iron AS750-C	2.5	64	10 X 12	254 X 305	17.8	452	65	29
AS750 Series - Bronze AS750-B	2.5	64	10 X 12	254 X 305	17.8	452	73	33

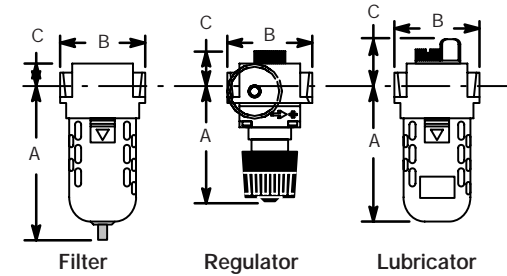
GENERAL:
Air Inlet: 3/4" NPTF
Minimum Hose Size: 3/4"
Tool performance rated at 90 psi (620kPa) air pressure.

CAUTION:
Sump pumps are not intended for pumping flammable materials.

STANDARD EQUIPMENT:
Operating instructions & service manual

Filters, Regulators, Lubricators

■ Modular Construction



Model Number	NPT	Air Flow		Bowl Capacity		"A"		"B"		"C"	
	in.	SCFM	m³/min	oz.	liter	in.	mm	in.	mm	in.	mm

Filters

F02-M	1/4	35	9.9	5.0	0.15	5.6	142	3.0	76	0.9	23
F03-M	3/8	44	12.9	5.0	0.15	5.6	142	3.0	76	0.9	23
F04-M	1/2	138	39.1	10	0.30	6.4	163	3.4	86	1.0	25

Lubricators - Economist (Standard Mist)

L02-EP	1/4	28	3.7	5.0	0.15	4.8	122	3.0	76	1.6	41
L03-EP	3/8	48	6.2	5.0	0.15	4.8	122	3.0	76	1.6	41
L04-EP	1/2	102	13.6	10	0.30	5.4	137	3.4	86	1.6	41

Lubricators - Atomist (Fine Mist)

L02-AP	1/4	28	3.7	5.0	0.15	4.8	122	3.0	76	1.6	41
L03-AP	3/8	48	6.2	5.0	0.15	4.8	122	3.0	76	1.6	41
L04-AP	1/2	102	13.6	10	0.30	5.4	137	3.4	86	1.6	41

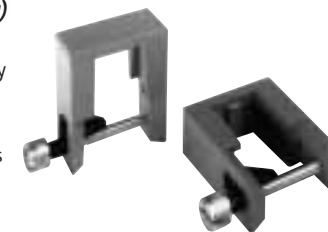
Model Number	NPT	Air Flow		Maximum Pressure		"A"		"B"		"C"	
	in.	SCFM	m³/min	psig	bar	in.	mm	in.	mm	in.	mm

Regulators

R02-G	1/4	80	10.8	125	8.5	3.9	99	3.0	76	1.3	33
R03-G	3/8	80	10.8	125	8.5	3.9	99	3.0	76	1.3	33
R04-G	1/2	195	26.1	125	8.5	5.6	142	3.4	86	1.4	36

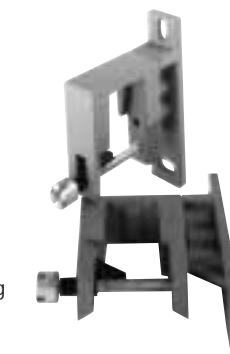
Modular Sleeve (with O-Ring)

Model: MS101
Unique modular sleeve design easily and quickly connects one or more units and accessories together without pipe nipples. Hand tightening the threaded pin provides a tight seal between the units. Modular sleeves do not add length to combination assemblies, and make a more compact installation.



Modular Sleeve & Bracket (with O-Ring)

Model: MS102
Combination sleeve/wall mounting bracket as shown. Designed for mounting a single unit or combination of units directly to the wall. The sleeve and mounting bracket can be ordered assembled at the factory, or just the mounting bracket alone to be used on existing modular sleeves.



Modular End Blocks (sold in pairs)

Models: EB-102 (1/4"); EB-103 (3/8"); EB-104 (1/2"); EB-106 (3/4")

The threaded End Blocks, together with the modular sleeve, allow a single unit or a combination of units to be piped into the air system in the modular mode. This feature allows ease of unit servicing or replacement without disturbing the airline connections. End blocks add 1.19" (30 mm) to each end of the unit where used.

NOTE: The 3/4" end blocks are designed only to adapt to 3/4" piping systems and do not increase flow ratings listed for any unit.



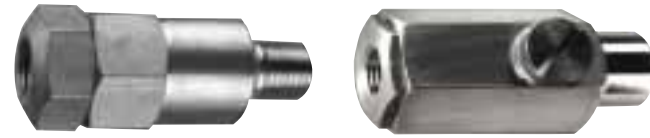
Automatic Drain

Model: AD-101
Automatic Mechanical Drain is a float-type mechanism with a 1/8" NPT threaded drain port completely enclosed in the filter bowl. The float is constructed of rigid cellular rubber. The drain will operate automatically under air pressure ranging from 20 to 175 psig (1.5 to 12 bar).



WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1. Cutting tool maximum speed rating must equal or exceed speed of air tool @ 90psi (620 kPa). Follow cutting tool manufacturer's mounting & operating instructions.

Airline Filter and Lubricator



Part Number	Description	NPT		Air Flow		Max. Pressure	
		in.	SCFM	m ³ /min	psig	bar	
45-211	Filter w/cartridge*	1/4	17	8.0	100	6.9	
45-0212	Filter cartridge	-	-	-	-	-	
45-0201	Lubricator**	1/4	22	10	100	6.9	
45-0301	Lubricator**	3/8	22	10	100	6.9	

GENERAL: Use where inconvenient for standard filter or lubricator.
 * NOTE: Filter will not remove water.
 ** NOTE: One ounce reservoir good for an average eight hour shift.

Air Hoses



Part Number	Hose I.D.		Fittings (NPT)		Length	
	in.	mm	in.	mm	ft.	m
A110026	3/16	4.7	1/8	3/8-24*	6.0	1.8
A139856	3/16	4.7	1/8	1/8	6.0	1.8
45-1307	3/16	4.7	1/8	1/4	7.0	2.1
45-1408	1/4	6.4	1/4	1/4	8.0	2.4
45-1409	1/4	6.4	1/8	1/4	8.0	2.4
45-1508	5/16	7.9	1/4	1/4	8.0	2.4
45-1610	3/8	9.5	3/8	3/8	10	3.0
45-1620	3/8	9.5	3/8	3/8	20	6.1
45-1630	3/8	9.5	3/8	3/8	30	9.1
45-1810	1/2	12.7	3/8	1/2	10	3.0
45-1812	1/2	12.7	1/2	1/2	12	3.7
45-1825	1/2	12.7	1/2	1/2	25	7.6
45-1850	1/2	12.7	1/2	1/2	50	15.2

GENERAL: 3/16" & 1/4" hoses have braided covers, all others have neoprene covers.
 * NOTE: 3/8"-24 is a straight thread

Steel Handle Bushings

Part Number	Size
881276	*1/4 in. MPT x 1/4 in. FPT
841554	†1/4 in. MPT x 1/4 in. FPT
841553	3/8 in. MPT x 1/4 in. FPT
841552	3/8 in. MPT x 3/8 in. FPT
841551	1/2 in. MPT x 3/8 in. FPT
841555	1/2 in. MPT x 1/2 in. FPT
841556	3/4 in. MPT x 3/4 in. FPT

* Light duty for rotary tools
 † Heavy duty for percussion tools.

Swivel Hose Couplings

Part Number	NPT in.
A20744	1/4
A20741	3/8
A20764	1/2



Air Pressure Gage Kit

Part Number	Description
A13157	Gage, needle, cap & case
13158	Hypodermic needle (1)

Quick Disconnect Fittings

Fitting Type*	NPT in.	Nominal Size		
		1/4"	3/8"	1/2"

	1/8	45-0710	-	-
	1/4	45-0711	45-0713	-
	3/8	45-0712	45-0714	45-0716
	1/2	-	45-0715	45-0717
	1/8	45-0730	-	-
	1/4	45-0731	45-0733	-
	3/8	45-0732	45-0734	45-0736
	1/2	-	45-0735	45-0737
	1/8	45-0720	45-0723	-
	1/4	45-0721	45-0724	-
	3/8	45-0722	45-0725	45-0726
	1/2	-	-	45-0727
	1/8	45-0740	-	-
	1/4	45-0741	45-0744	-
	3/8	45-0742	45-0745	45-0746
	1/2	-	-	45-0747
	1/4**	45-0748	45-0750	-
	3/8**	45-0749	45-0751	45-0752
	1/2**	-	-	45-0753

* NOTE: Nipples of one size will not fit couplers of another size.
 ** NOTE: Indicates inside diameter of hose.
 NOTE: 1/4" nominal will pass 49 cfm free air @ 90 psi, but pressure drop exceeds 10 psi with air flow over 30 cfm.
 3/8" nominal will pass 90 cfm free air @ 90 psi, but pressure drop exceeds 10 psi with air flow over 53 cfm.
 1/2" nominal will pass 168 cfm free air @ 90 psi, but pressure drop exceeds 10 psi with air flow over 109 cfm.

Activeswivel

Part No.	NPT in.	Air Flow		Max. Pressure		Weight	
		SCFM	m ³ /min	psig	bar	lbs.	kgr
SW-102	1/4	25	7.1	150	10.4	0.20	0.09
SW-103	3/8	45	12.7	150	10.4	0.40	0.18
SW-104	1/2	65	18.4	150	10.4	0.80	0.36
SWR-102*	1/4	25	7.1	150	10.4	0.25	0.11

* NOTE: Equipped with built-in flow regulator.

Lubricants

Part Number	Size	Description	M.S.D.S. No.
Oils			
540397	1 qt. plastic	Air line oil	CPT-153
533485	1 gal. metal	Air line oil	CPT-153
536333	1 gal. metal	High film strength	CPT-154
45-0918	1 qt. plastic	Air line oil	CPT-155
45-0919	1 gal. metal	Air line oil	CPT-155
Greases			
513156	18 oz. can	Teflon grease	CPT-145
540395	2 oz. tube	Teflon grease	CPT-145

NOTE: Under normal conditions of use, lubrication products sold separately for or used within these tools should not cause an exposure hazard. Refer to the Material Safety Data Sheet (M.S.D.S.) for Safety and Disposal Information. M.S.D.S. sheets shown in the chart are available upon request from Cooper Power Tools.

Push Type Grease Gun

Part Number: 45-1982



Service Tools

Part Number	Description
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"T" Wrenches

Used to remove and replace hex socket screws in tool housings
 10021201 5/32" Hex socket screws
 1021202 3/16" Hex socket screws

Hex Key Wrenches

1008860 1/8"
 1004341 5/31"
 1006443 3/16"



Torx Torque Adjustment Keys

536633 H10 series tools
 535508 H16/H30 series tools

Open End Wrenches

1006626 3/16" & 5/16"
 1011691 7/16"
 1014471 1/2"
 1004958 9/16" & 1 33/64" Hex Box
 1009950 19/32" & 1 7/16" Hex Box
 1014472 11/16"
 1010911 7/8"
 1010929 1"
 1016694 1 1/8"
 1008163 2 7/32"

Snap Ring Pliers

1008360 External sizes 18 thru 23
 1007488 External sizes 25 thru 87
 1008702 External sizes 37 thru 93
 1007487 External sizes 106 thru 175



Line Oilers



Part No.	Capacity	Size	Pipe Size	Weight	PSIG	*F
850305	1/4 oz.		1/4 in.	4 oz.	250	200
850151	1/6 pt.	0	1/2 in.	1 lb.	500	200
850152	1/3 pt.	1	3/4 in.	1 lb.	260	200
850153	2/3 pt.	2	3/4 in.	2 lbs.	300	200
850154	1 pt.	3	1 in.	4 lbs.	250	200

Pressure-Seated Air Valves



Available in Sizes:	Standard (or Lock-On)	Lock-Off
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A-90 Valve: One direction only.

1/2 in. Inlet - 1/4 in. Outlet	850007	-
1/2 in. Inlet - 3/8 in. Outlet	850008	850954
3/4 in. Inlet - 1/2 in. Outlet	850009	850955
1 in. Inlet - 3/4 in. Outlet	850010	850955

A-30 Valve: One direction only.

1/2 in. Inlet - 3/8 in. Outlet	850142	-
3/4 in. Inlet - 1/2 in. Outlet	850013	-
1 in. Inlet - 3/4 in. Outlet	850012	850950



Available in Sizes:	Standard (or Lock-Off)	Lock-On
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S Valve: One direction only. Inlet and Outlet same size.

1/4 in. Inlet - 1/4 in. Outlet	850002	850958
3/8 in. Inlet - 3/8 in. Outlet	850003	850959
1/2 in. Inlet - 1/2 in. Outlet	850004	850960
3/4 in. Inlet - 3/4 in. Outlet	850005	850961
1 in. Inlet - 1 in. Outlet	850006	850962

P Valve: One direction only. Does not have locking lug.

1/2 in. Inlet - 3/8 in. Outlet	850141	
3/4 in. Inlet - 1/2 in. Outlet	850000	
1 in. Inlet - 3/4 in. Outlet	850001	

Tool Maintenance and Repair Kit



Order No.	Description	For Use With
889451	Bearing Driver	"F" or "RA-5" anglehead
889452	Bearing Driver	"K" or "RA-10" anglehead
889453	Bearing Driver	"M" or "RA-12" anglehead for 45/55 nutrunners
889454	Bearing Driver	"P" anglehead for 40 nutrunner
889455	Bearing Driver	"P" anglehead for 45/55 nutrunners
889456	Bearing Driver	"T" or "RA-13" anglehead
889457	Bearing Driver	"V" or "RA-18" anglehead
889458	Bearing Driver	"X" or "RA-20" anglehead
889459	Bearing Cap Tool	"M" or "RA-12" anglehead
889460	Bearing Cap Tool	"K" or "RA-10" anglehead
889462	Bearing Retainer Tool	"M" or "RA-12" anglehead
889463	Bearing Retainer Tool	"V", "RA-18", "X", "RA-20" anglehead
889461	Holding Fixture	5, 8, 88, 9, 35, & 40 screwdrivers & nutrunners
204569	Adjustable Wrench	gear cases
204566	Offset Adj. Wrench	gear cases
204567	1 7/16" O.E. Wrench	gear cases
204568	Hook Spanner Wrench	large clutch housing
203804	Hook Spanner Wrench	small clutch housing
203803	Gear Case Wrench	5 series gear cases
204564	T-Bar	all bearing cap & bearing ret. tools
204570	Tool Case	Carrying case for kit
201757	Assembly Tool Repair Kit	All above included

Conversion Table

Millimeter – Decimal – Fraction

mm	Dec.	in.	mm	Dec.	in.	mm	Dec.	in.	mm	Dec.	in.	mm	Dec.	in.	mm	Dec.	in.	
0.100	.0039		5.159	.2031	13/64	10.200	.4016		15.300	.6024		20.300	.7992					
0.200	.0079		5.200	.2047		10.300	.4055		15.400	.6063		20.400	.8031					
0.300	.0118		5.300	.2087		10.319	.4063	13/32	15.478	.6094	39/64	20.500	.8071					
0.397	.0156	1/64	5.400	.2126		10.400	.4094		15.500	.6102		20.600	.8110					
0.400	.0157		5.500	.2165		10.500	.4134		15.600	.6142		20.638	.8125	13/16				
0.500	.0197		5.556	.2188	7/32	10.600	.4173		15.700	.6181		20.700	.8150					
0.600	.0236		5.600	.2205		10.700	.4219		15.800	.6220		20.800	.8189					
0.700	.0276		5.700	.2244		10.716	.4219	27/64	15.875	.6250	5/8	20.900	.8228					
0.794	.0313	1/32	5.800	.2283		10.800	.4252		15.900	.6250		21.000	.8268					
0.800	.0315		5.900	.2323		10.900	.4291		16.000	.6299		21.034	.8182	53/64				
0.900	.0354		5.953	.2344	15/64	11.000	.4331		16.100	.6339		21.100	.8307					
1.000	.0394		6.000	.2362		11.100	.4370		16.200	.6378		21.200	.8307					
1.100	.0433		6.100	.2402		11.113	.4375	7/16	16.272	.6406	41/64	21.200	.8346					
1.191	.0469	3/64	6.200	.2441		11.200	.4409		16.300	.6417		21.300	.8386					
1.200	.0472		6.300	.2480		11.300	.4449		16.400	.6457		21.400	.8425					
1.300	.0512		6.350	.2500	1/4	11.400	.4488		16.500	.6496		21.431	.8438	27/32				
1.400	.0551		6.400	.2520		11.500	.4528		16.600	.6535		21.500	.8465					
1.500	.0591		6.500	.2559		11.509	.4531	29/64	16.669	.6563	21/32	21.600	.8504					
1.588	.0625	1/16	6.600	.2598		11.600	.4567		16.700	.6575		21.700	.8543					
1.600	.0630		6.700	.2638		11.700	.4606		16.800	.6614		21.800	.8583					
1.700	.0669		6.747	.2656	17/64	11.800	.4646		16.900	.6654		21.828	.8594	55/94				
1.800	.0709		6.800	.2677		11.900	.4685		17.000	.6693		21.900	.8622					
1.900	.0748		6.900	.2717		11.906	.4688	15/32	17.066	.6719	43/64	22.000	.8661					
1.984	.0781	5/64	7.000	.2756		12.000	.4724		17.100	.6732		22.100	.8701					
2.000	.0878		7.100	.2795		12.100	.4764		17.200	.6772		22.200	.8740					
2.100	.0827		7.144	.2813	9/32	12.200	.4803		17.300	.6811		22.225	.8750	7/8				
2.200	.0866		7.200	.2835		12.300	.4843		17.400	.6850		22.300	.8780					
2.300	.0906		7.300	.2874		12.303	.4844	31/64	17.463	.6875	11/16	22.400	.8819					
2.381	.0938	3/32	7.400	.2913		12.400	.4882		17.500	.6890		22.500	.8858					
2.400	.0945		7.500	.2953		12.500	.4921		17.600	.6929		22.600	.8898					
2.500	.0984		7.541	.2969	19/64	12.600	.4961		17.700	.6968		22.622	.8906	57/64				
2.600	.1024		7.600	.2992		12.700	.5000	1/2	17.800	.7008		22.700	.8937					
2.700	.1063		7.700	.3031		12.800	.5039		17.859	.7031	45/64	22.800	.8976					
2.778	.1094	7/64	7.800	.3071		12.900	.5079		17.900	.7047		22.900	.9016					
2.800	.1102		7.900	.3110		13.000	.5118		18.000	.7087		23.000	.9055					
2.900	.1142		7.938	.3125	5/16	13.097	.5156	33/64	18.100	.7126		23.019	.9063	29/32				
3.000	.1181		8.000	.3150		13.100	.5157		18.200	.7165		23.100	.9094					
3.100	.1220		8.100	.3189		13.200	.5197		18.256	.7188	23/32	23.200	.9134					
3.175	.1250	1/8	8.200	.3228		13.300	.5236		18.300	.7205		23.300	.9173					
3.200	.1260		8.300	.3268		13.400	.5276		18.400	.7244		23.400	.9213					
3.300	.1299		8.334	.3281	21/64	13.494	.5313	17/32	18.500	.7283		23.416	.9219	59/64				
3.400	.1339		8.400	.3307		13.500	.5315		18.600	.7323		23.500	.9252					
3.500	.1378		8.500	.3346		13.600	.5354		18.653	.7344	47/64	23.600	.9291					
3.572	.1406	9/64	8.600	.3386		13.700	.5394		18.700	.7362		23.700	.9331					
3.600	.1417		8.700	.3425		13.800	.5433		18.800	.7402		23.800	.9370					
3.700	.1457		8.731	.3438	11/32	13.891	.5469	35/64	18.900	.7441		23.900	.9409					
3.800	.1496		8.800	.3465		13.900	.5472		19.000	.7480		24.000	.9449					
3.900	.1535		8.900	.3504		14.000	.5512		19.050	.7500	3/4	24.100	.9488					
3.969	.1563	5/32	9.000	.3543		14.100	.5551		19.100	.7520		24.200	.9528					
4.000	.1575		9.100	.3583		14.200	.5591		19.200	.7559		24.209	.9531	61/64				
4.100	.1624		9.128	.3594	23/64	14.288	.5625	9/16	19.300	.7598		24.300	.9567					
4.200	.1654		9.200	.3622		14.300	.5630		19.400	.7638		24.400	.9606					
4.300	.1693		9.300	.3661		14.400	.5669		19.447	.7656	49/64	24.500	.9646					
4.366	.1719	11/64	9.400	.3701		14.500	.5709		19.500	.7677		24.600	.9685					
4.400	.732		9.500	.3740		14.600	.5748		19.600	.7717		24.606	.9688	31/32				
4.500	.1772		9.525	.3750	3/8	14.684	.5781	37/64	19.700	.7756		24.700	.9724					
4.600	.1811		9.600	.3780		14.700	.5787		19.800	.7795		24.800	.9764					
4.700	.1850		9.700	.3819		14.800	.5827		19.844	.7813	25/32	24.900	.9803					
4.763	.1875	3/16	9.800	.3858		14.900	.5866		19.900	.7835		25.000	.9843					
4.800	.1890		9.900	.3898		15.000	.5906		20.000	.7874		25.003	.9844	63/64				
4.900	.1929		9.922	.3902	25/64	15.081	.5938	19/32	20.100	.7913		25.100	.9882					
5.000	.1969		10.000	.3937		15.100	.5945		20.200	.7953		25.200	.9921					
5.100	.2008		10.100	.3976		15.200	.5984		20.241	.7969	51/64	25.300	.9961					
									25.400	1.000	1							

Conversion Table

Torque – Air Pressure – Miscellaneous

TORQUE CONVERSION – IN. LBS. (NM)					
In.	Nm	In.	Nm	In.	Nm
5	0.6	50	5.7	140	15.8
10	1.1	60	6.8	150	17.0
15	1.7	70	7.9	160	18.1
20	2.3	80	9.0	170	19.2
25	2.8	90	10.2	180	20.3
30	3.4	100	11.3	190	21.5
35	4.0	110	12.4	200	22.6
40	4.5	120	13.6		
45	5.1	130	14.7		

TORQUE CONVERSION FACTORS		
To Convert	Into	Multiply By
Inch Pounds	Foot Pounds	0.0835
Inch Pounds	Newton meters	0.1130
Inch Pounds	Kg-meters	0.0115
Inch Pounds	Kg-Cm	1.1519
Foot Pounds	Inch Pounds	12.000
Foot Pounds	Newton meters	1.3560
Foot Pounds	Kg-meters	0.1382
Foot Pounds	Kg-Cm	13.8240
Newton Meters	Inch Pounds	8.8440
Newton Meters	Foot Pounds	0.7370
Newton Meters	Kg-meters	0.1020
Newton Meters	Kg-Cm	10.2000

Kg meters	Inch Pounds	86.8100
Kg meters	Foot Pounds	7.2340
Kg meters	Newton-meters	9.8040
Kg Cm	Inch Pounds	0.8681
Kg Cm	Foot Pounds	0.0723
Kg Cm	Newton-meters	0.0980

Suggested Surface Speeds for High Speed Steel Drills*

MATERIAL	S.F.M.
Alloy Steels – 300 to 4000 Brinell	20-30
Stainless Steels – Medium range	30-40
Automotive Steel Forgings and the like	40-50
Tool Steels Annealed – 90 to 1.20 Carbon	50-60
Steels – .40 to .50 Carbon	70-80
Steels – .20 to .30 Carbon (Machinery Steel)	80-110
Hard, Chilled Cast Iron	30-40
Medium Hard Cast Iron	70-110
Soft Cast Iron	100-150
Malleable Iron	80-90
Monel Metal	40-50
High Tensile Strength Bronze	70-150
Ordinary Brass and Bronze	200-300
Aluminum and its Common Alloys	250-400
Magnesium and its Common Alloys	250-400
Plastics – Common Types	100-150
Wood	300-400

* Carbon Steel Drills should be operated at 40%–50% of the above speeds. These speeds indicate the approximate range under normal conditions. For peak performance on individual jobs, adjustments may be required. To convert surface feet per minute (SFM) into revolutions per minutes (RPM) use the following formula:

$$RPM = \frac{SFM \times 3.82}{Diameter}$$

Example: To drill 1/4" hole in aluminum:

$$\frac{300 \times 3.82}{.250} = 4.584 \text{ RPM}$$

Recommended Tool: Cleco 111 DO-50B

MISCELLANEOUS CONVERSION FACTORS		
To Convert	Into	Multiply By
Inches	Millimeters	25.4000
Millimeters	Inches	0.0394
Pounds	Kilograms	0.4536
Kilograms	Pounds	2.2050
psi	bar	0.069
bar	psi	14.5

AIR PRESSURE CONVERSION		
PSI	kPa*	Bar**
85	586	5.9
90	620	6.2
95	655	6.6
100	690	6.9
125	860	8.6

* Preferred: Approximate to the nearest 5 kPa.
** Approximate to the nearest 0.5 Bar.

Drill Diameter (inches)	Surface Speed, Feet per Minute											
	30	40	50	60	70	80	90	100	110	200	300	400
Spindle Speeds, RPM												
1/4	458	611	76									

TRAINING

Our Commitment To Your Success

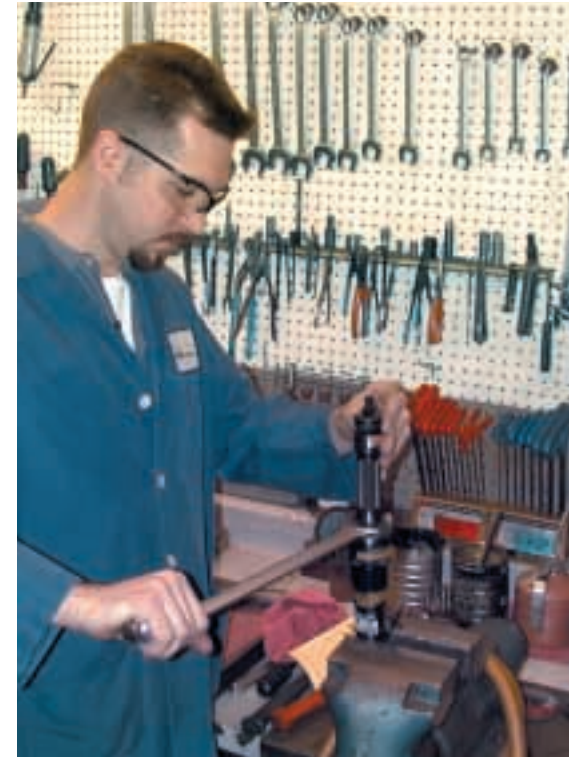
Our complete line of tools are carefully designed and built from the finest materials available in order to provide years of trouble free service. But, as with any piece of equipment, service problems can occur. All tools are designed to be easy to service...that is, of course, if you know what you're doing.

To facilitate quick repairs, and limit downtime...CooperTools conducts training seminars covering all aspects of every tool we make.

Introductory training seminars are designed to fully acquaint students with the entire line of tools and their fundamental operation. The emphasis is on thoroughly understanding each tool...its features, uses, and the best way to demonstrate the tool to a potential buyer.

Advanced training seminars, which are often tailored to individual needs, are designed to hone the skills of the experienced student. Hands-on experience, with an emphasis on troubleshooting and repairing, are the focus of this training.

For additional information on our training seminars, please call your local CooperTools Distributor.



Factory Certified Tool Service

You can depend on Factory Certified Service Centers to provide the service your tools need.

CooperTools has strategically located Certified Service Centers throughout the U.S. These Centers are staffed with professional Tool Repair Technicians who provide complete and comprehensive repairs for **all** air tools, regardless of manufacture. And to be sure all repairs are done right the first time, the latest in testing equipment and inspection instruments are used.

Each tool repaired in one of the Factory Certified Service Centers is calibrated and tested to new tool standards, and carries the New Tool Warranty of Performance.

Free Repair Estimates

The cost to repair your air tool is provided before any work is started. We think you should know in advance what to expect. Naturally, the repair estimates are free... with no obligation.



Tool Inspection Service

Representatives from the Certified Service Center can help you improve your air tool utilization by providing a free, no-obligation survey of your present tooling. By identifying air tools in your plant that are worn and inefficient, the Factory Trained Servicemen can recommend appropriate repairs to help you reduce costly down-time and improve your man-hour productivity.

New Tool Warranty

Because every Certified Service Center has all equipment necessary to repair and calibrate your tools, each tool that leaves our centers has a New Tool Warranty. You have our assurance that this tool will perform just like it did when it was new.



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

**CooperTools
Sales & Service Center**
1470 Post & Paddock
Grand Prairie, TX 75050
Tel: (972) 641-9563
Fax: (972) 641-9674

Detroit

**CooperTools
Sales & Service Center**
4121 North Atlantic Blvd.
Auburn Hills, MI 48326
Tel: (248) 391-3700
Fax: (248) 391-6295

Houston

**CooperTools
Sales & Service Center**
7007 Pinemont
Houston, TX 77040
Tel: (713) 460-7041
Fax: (713) 462-0482

Lexington

CooperTools
670 Industrial Drive
Lexington, SC 29072
Tel: (800) 845-5629
Tel: (803) 359-1200
Fax: (803) 359-0822

Los Angeles

**CooperTools
Sales & Service Center**
2000 S. Santa Cruz Street
Anaheim, CA 92805-6816
Tel: (714) 712-5800
Fax: (714) 712-5801

Springfield

**CooperTools
Airetool Operation**
(Airetool products only)
302 South Center Street
Springfield, OH 45506
Tel: (937) 323-4981
Tel: (877) 739-7263
Fax: (937) 323-6524

Tulsa

**CooperTools
Sales & Service Center**
5415 S. 125th East Avenue
Suite 202
Tulsa, OK 74146
Tel: (918) 250-9040
Fax: (918) 252-5931

Brazil

Cooper Tools Industrial Ltda.
Av. Liberdade, 4055
Zona Industrial - Iporanga
18087-170 Sorocaba, SP Brazil
Tel: (011) 55 15 238 3929
Fax: (011) 55 15 228 3260

Canada

**CooperTools
Sales & Service Center**
6581 Kitimat Road Unit #10
Mississauga, Ont. L5N 3T5
Canada
Tel: (905) 826-3000
Fax: (905) 826-9443

France

**CooperTools
Recoules Operation**
Zone Industrielle
BP 28
Avenue Maurice Chevallier
77831 Ozoir-la-Ferrière Cedex
France
Tel: 011 33 1 64 43 22 00
Fax: 011 33 1 64 40 17 17

Germany

**Cooper Power Tools
GmbH & Co.**
Postfach 30
D-73461 Westhausen
Tel: +49 (0) 73 63-8 10
Fax: +49 (0) 73 63-8 12 22

Mexico

**Cooper Power Tools
de México S.A. de C.V.**
Ave. San Andrés Atoto No. 165A
Col. San Esteban
Naucalpan, Edo. de México C.P.
53550
Tel: (011) 525 576-7955
Fax: (011) 525 576-0096

CooperTools Is On The Web!

CooperTools is pleased to unveil a complete resource for power tools on-line. www.coopertools.com offers product information, service literature, brand catalogs, press releases and more. A dominant source of information, the CooperTools' web site is your source for application solutions on-line.



Making your job easier is our goal!

You can access service literature anytime. Choose a category such as Assembly Tools or Material Removal Tools from the main menu and then click on the brand you're looking for. You'll be on your way to any current service literature you need, whether it's Buckeye, Cleco, Dotco or any of our power tools' brands.

Up-to-date product catalogs are also available online providing you with current information on our broad product line. Even Material Safety Data Sheets (M.S.D.S.) for Safety and Disposal Information are available on our website.



It's simple!

Our Customer Service section provides you with information such as answers to frequently asked questions or contact phone numbers and addresses for your area of the country. You can learn more about CooperTools in the *About Us* section or browse through the *What's New* information to learn how CooperTools continues to be your source for solutions.

For even faster searches, you can go direct to a brand site by simply entering the brand name. Entering www.buckeye-tools.com, www.clecotools.com or www.dotco-tools.com takes you directly to the brand site.

What is the future of www.coopertools.com? A dynamic site continuing to focus on your need for up-to-date information on the latest CooperTools' offerings that you can access anytime you need...twenty-four hours a day, seven days a week!





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Phone: (49)7363-810
Fax: (49)7363-81222