

Parts Manual
45-8188EN
PL30-850
03/18/2015

DOTCO®

12L41 Series
Inline Extended Grinders



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

Dotco®
Nomenclature

	12	L	4	1	XX	-	XX
<u>Product Classification</u>							
12 = Ergonomic Handle							
<u>Throttle Type</u>							
L = Locking Lever							
<u>Motor Size</u>							
4 = 1.7 hp							
<u>Handle Style</u>							
1 = Straight Extended							
<u>Speed Options (RPM)</u>							
09 = 9,000							
12 = 12,000							
15 = 15,000							
18 = 18,000							
<u>Termination Code</u>							
01 = Series 200 Collet (3/8" maximum shank diameter)							
03 = Type 1 Straight Wheels (4" x 1" x 5/8" Arbor)							
16 = Type 1 Straight Wheels (3" x 1/2" x 3/8" Arbor)							
17 = Type 1 Straight Wheels (3" x 1/2" x 1/2" Arbor)							
44 = Type 1 Straight Wheels (4" x 1" x 1/2" Arbor)							
62 = Series "K" Collet (3/8" maximum shank diameter)							
77 = Cone & Plug Wheel (3/8" Spindle)							
78 = Cone & Plug Wheel (1/2" Spindle)							
79 = Cone & Plug Wheel (5/8" Spindle)							

The original language of this manual is English.

Product Safety Information:

Intended Use:

This pneumatic grinder is to be used only for removing material by utilizing appropriate abrasive wheels, rotary files or other material removal cutting devices.

For additional product safety information refer to Apex Tool Group, LLC or Apex Tool Group GmbH & Co. OHG document GS-2007, General Safety Pneumatic Grinders.



The grinder must not be modified in any manner unless approved in writing by Apex Tool Group, LLC or Apex Tool Group GmbH & Co. OHG. All safety devices must be properly installed and maintained in good working order.

EC Declaration of Conformity:

We affirm that this machine is in accordance with the following EC regulations (2006/42/EC). Applied harmonized standards are ISO 12100:2010.

The name, job function and address of the person authorized to compile the technical file.

Mr. Vishnu Irigireddy
Director of Global R&D- Mechanical Engineering
Apex Tool Group
670 Industrial Drive
Lexington, SC 29072

I. V. Vishnu Varadhan

Signature: Vishnu Irigireddy
Date: September 20, 2013

Noise and Vibration:

12L41 Series Noise Level: ≤ 82 dB(A)

12L41 Series Vibration Level: < 2.5 m/s²

Air Line Lubrication:

Use Apex Tool Group, LLC or Apex Tool Group GmbH & Co. OHG's lightweight air tool oil 500021 (available in quantities shown in the following chart) or an SAE-5 lightweight spindle oil.

Part No.	Packaged	Designation
540397	1 Quart (0.94 liter)	Airlube 10W/NR-420LB DR
533485	1 US Gallon (3.78 liter)	Airlube 10W/NR-420LB DR

Air Supply Line:

Parameter	Description
Air Hose	Minimum inside diameter: 1/2" (12.7mm) Maximum length: 8.0' (2.4 m)
Working pressure range	Performance rated at: 90 psi (620 kPa)
Compressed air	Air quality according to ISO 8573-1, quality class 2.4.3 The compressed air must be clean and dry.

Service and Repair:

Tool service and repair should be performed by an authorized Apex Tool Group, LLC or Apex Tool Group GmbH & Co. OHG Center. Refer to the last page of this manual for locations.



The governor module is factory sealed and cannot be repaired under any circumstances. User repair of the governor module must never be attempted. Replace with a new governor module of the same rated speed to prevent dangerous over speeding of the grinder.

Disposal:



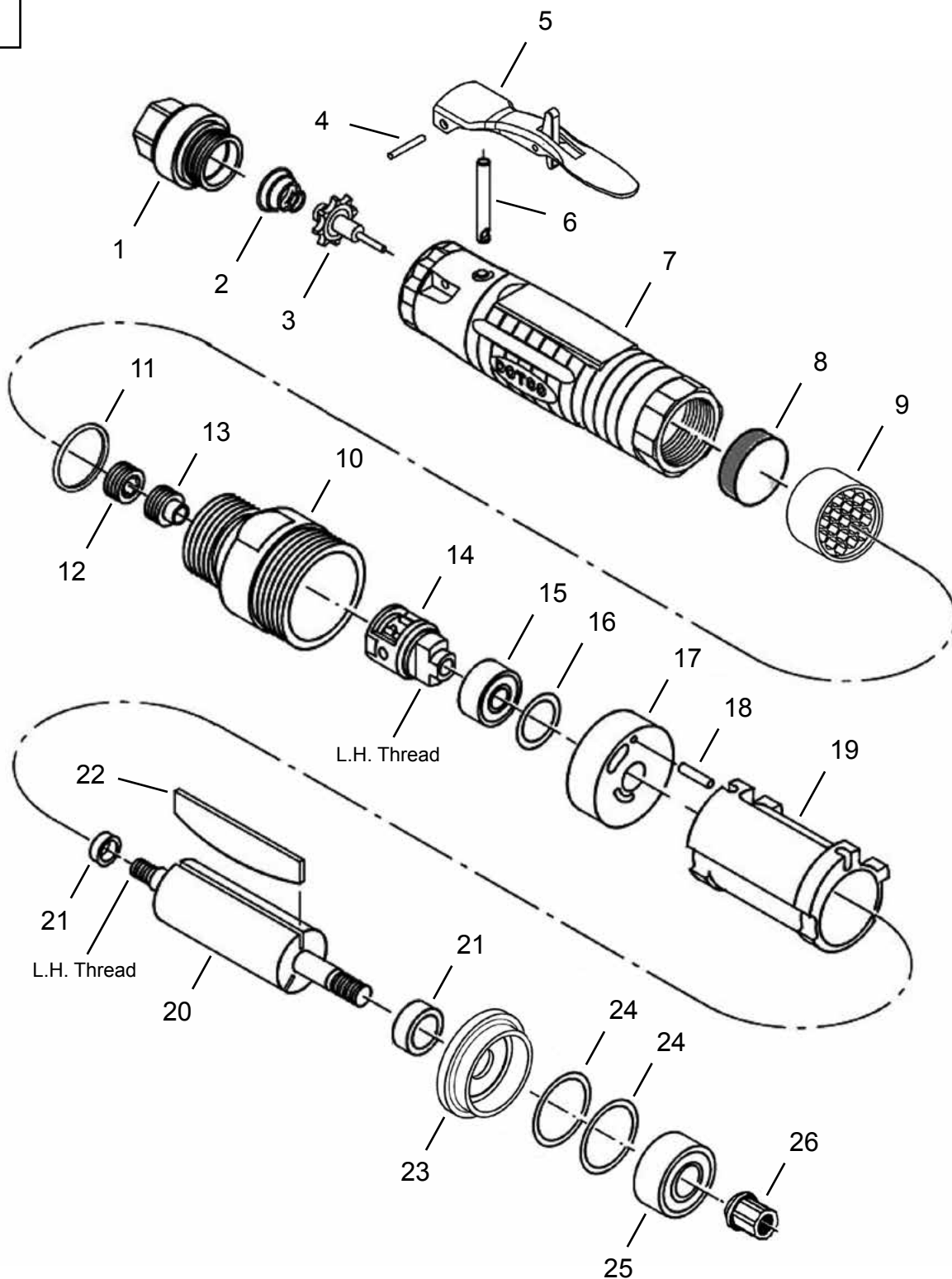
Observe local disposal guidelines for all components of this tool and its packaging.

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Dotco®
Motor Assembly

"A"



Dotco®
Motor Assembly

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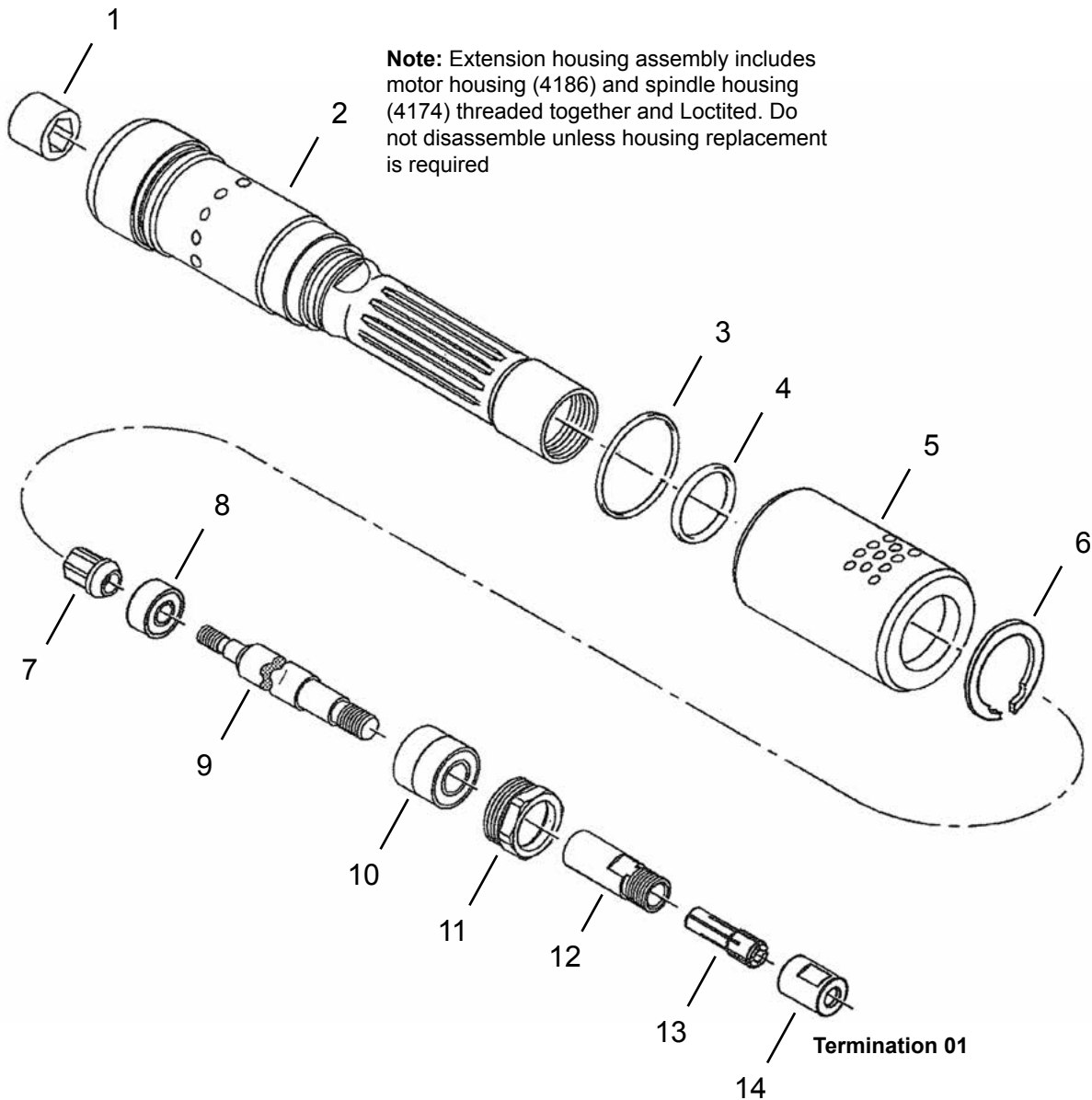
Illustration "A"

Ref	Number	#	X	EN
				Description
1	01-3031	1		Inlet Adapter (1/2" NPT)
2	01-3029	1	3	Spring
3	01-3033	1	1	Poppet Valve
4	1042	1	1	Lever Pin
5	01-1267	1	1	Lock-Off Lever Assembly
6	01-3036	1		Valve Stem
7	01-3035	1		Throttle Housing
8	4293	1	3	Filter Disc
9	02-5316	1		Filter Retainer
10	4181	1		Governor Housing (includes Ref. 11-12-13)
11	3036PT	1	3	O-Ring
12	3263PT	1		Nozzle Locknut
13	3262PT	1		Nozzle
14	4192S	1		Governor Module (9,000 RPM)
	4193S	1		Governor Module (12,000 RPM)
	3259S	1		Governor Module (15,000 RPM)
	3260S	1		Governor Module (18,000 RPM)
15	500PT	1	2	Ball Bearing
16	2488PT	1		Shim Packet
17	4168	1		Rear Bearing Plate (includes 1 Ref. 18)
18	3062	2	4	Pin
19	4189	1		Cylinder
20	4170S	1		Rotor (includes Ref. 21)
21	2017PT	2		Spacer
22	4171	3	9	Rotor Blade
23	4172	1		Front Bearing Plate
24	2901PT	1		Shim Packet
25	535	1	2	Ball Bearing
26	4102PT	1	2	Coupling Nut

(#) Quantity

(X) Recommended Spare Parts (quantity shown based on 1-5 tools in operation)

Extension Assembly (Termination 01)

"B"

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Extension Assembly (Termination 01)

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Illustration "B"

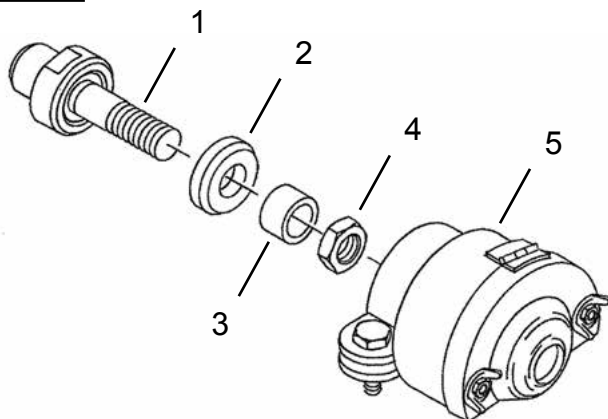
Ref	Number	#	X	EN
				Description
1	4106PT	1		Coupling
2	4219PT	1		Extension Housing
3	4183	1	3	O-Ring
4	3031PT	1	3	O-Ring
5	4184	1		Exhaust Shield
6	3038	1		Retaining Ring
7	4102PT	1	2	Coupling Nut
8	500PT	1	2	Ball Bearing
9	4153PT	1		Spindle
10	523PT	1	2	Duplex Bearing
11	3040	1		Lock Ring
Termination 01:				
12	2801PT	1		Chuck Body
13	208	1	2	Collet (1/4")
14	2058PT	1	2	Collet Nut
15	14-0809	1		Wrench (9/16") (not shown)
16	14-0812	1		Wrench (3/4") (not shown)

(#) Quantity

(X) Recommended Spare Parts (quantity shown based on 1-5 tools in operation)

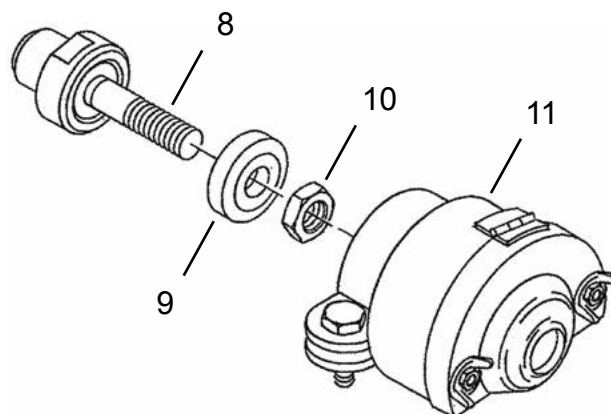
“C”

Termination 03

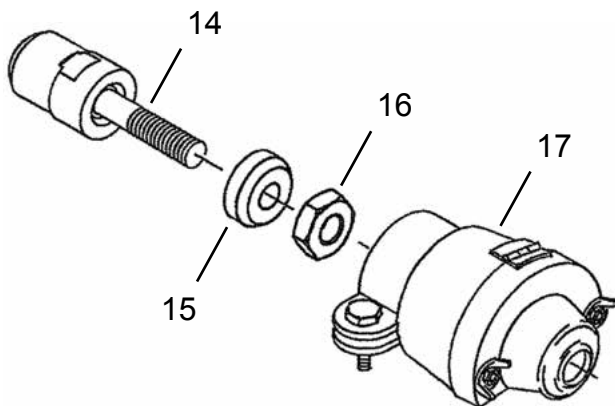


Termination 44

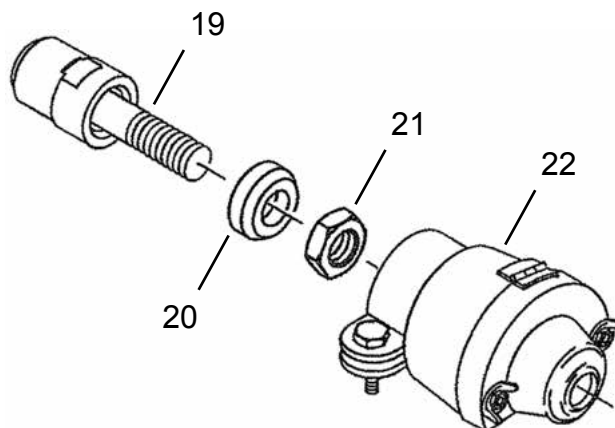
(Models 12L4109 & 12L4112 only)



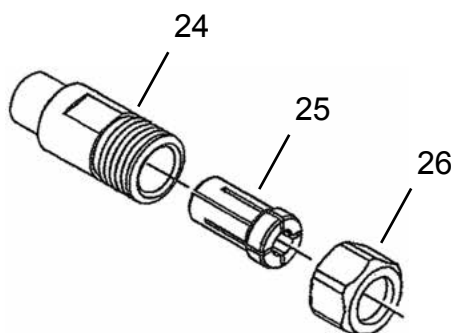
Termination 16



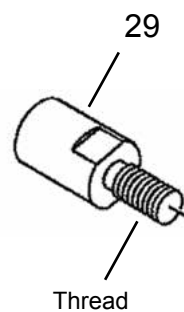
Termination 17



Termination 62



Termination 77, 78, 79



Dotco®
Optional Terminations

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Illustration "C"

Ref	Number	#	X	EN
				Description
Termination 03: Type 1 Straight Wheel (4" x 1" x 5/8" Hole)				
1	14-2212	1		Wheel Adapter
2	14-4045	1		Flange
3	14-4009	1		Spacer
4	14-4037	1	2	Hex Nut
5	14-4076	1		Wheel Guard (4")
6	14-0836	1		Wrench (1-3/8") (not shown)
7	14-0815	1		Wrench (15/16") (not shown)
Termination 44: Type 1 Straight Wheel (4" x 1" x 1/2" Hole)				
8	14-2216	1		Wheel Adapter
9	14-4072	1		Flange
10	14-4073	1	2	Hex Nut
11	14-4076	1		Wheel Guard (4")
12	14-0836	1		Wrench (1-3/8") (not shown)
13	14-0814	1		Wrench (7/8") (not shown)
Termination 16: Type 1 Straight Wheel (3" x 1/2" x 3/8" Hole)				
14	14-2228	1		Wheel Adapter
15	14-3052	1		Flange
16	2057PT	1	2	Hex Nut
17	14-3011	1		Wheel Guard (3")
18	14-0814	1		Wrench (7/8") (not shown)
Termination 17: Type 1 Straight Wheel (3" x 1/2" x 1/2" Hole)				
19	14-2230	1		Wheel Adapter
20	14-3056	1		Flange
21	14-4073	1	2	Hex Nut
22	14-3011	1		Wheel Guard (3")
23	14-0814	1		Wrench (7/8") (not shown)
Termination 62: Series "K" Collet				
24	14-2254	1		Collet Chuck Body
25	124PT	1	2	Collet (3/8")
26	4255PT	1	2	Collet Nut
27	14-0814	1		Wrench (7/8") (not shown)
28	14-0818	1		Wrench (1-1/8") (not shown)
Termination 77: Cone and Plug Wheel (Types 16-19)				
29	14-4067	1		Spindle (3/8"-24 Thread)
30	14-0810	1		Wrench (5/8") (not shown)
Termination 78: Cone and Plug Wheel (Types 16-19)				
29	14-4068	1		Spindle (1/2"-13 Thread)
30	14-0810	1		Wrench (5/8") (not shown)
Termination 79: Cone and Plug Wheel (Types 16-19)				
29	14-4069	1		Spindle (5/8"-11 Thread)
30	14-0810	1		Wrench (5/8") (not shown)

(#) Quantity

(X) Recommended Spare Parts (quantity shown based on 1-5 tools in operation)

Sales & Service Centers

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

Brazil

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