

**Parts Manual**  
**45-8214EN**  
PL30-1211  
12/14/2012

**DOTCO<sup>®</sup>**

**12-11 Series**  
Inline Extended Grinders



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

|  |                                       |  |                                       |          |           |          |           |           |           |  |                                       |  |                                       |  |  |  |  |  |  |                    |                    |                    |                    |  |  |  |  |  |  |                    |  |                    |  |  |  |  |  |  |  |
|--|---------------------------------------|--|---------------------------------------|----------|-----------|----------|-----------|-----------|-----------|--|---------------------------------------|--|---------------------------------------|--|--|--|--|--|--|--------------------|--------------------|--------------------|--------------------|--|--|--|--|--|--|--------------------|--|--------------------|--|--|--|--|--|--|--|
|  | <b>12</b>                             | <b>X</b>                               | <b>1</b>                              | <b>1</b> | <b>XX</b> | <b>-</b> | <b>36</b> | <b>XX</b> | <b>OH</b> |  |                                       |  |                                       |  |  |  |  |  |  |                    |                    |                    |                    |  |  |  |  |  |  |                    |  |                    |  |  |  |  |  |  |  |
| <p><u>Tool Series</u><br/><b>12</b> = Ergo Grinder/Sander</p>  |                                       |  |                                       |          |           |          |           |           |           |  |                                       |  |                                       |  |  |  |  |  |  |                    |                    |                    |                    |  |  |  |  |  |  |                    |  |                    |  |  |  |  |  |  |  |
| <p><u>Throttle Type</u><br/><b>L</b> = Locking Lever<br/><b>S</b> = Locking Lever</p>  |                                       |  |                                       |          |           |          |           |           |           |  |                                       |  |                                       |  |  |  |  |  |  |                    |                    |                    |                    |  |  |  |  |  |  |                    |  |                    |  |  |  |  |  |  |  |
| <p><u>Motor Size</u><br/><b>1</b> = 0.3 hp</p>   |                                       |  |                                       |          |           |          |           |           |           |  |                                       |  |                                       |  |  |  |  |  |  |                    |                    |                    |                    |  |  |  |  |  |  |                    |  |                    |  |  |  |  |  |  |  |
| <p><u>Handle Style</u><br/><b>1</b> = Straight, Extended</p>   |                                       |  |                                       |          |           |          |           |           |           |  |                                       |  |                                       |  |  |  |  |  |  |                    |                    |                    |                    |  |  |  |  |  |  |                    |  |                    |  |  |  |  |  |  |  |
| <p><u>Speed Options (RPM)</u></p> <table border="0"> <tr> <td><b>Front Exhaust<br/>(3" Extended)</b></td> <td><b>Rear Exhaust<br/>(3" Extended)</b></td> <td><b>Front Exhaust<br/>(5" Extended)</b></td> <td><b>Rear Exhaust<br/>(5" Extended)</b></td> <td colspan="6"></td> </tr> <tr> <td><b>00</b> = 28,000</td> <td><b>80</b> = 28,000</td> <td><b>01</b> = 28,000</td> <td><b>81</b> = 28,000</td> <td colspan="6"></td> </tr> <tr> <td><b>11</b> = 25,000</td> <td></td> <td><b>12</b> = 25,000</td> <td></td> <td colspan="6"></td> </tr> </table> |                                       |  |                                       |          |           |          |           |           |           | <b>Front Exhaust<br/>(3" Extended)</b> | <b>Rear Exhaust<br/>(3" Extended)</b> | <b>Front Exhaust<br/>(5" Extended)</b> | <b>Rear Exhaust<br/>(5" Extended)</b> |  |  |  |  |  |  | <b>00</b> = 28,000 | <b>80</b> = 28,000 | <b>01</b> = 28,000 | <b>81</b> = 28,000 |  |  |  |  |  |  | <b>11</b> = 25,000 |  | <b>12</b> = 25,000 |  |  |  |  |  |  |  |
| <b>Front Exhaust<br/>(3" Extended)</b>   | <b>Rear Exhaust<br/>(3" Extended)</b> | <b>Front Exhaust<br/>(5" Extended)</b> | <b>Rear Exhaust<br/>(5" Extended)</b> |          |           |          |           |           |           |  |                                       |  |                                       |  |  |  |  |  |  |                    |                    |                    |                    |  |  |  |  |  |  |                    |  |                    |  |  |  |  |  |  |  |
| <b>00</b> = 28,000   | <b>80</b> = 28,000                    | <b>01</b> = 28,000                     | <b>81</b> = 28,000                    |          |           |          |           |           |           |  |                                       |  |                                       |  |  |  |  |  |  |                    |                    |                    |                    |  |  |  |  |  |  |                    |  |                    |  |  |  |  |  |  |  |
| <b>11</b> = 25,000   |                                       | <b>12</b> = 25,000                     |                                       |          |           |          |           |           |           |  |                                       |  |                                       |  |  |  |  |  |  |                    |                    |                    |                    |  |  |  |  |  |  |                    |  |                    |  |  |  |  |  |  |  |
| <p><u>Termination Code</u><br/><b>36</b> = 300 Series 1/4" Capacity Collet (3-piece)</p>   |                                       |  |                                       |          |           |          |           |           |           |  |                                       |  |                                       |  |  |  |  |  |  |                    |                    |                    |                    |  |  |  |  |  |  |                    |  |                    |  |  |  |  |  |  |  |
| <p><u>Optional Collet (no extra cost)</u><br/><b>08</b> = 1/8"<br/><b>14</b> = 7/32"<br/><b>M6</b> = 6mm</p>   |                                       |  |                                       |          |           |          |           |           |           |  |                                       |  |                                       |  |  |  |  |  |  |                    |                    |                    |                    |  |  |  |  |  |  |                    |  |                    |  |  |  |  |  |  |  |
| <p><u>Overhose Option (extra cost)</u><br/><b>OH</b> = Overhose (rear exhaust models only)</p>   |                                       |  |                                       |          |           |          |           |           |           |  |                                       |  |                                       |  |  |  |  |  |  |                    |                    |                    |                    |  |  |  |  |  |  |                    |  |                    |  |  |  |  |  |  |  |

## Description and Instructions

**Language Version:**

This Parts Manual is the ***“Original Instructions”*** intended for all persons who will use or repair these tools.

**Product Identification:**

Refer to the “Model Nomenclature” page in this document.

**Noise and Vibration:**

Refer to documents CE-1007DC and CE-1007TD.

**General Description:**

Air powered inline extended grinder.

**Intended Use:**

These air powered grinders are intended for material removal applications using carbide burs, mounted points, or mounted wheels. Use only for their designated purpose. Do not use as a hammer, lever or other improper usage that can cause tool damage and operator injury.

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**General Safety:**

Refer to General Safety document, CE-2007 for general safety operating instructions for this equipment.

**Lubrication:**

Refer to lubrication document, PL65-LUB, for general lubrication instructions.

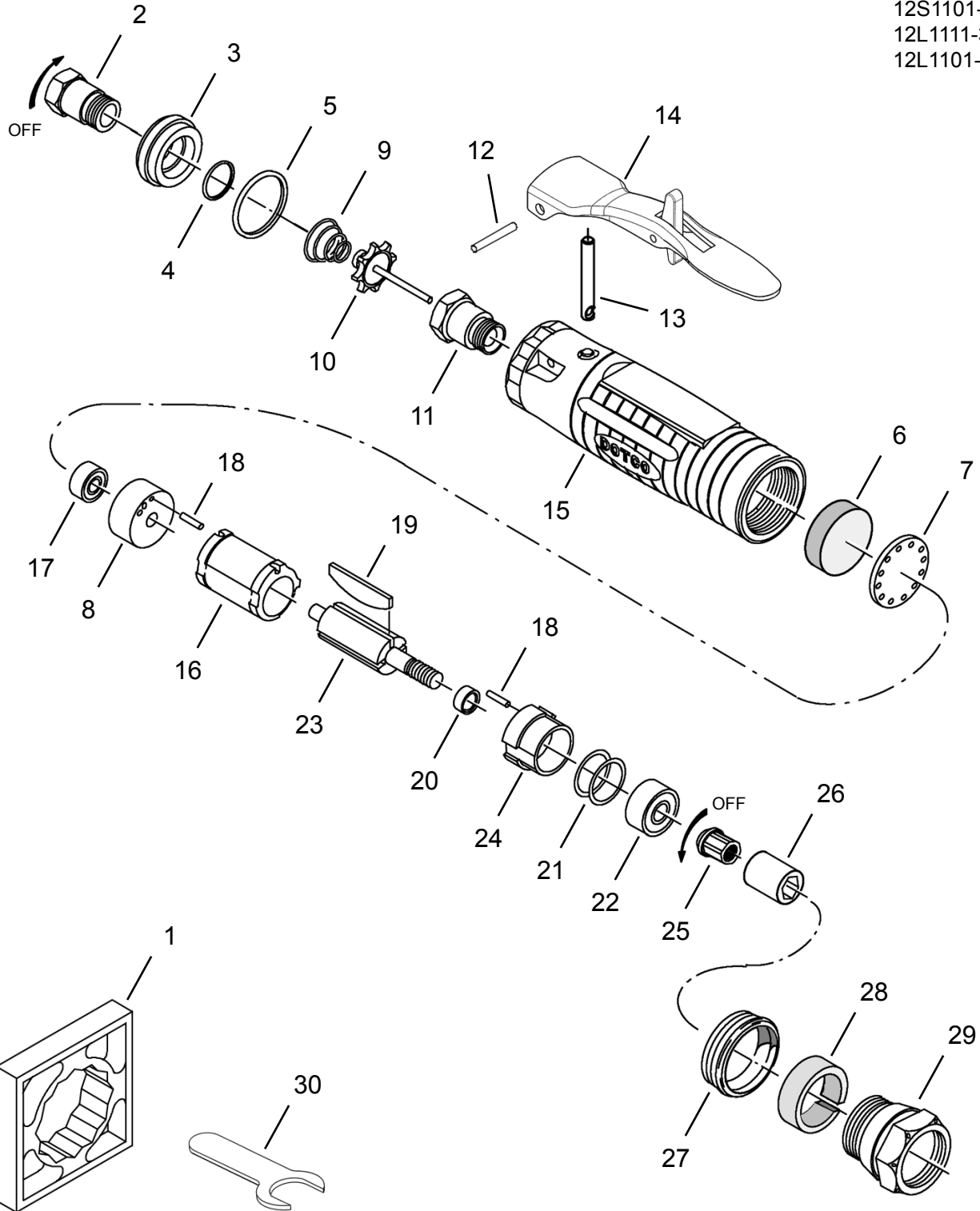
**CAUTION: Do not use lubricant substitutes. This could result in damage to the tool.**

# Dotco® Front Exhaust Grinders

“A”

## Models

- 12L1100-36
- 12L1101-36
- 12S1101-36
- 12L1111-36
- 12L1101-36



**Dotco®**  
Front Exhaust Grinders

**45-8214EN**  
12/14/2012

**Illustration "A"**

| Ref                | Number    | # | X  | EN          |  |
|--------------------|-----------|---|----|-------------|--|
|                    |           |   |    | Description |  |
| 1                  | 14-0851   | 1 |    |             | Housing Wrench                             |
| 2                  | 01-2505   | 1 | K1 |             | Inlet Adapter                              |
| 3                  | 01-2506   | 1 | K1 |             | Exhaust Plug                               |
| 4                  | 2965      | 1 | K1 |             | O-Ring                                     |
| 5                  | 3036PT    | 1 | K1 |             | O-Ring                                     |
| 6                  | 01-1046   | 1 | K1 |             | Filter Disc                                |
| 7                  | 01-1016   | 1 | K1 |             | Filter Retainer                            |
| 8                  | 1003PT    | 1 |    |             | Rear Plate (includes 1 Ref. 18)            |
| 9                  | 01-2519   | 1 | K2 |             | Valve Spring                               |
| 10                 | 01-2518   | 1 | K2 |             | Valve                                      |
| 11                 | 01-2504   | 1 | K2 |             | Valve Seat                                 |
| 12                 | 1042      | 1 | K2 |             | Lever Pin                                  |
| 13                 | 01-1017   | 1 | K2 |             | Push Rod                                   |
| 14                 | 01-1267   | 1 | K2 |             | Lock-Off Lever Assembly                    |
| 15                 | 01-1001   | 1 |    |             | Motor Housing                              |
| 16                 | 1002PT    | 1 |    |             | Cylinder                                   |
| 17                 | 504PT     | 1 | K3 |             | Ball Bearing                               |
| 18                 | 1041      | 2 | K3 |             | Pin  |
| 19                 | Table "A" | 4 | K3 |             | Rotor Blade (*)                            |
| 20                 | 1017PT    | 1 | K3 |             | Spacer                                     |
| 21                 | 1355      | 1 | K3 |             | Shim Packet                                |
| 22                 | 538PT     | 1 | K3 |             | Ball Bearing                               |
| 23                 | 1005S     | 1 |    |             | Rotor                                      |
| 24                 | 1064PT    | 1 |    |             | Front Plate (includes 1 Ref. 18)           |
| 25                 | 1708PT    | 1 |    |             | Coupling Nut                               |
| 26                 | 02-1711   | 1 |    |             | Coupling                                   |
| 27                 | 01-1045   | 1 | K4 |             | Lock Ring Sleeve                           |
| 28                 | 01-1021   | 1 | K1 |             | Muffler Felt                               |
| 29                 | 01-1049   | 1 | K4 |             | Lock Ring                                  |
| 30                 | 14-0807   | 1 |    |             | Wrench (7/16")                             |
|                    | 14-0811   | 1 |    |             | Wrench (11/16")                            |
| <b>Repair Kits</b> |           |   |    |             |  |
| K1                 | 04-0144   | 1 | 1  |             | Air Inlet Kit                              |
| K2                 | 04-0143   | 1 | 1  |             | Throttle Kit                               |
| K3                 | Table "A" | 1 | 1  |             | Motor Kit                                  |
| K4                 | 04-0145   | 1 | 1  |             | Housing Kit                                |
| *                  | Table "A" | 1 | 1  |             | Rotor Blade Kit (contains 50 Rotor Blades) |

(#) Quantity

(X) Included in Repair Kit (K#) or Recommended Spare Parts (quantity shown based on 1-5 tools in operation)

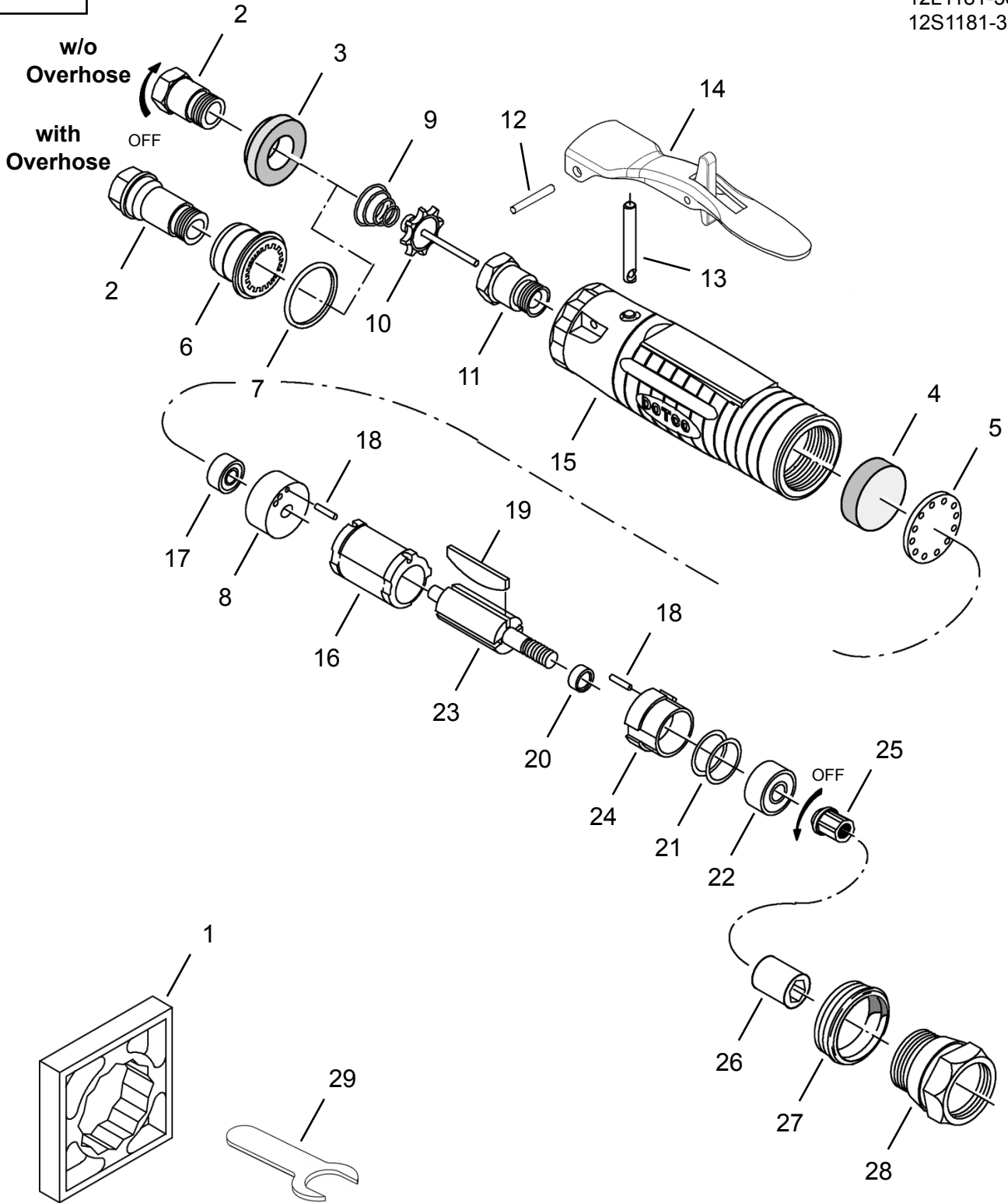
**Table "A"**

| Ref. | Description     | # | 12(-)1100 |   | 12(-)1111 |   |
|------|-----------------|---|-----------|---|-----------|---|
|      |                 |   | 12(-)1101 | # | 12(-)1112 | # |
| 19   | Rotor Blade     | 4 | 1006PT    | 4 | 1906PT    |   |
| K3   | Motor Kit       | 1 | 04-0042   | 1 | 04-0044   |   |
| *    | Rotor Blade Kit | 1 | 04-0031   | 1 | 04-0032   |   |

# Dotco® Rear Exhaust Grinders

**Models**  
12L1180-36  
12L1181-36  
12S1181-36

**“B”**



**Dotco®**  
Rear Exhaust Grinders

**45-8214EN**  
12/14/2012

**Illustration "B"**

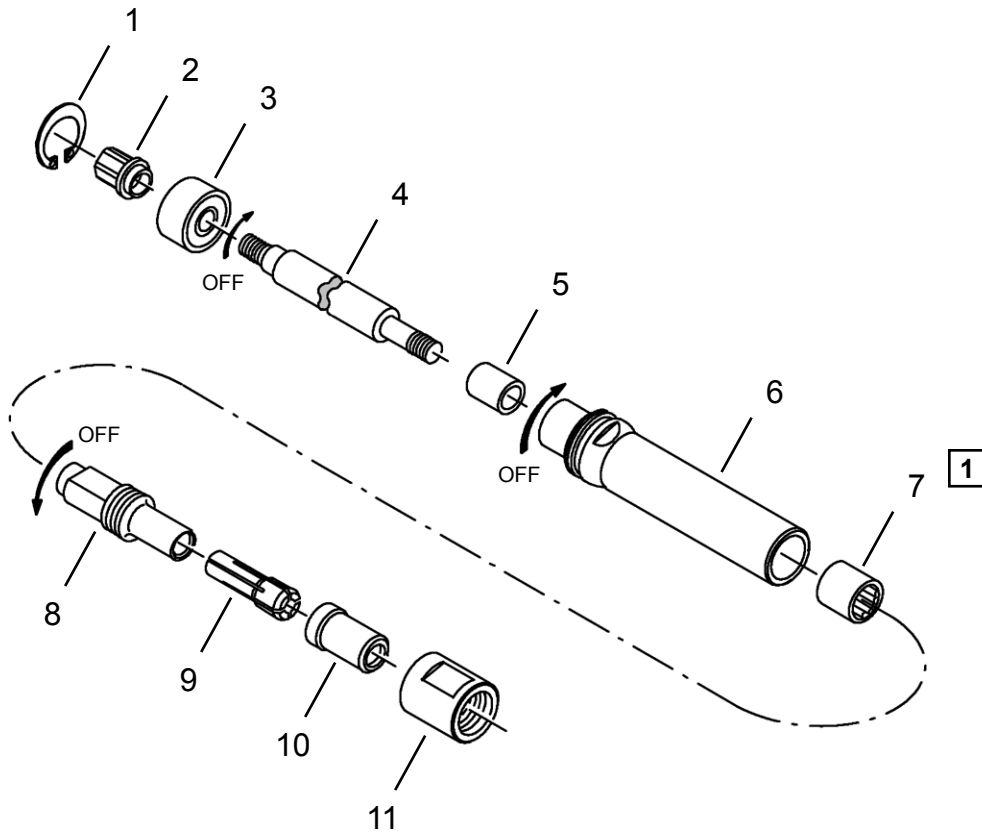
| Ref                | Number  | # | X  | EN |  |
|--------------------|---------|---|----|----|--|
|                    |         |   |    |    | Description                                |
| 1                  | 14-0851 | 1 |    |    | Housing Wrench                             |
| 2                  | 01-2505 | 1 | K5 |    | Inlet Adapter (non Overhose version)       |
|                    | 01-1031 | 1 | K5 |    | Inlet Adapter (Overhose version)           |
| 3                  | 01-2520 | 1 | K5 |    | Diffuser                                   |
| 4                  | 01-1046 | 1 | K5 |    | Filter Disc                                |
| 5                  | 01-1016 | 1 | K5 |    | Filter Retainer                            |
| 6                  | 01-1032 | 1 | K5 |    | Muffler (Overhose version)                 |
| 7                  | 3036PT  | 1 | K5 |    | O-Ring (Overhose version)                  |
| 8                  | 1003PT  | 1 |    |    | Rear Plate (includes 1 Ref. 18)            |
| 9                  | 01-2519 | 1 | K2 |    | Valve Spring                               |
| 10                 | 01-2518 | 1 | K2 |    | Valve                                      |
| 11                 | 01-2504 | 1 | K2 |    | Valve Seat                                 |
| 12                 | 1042    | 1 | K2 |    | Lever Pin                                  |
| 13                 | 01-1017 | 1 | K2 |    | Push Rod                                   |
| 14                 | 01-1267 | 1 | K2 |    | Lock-Off Lever Assembly                    |
| 15                 | 01-1001 | 1 |    |    | Motor Housing                              |
| 16                 | 1002PT  | 1 |    |    | Cylinder                                   |
| 17                 | 504PT   | 1 | K3 |    | Ball Bearing                               |
| 18                 | 1041    | 2 | K3 |    | Pin  |
| 19                 | 1006PT  | 4 | K3 |    | Rotor Blade (*)                            |
| 20                 | 1017PT  | 1 | K3 |    | Spacer                                     |
| 21                 | 1355    | 1 | K3 |    | Shim Packet                                |
| 22                 | 538PT   | 1 | K3 |    | Ball Bearing                               |
| 23                 | 1005S   | 1 |    |    | Rotor                                      |
| 24                 | 1064PT  | 1 |    |    | Front Plate (includes 1 Ref. 18)           |
| 25                 | 1708PT  | 1 |    |    | Coupling Nut                               |
| 26                 | 02-1711 | 1 |    |    | Coupling                                   |
| 27                 | 01-1045 | 1 | K6 |    | Lock Ring Sleeve                           |
| 28                 | 01-1044 | 1 | K6 |    | Lock Ring                                  |
| 29                 | 14-0807 | 1 |    |    | Wrench (7/16")                             |
|                    | 14-0811 | 1 |    |    | Wrench (11/16")                            |
| <b>Repair Kits</b> |         |   |    |    |  |
| K2                 | 04-0143 | 1 | 1  |    | Throttle Kit                               |
| K3                 | 04-0042 | 1 | 1  |    | Motor Kit                                  |
| K5                 | 04-0140 | 1 | 1  |    | Air Inlet Kit (non Overhose version)       |
|                    | 04-0141 | 1 | 1  |    | Air Inlet Kit (Overhose version)           |
| K6                 | 04-0146 | 1 | 1  |    | Housing Kit                                |
| *                  | 04-0031 | 1 | 1  |    | Rotor Blade Kit (contains 50 Rotor Blades) |

(#) Quantity

(X) Included in Repair Kit (K#) or Recommended Spare Parts (quantity shown based on 1-5 tools in operation)

Dotco®  
3" and 5" Extension Assemblies

“C”



**1** Press replacement bearing 1/4" below the end of the spindle housing.



**3" and 5" Extension Assemblies**

**Illustration "C"**

| Ref                | Number  | # | X  | EN                    |
|--------------------|---------|---|----|-----------------------|
|                    |         |   |    | Description           |
| 1                  | 1098    | 1 | K7 | Retaining Ring        |
| 2                  | 1707PT  | 1 |    | Coupling Nut          |
| 3                  | 505PT   | 1 | K7 | Ball Bearing          |
| 4                  | 1748PT  | 1 |    | Spindle (3" Extended) |
|                    | 1561PT  | 1 |    | Spindle (5" Extended) |
| 5                  | 1562    | 1 |    | Sleeve                |
| 6                  | 02-6124 | 1 |    | Housing (3" Extended) |
|                    | 6125PT  | 1 |    | Housing (5" Extended) |
| 7                  | 1514PT  | 1 | K7 | Needle Bearing        |
| 8                  | 1054PT  | 1 |    | Chuck Body            |
| 9                  | 308PT   | 1 |    | Collet (1/4")         |
| 10                 | 1053PT  | 1 | K7 | Nosepiece             |
| 11                 | 1058PT  | 1 | K7 | Collet Chuck Cap      |
| <b>Repair Kits</b> |         |   |    |                       |
| K7                 | 04-0051 | 1 | 1  | Output Kit            |

(#) Quantity

(X) Included in Repair Kit (K#) or 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.

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Auburn Hills, MI 48326  
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Fax: 248-391-6295

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**Apex Tool Group  
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