**Parts Manual**
**45-8207**
*PL31-56C*
12/27/2013

DOTCO®

# 56CT, 56CS & 56CN Series
## Reversible Pistol Grip Drills & Screwdrivers



| 56 | C | X | X | XX | - | XX | NL |
|---|---|---|---|---|---|---|---|

**Series**
**56 =** Reversible Drill/Screwdriver

**Throttle Type**
**C =** Trigger Actuated

**Motor Size**
**T =** 1/3 HP
**S =** 1/2 HP
**N =** 3/4 HP

**Handle Style**
**L =** Large Grip
**S =** Small Grip

**Speed Code**

| 1/3 & 1/2 HP Models | 3/4 HP Models |
|---|---|
| **91 =** 4,500 RPM | **91 =** 4,000 RPM |
| **92 =** 2,800 RPM | **92 =** 2,500 RPM |
| **93 =** 1,700 RPM | **93 =** 1,500 RPM |
| **94 =** 1,400 RPM | **94 =** 1,200 RPM |
| **95 =** 1,100 RPM | **95 =** 950 RPM |
| **96 =** 700 RPM | **96 =** 600 RPM |
| **97 =** 400 RPM | **97 =** 350 RPM |

**Termination Code**

| | |
|---|---|
| **38 =** 1/4" Jacobs Chuck | **70 =** Positive Clutch |
| **40 =** No Chuck | **71 =** Positive Clutch Slip Chuck |
| **51 =** 3/8" Jacobs Chuck | **72 =** Adjustable Clutch |
| **53 =** 1/2" Jacobs Chuck | **73 =** Adjustable Clutch Slip Chuck |
| **54 =** 1/4" Internal Hex Slip Chuck | |

**Extra Cost Option**
**NL =** Oil-Free Blades

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

# DOTCO

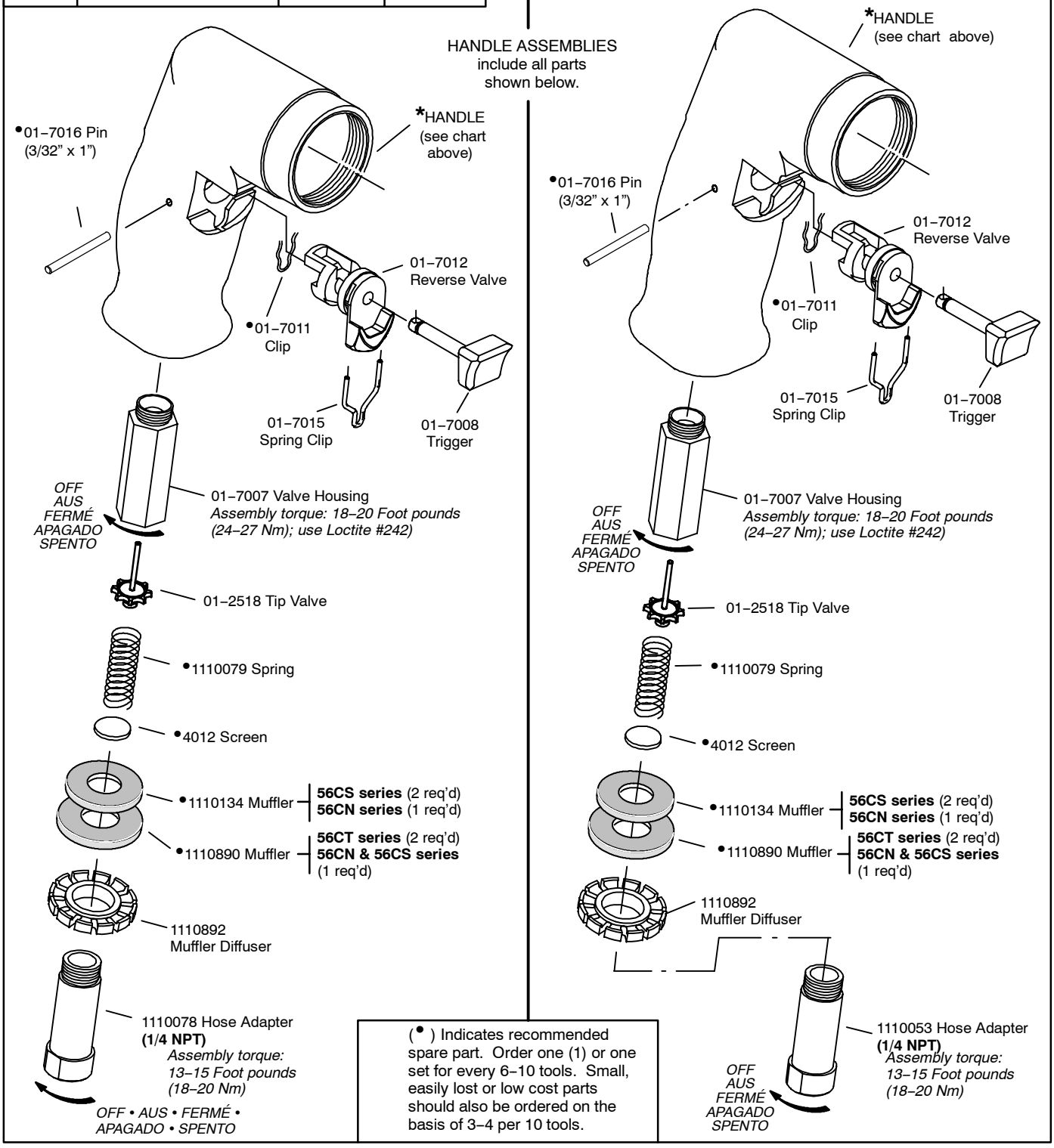
## 56C Series

## Large & Small Handle Assemblies

| HOUSING STYLE | | SMALL HANDLE ASSEMBLY (complete) | SMALL HANDLE HANDLE Part Num. |
|---|---|---|---|
| 56CTS | Light Duty | 01–7040<br>01–7240 | 01–7001<br>01–7201 |
| 56CSS | Medium Duty | 01–7042<br>01–7242 | 01–7003<br>01–7203 |
| 56CNS | Heavy Duty | 01–7044 | 01–7004 |

| HOUSING STYLE | | LARGE HANDLE ASSEMBLY (complete) | LARGE HANDLE HANDLE Part Num. |
|---|---|---|---|
| 56CTL | Light Duty | 01–7041 | 01–7031 |
| 56CSL | Medium Duty | 01–7043 | 01–7032 |
| 56CNL | Heavy Duty | 01–7045 | 01–7033 |

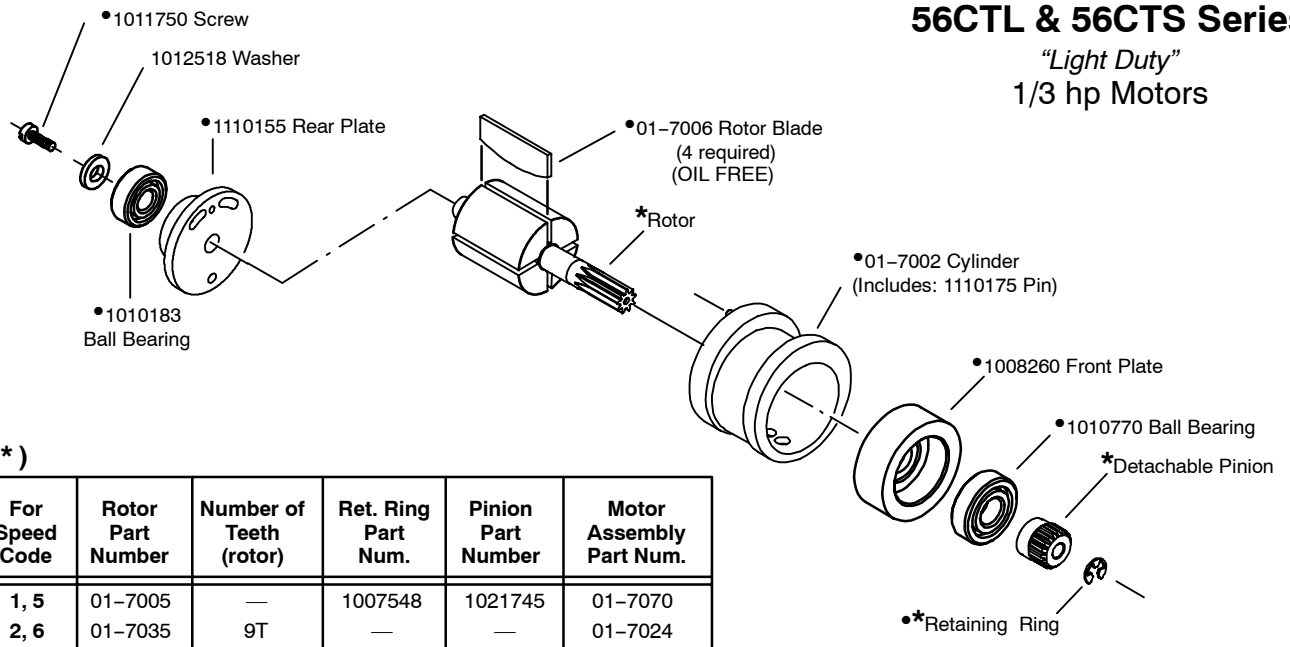
HANDLE ASSEMBLIES include all parts shown below.




( • ) Indicates recommended spare part. Order one (1) or one set for every 6–10 tools. Small, easily lost or low cost parts should also be ordered on the basis of 3–4 per 10 tools.

## 56CTL & 56CTS Series

*"Light Duty"*
1/3 hp Motors



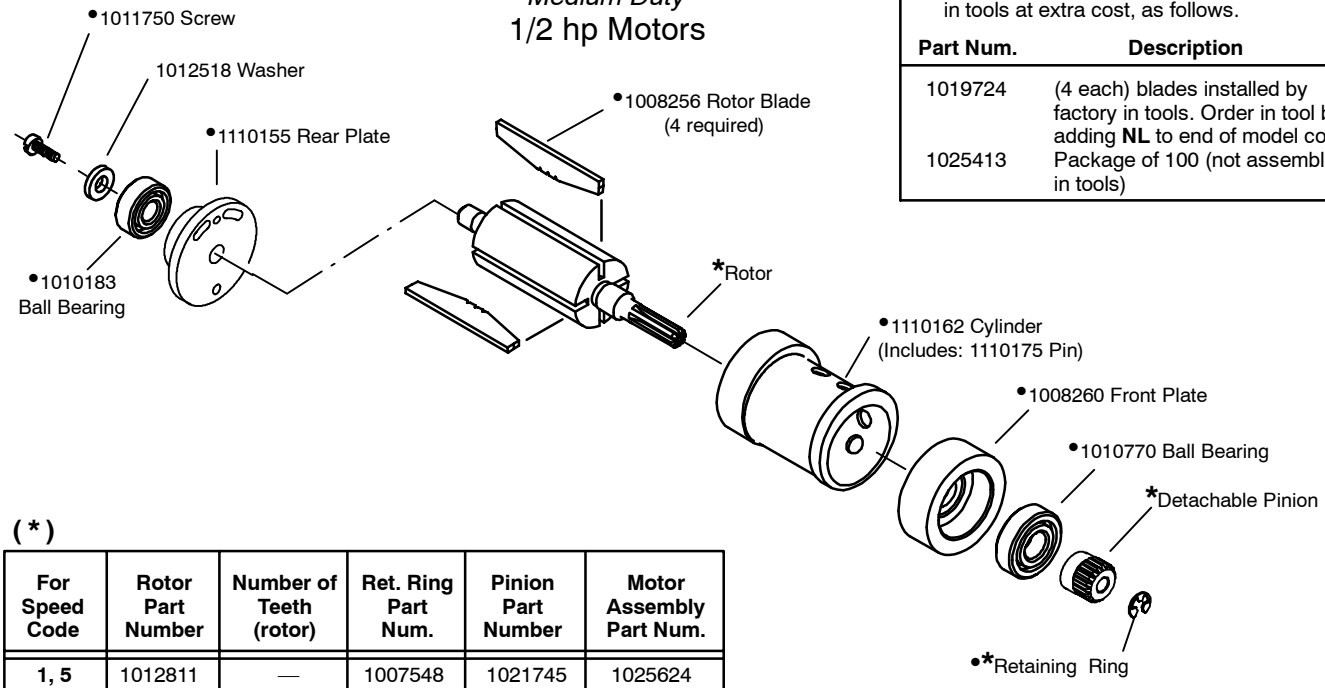

**( * )**

| For Speed Code | Rotor Part Number | Number of Teeth (rotor) | Ret. Ring Part Num. | Pinion Part Number | Motor Assembly Part Num. |
|---|---|---|---|---|---|
| **1, 5** | 01–7005 | — | 1007548 | 1021745 | 01–7070 |
| **2, 6** | 01–7035 | 9T | — | — | 01–7024 |
| **3, 4, 7** | 01–7025 | 5T | — | — | 01–7034 |

(• ) Indicates recommended spare part. Order one (1) or one set for every 6–10 tools. Small, easily lost or low cost parts should also be ordered on the basis of 3–4 per 10 tools.

## 56CSL & 56CSS Series

*"Medium Duty"*
1/2 hp Motors




**"OIL–LESS" ROTOR BLADES**

"Oil–Less" rotor blades can be assembled in tools at extra cost, as follows.

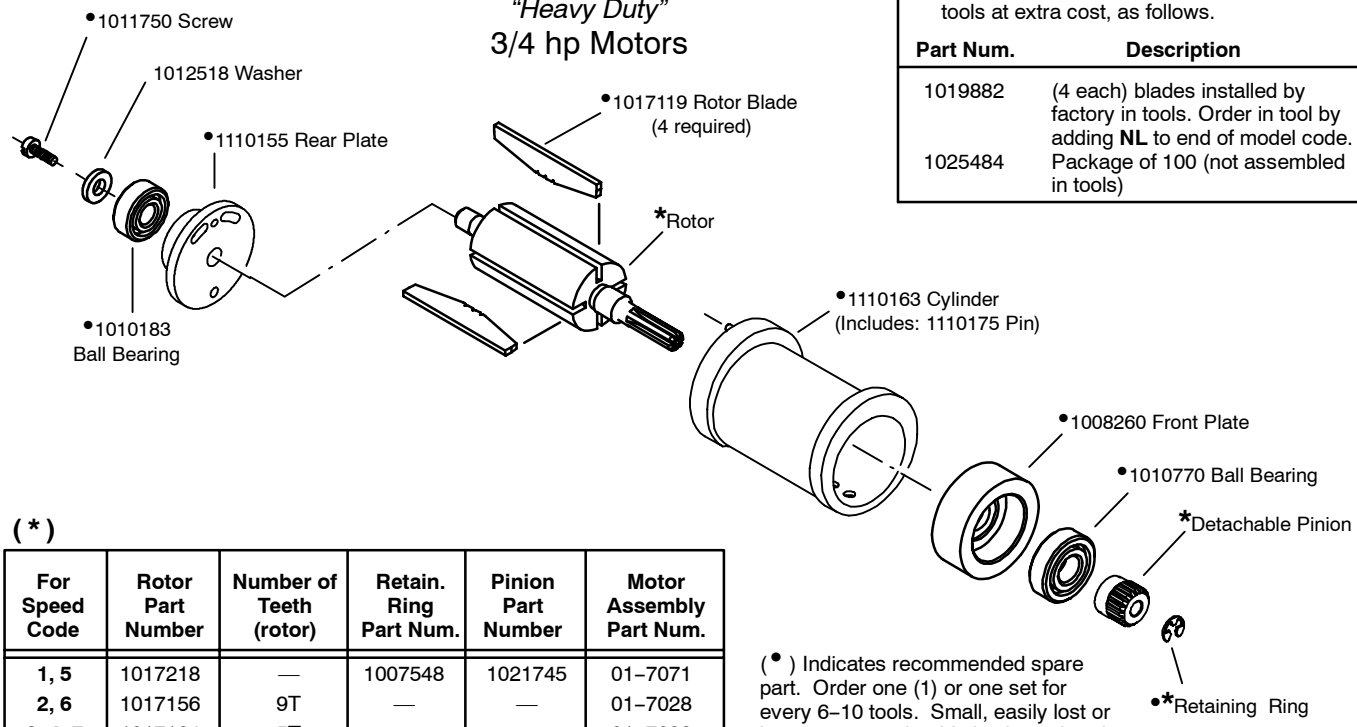
| Part Num. | Description |
|---|---|
| 1019724 | (4 each) blades installed by factory in tools. Order in tool by adding **NL** to end of model code. |
| 1025413 | Package of 100 (not assembled in tools) |

**( * )**

| For Speed Code | Rotor Part Number | Number of Teeth (rotor) | Ret. Ring Part Num. | Pinion Part Number | Motor Assembly Part Num. |
|---|---|---|---|---|---|
| **1, 5** | 1012811 | — | 1007548 | 1021745 | 1025624 |
| **2, 6** | 1012769 | 9T | — | — | 1025625 |
| **3, 4, 7** | 1012812 | 5T | — | — | 1025623 |

## 56CNL & 56CNS Series

*"Heavy Duty"*
3/4 hp Motors




**"OIL FREE" ROTOR BLADES**

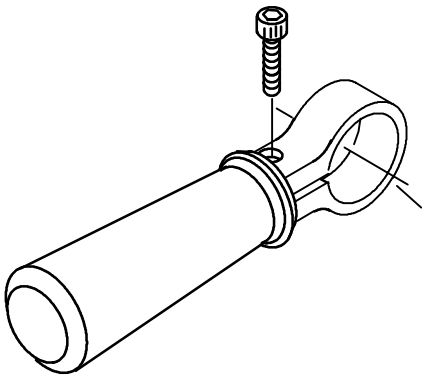
"Oil Free" rotor blades can be assembled in tools at extra cost, as follows.

| Part Num. | Description |
|---|---|
| 1019882 | (4 each) blades installed by factory in tools. Order in tool by adding **NL** to end of model code. |
| 1025484 | Package of 100 (not assembled in tools) |

**( * )**

| For Speed Code | Rotor Part Number | Number of Teeth (rotor) | Retain. Ring Part Num. | Pinion Part Number | Motor Assembly Part Num. |
|---|---|---|---|---|---|
| **1, 5** | 1017218 | — | 1007548 | 1021745 | 01–7071 |
| **2, 6** | 1017156 | 9T | — | — | 01–7028 |
| **3, 4, 7** | 1017184 | 5T | — | — | 01–7038 |

( • ) Indicates recommended spare part. Order one (1) or one set for every 6–10 tools. Small, easily lost or low cost parts should also be ordered on the basis of 3–4 per 10 tools.



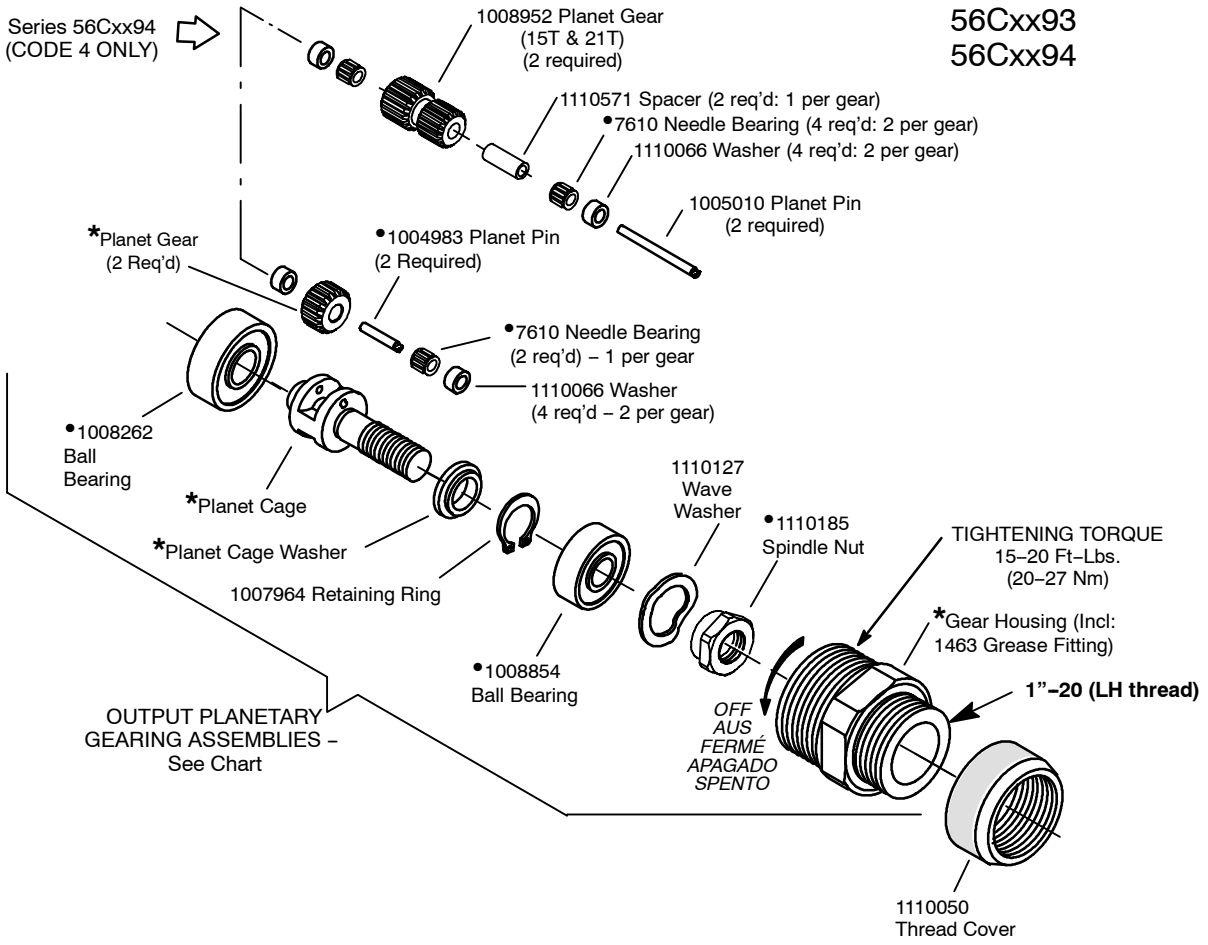
**DEAD HANDLE, part #1023972**
Supplied with all TERMINATION 53 (1/2" chuck) models. Available as extra equipment on all others.

Recommended for use with all fastening tools capable of 90 foot–pounds torque, or higher.

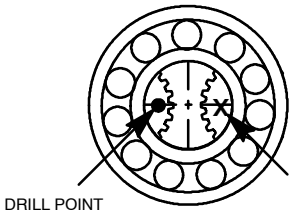
Includes:
1007629 Cap Screw (1/4"–20 x 3/4") and
539603 Handle Grip

**TERMINATIONS 38, 40, 51, 53 & 54 Only**

Single Stage Planetary Gearing
*(Threaded Output Spindles):*
56Cxx91
56Cxx92
56Cxx93
56Cxx94




*Models*: **56Cxx94**




**Speed Code "4" ONLY: Timing of the Step Reduction Gear Assembly**

Assemble the planet gears into the planet cage, making sure the notched planet pins fit over the planet cage washer. Rotate each gear until the aligning hole — on the end of one gear — is diametrically opposite the **"X"** mark of the other gear. Hold the gears in this position and slip the planet cage into the internal gear. This is important to avoid "wiping out" the gear teeth.

This is the only position where the gear teeth are lined up.

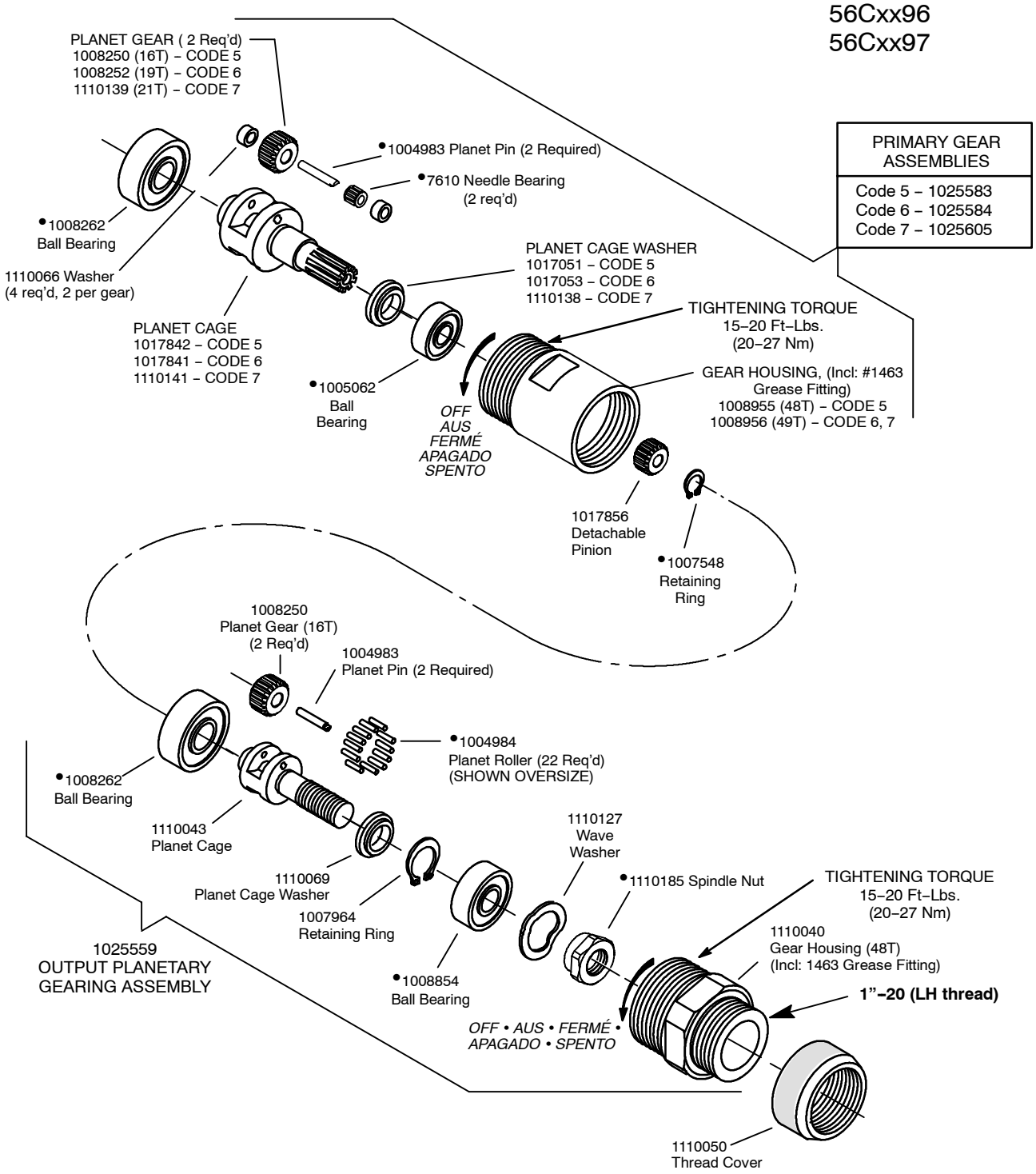
**( * )**

| Part Name \ Model / Speed Code | 56Cxx91 | 56Cxx92 | 56Cxx93 | 56Cxx94 |
|---|---|---|---|---|
| GEAR ASSEMBLY (Complete) | 1025933 | 1025564 | 1025567 | 1025568 |
| Pl. Cage Washer | 1110069 | 1110070 | 1110071 | 1110071 |
| (diameter): | (0.743") | (0.677") | (0.636") | (0.636") |
| Gear Housing | 1110040 | 1110042 | 1110042 | 1110063 |
| (num. teeth) | (48T) | (49T) | (49T) | (43T) |
| Planet Cage | 1110043 | 1110044 | 1110045 | 1110060 |
| Planet Gears (2 ea.) | 1008250 | 1008252 | 1110139 | 1008952 |
| (num. teeth) | (16T) | (19T) | (21T) | (21T/15T) |

( • ) Indicates recommended spare part. Order one (1) or one set for every 6–10 tools. Small, easily lost or low cost parts should also be ordered on the basis of 3–4 per 10 tools.

**TERMINATIONS 38, 40, 51, 53 & 54 Only**

Double Stage Planetary Gearing
*(Threaded Output Spindles):*
56Cxx95
56Cxx96
56Cxx97

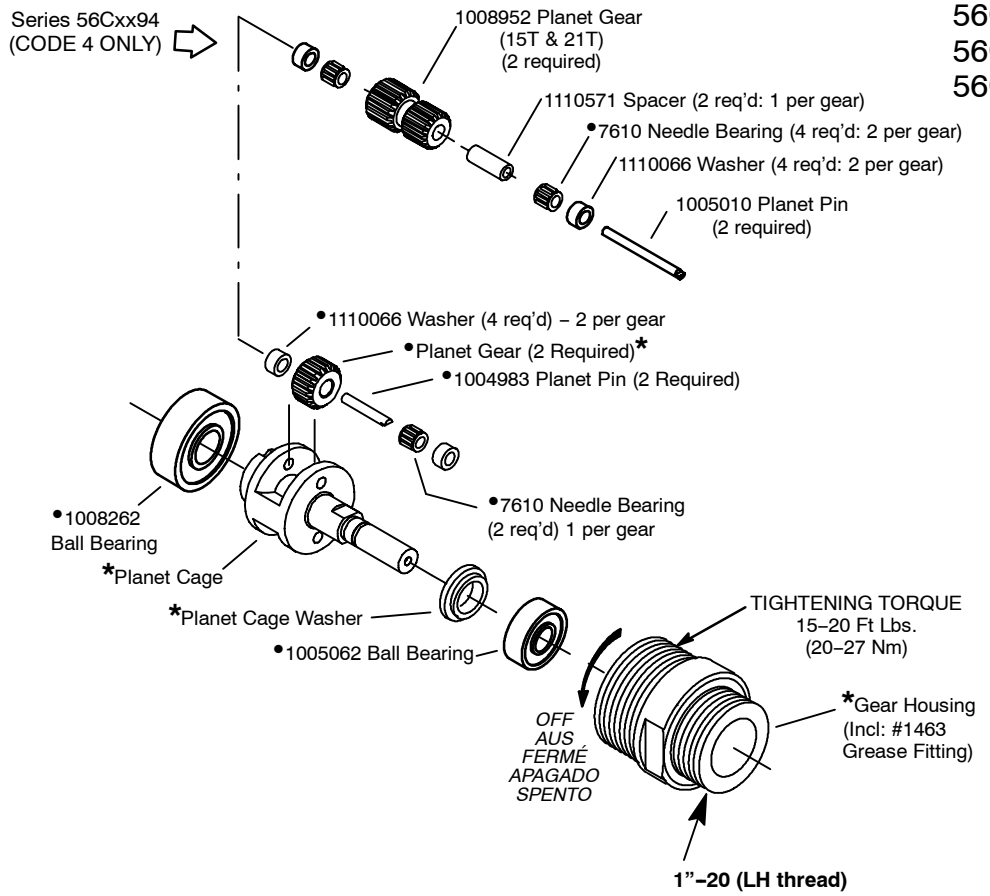



| PRIMARY GEAR ASSEMBLIES |
|---|
| Code 5 – 1025583 |
| Code 6 – 1025584 |
| Code 7 – 1025605 |

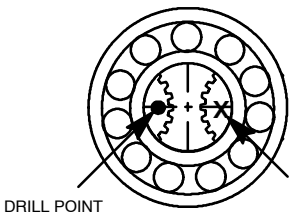
(•) Indicates recommended spare part. Order one (1) or one set for every 6–10 tools. Small, easily lost or low cost parts should also be ordered on the basis of 3–4 per 10 tools.

**TERMINATIONS 70, 71, 72, 73 Only**

Single Stage Planetary Gearing
*(Screwdriver Clutch models):*
56Cxx91
56Cxx92
56Cxx93
56Cxx94




*Models*: **56Cxx94**




**Speed Code "4" ONLY: Timing of the Step Reduction Gear Assembly**

Assemble the planet gears into the planet cage, making sure the notched planet pins fit over the planet cage washer. Rotate each gear until the aligning hole — on the end of one gear — is diametrically opposite the **"X"** mark of the other gear. Hold the gears in this position and slip the planet cage into the internal gear. This is important to avoid "wiping out" the gear teeth.

This is the only position where the gear teeth are lined up.

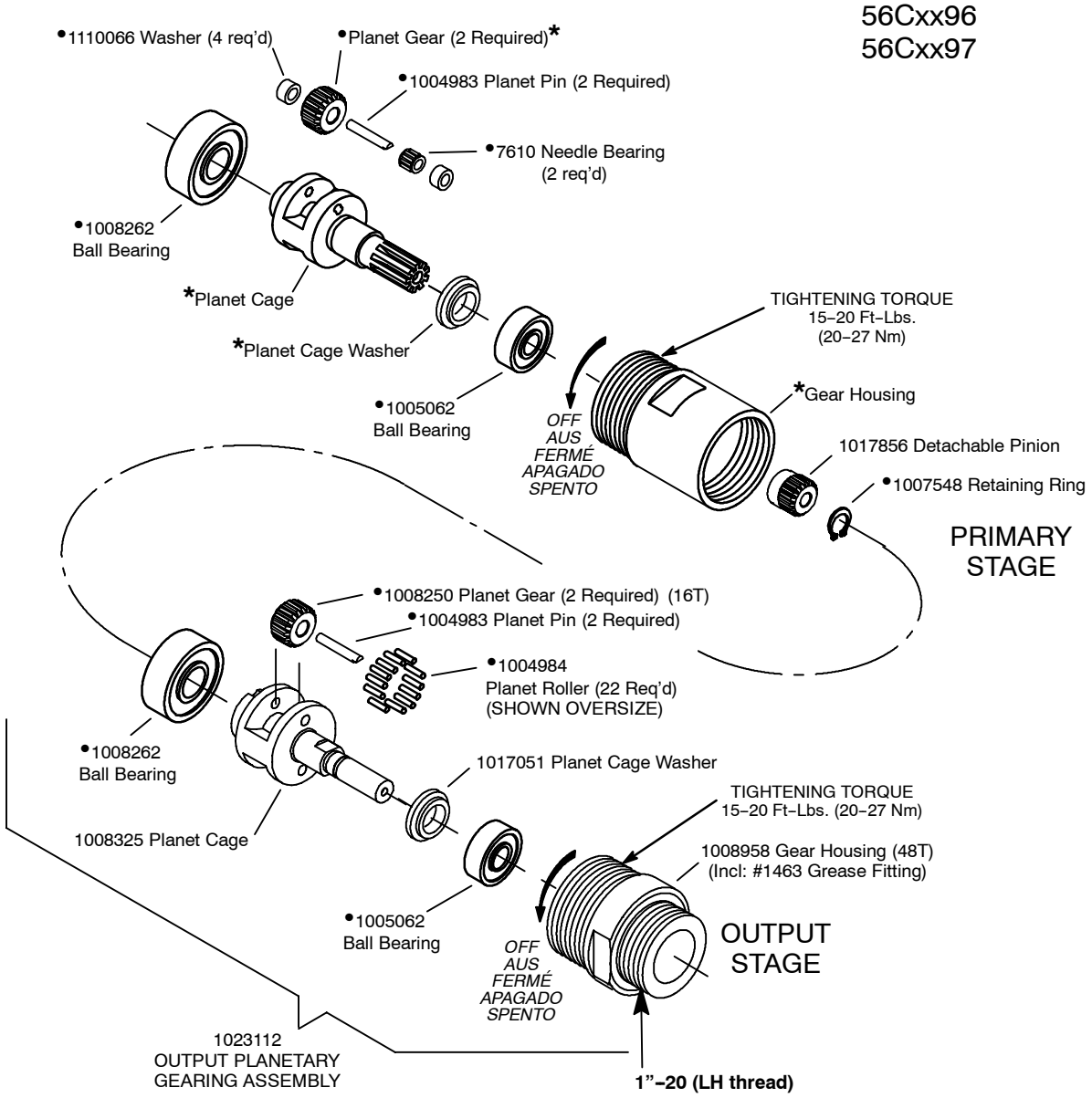
**( * )**

| Part Name / Model Speed Code | 56Cxx91 | 56Cxx92 | 56Cxx93 | 56Cxx94 |
|---|---|---|---|---|
| GEAR ASSEMBLY (Complete) | 01–7048 | 01–7047 | 01–7046 | 1023122 |
| Pl. Cage Washer | 1017051 | 1017053 | 1017052 | 1017052 |
| (diameter): | (0.747") | (0.680") | (0.640") | (0.640") |
| Gear Housing | 1008958 | 1008957 | 1008957 | 1008951 |
| (num. teeth) | (48T) | (49T) | (49T) | (43T) |
| Planet Cage | 1008325 | 1008238 | 01–7027 | 1008950 |
| Planet Gears (2 ea.) | 1008250 | 1008252 | 1110139 | 1008952 |
| (num. teeth) | (16T) | (19T) | (21T) | (21T/15T) |

( • ) Indicates recommended spare part. Order one (1) or one set for every 6–10 tools. Small, easily lost or low cost parts should also be ordered on the basis of 3–4 per 10 tools.

**TERMINATIONS 70, 71, 72, 73 Only**

Double Stage Planetary Gearing
*(Screwdriver Clutch models):*
56Cxx95
56Cxx96
56Cxx97

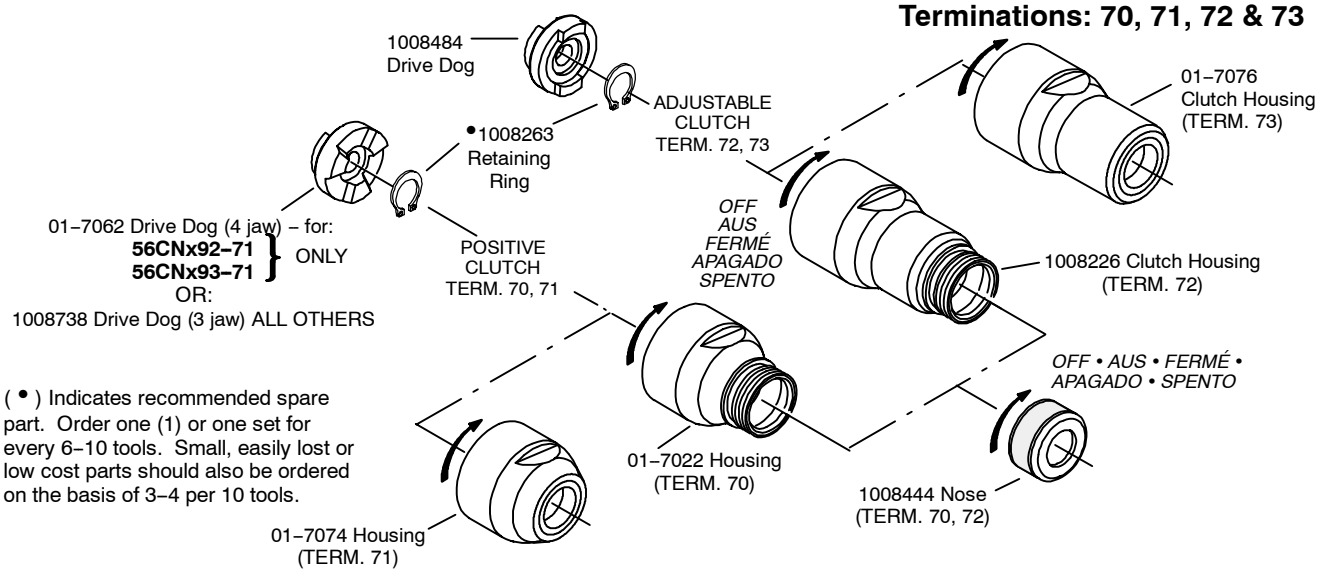



**( * )** PRIMARY STAGE

| Part Name / Model Speed Code | 56Cxx95 | 56Cxx96 | 56Cxx97 |
|---|---|---|---|
| PRIMARY STAGE GEAR ASSEMBLY (Complete) | 1025583 | 1025584 | 1025605 |
| Pl. Cage Washer (diameter): | 1017051 (0.747") | 1017053 (0.680") | 1110138 (0.646") |
| Gear Housing (num. teeth) | 1008955 (48T) | 1008956 (49T) | 1008956 (49T) |
| Planet Cage | 1017842 | 1017841 | 1110141 |
| Planet Gears (2 ea.) (num. teeth) | 1008250 (16T) | 1008252 (19T) | 1110139 (21T) |

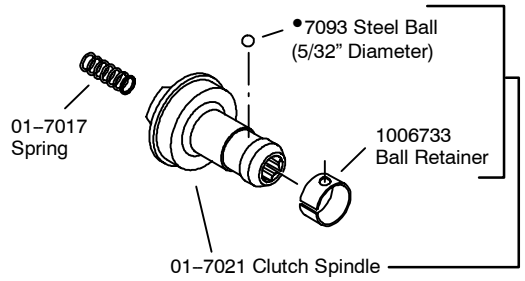
( • ) Indicates recommended spare part. Order one (1) or one set for every 6–10 tools. Small, easily lost or low cost parts should also be ordered on the basis of 3–4 per 10 tools.

## Terminations: 70, 71, 72 & 73

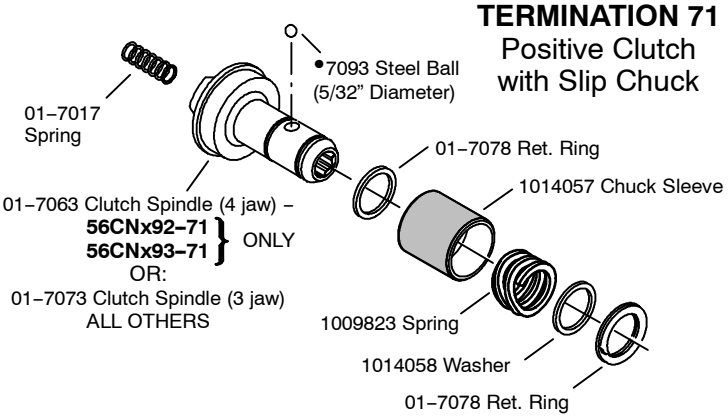



( • ) Indicates recommended spare part. Order one (1) or one set for every 6–10 tools. Small, easily lost or low cost parts should also be ordered on the basis of 3–4 per 10 tools.

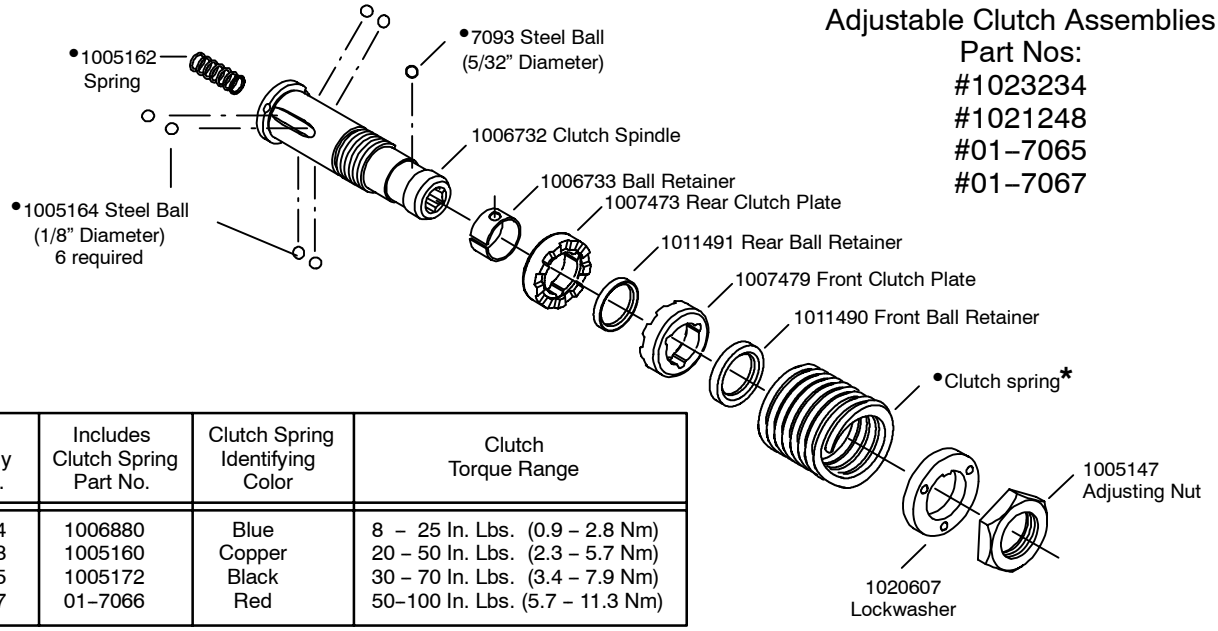
## TERMINATION 70
Positive Clutch
Part No. 01–7020




## TERMINATION 71
Positive Clutch
with Slip Chuck




## TERMINATION 72
Adjustable Clutch Assemblies
Part Nos:
#1023234
#1021248
#01–7065
#01–7067

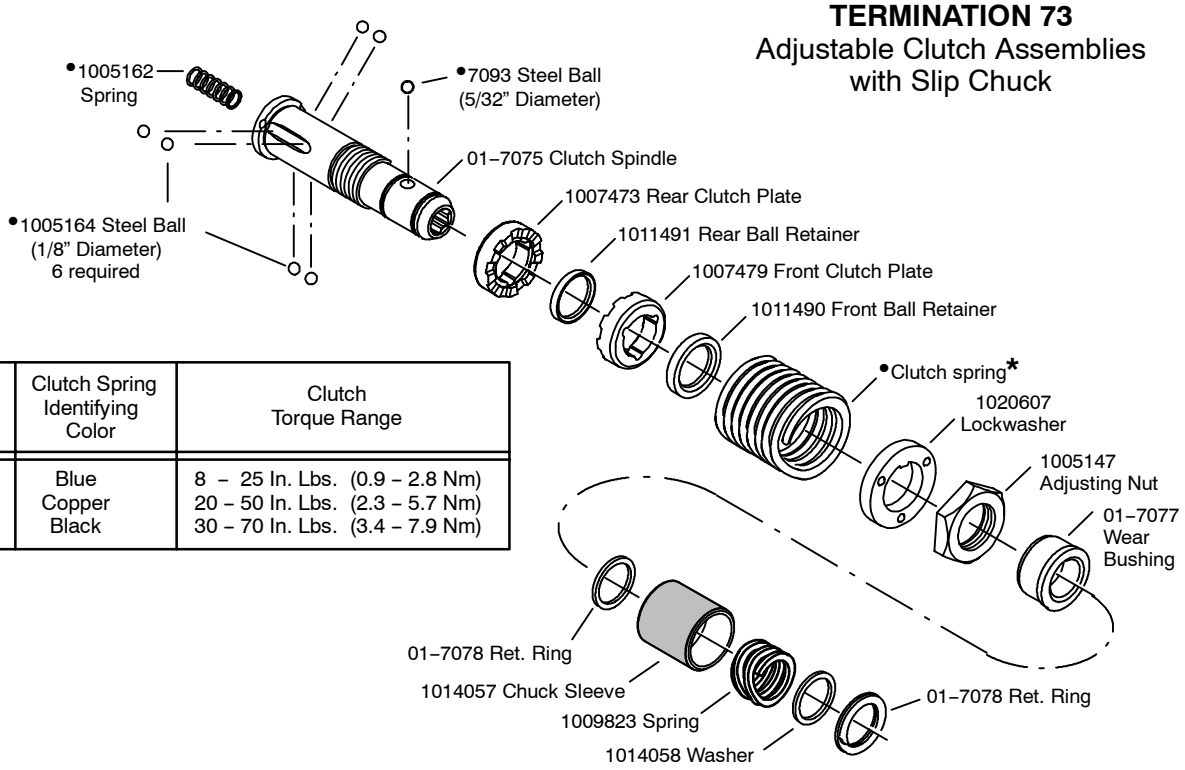



**( * )**

| Clutch Assembly Part No. | Includes Clutch Spring Part No. | Clutch Spring Identifying Color | Clutch Torque Range |
|---|---|---|---|
| 1023234 | 1006880 | Blue | 8 – 25 In. Lbs. (0.9 – 2.8 Nm) |
| 1021248 | 1005160 | Copper | 20 – 50 In. Lbs. (2.3 – 5.7 Nm) |
| 01–7065 | 1005172 | Black | 30 – 70 In. Lbs. (3.4 – 7.9 Nm) |
| 01–7067 | 01–7066 | Red | 50–100 In. Lbs. (5.7 – 11.3 Nm) |

# DOTCO
## 56C Series Drills
## Tool Terminations

### TERMINATION 73
Adjustable Clutch Assemblies with Slip Chuck



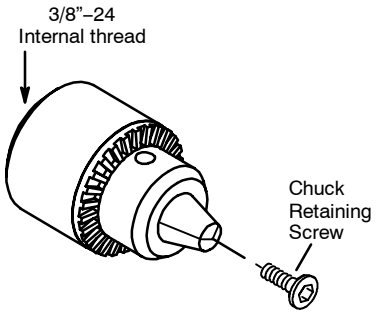

**( * )**

| Clutch Spring Part No. | Clutch Spring Identifying Color | Clutch Torque Range |
|---|---|---|
| 1006880 | Blue | 8 – 25 In. Lbs. (0.9 – 2.8 Nm) |
| 1005160 | Copper | 20 – 50 In. Lbs. (2.3 – 5.7 Nm) |
| 1005172 | Black | 30 – 70 In. Lbs. (3.4 – 7.9 Nm) |

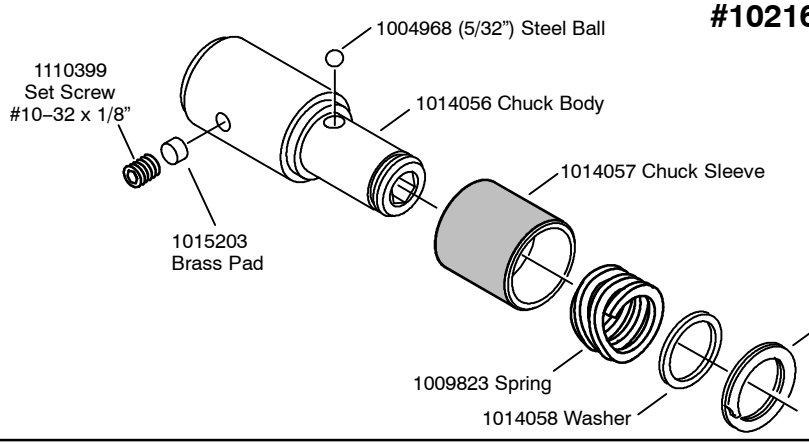
### Drill Chuck Terminations – 38, 42, 47, 51, 52 & 53

**Drill Chuck Options, includes:**

| Termination Number | Chuck Part Number | Chuck Capacity | Spindle Wrench | Chuck Ret. Screw | Jacobs Description |
|---|---|---|---|---|---|
| **–38** | #1005078 (w/1005079 Chuck Key) | 0 – 1/4" | #1014471 | #7095 | **#1BA** (smooth sleeve) |
| **–42** | #1001505 (w/1005023 Chuck Key) | 0 – 1/4" | #1014471 | #7095 | **#7BA** (fluted sleeve) |
| **–47** | #863420 (w/Jacobs #KG Chuck Key) | 0 – 5/16" | #1014471 | #7095 | **#20BA** (fluted sleeve) |
| **–51** | #1001252 (w/1006375 Chuck Key) | 0 – 3/8" | #1014471 | #1110366 | **#41BA** (smooth sleeve) |
| **–52** | #14–1492 Keyless Chuck | 0 – 1/4" | — | — | — |
| **–53** | #1009726 (w/1005022 Chuck Key) | 5/64" – 1/2" | #1014471 | #1110366 | **#33BA** (fluted sleeve) |




### #1021679 Quick Change "Slip Chuck" – Termination 54




| Termination Number | QC Chuck Part Number | Output Spindle | Thread Mount |
|---|---|---|---|
| **–54** | #1021679 | 1/4" hex (internal) | 3/8"–24 |

# 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.

Detroit, Michigan
**Apex Tool Group**
**Sales & Service Center**
2630 Superior Court
Auburn Hills, MI 48326
Tel: (248) 393-5640
Fax: (248) 391-6295

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

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

Los Angeles, California
**Apex Tool Group**
**Sales & Service Center**
6881 Stanton Avenue
Unit B
Buena Park, CA 90621
Tel: (714) 994-1491
Fax: (714) 994-9576

Seattle, Washington
**Apex Tool Group**
**Sales & Service Center**
2865 152nd Avenue N.E
Redmond, WA 98052
Tel: (425) 497-0476
Fax: (425) 497-0496

York, Pennsylvania
**Apex Tool Group**
**Sales & Service Center**
3990 East Market Street
York, PA 17402
Tel: (717) 755-2933
Fax: (717) 757-5063

Brazil
**Apex Tool Group**
**Sales & Service Center**
Av. Liberdade, 4055
Zona Industrial - Iporanga
18087-170 Sorocaba
SP Brazil
Tel: +55 15 2383929
Fax: +55 15 2383260

Canada
**Apex Tool Group**
**Sales & Service Center**
7631 Bath Road
Mississauga
Ontario L4T 3T1
Canada
Tel: (866) 691-6212
Tel: (905) 673-4400

China
**Apex Power Tool Trading**
**(Shanghai) Co., Ltd**
Building A8, No. 38
Dongsheng Road
Pudong, Shanghai
China 201201
Tel: +86-21-60880320
Fax: +86-21-60880313

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**Apex Tool Group**
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Piccadilly, Tamworth
Staffordshire B78 2ER
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Fax: +44 1827 8741 28

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**Hungaria Kft**
Platànfa u.2
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India
**Apex Power Tools India**
**Private Limited**
Gala No. 1, Plot No. 5
S. No. 234, 235 & 245
Indialand Global
Industrial Park
Taluka-Mulsi, Phase I
Hinjawadi, Pune 411057
Maharashtra, India
Tel: +91 20 66761111

Mexico
**Apex Tool Group México**
S. **de R.L. de C.V.**
Vialidad El Pueblito #103
Parque Industrial Querétaro
Querétaro, QRO 76220
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**1000 Lufkin Road**
**Apex, NC 27539**
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**Fax: 919-387-2614**
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