



**19P Series**



**19T Series**

## For this Instruction Manual

This Instruction Manual is the Original Instruction Manual intended for all persons who will operate and maintain these tools.

This Instruction Manual

- provides important notes for the safe and efficient use of these tools.
- describes the function and operation of the 19P and 19T series tools.
- serves as a reference guide for technical data, service intervals and spare parts ordering.
- provides information on optional equipment.

### Identification text:

19P / 19T represents all models of the pistol grip pneumatic screwdrivers as described in this manual

→ indicates a required action

• indicates a list

<.> indicates a reference number from the exploded parts drawings

**Arial** indicates an important feature or instruction written in **Arial Bold**

### Identification graphic:

→ indicates a directional movement

↓ indicates a function or force

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	<b>19</b>	<b>X</b>	<b>X</b>	<b>A</b>	<b>XX</b>	<b>Q</b>
<u>Tool Series</u> <b>19</b>						
<u>Handle</u> <b>P</b> = Pistol Grip P-Handle <b>T</b> = Pistol Grip T-Handle						
<u>Tool Type</u> <b>C</b> = Combination (Trigger/Push-To-Start) <b>T</b> = Trigger						
<u>Clutch</u> <b>A</b> = Clecomatic Clutch						
<u>Maximum Torque</u> <b>02</b> = 2.1 Nm <b>06</b> = 5.1 Nm <b>03</b> = 2.9 Nm <b>07</b> = 6.8 Nm <b>04</b> = 4.5 Nm <b>09</b> = 8.9 Nm <b>05</b> = 5.1 Nm <b>15</b> = 14.7 Nm						
<u>Output Drive</u> <b>Q</b> = Quick Change Chuck						

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# 1 Safety

## 1.1 Warnings and notes

Warning notes are identified by a signal word and a pictogram.

- The signal word indicates the severity and probability of the impending danger.
- The pictogram indicates the type of danger.

WARNING!



-----  
**WARNING** identifies a potentially **hazardous** situation which, if not avoided, may result in serious injury.  
-----

CAUTION!



-----  
**CAUTION** identifies a potentially **hazardous** situation which, if not avoided, may result in minor or moderate injury or property and environmental damage.  
-----

NOTE



-----  
**NOTE** identifies general information which may include application tips or useful information but no hazardous situations.  
-----



-----  
Important information that must be read and understood by all personnel installing, operating or maintaining this equipment.  
-----

## 1.2 Basic requirements for safe working practices



All personnel involved with the installation, operation or maintenance of these tools must read and understand all safety instructions contained in this manual. Failure to comply with these instructions could result in serious injury or property damage.

These safety instructions are not intended to be all inclusive. Study and comply with all applicable National, State and Local regulations.

---

### CAUTION! Work Area:



- Ensure there is enough space in the work area.
- Keep the work area clean.
- Keep the work area well ventilated.

### Personnel Safety:

- Inspect the air supply hoses and fittings. Do not use damaged, frayed or deteriorated hoses.
- Make sure the air supply hose is securely attached to the tool.
- Ensure a secure standing position and maintain balance.
- Make sure the throttle is positioned relative to the head so the throttle will not become wedged against an adjacent object in the ON position due to torque reaction.
- If the tool is to be reversed, locate the throttle in a neutral position to prevent entrapment.
- Keep the tool clean and dry to provide the best possible grip.
- Firmly grasp the handle of the 19P/19T and apply the bit to the application before starting.
- Be prepared for high short-term reaction torques.

### Safety working with and around fastening tools:

- Use only power tool sockets and bits available from Apex Tool Group.
  - Inspect socket or bit for visible damage and cracks. Replace damaged items immediately.
  - Disconnect the air supply before installing or replacing the socket or bit.
  - Do not attach the socket or bit at a slant.
  - Make sure the socket or bit is fully assembled on the drive and locked in position.
- 

## 1.3 Operator training

All personnel must be properly trained before operating the 19P/19T tools. The 19P/19T tools are to be repaired by fully trained personnel only.

## 1.4 Personal protective equipment

When working



- Wear eye protection to protect against flying metal splinters.
- Wear hearing protection

Danger of injury by being caught by moving equipment.



- Wear a hairnet
- Wear close fitting clothing
- Do not wear jewelry

## **1.5 Designated use**

The 19P/19T are designed exclusively for fastening and releasing threaded fasteners.

The 19P/19T series screwdrivers are equipped with an adjustable Clecomatic clutch. The tool will shut off the instant the clutch reaches its adjustable preset torque. This action provides an accurate method of controlling torque without sacrificing tool speed.

- Do not modify the 19P/19T, any guard or accessory.
- Use only with accessory parts which are approved by the manufacturer.
- Do not use as a hammer, pry-bar or any other improper usage.

## **1.6 Codes and standards**

It is mandatory that all national, state and local codes and standards be followed.

## **1.7 Noise and vibration**

Noise level  $\leq 79$  dB(A) free speed (without load) according to ISO 12100: 2011

Vibration values  $< 2.5$  m/s<sup>2</sup> according to ISO 12100: 2011



## Scope of Supply, Transport and Storage

**2 Scope of supply, transport and storage****2.1 Items supplied**

Check shipment for transit damage and ensure that all items have been supplied:

- 1 19P or 19T
- 1 PL12-1012EN instruction manual
- 1 Declaration of Conformity
- 1 Lubrication sheet
- 1 Warranty statement

**2.2 Transport**

Transport and store the 19P/19T in the original packaging. The packaging is recyclable.

**2.3 Storage**

For short term storage (less than 2 hours) and protection against damage:

- Place the 19P/19T in a location on the workbench to avoid accidental depression of the trigger.  
or
- Suspend the 19P/19T from a suitable balancer or tool positioner.

For storage longer than 2 hours:

- Disconnect the air supply from the 19P/19T

Object	Time Period	Storage Temperature
19P without air supply	No guideline	-13°F to 104°F (-25°C to 40°C)
19T without air supply	No guideline	-13°F to 104°F (-25°C to 40°C)

### 3 Product description

#### 3.1 General description

- Pistol grip or “T” handle pneumatic powered screwdriver
- Trigger actuated
- Clockwise/counterclockwise rotation
- 19PCA and 19TCA models: trigger allowed push-to-start with adjustable Clecomatic clutch  
19PTA and 19TTA models: trigger start with adjustable Clecomatic clutch
- Low vibration level

#### 3.2 Operation and functional elements

This section describes the operational and functional elements of the 19P/19T.



Ref.	Description
1	Air Inlet
2	Adjustable Reversing Lever
3	Trigger
4	Two Interchangeable soft-touch grip sizes
5	Clecomatic Clutch
6	Motor and Gearing
7	Quick Change Chuck

**4 Accessories**



Suspension Bail  
Part Number: 931962



Torque Signal Kit  
Clecomatic clutch models only  
Part Number: 302020PT



TVP-100 Series Torque Verifier  
Part Number:  
TVP-110-15-U (115VAC) EN  
TVP-110-30-U (230 VAC) EN



Small Handle  
Part Number: 207595PT

## 5 Before initial operation

### 5.1 Ambient conditions

Ambient temperature: 41°F (5°C) to a maximum of 104°F (40°C)

Acceptable relative humidity: 25% to 90%, non-condensing

### 5.2 Air supply

Parameter	Description
Air Hose	Minimum inside diameter: 3/16" (4,7 mm) Maximum length: 16.4' (5 m)
Working pressure range	58 to 101.5 psi (400 to 700 kPa) Recommended: 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.

**NOTE**



To attain consistent results, maintain a constant working pressure using a suitable air line unit consisting of a filter, regulator and lubricator.

- The inside diameter of the air hose must be free of residue, clean if necessary.
- Spray a few drops of light air tool oil into the air inlet adapter.
- Adjust the lubricator to a minimum setting to reduce the amount of excess oil in the exhaust air.

#### Oil identification

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

### 5.3 Connecting the air supply to the tool

**WARNING!**



The air hose can disconnect from the tool by itself and whip around uncontrollably.

- Turn off the compressed air before connecting to the tool.
- Securely connect the air hose to the tool.
- Turn on the compressed air.

## 5.4 Tool set up

The tool must be configured for the application.

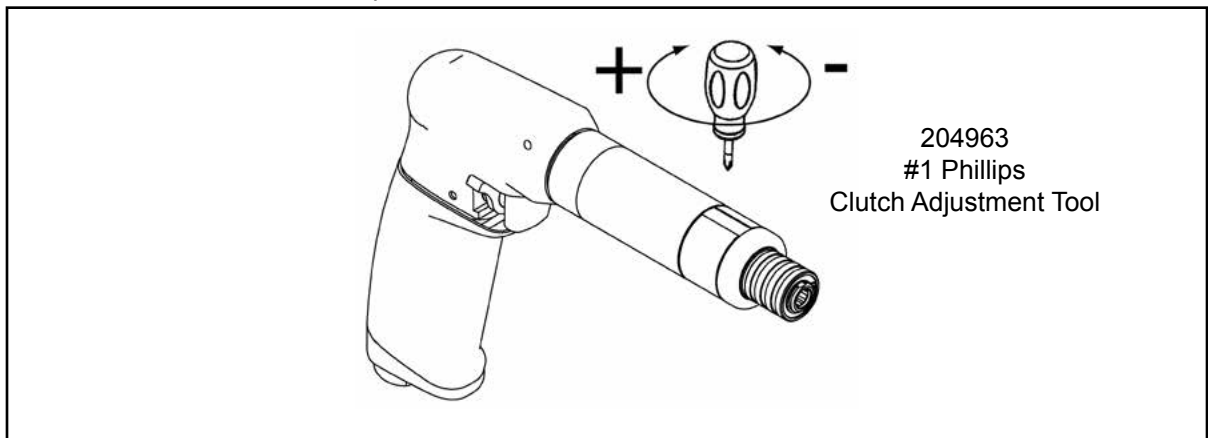
### 5.4.1 Setting the torque

**CAUTION!**



Danger of injury from accidental start up.  
Turn off the compressed air before adjusting the clutch.

→ Using the clutch adjustment tool provided, turn clockwise for maximum torque or counter-clockwise for minimum torque.



Note: For best results, start from minimum torque and adjust in the maximum direction until desired torque is achieved.

## **6 First operation**

### **6.1 Putting into use**

- Make sure the air supply is securely attached and the compressor is turned on.
- Make sure the reverse lever is in the correct position.
- Place the socket or bit on the application and depress the trigger to start the rundown.
- When the tool shuts off after reaching the set torque, release the trigger.
- Remove the tool from the application.

## 7 Troubleshooting

Malfunction	Possible causes	Remedy
Tool does not start	No or low air pressure	→ Make sure there is adequate air pressure at the tool air inlet
	Reversing lever out of position	→ Make sure the reversing lever is in the clockwise or counterclockwise position
	Trip rod spring out of position	→ Tool disassembly required
	Broken gears	→ Tool disassembly required (parts replacement)
Tool does not shut off	Torque set to high	→ Reduce the torque setting
	Working pressure < 58 psi (400 kPa)	→ Increase the working air pressure
Unable to adjust torque	Teeth on adjusting wrench worn or broken	→ Replace adjusting wrench
	Teeth on adjustment nut worn or broken	→ Clutch disassembly required (parts replacement)
Tool loses power	Reduced air pressure	→ Check air supply line for any obstructions
	Lack of lubrication	→ Check the air line lubricator to make sure it is full of lubricant and is working properly
	Motor exhaust air is obstructed	→ Clean or replace bronze mufflers
	Swollen rotor blades from excessive moisture	→ Check the air line filter, empty reservoir if necessary
	Worn rotor blades	→ Tool disassembly required (parts replacement)
	Worn gears or bearings	→ Tool disassembly required (parts replacement)
Air leak at inlet adapter	Loose inlet adapter	→ Tighten inlet adapter
	Worn o-ring on inlet adapter	→ Replace o-ring

## 8 Maintenance

CAUTION!



Danger of injury from accidental start up.  
Turn off the compressed air before performing any maintenance.

### 8.1 Service schedule

Only qualified and trained personnel are permitted to perform maintenance on these tools.

Regular maintenance reduces operating faults, repair costs and downtime. In addition to the following service schedule, implement a safety related maintenance program that takes the local regulations for repair and maintenance for all operating phases of the tool into account.

Maintenance Interval	Rundowns	Designation
Daily	Daily	<ul style="list-style-type: none"> <li>→ Visual inspection of air supply hose and connections</li> <li>→ Inspect airline filter, regulator and lubricator for proper operation</li> <li>→ Check the tool for excessive vibration or unusual noises</li> <li>→ Visual inspection of all external components of the tool</li> </ul>
W1	100,000	<ul style="list-style-type: none"> <li>→ Inspect the air hose for damage or wear</li> <li>→ inspect the square drive output spindle for damage or wear</li> <li>→ Inspect the air inlet adapter for a secure fit</li> <li>→ Check the maximum free speed</li> </ul>
W2	500,000	<ul style="list-style-type: none"> <li>→ Check individual parts and replace if necessary</li> <li>→ Replace O-rings and seals</li> <li>→ Clean bronze mufflers</li> </ul>
W3	1,000,000	<ul style="list-style-type: none"> <li>→ Check individual parts and replace if necessary</li> <li>→ Throttle valve</li> <li>→ Motor</li> <li>→ Gearing</li> <li>→ Clutch</li> <li>→ Quick change chuck</li> </ul>

This maintenance schedule uses values that are valid for most applications. For a specific maintenance interval, refer to 8.1.1 Calculating a customer-specific maintenance plan.



### 8.1.1 Calculating a customer specific maintenance plan

A service interval W(1, 2, 3) depends on the following factors:

Factor	Value assumed in "Service Schedule"	Description
<b>V</b>	V1 = 100,000 V2 = 500,000 V3 = 1,000,000	Number of rundowns after a maintenance measure is prescribed by Apex Tool Group.
<b>T1</b>	1.8 seconds	Specific rundown time, measured in life and endurance tests.
<b>T2</b>	2 seconds	Actual rundown time, depending on the hardness of the joint.
<b>S</b>	1; 2; 3	Number of shifts per day.
<b>VS</b>	750	Number of rundowns per shift.

T2, S and VS are variable factors and can differ depending on the specific application.

Example for service interval W2:



After 500,000 rundowns (V),  
a specific rundown time of 1.8 seconds (T1)  
with an actual fastening time of 3 seconds (soft joint) and  
3 completed shifts per day and 750 rundowns per shift.

$$W(1, 2, 3) = \frac{V \times T1}{T2 \times S \times VS} \qquad W2 = \frac{500000 \times 1.8}{3 \times 3 \times 750} = 133 \text{ (days)}$$

You will need to perform the maintenance indicated as W2 after an operating time of 133 days.)

### 8.2 Lubricants

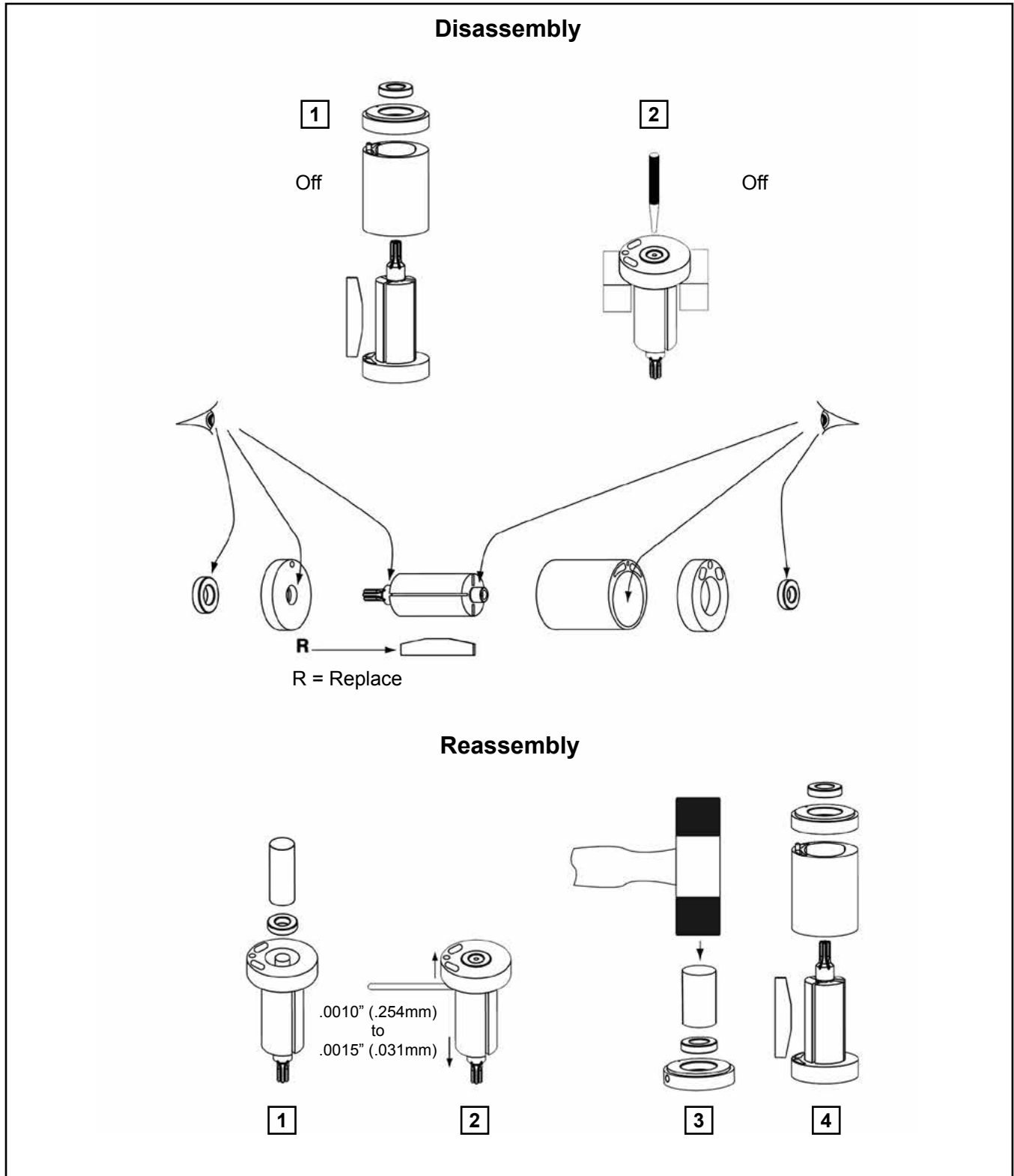
For proper function and long service life, use of the correct grease is essential.

**Grease lubricants recommended for this tool.**

Part No.	Packaged	Designation	Vendor
540450	18 oz. (0.51 kg)	Black Pearl EP-NLGI-0	Chevron
540395	2 oz. (0.06 kg)	Magnalube-G	Carleton-Stuart Corp.
513156	16 oz. (0.45 kg)	Magnalube-G	Carleton-Stuart Corp.
541444	2 oz. (0.06 kg)	Rheolube 363AX-1	Nye Lubricants, Inc.
541445	16 oz. (0.45 kg)	Rheolube 363AX-1	Nye Lubricants, Inc.

## 9 Repair instructions

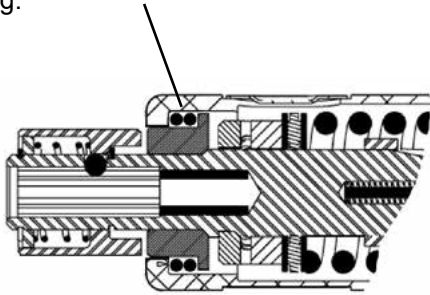
### 9.1 Motor disassembly and reassembly



## 9.2 Trip rod sizing

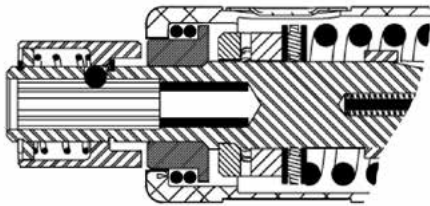
### Step 1: (Kit 301409)

Assemble (2) 863009 O-Rings on the Spindle Bushing.



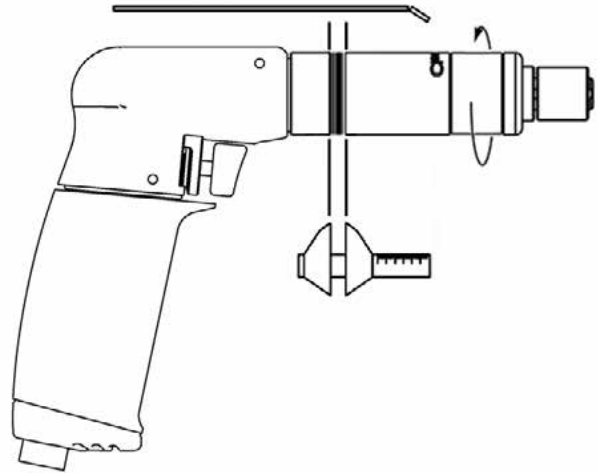
### Step 3: (19PCA & 19TCA models)

Remove 863009 O-Rings.



### Step 2:

Shorten the Trip Rod until the tool just begins to start with one (1) turn remaining on the Clutch Housing.

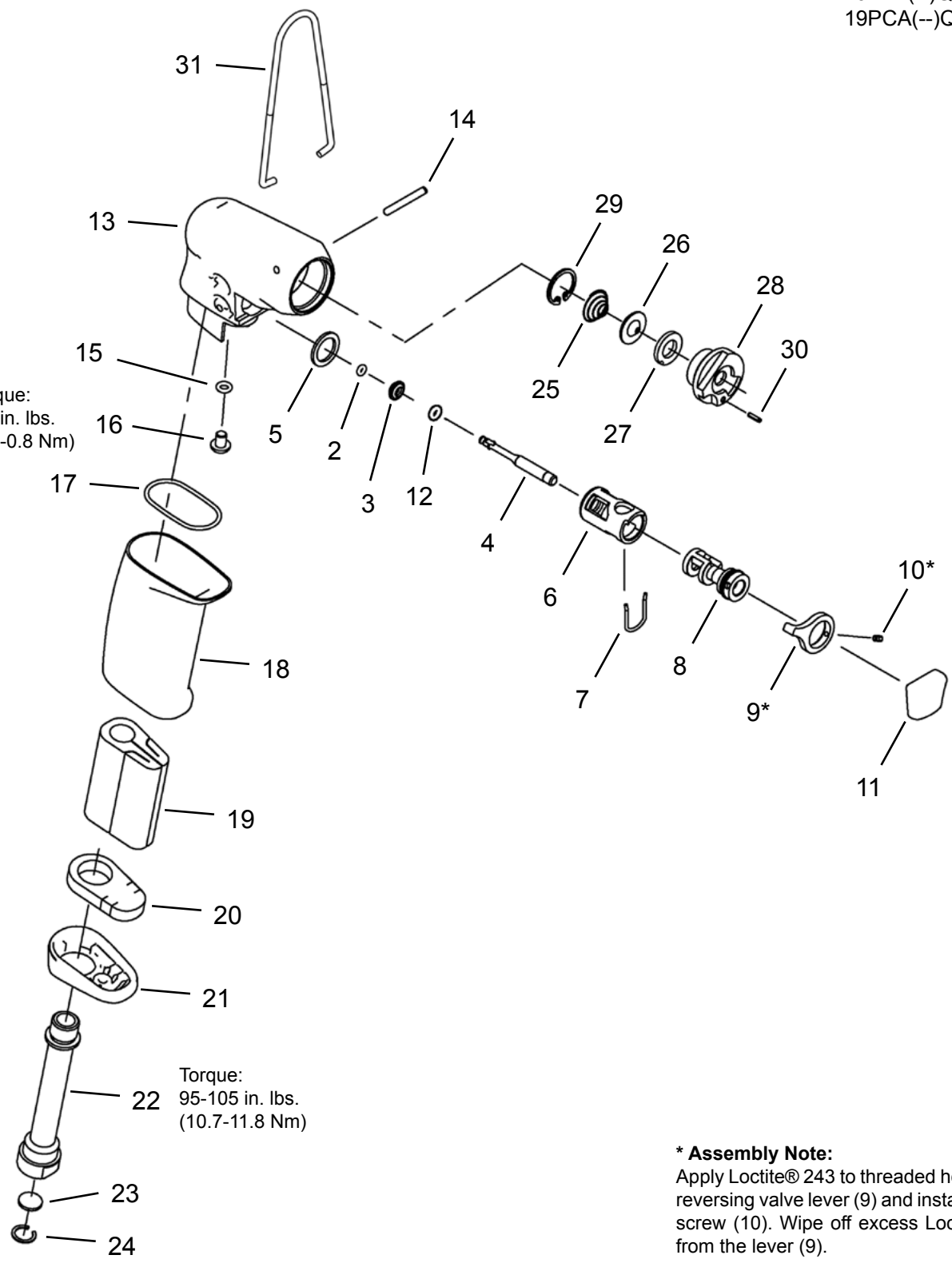


**10.1 19P Series Screwdriver**

**Models**  
19PTA(--Q)  
19PCA(--Q)

Torque:  
5-7 in. lbs.  
(0.6-0.8 Nm)

Torque:  
95-105 in. lbs.  
(10.7-11.8 Nm)



**\* Assembly Note:**  
Apply Loctite® 243 to threaded hole in reversing valve lever (9) and install set screw (10). Wipe off excess Loctite® from the lever (9).

**10.1 19P Series Screwdriver**

Ref	Number	#	X	EN
				Description
1	301963PT	1		Reversing Valve Assembly (includes Ref. 2 thru 12)
2	541528	1	3	O-Ring
3	207611PT	1		Tapered Throttle Valve
4	207612PT	1		Valve Stem
5	70193900	1		Washer
6	70191800	1		Reversing Valve Bushing
7	80047400	1	1	Spring Clip
8	207574PT	1		Reversing Valve
9	207597PT	1		Reversing Valve Lever
10	207598PT	1	2	Socket Head Set Screw
11	1110038	1	1	Trigger
12	93040033	1	3	O-Ring
13	207570PT	1		Pistol Grip Housing
14	847031	1	2	Dowel Pin
15	844302	1	3	O-Ring
16	812962	1	3	Screw
17	867926	1	3	O-Ring
18	207601PT	1		Large Pistol Grip Handle (Standard Equipment)
	207595PT *	1		Small Pistol Grip Handle (Option)
19	203563	1	3	Muffler Pad
20	866400PT	1	3	Muffler
21	207587PT	1		Muffler Cap
22	207602PT	1		Inlet Adapter - Large Handle (Standard Equipment)
	207588PT *	1		Inlet Adapter - Small Handle (Option)
23	905031 *	1	3	Screen
24	905599 *	1	3	Retaining Ring
25	203525	1	3	Shut-Off Valve Spring
26	203529	1		Shut-Off Valve
27	847675	1	3	Valve Seal
28	207594PT	1		Valve Manifold (includes Ref. 30)
29	847033	1	2	Retaining Ring
30	847548	1	2	Pin
31	931962	1	2	Suspension Bail

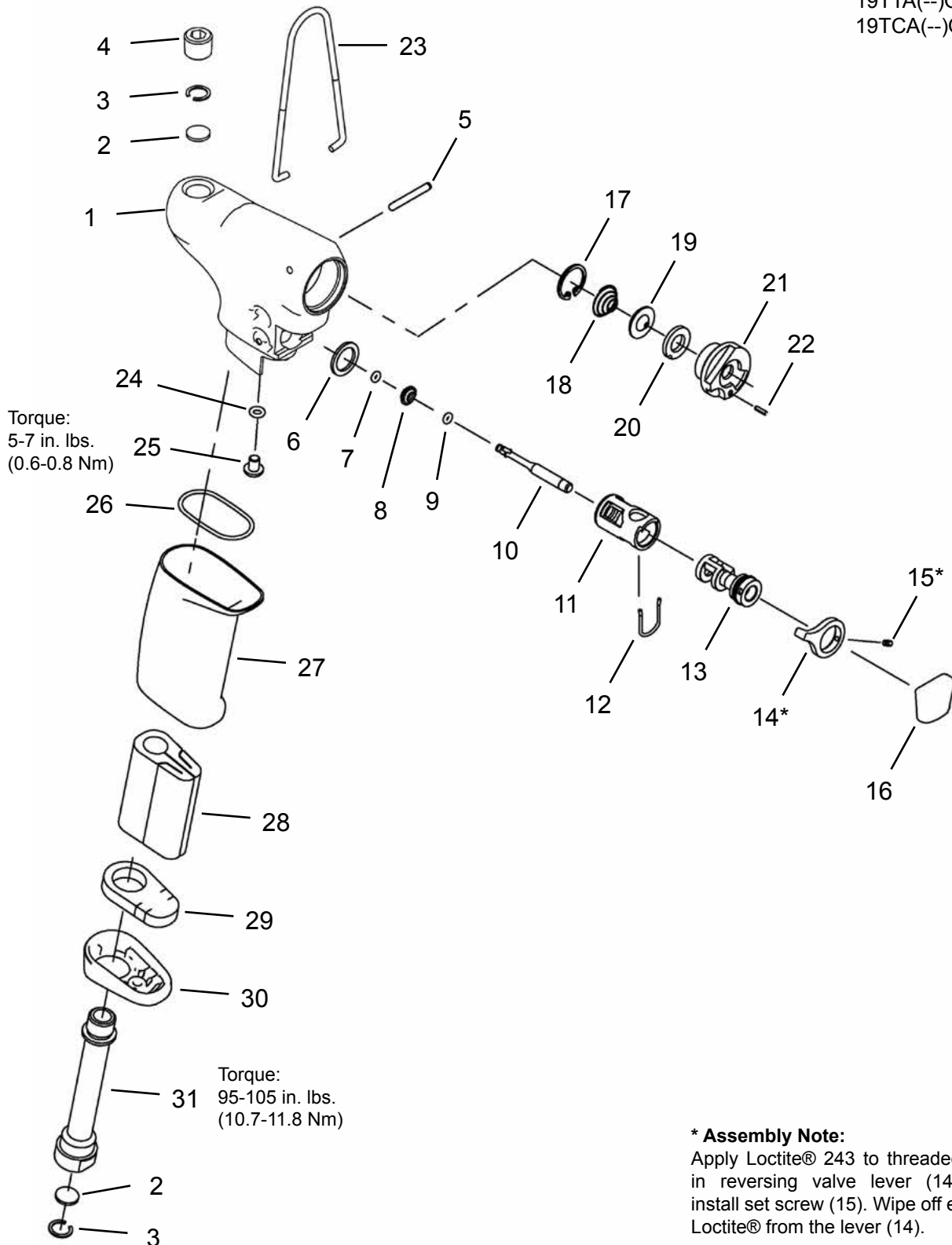
(#) Quantity

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

\* Note: Parts included in 302020PT small Pistol Grip handle kit

**10.2 19T Series Screwdriver**

**Models**  
19TTA(--)Q  
19TCA(--)Q



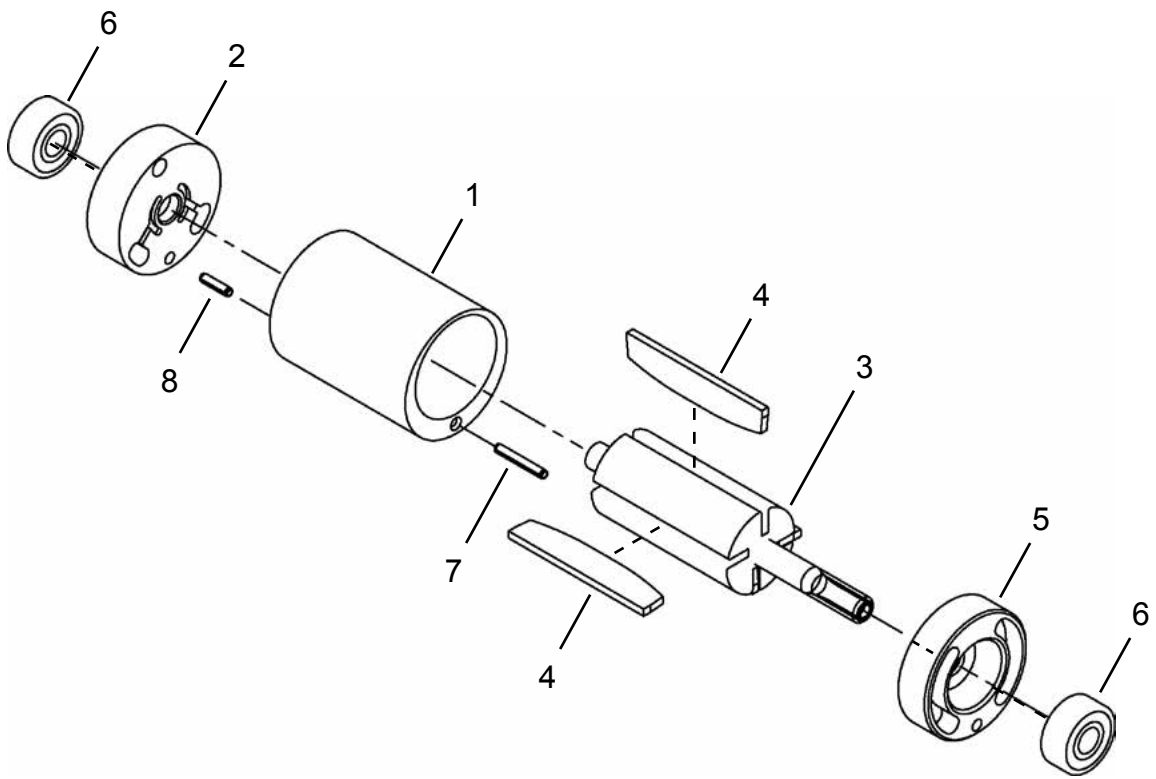
**10.2 19T Series Screwdriver**

Ref	Number	#	X	EN
				Description
--	302038PT	1		Housing and Trigger Assembly (includes Ref. 1-16)
1	207720PT	1		Pistol Grip Housing
2	905031	2	6	Screen
3	905599	2	6	Retaining Ring
4	867801	1	1	Pipe Plug (1/4")
5	847031	1	2	Dowel Pin
--	301963PT	1		Reversing Valve Assembly (includes Ref. 6-16)
6	70193900	1		Washer
7	541528	1	3	O-Ring
8	207611PT	1		Tapered Throttle Valve
9	93040033	1	3	O-Ring
10	207612PT	1		Valve Stem
11	70191800	1		Reversing Valve Bushing
12	80047400	1	1	Spring Clip
13	207574PT	1		Reversing Valve
14	207597PT	1		Reversing Valve Lever
15	207598PT	1	2	Socket Head Set Screw
16	1110038	1	1	Trigger
17	847033	1	2	Retaining Ring
18	203525	1	3	Shut-Off Valve Spring
19	203529	1		Shut-Off Valve
20	847675	1	3	Valve Seal
21	207594PT	1		Valve Manifold (includes Ref. 30)
22	847548	1	2	Pin
23	931962	1	2	Suspension Bail
24	844302	1	3	O-Ring
25	812962	1	3	Screw
26	867926	1	3	O-Ring
27	207601PT	1		Large Pistol Grip Handle (Standard Equipment)
	207595PT	1		Small Pistol Grip Handle (Option)
28	203563	1	3	Muffler Pad
29	866400PT	1	3	Muffler
30	207587PT	1		Muffler Cap
31	207602PT	1		Inlet Adapter - Large Handle (Standard Equipment)
	207588PT	1		Inlet Adapter - Small Handle (Option)

(#) Quantity

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

**10.3 Motor Assembly**





**10.3 Motor Assembly**

Ref	Number	#	X	EN	
				Description	
--	Table 10.3	1		Motor Assembly	
1	203504	1		Cylinder	
2	205960	1		Rear Bearing Plate	
3	Table 10.3	1		Rotor	
4	203615PT	4	12	Rotor Blade	
5	203641	1		Front Bearing Plate	
6	842768	2	4	Ball Bearing	
7	844897	1	2	Front Cylinder Pin	
8	847548	1	2	Rear Cylinder Pin	

(#) Quantity

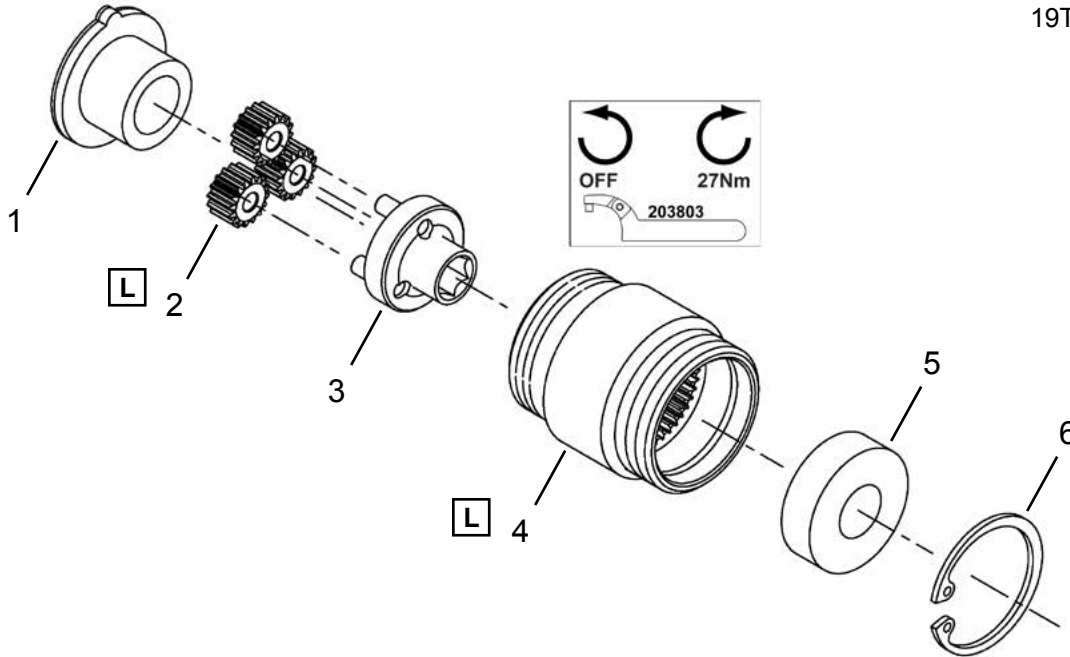
(X) Recommended Spare Parts (quantity shown based on 1-5 tools in operation)

**Table 10.3**

Ref.	Description	#	19(--) <b>A02Q</b>		19(--) <b>A03Q</b>		19(--) <b>A04Q</b>	
			#	19(--) <b>A05Q</b>	#	19(--) <b>A09Q</b>	#	19(--) <b>A06Q</b>
--	Motor Assembly	1	301972PT	1	301973PT	1	301974PT	
3	Rotor	1	203545	1	203547	1	203546	

**10.4 301967PT Gearing Assembly**

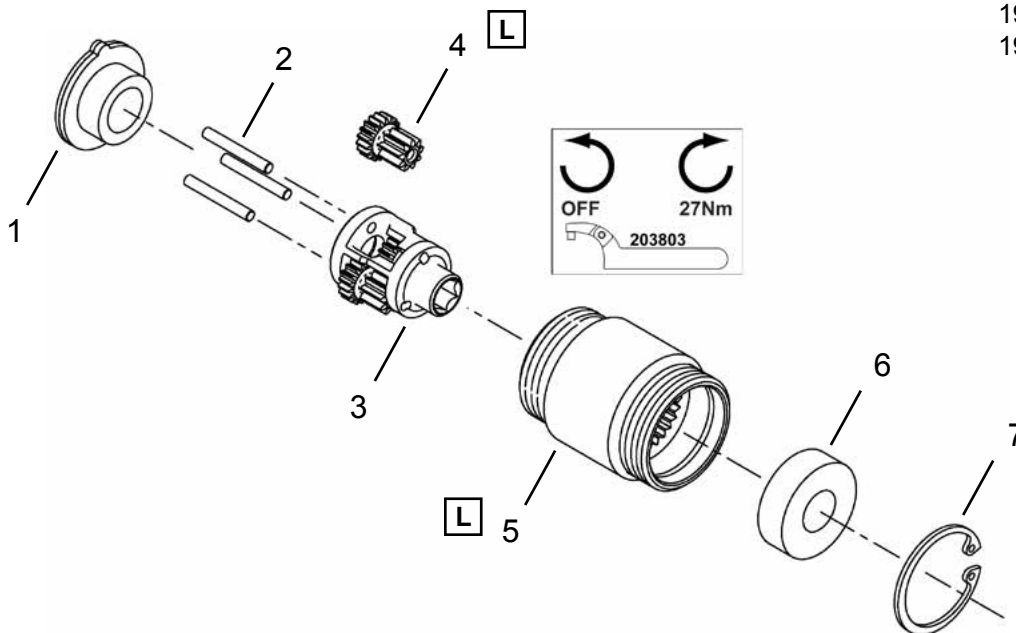
**Models**  
19PCA02Q  
19PTA02Q  
19TCA02Q  
19TTA02Q



**L** Lubricate with 540450 Grease (18 oz. can)

**10.5 301086 Gearing Assembly**

**Models**  
19PCA03Q  
19PTA03Q  
19TCA03Q  
19TTA03Q



**L** Lubricate with 540450 Grease (18 oz. can)

**10.4 301967PT Gearing Assembly**

Ref	Number	#	X	EN
				Description
--	301967PT	1		Gear Case Assembly (6.875:1)
1	204136PT	1		End Plate Spacer
2	207619PT	3	6	Idler Gear (16T)
3	207620PT	1		Open Spider
4	205964	1		Gear Case
5	847595	1	2	Ball Bearing
6	619017	1	2	Retaining Ring

(#) Quantity

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

(T) Teeth

**10.5 301086 Gearing Assembly**

Ref	Number	#	X	EN
				Description
--	301086	1		Gear Case Assembly
1	203646	1		End Plate Spacer
2	833862	3	6	Needle Roller
3	869155	1		Spider
4	869163	3	6	Idler Gear (18/9T)
5	205966	1		Gear Case
6	847595	1	2	Ball Bearing
7	619017	1	2	Retaining Ring

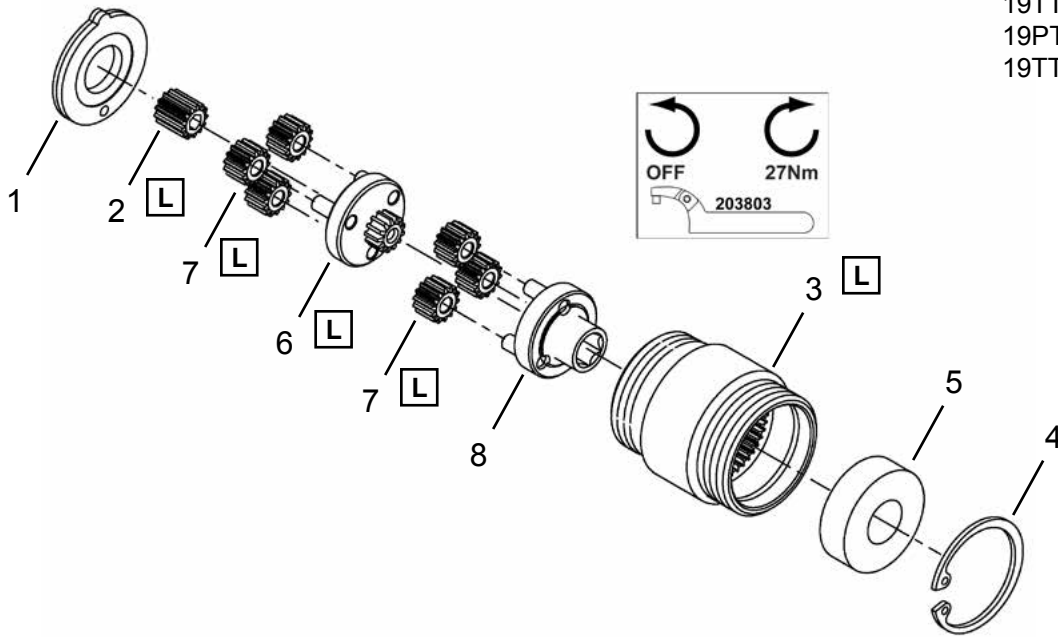
(#) Quantity

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

(T) Teeth

**10.6 301968PT Gearing Assembly**

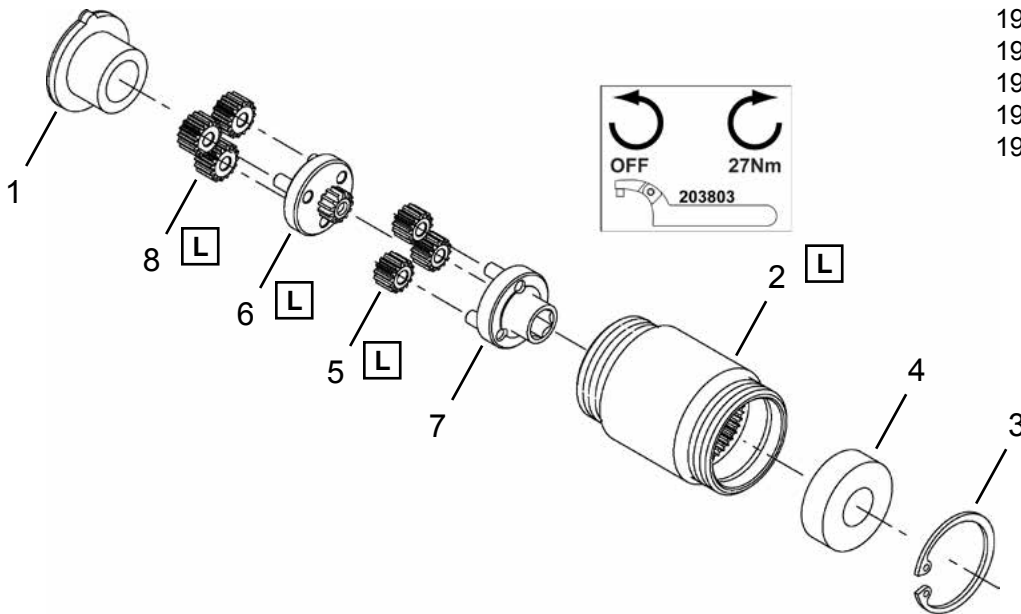
**Models**  
19PCA04Q  
19PTA04Q  
19TCA04Q  
19TTA04Q  
19PTA15Q  
19TTA15Q



**L** Lubricate with 540450 Grease (18 oz. can)

**10.7 301969PT Gearing Assembly**

**Models**  
19PCA05Q  
19PTA05Q  
19TCA05Q  
19TTA05Q  
19PCA07Q  
19PTA07Q  
19TCA07Q  
19TTA07Q



**L** Lubricate with 540450 Grease (18 oz. can)

**10.6 301968PT Gearing Assembly**

Ref	Number	#	X	EN
				Description
--	301968PT	1		Gear Case Assembly (17.256:1)
1	203644PT	1		End Plate Spacer
2	203919	1	2	Pinion Gear
3	205964	1		Gear Case
4	619017	1	2	Retaining Ring
5	847595	1	2	Ball Bearing
6	207615PT	1		Open Spider
7	207616PT	6	12	Idler Gear (14T)
8	207618PT	1		Open Spider

(#) Quantity

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

(T) Teeth

**10.7 301969PT Gearing Assembly**

Ref	Number	#	X	EN
				Description
--	301969PT	1		Gear Case Assembly (28.484:1)
1	204136PT	1		End Plate Spacer
2	205963	1		Gear Case
3	619017	1	2	Retaining Ring
4	847595	1	2	Ball Bearing
5	207616PT	3	6	Idler Gear (14T)
6	207617PT	1		Open Spider
7	207618PT	1		Open Spider
8	207619PT	3	6	Idler Gear (16T)

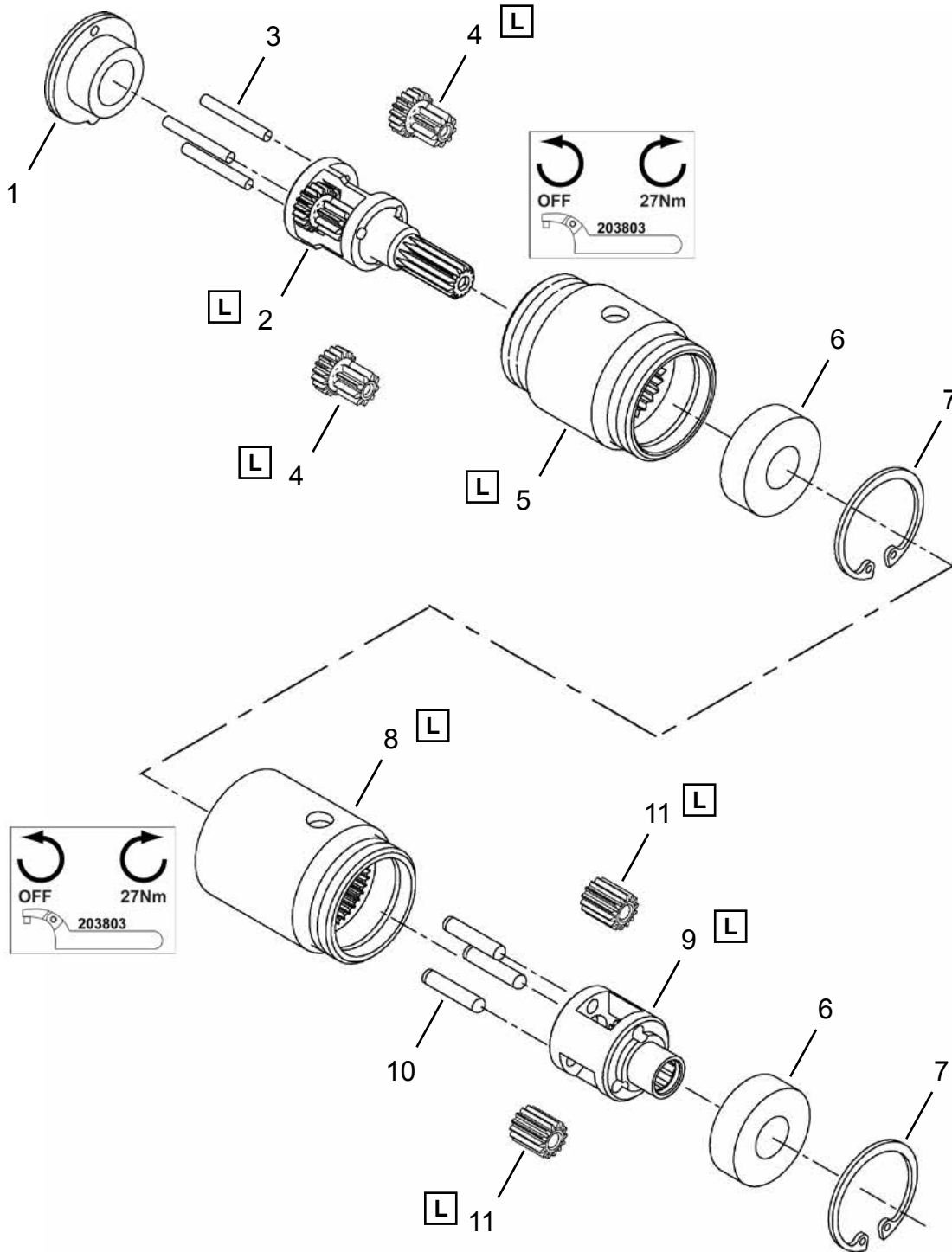
(#) Quantity

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

(T) Teeth

**10.8 302016PT Gearing Assembly**

**Models**  
19PCA09Q  
19PTA09Q  
19TCA09Q  
19TTA09Q



**L** Lubricate with 540450 Grease (18 oz. can)

**10.8 302016PT Gearing Assembly**

Ref	Number	#	X	EN
				Description
--	302016PT	1		Gear Case Assembly (41.538:1)
1	203646	1		End Plate Spacer
2	207701PT	1		Spider
3	833862	3	6	Needle Roller
4	207691PT	3	6	Idler Gear (18T and 9T)
5	205966	1		Gear Case
6	847595	2	4	Ball Bearing
7	619017	2	4	Retaining Ring
8	207702PT	1		Gear Case
9	204282	1		Gear Cage Spider
10	844111	3	6	Dowel Pin
11	203623PT	3	6	Idler Gear (14T)

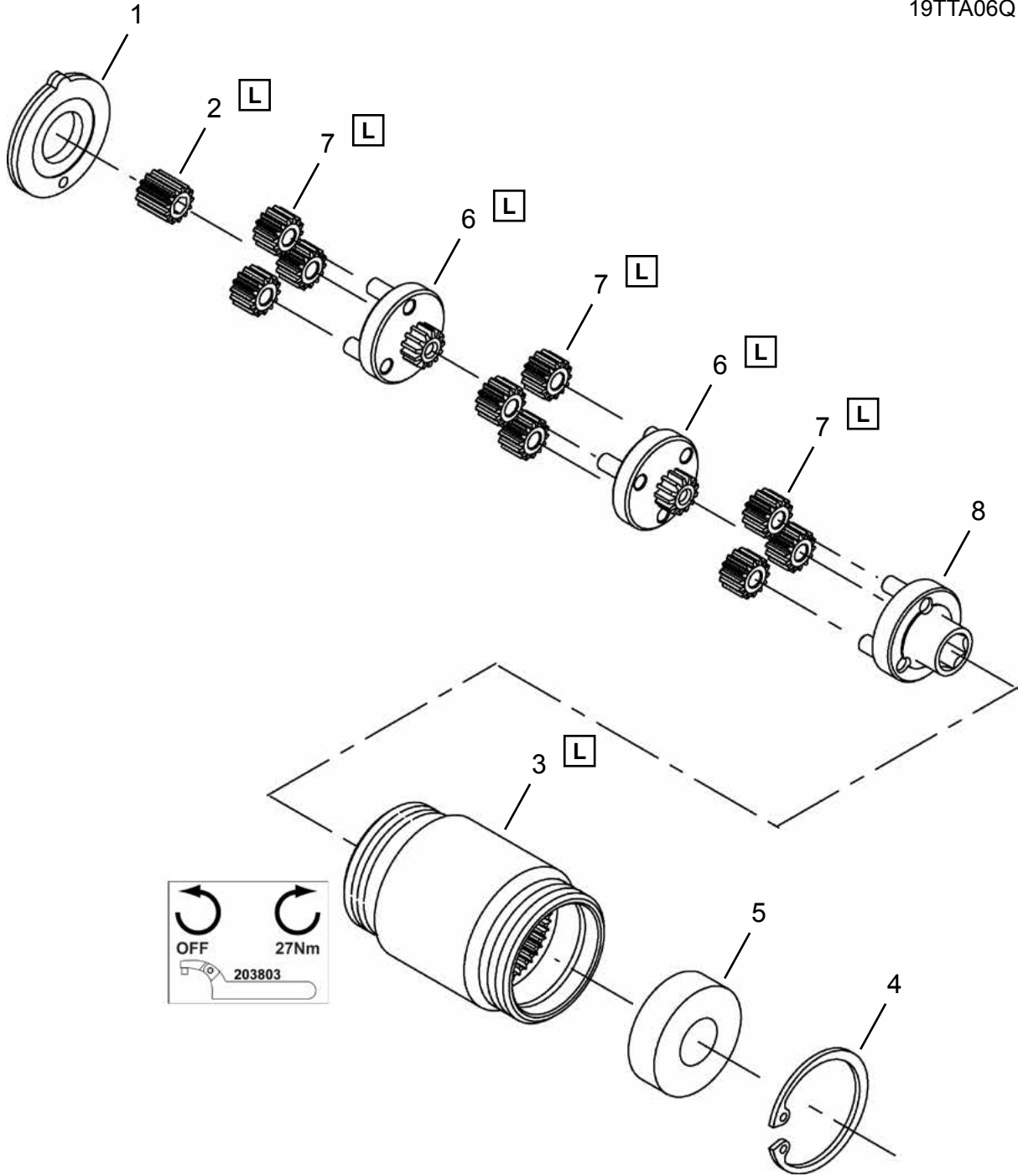
(#) Quantity

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

(T) Teeth

**10.9 301970PT Gearing Assembly**

**Models**  
19PCA06Q  
19PTA06Q  
19TCA06Q  
19TTA06Q



**L** Lubricate with 540450 Grease (18 oz. can)



**10.9 Gearing Assembly**

Ref	Number	#	X	EN
				Description
--	301970PT	1		Gear Case Assembly (70.680:1)
1	203644PT	1		End Plate Spacer
2	203919	1	2	Pinion Gear
3	205963	1		Gear Case
4	619017	1	2	Retaining Ring
5	847595	1	2	Ball Bearing
6	207615PT	2		Open Spider
7	207616PT	9	18	Idler Gear (14T)
8	207618PT	1		Open Spider

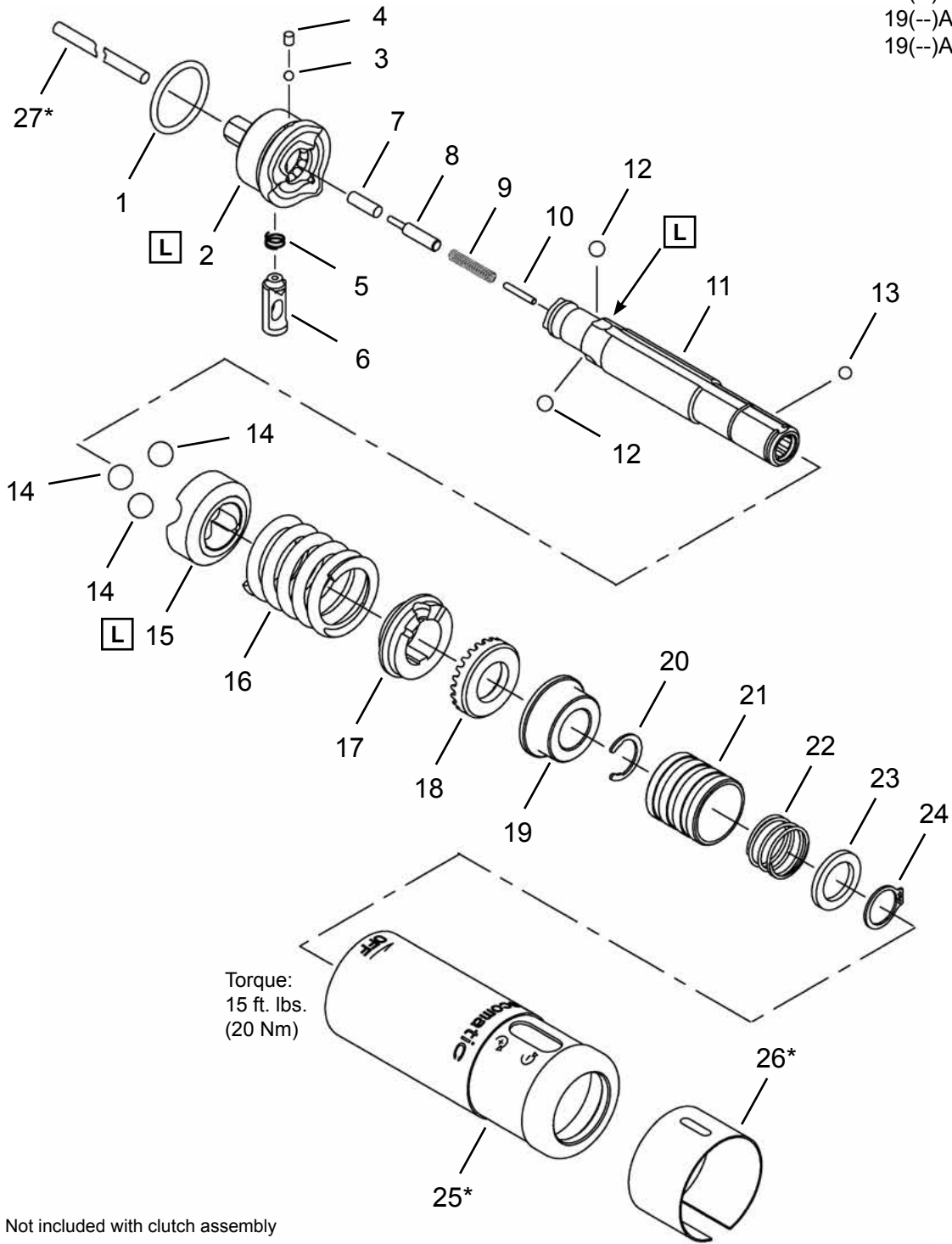
(#) Quantity

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

(T) Teeth

**10.10 301991PT Clecomatic Clutch Assembly  
301979PT Clecomatic Clutch Assembly**

**Models**  
19(-- )A02Q  
19(-- )A03Q  
19(-- )A04Q  
19(-- )A05Q  
19(-- )A06Q



\* Note: Not included with clutch assembly

**L** Lubricate with 540450 Grease (18 oz. can)

**10.10 301991PT Clecomatic Clutch Assembly**  
**301979PT Clecomatic Clutch Assembly**

Ref	Number	#	X	EN
				Description
--	Table 10.10	1		Clutch Assembly
1	847411	1	3	O-Ring
2	207591PT	1		Clutch Cam
3	842980	13	26	Steel Ball (.094 diameter)
4	869149	1	3	Ball Retainer Plug
5	203613	1	3	Slide Reset Spring
6	203612	1	1	Trip Slide
7	207651PT	1		Dowel Pin
8	869112	1		Reset Pin
9	203585PT	1	3	Reset Spring
10	869424	1		Reset Pin Stop
11	207590PT	1		Clutch Spindle
12	842274	3	9	Steel Ball (.156 diameter)
13	844265	1	3	Steel Ball (.125 diameter)
14	842162	3	9	Steel Ball (.250 diameter)
15	207589PT	1		Driven Cam
16	Table 10.10	1		Torque Spring
17	207579PT	1		Lock Ring
18	869123	1		Adjustment Nut
19	203600PT	1		Spindle Bushing
20	619524	1	3	Retaining Ring
21	202833PT	1	1	Release Collar
22	202842PT	1	3	Release Collar Spring
23	864249	1	1	Release Collar Washer
24	833688	1	3	Release Collar Retaining Ring
25	207584PT	1		Clutch Housing (includes Ref. 26) (Not included in Clutch Assembly)
26	203584	1		Adjustment Cover (Not included in Clutch Assembly)
27	203586PT	1	2	Trip Rod (Not included in Clutch Assembly)

(#) Quantity

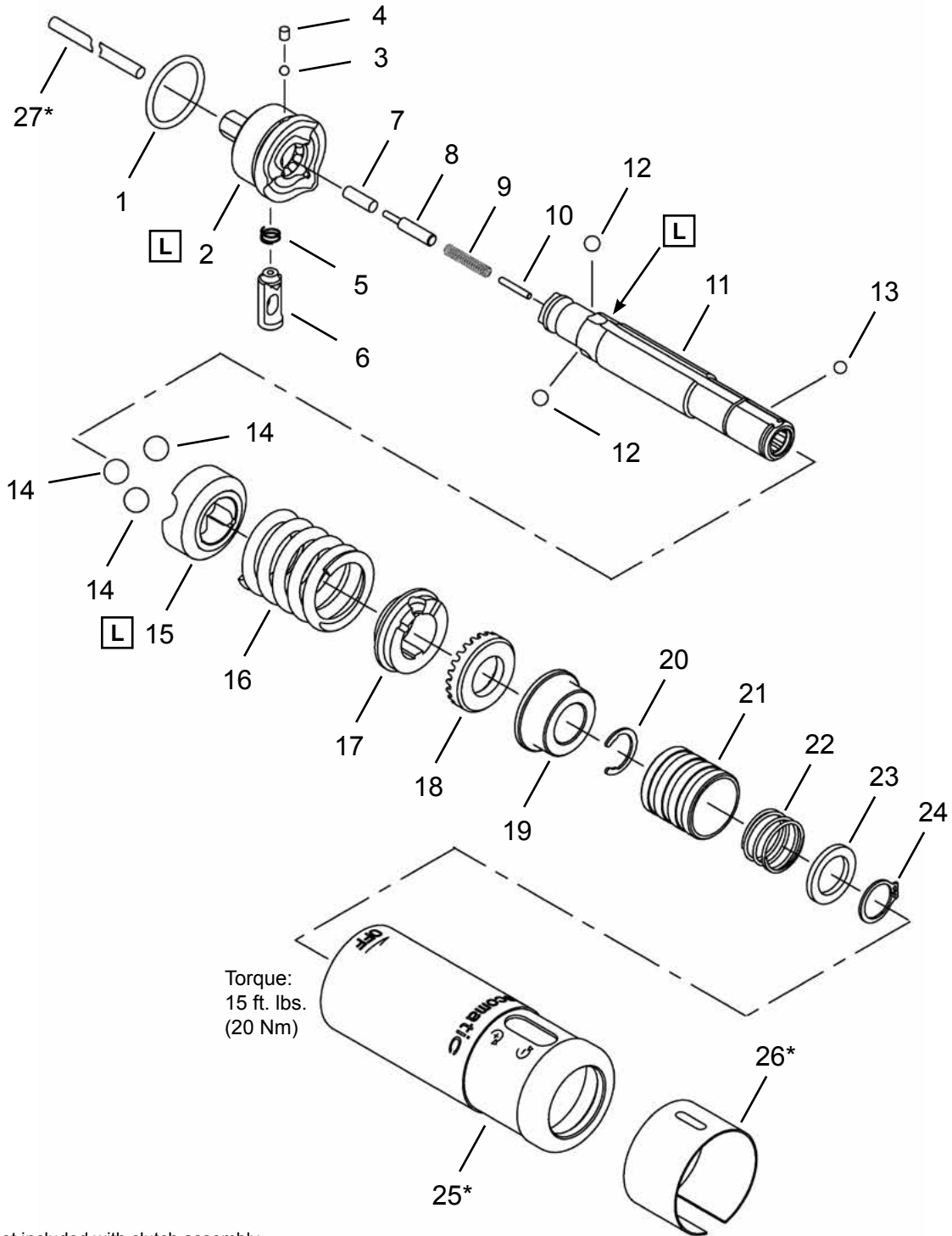
(X) Recommended Spare Parts (quantity shown based on 1-5 tools in operation)

**Table 10.10**

Ref.	Description	#	19(--) <b>A02Q</b> 19(--) <b>A03Q</b>	#	19(--) <b>A04Q</b> 19(--) <b>A05Q</b> 19(--) <b>A06Q</b>
--	Clutch Assembly	1	301991PT	1	301979PT
16	Clutch Spring (Green)	1	207652PT		-----
	Clutch Spring (White)		-----	1	207596PT

**10.11 302017PT Clecomatic Clutch Assembly**

**Models**  
19(--A07Q  
19(--A09Q



\* Note: Not included with clutch assembly

**L** Lubricate with 540450 Grease (18 oz. can)

**10.11 302017PT Clecomatic Clutch Assembly**

Ref	Number	#	X	EN
				Description
--	302017PT	1		Clutch Assembly
1	847411	1	3	O-Ring
2	207694PT	1		Clutch Cam
3	842980	13	26	Steel Ball (.094 diameter)
4	869149	1	3	Ball Retainer Plug
5	203613	1	3	Slide Reset Spring
6	203612	1	1	Trip Slide
7	207651PT	1		Dowel Pin
8	869112	1		Reset Pin
9	203585PT	1	3	Reset Spring
10	869424	1		Reset Pin Stop
11	207590PT	1		Clutch Spindle
12	842274	3	9	Steel Ball (.156 diameter)
13	844265	1	3	Steel Ball (.125 diameter)
14	842162	3	9	Steel Ball (.250 diameter)
15	207695PT	1		Driven Cam
16	207696PT	1		Torque Spring (Orange)
17	207579PT	1		Lock Ring
18	869123	1		Adjustment Nut
19	203600PT	1		Spindle Bushing
20	619524	1	3	Retaining Ring
21	202833PT	1	1	Release Collar
22	202842PT	1	3	Release Collar Spring
23	864249	1	1	Release Collar Washer
24	833688	1	3	Release Collar Retaining Ring
25	207584PT	1		Clutch Housing (includes Ref. 26) (Not included in Clutch Assembly)
26	203584	1		Adjustment Cover (Not included in Clutch Assembly)
27	Table 10.11	1	2	Trip Rod (Not included in Clutch Assembly)

(#) Quantity

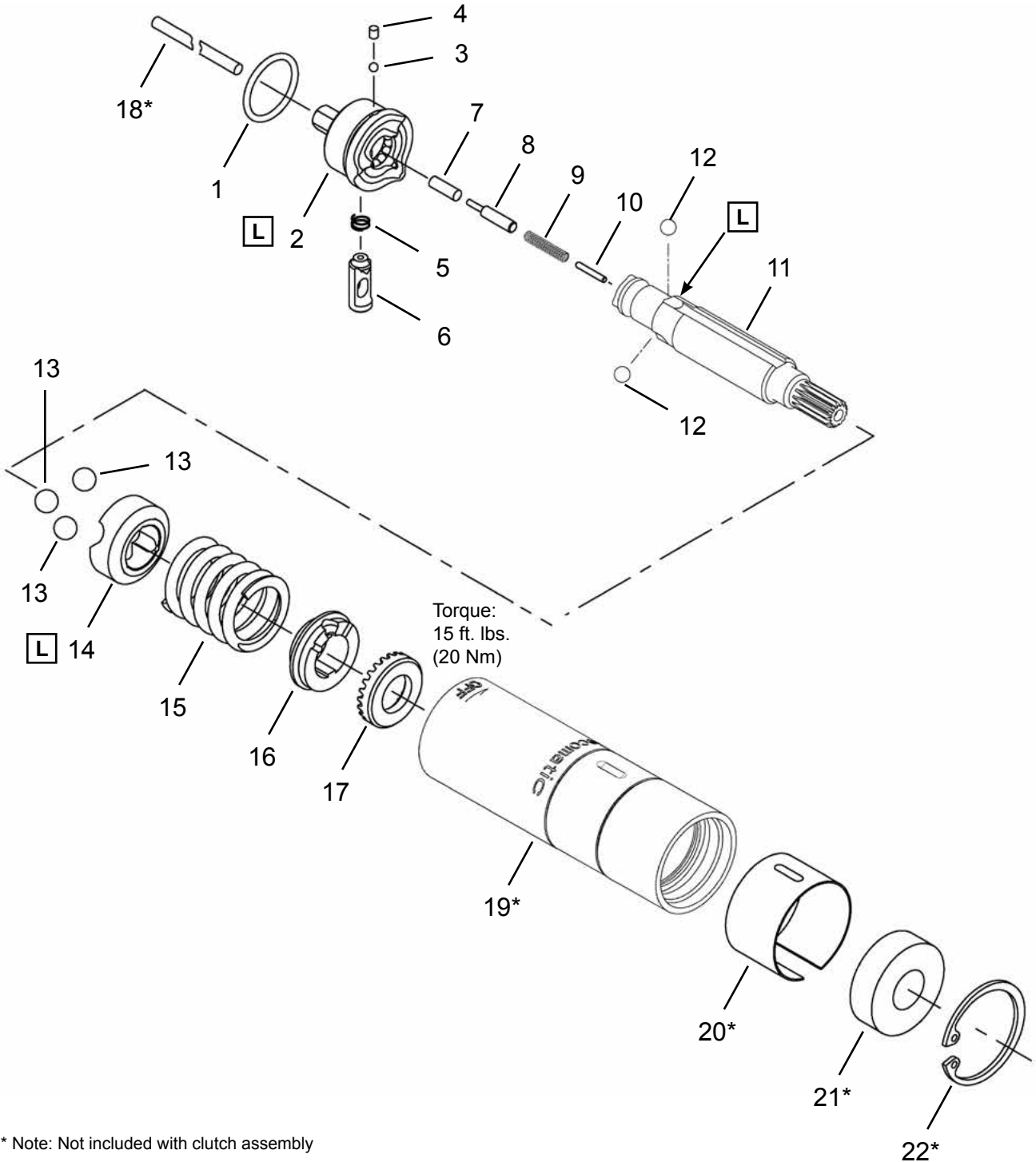
(X) Recommended Spare Parts (quantity shown based on 1-5 tools in operation)

**Table 10.11**

Ref.	Description	#	19(--) <b>A07Q</b>	#	19(--) <b>A09Q</b>
27	Trip Rod	1	203586PT	1	207704PT

10.12 301981PT Clecomatic Clutch Assembly

Models  
19(--)A15Q



\* Note: Not included with clutch assembly

**L** Lubricate with 540450 Grease (18 oz. can)

**10.12 301981PT Clecomatic Clutch Assembly**

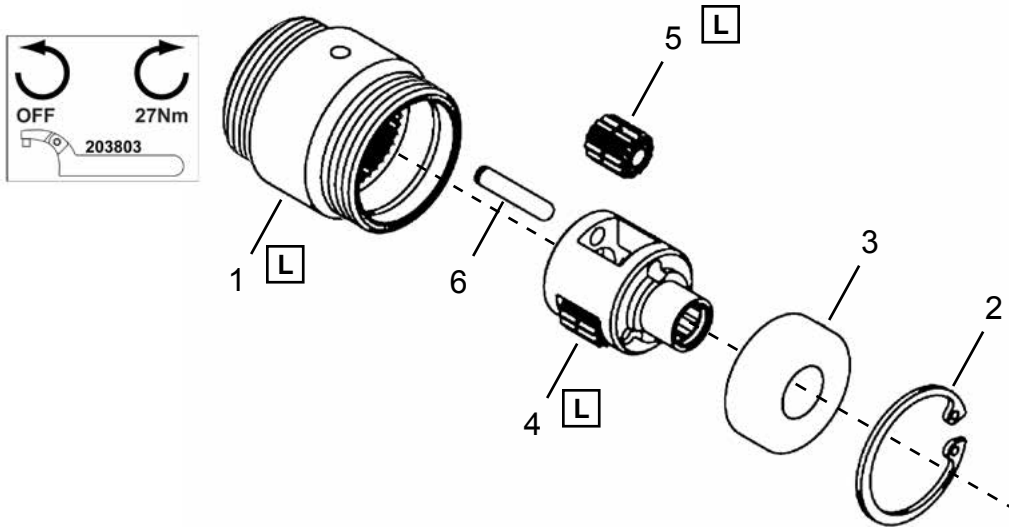
Ref	Number	#	X	EN
				Description
--	301981PT	1		Clutch Assembly
1	847411	1	3	O-Ring
2	207591PT	1		Low Speed Clutch Cam
3	842980	13	26	Steel Ball (.094 diameter)
4	869149	1	3	Ball Retainer Plug
5	203613	1	3	Slide Reset Spring
6	203612	1	1	Trip Slide
7	207651PT	1		Dowel Pin
8	869112	1		Reset Pin
9	203585PT	1	3	Reset Spring
10	869424	1		Reset Pin Stop
11	207592PT	1		Clutch Spindle
12	842274	3	9	Steel Ball (.156 diameter)
13	842162	3	9	Steel Ball (.250 diameter)
14	207589PT	1		Low Speed Driven Cam
15	207596PT	1		Torque Spring (White)
16	207579PT	1		Lock Ring
17	869123	1		Adjustment Nut
18	203586PT	1	2	Trip Rod (Not included in Clutch Assembly)
19	207624PT	1		Clutch Housing (includes Ref. 20) (Not included in Clutch Assembly)
20	203584	1		Adjustment Cover (Not included in Clutch Assembly)
21	847095	1	2	Ball Bearing (Not included in Clutch Assembly)
22	619017	1	2	Retaining Ring (Not included in Clutch Assembly)

(#) Quantity

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

**10.13 301124 Output Gear Assembly**

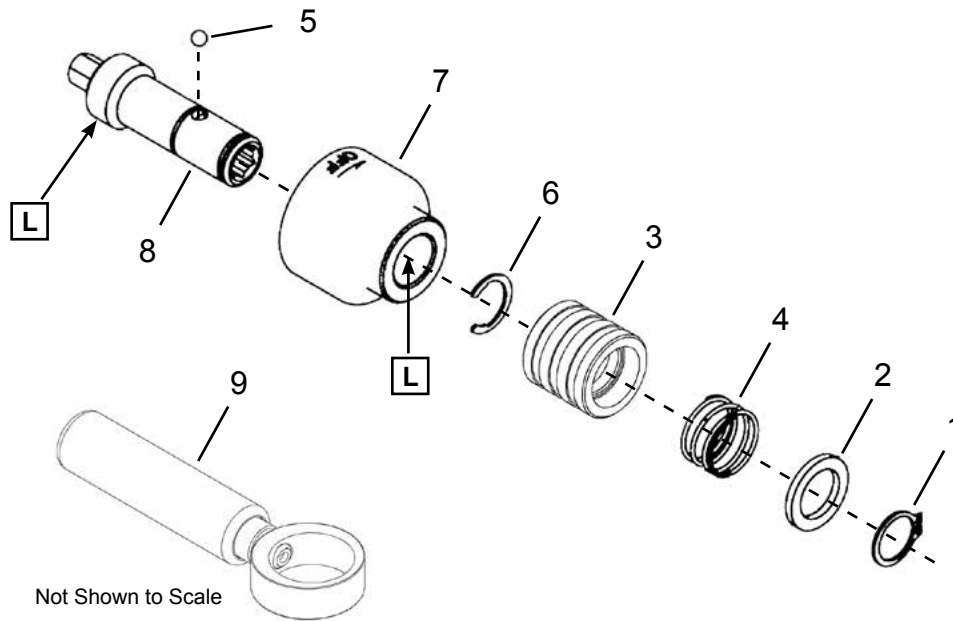
**Models**  
19PTA15Q  
19TTA15Q



**L** Lubricate with 540450 Grease (18 oz. can)

**10.14 301122 Output Spindle Assembly**

**Models**  
19PTA15Q  
19TTA15Q



**L** Lubricate with 540450 Grease (18 oz. can)



**10.13 301124 Output Gear Assembly**

Ref	Number	#	X	EN
				Description
1	207109	1		Gear Case
2	619017	1	2	Retaining Ring
3	847595	1	2	Ball Bearing
4	204282	1		Gear Cage
5	203623PT	3	6	Idler Gear (14T)
6	844111	3	6	Dowel Pin

(#) Quantity

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

(T) Teeth

**10.14 301122 Output Spindle Assembly**

Ref	Number	#	X	EN
				Description
1	833688	1	2	Retaining Ring
2	864249	1	2	Washer
3	202833PT	1		Release Collar
4	202842PT	1	3	Spring
5	844265	1	3	Steel Ball (1/8")
6	619524	1	2	Retaining Ring
7	207104	1		Spindle Housing
8	202847PT	1		Spindle
9	201770 *	1		Dead Handle (Not included in Output Spindle Assembly)

(#) Quantity

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

\* Note: 15Q models: Standard Equipment  
All other models: Optional Equipment

# 11 Technical data

## 11.1 19PCA and 19TCA Specifications

Trigger Allow Push-to-Start Clecomatic Clutch

Model Number		Tool Torque Range		Torque Range and Spring Selection								Free Speed (rpm)	19PC Series				19TC Series			
				Blue		Green		White		Orange			Length		Weight		Length		Weight	
				in-lb	Nm	in-lb	Nm	in-lb	Nm	in-lb	Nm		in-lb	Nm	in	mm	lbs	kg	in	mm
19PCA02Q	19TCA02Q	3-19	0.3-2.1	3-8	0.34-0.9	5-19	0.6-2.1	----	----	----	----	2800	8.1	206	1.41	0.6	8.0	202	1.4	0.7
19PCA03Q	19TCA03Q	3-26	0.3-2.9	3-8	0.34-0.9	5-19	0.6-2.1	15-26	1.7-2.9	----	----	1900	8.3	211	1.51	0.7	8.2	207	1.5	0.7
19PCA04Q	19TCA04Q	3-40	0.3-4.5	3-8	0.34-0.9	10-19	1.1-2.1	15-38	1.7-4.3	21-40	2.4-4.5	1100	8.1	206	1.41	0.6	8.0	202	1.5	0.7
19PCA05Q	19TCA05Q	3-45	0.3-5.1	3-8	0.34-0.9	10-19	1.1-2.1	15-38	1.7-4.3	21-45	2.4-5.1	660	8.5	216	1.51	0.7	8.4	212	1.5	0.7
19PCA06Q	19TCA06Q	3-45	0.3-5.1	3-8	0.34-0.9	10-19	1.1-2.1	15-38	1.7-4.3	21-45	2.4-5.1	260	8.5	216	1.51	0.7	8.4	212	1.5	0.7
19PCA07Q	19TCA07Q	18-60	2.0-6.8	----	----	----	----	18-44	2.0-5.0	24-60	2.7-6.8	660	8.5	216	1.51	0.7	8.4	212	1.5	0.7
19PCA09Q	19TCA09Q	18-79	2.0-8.9	----	----	----	----	18-44	2.0-5.0	24-79	2.7-8.9	470	9.8	248	1.65	0.7	9.3	235	1.7	0.8

Standard / Installed Spring  
Optional / Included Spring

## 11.2 19PTA and 19TTA Specifications

Trigger Start Clecomatic Clutch

Model Number		Tool Torque Range		Torque Range and Spring Selection								Free Speed (rpm)	19PT Series				19TT Series			
				Blue		Green		White		Orange			Length		Weight		Length		Weight	
				in-lb	Nm	in-lb	Nm	in-lb	Nm	in-lb	Nm		in-lb	Nm	in	mm	lbs	kg	in	mm
19PTA02Q	19TTA02Q	3-19	0.3-2.1	3-8	0.34-0.9	5-19	0.6-2.1	----	----	----	----	2800	8.1	206	1.41	0.6	8.0	202	1.4	0.7
19PTA03Q	19TTA03Q	3-26	0.3-2.9	3-8	0.34-0.9	5-19	0.6-2.1	15-26	1.7-2.9	----	----	1900	8.3	211	1.51	0.7	8.2	207	1.5	0.7
19PTA04Q	19TTA04Q	3-40	0.3-4.5	3-8	0.34-0.9	10-19	1.1-2.1	15-38	1.7-4.3	21-40	2.4-4.5	1100	8.1	206	1.41	0.6	8.0	202	1.5	0.7
19PTA05Q	19TTA05Q	3-45	0.3-5.1	3-8	0.34-0.9	10-19	1.1-2.1	15-38	1.7-4.3	21-45	2.4-5.1	660	8.5	216	1.51	0.7	8.4	212	1.5	0.7
19PTA06Q	19TTA06Q	3-45	0.3-5.1	3-8	0.34-0.9	10-19	1.1-2.1	15-38	1.7-4.3	21-45	2.4-5.1	260	8.5	216	1.51	0.7	8.4	212	1.5	0.7
19PTA07Q	19TTA07Q	18-60	2.0-6.8	----	----	----	----	18-44	2.03-5.0	24-60	2.7-6.8	660	8.5	216	1.51	0.7	8.4	212	1.5	0.7
19PTA09Q	19TTA09Q	18-79	2.0-8.9	----	----	----	----	18-44	2.03-5.0	24-79	2.7-8.9	470	9.8	248	1.65	0.7	9.3	235	1.7	0.8
19PTA15Q	19TTA15Q	40-140	4.5-15.8	----	----	40-75	4.5-8.5	6-140	6.78-15.8	----	----	260	9.7	246	1.91	0.9	9.6	244	1.9	0.9

Standard / Installed Spring  
Optional / Included Spring

## **12 Service**

### **12.1 Replacement parts**

**NOTE**



Use only original Cleco replacement parts. Failure to comply can result in reduced power and increased service requirements. The tool warranty may be voided if replacement parts are not manufactured or approved by Apex Tool Group.

### **12.2 Tool repairs**

Only qualified and trained personnel are to repair this equipment.

### **12.3 Warranty repairs**

All warranty repairs are to be performed by an authorized Apex Tool Group service center. Contact your local representative for assistance with warranty repair claims.

## 13 Disposal

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**CAUTION!**

Injuries and environmental damage from improper disposal.



Components and auxiliary materials of the tool pose risks to health and the environment.

- Capture auxiliary materials (oils, greases) when drained and dispose of them properly.
- Separate the packaging components and dispose of them properly.
- Comply with all applicable local regulations.



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

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## Sales & Service Centers

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

Brazil

**Apex Tool Group  
Ind. Com. Ferram. Ltda**  
Av. Liberdade, 4055  
Zona Industrial Iporanga  
Sorocaba, São Paulo  
CEP# 18087-170  
Brazil  
Tel: +55 15 3238 3820  
Fax: +55 15 3238 3938

Canada

**Apex Tool Group  
Sales & Service Center**  
7631 Bath Road  
Mississauga, Ont. 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: +86-21-60880298  
www.apxpowertools.com.cn

England

**Apex Tool Group  
GmbH & Co. OHG**  
C/O Spline Gauges  
Piccadilly, Tamworth  
Staffordshire B78 2ER  
United Kingdom  
Tel: +44 1827 872 771  
Fax: +44 1827 8741 28

France

**Apex Tool Group S.N.C.**  
25 rue Maurice Chevalier  
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Cedex, France  
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Germany

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GmbH & Co. OHG**  
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Fax: +49 (0) 73 63 81 222  
www.apxpowertools.eu

Hungary

**Apex Tool Group  
Hungaria Kft**  
Platánfa u.2  
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Hungary  
Tel: +36 96 66 1383  
Fax: +36 96 66 1135

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  
Manufacturing México**  
S. de RL de CV  
Vialidad El Pueblito #103  
Parque Industrial Querétaro  
Querétaro, QRO  
CP# 76220  
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Tel: +52 (442) 211-3800  
Fax: +52 (800) 685-5560

USA - Detroit, Michigan

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

USA - Lexington, South Carolina

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

USA - 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

USA - Seattle, Washington

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

USA - York, Pennsylvania

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

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