







## The Remarkable Clecomatic® Clutch

The heart and soul of the Cleco #5 – the thing

The adjacent TORQUE/ TIME graphs illustrate how Clecomatic tools reduce the length of time an operator spends counteracting the ratcheting effect of other screwdrivers.

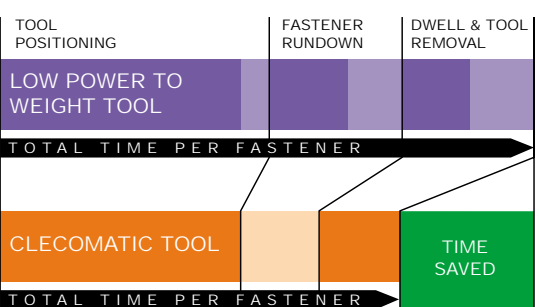
Operators using Clecomatic tools are exposed to far less tool noise. The automatic start/stop feature means that the tool runs only while the fastener is being tightened. With virtually no clutch ratcheting tool noise is reduced by as much as 80%.

TYPE OF SCREWDRIVER	MOTOR NOISE DURING POSITIONING OF TOOL	MOTOR NOISE WHILE DRIVING FASTENER	MOTOR AND CLUTCH NOISE DURING DWELL
Clecomatic	NONE		NONE
Push-to-Start Ratcheting	NONE		
Lever-Operated Ratcheting			

## Making The Best Even Better

The Cleco #5 is a product of Cooper Tools, a company dedicated to the relentless pursuit of science in offering continual product improvements to meet the needs of its market partners.

So, it should not come as a big surprise to learn that we have now made the best even better, by re-engineering the #5 into a plug-in electric screwdriver.



Since the tool does not dwell on the fastener, production can be boosted 10 percent or more, and the short cycle results in less tool wear and fewer replacement parts.

## Cleco 14 Series Electric Screwdriver Specifications

Model Number		Screw Size		Free Speed RPM	Torque Range		Length		Weight	
110V	220V	GR. 5 in	GR. 9.8 mm		in.-lbs.	Nm	in	mm	lbs.	kg
 14E1SA02Q	 14E2SA02Q	#6	M3.5	1900	16-3	1.8-0.4	12.9	328	2.0	0.9
 14E1SA03Q	 14E2SA03Q	#8	M4	1150	26-5	2.9-0.6	12.9	328	2.0	0.9
 14E1SA04Q	 14E2SA04Q	#10	M4	800	34-5	3.8-0.6	12.9	328	2.0	0.9
 14E1SA05Q	 14E2SA05Q	#10	M5	450	45-5	5.1-0.6	12.9	328	2.0	0.9
<b>Push and Lever Start</b>										
14E1CA02Q	14E2CA02Q	#6	M3.5	1900	16-3	1.8-0.4	12.9	328	2.0	0.9
 14E1CA03Q	 14E2CA03Q	#8	M4	1150	26-5	2.9-0.6	12.9	328	2.0	0.9
14E1CA04Q	14E2CA04Q	#10	M4	800	34-5	3.8-0.56	12.9	328	2.0	0.9
14E1CA05Q	14E2CA05Q	#10	M5	450	45-5	5.1-0.6	12.9	328	2.0	0.9

**STANDARD EQUIPMENT:**  
10 foot power cord  
Operating instructions & service manual  
Clutch Adjustment Tool  
All torque springs required to meet indicated torque specification  
Suspension Bail

Two additional nosepieces  
Voltage/speed selector and cable (220V models only)  
**OPTIONAL EQUIPMENT:**  
Voltage/speed selector: 205943  
Voltage/speed selector cable for 110V: 541683-01

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

### Balance Arms

Single Arms		Dimensions				
Model No.	Code No.	A		B		Post Height
		in.	mm	in.	mm	in. mm
ESBA-12-AH	240373	12	305	12	305	30 762
ESBA-18-AH	240374	12	305	18	457	30 762
ESBA-24-AH	240375	12	305	24	610	30 762
ESBA-30-AH	240376	12	305	30	762	30 762

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

**STANDARD EQUIPMENT**  
Tool holder and hardware to attach electric screwdriver  
Operating Instructions and Service Manual.

**OPTIONAL EQUIPMENT**  
Additional accessories: Refer to SP-1200 catalog.

### Portable Tool Balancers

Part Number	Capacity		Net Weight	Min. Dist. Hook to Hook	Length of Working Cable
	Max.	Min.			
 200427	2 lb.	0 lb.	1 lb. 4 oz.	10 7/8 in.	5 ft.
 200428	4 lb.	2 lb.	1 lb. 4 oz.	10 7/8 in.	5 ft.



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GETA • KAHNETICS® • LUFKIN®  
MASTER POWER® • METRONIX  
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Extreme fastening requirements

demand extreme

fastening technology.



# How do you improve a tool that's already the industry standard?

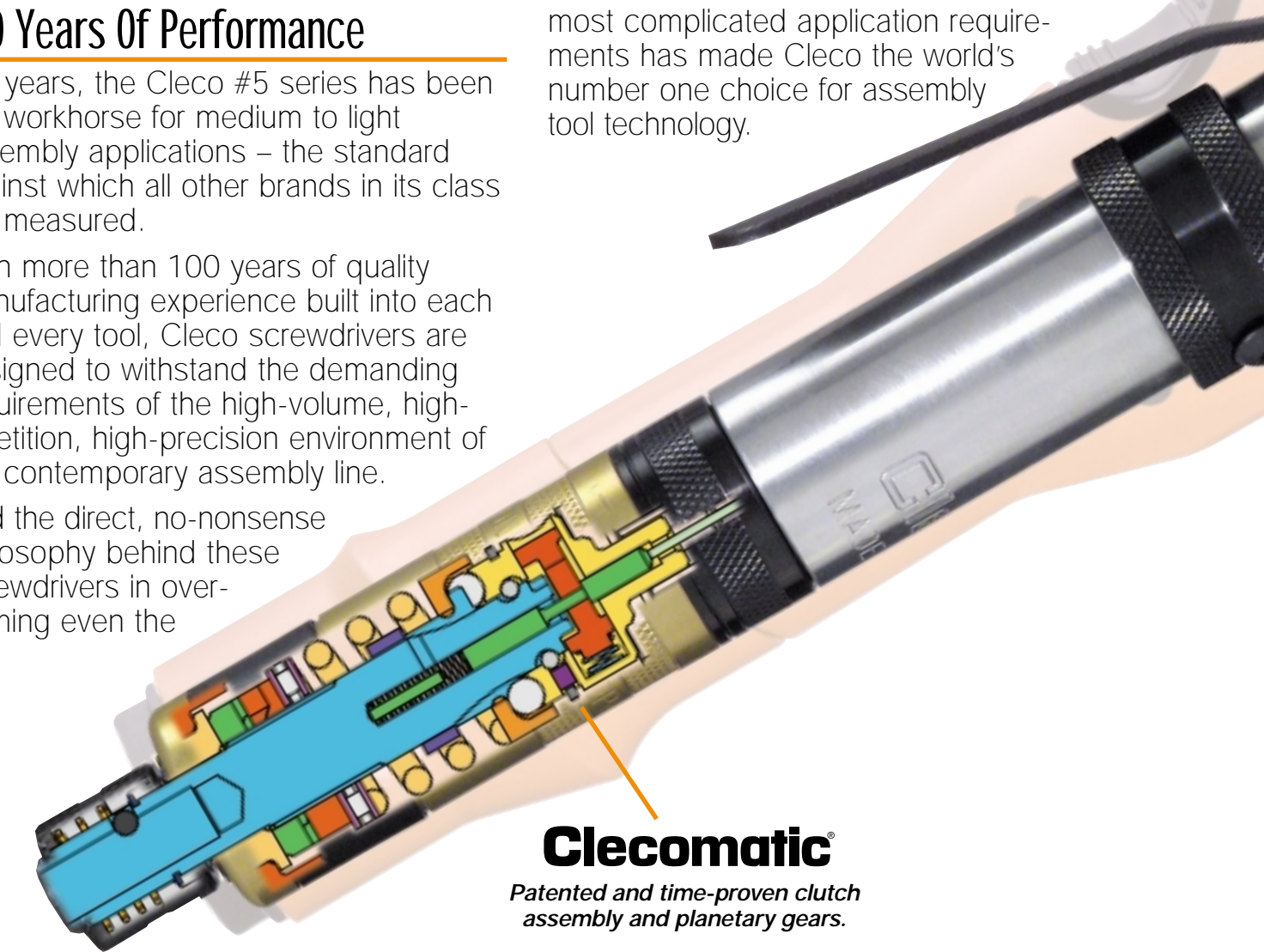
## 100 Years Of Performance

For years, the Cleco #5 series has been the workhorse for medium to light assembly applications – the standard against which all other brands in its class are measured.

With more than 100 years of quality manufacturing experience built into each and every tool, Cleco screwdrivers are designed to withstand the demanding requirements of the high-volume, high-repetition, high-precision environment of the contemporary assembly line.

And the direct, no-nonsense philosophy behind these screwdrivers in over-coming even the

most complicated application requirements has made Cleco the world's number one choice for assembly tool technology.



**Clecomatic®**  
Patented and time-proven clutch assembly and planetary gears.

**COOPER Tools**

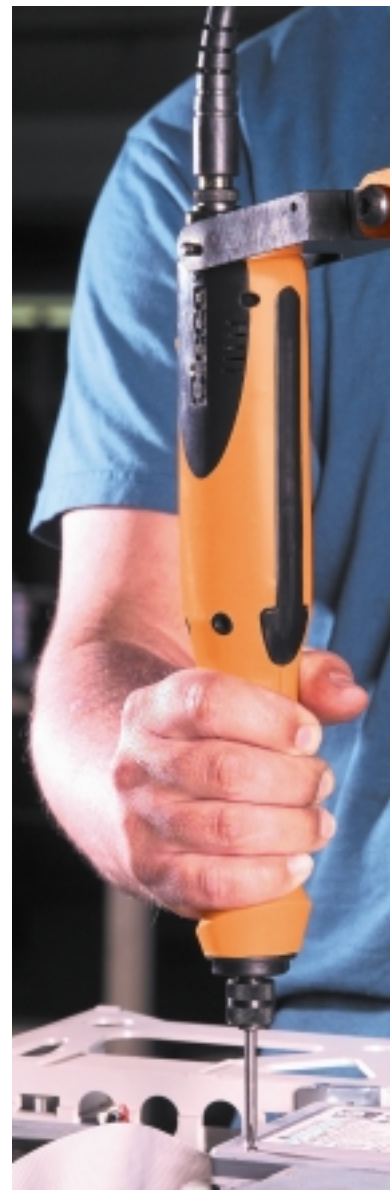
# Introducing The New Cleco 14 Series Plug-In Electric Screwdriver.

Extreme fastening requirements demand extreme fastening technology.

And to meet the demands of today's sophisticated electronics assembly and other clean-room applications, Cleco is introducing the most extraordinary electric screwdriver ever made.

If you've always thought that an electric screwdriver couldn't be as good as a pneumatic, you were right – until now.

Now the Cleco 14 Series combines the time-proven industry leadership of the Cleco #5, the leading-edge fastening technology we pioneered with our Cleco Tightening Manager system, and a powerful, proprietary electric motor that is so revolutionary its brushes never need replacing.



## Performs Like A Pneumatic

The result is a remarkable electric tool that delivers the performance of a pneumatic. But the Cleco 14 Series is safe for use in electronics assembly and other clean-room applications, which require an electric tool.

Noise levels are also greatly reduced with an electric screwdriver. That is a critical factor, because electronics assembly is often performed in tighter quarters than a traditional open assembly line where there is already a high noise level.

Frankly, a screwdriver this good didn't exist, so we had to invent one.

And, although this is Cleco's first electric screwdriver, its designers were able to rely on more than 50 years of solid

experience in electrical tool design and manufacture within the CooperTools family – including the experience we gained in the development of the Cleco Tightening

Manager system, one of the most significant advancements in the history of fastening technology.

**Clecomatic®**  
Patented and time-proven clutch assembly and planetary gears that are interchangeable with existing Cleco pneumatic screwdrivers.

Soft, textured over-mold for comfortable, non-slip grip

Removable nosepiece for easy torque adjustment.

Three interchangeable nosepieces provided to accommodate different hand sizes.

1/4" Quick-change chuck for fast and easy bit changes.

Smooth, easy-to-use, thumb-activated forward/reverse switch.

Bi-directional clutch for shut-off in both clockwise and counter-clockwise direction



Threaded quick disconnect with heavy duty strain relief.



Durable suspension bail for quick hanging.

Over-current and over-voltage protection within the circuit board.

No brush replacement indicator because brushes never wear out.

The first plug-in motor good enough to carry the Cleco name.

## Features You Want

The Cleco 14 Series offers you a number of substantial advantages over other electric screwdrivers on the market.

- The Cleco 14 Series is equipped with brushes that never wear out. They are made of a proprietary material that delivers 10 times the lifespan of other brushes.
- over-current and over-voltage protection within the circuit board.
- surfaced-mounted chip technology
- the renowned Clecomatic clutch mechanism
- Bi-directional clutch shut-off



- modular design for easy and quick repairability
- heavy-duty clutch, gears and bearings that are interchangeable with Cleco #5
- push-to-start or lever-permit start options
- torque ranges from 3 to 45 in.-lbs.
- speeds up to 1900 RPM

In addition, two other features demand special mention.

### ■ Electronic Brake System

We have designed the braking system to work in both forward and reverse modes, because there are critical safety and precision reasons why you want the tool to stop the split-second the operator releases the trigger.



### ■ Three Grip Sizes

We have also designed the Cleco 14 Series to be ergonomically sound and feel good in the hand. But not all hands are created equal, so we made the nosepiece in three different sizes, and we ship each tool with all three nosepieces so it can easily be changed to fit the hand size of different operators.

## Benefits You Need

The people who design and manufacture the new Cleco 14 Series electric screwdriver are keenly aware that improving production rates and lowering costs are critical to the success of any manufacturing operation today.

Accordingly, we are building every Cleco 14 Series to deliver:

- optimum speed
- torque accuracy
- consistency
- long-term reliability
- ease of maintenance
- reduced energy costs
- longer operating life
- fewer replacement parts
- sound ergonomics
- operator convenience
- significant power-to-weight ratios
- adaptability to a variety of applications
- the ultimate in flexibility

All of that boils down to better repeatability, fewer rejects, less operator fatigue, and reduced down time on the assembly line, which translates into greater productivity and profit potential for you and your company.

## The Total Light Assembly Solution

For all of your assembly applications, make one call to CooperTools at 1.803.359.1200. We have the total tooling solution.



**Cleco®**