

**Parts Manual**  
**823108EN**  
12/31/2015

# Cleco®

**B1-C & BR-C Series**  
Chisel and Needle Scaler



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



**Cleco®**  
Nomenclature

**823108EN**  
12/31/2015

	XX	-	XXX	-	XX	-	XXX	-	K
Tool Series									
	<b>B1</b> = Shank (Square Chisel)								
	<b>BR</b> = Shank (Round Chisel)								
Tool Style									
	<b>C</b> = Chisel								
	<b>CNB</b> = Chisel and Needle Scaler								
Throttle Type									
	<b>BV</b> = Pistol Grip, Lever Throttle								
	<b>LT</b> = Inline, Lever Throttle								
	<b>PT</b> = Inline, Push-Pull Start								
Nose Configuration (CNB models only)									
	<b>RD</b> = Round								
	<b>RET</b> = Rectangular								
Option									
	<b>K</b> = Needle Scaler Kit								

# Cleco®

## Description and Safety

The original language of this manual is English.

### Product Safety Information:

#### Intended Use:

These chisels and needle scalers are driven by compressed air to remove material.

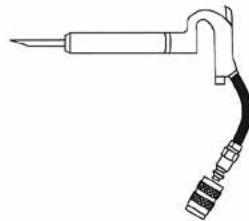
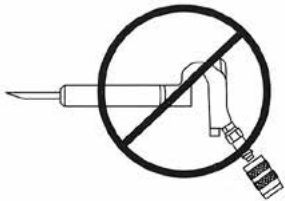
For additional product safety information refer to Apex Tool Group, LLC or Apex Tool Group GmbH & Co. OHG document CE-2017, General Safety Percussion Tools.

### **WARNING**

These chisels or needle scalers 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.

### Quick Disconnect Coupling

### **WARNING**



Attachment of a quick disconnect compressed air coupling directly to the inlet threads of a percussion tool can cause wear and failure of the coupling. Failure of the coupling may cause severe injury from the air hose end violently whipping about. If a quick disconnect air coupling is used, separate the coupling from the tool with a whip hose (1.5 feet minimum length).

### Chisel/Scaler Care and Use

### **WARNING**

Cracked chisels or implements are hazardous. Visually inspect the chisel or implement for cracks before using. Have all chisels magnifluxed before re-sharpening. Destroy and discard any chisel or implement that shows a crack or damage.

Correct selection of the chisel or other implement is important. Dull edges on the chisel or moil point cause the energy of the percussion blow to be absorbed by the tool, instead of the work piece, increasing the chance of chisel breakage.

When operating percussion tools in explosive or flammable environments, use only non-sparking chisels or implements such as those made from beryllium copper. Also, do not use cupped rivet sets with Cleco percussion tools to drive nails. Blows not centered on the nail can cause the nail to ricochet off the work and strike the user.

### 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: 5/16" (7.9 mm) Maximum length: 8' (2.5 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:

Always disconnect the air supply before changing the chisel or implement or performing any service on the tool.

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.

### Disposal:



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

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## Chisel Removal:

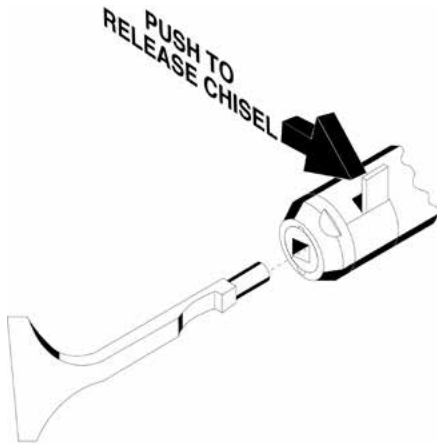
### **WARNING**

Turn off the air supply and disconnect the air hose from the tool before removing any chisel or implement.

Use only notched B1-C approved safety retainer chisels with B1-C scalers and notched BR-C approved safety retainer chisels with BR-C scalers. Refer to Illustration "F" for a list of approved chisels.

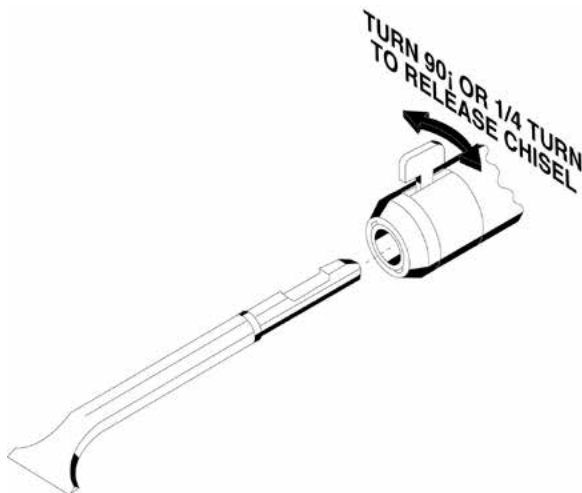
### **B1-C Series Models:**

Push the tang on the driver retainer (832956), away from the barrel to remove the chisel (see illustration below).



### **BR-C Series Models:**

Rotate the driver retainer (869314) 90° or 1/4 turn in either direction to remove the chisel (see illustration below). Rotate the driver retainer back to its in-line position with the barrel after chisel replacement.



## Disassembly and Assembly:

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.

### **B1-C-BV Pistol Grip Models:**

Should if be necessary to replace the throttle valve casing (832054), thread a 7/16-20 bolt into the casing and using a suitable puller, remove it from the handle. Refer to Illustration "C".

### **Inspect Parts:**

Clean and inspect all parts for excessive wear or damage and replace as necessary with genuine Cleco replacement parts. Replace all o-rings and seals whenever the tool is disassembled.

Common issues to look for:

- Worn out retainer buffer (833527), used in the B1 series tools. This can be caused by operating the tool without any resistance against the chisel.
- Excessive wear in the tool nose.
- Worn or scored plunger (832373 or 832944) usually caused by foreign particles entering the tool.
- Worn or scored bore in the barrel sleeve (832700 or 832943) caused by foreign particles entering the tool.

### **Handle Assembly:**

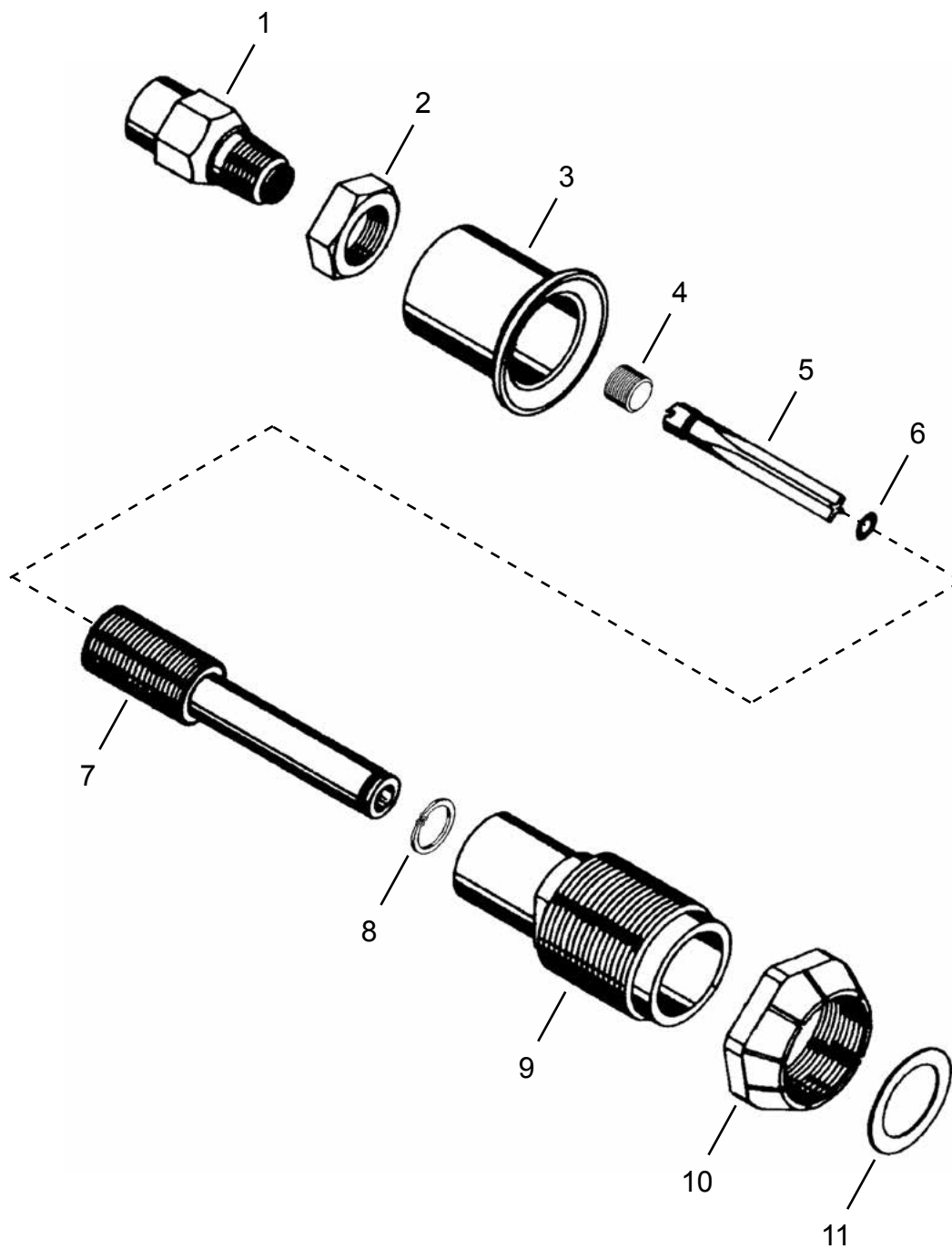
If the handle does not position as desired in relationship to the chisel position, one or more handle positioning shims (832947) may be placed between the valve assembly and the handle. Refer to Illustrations "A", "B", and "C".

Use one shim for about every 30° desired. Always tighten the handle into the barrel until the valve assembly is tight against the barrel sleeve and then tighten the handle lock ring (832882).

After the tool is assembled, pour a few drops of 10W machine oil into the inlet bushing to ensure immediate lubrication of the tool components.

### **B1-C-PT Series Throttle Valve Adjustment:**

To adjust the throttle valve for the desired power, loosen the throttle valve casing lock nut (843645) and screw the controlling valve handle (832610) to a position so that the desired blow is delivered when the handle is fully compressed. Tighten the throttle valve casing lock nut to secure the controlling valve handle in position. Refer to Illustration "A".

**"A"****Throttle Type:**  
PT Series

**Cleco®**  
**Inline Handle - Push-Pull Start**

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**Illustration "A": Inline Handle, Push-Pull Start**

Ref	Number	#	X	EN
				Description
--	831219	1		Handle Assembly (includes Ref. 1-10)
1	841554	1	1	Air Inlet Bushing
2	843645	1		Throttle Valve Casing Lock Nut
3	832610	1		Control Valve Handle
4	834878	1	1	Set Screw
5	832600	1		Throttle Valve (includes Ref. 6)
6	844302	1	3	Throttle Valve O-Ring (5/32" x 9/32")
7	832095	1		Throttle Valve Casing
8	833600	1	2	Throttle Valve Casing Retaining Ring
9	832807	1		Handle
10	832882	1		Handle Lock Ring
11	832947	1	AR	Handle Positioning Shim

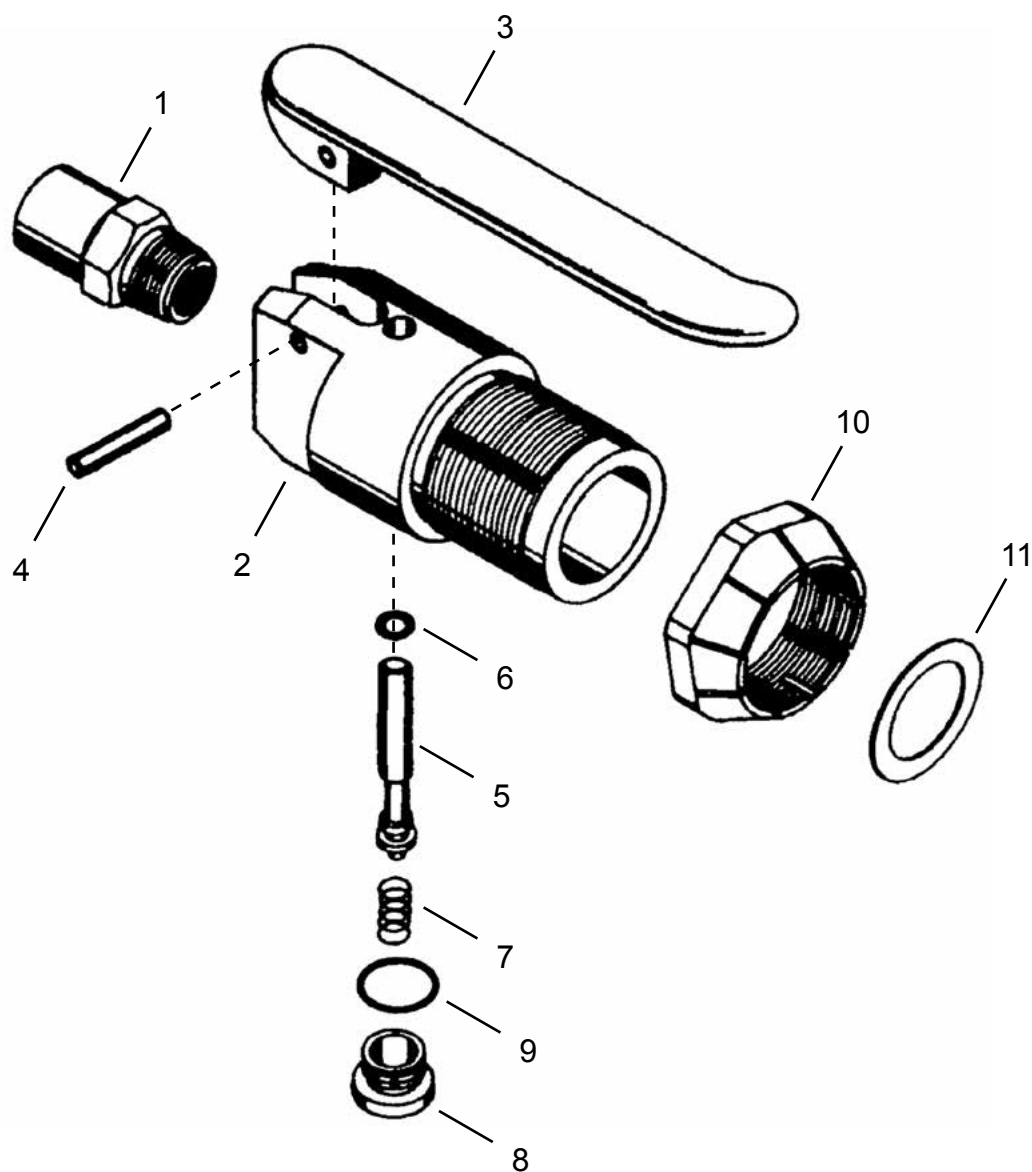
(#) Quantity

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

**Cleco®**  
Inline Handle - Lever Throttle

**“B”**

**Throttle Type:**  
LT Series





**Cleco®**  
**Inline Handle - Lever Throttle**

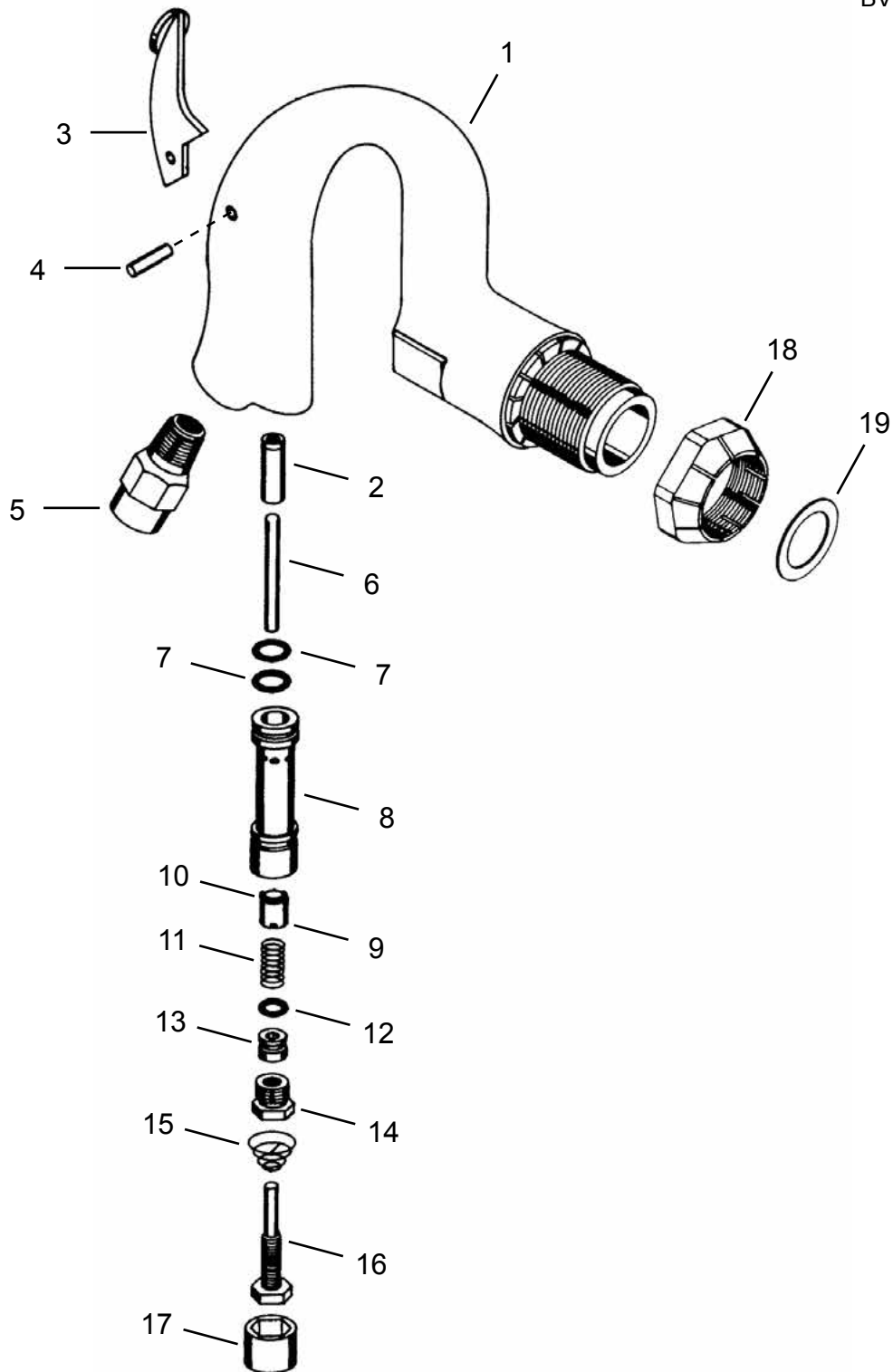
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**Illustration "B": Inline, Lever Throttle**

Ref	Number	#	X	EN
				Description
--	861731	1		Handle Assembly (includes Ref. 1-14)
1	841553	1	1	Air Inlet Bushing
2	869310	1		Handle
3	834780	1	1	Throttle Lever
4	834848	1	2	Throttle Lever Pin
5	834782	1		Throttle Valve (includes Ref. 6)
6	844302	1	3	Throttle Valve O-Ring (5/32" x 9/32")
7	832078	1	3	Throttle Valve Spring
8	832207	1		Throttle Valve Cap (includes Ref. 9)
9	844307	1	3	O-Ring (.364 I.D.)
10	832882	1		Handle Lock Ring
11	832947	1	AR	Handle Positioning Shim

(#) Quantity

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

**"C"****Throttle Type:**  
BV Series

**Pistol Grip Handle - Lever Throttle**

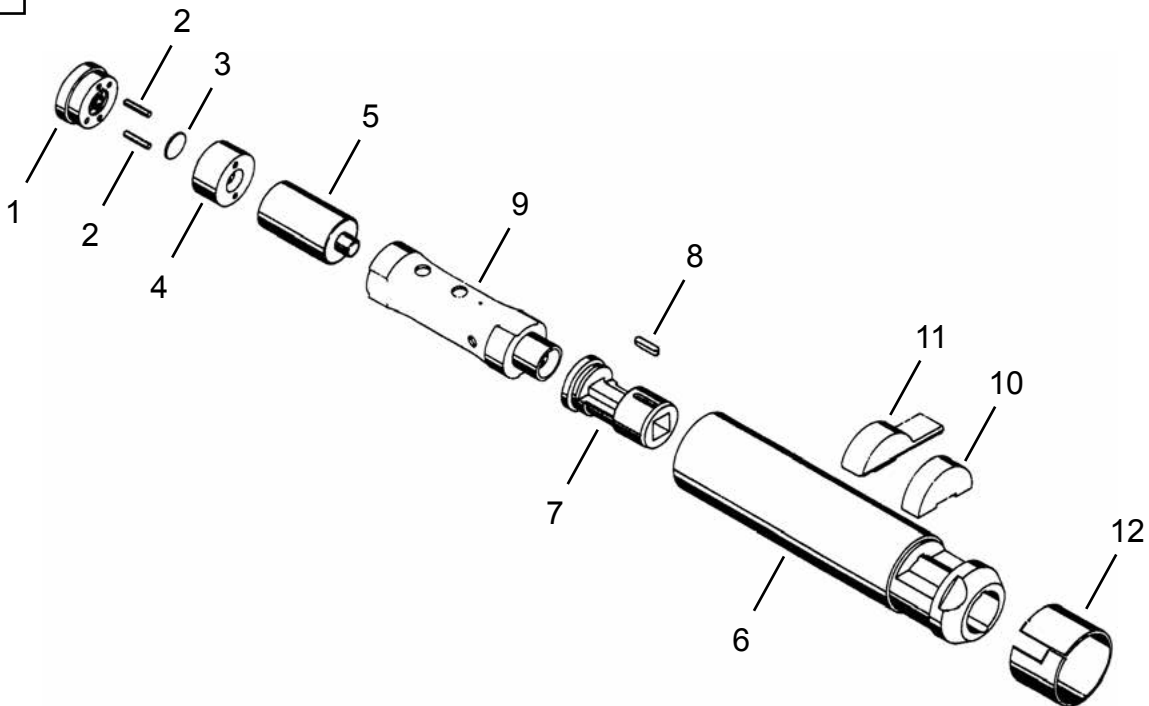
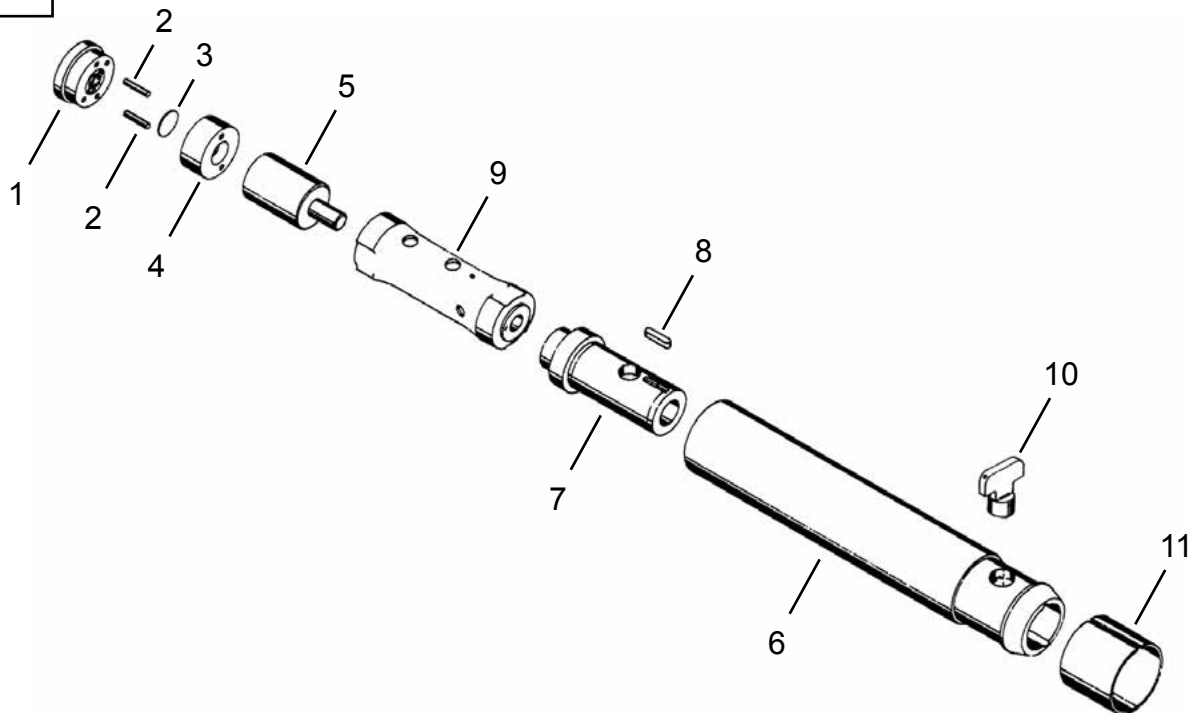
**Illustration "C": Pistol Grip, Lever Throttle**

Ref	Number	#	X	EN
				Description
--	831121	1		Handle Assembly (includes Ref. 1-18)
1	832948	1		Handle (includes Ref. 2)
2	832211	1		Throttle Valve Pin Bushing
3	832148	1	1	Throttle Lever
4	832128	1	1	Throttle Lever Pin
5	841554	1	1	Air Inlet Bushing
6	844767	1		Throttle Valve Pin
7	844307	2	6	Throttle Valve Casing O-Ring (3/8" x 1/2")
8	832054	1		Throttle Valve Casing
9	832091	1		Throttle Valve (includes Ref. 10)
10	844301	1	3	Throttle Valve O-Ring (1/8" x 1/4")
11	843262	1	3	Throttle Valve Spring
--	831411	1		Handle Assembly (includes Ref. 12-17)
12	844305	1	3	Nylon Sleeve O-Ring (1/4" x 3/8")
13	865992	1		Nylon Sleeve
14	833571	1		Regulating Valve Cap
15	833583	1	3	Regulating Valve Spring
16	833616	1		Regulating Valve Adjusting Screw
17	832834	1		Regulating Valve Lock Nut
18	832882	1		Handle Lock Ring
19	832947	1	AR	Handle Positioning Shim

(#) Quantity

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

**Cleco®**  
Scaler Barrel Assemblies

**"D"****B1-C Series Scaler****"E"****BR-C Series Scaler**

**Cleco®**  
Scaler Barrel Assemblies

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**Illustration "D": B1-C Barrel Assembly**

Ref	Number	#	X	EN
				Description
1	832173	1		Valve Block Button
2	844652	2	4	Valve Block Pin
3	832196	1	1	Valve
4	832508	1		Valve Block
5	832373	1		Plunger
6	861735	1		Barrel Assembly (includes Ref. 7-9)
7	832963	1		Tool Nose
8	842801	1	3	Tool Nose Key
9	832700	1		Barrel Sleeve
10	833527	1		Retainer Buffer
11	832956	1		Driver Retainer
12	832554	1		Retainer Clip

(#) Quantity

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

**Illustration "E": BR-C Barrel Assembly**

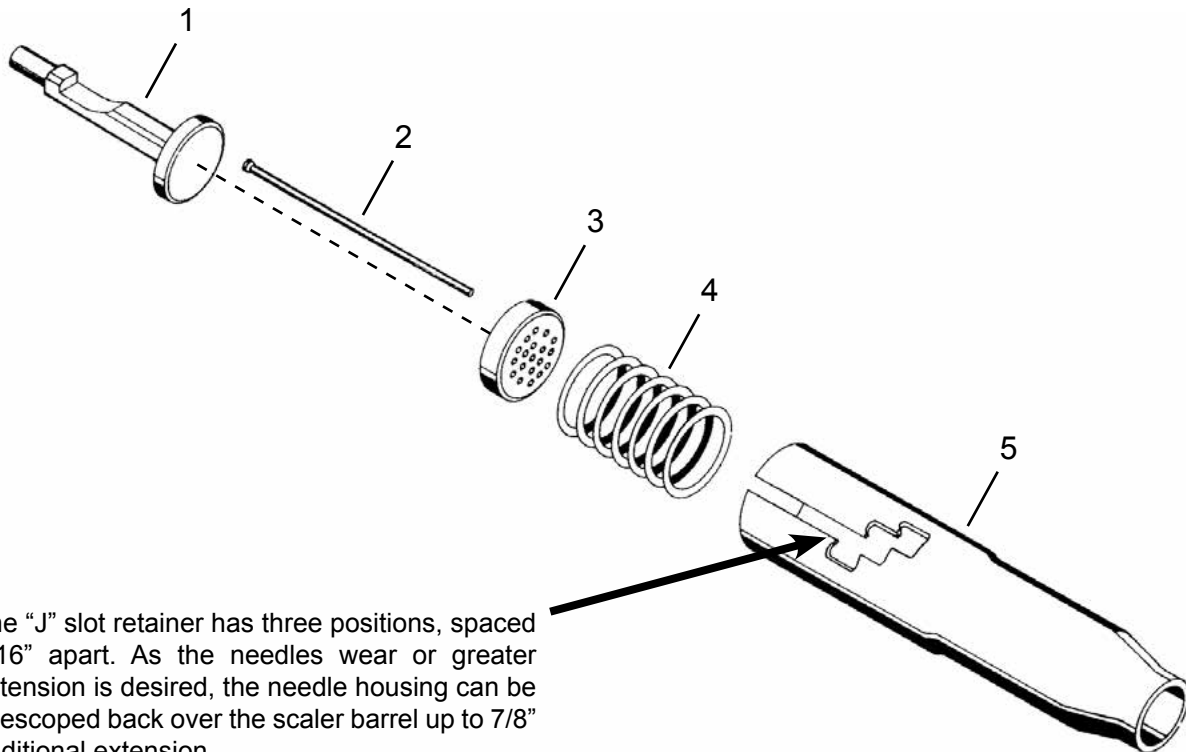
Ref	Number	#	X	EN
				Description
1	832173	1		Valve Block Button
2	844652	2	4	Valve Block Pin
3	832196	1	1	Valve
4	832508	1		Valve Block
5	832944	1		Plunger
6	861732	1		Barrel Assembly (includes Ref. 7-9)
7	832945	1		Tool Nose
8	842801	1	3	Tool Nose Key
9	832943	1		Barrel Sleeve
10	869314	1		Driver Retainer
11	869315	1		Retainer Clip

(#) Quantity

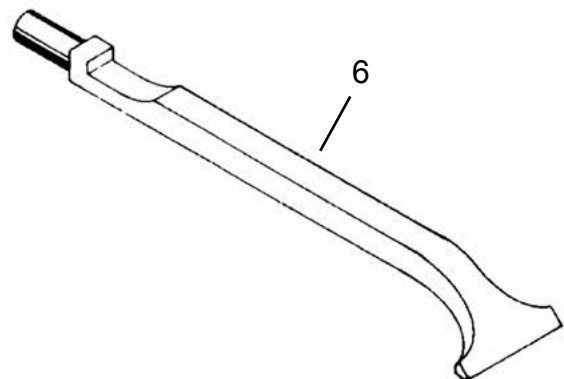
(X) Recommended Spare Parts (quantity shown based on 1-5 tools in operation)

**Cleco®**  
Needle Scaler Assembly

**“F”**



The “J” slot retainer has three positions, spaced  $\frac{7}{16}$ ” apart. As the needles wear or greater extension is desired, the needle housing can be telescoped back over the scaler barrel up to  $\frac{7}{8}$ ” additional extension



**Cleco®**  
Needle Scaler Assembly

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**Illustration "F": Needle Scaler Attachment**

Ref	Number	#	X	EN
				Description
--	Table "F"	1		Needle Scaler Assembly (includes Ref. 1-7)
1	Table "F"	1		Needle Driver
2	834043	19	19	Needle (5") - Standard Equipment
	834024	19	19	Needle (7") - Optional Equipment
3	834046	1		Needle Holder
4	834044	1	3	Needle Holder Spring
5	Table "F"	1		Needle Tube
6	Table "F1"	1		Chisel (B1-C series models)
	Table "F2"	1		Chisel (BR-C series models)

(#) Quantity

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

**Table "F"**

Ref.	Description	#	B1-C Round	#	B1-C Rectangular	#	BR-C Round	#	BR-C Rectangular
--	Needle Scaler Assembly	1	831322	1	831340	1	861734	1	861733
1	Needle Driver	1	834045	1	834045	1	869316	1	869316
5	Needle Tube	1	834779	1	834620	1	834779	1	834620

**Table "F1" : B1-C Optional Scaler Chisels (Safety Retainer Type)**

Description	Size	Overall Length	Cutting Edge Dimensions	Part Number
Hardened Blank	1/2" Square	7-1/2"	-----	839052
Hardened Blank	1/2" Square	12"	-----	839053
Hardened Blank	1/2" Square	18"	-----	839054
Flat Chisel	1/2" Square	7-1/2"	3/4"	839061
Flat Chisel	1/2" Square	12"	3/4"	839341
Flat Chisel	1/2" Square	18"	3/4"	839335
Flat Chisel	1/2" Square	8"	1-1/2"	839467
<b>Spoon Chisel</b>	<b>1/2" Square</b>	<b>7-1/4"</b>	<b>1-3/8"</b>	<b>839050 *</b>
Spoon Chisel	1/2" Square	12"	1-3/8"	839299
Spoon Chisel	1/2" Square	18"	1-3/8"	839334
Spoon Chisel	1/2" Square	7-1/4"	1"	839740

\* Note: 839050 is standard equipment

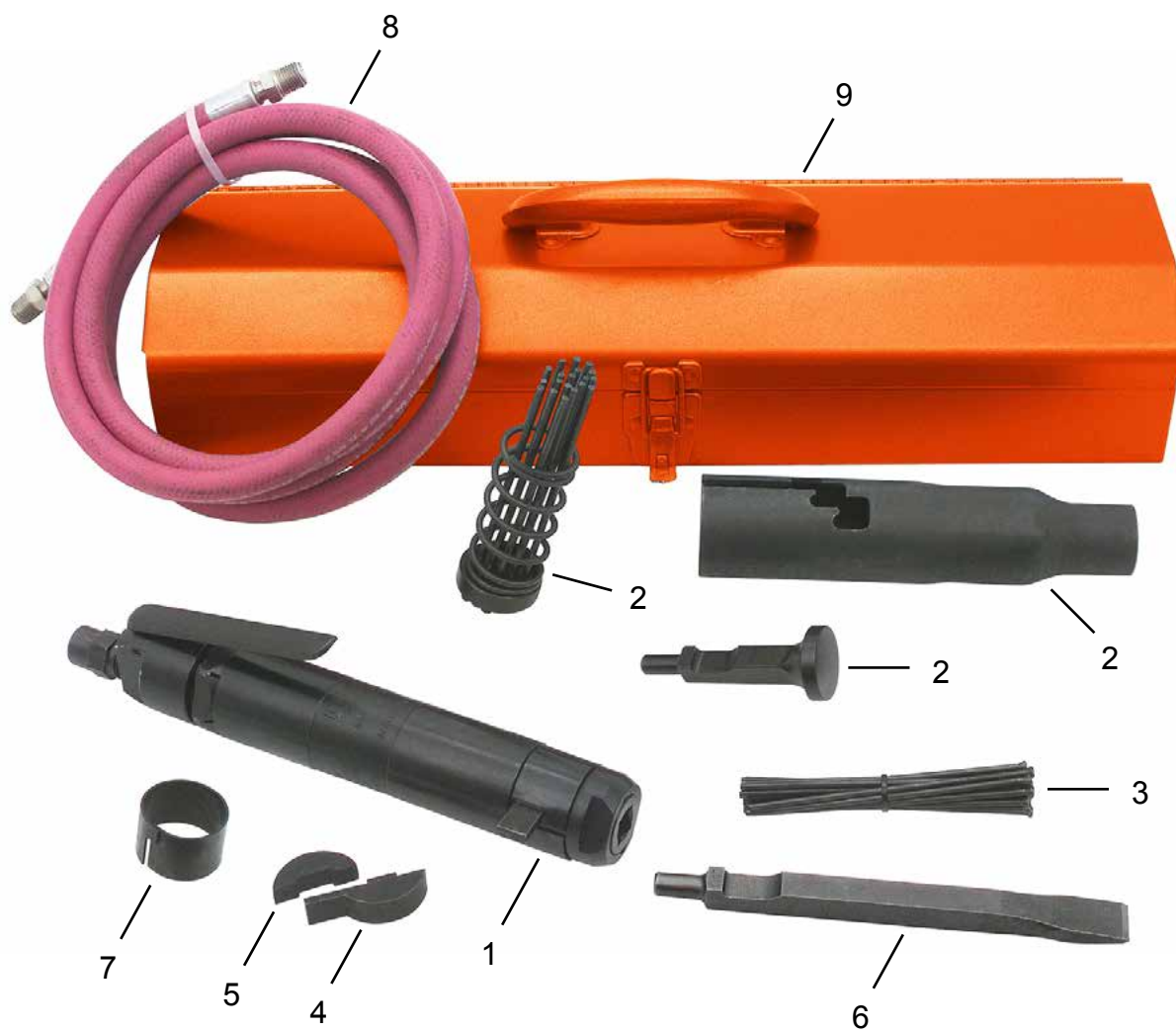
**Table "F2" : BR-C Optional Scaler Chisels (Safety Retainer Type)**

Description	Overall Length	Cutting Edge Dimensions	Part Number
Blank	6-1/2"	-----	829172
Blank	7-1/2"	-----	829173
Short Wide Blade	4-3/8"	1-1/4" x 1/8"	829167
Narrow Blade	3-7/8"	5/8" x 3/32"	829168
Long Wide Blade	8"	1-3/4" x 3/32"	829165
Cold	8-1/2"	3/4" x 3/32"	829150
Scaling	9"	1-1/4" x 3/32"	829301
<b>Spoon</b>	<b>7-1/2"</b>	<b>1-3/8" x 3/32"</b>	<b>829310 *</b>

\* Note: 829310 is standard equipment

## “G”

**Model: B1-CNB-LT-RD-K**





**Cleco®**  
Needle Scaler Kit

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**Illustration "G": Needle Scaler Kit**

Ref	Number	#	X	EN
				Description
1	B1-C-LT	1		Needle Scaler (Inline, Lever Throttle)
2	831322	1		Needle Tube Assembly
3	834043	19	19	Needle (5") - Standard Equipment
	834024	19	19	Needle (7") - Optional Equipment
4	832956	1		Chisel Retainer
5	833527	1		Retainer Buffer
6	839051	1		Flat Chisel (7")
7	832554	1		Retainer Clip
8	869723	1		Air Supply Hose (1/4" NPT Fittings, 5/16" I.D., 8' Long)
9	834047	1		Steel Storage Box

(#) Quantity

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