

BLG-BC1 Series Operating Instructions

(Rev 1.1 4/25/17)



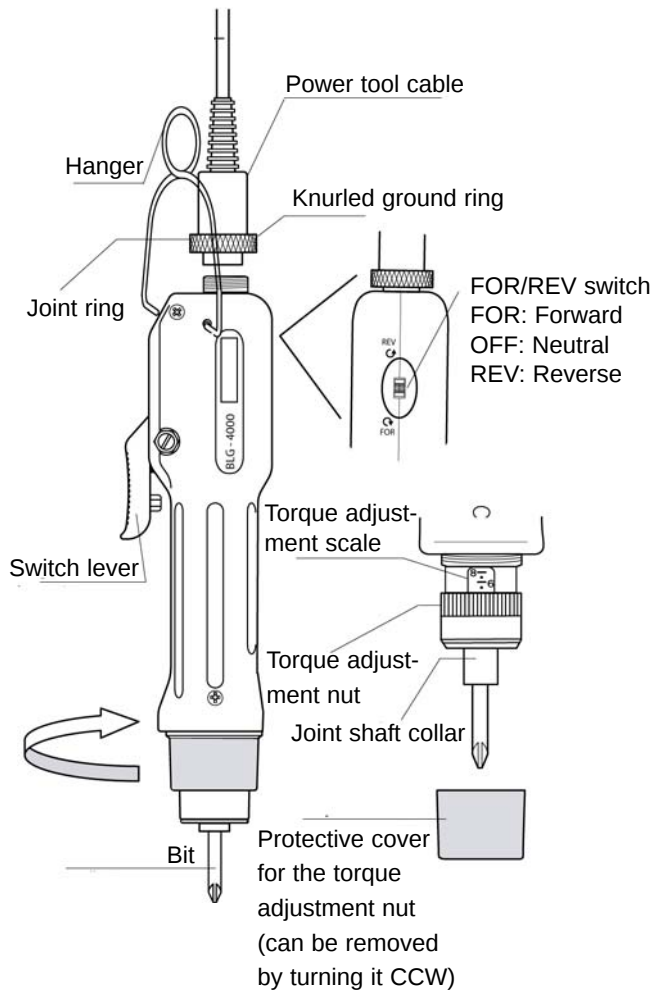
RoHS

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BLG-BC1 Series Operating Instructions

Name of Parts

BLG-4000BC1 (Lever Start type)

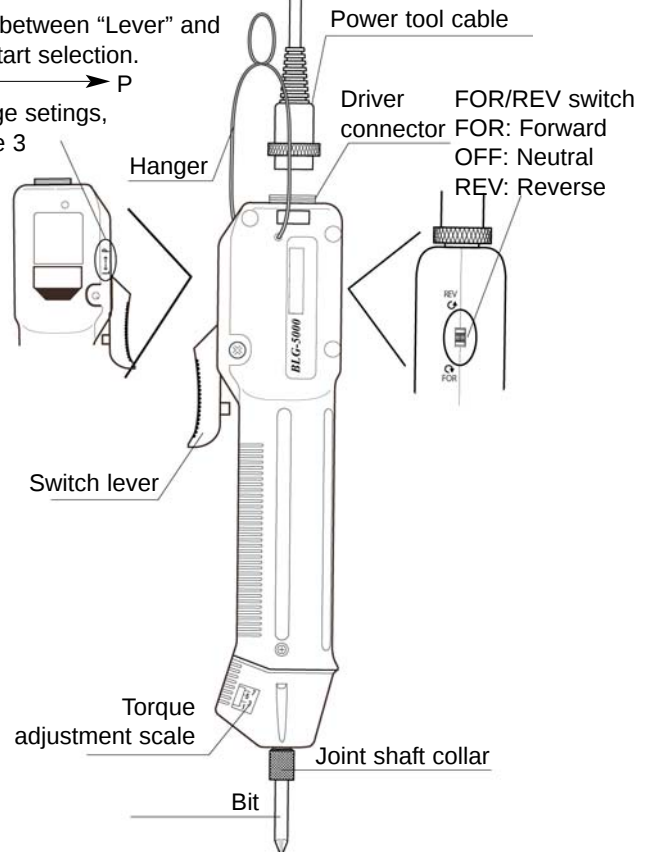


BLG-5000BC1 (Lever or Push Start) Selectable by the Switch

Two-way Start System (Switchable between Lever Start and Push-to-Start)

Marking between "Lever" and "Push" start selection.

L ← → P
To change settings, see page 3



Transformer Guide

Model	Item #	For Use with Electric Screwdriver Models
T-30BL	144300	BLG4000BC1
T-70BL	144400	BLG4000BC1 - BLG5000BC1-HT



T-70BL

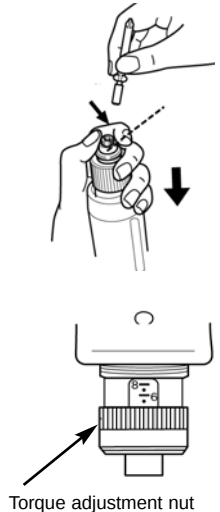


T-30BL

BLG-BC1 Series Operating Instructions

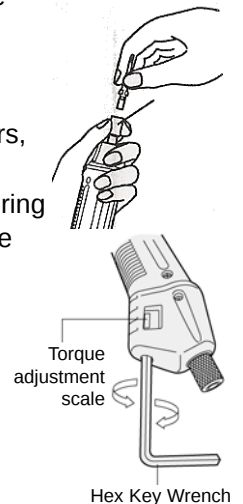
Operating the BLG-4000BC1 Model

1. Attach power tool cable to the BLG-4000 screwdriver and the transformer. Make sure notch at the cable end aligns with the notch on the driver connector. Tighten knurled ground ring.
2. Plug in power cord to the back of the transformer and power outlet. Flip power switch to "ON" position located on the front of transformer.
3. Select a bit. Retract the bit collar. Insert the bit and release the retracted collar. To avoid damaging fasteners, make sure the proper bit is suitable for the head of the fastener.
4. The torque limit is determined by the tension of the coil spring housed in the torque adjustment nut. The tighter the coil spring is wound the higher the torque limit is raised. See Torque Charts on page 9 to determine the appropriate torque adjustment setting.
5. Rotate the torque adjustment nut to set the torque limit. Turn clockwise to increase torque and counter clockwise to decrease torque. The scale adjacent to the Torque Adjustment Nut is a reference guide. The torque output from the driver can change depending on various fastening factors like friction, type of joint, and the type material being used like a washer. Verify torque setting with a torque testing system.
6. Turn driver on and check for proper rotation. FOR-clockwise, REV-counterclockwise.
7. To apply torque, squeeze the lever. The driver will automatically stop when the preset torque has been reached.
8. To remove the screw, turn the FOR/REV switch to REV position.



Operating the BLG-5000BC1 Model

1. Attach power tool cable to the BLG-5000 screwdriver and the transformer. Make sure notch at the cable end aligns with the notch on the driver connector. Tighten knurled ground ring.
2. Plug in power cord to the back of the transformer and power outlet. Flip power switch to "ON" position located on the front of transformer.
3. Select a bit. Slide the bit collar forward. Insert the bit and release the collar. To avoid damaging fasteners, make sure the proper bit is suitable for the head of the fastener.
4. The torque limit is determined by the tension of the coil spring housed in the tool. The tighter the coil spring is wound the higher the torque limit is raised. See Torque Charts on page 9 to determine the appropriate torque adjustment setting.
5. Using the "Hex Key wrench", set the torque by referring to the torque adjustment scale "1 to 8". Turn clockwise to increase torque and counter clockwise to decrease torque. The torque adjustment scale is a reference guide. The torque output from the driver can change depending on various fastening factors like friction, type of joint, and the type material being used like a washer. Verify torque setting with a torque testing system.
6. Turn driver on and check for proper rotation. FOR-clockwise, REV-counterclockwise.
7. To apply torque, squeeze the lever (If Push-to-Start setting is set-up for the BLG-5000* model - place light downward pressure on the nose of the driver). The driver will automatically stop when the preset torque has been reached.
8. To remove the screw, turn the FOR/REV switch to REV position.

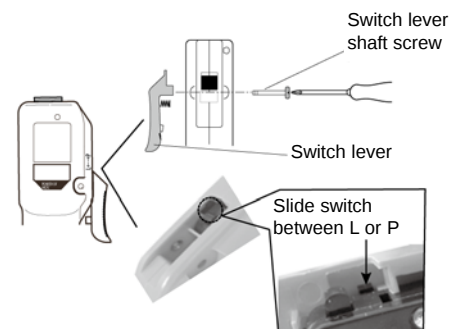


*** Note:** The BLG-5000 features a two-way start system (switchable between Lever Start and Push-to-Start)

How to Change BLG-5000 to "Push" Start System

1. Unscrew the "switch lever shaft screw" and then take off the "switch lever". Using tweezers, move the selection SW near "P" (push) mark.

*** Note:** Do not press or hit the SW or you may damage the SW or body case.



BLG-BC1 Series Operating Instructions

Screw Counter Display

Screw Count Display Section/Set Value Display

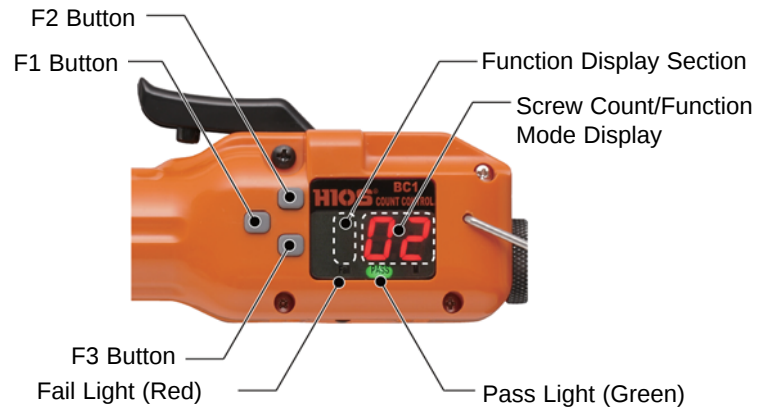
Section:

In the normal mode, the screw fastening count set value is displayed first. After starting the count, the remaining screw fastening count is displayed.

The count decreases with each screw fastening operation and the remaining screw fastening count is displayed.

Function Display Section:

The symbol corresponding to the set item is displayed in the setting mode. (See page 5 for the list of setting functions).



F1 Button:

When this button is pressed for more than 2 seconds in the normal mode, the mode is changed to the “setting mode”.

This button is used for selecting the function in the “setting mode”.

When this button is pressed for more than 2 seconds in the “setting mode”, the buzzer sounds twice and the mode is changed to the normal mode.

F2 & F3 Buttons:

Using these buttons, the set value can be changed in the function settings.

Some set values are limited depending on the function that is being set.

Pass Light (Green):

When the screw fastening result is “OK”, the green LED lamp turns ON.

Fail Light (Red):

When the screw fastening result is NG (No Good), the red LED lamp turns ON.

Note!

When the lever switch is turned ON, the lamp turns OFF (reset).

When this unit is used in combination with the existing HIOS external screw counter, the driver counter does not synchronize with the external screw counter. So, use them based on the external counter function. Otherwise, turn off the driver's counting function before use.

When the output setting for Power HI/LOW is changed, the driver speed changes. In such cases, pay attention to the counter timer set value and reverse counter timer set value.

Only the T-30BL or the T-70BL power units (transformers) can be used with this driver. Do not connect it to any other power unit.

BLG-BC1 Series Operating Instructions

Other Operations

The count is to be returned to the default value during the screw fastening operation.	Pressing the F3 button for 2 seconds or more, resets the screw fastening count value.
How to check the Screw Counter Timer: set time	When the screw is fastened for the time period (seconds) set using the counter timer: - For correct operation, the buzzer sounds once. - For incorrect operation, the buzzer does not sound. When the buzzer does not sound, increase the set value gradually and adjust it so that the buzzer sounds once.

List of Function Settings

Display	Setting Function <Default Value>	Symbol	Setting Description
(1)	Counter ON/OFF Setting ON	P	ON : When selected, the counter function is available. OFF : When selected, it is used as a normal driver.
(2)	Count <n05>	n	The screw fastening count value is set. Setting Range: 1 to 99
(3)	Count Timer <c.30>	C	This function is used to prevent the count for double tightening operations such as check fastening or retightening. Set the operation time while the check fastening is performed for the tightened screw. Setting Range: 0.00 to 0.99 seconds Note: When the screw tightening operation is performed during this setting and the judgment result is normal, the buzzer sounds once.
(4)	Work - Reset - Timer <F 10>	F	The buzzer sound time period after the work is completed is set. Setting Range: 0.0 to 3.9 seconds Note: Set it based on the reverse count timer set value.
(5)	Reverse Count Timer <r.04>	r	The time period until the reverse count is performed is set. Set the work reset timer operation time based on the time period up to when the reverse count is performed. Setting Range: 0.1 to 1.0 seconds Note: It is available when the "Reverse Count Enable" has been set in the system setting.

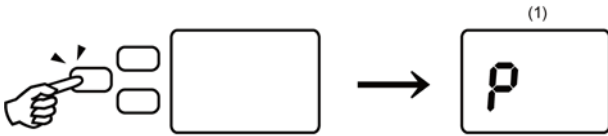


Display	Setting Function <Default Value>	Symbol	Setting Description
(6)	System Setting d03<	d	Each Buzzer or Reverse Count Enable/Disable is set up. The setting is performed with a combination of the tenth digit and single unit digit. Tenth Digit 0 : Buzzer Enable/Reverse Count Enable 1 : Buzzer Enable/Reverse Count Disable 2 : Buzzer Disable/Reverse Count Enable 3 : Buzzer Disable/Reverse Count Disable Units Digit 2 : Torque Up Buzzer Disable 3 : Torque Up Buzzer Enable
(7)	Over - Time Short - Time U3<	U	This sets whether or not the Over Time /Short Time error is detected. 0 : When selected, neither Over Time or Short Time Error is detected. 1 : When selected, only the Short Time Error is detected. 2 : When selected, only the Over Time Error is detected. 3 : When selected, the both Over Time & Short Time Errors are detected.
(8)	Accumulated Counter L00<	L	The accumulated count of the screw fastening operation is displayed. For the accumulated count, all the torque-up operations are counted regardless of whether the counter is ON/OFF. How to understand the display Units Digit: Numbered in multiples of 100,000 units Tenths Digit: Numbered in the millions of units

BLG-BC1 Series Operating Instructions

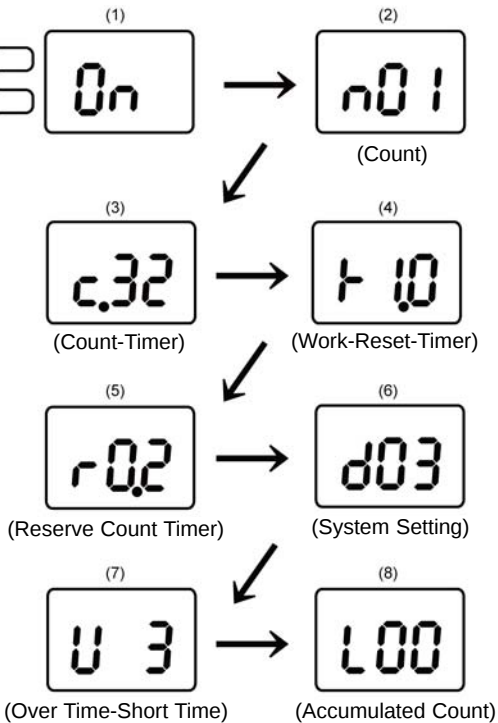
Operation

Changing to the Setting Mode: Press the F1 button for more than 2 seconds in the normal mode. Then “P” will be displayed in the function display section and the mode will be changed to the setting mode.



Press it for more than 2 seconds.

Setting Mode: Pressing the F1 button allows you to toggle through each setting mode, which provides you access to change any settings from “Function List”. Refer to “**List of Function Settings**” on page 5 for the changing and setting any functions with the power tool.



BLG-BC1 Series Operating Instructions

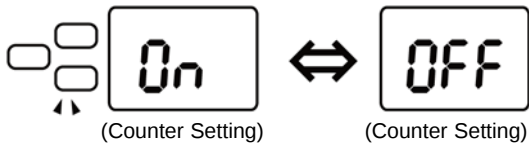
Operation

Changing to the Normal Mode: Press the F1 button for more than 2 seconds in the setting mode. Then the mode will be changed to the normal mode and the value set for the count will be displayed.



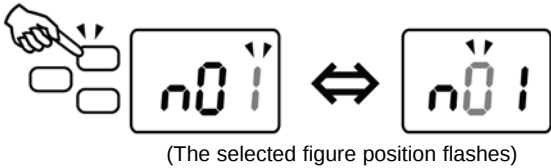
Press it for more than 2 seconds.

Counter ON/OFF Setting: Pressing of the F3 button toggles between ON and OFF. (Note: F2 button is not to be used.)

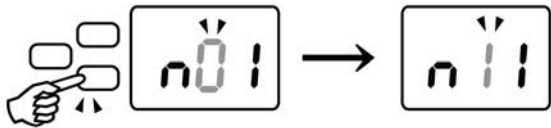


Value Setting for Each Function:

1. Pressing the F2 button in the setting mode changes the figure position for setting.



2 . Pressing the F3 button increases the value one by one.



Note : The setting procedure is the same for all the settings except for the Counter ON/OFF Setting. Refer to “**List of Function Settings**” on page 5 for the setting range.

BLG-BC1 Series Operating Instructions

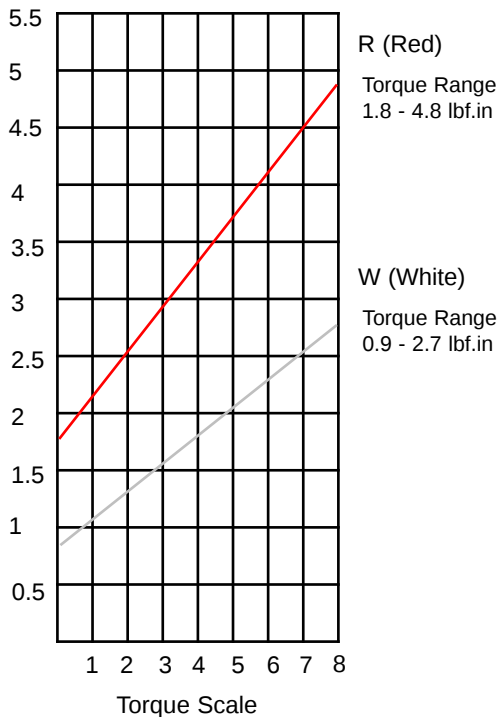
Torque Reference Charts

These charts are meant to be used as guidelines for setting the torque on the BLG-BC1 Series electric screwdrivers. The drivers have a torque adjustment scale showing reference numbers. These numbers determine the approximate torque setting. Refer to the charts to determine the reference number setting for your torque requirement.

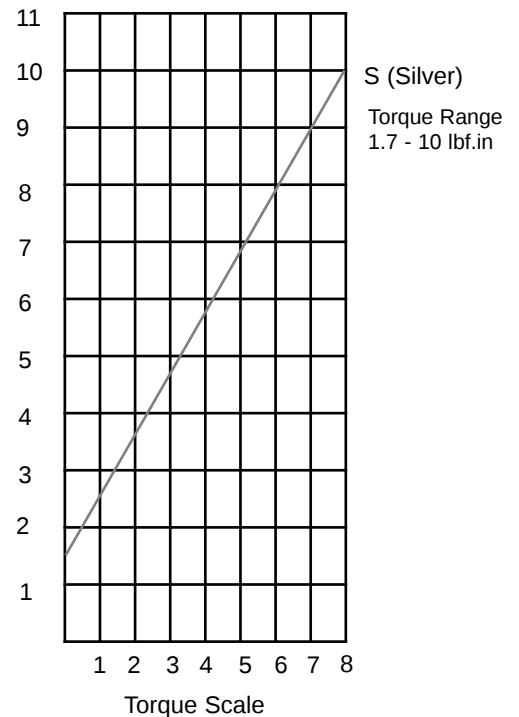
How to Read the Torque Charts

Torque ranges (lbf.in) approximate tightening torque, operated with no load at maximum speed. Verify torque setting with a torque testing system.

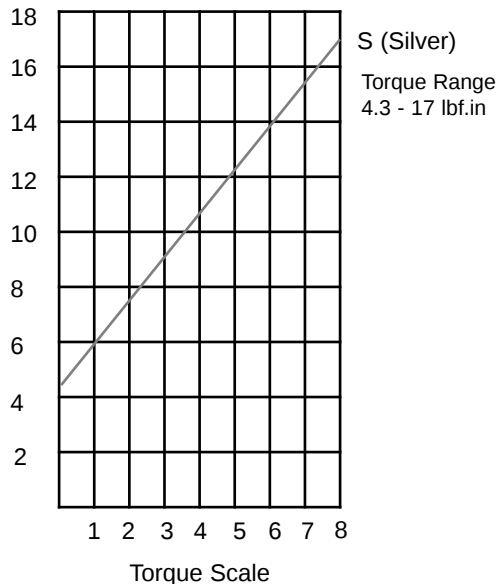
lbf.in BLG-4000BC1



lbf.in BLG-5000BC1



lbf.in BLG-5000BC1-HT



BLG-BC1 Series Operating Instructions

Testing Power Tools:

1. Application Method: Use a torque tester in "Peak Mode" with a rotary torque sensor between the power tool and the actual application. This is the best way to test since you are using the actual joint as the test station. You will see the actual torque applied to the fastener. **Caution:** Variances in tool performance may occur do to the addition of the rotary torque sensor.
2. Simulated Method: Always use a quality joint rate simulator (run down adapter) with a torque tester when testing power tools in a simulated application. Use Joint rate and Breakaway methods to obtain most accurate torque readings in a simulated rundown.

Care

1. The BLG-BC1 Series screwdrivers are a precision torque control instrument and should be handled with care at all times.
2. Only use the transformers listed in the Mountz catalog or website for appropriate BLG-BC1 Series driver model (If you have any questions regarding the appropriate transformer set-up, contact Mountz Customer Service Department).
3. Operate under safe conditions. Do not place in operation where such objects as hair, strings, clothing, etc. can become tangled in the rotating bit.
4. Keep away from moisture. Never use in high humid, moist or damp environment.

Mountz Calibration & Repair Services

Mountz Inc. features an experienced calibration and repair staff. Our trained technicians can calibrate and repair most any tool. Mountz provides rapid service with quality that you can trust as we offer two state-of-the-art calibration lab and repair facilities that can calibrate up to 20,000 lbf.ft.

Since 1965, Mountz's in-depth knowledge of torque is reflected in our tool's craftsmanship and our ability to provide solutions to both common and uncommon torque applications. We perform calibrations in accordance with ANSI/NCSL-Z540. Mountz is dedicated solely to the manufacturing, marketing and servicing of high quality torque tools.

Tool Service & Repair Capability

- Torque Wrench Calibration: Click Wrench, Dial Torque Wrench, Beam Wrench, Cam-Over & Break-Over Wrench
- Torque Screwdrivers: Dial, Micrometer, Preset & Adjustable
- Torque Analyzers/Sensors: All brands
- Electric Screwdrivers: All brands
- Air Tools: All brands
Impact Wrenches, Drills, Pulse Tools, Grinders, Percussive Tools,
Air Screwdrivers, Nutrunners, DC Controlled Nutrunners
- Torque Multipliers: All brands

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