



Assembly · Industrial · Precision Fastening · Automation

HIOS BLG Series Operational Manual

BLG-4000, BLG-5000, BLG-BC1 (With Built in Screw Counter),
BLG-BC2/ZERO1 (With Built in Screw Counter and Pulse System),
BLG-OPC (For Use with Screw Counter)

Important: Please read and save the operating instructions.

Warning: When using electric tools, the following basic safety precautions should always be adhered to in order to reduce the risk of fire, electric shock, or personal injury.

Precautions

1. Keep Work Area Clean: Cluttered areas and benches can result in injuries.
2. Consider Work Area Environment: Do not expose tools to rain. Do not use tools in damp or wet locations. Keep work area well lit. Never use the tool in an area with dangerous objects present. (gasoline, benzene, thinner, gas glue, metallic objects, etc.)
3. Secure Work: Use clamps or a vice to hold work piece.
4. Guard Against Electric Shock: Prevent body contact with grounded surfaces.
5. Keep Away From Children and Unauthorized Personnel: Do not allow children or unauthorized personnel to use the tool.
6. Store Idle Tools: When not in use, tools should be stored in a dry and high or locked-up place.
7. Remove Adjusting Keys And Wrenches: Make a habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
8. Use The Correct Tool: Use the tool for the correct work for its rated power and design.
9. Dress Properly: Do not wear loose clothing or jewelry as they can be caught in moving parts. Wear protective head wear to contain long hair.
10. Use Safety Glasses: Also use a face or dust mask if the operation involves dust.
11. Do Not Abuse The Cord: Never carry the tool by its cord or pull it to disconnect from the power outlet. Keep the cord away from heat, oil, and sharp edges.
12. Do Not Overreach: Maintain proper footing and balance at all times.
13. Maintain Tools With Care: Keep tools clean for better and safer performance. Follow instructions for lubricating and changing accessories. To use the tool for an extended period of time safely, perform periodical inspections on the tool and if damaged, contact ASG. Keep hands dry, clean, and free from oil and grease. Inspect extension cords periodically and replace if damaged.
14. Disconnect Tools: When the tool is not in use, such as attaching and removing the bit, inspection or cleaning, disconnect the tool from the power outlet.
15. Avoid Unintentional Starting: Ensure that the switch is off when plugging in. Do not carry the tool with finger on the switch.
16. Stay Alert: Always remain vigilant, use common sense, and do not operate the tool when you are tired.
17. Check Damaged Parts: Before using the tool, a damaged protective cover or other parts should be carefully checked to

determine whether the tool will operate correctly and perform as designed.

18. Ground the tool.
19. It only takes a slight amount of pressure for a push-to-start tool to go into operation.

Cautions in Operation

1. If there are any problems, do not disassemble the tool. Stop operations and contact ASG immediately.
2. Never lubricate the tool with aerosol oil or similar lubricants.
3. Do not drop, hit, or abuse the tool.
4. Never use chemicals to wipe the body cover
5. Use only the correct voltage.
6. Do not pull the AC cord when unplugging from the power outlet. Grasp the plug.
7. For safety use, do not set the torque adjusting nut higher than 10 on the torque adjusting scale
8. Use the tool intermittently: (Example: 0.5 seconds ON, 4.5 seconds OFF)
9. Do not tighten more than 720 tapping screws in an hour.
10. This tool is not for tightening wood screws
11. Set the power switch to OFF before putting the tool in reverse.
12. If the tool is not being used, turn the tool off and unplug the AC cord plug.
13. In push-to-start mode the driver automatically goes on when pressure is applied to the bit end.
14. In push-to-start mode do not raise the driver from the screw head until rotation has stopped

Grounding Instructions

The tool should be grounded while in use to protect the operator from electric shock.



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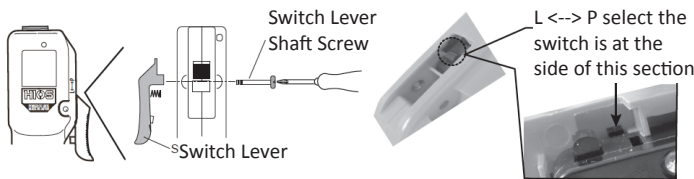
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Operating Procedure

1. Connect the power cord plug to AC outlet.
2. Turn power switch on and check if the LED is illuminated. If it is not lit, contact ASG. After confirming it is lit, turn the power switch off.
3. Connect the driver cord to the power source.
4. Use the torque adjustment nut to select the desired output setting.
5. Attach the bit to the screwdriver
6. Turn the FOR/REV switch to OFF and connect the driver plug to an AC power outlet.
7. Turn on power supply and set the power output setting to 1(20V) or 2(30V).
8. Turn the switch to either FOR or REV to start the screwdriver.
9. Operate the clutch until the screw is tightened to the set torque value.
10. Always turn the power off before reversing the rotation direction setting.
11. When loosening a tightened screw, turn the FOR/REV switch to REV and loosen in the reverse direction.

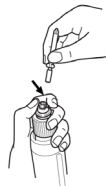
Push-to-Start Mode

Unscrew the switch lever shaft screw to detach the switch lever. Using a tweezer, slide the selection switch to P (Push). Pushing the selection switch may cause damage. Do not use the screwdriver with the switch lever shaft screw removed.



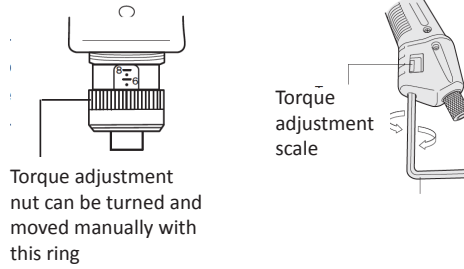
Attaching a Bit

- Caution: When attaching the bit, always ensure that the driver FOR/OFF/REV switch is set to OFF or that the driver power plug has been removed from the AC power outlet.
- Use the correct bit size. To install the bit, push or pull the joint shaft collar at the end of the driver upwards and insert the bit. Check that the bit does not come loose after you have inserted it.



Torque Adjustment Procedure

- BLG-4000 has two torque adjustment springs – Red spring is for high torque measurement, white spring is for low torque measurement.
- Use the torque adjustment nut to select the desired output setting. Note that this setting should be taken as an approximate value. Adjust the setting by loosening the adjustment nut stopper and adjusting the torque adjustment nut. When the setting has been made, re-tighten the torque adjustment nut stopper securely. Repeat this process to determine the appropriate tightness. Use a torque tester to verify.
- BLG-5000: Use an allen wrench to adjust the scale.



Screw Counter

- The BLOP-STC3 is a power supply with a screw counter. The BLOP-SC1 is a screw counter. Please see the operation manual for these products for more information.
- BLOP-STC3 Compatible Screwdrivers: BLG-4000-OPC, BLG-5000-OPCS, BLG-ZERO1, BLG-BC1, BLG-BC2
- BLOP-SC1: Must be used with an external power supply. Compatible Screwdrivers: BLG-4000-OPC, BLG-5000-OPCS, BLG-ZERO1, BLG-BC1, BLG-BC2
- Note: When a tool with an internal counter is used in combination with an external counter, the external counter supersedes the internal counter of the tool.

Repairs

Contact ASG with any questions or concerns at +1-888-486-6163 or asginfo@asg-jergens.com

Accessories

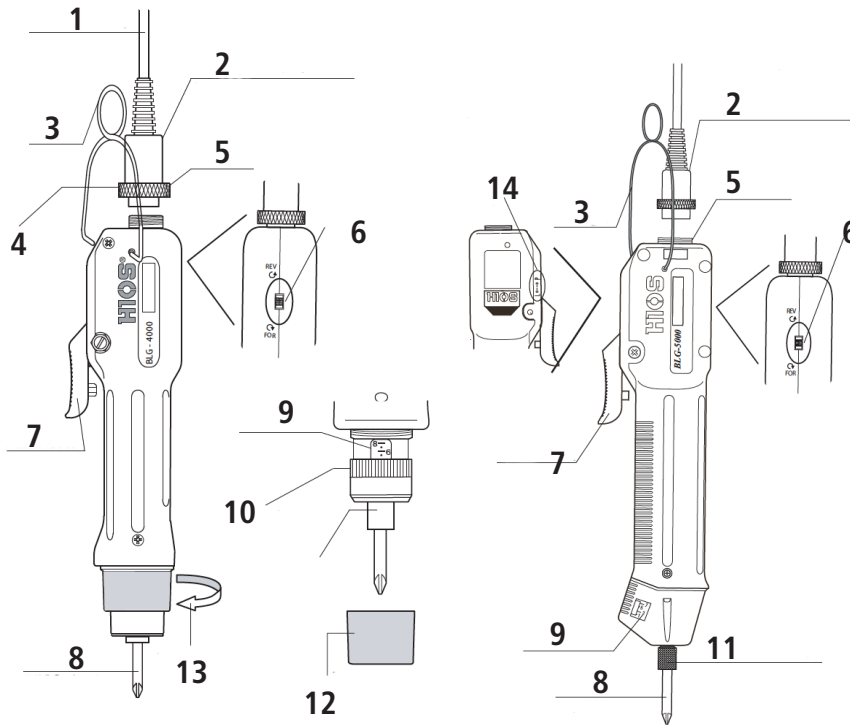
- Bits
- Torque adjusting spring – BLG-4000 has two torque adjustment springs – Red spring is for high torque measurement, white spring is for low torque measurement.
- Allen wrench



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Parts



1	Screwdriver Cord
2	Screwdriver cord plug
3	Hanger
4	Joint Ring
5	Screwdriver Connector
6	Forward/Reverse Switch
7	Switch Lever
8	Bit
9	Torque adjustment Scale
10	Torque adjustment nut
11	Joint shaft collar
12	Torque adjustment nut protect cover
13	Rotate the protect cover counter clockwise to remove.
14	Start Selection Switch - Marking between Lever and Push.

Specifications

Model Number		BLG-4000, BLG-4000ZERO1, BLG-4000BC1, BLG-4000BC2, BLG-4000-OPC	BLG-5000, BLG- 5000ZERO1, BLG- 5000BC1, BLG-5000BC2, BLG-5000-OPC	BLG-5000-15, BLG-5000ZERO1-15, BLG-5000BC1-15, BLG-5000BC2-15, BLG-5000-OPC-15	BLG-5000-18, BLG-5000ZERO1-18, BLG-5000BC1-18, BLG-5000BC2-18, BLG-5000-OPC-18	BLG-5000-HT, BLG-5000ZERO1-HT, BLG-5000BC1-HT, BLG-5000BC2-HT, BLG-5000-OPC-HT
Output Torque Range	N.m	0.1-0.55	0.2-1.2	0.3-1.0	0.5-1.5	0.5-2.0
	lbf.in	0.9-4.8	1.7-10.0	2.6-10	4.3-13	4.3-17
	kgf.cm	1-5.5	2.0-12	3.0-10	5.0-15	5.0-20
Torque Switching		Stepless Adjustment				
Unloaded Rotation Speed (rpm) ±10%	HI	1000	1000	1500	1800	730
	LO	690	690	1000	1200	
Screw Size	Machine Screw	1.4-2.6	2.0-3.0	2.3-3.0	2.3-3.0	2.0-4.0
	Tapping Screw	1.4-2.3	2.0-3.0	2.0-2.6	2.0-2.6	2.0-3.0
Weight (g)		370	425	425	425	425
Bit Type	HIOS Shank	H4		H4	H5 and 5Hex	
	Hex Shank	1/4" Hex	H5 and 5Hex or 1/4" Hex	H5 and 5Hex or 1/4" Hex	1/4" Hex	1/4" Hex
Power Supply	T-45BL	X	X	X*	—	X*
	T-70BL	X	X	X*	X*	X*

* Use only 2(HI) power. May not perform properly on 1(LO) power.

ASG, Division of Jergens, Inc.

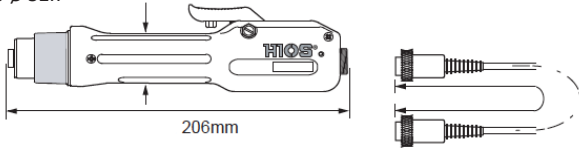
15700 S. Waterloo Road | Cleveland, OH 44110-3898 | Phone: (888) 486-6163 | Fax: (216) 481-4519 | Email: asginfo@asg-jergens.com | Web: www.asg-jergens.com



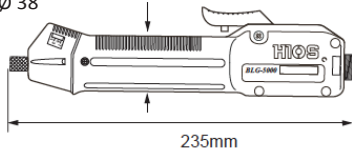
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External Dimensions

BLG-4000
Grip \varnothing 32.7



BLG-5000
Grip \varnothing 38

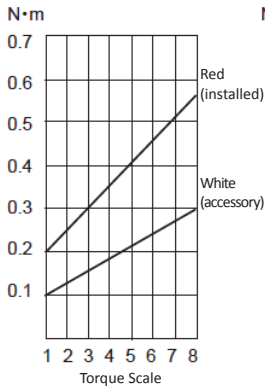


- Driver Cord Length
- BLG-4000, BLG-5000: 1.5m(5P)
- BLG-4000BC1, BC2, ZERO1, OPC
- BLG-5000BC1, BC2, ZERO1, OPC
- :2m(6P)

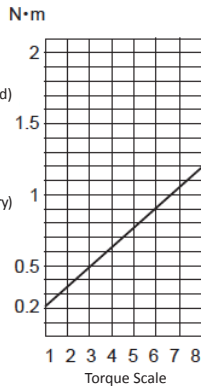
Unit: mm

Approximate Guidance of Torque Output

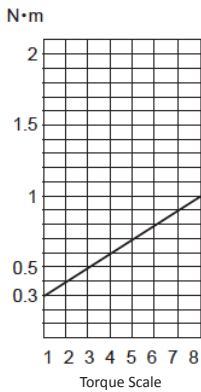
- BLG-4000
- BLG-4000ZERO1
- BLG-4000BC1
- BLG-4000BC2
- BLG-4000-OPC



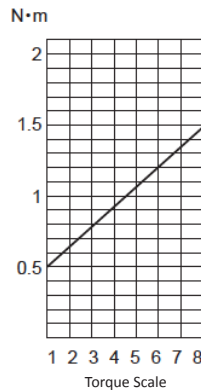
- BLG-5000
- BLG-5000ZERO1
- BLG-5000BC1
- BLG-5000BC2
- BLG-5000-OPC



- BLG-5000-15
- BLG-5000ZERO1-15
- BLG-5000BC1-15
- BLG-5000BC2-15
- BLG-5000-OPC-15



- BLG-5000-18
- BLG-5000ZERO1-18
- BLG-5000BC1-18
- BLG-5000BC2-18
- BLG-5000-OPC-18



- BLG-5000-HT
- BLG-5000ZERO1-HT
- BLG-5000BC1-HT
- BLG-5000BC2-HT
- BLG-5000-OPC-HT

