Adjusting the Torque (Cont.)

The tool should be run in reverse before to each test to make sure the adapter is unwound and will allow the tool to achieve rotation. Testing the tool without allowing any rotation will provide incorrect readings. Start the test with the meter reading zeros. Pull the trigger on the tool and let it run until it shuts off. The reading on the meter will indicate the torque the driver achieved. Reverse the tool, zero the meter and repeat the process several times to see where the driver seems to be set. Tighten the Torque Adjusting Nut to increase the torque, loosen the Torque Adjusting Nut to decrease the torque. When the readings on the meter equal the target torque run several tests to observe the scatter, or the "over/ under" You can "fine tune" the readings so that your target torque will split the high and low readings. Visit the ASG Web page for information on Torque Meters at www.asg-jergens.com

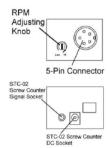
Locking the Torque Adjusting Nut

BTL tools are supplied with a torque cover to protect the Torque Adjusting Nut. When the torque has been adjusted to your satisfaction, install the torque cover to prevent accidental adjustment or tampering.



Adjusting the RPM

The speed of the BTL tools may be adjusted without affecting the torque. The RPM adjustment knob is located on the BTL-1224 power supply next to the 5-pin connector. Use a flat screwdriver bit to adjust the knob. Turn clockwise to increase RPM or counter clockwise to reduce RPM. CAUTION: Do not force the knob past its stopping point or you will damage it.

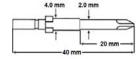


Standard Equipment

- 2, #64416, #0 bit*
- 1, #720718 1.5mm hex key
- 1, #915152, #1 bit
- 1, #728110 2m driver cord

*The spare #0 bit is provided to use for adjusting the RPM.

The drawing to the right shows dimensions of the bits supplied. Contact ASG for different styles, lengths or diameters.



Power Supply BTL-1224



BTL-2A24 Operating Instructions

Plug the Driver Cord in to the 5- Pin Connector on the Power Supply. Plug the A/C Cord in to an A/C outlet. Turn the Power Switch to ON. Turn the RPM adjustment knob with a flat screwdriver bit — turn it clockwise to increase the RPM of the electric screwdriver and counter clockwise to decrease the RPM.

Tool and Power Supply Specifications

Model		BTL-02B	BTL-03B	BTL-04B
Torque Range	lbf.in	0.18-1.3	0.4-2.7	0.4-4.4
	N.m	0.02-0.15	0.05-0.3	0.05-0.5
No Load RPM Adjustment		100-750	100-750	100-750
Weight (g)		230	230	230
Length (mm)		190	190	190
Applicable Screw Range		1.0-2.6	1.0-2.6	1.0-2.6
Applicable Bits		H4 (Ø4mm)	H4 (Ø4mm)	H4 (Ø4mm)

Input Voltage AC	#65688	110-240V - 50/60 Hz		
Output Voltage DC		V (For Electric Screwdriver Use) 12V (For Screw Counter Use)		
Dimensions (mm)	70x125x60 (WxDxH)			
Weight (g)		0.6 lb 270g		
Length of Cord (m)		5 ft 1.5m		



Electric Screwdrivers BTL-02B-ESD, BTL-03B-ESD, BTL-04B-ESD

Instruction Manual



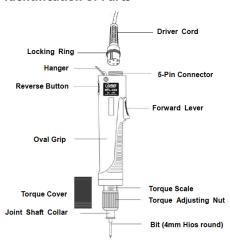
Please Read Instructions Before Operating

Revision: 07/28/202

ASG, Division of Jergens, Inc.

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Identification of Parts



BTL-0XB Operating Instructions

- 1. With the power off, connect one end of the Driver Cord to the 5 Pin Connector on the Power Supply. Connect the other end of the cord to the 5 Pin Connector on the driver. Tighten the Lock Ring to keep the cord in place.
- 2. Select the proper bit for the application. Pull the Joint Shaft Collar forward to insert or remove the bit.
- 3. Adjust the torque by tightening or loosening the Torque Adjusting Nut. Refer to the Torque Chart for approximate torque values. After the torque is set, use the torque cover to protect the preset torque from unwanted adjustment.
- 4. Turn the power switch on the power supply to the ON position.
- 5. Turn the RPM adjustment knob on the power supply with a flat bit to set the working RPM.
- 6. Hold the tool so that your trigger finger is on the Forward Lever and your thumb can operate the Reverse Button.
- 7. Press the Forward Lever to drive the screw. The tool will run and shut off upon reaching the preset torque value.
- 8. When driving screws you need only to apply sufficient downward pressure to keep the bit engaged in the head of the fastener. If the bit "cams out" or seems to slip in the head of the fastener, make sure you are using the proper size bit for the fastener. Excessive downward pressure on small screws at low torque settings can result in incorrect torque and possibly strip the screws.

- Press the Reverse Button to remove screws.
- 10. Do not press the Forward Lever and the Reverse Button at the same time. This will damage the circuit.
- 11. The normal duty cycle of the tool is 800-1000 screws per hour, 8 hours per day. Exceeding this will reduce the life of the driver and can cause premature failure.
- 12. Do not use the tool to tighten wood screws.
- 13. Use the tool with a tool balancer and tool support to prevent damage to the tool and reduce clutter on the work surface. Tool balancers and tool supports available at: www.asgjergens.com

Caution:

- This electric screwdriver is designed for indoor use only. Do not use it outdoors or in wet environments to prevent the danger of electric shock.
- Pay attention to the voltage specification. Make sure the Power Switch is in the OFF position when you plug in the Driver Cord or the Power Supply.
- DO NOT operate the BTL-02B/03B/04B tools on any power supply other than the BTL-1224. Using any other power supply will damage the circuit.

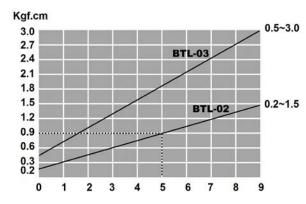
Adjusting the Torque

Refer to the Torque Graph for the tool. The numbers along the bottom represent the numbers on the Torque Scale found on the tool. They do not represent any specific torque value. The 5 on the tool does not indicate that the tool is set to 5 kgf.cm, 5 ozf.in or 5 lbf.in. The numbers along the left side represent torque in kgf.cm. The diagonal lines represent the different BTL tools. Find your desired torque value along the left side. Look straight to the right to see where a line drawn to the right, horizontally from your torque value would cross the diagonal line representing the tool you are using. From that point look straight down to find where a line drawn vertically would cross the bottom line of the graph. The point where your vertical line crosses the bottom will be where you set the edge of the Torque Adjusting Nut on the Torque scale on the tool.

Example: You have a BTL-02B and you want it set to 0.9 kgf.cm. Looking at the Torque Graph below you can see that you would want to set the edge of the Torque Adjusting Nut to the mark

representing the #5 on the Torque Scale on the tool.

Torque Graph BTL Tools:



Using the Torque Graph to adjust the tool will provide an APPROXIMATE torque setting. For more precise torque adjustment a Torque Meter must be used.

Make sure you have a torque meter designed for power tools. Meters designed for use with hand tools may not operate properly for use with power tools.

Make sure the usable torque range of the meter exceeds the torque output of the tool being tested. You also must insure the torque range of the driver adapter being used also matches the torque output of the tool being tested.

The Driver Adapter, sometimes called a joint simulator, can use a spring, a Bellville washer stack or elastomer cylinder in place of the spring or washer stack. Whichever version of the Driver Adapter is used, its purpose is to allow the tool to run for a number of revolutions simulating driving a fastener. The Driver Adapter is placed between the screwdriver and the torque meter.

