

Tube Hole Gauge



Tube & Pipe Cleaners ○ Tube Testers ○ Tube Plugs ○ Tube Removal ○ Tube Installation



Operating and Maintenance Instructions

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INTRODUCTION

Thank you for purchasing this Elliott product. More than 100 years of experience have been employed in the design and manufacture of this control, representing the highest standard of quality, value and durability. Elliott tools have proven themselves in thousands of hours of trouble-free field operation.

If this is your first Elliott purchase, welcome to our company; our products are our ambassadors. If this is a repeat purchase, you can rest assured that the same value you have received in the past will continue with all of your purchases, now and in the future.

If you have any questions regarding this product, manual or operating instructions, please call Elliott at +1 800 332 0447 toll free (USA only) or +1 937 253 6133, or fax us at +1 937 253 9189 for immediate service.

GENERAL INFORMATION

The Elliott Tube Hole Gauge is a precision measuring tool. The all metal construction makes it durable for years of quality use in all applications. The Elliott Tube Hole Gauge has been preset at the factory for accurate measuring.

To Measure The Tube ID

1. Set the Centering Slide to allow the (3) contact balls to enter the tube ID to the desired depth.
2. Withdraw the mandrel by pulling back the Rack Knob by the dial case.
3. Insert the tube gauge shaft into the tube ID until the Centering Slide seats against the tube end.
4. Allow the Mandrel to pull itself back into position.

CAUTION

Caution: DO NOT release the Rack Knob and allow the mandrel to “snap back.” This type of mandrel movement could cause the contact balls to loosen from the body or upset the dial calibration.

5. Read the measurement on the dial where it lines up with the scribe mark on the dial case.

CALIBRATING THE TUBE HOLE GAUGE

Provided in the Elliott Tube Hole Gauge kit is a Setting Ring and Wrench. Indicated on the Setting Ring is the proper calibration diameter of the gauge.

1. Move the Centering Slide up the Tube Hole Gauge shaft just behind the (3) contact balls.
2. Withdraw the Mandrel by pulling back on the Rack Knob by the dial case.
3. Place the Setting Ring over the (3) contact balls against the Centering Slide.
4. Allow the Mandrel to pull itself back into position, being careful not to force the mandrel forward or to allow it to “snap back”.

On the Dial Case, toward the front of the Tube Hole Gauge is a scribe mark. If the dial does not read the correct setting, as indicated on the Setting Ring, follow these (4) simple calibration steps:

1. With the Setting Ring still in place, loosen (do not remove) the two screws on the face of the Tube Gauge dial.
2. Adjust the dial to the correct reading by rotating the dial either clockwise or counterclockwise until the proper setting on the dial aligns with the dial case scribe mark.
3. While holding the dial in this position, tighten the two screws, making sure the setting does not change.
4. The screw holes in the dial plate will allow approximately 0.003” adjustment at calibration. Should more adjustment be required than can be made using this method, the Tube Hole Gauge must be returned to Elliott Tool Technologies for reconditioning and/or calibration.

INSTALLING EXTENSIONS

The reach of the Elliott Tube Hole Gauge can easily be increased by installing the optional Mandrel and Body Extensions. To install the extensions, follow these (8) steps:

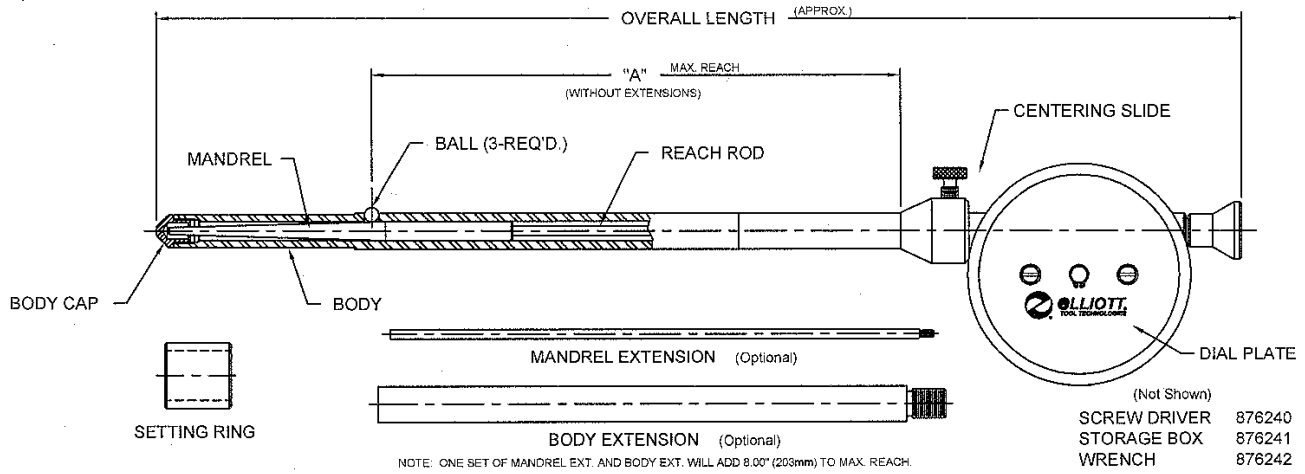
1. Move the Centering Slide to the front (toward the contact balls) of the Tube Hole Gauge.
2. Locate the wrench flats on the Tube Hole Gauge Body. Using the wrench provided in the kit, loosen the body from the Rack Tube. Thread the Body out of the Rack Tube.

CAUTION

Caution: Only withdraw the Body enough to expose the wrench flats on the Reach Rod! Withdrawing the Body too far could allow the contact balls to fall into the Body ID!

3. Using the wrench provided, loosen the Reach Rod by turning it counterclockwise (as you're looking into the open end of the Rack Tube). Thread the Reach Rod out of the Rack inside the Rack Tube, separating the unit.
4. Thread the Mandrel Extension to the exposed end of the Reach Rod. Finger-tighten until flush with the shoulder on the Reach Rod. DO NOT overtighten as threads could get damaged.
5. Thread the Body Extension to the Body and finger-tighten until flush with the shoulder on the Body. DO NOT overtighten!
6. To re-assemble the Tube Hole Gauge, extend the Mandrel Extension until the wrench flats on the extension are exposed. Thread the Mandrel Extension into the Rack located inside the Rack Tube. Use the wrench ONLY to ensure the Mandrel Extension is threaded all the way to the shoulder of the Rack. DO NOT overtighten!
7. Slide the Body Extension over the Mandrel Extension and thread onto the Rack Tube until flush to the shoulder of the Rack Tube. DO NOT overtighten!
8. Follow the same steps in Calibrating the Tube Hole Gauge to check for gauge accuracy after assembly.

PARTS LISTS & DIAGRAMS



Tube Data		Tube Gauge Dimensional Data	
Tube Size	Tube Gauge ID Range	Reach	O.A.L
3/8" (9.5 mm)	0.290 - 0.350 (7.4 - 8.9mm)	4" (102mm)	14.31" (363.5mm)
1/2" (12 mm)	0.350 - 0.450 (8.9 - 11.4mm)		15.00" (381mm)
5/8" (16 mm)	0.440 - 0.560 (11.2 - 14.2mm)		15.50" (394mm)
3/4" (19 mm)	0.550 - 0.715 (14 - 18.2mm)	8" (203mm)	16.50" (419mm)
7/8" (22 mm)	0.675 - 0.840 (17.1 - 21.3mm)		
1" (25 mm)	0.800 - 0.955 (20.3 - 24.5mm)		
1-1/4" (32 mm)	0.950 - 1.170 (24.1 - 29.7mm)		
1-3/8" (35 mm)	1.085 - 1.295 (27.5 - 32.9mm)		
1-1/2" (38 mm)	1.240 - 1.450 (31.5 - 36.8mm)		
2" (51 mm)	1.700 - 1.910 (43.2 - 48.5mm)		

WARRANTY

Should any part, of Seller's own manufacture, prove to have been defective in material or workmanship when shipped (as determined by Seller), Seller warrants that it will, at its sole option, repair or replace said part f.o.b., point of manufacture, provided that Buyer notifies, in writing, of such defect within twelve (12) months from date of shipment from the manufacturing plant.

On request of Seller, the part claimed to be defective will be returned, transportation, insurance, taxes and duties prepaid, to the factory where made, for inspection. Any item, which has been purchased by Seller, is warranted only to the extent of the original manufacturer's warranty to Seller. Seller shall not be liable for any damages or delays caused by defective material or workmanship.

No allowance will be made for repairs or alterations made by others without Seller's written consent or approval. If repairs or alterations are attempted without Seller's consent, Seller's warranty is void.

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Seller's total liability is limited to the lower of the cost of repair or replacement.



Contact Us

Elliott Tool offers a complete line of precision tube tools to meet your needs. Contact us or your local support.

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