

Elliott offers a complete line of precision tube tools, including:



**tube
expanders**

- Boiler Expanders
- Heat Exchanger Expanders
- Condenser Expanders
- Refinery Expanders

**tube rolling motors
& torque controls**

- Electric
- Pneumatic

**tube
cleaners**

- Air & Water Driven Motors
(Internal/External Drives)
- Jiffy Guns
("Shoot-Thru" Devices)
- Roto-Jet
(Rotating Flex Shaft)

**additional
products**

- Tube and Joint Testers
- Tube Plugs
(High & Low Pressure)

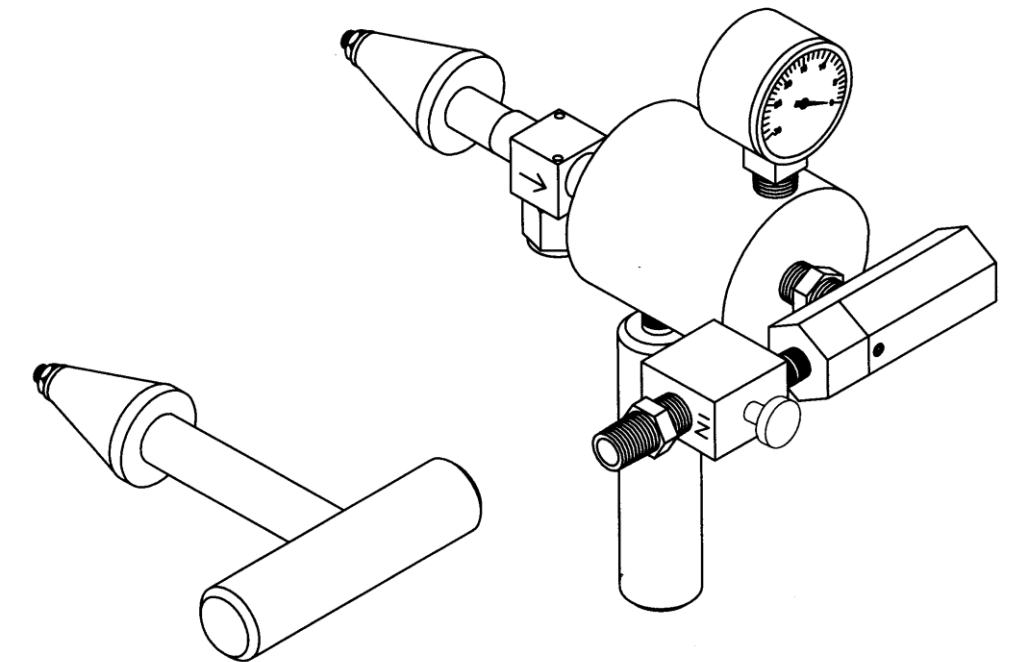
**retubing
tools**

- Tube Gauges
- Tube Cutters
- Manual Tools
- Spear Type Tube Pullers
- Collet-Type Tube Pullers
- CYCLGRIP Tube Extractors
- Grooving Tools
- End-Prep Tools

**metal working
products**

- Back Chamfering Tools
- Carbide Roller Burnishing Tools
- Diamond Burnishing Tools
- Elliptical Deburring Tools
- Fine Boring Tools
- Internal Recessing Tools
- Magic Vise
- Mechanical Joining Tools
- Roller Burnishing Tools
- Single Blade Reamers

5556 Series Vacuum Tube Tester



Safety and Operating Instructions

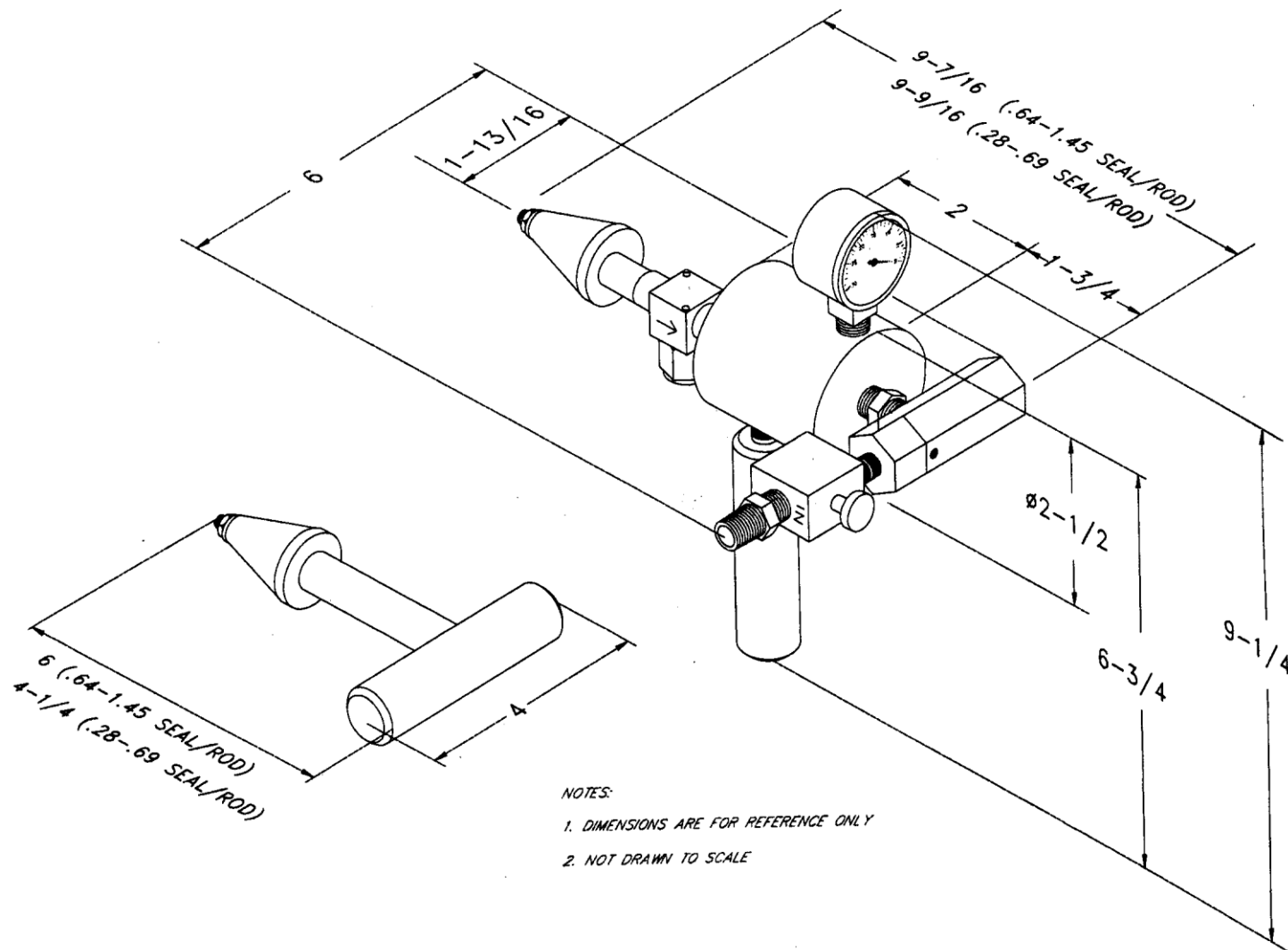
Elliott Tool Technologies Ltd • 1760 Tuttle Avenue • Dayton, Ohio 45403 U.S.A.
Phone: +1 800 332 0447 • +1 937 253 6133 • Fax: +1 937 253 9189

Elliott Tool Technologies UK Limited • Broadstone Hill • Old Chalford • Chipping Norton • OXON • OX7 5QL • England
Phone: +44 (0) 1608 672815 • Fax: +44 (0) 1608 672810



www.elliott-tool.com

MODEL 5556 VACUUM TEST GUN – DIMENSIONAL DRAWING



OPERATING PROCEDURES FOR MODEL 5556 VACUUM TUBE TESTING GUN SET

PRIOR TO TESTING:

1. The tubes to be tested are to be cleaned and any loose deposits or scale are to be removed. If the tubes have not been cleaned any foreign materials present may be ejected during the testing operation and may damage the test guns or injure the operators.
2. The operators should always wear safety glasses and a face shield when testing with the 5556 test gun.
3. If the tubes have been chemically cleaned, please check with Elliott Tool regarding the compatibility of the test gun seals with the cleaning agent. Different types of elastomer seals are available as replacements.
4. Make sure the seal and support rod assembly are the correct size for the tubes being tested. The size range of the smaller seal and support rod assembly are for tube ID range of 0.28" to 0.69" (7.1 mm to 17.5mm). The size range of the larger seal and support rod assembly are for tube ID range of 0.64" to 1.45" (16.3mm to 36.8mm). For tubes with IDs larger than 1.45" (36.8mm), please contact the factory.
5. Using seals that are too small may cause the following: premature seal wear, jamming of the test gun in the tube, or inability to pull a vacuum on tube end. Using seals that are too big may prevent the gun from creating a seal on the tub end.

TESTING PROCEDURE:

Configuring the Support Rod and Seal Assembly for 0.28" to 0.69" (7.1 mm to 17.5mm) Tube ID:

1A. Confirm that the correct assembly is chosen. The OD of the small end washer is approximately 1/4" (6.4mm). Apply Teflon Tape to the NPT threads of both support rods. Firmly thread one support rod into the open NPT port of the filter on the 5556 Test Gun. Tighten the lock nut on front of support rod to remove any slack in the assembly.

2A. Firmly thread the 2nd support rod into the NPT port of the T-handle bar. Continue to step 3.

Configuring the Support Rod and Seal Assembly for 0.64" to 1.45" (16.3mm to 36.8mm) Tube ID:

1B. Confirm that the correct assembly is chosen. The OD of the small end of washer is approximately 9/16" (14.2mm). Apply Teflon Tape to the NPT threads of both 3/8" OD support rods. Firmly thread the 3-3/8" long, 3/8" OD support rod into the open NPT port of the filter on the 5556 Gun. Insert the following over the support rod in the order listed: 3/4" long comp tube, large washer (1.55" OD x .42" ID), large tapered seal, small washer (.56" OD x .42" ID) over the support rod. Tighten the lock nut on front of support rod to remove any slack in the assembly.

2B. Firmly thread the 5-5/16" long support rod into the NPT port of the T-handle bar. Insert the following over the support rod in the order listed: 2-7/8" long comp tube, large washer (1.55" OD x .42" ID), large tapered seal, small washer (.56" OD x .42" ID) over the support rod. Tighten the lock nut on front of support rod to remove any slack in the assembly. Continue to step 3.

3. Attach air supply (40 to 130 psi; 2.7 to 8.9 Bar) to port labeled "IN" on the valve block of the 5556 test gun. The 5556 test gun will be operational on plant air supplies ranging from 40 to 130 psi (2.7 to 8.9 Bar) at a minimum of 5 cfm (2.4 lps).

4. Insert the tapered seal of the gun into one end of the tube for a snug fit to create a leak tight seal. The support rod of the 5556 should be in-line with the tube being tested at all times. Insert the tapered seal of the T-handle plug into the other end of tube for a snug fit to create a leak tight seal.

5. Begin testing: Depress the air control valve on the 5556 test gun until the vacuum gage needle stops moving. Release the air control valve while maintaining a leak tight seal on the tube end. Gun operators should observe the vacuum gage on the gun. Any tube leaks will be identified by a reduction in vacuum reading on the gage.

PREVENTIVE MAINTENANCE

6. If no leaks are detected, remove the 5556 test gun & T-Handle Plug from the tube ends by pulling the 5556 gun & T-Handle plug straight out of the tube and reinsert each into the next respective tube ends to be tested. Mark each leaking tube encountered for repair. The total operation should be completed in 15 to 30 seconds. Your actual testing time will depend on the amount of time you choose to hold the vacuum test and the length of the tubes.

7. Repeat steps 5 through 6 until testing is complete.

REPLACING THE AIR FILTER ELEMENT:

Unscrew hex nut at the bottom of the filter body. Pull out the filter strainer element from filter body with needle nose pliers. Insert new element open end first, until snug. Screw hex nut back onto the filter body.

Table 1. Model 5556 Vacuum Tester Parts List

ITEM	QUANTITY	DESCRIPTION	PART NO.
1	1	Complete 5556 Test Gun Kit (See Note 1) (Includes Seal & Washer Sets)	5556
		Support Rod Assembly	
2A	2	0.28" - 0.69" (7.1-17.5mm) (INCLUDES ITEMS 4A, 5A, 6)	5556ST1
2B	1	0.64" - 1.45" (16.3-36.8mm) FOR GUN (INCLUDES ITEMS 4B, 5B, 7A)	5556ST2
2C	1	0.64" - 1.45" (16.3-36.8mm) FOR T-HANDLE (INCLUDES: 4B, 5C, 7B)	5556ST3
		REPLACEMENT SEALS & WASHERS SET (See Note 2)	
3A	1	0.28" - 0.69" (7.1-17.5mm) (2 SEALS & 4 WASHERS)	5556S1
3B	1	0.64" - 1.45" (16.3-36.8mm) (2 SEALS & 4 WASHERS)	5556S2
		LOCK NUT	
4A	1	0.28"-0.69" (7.1-17.5mm)	5373LN1
4B	1	0.64" - 1.45" (16.3-36.8mm)	5373LN3
		PORTED SUPPORT ROD	
5A	1	0.28"-0.69" (7.1-17.5mm)	SEE ITEM 2
5B	1	0.64" - 1.45" (16.3-36.8mm) FOR GUN	SEE ITEM 2
5C	1	0.64" - 1.45" (16.3-36.8mm) FOR T-HANDLE	SEE ITEM 2
6	1	1/16F-1/8M NPT COUPLING	SEE ITEM 2
		0.28" - 0.69" (7.1-17.5mm)	N/A
		0.64" - 1.45" (16.3-36.8mm)	N/A
		COMP TUBE SPACER	
		0.28" - 0.69" (7.1-17.5mm)	N/A
7A	1	0.64" - 1.45" (16.3-36.8mm) FOR GUN	SEE ITEM 2
7B	1	0.64" - 1.45" (16.3-36.8mm) FOR T-HANDLE	SEE ITEM 2
8	1	SMALL SUPPORT ROD EXTENSIONS ASSEMBLY	
		0.28" - 0.69" (7.1-17.5mm)	
		12" EXTENSION	5556ST1-12
		24" EXTENSION	5556ST1-24
		36" EXTENSION	5556ST1-36
		48" EXTENSION	5556ST1-48
9	1	LARGE SUPPORT ROD EXTENSIONS ASSEMBLY	
		0.64" - 1.45" (16.3-36.8mm)	
		12" EXTENSION	5556ST2-12
		24" EXTENSION	5556ST2-24
		36" EXTENSION	5556ST2-36
		48" EXTENSION	5556ST2-48
10	1	VACUUM GAGE, 0-30" HG VAC	5376VG
11A	1	AIR FILTER *	5556AF
11B	1	REPLACEMENT FILTER ELEMENT	5556FE
12	1	CYLINDER BODY	5556C
13	1	CHECK VALVE	5376CV
14	1	AIR CONTROL VALVE BLOCK	5373CV
15	1	VENTURI	5376V
16	1	REDUCING NIPPLE, 1/4 TO 1/8 NPT	5373RN
17	2	SHORT NIPPLE, 1/8 NPT	5373SN
18	1	GUN HANDLE	5373H2
19	1	T-HANDLE	5556TH
20	1	PLASTIC TOOLBOX W/INSERT	5373TB

* Replacement Gasket 5556GK

MODEL 5556 VACUUM TUBE TESTING GUN SET

NOTE 1: Complete Tube Tester Kit consists of (1) Test Gun, (1) Set each Support Rod Assemblies, and Seal & Washer Sets to cover tube I.D. range of 0.28" – 1.45" [7.1mm – 36.8mm], (1) T-Handle, and (1) Tool Box.

NOTE 2: Standard material for seals is neoprene. For addition material, consult the factory.

