

**Installation Instructions**  
**Type 662 & 663 Tapping Sleeves**  
**Type 664 & 665 Tapping Sleeves**



662/663 Finger Lug Style  
See Page 1



664/665 V-Lug Style  
See Page 2

**FOR TYPE 662 & 663 TAPPING SLEEVES**

**Step 1**

Visually inspect your Smith-Blair tapping sleeve prior to installation to ensure that no damage has occurred during shipment or storage.

**Step 2**

Check pipe outside diameter where sleeve will be installed to ensure that the correct tapping sleeve is being installed. Thoroughly clean pipe surface so that it is smooth and free of dirt, corrosion and/or other debris that may impair gasket seal.

**Step 3**

Lubricate pipe and gasket with soap solution or suitable lubricant. Antifreeze should be added in freezing weather.

**Step 4**

Disassemble nuts, washers, keeper bars, and remove top half of tapping sleeve. Note: If a three piece sleeve is to be installed, assemble the two lower segments with a 1 1/2" gap between the lug bars. This lower assembly can now be treated as one piece and assembled similar to the two-piece design.

**Step 5**

Mount top half on pipe with outlet in

position required for permanent installation making sure test plug is accessible. Extra caution should be made at this stage of installation to ensure that the flanged portion of the sleeve is mounted on the pipe in a direct "head-on" direction. Do not rotate tapping sleeve top section after it is positioned on pipe.

**Step 6**

Install bottom half of the tapping sleeve, tucking gasket flaps in place to ensure they are flat and smooth against the pipe surface. Do not rotate tapping sleeve. This will cause the gasket to roll up in the sleeve and prevent proper sealing. Mesh lug fingers and studs. Install keeper bars, washers and nuts on studs.

**Step 7**

Tighten nuts starting from the center outward, alternating from one side to the other, to equalize the gap between the halves. Continue to tighten nuts until sleeve halves conform to the contour of the pipe and all nuts are to a uniform tightness. The required torque will be 90 ft. lbs. A torque wrench is recommended. Note: If a three-piece sleeve

is being installed alternate between all three sets of nuts equally.

**WARNING:** For mechanical joint (MJ) outlets use only gaskets, hardware and installation procedures per AWWA C111.

**Step 8**

A pressure test is recommended prior to tapping to test the seal. Do not air test! Use hydrostatic test only. Proceed with tapping operation. Note: The hydrostatic test pressure shall not exceed 1.25 times the pressure inside of the pipe being tapped at the time of the test.

**WARNING:** Ensure proper clearance between cutter and neck/outlet inside diameter.

**Step 9**

Check nuts for tightness and re-torque to 90 ft.-lbs. if required. If possible, nuts should be checked for tightness 12-24 hours after initial tightening.

**CAUTION**

Failure to evenly tighten all nuts to the required torque may result in failure of the tapping sleeve. The tapping sleeve will not function properly if the nuts on only the topside of the tapping sleeve are tightened! Make sure the nuts on the bottom of the tapping sleeve are tightened to the proper torque! Be sure to permanently block and support the valve and pipe prior to the tapping operation. Failure to do so may cause damage to the pipe or sleeve.



**Installation Instructions**  
**Type 662 & 663 Tapping Sleeves**  
**Type 664 & 665 Tapping Sleeves**

**Step 1**

Visually inspect your Smith-Blair tapping sleeve prior to installation to ensure that no damage has occurred during shipment or storage.

**Step 2**

Check pipe outside diameter where sleeve will be installed to ensure that the correct range tapping sleeve is being installed. Thoroughly clean pipe surface so that it is smooth and free of dirt, corrosion and/or other debris that may impair gasket seal.

**Step 3**

Lubricate pipe and gasket with soap solution or suitable lubricant. Antifreeze should be added in freezing weather.

**Step 4**

Disassemble nuts and washers and remove top half of tapping sleeve.

**Step 5**

Mount top half on pipe with outlet in position required for permanent instal-

**FOR 664 & 665 TAPPING SLEEVES**

lation making sure test plug is accessible. Extra caution should be made at this stage of installation to ensure that the sleeve is mounted on the pipe in a direct "head-on" direction. Do not rotate tapping sleeve top section after it is positioned on pipe.

**Step 6**

Install bottom half of the tapping sleeve, tucking gasket flaps in place to ensure they are flat and smooth against the pipe surface. Do not rotate tapping sleeve. This will cause the gasket to roll up in the sleeve and prevent proper sealing. Insert bolts and hand tighten nuts keeping equal gaps between body halves.

**Step 7**

Tighten bolts starting from the center outward, alternating from one side to the other, to equalize the gap between the halves. Continue to tighten bolts until sleeve halves conform to the contour of the pipe and all bolts are to a uniform tightness. The required torque will be 90 ft. lbs. A torque wrench is rec-

ommended.

**WARNING:** For mechanical joint (MJ) outlets use only gaskets, hardware and installation procedures per AWWA C111.

**Step 8**

A pressure test is recommended prior to tapping to test the seal. Do not air test! Use hydrostatic test only. Proceed with tapping operation. Note: The hydrostatic test pressure shall not exceed 1.25 times the pressure inside of the pipe being tapped at the time of the test.

**WARNING:** Ensure proper clearance between cutter and neck/outlet inside diameter.

**Step 9**

Check nuts for tightness and re-torque to 90 ft.-lbs. if required. If possible, nuts should be checked for tightness 12-24 hours after initial tightening.

**CAUTION**

Failure to evenly tighten all nuts to the required torque may result in failure of the tapping sleeve. The tapping sleeve will not function properly if the nuts on only the topside of the tapping sleeve are tightened! Make sure the nuts on the bottom of the tapping sleeve are tightened to the proper torque! Be sure to permanently block and support the valve and pipe prior to the tapping operation. Failure to do so may cause damage to the pipe or sleeve.

**WARRANTY**

Smith-Blair, Inc. warrants its products to be free of defects in materials and workmanship for a period of one (1) year from the date of shipment by Smith-Blair, Inc. (the "Warranty Period"). Dated proof of purchase, such as a bill of sale, is required to establish warranty eligibility. If a product fails to perform due to a defect in materials or workmanship during the Warranty Period, Smith-Blair, Inc. will repair or, at Smith-Blair, Inc.'s option, replace the product with the same or comparable item. In the event that the product cannot be repaired and a suitable replacement item is not available, Smith-Blair, Inc. will refund the original purchase price shown on the proof of purchase. In all cases, the customer is responsible for returning the allegedly defective product to the factory or warehouse designated by Smith-Blair, Inc.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHER WARRANTY OF QUALITY, OR THOSE ARISING FROM A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. THE REMEDIES PROVIDED IN THIS LIMITED WARRANTY STATEMENT ARE THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES. IN NO EVENT SHALL SMITH-BLAIR, INC. BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY, AND WHETHER ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

**WARNING**

Metal products are subject to corrosion, particularly when used outdoors and/or underground. A large number of factors and local conditions affect the rate of corrosion. Consult a local corrosion expert to determine the life expectancy of this product when used with your pipeline content, soil, and environment. Also, consult your system designer to determine the suitability of this product in your piping system. Failure to determine the suitability of this product in your application, soil, and/or environment can result in premature product failure. Smith-Blair, Inc. will provide additional information about this product's material specifications at your request.