Franklin Fueling Systems

# Secondary Test Boots (STB-XXX and STB-SW-XXX) & STK-1 and STK-2

## Installation Instructions

**Warning** **Follow all federal, state and local laws governing the installation of this product and its associated systems. When no other regulations apply, follow NFPA codes 30, 30A and 70 from the National Fire Protection Association. Failure to follow these codes could result in severe injury, death, serious property damage, environmental contamination and/or system degradation.**

## Clamshell Secondary Test Boots

1. After pulling the piping on the site, cut it at each intermediate dispenser sump as required.
2. Preassemble the hose barb portion of the fittings into the tees or elbows per the fitting installation instructions.
3. Square off and de-burr the end of the pipe. If you are using SC (Secondary Contained) piping, cut back the scuff guard layer to the sump wall (approximately 9" in dispenser sumps) and cut back the SC layer 4½". For further cutback details, see the process's complete description in the DWC-XXX Double Wall Cutter (SC) Installation Instructions or in APT's Installation Guide Overview.
4. Push the pipe through the appropriate entry boot in the sump wall and slide the Secondary Test Boot over the pipe. Clamshell STBs must be oriented so the larger mouth is facing the pipe secondary (See Figure 1).

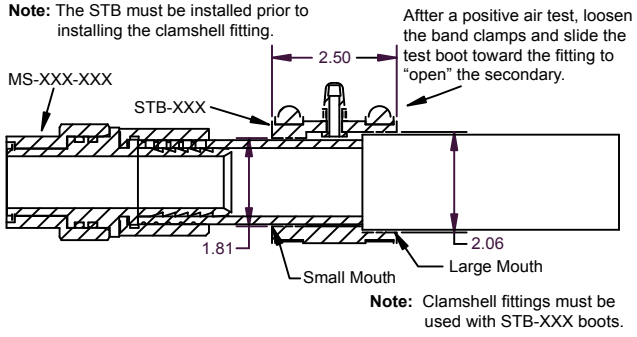


**Figure 1: Clamshell Secondary Test Boot *(STB-XXX)***

5. Connect the STB assemblies to the SC jacket and the primary pipe by tightening the band clamps.
6. Continue assembling the fittings as per the fitting installation instruction. Push the end of pipe over the barbed fitting and attach it per the fitting installation instructions.
7. If you're using By-Pass Tubes (BPT-100) to test an entire run of pipe, attach each end of a BPT-100 to the air valves of each inline STBs.

**Note:** When using a BPT-100 or STK-*x* to air test an entire run, make sure not to kink or squeeze the tubing during testing. Reducing airflow through the tubing while testing may result in inaccurate test results.

When using STK-*x,* leave STBs in closed (test) position. Refer to STK Installation and Testing on the second page of this guide.

8. Perform a 5 to 8 psi secondary air test with all test boots attached.
9. If a pressure loss is detected, use soapy water to check all connections for the leak point.
10. Once the air test has been passed, loosen each band clamp and slide the STB back towards the clamshell fitting.

## Swage Secondary Test Boots

1. After pulling the piping on the site, cut it at each intermediate dispenser sump as required.
2. Square off and de-burr the end of the pipe. If you are using SC (Secondary Contained) piping, cut back the scuff guard layer to the sump wall (approximately 9" in dispenser sumps) and cut back the SC layer 4½". For further cutback details, see the process's complete description in the *DWC-XXX Double Wall Cutter (SC) Installation Instructions* or in APT's *Installation Guide Overview*.
3. Swage on the connection fitting per the swage fitting installation instructions.
4. Push the pipe through the appropriate entry boot in the sump wall and slide the Secondary Test Boot over the fitting and pipe. One end of the test boot must cover the secondary jacket; the other end will cover the swage fitting collar. No specific orientation is required (see Figure 2).

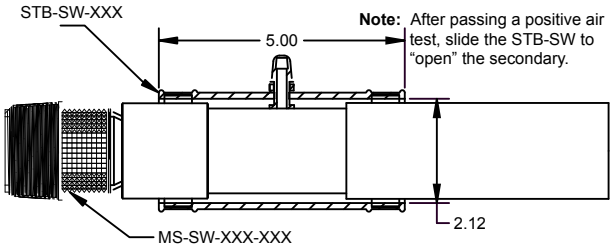


**Figure 2: Swage Secondary Test Boot *(STB-SW-XXX)***

5. Thread the swage fitting into its mated fitting.
6. Connect the STB assemblies to the SC jacket and the swage fitting by tightening the band clamps.
7. If you're using By-Pass Tubes (BPT-100) to test an entire run of pipe, attach each end of a BPT-100 to the air valves of each inline Secondary Test Boot.

**Note:** When using a BPT-100 or STK-*x* to air test an entire run, make sure not to kink or squeeze the tubing during testing. Reducing airflow through the tubing while testing may result in inaccurate test results.

When using STK-*x,* leave STBs in closed (test) position. Refer to STK Installation and Testing on the second page of this guide.

8. Perform a 5 to 8 PSI secondary air test with all test boots attached.
9. If a pressure loss is detected, use soapy water to check all connections for the leak point.
10. Once the test is passed, loosen each band clamp and slide the STB back.

## STK-2

### Installation

1. Measure the distance between the in-line STBs that will be connected and then add 5 inches to the measurement.
2. Cut a piece of tubing to the previously determined measurement and cut it in half.
3. Push an air valve actuator into one side of each of the tube pieces and then use a zip tie to seal the tube tightly over the barb.
4. Connect the other end of each tube to each in-line side of the barbed tee fitting and then use a zip tie to seal the tube tightly over the barb.
5. Screw each air valve actuator onto the Schrader valve of each STB.
6. Measure the distance from the top of the STBs to the middle of the stabilizer where the ball valve will be mounted to and cut another piece of tubing to meet that dimension.
7. Connect one end of the tube onto the third barb on the tee fitting and the other end onto one barbed end of the ball valve. Use zip ties to seal the tubes tightly over each barb.
8. Position the ball valve on the SBK that will allow free movement of the ball valve handle and secure it to the stabilizer bar.
9. Cut a fourth tube that will connect to the top side of the ball valve and will reach the sensor area.
10. Install the drain tube on the top of the ball valve and attach the opposite end to sensor area.

## STK-1

### Installation

1. Measure the distance from the top of the STB to the middle of the stabilizer where the ball valve will be mounted to and cut a piece of tubing to meet that dimension.
2. Connect one end of the tube to a air valve actuator and the other end onto one end of the ball valve. Use zip ties to seal the tubes tightly over each barb.
3. Position the ball valve on the SBK that will allow free movement of the ball valve handle and secure it to the stabilizer bar.
4. Cut a second tube that will connect to the top side of the ball valve and will reach the sensor area.
5. Screw the air valve actuator onto the Schrader valve of the STB.
6. Install the drain tube on the top of the ball valve, secure with a zip tie and attach the opposite end to sensor area.

### Testing

1. Disconnect the drain tube from one of the ball valves and install a test apparatus. Close all other ball valves on that line creating a closed system prior to testing.
2. Perform a 5 to 8 PSI secondary air test.
3. If pressure loss is detected, use a soapy water solution to check all connections and tubes for a leak point.
4. Once the test has passed, disconnect test apparatus, reinstall drain tube and open all ball valves.

**Important:** The valve must be in the open position to detect a leak in the system

***Figure 3: STK-2***


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