

## Safe-T-Stopper ® - Typical operation illustrations

The intent of this booklet is to enhance overall operational understanding to those who are new to the Safe-T-Stopper. The illustrations are for demonstration purposes only and do not replace the written instructions or formal training.

Pictured below are some of the styles of service tees that are compatible with the Safe-T-Stopper operation.

### 3/4"- 2" open gut welded pipe tees (manufactured or homemade)



### 3/4"- 2" Street Tee threaded directly into the main, onto a saddle, or threaded into a welded socket or weldolet



### 3/4"-1-1/4" various different styles of Mueller tees with or without brass completion plug



Customized adapters can be made for specialty and older style tees , such as tees with a flapper valve attached to a Skinner saddle, tees with a corporation shut off or street elbows threaded directly into the main.



# Example 1: Street Tee threaded into a welded coupling / half coupling



Aluminum disc with embedded o-ring is placed on boss of tee.



Cap housing and disc secured with chains.



Ball valve attaches to cap housing.



Plug removal tool.



Plug removal tool attaches to shaft.



Plug removal tool attaches to ball valve.



Plug removal tool travels through ball valve to remove plug.

# Example 1: Street Tee threaded into a welded coupling / half coupling



Check for concentric hole in the main using view port. If hole is round then skip drilling step and insert tapered threaded weld plug.

*Drill assembly: Use when hole is out of round.*



Drill guide shown.



Insert drill guide into top of tee using plug insertion tool.



Drill assembly



Drill guide ensures proper drill alignment.



Drill hole in main.



Tapered threaded weld plug and plug insertion adapter.



Tapered threaded weld plug insertion tool assembly.



Tapered threaded weld plugs available in different sizes

# Example 1: Street Tee threaded into a welded coupling / half coupling



Attach tapered threaded weld plug tool assembly.



Open ball valve and insert tapered threaded weld plug.



Once the inserted tapered threaded weld stops the flow of gas, assembly can be disassembled.



A malleable plug is tightened into the welded coupling.



Low profile tapered threaded weld plug inside the main.

**Example 2: Street Tee threaded into a saddle. Use the same operation as example 1.**



Street Tee threaded into a saddle.



Place aluminum disc with embedded o-ring on top of the tee.



Threaded cap housing attached with chains.



Ball valve attaches to cap housing.



Remove plug



Check for concentric hole in the main using view port. If hole is round then skip drilling step and insert tapered threaded weld plug.



Insert tapered threaded weld plug into main to stop the flow of gas.



Remove tool assembly, tee and saddle. Leave in tapered threaded weld plug and install full encirclement clamp with threaded outlet over plug to complete operation.

### Example 3: Homemade or manufactured welded pipe tee.



Pipe Tee



Adapters: Half collar cap housing, two beveled o-rings, half collars, cap removal adapter and expansion plug.



Fit one beveled o-ring with bevel facing down.



Fit second beveled o-ring with bevel facing up.



Fit two half collars under beveled o-rings



Fit cap housing



Secure safety strap



Attach ball valve

### Example 3: Homemade or manufactured welded pipe tee



Cap removal tool.



Cap removal tool is attached to ball valve.



Cap is removed.



Check for possible obstruction using view port.



Expansion plugs available in different sizes.



Expansion plug removal / insertion tool.



Measure expansion plug insertion depth.



Insert expansion plug below branch to stop the flow of gas.

### Example 3: Homemade or manufactured welded pipe tee



Use view port to check expansion plug is properly seated in base of tee below the branch.



Make renewal connections.



Once service connection are complete, remove expansion plug to energize service.



Return cap to tee and remove entire assembly.



Operation is complete.

**Example 4: Operation performed on Mueller tee. (Operation is identical to pipe tee)**



Install first beveled o-ring  
beveled side down.



Install second beveled o-ring  
beveled side up.



Fit two half collars under o-rings.



For some tee sizes it is  
necessary to place reducer ring  
inside cap housing to achieve  
gas tight seal around tee.



Fit cap housing over tee and  
secure safety strap.



Fit ball valve.



Mueller cap removal / insertion  
tool.



Mueller cap removal/ insertion  
tool has four keyway slots.

**Example 4: Operation performed on Mueller tee. (Operation is identical to pipe tee)**



Insert Mueller cap removal tool.



Remove cap.



Use view port to check for any obstruction.



Expansion plug removal / insertion tool.



Measure expansion plug insertion depth using collar.



Insert expansion plug below branch to stop the flow of gas.



Use view port to confirm the expansion plug is properly seated to stop the flow of gas. Renewal connections or abandonment procedure can now be carried out.



Expansion plug shown for illustration purposes only. Renewal connections or abandonment procedures should be carried out with tool assemble mounted to tee.

**Example 5: Operation performed on a tee threaded into the main and the tee is removed.**



Street Tee



Aluminum disc with embedded o-ring.



Install ball valve and remove cap with cap removal / insertion tool



After cap is removed, install expansion plug into throat of tee to stop the flow of gas.



Check expansion plug is properly seated.



Replace malleable plug and disassemble entire assembly. Expansion plug shown in throat of tee for illustration purposes.

# Example 5: Operation performed on a tee threaded into the main and the tee is removed



Before cutting off branch tighten plug and loosen tee. Plug should be tighter than tee. Cut branch.



Place saddle over tee.



Place aluminum adapter over saddle.



Place cap housing over aluminum adapter and chain the assembly to the main.



Attached ball valve and extension housing. Plug removal tool will be used to extract tee out of the main.



Remove tee and close ball valve.



Once tee is removed, replace threaded hole in main with malleable plug using the plug insertion / removal tool.



Operation is complete and assembly can be removed.