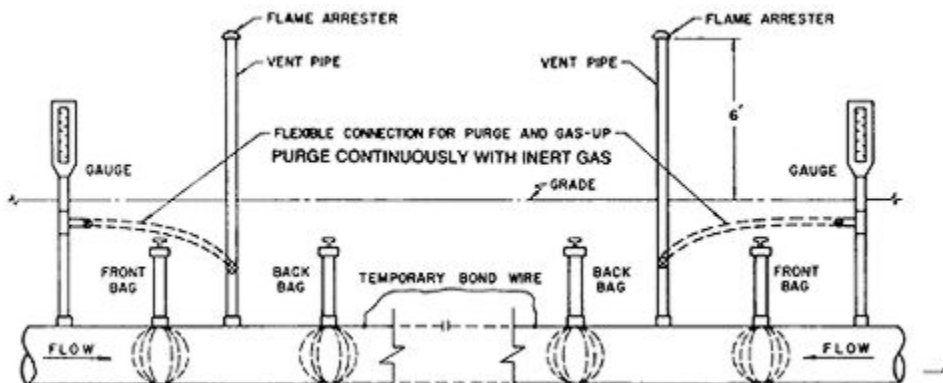


Operating Procedures for Inflatable (Type C “Gas Bag”) Pipe Plugs

1. Immediately Upon Receipt of the Inflatable Pipe Plug (or “Bag”)
 - a. Remove the Bag from shipping carton and examine for any damage sustained in transit. Report any such damage to the delivering carrier.
 - b. Mark on the Inflatable Pipe Plug, in a conspicuous location with indelible ink, the date of receipt.
 - c. Inflate to the recommended pressure, which can be found on the tag attached to the Bag. DO NOT OVER-INFLATE as this may cause the Bag to burst. Leave inflated for three hours. If the Bag does not retain the recommended inflating pressure, notify your supplier IMMEDIATELY as no claims for defective goods will be honored beyond 21 days from date of shipment. DO NOT USE IF DEFECTIVE.
2. Proper Storage of the Inflatable Pipe Plug
 - a. Store the Inflatable Pipe Plug in a cool, dry, and dark area that is not subject to excessive changes in temperature. NEVER store an Inflatable Pipe Plugs in direct sunlight or exposed to weather.
 - b. DO NOT place anything on top of the Bag while being stored.
 - c. Store lying FLAT and NOT FOLDED, WRINKLED or ROLLED UP. DO NOT kink inflating tubes.
 - d. All Inflatable Pipe Plugs should be given a light coat of oil on all metal surfaces and moving parts and then wrapped in an air-tight container and stored in a cool, dry, dark place.
3. Before Each Use of Inflatable Pipe Plug
 - a. Rotate all stock, using the Bag with the oldest date of receipt first. Inflatable Pipe Plugs over 2 years old SHOULD NOT BE USED. They must be returned to the manufacturer for a free safety check and testing.
 - b. Insert the Bag into an empty test pipe of the exact inside diameter in which it will actually be used. The inside of the pipe must be clean.
 - c. Always use Inflatable Pipe Plugs in series with a vent pipe extending vertically between them on either side of the area to be isolated as shown in the accompanying illustration (Chart 1).

Chart 1



- d. Inflate the Bag to the recommended pressure. DO NOT OVER-INFLATE as this may cause it to burst.
 - e. Always use a pressure gauge on the Inflatable Pipe Plug to insure that it is not over-inflated and is retaining pressure. Use a Test Gauge to determine if the gauge on the Bag is accurate.
 - f. The size marked on the Bag always refers to the Plugs Outside Diameter. Make certain of the pipes inside diameter before using on a live main. While the Inflatable Pipe Plug is inflated or in the open position in the test pipe, compressed air at the pressure that will actually be in the live main – not exceeding recommended line pressure for pipe size – should be fed into the test pipe. Examine the Bag for any air escaping past the back stopper in the pipe. DO NOT USE the Inflatable Pipe Plug if any air gets past the back Bag. The back stopper is the Bag closest to the open end of the main.
 - g. Leave the Bag in the test pipe for at least one-half hour. If the pressure reading on the gauge drops, DO NOT USE. DO NOT ATTEMPT TO REPAIR. Return the Bag to the manufacturer for inspection and testing.
 - h. Test all Inflatable Pipe Plugs to be used on live gas mains in this manner.
4. Actual Use of Inflatable Pipe Plug on Live Mains
- a. Inflate the Bag, just prior to inserting into main, to the recommended pressure and observe for leaks. Leave inflated for one-quarter hour before using. If pressure drops DO NOT USE. DO NOT OVER-INFLATE.
 - b. All Bags should be examined and tested to be sure all moving parts work properly and that no cuts, tears or worn parts are present.
 - c. Use a Test Gauge to determine the accuracy of the pressure gauge on the Bag just prior to insertion in the main and during step (a.) above.
 - d. Always use Inflatable Pipe Plugs in series with a vent pipe extending vertically between them on either side of the area to be isolated when actually working on live mains. See illustration (Chart 1) for recommendations regarding this procedure. Examine the Bag for any leakage past the back stopper. The back stopper is the Bag closest to the area to be isolated. DO NOT use the Bag if there is any leakage past the back stopper. Clean the interior of the pipe thoroughly before inserting the Bag into the main.
 - e. Inflate the Bag with inert gas when used as a PURGE DAM in stainless steel pipe during MIG or TIG welding.
 - f. Be sure no sharp objects touch the Bag at any time. Remove all burrs from the inside of the tap hole. Be careful not to tear the Bag on tap hole threads.
 - g. Do not use any Inflatable Pipe Plug on live mains having line pressure in excess of the recommendations for that particular pipe size.
 - h. Be sure ALL vent pipes extend at least 8 ft. above the top of the evacuations – higher if necessary – to carry away any vapors that may bypass the front Bag.
 - i. Be sure that ALL vent pipes are installed in such a way that the blow-off vapor is directed AWAY from all sources of ignition.
 - j. DO NOT attempt to use the Inflatable Pipe Plug in a live main unless you have been instructed in the proper use of this equipment and have actually tested it on an empty practice main first.
 - k. DO NOT allow sparks or hot metal of any kind to touch the Bag.
 - l. DO NOT use an Inflatable Pipe Plug where temperature will exceed 150°F. or will be lower than -20°F.
5. After Each Use Of The Inflatable Pipe Plug Do The Following
- a. Wash the Bag thoroughly with a MILD soap and warm water, and dry.

- b. Hang the Bag up to dry in a shaded area with air circulation. Be sure the Bag is THOROUGHLY dry before storing.
- c. Lubricate all metal surfaces and moving parts, being careful not to allow any lubricant to fall on any rubber portion of the Bag.
- d. Remove all dust and dirt from the bag before storing.
- e. Inflate the Bag to the recommended pressure using a Test Gauge to determine the accuracy of the pressure gauge on the Bag. Do not over-inflate. Leave inflated for 1 hour before storing; then deflate.
- f. Any Bag found to be defective in any way should be returned to the manufacturer for repairs. DO NOT attempt to make any repairs yourself.