

Petersen® 154-Series Gas Plug Operation and Maintenance Instructions

WARNING!

Read and understand before using Petersen® Plugs. Failure to do so may result in property damage, serious injury, or death!

1. Immediately upon receipt of gas plug:

- a. Remove plug from shipping carton and examine for any damage sustained in transit. Report any such damage to delivering carrier.
- b. Mark directly on plug in a conspicuous location with indelible ink in large figures the date of receipt on the equipment.

2. Proper storage of gas plug:

- a. Storage area must be cool, dry, dark, and not subject to excessive changes in temperature. NEVER store any gas plugs in direct sunlight or expose to weather.
- b. DO NOT place anything on top of gas plug while being stored.
- c. All inflatable gas plugs must be stored lying FLAT and NOT FOLDED, WRINKLED, or ROLLED UP. DO NOT kink inflating tubes.

3. Before each use of gas plug:

- a. Insert all inflatable gas plugs in a clean, empty test pipe of the inside diameter in which it will actually be used.
- b. Inflate plug to recommend pressure which is on the tag attached to the plug or is listed in other literature. DO NOT OVER INFLATE as this may cause plug to burst. Leave inflated for three hours. If plug does not retain recommended inflation pressure, notify supplier IMMEDIATELY, DO NOT USE IF DEFECTIVE.

4. Instructions for use:

- a. Always use gas 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 illustrations.
- b. Inflate to recommended pressure. DO NOT OVER INFLATE gas plug as this may cause it to burst.
- c. Always use a pressure calibrated gauge on a gas plug to insure that it is not over inflated and it is retaining pressure. Use a test gauge to determine if the gauge on gas plug is accurate.
- d. The size marked on all inflatable plugs always refers to plug/stoppers inflated diameter. While gas 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 the recommended line pressure for that particular type of gas plug in the literature – should be fed into test pipe. DO NOT USE gas plug if any air gets past the back gas plug. The back gas plug is the one closest to the open end of the main.
- e. Leave inflated gas plug in test pipe for at least one-half hour. If the pressure reading on the gauge drops, DO NOT USE GAS PLUG. DO NOT ATTEMPT TO REPAIR IT. Return gas plug to Petersen® for inspection and testing.
- f. Test all inflatable gas plugs to be used on live gas mains in this matter.

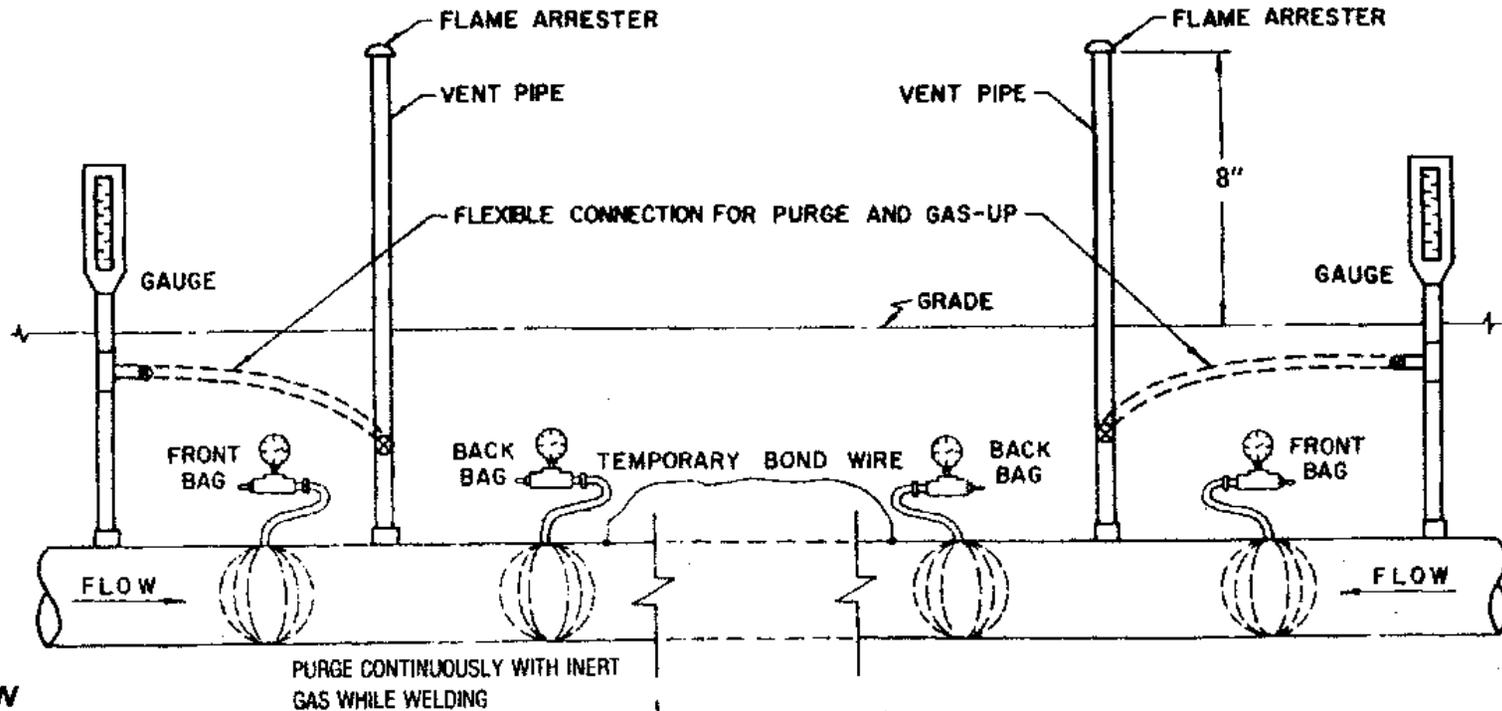
5. Actual use of gas plug on live main:

- a. Inflate gas plug just prior to inserting in main to 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 gas plugs 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 test gauge to determine accuracy of pressure gauge on gas plug just prior to insertion in main and during step (a.) above.
- d. Always use gas 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 illustrations for recommendations regarding these procedures. Examine gas plugs for any leakage past the back plug. The back plug is the one closest to the area to be isolated. DO NOT use equipment if there is any leakage past the back plug. Clean the interior of the pipe thoroughly before inserting the gas plug into the main.
- e. Inflate the gas plug with inert gas when used as PURGE DAMS in stainless steel pipe during MIG or TIG welding.
- f. Be sure no sharp objects touch gas plug at any time. Remove all burrs from inside of tap hole. Be careful not to tear bag or stopper on tap hole threads.
- g. Do not use any gas plug on live mains having line pressure in excess of recommendations for that particular type of equipment.
- h. Be sure ALL vent pipes extend at least 8 ft. above top of excavation – higher if necessary – to carry away any vapors that may bypass from gas plug.
- i. Be sure that ALL vent pipes are installed in such a way that blow-off vapor is directed AWAY from all sources of ignition.
- j. DO NOT attempt to use gas plug in a live main unless you have been instructed in the proper use of equipment and have actually used the equipment on an empty practice main first.
- k. DO NOT allow sparks or hot metal of any kind to touch gas plug.
- l. DO NOT use gas plug where temperature will exceed 150°F or will be lower than -20°F.

6. After each use of gas plug do the following:

- a. Wash gas plug thoroughly with MILD soap and warm water and dry.
- b. Hang gas plug in shaded area with air circulation. Be sure gas plug is THOROUGHLY dry before storing.
- c. Lubricate all metal surfaces and moving parts of gas plug.
- d. Remove all dust and dirt from equipment before storing.
- e. Inflate gas plug to recommended pressure using a test gauge to determine accuracy of pressure gauge on gas plug. Do not over inflate gas plug. Leave inflated 1 hour before storing: then deflate.
- f. Any gas plug found to be defective in any way should be returned to the manufacturer for repairs. DO NOT attempt to make any repairs yourself.

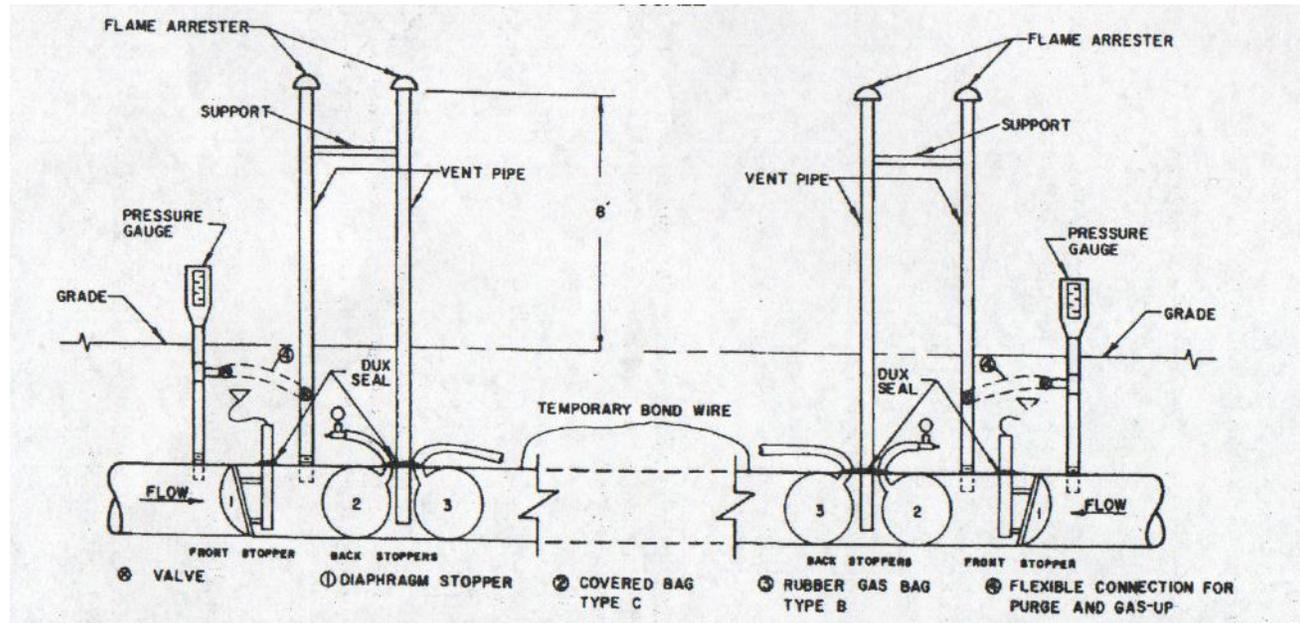
INSTALLATION PROCEDURE FOR ALL TYPES OF INFLATABLE GAS PLUGS ILLUSTRATED WITH LOW PRESSURE CONNECTION NOT TO SCALE



CAUTION

1. Do not allow sparks, hot metal or welding slag to come into contact with gas plug as they will burst.
2. Do not expose gas plug to temperatures in excess of 150°F.
3. Do not exceed maximum gas plug or line pressures as this will cause gas plug to burst.
4. Remove ALL burrs from inside of tap hole as they will tear gas plug.
5. Vent pipes must extend 8 ft. above top of excavation, higher if necessary, to remove any vapor bypassing gas plug. Install vent pipes so all blow-off is directed AWAY from ALL sources of ignition.
6. Pack duct seal liberally around each tap hole after gas plug is inserted and fully expanded to prevent vapors from discharging into work area.
7. Since conditions vary greatly at each job site, the above illustration may have to be varied. The ultimate user must determine the suitability of any variations made and their effects on the safe use of the products. AMERICAN WELDING SOCIETY and AMERICAN GAS ASSOCIATION safety practices must be followed at all times.

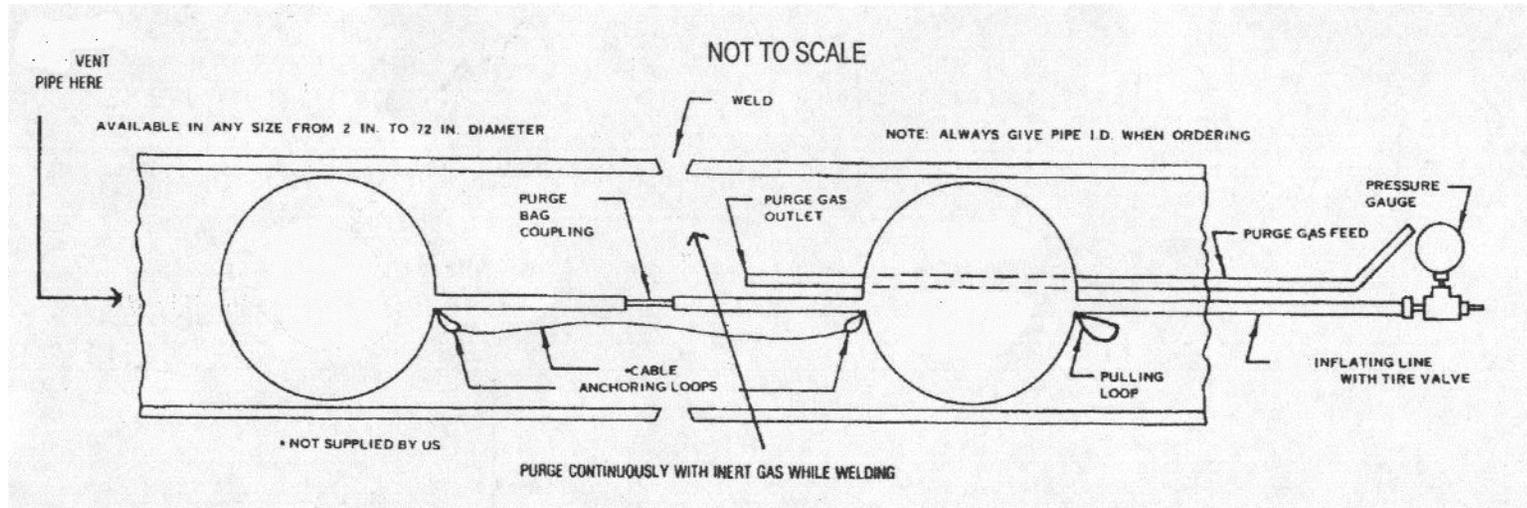
INSTALLATION PROCEDURE FOR ALL TYPES OF INFLATABLE GAS PLUGS ILLUSTRATED FOR USE IN LOW PRESSURE ONE WAY OR TWO WAY FEED NOT TO SCALE



CAUTION:

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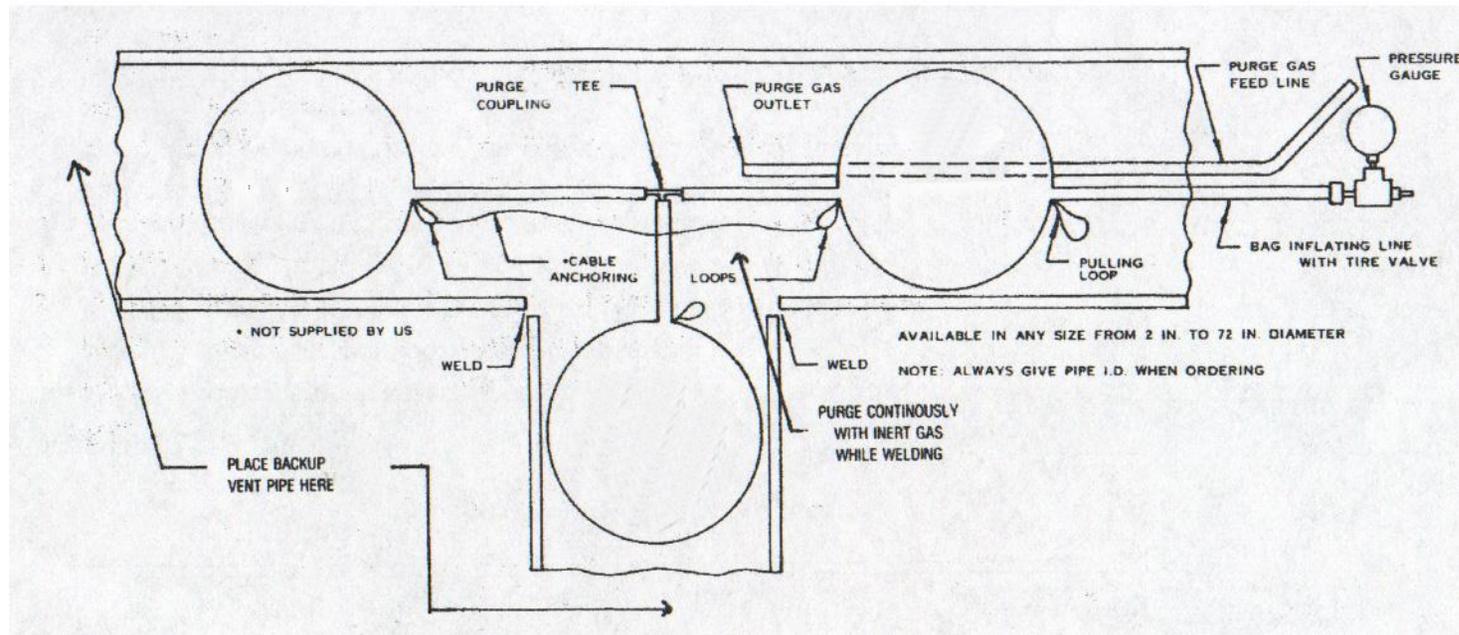
INFLATABLE PURGE DAMS WITH BYPASS LINE FOR INERT GAS



WARNING:

1. DO NOT pull gas plugs by air line, use pulling loop only.
2. DO NOT inflate gas plugs over recommended pressures.
3. DO NOT allow sparks, hot metal or welding slag to contact gas plug or tubes.
4. DO NOT expose gas plug or tubes to temperatures in excess of 150°F.
5. Test each gas plug by inflating to recommended pressure for ¼ hour immediately before each use. See detailed literature for further safety measures.
6. Inert purging gases displace oxygen, therefore, use with adequate ventilation and post warning signs in welding area.
7. Welding Safety Practices as recommended by the American Welding Society must be observed at all times.
8. Place gas plugs at least 8 ft. from welding site.

INFLATABLE PURGE DAMS WITH BYPASS LINE FOR INERT GAS TEE INSTALLATION NOT TO SCALE



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