

DANGER!

Improper use of a Pneumatic Test Plug can cause Death, Severe Bodily Injury or Property Damage!

WARNING!

Hard Hat and Safety Glasses are required with use of Pneumatic Test Plugs!

Pneumatic Test Plugs can be Dangerous!

You Must Read and Understand the Instructions in this Manual Before Using a Pneumatic Test Plug!

If You Do Not Understand the Information in this Manual, Do Not Attempt to Use a Pneumatic Test Plug!

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This Manual includes both safety precautions and use instructions for Test-Tite® Pneumatic Test Plugs. Additional copies may be downloaded from IPS Corporation website, www.ipscorp.com or by calling 800-888-8312 or 901-853-5001.

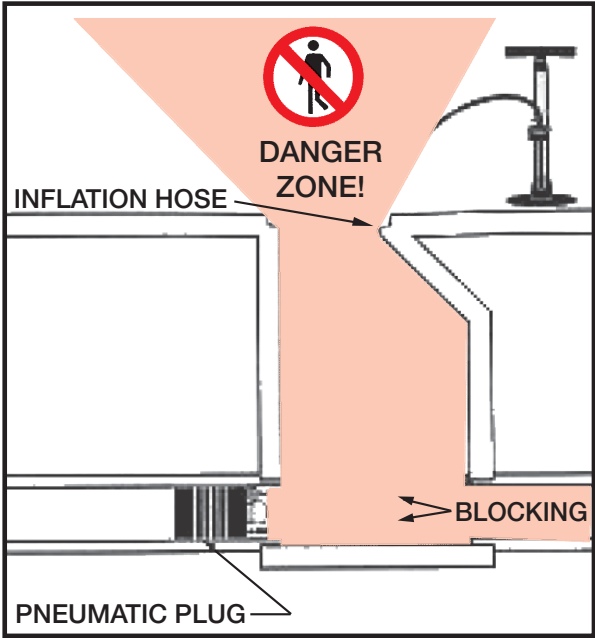
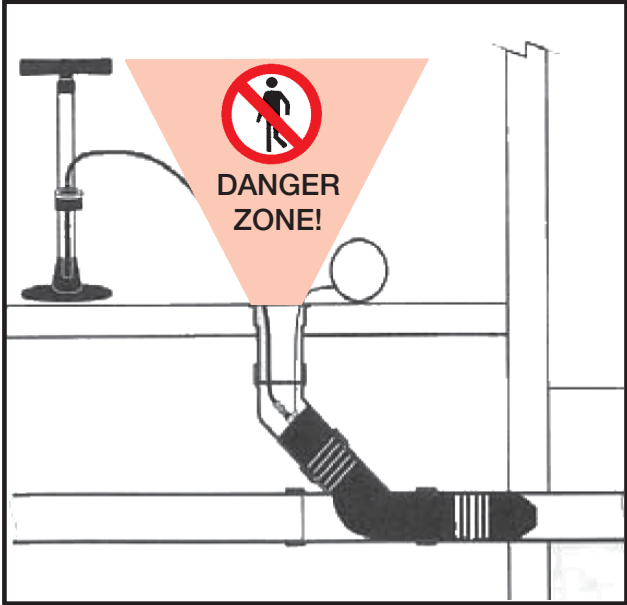
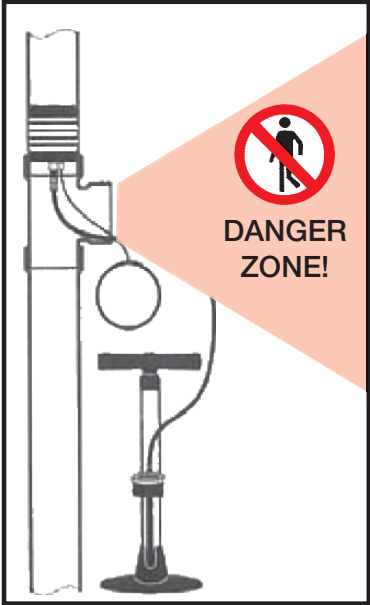
DANGER!

Improper use of a Pneumatic Test Plug can cause Death, Severe Bodily Injury or Property Damage!

GENERAL SAFETY AND USE INSTRUCTIONS:

- **DEATH, SEVERE BODILY INJURY OR PROPERTY DAMAGE** may result if a pneumatic test plug fails for any reason
- **YOU MUST READ AND UNDERSTAND** this safety instruction manual before using a pneumatic test plug
- **ALWAYS MEASURE** the inside pipe diameter before selecting a pneumatic test plug. **DO NOT** use a pneumatic test plug in a pipe size different from the recommended use range as indicated on the plug.
- **ALWAYS INSPECT** the pneumatic test plug for damage before each use.
- **ALWAYS** attach an inflation hose to the pneumatic test plug so it may be inflated and deflated from outside the danger zone.
- **ALWAYS** use an accurate pressure gauge when inflating a pneumatic test plug.
- **ALWAYS** inflate the pneumatic test plug to the pressure indicated on the plug.
- **ALWAYS** release back pressure before deflating a pneumatic test plug.

- **ALWAYS** keep out of the danger zone while a pneumatic test plug is in use.



KEEP OUT OF THE DANGER ZONE!

WHAT TO DO BEFORE USING A PNEUMATIC TEST PLUG:

- Determine the accurate inside pipe diameter where the plug will be used. Always measure the inside of the pipe.
- Make sure the pneumatic test plug you intend to use is the proper size for the pipe. The proper size is indicated on the plug.

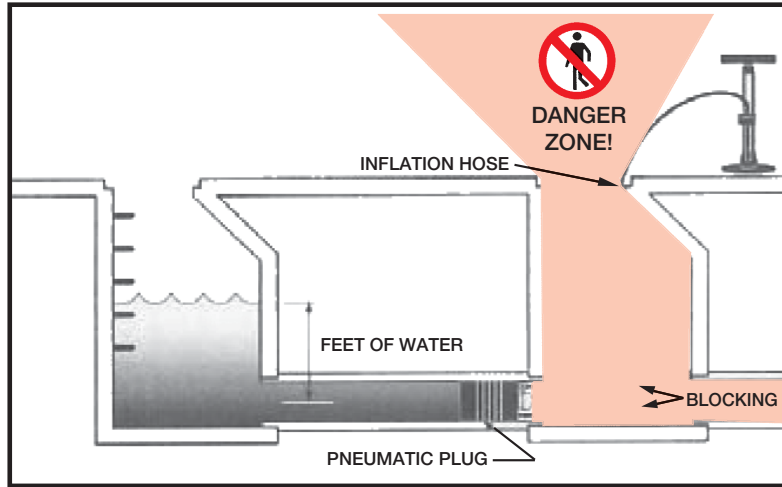
WARNING!

Using an incorrect size pneumatic test plug can cause the plug to work improperly. An incorrect size pneumatic test plug may become loose in the pipe and could cause death, severe bodily injury or property damage!

- Determine the amount of back pressure the pneumatic test plug will be required to withstand. Back pressure is the amount of force that will push against the plug
- Make sure the pneumatic test plug you intend to use is capable of holding the back pressure in the pipe. Each pneumatic test plug can withstand water and air pressure as listed in the specifications included in this manual.

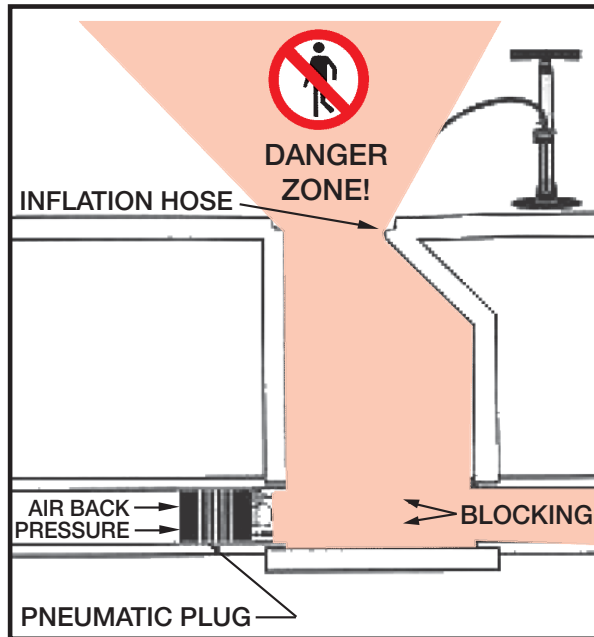
WATER BACK PRESSURE:

Water back pressure is a measurement of the water's standing height above the pipe being tested. This height of water is measured in feet or meters.



AIR BACK PRESSURE:

Air back pressure is a measurement of the air pressure in the pipe being tested. Air pressure is measured in PSIG (pounds per square inch gauge)



WARNING!

Pneumatic test plugs can be pushed out of the pipe. It is always recommended that properly designed blocking be used with a pneumatic test plug to ensure that it stays in place!

Clean the pipe thoroughly where the pneumatic plug is to be used to make sure it will hold and seal properly. Make sure the pipe surface is not slippery, or the pneumatic plug will not hold properly. Make sure the pipe surface does not have any sharp edges that might puncture or cut the pneumatic plug and cause an air leak.

Clean the pneumatic test plug thoroughly with soap (liquid dish soap works well) and water. Rinse the plug with water and dry it with a clean cloth. DO NOT use solvents to clean the plug. Solvents adversely affect natural rubber causing rapid deterioration.

Inspect the pneumatic test plug thoroughly to ensure that it is safe for use. Check for wear, cuts, punctures, and loose or damaged fittings. Any damage to the plug can cause it to fail during operation. If any faulty conditions are observed, DO NOT use the plug

DANGER!

**Failure of a Pneumatic Test Plug can cause Death,
Severe Bodily injury, or Property Damage!**

WARNING!

**Hard Hat and Safety Glasses are required with use of
Pneumatic Test Plugs!**

HOW TO INSTALL A PNEUMATIC TEST PLUG:

- Connect an extension hose to the pneumatic test plug. The extension hose must be long enough to ensure that the plug can be inflated and deflated from outside the danger zone.
- For larger size pneumatic test plugs, connect one end of a lift cable to the eyebolt located on top of the plug and anchor the other end to a secured fixture. This cable or deployment tool can simplify lowering and retrieving the plug from the pipeline and ensure that it does not accidentally float away.
- Insert the pneumatic test plug inside the pipe at a depth at least equal to the pipe's diameter. For example, in a 4" pipe the plug must be at least 4" beyond the pipe opening. This precaution is necessary because some pneumatic test plugs stretch in length when inflated.
- For additional safety, install properly designed blocking to hold the pneumatic test plug in place should the plug fail or if unforeseen head pressure tries to move it.
- Many pneumatic test plugs have Pressure Relief Valves to help prevent over-inflation. These valves are designed to relieve excess inflation pressure but are not intended to be used as a pressure maximum. Always inflate a pneumatic plug to the recommended inflation pressure as noted on the plug itself or in this manual.

WARNING!

ALWAYS inflate a pneumatic test plug from outside the danger zone using an extension hose of proper length!

- Connect the hand pump, pressure tank or compressor with an accurate pressure gauge to the extension hose.
- Fill the pneumatic test plug to the specified pressure indicated on the plug. **DO NOT OVER-INFLATE OR UNDER-INFLATE THE PLUG!**

DANGER!

An over-inflated Pneumatic Test Plug could explode. An under-inflated Pneumatic Test Plug could slip in the pipe. In either case the resulting failure can cause Death, Severe Bodily Injury or Property Damage!

WARNING!

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HOW TO REMOVE A PNEUMATIC TEST PLUG:

- Release the air back pressure or water head behind the pneumatic test plug. If this is not possible, use extreme caution during plug deflation. Relieve the pressure by very slowly deflating the pneumatic test plug to minimize slippage in the pipe. Keep out of the danger zone.

DANGER!

Exercise extreme caution. Back Pressure may push a Pneumatic Test Plug out of the pipe with a force that can cause Death, Severe Bodily Injury or Property Damage!

- Release the air pressure from the pneumatic test plug by pushing the valve pin on the end of the extension hose or turning the exhaust valve on the air control assembly until all pressure is relieved.
- Remove the blocking.
- Retrieve the pneumatic test plug from the pipe using the chain and ring, lift cable or deployment tool.

| | | | | | Maximum Back Pressure | |
|--------|--------------------|---------------------------|---------------------------|--|---------------------------|---------------------------|
| | | | | | Máximo Regreso de Presión | |
| | | | | | Contre-pression maximale | |
| Size | Product Code | Minimum Pipe Diameter | Maximum Pipe Diameter | Inflation Pressure (psig) | Water Head (feet) | Air (psig) |
| Tamaño | Código de Producto | Diámetro Mínimo de Tuvo | Diámetro Máximo de Tuvo | Presión para Inflar (lpcc) | Altura de Agua (pies) | Aire (lpcc) |
| Taille | Code de produit | Diamètre de tuyau minimum | Diamètre de tuyau maximum | Pression de gonflage (lb/po ²) | Charge d'eau (pi) | Air (lb/po ²) |

Large PR Test Plugs

| | | | | | | |
|-----|-------|-------|-------|----|----|----|
| 5" | 83625 | 4.46 | 5.25 | 30 | 30 | 13 |
| 6" | 83626 | 5.25 | 6.25 | 30 | 30 | 13 |
| 8" | 83628 | 7.09 | 8.25 | 25 | 40 | 17 |
| 10" | 83630 | 8.92 | 10.25 | 25 | 40 | 17 |
| 12" | 83632 | 11.02 | 12.25 | 25 | 40 | 17 |
| 15" | 83635 | 13.39 | 16.25 | 25 | 40 | 17 |

PR Test Plugs

| | | | | | | |
|--------|-------|------|------|----|----|----|
| 1 1/2" | 83581 | 1.18 | 1.25 | 45 | 30 | 13 |
| 2" | 83582 | 1.85 | 2.25 | 40 | 30 | 13 |
| 3" | 83583 | 2.63 | 3.25 | 35 | 30 | 13 |
| 4" | 83584 | 3.41 | 4.25 | 30 | 30 | 13 |
| 1 1/2" | 83585 | 1.18 | 1.25 | 45 | 30 | 13 |
| 2" | 83586 | 1.85 | 2.25 | 40 | 30 | 13 |
| 3" | 83587 | 2.63 | 3.25 | 35 | 30 | 13 |
| 4" | 83588 | 3.41 | 4.25 | 30 | 30 | 13 |

Multi Size Standard Test Plugs

| | | | | | | |
|----------------|-------|-------|-------|----|----|----|
| 3/4 - 1 1/2" | 83211 | .75 | 1.50 | 45 | 40 | 17 |
| 1 1/4 - 1 1/2" | 83621 | 1.18 | 1.75 | 40 | 30 | 13 |
| 1 1/4 - 2" | 83212 | 1.18 | 2.25 | 40 | 30 | 13 |
| 2 - 2 1/2" | 83225 | 1.85 | 2.60 | 40 | 30 | 13 |
| 3 - 4" | 83234 | 2.63 | 4.25 | 30 | 30 | 13 |
| 4 - 6" | 83246 | 3.41 | 6.25 | 30 | 30 | 13 |
| 4 - 8" | 83248 | 3.70 | 8.25 | 30 | 30 | 13 |
| 6 - 8" | 83568 | 5.51 | 8.25 | 30 | 40 | 17 |
| 6 - 10" | 83261 | 5.39 | 10.25 | 30 | 40 | 17 |
| 8 - 12" | 83282 | 7.09 | 12.25 | 30 | 40 | 17 |
| 10 - 16" | 83216 | 8.92 | 16.25 | 30 | 40 | 17 |
| 12 - 18" | 83218 | 11.02 | 18.25 | 30 | 40 | 17 |
| 12 - 24" | 83633 | 11.95 | 24.25 | 30 | 12 | 5 |

| | | | | | Maximum Back Pressure | |
|--------|--------------------|---------------------------|---------------------------|--|---------------------------|---------------------------|
| | | | | | Máximo Regreso de Presión | |
| | | | | | Contre-pression maximale | |
| Size | Product Code | Minimum Pipe Diameter | Maximum Pipe Diameter | Inflation Pressure (psig) | Water Head (feet) | Air (psig) |
| Tamaño | Código de Producto | Diámetro Mínimo de Tuvo | Diámetro Máximo de Tuvo | Presión para Inflar (lpcc) | Altura de Agua (pies) | Aire (lpcc) |
| Taille | Code de produit | Diamètre de tuyau minimum | Diamètre de tuyau maximum | Pression de gonflage (lb/po ²) | Charge d'eau (pi) | Air (lb/po ²) |

PR Long Test Plugs

| | | | | | | |
|--------|-------|------|------|----|----|----|
| 2" | 83642 | 1.71 | 2.25 | 40 | 30 | 13 |
| 3" | 83643 | 2.63 | 3.25 | 35 | 30 | 13 |
| 4" | 83644 | 3.75 | 4.25 | 30 | 30 | 13 |
| 4 - 6" | 83646 | 3.75 | 6.25 | 30 | 30 | 13 |

Multi Size Dual Stage Long Test Plugs

| | | | | | | |
|--------|-------|------|------|----|----|----|
| 2 - 3" | 83123 | 1.84 | 3.25 | 45 | 30 | 13 |
| 3 - 4" | 83134 | 2.75 | 4.25 | 40 | 30 | 13 |
| 4 - 6" | 83146 | 3.75 | 6.25 | 30 | 30 | 13 |

Cleanout Test Plugs

| | | | | | | |
|--------|-------|------|------|----|----|----|
| 1 1/2" | 83651 | 1.50 | 1.50 | 35 | 30 | 13 |
| 2" | 83652 | 2.00 | 2.00 | 35 | 30 | 13 |
| 3" | 83653 | 3.00 | 3.00 | 35 | 30 | 13 |
| 4" | 83654 | 4.00 | 4.00 | 35 | 30 | 13 |

Bypass Plugs

| | | | | | | |
|--------|-------|-------|-------|----|----|----|
| 1 1/2" | 83671 | 1.40 | 1.75 | 40 | 50 | 21 |
| 2" | 83672 | 1.90 | 2.25 | 40 | 50 | 21 |
| 3" | 83673 | 2.65 | 3.25 | 40 | 50 | 21 |
| 4" | 83674 | 3.15 | 4.25 | 35 | 30 | 13 |
| 5" | 83675 | 4.46 | 5.25 | 35 | 30 | 13 |
| 6" | 83676 | 5.51 | 6.25 | 35 | 30 | 13 |
| 8" | 83678 | 7.09 | 8.25 | 35 | 30 | 13 |
| 10" | 83680 | 8.92 | 10.25 | 35 | 30 | 13 |
| 12" | 83682 | 11.02 | 12.25 | 35 | 30 | 13 |
| 15" | 83685 | 13.39 | 16.25 | 30 | 30 | 13 |

| | | | | | Maximum Back Pressure | |
|--------|--------------------|---------------------------|---------------------------|--|---------------------------|---------------------------|
| | | | | | Máximo Regreso de Presión | |
| | | | | | Contre-pression maximale | |
| Size | Product Code | Minimum Pipe Diameter | Maximum Pipe Diameter | Inflation Pressure (psig) | Water Head (feet) | Air (psig) |
| Tamaño | Código de Producto | Diámetro Mínimo de Tuvo | Diámetro Máximo de Tuvo | Presión para Inflar (lpcc) | Altura de Agua (pies) | Aire (lpcc) |
| Taille | Code de produit | Diamètre de tuyau minimum | Diamètre de tuyau maximum | Pression de gonflage (lb/po ²) | Charge d'eau (pi) | Air (lb/po ²) |

Multi Size Bypass Test Plugs

| | | | | | | |
|----------|-------|-------|-------|----|------|----|
| 4 - 8" | 83748 | 3.70 | 8.25 | 30 | 40 | 17 |
| 6 - 8" | 83768 | 5.51 | 8.25 | 30 | 440 | 17 |
| 6 - 10" | 83761 | 5.51 | 10.25 | 30 | 40 | 17 |
| 8 - 12" | 83802 | 7.09 | 12.25 | 30 | 40 | 17 |
| 10 - 16" | 83816 | 8.92 | 16.25 | 30 | 40 | 17 |
| 12 - 18" | 83818 | 11.02 | 18.25 | 30 | 30 | 13 |
| 12 - 24" | 83824 | 11.95 | 24.25 | 30 | 12 | 5 |
| 15 - 30" | 83860 | 14.00 | 30.25 | 20 | 18 | 8 |
| 20 - 36" | 83861 | 19.00 | 36.25 | 20 | 18 | 8 |
| 24 - 48" | 83865 | 22.00 | 48.25 | 15 | 18 | 8 |
| 36 - 60" | 83869 | 34.50 | 60.25 | 10 | 13.8 | 6 |
| 48 - 72" | 83877 | 46.00 | 72.25 | 10 | 13.8 | 6 |
| 60 - 96" | 83881 | 58.00 | 96.25 | 10 | 13.8 | 6 |

| | | | | | Maximum Back Pressure | |
|--------|--------------------|---------------------------|---------------------------|--|---------------------------|---------------------------|
| | | | | | Máximo Regreso de Presión | |
| | | | | | Contre-pression maximale | |
| Size | Product Code | Minimum Pipe Diameter | Maximum Pipe Diameter | Inflation Pressure (psig) | Water Head (feet) | Air (psig) |
| Tamaño | Código de Producto | Diámetro Mínimo de Tuvo | Diámetro Máximo de Tuvo | Presión para Inflar (lpcc) | Altura de Agua (pies) | Aire (lpcc) |
| Taille | Code de produit | Diamètre de tuyau minimum | Diamètre de tuyau maximum | Pression de gonflage (lb/po ²) | Charge d'eau (pi) | Air (lb/po ²) |

Back Air Test Plugs

| | | | | | | |
|----------|-------|-------|-------|----|------|----|
| 4 - 8" | 83948 | 3.75 | 8.25 | 30 | 40 | 17 |
| 8 - 12" | 83962 | 7.09 | 12.25 | 30 | 40 | 17 |
| 12 - 18" | 83968 | 11.02 | 18.25 | 30 | 40 | 17 |
| 12 - 24" | 83974 | 11.95 | 24.25 | 30 | 12 | 5 |
| 15 - 30" | 83975 | 14.00 | 30.25 | 20 | 18 | 8 |
| 20 - 36" | 83976 | 19.00 | 36.25 | 20 | 18 | 8 |
| 24 - 48" | 83978 | 22.00 | 48.25 | 15 | 18 | 8 |
| 36 - 60" | 83979 | 34.50 | 60.25 | 10 | 13.8 | 6 |
| 48 - 72" | 83981 | 46.00 | 72.25 | 10 | 13.8 | 6 |
| 60 - 96" | 83982 | 58.00 | 96.25 | 10 | 13.8 | 6 |

Front Air Test Plugs

| | | | | | | |
|----------|-------|-------|-------|----|------|----|
| 4 - 8" | 84048 | 3.75 | 8.25 | 30 | 40 | 17 |
| 8 - 12" | 84082 | 7.09 | 12.25 | 30 | 40 | 17 |
| 12 - 18" | 84118 | 10.76 | 18.25 | 30 | 40 | 17 |
| 12 - 24" | 84124 | 11.95 | 24.25 | 30 | 12 | 5 |
| 15 - 30" | 84146 | 14.00 | 30.25 | 20 | 18 | 8 |
| 20 - 36" | 84147 | 19.00 | 36.25 | 20 | 18 | 8 |
| 24 - 48" | 84148 | 22.00 | 48.25 | 15 | 18 | 8 |
| 36 - 60" | 84149 | 34.50 | 60.25 | 10 | 13.8 | 6 |
| 48 - 72" | 84151 | 46.00 | 72.25 | 10 | 13.8 | 6 |
| 60 - 96" | 84152 | 58.00 | 96.25 | 10 | 13.8 | 6 |