

## 1) WARNING

- a) Read the complete instructions before attempting to install the rupture disk and holder assembly.
- b) It is the user's responsibility for the design of adequate venting and installation of adequate vent piping or directional flow after rupture occurs as intended. When size is specified, ZOOK assumes that adequate provisions have been made by the purchaser and/ or user for proper venting of a system to relieve the specific pressure. Locate the rupture disk where people or property will not be exposed to the system discharge in the event of rupture. Vent toxic or flammable fumes to a safe location to prevent personnel injury or property damage.
- c) It is the user's responsibility to specify the burst pressure rating at the coincident temperature at which the rupture disk is to be used. A rupture disk is a temperature sensitive device. The burst pressure of the rupture disk is directly affected by its exposure to the coincident temperature. Failure to utilize a rupture disk at the specified coincident temperature could cause premature failure or overpressurization of the system.
- d) Particles may discharge when the rupture disk ruptures. These particles may be part of the rupture disk itself, or other environmental matter in the system. It is the user's responsibility to ensure that the particles are directed to a safe area to prevent personnel injury or property damage.
- e) Rupture disk service life is affected by corrosion, creep, fatigue, and physical damage. These conditions will derate the rupture disk to a lower pressure. The user should be prepared to handle a premature failure of the rupture disk. The media or other environmental conditions should not allow for any build-up or solidification of media on the rupture disk. This may increase the burst pressure rating of the rupture disk.
- f) ZOOK rupture disks, when installed in their respective holders correctly, will provide a very good seal for liquids and most gases or vapors. However, ZOOK cannot guarantee the leakage rate of the disk seal without prior knowledge of the requirement and details of the piping layout. Consult ZOOK for guidance if leakage is critical to the installation.
- g) The customer and/or its installer shall be responsible for the proper installation of rupture disk device into a system. Recommended torque values do not consider piping stress or alignment.
- h) Customer and/or its installers shall be responsible for improper installation and physical damage resulting therefrom, including, but not limited to, damage resulting from leakage, improper torquing, and/or failure to follow installation instructions.
- i) ZOOK standard Terms and Conditions of Sale apply unless otherwise stated in writing by the manufacturer.

# 2) REMOVAL, INSPECTION AND PREPARATION

- a) Removing the existing assembly
  - 1) Depressurize the equipment before attempting to remove the assembly even if it has burst.
  - 2) Loosen and remove the burst assembly with the appropriate tool. Take care not to damage the threaded connection in equipment.
  - 3) If returning to ZOOK for re-disking, the assembly must be clean and free of all contaminants.

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4) Request a RAN (return authorization number) from ZOOK prior to returning the product. Unauthorized returns or collect shipments will not be accepted.

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- b) Inspect the Receiving Equipment
  - Inspect the seat area for any imperfections like scratches, dents, or nicks on the surface as these can cause leaks. DO NOT USE if any of these imperfections are detected, contact ZOOK immediately for instructions.
  - 2) Inspect and clean the receiving threads, use thread chase or other suitable cleaning device. Threads must be in good condition to receive the rupture disk device.
- c) Inspect the Rupture Disk Assembly
  - Carefully remove the rupture disk device from its packaging and check the seat area, exposed threads and pre-bulged surface of the disk for any scratches, dents, or nicks. Imperfections on these surfaces can cause leaks. DO NOT USE if any scratches, dents or nicks are detected, contact ZOOK immediately for instructions.
  - 2) Installation of a damaged assembly may result in premature rupture of the disk.

### 3) INSTALLATION

- a) Insert the new assembly into the threaded connection of the receiving equipment.
- b) Lightly lubricate the threads of the rupture disk assembly and/or the equipment threads with oil or anti-seize prior to assembling. Under some condition's threads can seize during extraction when no lubrication is used. Ensure that oil or anti-seize is compatible with process media, application and equipment, etc.
- c) Start threading by hand to ensure the threads are matched and in good condition. DO NOT FORCE THE THREADS. Continue threading the assembly by hand until fully seated.
- d) Tighten as required to prevent leakage with the appropriate tool (wrench, screwdriver, spanner, etc.) DO NOT OVER TIGHTEN as this can damage sealing surfaces and threads.
- e) For assemblies having tapered pipe threads; use Teflon tape or other suitable pipe thread sealants as required if compatible with the process medium.

### 4) OPTIONAL: BURST INDICATION INSTALLATION

Some models of WEB & EBP burst plugs may be supplied with an option of integral 'pop top' style burst indication. A preassembled 26 AWG Hi-Temperature indicator wire may be supplied optionally into the unit with bare leads. The wire is threaded through the hex-head of the burst plug and a 'T' shaped 'pop top' cap. When the burst plug ruptures, the T-cap is pushed out by the subsequent flowing media, shearing the burst indicator wire, opening a 'normally closed' circuit and indicating a burst event to a monitoring device. The T-cap is attached to a metal retainer strap designed to hold & secure the T-cap following a burst event.

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- a) **WARNING:** Burst Plugs and indication must be properly installed and safely vented in order to avoid injury, damage and loss of product.
- b) **WARNING:** Do not install the burst plug (with indication) without the metal retainer strap properly installed under the hex head of the plug.
- c) Electrical Connection

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- Only competent qualified personnel should install and complete the burst plug indication electrical connections. It is the end user's responsibility to ensure a safe installation that is compatible with user electrical requirements. The end user should evaluate the consequences in their system of shorting, opening or grounding of the wire.
- d) Intrinsically Safe Installations (where required)
  - 1) ZOOK burst plug with integral pop-top indication is not intrinsically safe by itself; but is intrinsically safe only when employed in a properly designed intrinsically safe system.
  - 2) ZOOK burst plug with integral pop-top indication is a passive "simple apparatus" concept allowing it to be used in intrinsically safe systems without the need for certification.
  - 3) If required, refer to ANSI/ISA-RP12.06.01 for the Recommended Practice for Intrinsically Safe Systems.



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