



User Recommendations for O-86 Detonators

DET-3050-115

MAN-DET-O86 (R04)

Owen Oil Tools

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O-86 Series Detonators





Warning: *Explosives are destructive by nature! Do not attempt to disassemble or alter the detonator in any manner! Do not crush, hammer, pinch, impact, pull wires or abuse the detonator or any explosive!*



Warning: *Be sure to follow safe operating practices as found in API RP-67 in accordance with governmental regulations, company policies and manufacturer's recommendations!*

Owen Oil Tools' Resistorized Bridge Detonators are designed to detonate when an electrical current greater than 0.2 amps is applied. The O-86 Detonator is a resistorized electrical detonator manufactured to API RP-67 recommendations and employs a 51 Ohm resistor in the firing circuit. It is designed to be used in exposed conditions where the operation environment should not exceed 450° F and 10,000 psi for 1 hour.

The user should satisfy themselves, as to the suitability of this product for the user's application.

1.0 Procedures for Panel Setup and Firing Resistorized Bridge Detonators

1.1 Before attaching a gun or detonator to the wireline cable:

- Short circuit the toolstring below the CCL.
- Apply DC voltage and adjust the rheostat to achieve 0.80 amps.
- Mark the rheostat location, then return the rheostat to zero.

1.2 When ready to fire a gun or detonator downhole, increase the power to the firing circuit from 0 to the 0.80 amp rheostat position over 4-6 seconds until the detonator fires.



Note: *If an alternative firing technique is used, do not surge the firing circuit with power as it may cause the detonator to fail and a mis-run to occur.*

2.0 Arming



Warning: *Detonators should be removed from their packaging and storage in the loading/arming area at the time of arming! Always insert the detonator inside a safety tube after removal from packaging and storage!*



Note: *An electrical check of the detonator's firing circuit may be conducted while the detonator is confined within a safety tube. Using electrical detonator circuit testing instruments, the O-86 Dump Bailer detonator will measure a resistance of 51 Ohms \pm 5%.*

2.1 Owen recommends using the included rubber grommet to ensure intimate contact between the detonator and the glass or ceramic disc. With the detonator leads shunted, apply a small amount of grease around the end of the detonator. Install the rubber grommet onto the detonator, making sure the adhesive side of the grommet is flush with the end of the detonator. Place the detonator into a detonator safety tube. Either wire can be used as the ground. The detonator body can not be used as ground. Ensure the wireline cable is shunted and then electrically connect the detonator to the wireline. Remove the detonator from the safety tube and ensure that the glass or ceramic disc and the end of the detonator are clean and free of dirt, grease, oil, or other contaminants that may prevent the adhesive from bonding. Remove the adhesive liner from the grommet on the detonator and press the grommet firmly against the center of the glass or ceramic disc. Then insert the detonator assembly in to the dump bailer tool. During the mechanical assembly of the toolstring, make sure to not force, pinch, crush, or impact the explosive components or wiring.

