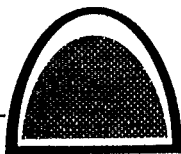


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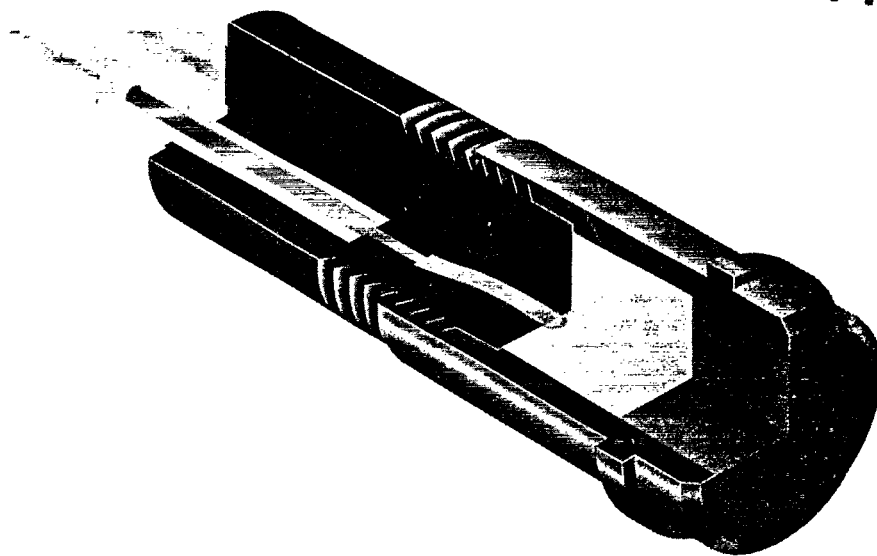


**MOUND LABORATORY**

MONSANTO RESEARCH CORPORATION • MIAMISBURG, OHIO 45342

# SE-1 Detonator

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**MASTER**

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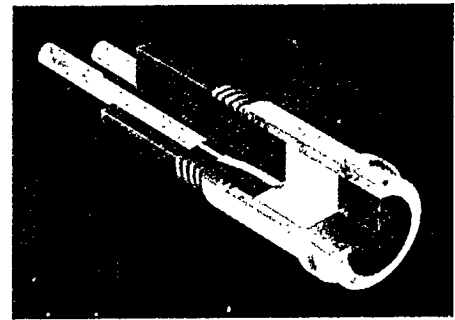
22

Mound Laboratory manufactures two different configurations of the SE-1 detonator.

The basic detonator is the model SE-1. It has insulated copper pigtail leads AWG #20.

The other model designation, SE-1/31, has a coaxial cable connector with external threads for mounting.

Shown directly below is the SE-1 and below right is the SE-1/31.

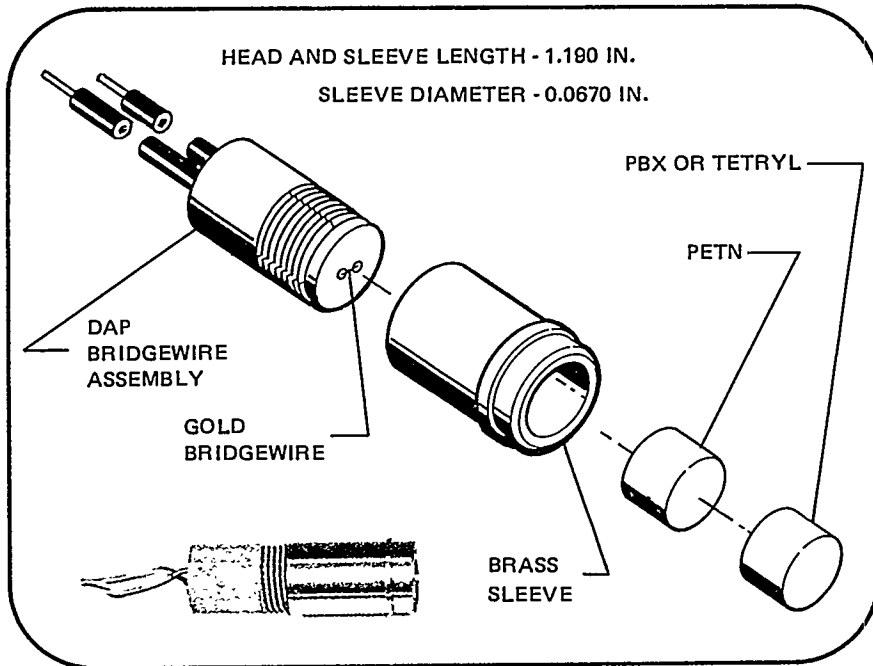


**COVER STORY**

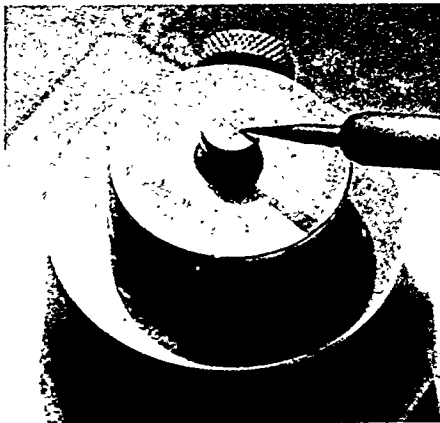
The original was a full color airbrush rendering by a Mound artist of the basic SE-1 detonator.

The SE-1 is often referred to as the "all purpose detonator" due to its popular use as a test unit by the U. S. Department of Defense and ERDA research and development laboratories such as Lawrence Livermore Laboratory, Los Alamos Scientific Laboratory and Sandia Laboratories.

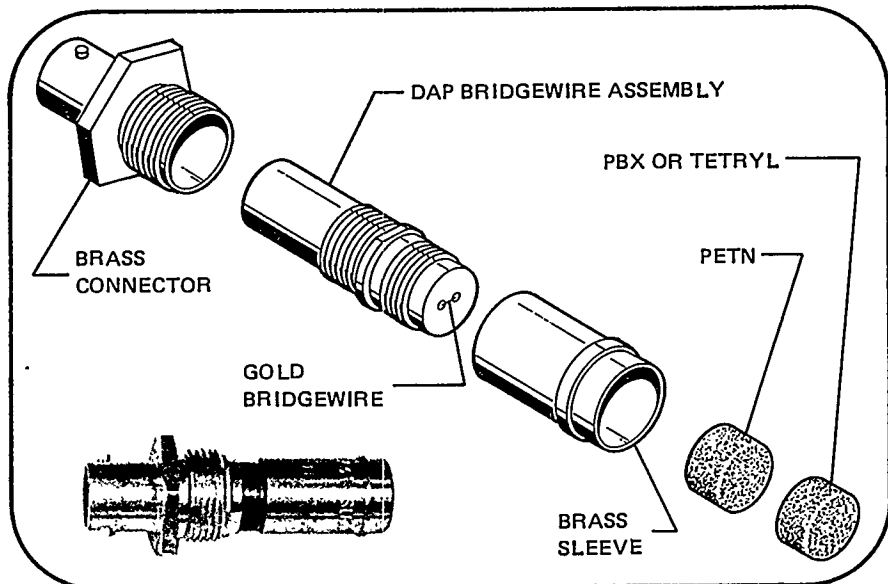
Inquiries should be directed to  
**MONSANTO RESEARCH CORPORATION**  
**MOUND LABORATORY**  
 Explosives Order Control  
 P. O. Box 32  
 Miamisburg, Ohio 45342



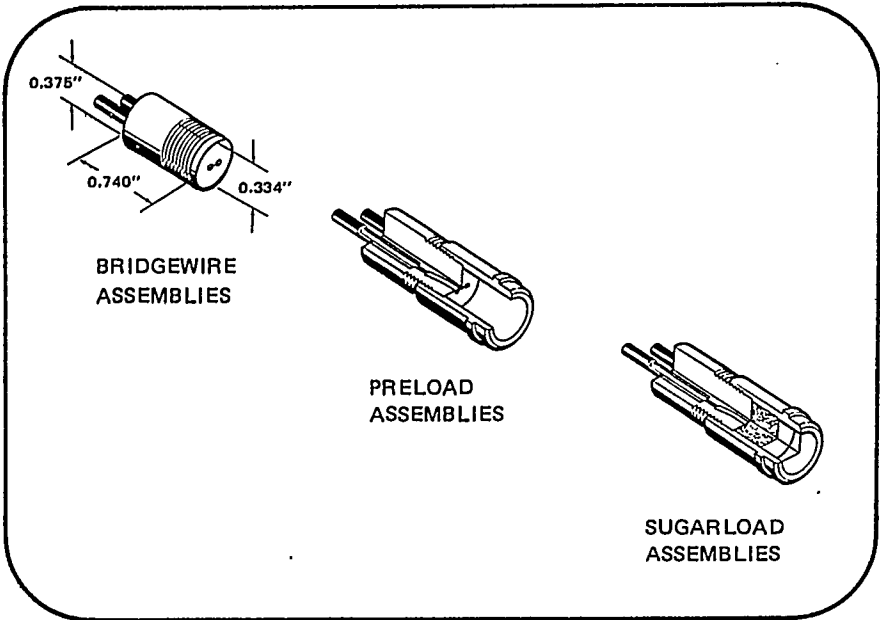
**BASIC COMPONENTS OF THE SE-1**



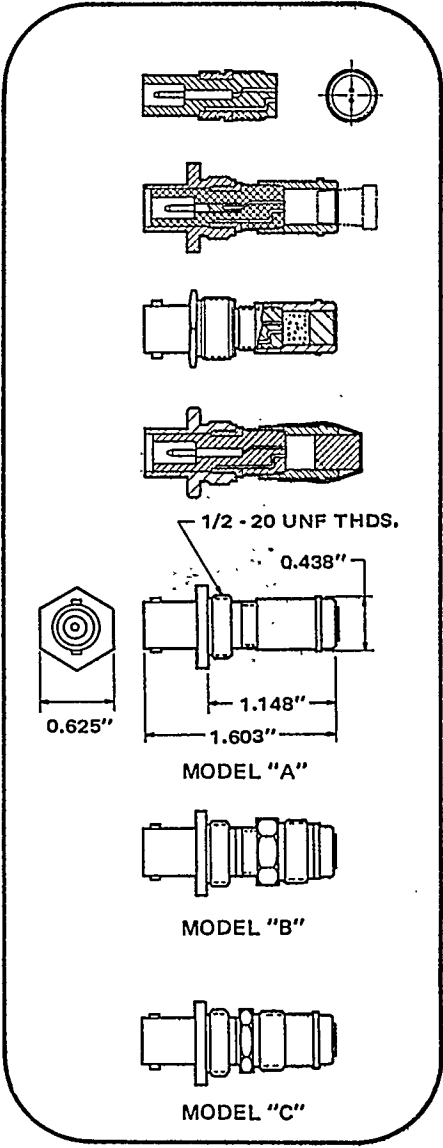
Soldering of a gold bridgewire to an SE-1 diallyl phthalate (DAP) head is shown here during fabrication of an actual bridge-wire assembly. The solder composition consists of 37.5% lead, 37.5% tin and 25% indium.



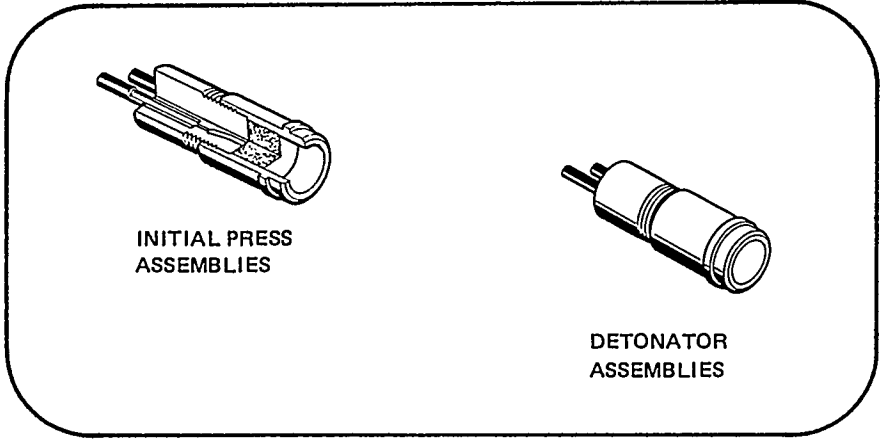
**BASIC COMPONENTS OF THE SE-1/31**



INERT GROUP



SE-1/31 MODELS



HIGH EXPLOSIVE GROUP

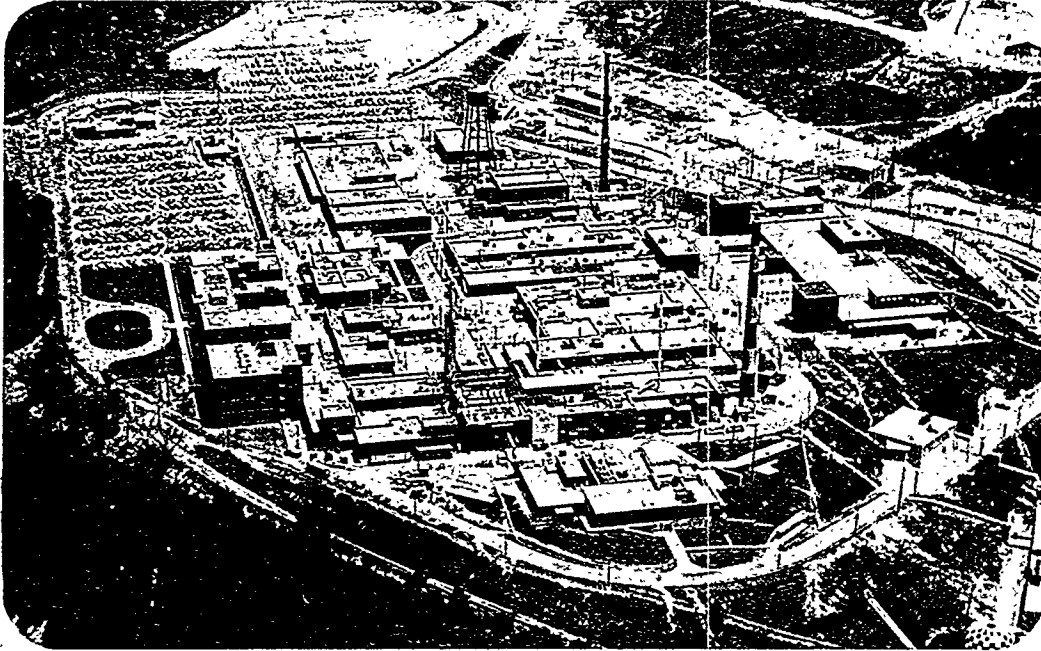
ELECTRODE SPACING (INCHES)	HEAD COLOR	ELECTRODE SPACING (INCHES)	HEAD COLOR
0.005 +0.002 -0.000	LIGHT GREEN	0.030 ±0.002	LIGHT BROWN
0.010 ±0.002	YELLOW	0.040 ±0.002	GRAY
0.015 ±0.002	BROWN	0.040 ±0.002	GRAY (MOD II)
0.020 ±0.002	LIGHT BLUE	0.060 ±0.002	BLUE
0.025 ±0.002	LIGHT RED	0.090 ±0.005	GREEN

HEAD COLOR CODES

ELECTRODE SPACING (INCHES)	HEAD COLOR
0.010 ±0.001	YELLOW
0.015 ±0.002	BROWN
0.020 ±0.002	LIGHT BLUE
0.010 ±0.002	GRAY
0.060 ±0.002*	DARK BLUE

\*Other sizes available on special order.

HEAD COLOR CODES



## **MOUND LABORATORY**

operated by

**MONSANTO RESEARCH CORPORATION**  
MIAMISBURG, OHIO 45342

for

**UNITED STATES ENERGY RESEARCH  
AND DEVELOPMENT ADMINISTRATION**

U.S. GOVERNMENT CONTRACT NO. EY-76-C-04-0053

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*MLM-MU-76-70-0008*

**MLM-MU-76-70-0002**

*October 1976*