

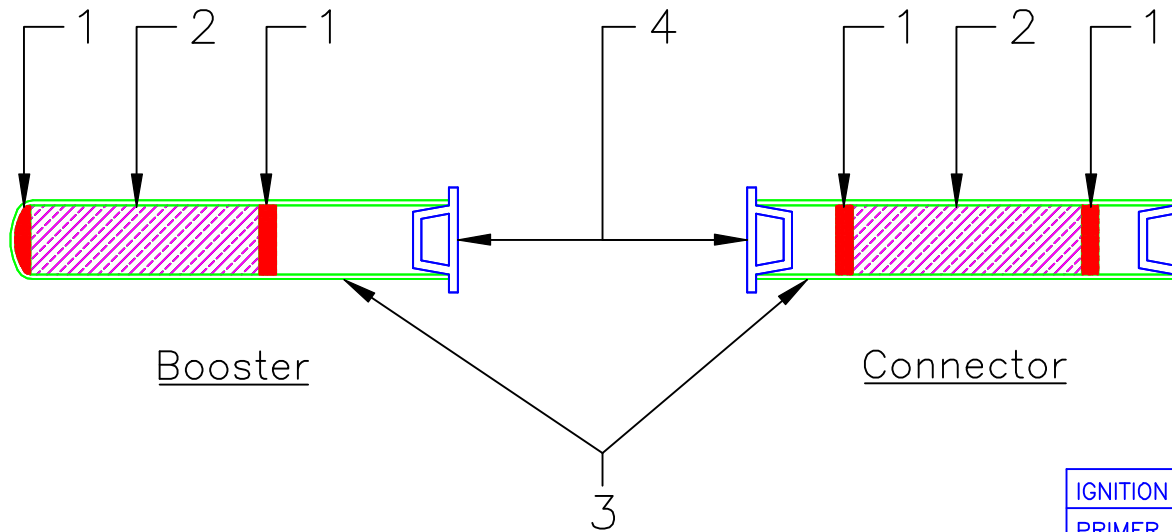
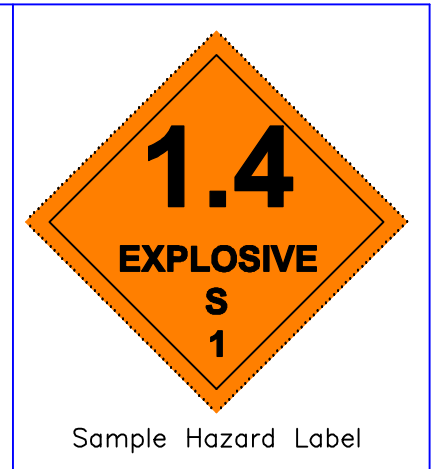
Packaging, Marking, and Labeling:

Packaging: Use BOX-1111-005, BOX-1212-001, BOX-1213-001, BOX-1313-001, BOX-1314-001, BOX-1315-001, or BOX-1414-001

Marking: Components, explosive train, n.o.s. (bi-directional boosters containing XXX)  
UN0384  
EX-9407302

Hazard Label: 1.4S (see sample at right)

Consult OCS for any variations



- 1 - Primer charge
- 2 - Base charge
- 3 - Shell
- 4 - Plug (removed prior to use)

	N.E.W.	MATERIAL
IGNITION CHARGE:	None	N/A
PRIMER CHARGE	0.064 - 0.194 g	RDX, HMX, HNS, PYX, NONA, or CP
BASE CHARGE	0.032 - 0.972 g	RDX, HMX, HNS, PYX, NONA, or CP
OCS PROJECT NO:	OOT-APRV-023	
CLIENT:	Owen Oil Tools, Inc.	
CLIENT XREF NO:	N/A	

MATERIAL:		DWN: DWB 6/1/94		UNLESS OTHERWISE SPECIFIED		TITLE: Product Family: Bi-directional Boosters UN0384, 1.4S, PG II		 8717-A FORUM WAY FORT WORTH, TX 76104 817-551-0680 FAX: 817-551-1032	
HEAT TREATMENT:		CHK:							
PROTECTIVE FINISH:		APP'D:		1. REMOVE ALL BURRS AND SHARP EDGES 2. COR RADII .02 3. ALL DIMENSIONS IN INCHES 4. ALL THREADS TO BE POLISHED		5. TOLERANCES .X = ±.050 .XX = ±.015 .XXX = ±.005 FRACTIONS ±.015 ANGLES ±1/2° SURF. FIN. 250✓ CONCENTRICITY WITHIN .005 TIR		DWG NO. OOT-APRV-023	
NEXT ASSY:		TRACE:							
1	Redrew drawing to recover from loss due to disk crash. Reformatted to OCS drawing frame.	8/20/97	DWB	NOTICE		Proprietary Rights Involved		SCALE: NA REV. 1	

**Packaging, Marking, and Labeling :**

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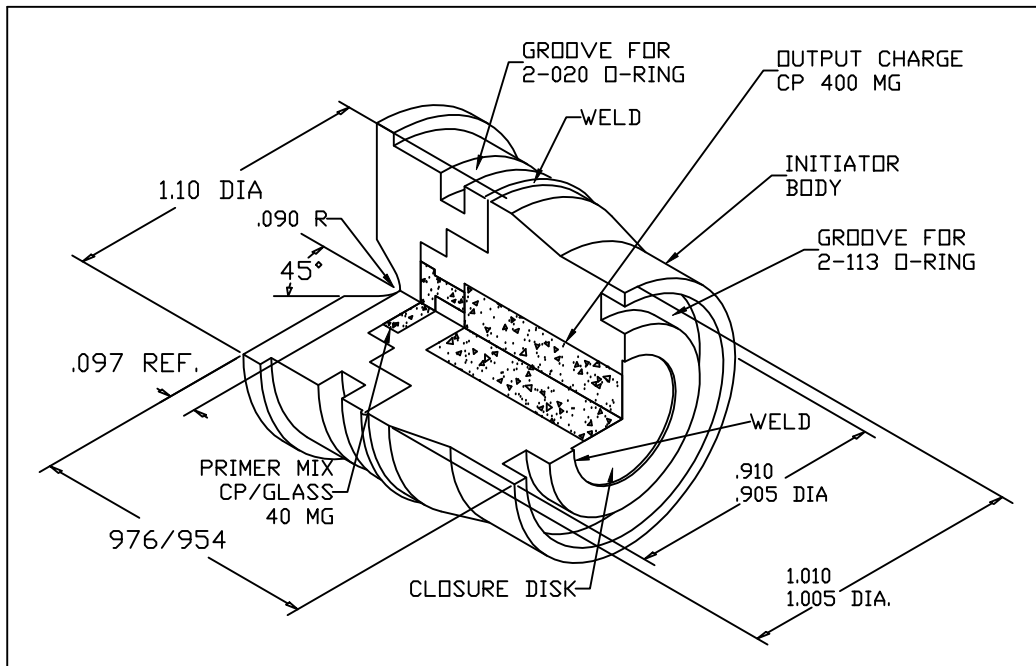
**Marking:** Components, explosive train, n.o.s. (bi-directional booster containing CP)  
UN0384  
EX-9407302

**Hazard Label:** 1.4S (see sample at right)

**Consult OCS for any variations**



Sample Hazard Label



	N.E.W.	MATERIAL
IGNITION CHARGE:	N/A	N/A
PRIMER CHARGE	40 mg	CP/Glass
BASE CHARGE	400 mg	CP
OCS PROJECT NO:	OOT-APRV-023	
CLIENT:	Owen Oil Tools, Inc.	
CLIENT XREF NO:	DET-3050-134	

MATERIAL:	DWN: CMB 3/18/98
HEAT TREATMENT:	CHK: DWB 3/18/98
PROTECTIVE FINISH:	APP'D:
NEXT ASSY:	TRACE:

UNLESS OTHERWISE SPECIFIED

- |                                     |  |
|-------------------------------------|--|
| 1. REMOVE ALL BURRS AND SHARP EDGES | 5. TOLERANCES<br>.X = ±.050<br>.XX = ±.015<br>.XXX = ±.005<br>FRACTIONS ±.015<br>ANGLES ±1/2°<br>SURF. FIN. 250✓ |
| 2. COR RADII .02                    | CONCENTRICITY WITHIN .005 TIR  |
| 3. ALL DIMENSIONS IN INCHES         |  |
| 4. ALL THREADS TO BE POLISHED       |  |

TITLE:  
CP Booster

NOTICE  
Proprietary Rights Involved

8717-A FORUM WAY  
FORT WORTH, TX 76140  
817-551-0680 FAX: 817-551-1032

DWG NO.  
DET-3050-134

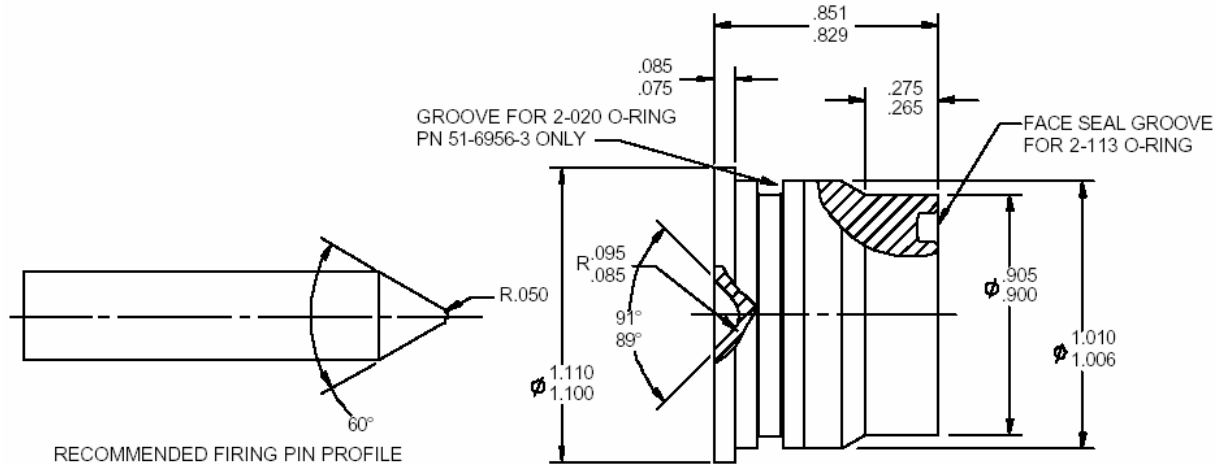
SHEET 1 OF 1	FILE: 0100.028
SCALE: N/A	REV.



**ENERGETIC MATERIALS Co.**

ISO 9001 Certified

**PART NOS 51-6956-3 AND 51-6956-4**  
**CLCP INITIATOR**  
**OILFIELD ORDNANCE DEVICE**



**DESCRIPTION**

This is an oilfield percussion fired detonator used for initiating detonation of oilfield tubing conveyed perforating guns.

**MATERIAL DATA**

All exposed components are CRES.

**FIRING CHARACTERISTICS**

All-Fire: 10.00 ft-lbs

No-Fire: 5.00 ft-lbs

**SEALING PROPERTIES**

Unit is hermetically sealed.

**TEMPERATURE RATING**

320° F for 200 Hours

340° F for 100 Hours

**EXPLOSIVE MATERIALS**

Primer Mix: 20 mgs CLCP/Glass

Output Charge: 355 mg CLCP

**OUTPUT**

Initiates RDX and HMX boosters.

**SHIPPING CLASSIFICATIONS**

1.4S or 1.4B

**EC TYPE-EXAMINATION CERT**

0080.EXP 03.0045