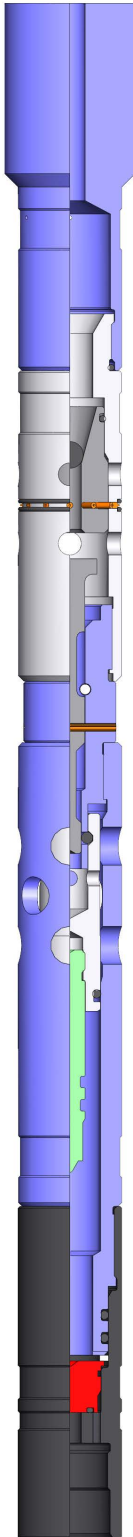


## PRODUCT INFORMATION:



### DESCRIPTION:

The Safety Impact Firing Head is designed to run perforating guns, jet cutters or severing tools on coil tubing. The system is actuated by, dropping a ball and pressuring up the tubing. Once the ball is seated, a predetermined pressure is applied to shear the precision shear pins. After shearing, the firing pin strikes the detonator causing the gun to fire.

### FEATURES AND BENEFITS:

- Electrical currents, natural or man-made cannot detonate the Safety Impact Firing Head.
- Used to initiate Owen Small Scalloped Gun Systems (1-11/16", 2-1/8", 2-1/2"), Tubing Cutters and Severing Tools.
- Ideal for heavy mud and deviated wells.
- The retainer cap top thread connection is specified when ordering.
- For safety, all retainer caps have three weep holes to prevent trapped pressure above the firing head.
- Requires pinning to 2000 psi (13.8 MPa) to pass API RP-67 drop testing.

### SPECIFICATIONS:

TC-031-1688-000		
O.D.	1.69 IN	43 MM
MAX. TEMPERATURE <sup>1</sup>	250°F	121°C
MAX. HYDROSTATIC (L.P.)	8,000 psi	55.4 MPa
MIN. HYDROSTATIC (L.P.)	300 psi	2.0 MPa
MAX. TENSILE STRENGTH	33,000 lbf	14 680 daN
FLOW AREA BEFORE FIRING	0.196 in <sup>2</sup>	1.265 cm <sup>2</sup>
FLOW AREA AFTER FIRING	0.442 in <sup>2</sup>	2.852 cm <sup>2</sup>

<sup>1</sup>The maximum temperature can be increased to 400°F (204°C) by substituting the 90 durometer Nitrile O-Ring with 90 durometer Viton O-Rings. Refer to the Time vs Temperature Chart for Explosives to confirm any explosives requirements.

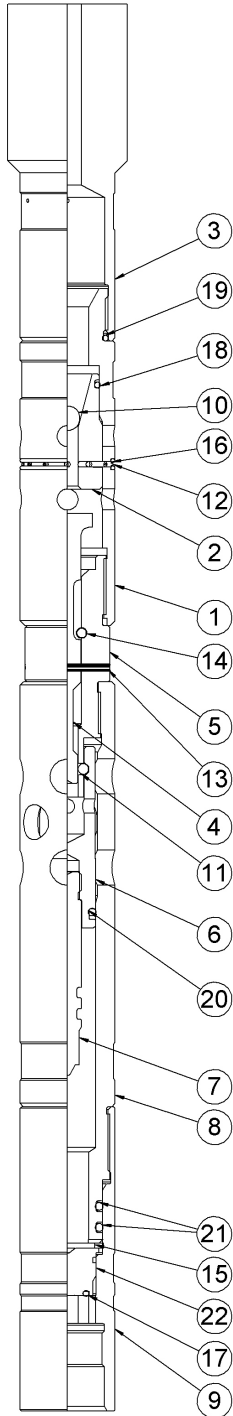
**Note:** Retainer caps, for special applications, are available with a 1" or 1-1/2" AMT Box Thread (sold separately)

TC-031-0008-004 - 1" AMT Box Thread

TC-031-0008-006 - 1-1/2" AMT Box Thread

PRODUCT INFORMATION:

BILL OF MATERIALS:



Low Pressure Assembly

ITEM	PART NUMBER	QTY.	DESCRIPTION
-	TC-031-1688-000	--	Coiled Tubing Safety Impact Firing Head (LP)
1	TC-031-0002-000	1	Piston Housing
2	TC-031-0003-000	1	Ball Drop Piston
3	TC-031-0008-000	1	Retainer Cap, Special
4	TC-031-0004-000	1	Release Rod
5	TC-031-0005-000	1	Release Rod Body
6	TC-012-0004-000	1	Ball Retainer Piston (LP)
7*	TC-012-0005-000	1	Firing Pin, CP Style Detonator
8	TC-012-0007-000	1	Body, HD (LP)
9	TC-040-0010-400	1	Detonator Body, No Compression
10*	ST-040-0437-000	1	7/16" Drop Ball
11*	ST-040-0188-000	4	Retaining Balls, 3/16"
12*	SF-010-0100-038	12	Shear Pins, Owen
13*	PF-120-0125-150H	1	Spriol® Coiled Pin, HD
14*	SF-010-0187-125	1	Roll Pin
15*	HSC-0100-048E	1	Compression Gasket
16*	OOO-N569-028	2	O-Ring, N90
17*	OOO-N569-113	1	O-Ring, N90
18*	OOO-N569-119	1	O-Ring, N90
19*	OOO-N569-124	1	O-Ring, N90
20*	OOO-N569-210	1	O-Ring, N90
21*	OOO-N569-214	2	O-Ring, N90
A	Reference	1	Percussion Detonator
--	TC-031-1688-000V	--	Coiled Tubing Safety Impact Firing Head (LP, HT)
--	TC-031-1688-099P	--	Re-Dress Kit - CT Safety Impact FH (LP, LT)
--	TC-031-1688-399P	--	Re-Dress kit - CT Safety Impact FH (LP, HT)

\*Denotes parts in redress kits.

High Temperature Firing Heads and Redress Kits contain Viton 90 Durometer O-Rings.