

Description

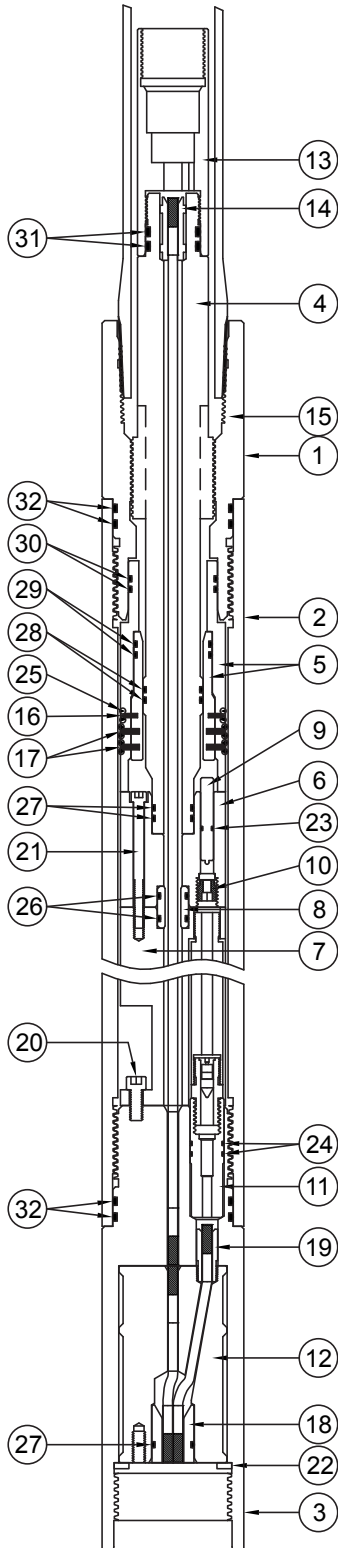
The Redundant Top Firing System (RTFS) is designed to provide a redundant firing solution which can be run on the top of a TCP gun string. The dual firing methods are achieved by integrating a pressure activated firing section with a 9-minute time delay fuse and a choice of an other pressure activated firing head or a mechanical activated (drop bar) firing head as a back-up. The use of the 9-minute delay allows for time to bleed off the activating pressure from the tubing or annulus.

Features and Benefits

- Provides redundancy to ensure detonation of the TCP gun string.
- Utilizes precision shear pin technology
- May be run with standard Gun Top Subs
- Operating Range: 20,000 psi (137.9 MPa)
- Redundancy can be achieved by using an Owen mechanical impact firing head or a pressure activated firing head

Tool Diameter	3.375"	86 mm
Make-up Length	40.44"	1027 mm
Top Thread	2-3/8 8rd EUE	
Maximum Temperature	250° F	121° C
Minimum Hydrostatic	2500 psi	17.2 MPA
Tensile Rating	124,000 lbf	55,158 daN
Pressure Rating	20,000psi	137.9 MPa

The maximum temperature can be increased to 450° (320° C) by substituting the 90 durometer Nitrile o-ring with 90 Viton O-rings. Refer to the Time vs Temperature chart for Explosives to confirm any explosives requirements.



ITEMS	PART NO.	QTY	DESCRIPTION
1	TC-042-0001-000	1	Top Sub
2	TC-042-0002-000	1	Outer Housing
3	TC-042-0003-000	1	Lower Sub
4	TC-042-0004-000	1	Center Stem
5	TC-042-0005-000	1	Shear Set
6	TC-042-0008-000	1	Firing Pin Block
7	TC-042-0009-000	1	Time Delay Block
8	TC-042-0010-000	1	Mating Sleeve
9	TC-042-0011-000	1	Fining pin
10	TC-042-0012-000	1	Igniter Support
11	TC-042-0013-000	1	Detonator Support, Slimline
12	TC-042-0014-000	1	Transfer Block
13	TC-040-0001-400	1	Detonator Housing
14	TC-042-0015-000	1	Top Booster Support
15	MI-305-2375-000	1	Seal Ring
16	SF-010-0100-038	8	Shear Pin, small
17	SF-010-0130-045	24	Shear Pin, large
18	TC-001-0002-000	1	Alignment Insert
19	TC-021-0014-000	1	Booster Alignment Pin
20	PF-020-031C-075S	2	Socket Head Cap Screw, Hex
21	PF-020-025C-300S	2	Socket Head Cap Screw, Hex
22	TAG-3375-076	1	Snap Ring
23	OOO-N569-008	1	O-ring, Nitrile
24	OOO-N569-017	2	O-ring, Nitrile
25	OOO-N569-035	6	O-ring, Nitrile
26	OOO-N569-113	2	O-ring, Nitrile
27	OOO-N569-117	3	O-ring, Nitrile
28	OOO-N569-124	2	O-ring, Nitrile
29	OOO-N569-131	2	O-ring, Nitrile
30	OOO-N569-135	2	O-ring, Nitrile
31	OOO-N569-215	2	O-ring, Nitrile
32	OOO-N569-231	4	O-ring, Nitrile

Explosives sold separately