

DESCRIPTION

The 1-11/16" 6 Minute Time Delay Transfer System was developed to be used in-conjunction with the new Pyrotechnic Igniter, TDI XL. The TDI XL is a percussion style igniter that outputs a pyrotechnic flame to ignite 6 Minute Time Delay Fuses. An input of 12.4 ft-lb (all fire) is required to activate the TDI XL. This input is achieved by a mechanical impact or from a high order explosive output. By utilizing the high order explosive output you eliminate the need for traditional mechanical firing pins to activate 6 Minute Time Delay Fuses. Before and after detonation the TDI XL maintains a bulk head of 20,000 psi.

The Time Delay Fuse allows for a time of 6 minute interval between the activation of the Dual Fire System and the detonation of the perforating guns. This time interval allows bleeding off of the pressure to establish an underbalance condition or to perform another needed operation prior to perforation. In the event that more time is required, extra fuses may be incorporated into the system using additional hardware.

The system can be threaded into the top of either style Dual Fire System or standard 1-11/16" TCP box connection (i.e. Det. Body, AGR, and etc.).

FEATURES AND BENEFITS

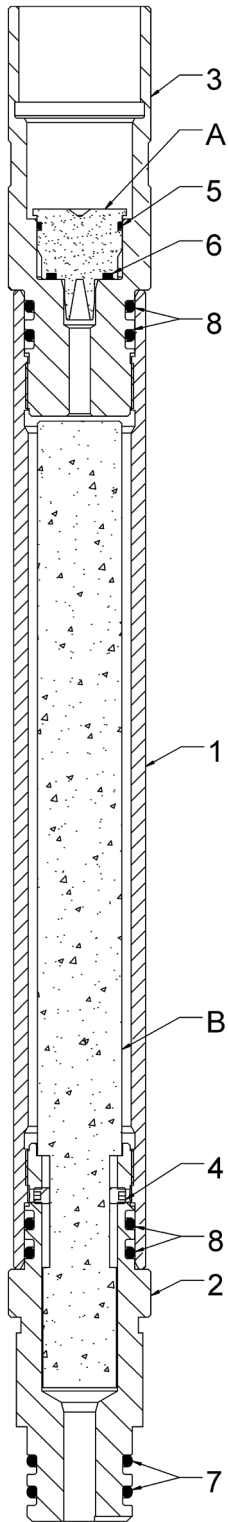
- TDI XL: 7.4 ft-lb (No-Fire), 12.4 ft-lb (All Fire).
- TDI XL: Maintains Bulk Head up to 20,000 psi.
- Used with either Owen's Dual Fire Systems "Victory Firing System".
- Used with other TCP auxiliary equipment.
- Eliminate the need for traditional mechanical firing pins.
- Increase operational time by the addition of 6 Minute Time Delay Fuses.
- Save running length for addition of 6 Minute Time Delay Fuses.

SPECIFICATIONS

O.D.	1.688" (42.88 MM)	1.688" (42.88 MM)
Make-Up Length	15.63" (39.70 cm)	15.63" (39.70 cm)
Maximum Temperature ¹	250°F (121 °C)	400°F (204 °C)
Maximum Hydrostatic ²	17,000 psi (117 Mpa)	17,000 psi (117 Mpa)
Tensile Strength (@72°F, 22.2°C)	30,000 lbf.	13,340 daN
Top Connection	1-11/16" TCP	1-11/16" TCP
Bottom Connection	1-11/16" TCP	1-11/16" TCP

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

BOM and Schematic



ITEM	PART NUMBER	QTY	DESCRIPTION
--	TC-039-1688-450	--	Assembly, 6-Min. Time Delay Transfer, 1-11/16", TDI XL
--	TC-039-1688-450H	--	Assembly, 6-Min. Time Delay Transfer, 1-11/16", TDI XL, High Temp
1	TC-039-0014-001	1	Housing, 6-Min TD, 1-11/16", TDI XL
2	TC-039-0015-002	1	Support Block, 6-Min, 1-11/16", TDI XL
	TC-039-0015-001**	1	Support Block w/ Ext, 6-Min, 1-11/16", TDI XL, Dual Fire System Only
3	TC-039-0016-001	1	Housing, TDI XL, 1-11/16", TDI XL
	TC-039-0016-PX1		Housing, PX1, TDI XL, 1-11/16", TDI XL
4*	PUR-0600-038	1	Set Screw, 10-32 x 3/16" Long
5*	OOO-N569-020	1	O-Ring 020, Nitrile
6*	OOO-N569-113	1	O-Ring 113, Nitrile
7*	OOO-N569-214	2	O-Ring 214, Nitrile
8*	OOO-N569-215	4	O-Ring 215, Nitrile
-	TC-039-1688-099XL		Redress Kit, Low Temp., 1-11/16" Time Delay Transfer, TDI XL
-	TC-039-1688-199XL	--	Redress Kit, High Temp., 1-11/16" Time Delay Transfer, TDI XL
A	2-350620	1	Igniter, TDI XL (explosive component sold separately)
B	51-8200-4	1	6-Min Time Delay Fuse (explosive component)
-	MAN-TC-039-1688-450	--	Procedure Manual, 1-11/16" Time Delay Transfer, TID XL

* Denotes parts in redress kits.

** Denotes items sold separately from TC-039-1688-450 assembly.

Note: TC-039-1688-450H comes with High Temp. O-Rings Viton (FKM).