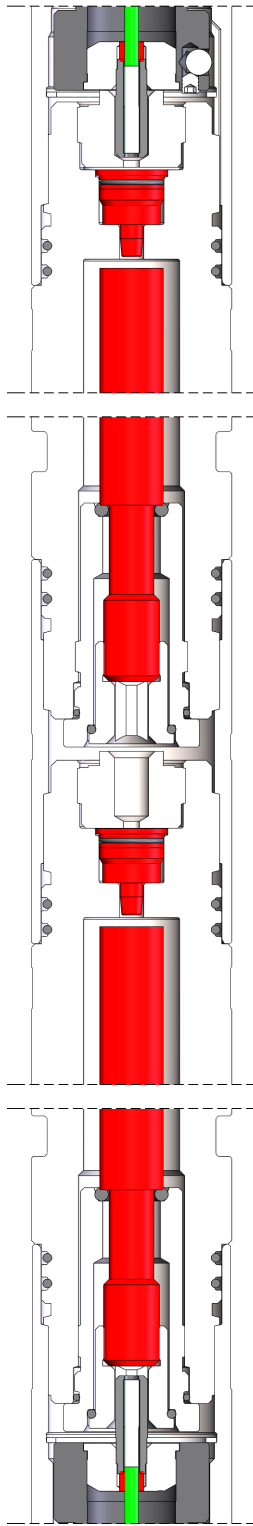


TECHNICAL INFORMATION:



The HP Time Delay Transfer System is a combination time delay sub which incorporates the gun to fuse transfer, fuse housing and top sub into a single sub. Functionally the HP CT Gun Time Delay Transfer System operates the same as the HTD-BLAST and Time Delay Systems but with a reduced overall length. Protected under U.S. Patent Number 8,079,296, additional patents pending.

ADVANTAGES:

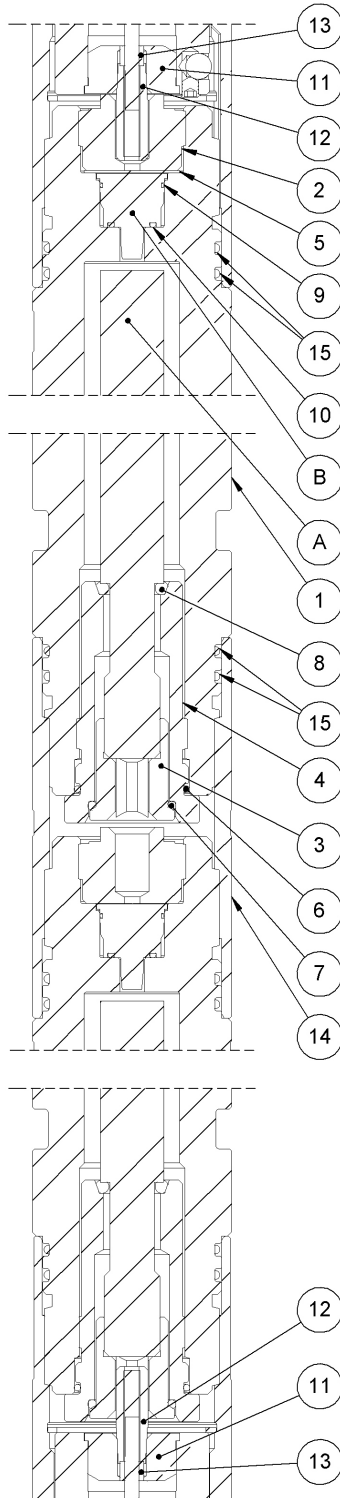
- 3 subs combined into 1: CT Transfer, Time Delay Housing, & Top Sub
- Short make-up length is 30% lighter and simplifies assembly/disassembly
- Coupling sub can be used to add additional time delay transfer systems to increase delay time
- Half the number of connections and seals as 3 sub system
- Allows the perforating of multiple intervals during a single run
- Run on coiled tubing without using gun spacers
- Independently perforate selected zones
- Work in heavy mud systems
- Used in producing completions, drillstem testing, and dual completions
- Only one firing head is required on top or on bottom of the gun string
- Run with the TDI XL to provide a sealing bulkhead

SPECIFICATIONS:

O.D.	3-1/8"	79MM
MAKE-UP LENGTH	9.33"	237 mm
MAX. TEMPERATURE	250°F	121°C
MAX. PRESSURE	20,000 psi	137.9 MPa
TENSILE	180,000 lbs	80 068 daN
ASSEMBLED WEIGHT	24 lbs	11 kg

The 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 explosives requirements.

TECHNICAL INFORMATION:



BILL OF MATERIALS:

ITEM	PART NUMBER	QTY	DESCRIPTION
	TC-043-3125-901		3.125 HP Time Delay Transfer System
1	TC-043-0018-900	1	HP Time Delay Transfer Sub, 3-1/8"
2	TC-043-0026-900	1	Extended TDI Retainer
3	TC-043-0014-900	1	Fuse Retainer
4	TC-043-0019-900	1	Support Block
5	TC-043-0028-900	1	Light Duty TDI Impact Diffuser
6	OOO-N569-130	1	O-Ring, 90 Durometer Nitrile
7	OOO-N569-216	1	O-Ring, 90 Durometer Nitrile
8	OOO-V568-314	1	O-Ring, 70 Durometer Viton
9	OOO-N569-020	1	O-Ring, 90 Durometer Nitrile
10	OOO-N569-113	1	O-Ring, 90 Durometer Nitrile
-	TC-043-3125-998	-	Redress Kit for HP Time Delay Transfer System
2	TC-043-0026-900	1	Extended TDI Retainer
3	TC-043-0014-900	1	Fuse Retainer
4	TC-043-0019-900	1	Support Block
5	TC-043-0028-900	1	Light Duty TDI Impact Diffuser
6	OOO-N569-130	1	O-Ring, 90 Durometer Nitrile
7	OOO-N569-216	1	O-Ring, 90 Durometer Nitrile
8	OOO-V568-314	1	O-Ring, 70 Durometer Viton
9	OOO-N569-020	1	O-Ring, 90 Durometer Nitrile
10	OOO-N569-113	1	O-Ring, 90 Durometer Nitrile
-	TC-043-3125-997	-	Redress Kit for HP Time Delay Transfer System, HT
2	TC-043-0026-900	1	Extended TDI Retainer
3	TC-043-0014-900	1	Fuse Retainer
4	TC-043-0019-900	1	Support Block
5	TC-043-0028-900	1	Light Duty TDI Impact Diffuser
6	OOO-V569-130	1	O-Ring, 90 Durometer Viton
7	OOO-V569-216	1	O-Ring, 90 Durometer Viton
8	OOO-V568-314	1	O-Ring, 70 Durometer Viton
9	OOO-V569-020	1	O-Ring, 90 Durometer Viton
10	OOO-V569-113	1	O-Ring, 90 Durometer Viton
-	TCP-0100-375C	-	Booster Transfer Kit, HP Time Delay Transfer System
11	TAG-0100-040	2	Universal Insert
12	TCP-0100-247	2	Booster Retainer
13	TC-001-0003-000	2	Rubber Grommet
Sold Separately			
A	2-450060-1	1	6 Minute CLCP TD Fuse
	51-8200-4		6 Minute TD Fuse
B	2-350620-1	1	TDI XL Time Delay Igniter
14	TC-043-0027-900	--	HP Time Delay Transfer System Extended Coupling
15	OOO-N569-230	--	O-Ring, 90 Durometer Nitrile
	OOO-V569-230		O-Ring, 90 Durometer Viton