



# **Owen Oil Tools**

## Technical Manual

### Metric Gun System

### MAN-MetricGunSystem

#### **Caution**

##### **Safety Information**

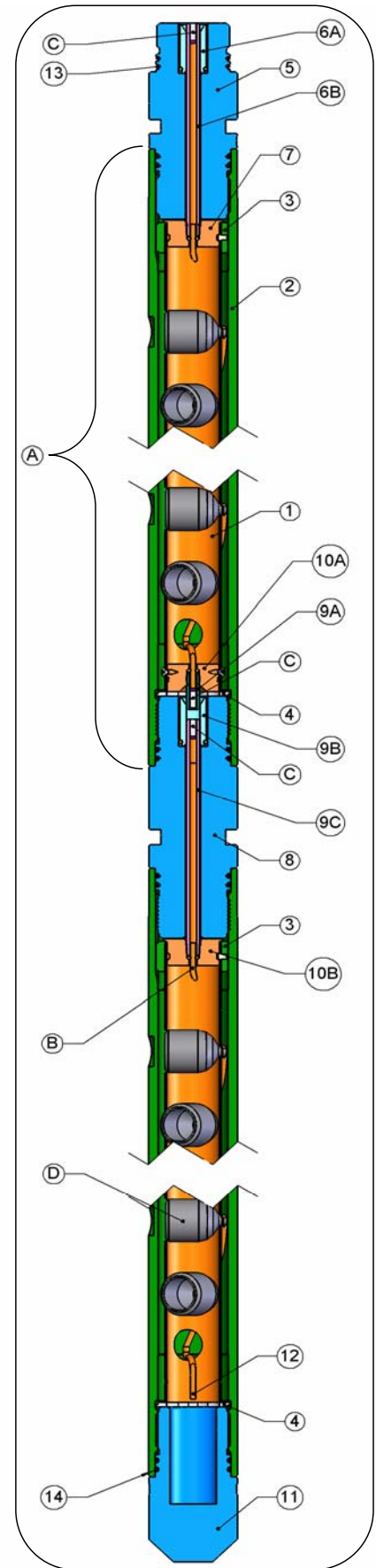
**If you are not properly trained in the handling, and use of explosives devices, do not attempt the assembly of any Owen Oil Tools Perforating Systems or Firing Devices.**

##### **Technical Assistance**

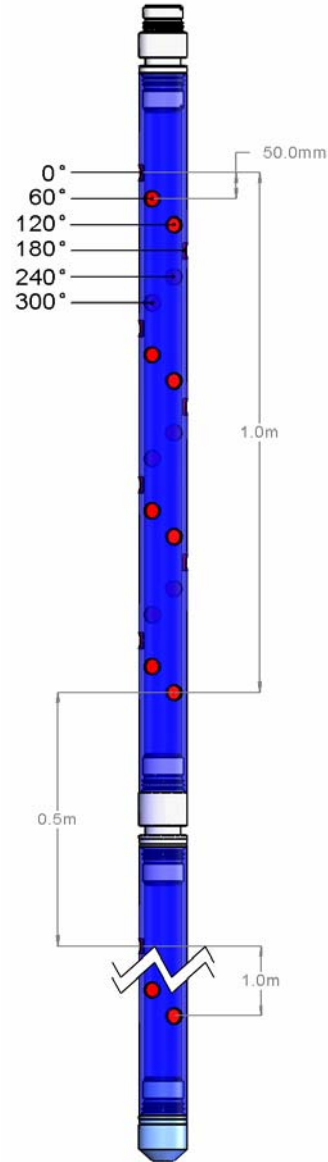
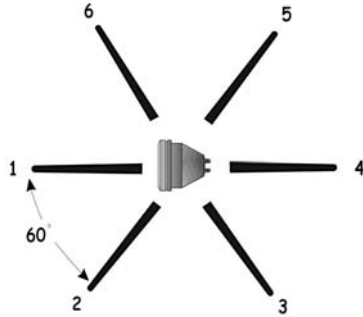
**For technical assistance, please call or contact your local support station.**



Item	Part No.	Description	
A	31-073-2534-10	Scalloped Gun System, 73mm x 1.0m, 20 spm, 60° Spiral	
	31-073-2534-15	Scalloped Gun System, 73mm x 1.5m, 20 spm, 60° Spiral	
	31-073-2534-20	Scalloped Gun System, 73mm x 2.0m, 20 spm, 60° Spiral	
	31-073-2534-25	Scalloped Gun System, 73mm x 2.5m, 20 spm, 60° Spiral	
	31-073-2534-30	Scalloped Gun System, 73mm x 3.0m, 20 spm, 60° Spiral	
	31-073-2534-35	Scalloped Gun System, 73mm x 3.5m, 20 spm, 60° Spiral	
	31-073-2534-40	Scalloped Gun System, 73mm x 4.0m, 20 spm, 60° Spiral	
	31-073-2534-50	Scalloped Gun System, 73mm x 5.0m, 20 spm, 60° Spiral	
31-073-2534-60	Scalloped Gun System, 73mm x 6.0m, 20 spm, 60° Spiral		
		Includes items 1, 2, 3 and 4	
1	39-045-2534-10	Tube Strip, 45mm x 1.0m, 20 spm, 60° Spiral	21
	39-045-2534-15	Tube Strip, 45mm x 1.5m, 20 spm, 60° Spiral	31
	39-045-2534-20	Tube Strip, 45mm x 2.0m, 20 spm, 60° Spiral	41
	39-045-2534-25	Tube Strip, 45mm x 2.5m, 20 spm, 60° Spiral	51
	39-045-2534-30	Tube Strip, 45mm x 3.0m, 20 spm, 60° Spiral	61
	39-045-2534-35	Tube Strip, 45mm x 3.5m, 20 spm, 60° Spiral	71
	39-045-2534-40	Tube Strip, 45mm x 4.0m, 20 spm, 60° Spiral	81
	39-045-2534-50	Tube Strip, 45mm x 5.0m, 20 spm, 60° Spiral	101
	39-045-2534-60	Tube Strip, 45mm x 6.0m, 20 spm, 60° Spiral	121
	2	31-073-2500-10	Scalloped Carrier, 73mm x 1.0m, 20 spm, 60° Spiral
31-073-2500-15		Scalloped Carrier, 73mm x 1.5m, 20 spm, 60° Spiral	
31-073-2500-20		Scalloped Carrier, 73mm x 2.0m, 20 spm, 60° Spiral	
31-073-2500-25		Scalloped Carrier, 73mm x 2.5m, 20 spm, 60° Spiral	
31-073-2500-30		Scalloped Carrier, 73mm x 3.0m, 20 spm, 60° Spiral	
31-073-2500-35		Scalloped Carrier, 73mm x 3.5m, 20 spm, 60° Spiral	
31-073-2500-40		Scalloped Carrier, 73mm x 4.0m, 20 spm, 60° Spiral	
31-073-2500-50		Scalloped Carrier, 73mm x 5.0m, 20 spm, 60° Spiral	
31-073-2500-60		Scalloped Carrier, 73mm x 6.0m, 20 spm, 60° Spiral	
			Includes item 4
3	30-073-0005-45	Alignment Collar	
4	30-073-0004-00	Retaining Ring	
5	30-073-0001-75	Top Sub, TCP	5.7 kg (12.6 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-1750-045	Top Sub Booster Puck Kit	
8	30-073-0002-0L	Tandem Sub, Long TCP	6.1 kg (13.4 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-1750-045	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-073-0003-00	Bottom Sub	3.1 kg (6.8 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-228	O-Ring, #228, 90 Duro Nitrile	
	OOO-V569-228	O-Ring, #228, 90 Duro Viton	
B	A578010	Detonating Cord -LS 80gr., RDX	
	A571010	Detonating Cord -LS 80gr., HMX	
	-	-	
		Approx. Req'd Detcord Length = (1.13 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	SDP-2875-402NT3	Charge, 16g HMX, SDP, NT3- Hero	Fluid
	TAG-3125-301	Charge, 15g RDX, BH	Fluid
	TAG-3125-302	Charge, 15g RDX, SDP	Fluid
--	TAG-2875-170	Blank Charge Case (Non Explosive)	

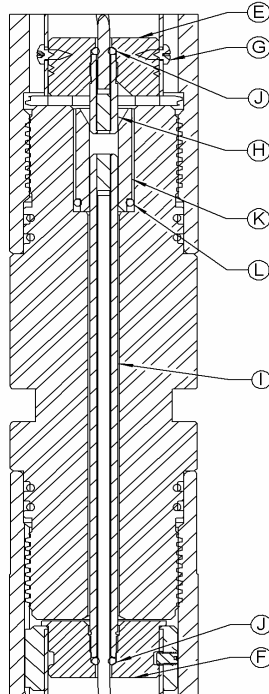


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 88.9 mm (3.5 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (469 mm)



20spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

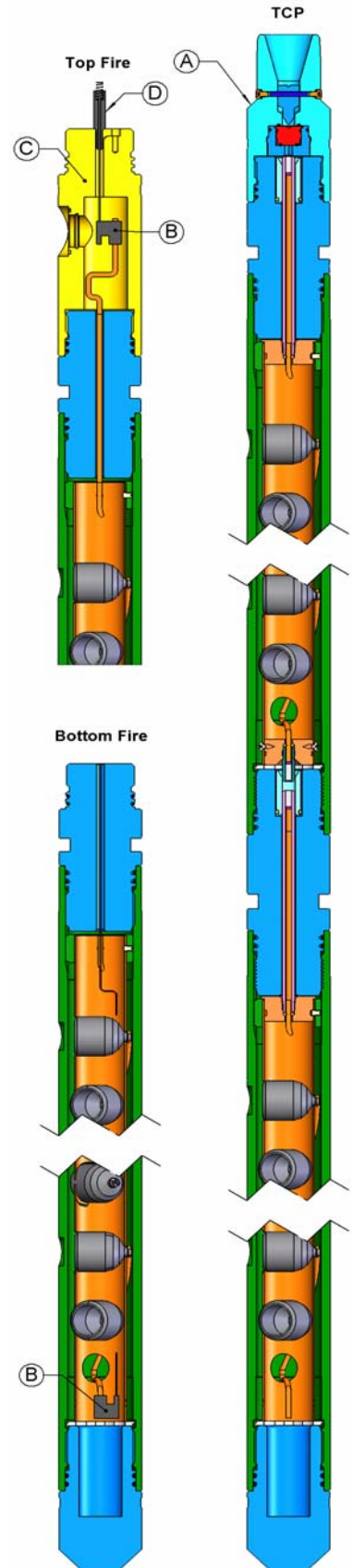
Connectors	D
Electrical Conn. Assy.	HSC-0100-061

<b>Tandem Sub Booster Kit 1.75 in. (45 mm) Strip</b>	
Part No.	Description
TC-251-1750-045	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

Specifications		
Pressure Rating	155 Mpa	22,500 psi
Tensile Strength	66,100 daN	148,400 lbf
Carrier Thread	2.505 - 6 TPI Acme	
Gun Weight Loaded	20 kg/m	13.4 lb/ft

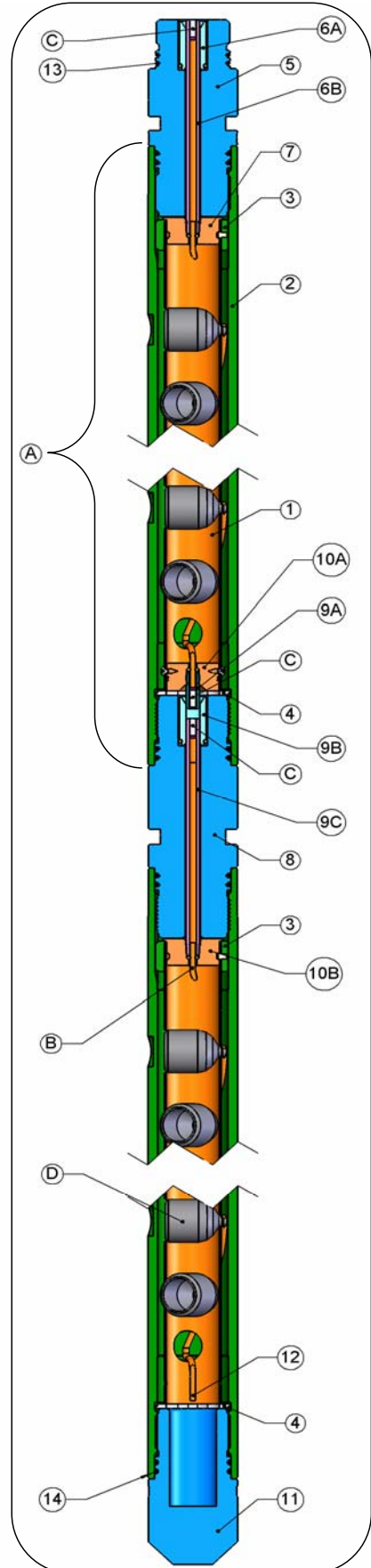
Note: Gun Weight Loaded = Carrier + Strip + Charges

**Typical Configurations**

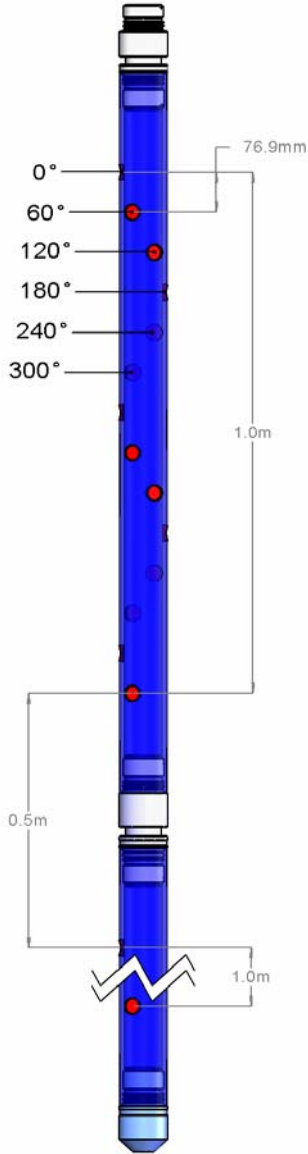
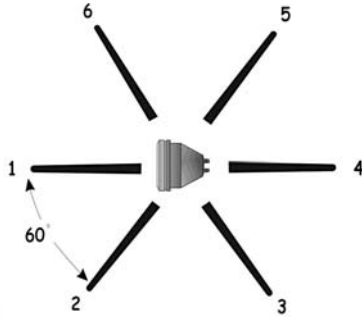


Optional Subs		
Part No.	Description	
30-073-0001-00	Top Sub, Wireline	6.2 kg (13.6 lbs)
30-073-0003-01	Bottom Sub, 73mm x 2 3/8" EU Pin	4.2 kg (9.3 lbs)
30-073-0002-95	Tandem Sub, Side Port Select Fire	5.5 kg (12.2 lbs)
-	-	-
-	-	-
-	-	-

Item	Part No.	Description	
A	31-086-2108-10	Scalloped Gun System, 86mm x 1.0m, 13 spm, 60° Spiral	
	31-086-2108-15	Scalloped Gun System, 86mm x 1.5m, 13 spm, 60° Spiral	
	31-086-2108-20	Scalloped Gun System, 86mm x 2.0m, 13 spm, 60° Spiral	
	31-086-2108-25	Scalloped Gun System, 86mm x 2.5m, 13 spm, 60° Spiral	
	31-086-2108-30	Scalloped Gun System, 86mm x 3.0m, 13 spm, 60° Spiral	
	31-086-2108-35	Scalloped Gun System, 86mm x 3.5m, 13 spm, 60° Spiral	
	31-086-2108-40	Scalloped Gun System, 86mm x 4.0m, 13 spm, 60° Spiral	
	31-086-2108-50	Scalloped Gun System, 86mm x 5.0m, 13 spm, 60° Spiral	
31-086-2108-60	Scalloped Gun System, 86mm x 6.0m, 13 spm, 60° Spiral		
Includes items 1, 2, 3 and 4			
1	39-054-2108-10	Tube Strip, 54mm x 1.0m, 13 spm, 60° Spiral	14
	39-054-2108-15	Tube Strip, 54mm x 1.5m, 13 spm, 60° Spiral	20
	39-054-2108-20	Tube Strip, 54mm x 2.0m, 13 spm, 60° Spiral	27
	39-054-2108-25	Tube Strip, 54mm x 2.5m, 13 spm, 60° Spiral	33
	39-054-2108-30	Tube Strip, 54mm x 3.0m, 13 spm, 60° Spiral	40
	39-054-2108-35	Tube Strip, 54mm x 3.5m, 13 spm, 60° Spiral	46
	39-054-2108-40	Tube Strip, 54mm x 4.0m, 13 spm, 60° Spiral	53
	39-054-2108-50	Tube Strip, 54mm x 5.0m, 13 spm, 60° Spiral	66
	39-054-2108-60	Tube Strip, 54mm x 6.0m, 13 spm, 60° Spiral	79
	2	31-086-2100-10	Scalloped Carrier, 86mm x 1.0m, 13 spm, 60° Spiral
31-086-2100-15		Scalloped Carrier, 86mm x 1.5m, 13 spm, 60° Spiral	
31-086-2100-20		Scalloped Carrier, 86mm x 2.0m, 13 spm, 60° Spiral	
31-086-2100-25		Scalloped Carrier, 86mm x 2.5m, 13 spm, 60° Spiral	
31-086-2100-30		Scalloped Carrier, 86mm x 3.0m, 13 spm, 60° Spiral	
31-086-2100-35		Scalloped Carrier, 86mm x 3.5m, 13 spm, 60° Spiral	
31-086-2100-40		Scalloped Carrier, 86mm x 4.0m, 13 spm, 60° Spiral	
31-086-2100-50		Scalloped Carrier, 86mm x 5.0m, 13 spm, 60° Spiral	
31-086-2100-60		Scalloped Carrier, 86mm x 6.0m, 13 spm, 60° Spiral	
Includes item 4			
3	30-086-0005-54	Alignment Collar	
4	30-086-0004-00	Retaining Ring	
5	30-086-0001-75	Top Sub, TCP	6.5 kg (14.4 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2125-054	Top Sub Booster Puck Kit	
8	30-086-0002-0L	Tandem Sub, Long TCP	8.3 kg (18.4 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2125-054	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-086-0003-00	Bottom Sub	4.4 kg (9.8 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-231	O-Ring, #231, 90 Duro Nitrile	
	OOO-V569-231	O-Ring, #231, 90 Duro Viton	
B	A578010	Detonating Cord -LS 80gr., RDX	Z
	A571010	Detonating Cord -LS 80gr., HMX	
	-	-	
Approx. Req'd Detcord Length = (1.078 X Gun Length in Meters) + 0.7m			
C	DET-3050-429	Bi-Directional Booster	
D	TAG-3375-311L	Charge, 19g RDX, DP	Dry
	HSC-3375-301	Charge, 20g RDX, BH	Dry
	SDP-3375-311NT	Charge, 23g RDX, SDP	Dry
	HSC-4000-318	Charge, 26g RDX, DP	Dry
	TAG-3375-302	Charge, 25g RDX, GH	Dry
	SDP-3375-311NT3	Charge, 25g RDX, SDP, NT3- Hero	Dry
	SDP-3375-411NT3	Charge, 25g HMX, SDP, NT3- Hero	Dry
Z	TAG-5000-360	Charge, 32g RDX, DP	Dry
	TAG-3375-905	Blank Charge Case (Non Explosive)	

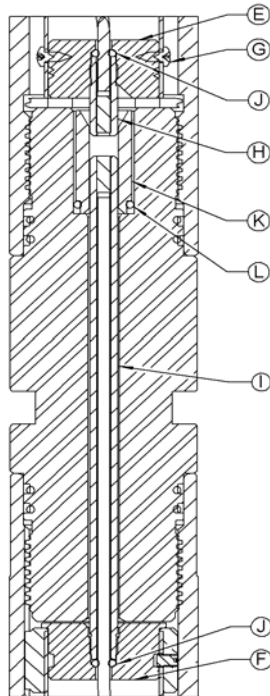


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 99.9 mm (3.93 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (488 mm)



13spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

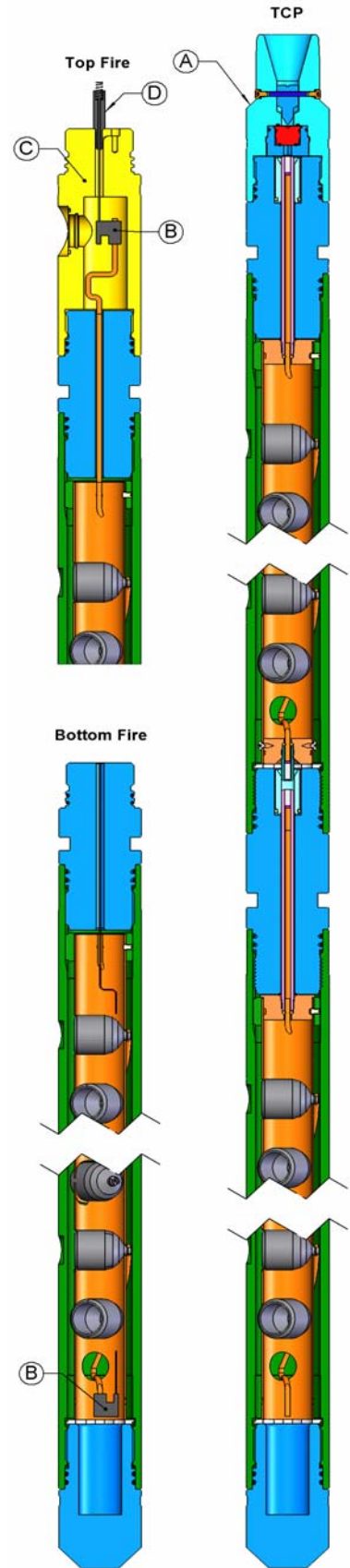
**Tandem Sub Booster Kit 2.125 in. (54 mm) Strip**

Part No.	Description
TC-251-2125-054	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

Specifications		
Pressure Rating	138 Mpa	20,000 psi
Tensile Strength	114,600 daN	257,600 lbf
Carrier Thread	2.818 - 6 TPI Acme	
Gun Weight Loaded	24.5 kg/m	16.4 lb/ft

Note: Gun Weight Loaded = Carrier + Strip + Charges

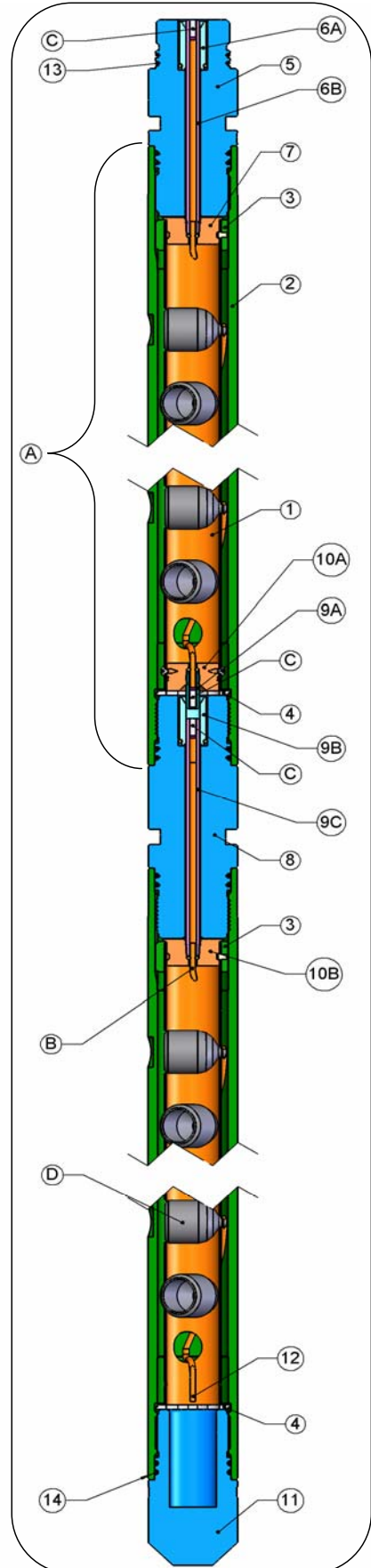
**Typical Configurations**



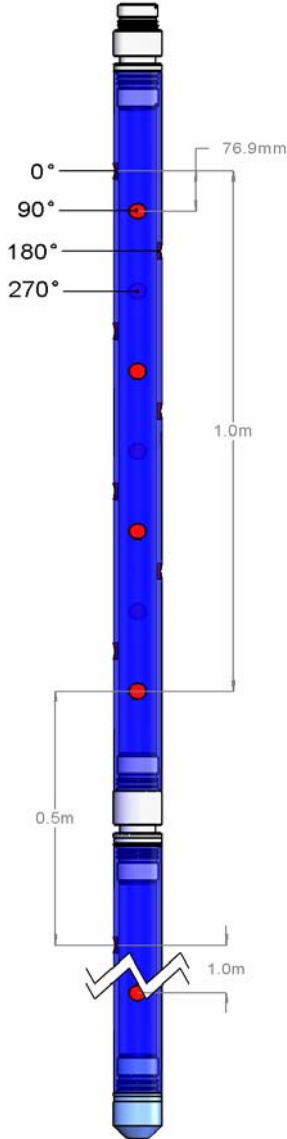
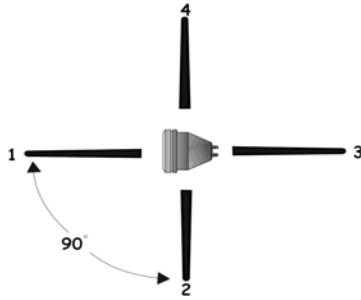
Optional Subs		
Part No.	Description	
30-086-0001-00	Top Sub, Wireline	6.1 kg (13.5 lbs)
30-086-0003-01	Bottom Sub, 86mm x 20" Long Weighted	19.9 kg (43.8 lbs)
30-086-0003-02	Bottom Sub, 86mm x 2 3/8" EU Pin	4.4 kg (9.6 lbs)
30-086-0003-05	Bottom Sub, 86mm x 2 3/8" EU Box	4 kg (8.8 lbs)
30-086-0112-0L	Tandem Sub, Orienting 86mm	8.1 kg (17.8 lbs)
30-086-0002-95	Tandem Sub, Side Port Select Fire	6.7 kg (14.7 lbs)



Item	Part No.	Description		
A	31-086-0408-10	Scalloped Gun System, 86mm x 1.0m, 13 spm, 90° Spiral		
	31-086-0408-15	Scalloped Gun System, 86mm x 1.5m, 13 spm, 90° Spiral		
	31-086-0408-20	Scalloped Gun System, 86mm x 2.0m, 13 spm, 90° Spiral		
	31-086-0408-25	Scalloped Gun System, 86mm x 2.5m, 13 spm, 90° Spiral		
	31-086-0408-30	Scalloped Gun System, 86mm x 3.0m, 13 spm, 90° Spiral		
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	31-086-0408-50	Scalloped Gun System, 86mm x 5.0m, 13 spm, 90° Spiral		
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1	39-054-0408-10	Tube Strip, 54mm x 1.0m, 13 spm, 90° Spiral	14	
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	2	31-086-0400-10	Scalloped Carrier, 86mm x 1.0m, 13 spm, 90° Spiral	
31-086-0400-15		Scalloped Carrier, 86mm x 1.5m, 13 spm, 90° Spiral		
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	31-086-0400-60	Scalloped Carrier, 86mm x 6.0m, 13 spm, 90° Spiral Includes item 4		
3	30-086-0005-54	Alignment Collar		
4	30-086-0004-00	Retaining Ring		
5	30-086-0001-75	Top Sub, TCP	6.5 kg (14.4 lbs)	
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B	
7	TC-261-2125-054	Top Sub Booster Puck Kit		
8	30-086-0002-0L	Tandem Sub, Long TCP	8.3 kg (18.4 lbs)	
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C	
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	OOO-V569-231	O-Ring, #231, 90 Duro Viton		
B	A578010	Detonating Cord -LS 80gr., RDX	Z	
	A571010	Detonating Cord -LS 80gr., HMX		
	-	-		
Approx. Req'd Detcord Length = (1.169 X Gun Length in Meters) + 0.7m				
C	DET-3050-429	Bi-Directional Booster		
D	TAG-3375-311L	Charge, 19g RDX, DP	Dry	
	HSC-3375-301	Charge, 20g RDX, BH	Dry	
	SDP-3375-311NT	Charge, 23g RDX, SDP	Dry	
	HSC-4000-318	Charge, 26g RDX, DP	Dry	
	TAG-3375-302	Charge, 25g RDX, GH	Dry	
	SDP-3375-311NT3	Charge, 25g RDX, SDP, NT3- Hero	Dry	
	SDP-3375-411NT3	Charge, 25g HMX, SDP, NT3- Hero	Dry	
	TAG-5000-360	Charge, 32g RDX, DP	Dry	
--	TAG-3375-905	Blank Charge Case (Non Explosive)		

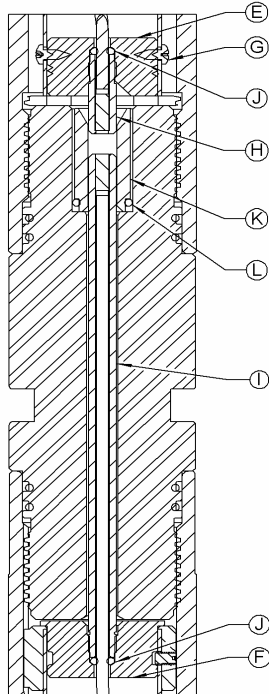


Notes:  
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**Worst Case Minimum Recommended Running ID 99.9 mm (3.93 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (488 mm)



13spm 90°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

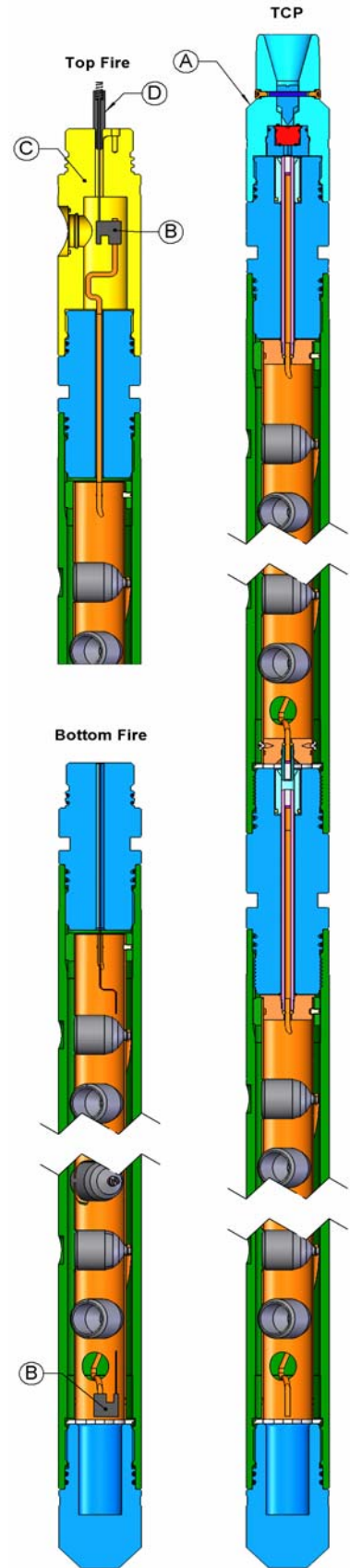
**Tandem Sub Booster Kit 2.125 in. (54 mm) Strip**

Part No.	Description
TC-251-2125-054	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

Specifications		
Pressure Rating	138 Mpa	20,000 psi
Tensile Strength	114,600 daN	257,600 lbf
Carrier Thread	2.818 - 6 TPI Acme	
Gun Weight Loaded	24.5 kg/m	16.4 lb/ft

Note: Gun Weight Loaded = Carrier + Strip + Charges

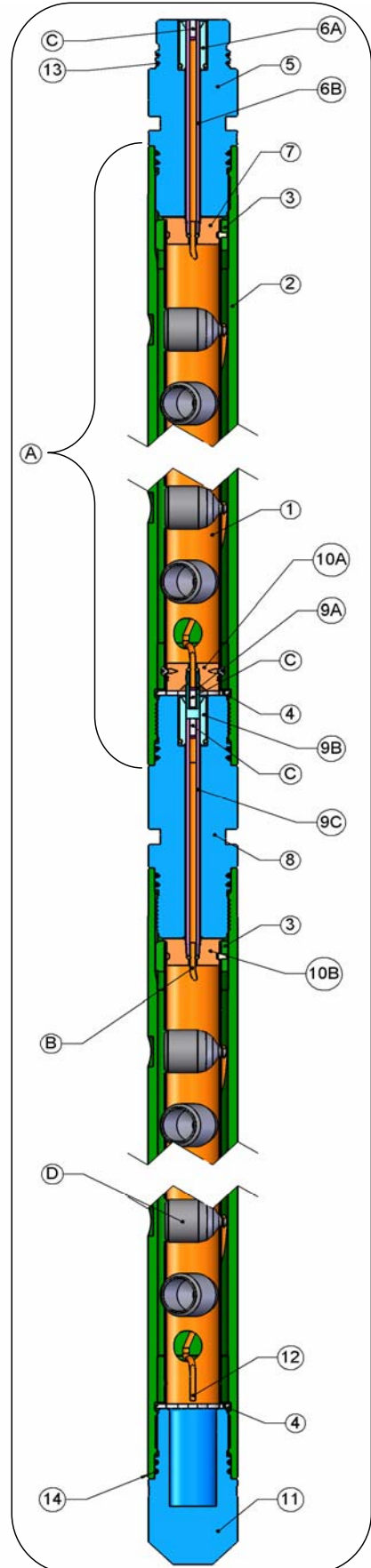
**Typical Configurations**



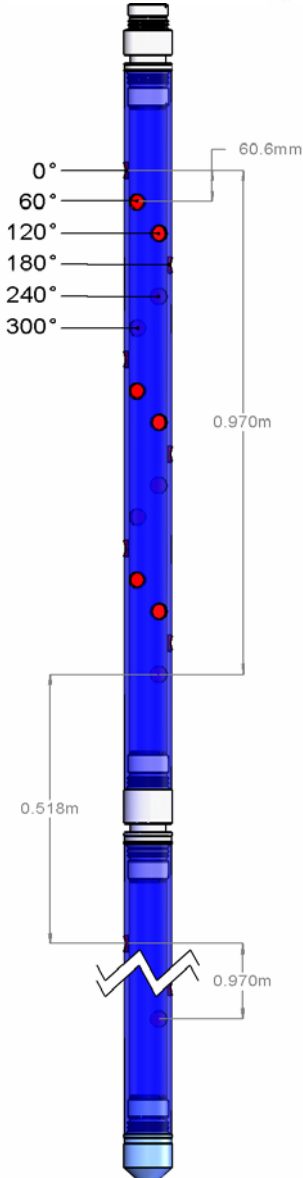
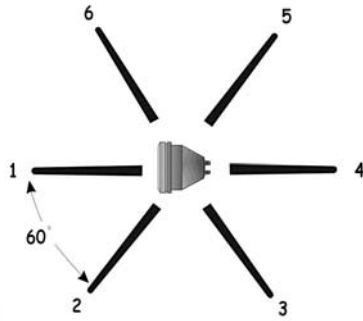
Optional Subs		
Part No.	Description	
30-086-0001-00	Top Sub, Wireline	6.1 kg (13.5 lbs)
30-086-0003-01	Bottom Sub, 86mm x 20" Long Weighted	19.9 kg (43.8 lbs)
30-086-0003-02	Bottom Sub, 86mm x 2 3/8" EU Pin	4.4 kg (9.6 lbs)
30-086-0003-05	Bottom Sub, 86mm x 2 3/8" EU Box	4 kg (8.8 lbs)
30-086-0112-0L	Tandem Sub, Orienting 86mm	8.1 kg (17.8 lbs)
30-086-0002-95	Tandem Sub, Side Port Select Fire	6.7 kg (14.7 lbs)



Item	Part No.	Description	
A	31-086-0908-10	Scalloped Gun System, 86mm x 1.0m, 16.5 spm, 60° Spiral	
	31-086-0908-15	Scalloped Gun System, 86mm x 1.5m, 16.5 spm, 60° Spiral	
	31-086-0908-20	Scalloped Gun System, 86mm x 2.0m, 16.5 spm, 60° Spiral	
	31-086-0908-25	Scalloped Gun System, 86mm x 2.5m, 16.5 spm, 60° Spiral	
	31-086-0908-30	Scalloped Gun System, 86mm x 3.0m, 16.5 spm, 60° Spiral	
	31-086-0908-35	Scalloped Gun System, 86mm x 3.5m, 16.5 spm, 60° Spiral	
	31-086-0908-40	Scalloped Gun System, 86mm x 4.0m, 16.5 spm, 60° Spiral	
	31-086-0908-50	Scalloped Gun System, 86mm x 5.0m, 16.5 spm, 60° Spiral	
31-086-0908-60	Scalloped Gun System, 86mm x 6.0m, 16.5 spm, 60° Spiral		
Includes items 1, 2, 3 and 4			
1	39-054-0908-10	Tube Strip, 54mm x 1.0m, 16.5 spm, 60° Spiral	17
	39-054-0908-15	Tube Strip, 54mm x 1.5m, 16.5 spm, 60° Spiral	25
	39-054-0908-20	Tube Strip, 54mm x 2.0m, 16.5 spm, 60° Spiral	34
	39-054-0908-25	Tube Strip, 54mm x 2.5m, 16.5 spm, 60° Spiral	42
	39-054-0908-30	Tube Strip, 54mm x 3.0m, 16.5 spm, 60° Spiral	50
	39-054-0908-35	Tube Strip, 54mm x 3.5m, 16.5 spm, 60° Spiral	58
	39-054-0908-40	Tube Strip, 54mm x 4.0m, 16.5 spm, 60° Spiral	67
	39-054-0908-50	Tube Strip, 54mm x 5.0m, 16.5 spm, 60° Spiral	83
	39-054-0908-60	Tube Strip, 54mm x 6.0m, 16.5 spm, 60° Spiral	100
	2	31-086-0900-10	Scalloped Carrier, 86mm x 1.0m, 16.5 spm, 60° Spiral
31-086-0900-15		Scalloped Carrier, 86mm x 1.5m, 16.5 spm, 60° Spiral	
31-086-0900-20		Scalloped Carrier, 86mm x 2.0m, 16.5 spm, 60° Spiral	
31-086-0900-25		Scalloped Carrier, 86mm x 2.5m, 16.5 spm, 60° Spiral	
31-086-0900-30		Scalloped Carrier, 86mm x 3.0m, 16.5 spm, 60° Spiral	
31-086-0900-35		Scalloped Carrier, 86mm x 3.5m, 16.5 spm, 60° Spiral	
31-086-0900-40		Scalloped Carrier, 86mm x 4.0m, 16.5 spm, 60° Spiral	
31-086-0900-50		Scalloped Carrier, 86mm x 5.0m, 16.5 spm, 60° Spiral	
31-086-0900-60		Scalloped Carrier, 86mm x 6.0m, 16.5 spm, 60° Spiral	
Includes item 4			
3	30-086-0005-54	Alignment Collar	
4	30-086-0004-00	Retaining Ring	
5	30-086-0001-75	Top Sub, TCP	6.5 kg (14.4 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2125-054	Top Sub Booster Puck Kit	
8	30-086-0002-0L	Tandem Sub, Long TCP	8.3 kg (18.4 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2125-054	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-086-0003-00	Bottom Sub	4.4 kg (9.8 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-231	O-Ring, #231, 90 Duro Nitrile	
	OOO-V569-231	O-Ring, #231, 90 Duro Viton	
B	A578010	Detonating Cord -LS 80gr., RDX	Z
	A571010	Detonating Cord -LS 80gr., HMX	
	-	-	
Approx. Req'd Detcord Length = (1.124 X Gun Length in Meters) + 0.7m			
C	DET-3050-429	Bi-Directional Booster	
D	TAG-3375-311L	Charge, 19g RDX, DP	Dry
	HSC-3375-301	Charge, 20g RDX, BH	Dry
	SDP-3375-311NT	Charge, 23g RDX, SDP	Dry
	HSC-4000-318	Charge, 26g RDX, DP	Dry
	TAG-3375-302	Charge, 25g RDX, GH	Dry
	SDP-3375-311NT3	Charge, 25g RDX, SDP, NT3- Hero	Dry
	SDP-3375-411NT3	Charge, 25g HMX, SDP, NT3- Hero	Dry
	TAG-5000-360	Charge, 32g RDX, DP	Fluid
--	TAG-3375-905	Blank Charge Case (Non Explosive)	

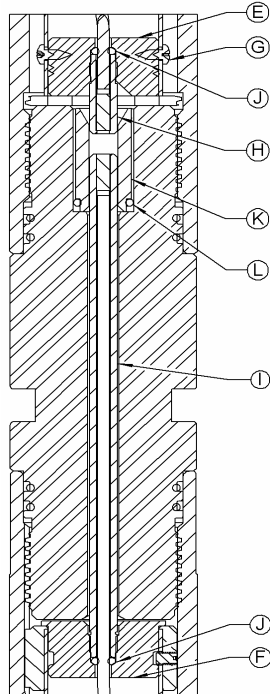


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 99.9 mm (3.93 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (488 mm)



16.5spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

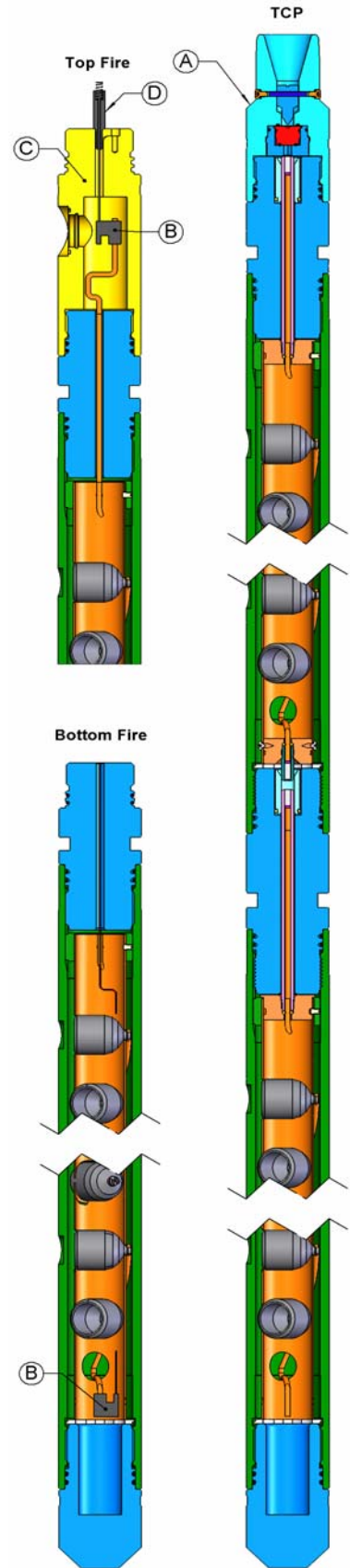
**Tandem Sub Booster Kit 2.125 in. (54 mm) Strip**

Part No.	Description
TC-251-2125-054 contains items E, F, & G	Tandem Booster Insert (Puck) Kit
TCP-0100-375L contains items H, I, J, K, & L	Booster Kit

Specifications		
Pressure Rating	138 Mpa	20,000 psi
Tensile Strength	114,600 daN	257,600 lbf
Carrier Thread	2.818 - 6 TPI Acme	
Gun Weight Loaded	25.6 kg/m	17.2 lb/ft

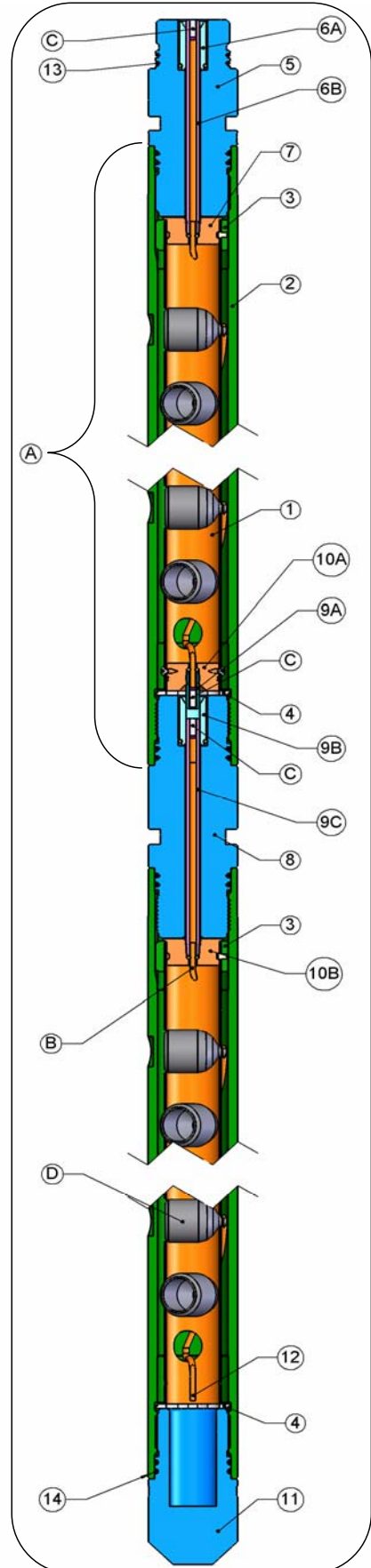
Note: Gun Weight Loaded = Carrier + Strip + Charges

**Typical Configurations**

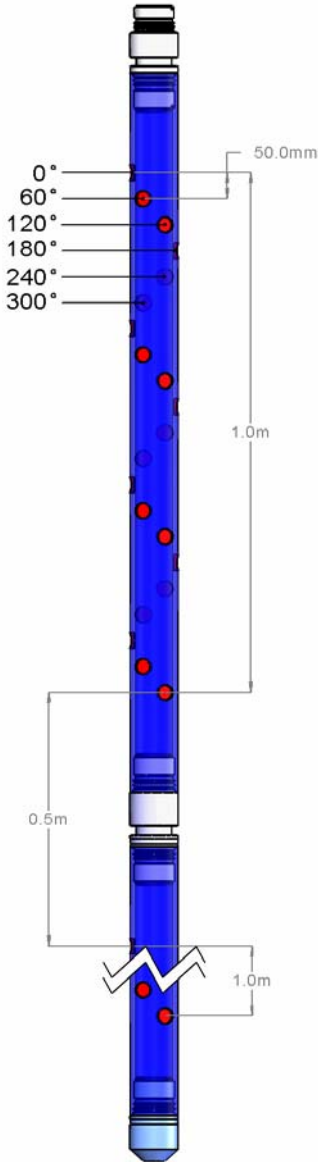
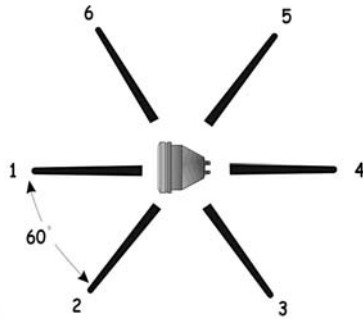


Optional Subs		
Part No.	Description	
30-086-0001-00	Top Sub, Wireline	6.1 kg (13.5 lbs)
30-086-0003-01	Bottom Sub, 86mm x 20" Long Weighted	19.9 kg (43.8 lbs)
30-086-0003-02	Bottom Sub, 86mm x 2 3/8" EU Pin	4.4 kg (9.6 lbs)
30-086-0003-05	Bottom Sub, 86mm x 2 3/8" EU Box	4 kg (8.8 lbs)
30-086-0112-0L	Tandem Sub, Orienting 86mm	8.1 kg (17.8 lbs)
30-086-0002-95	Tandem Sub, Side Port Select Fire	6.7 kg (14.7 lbs)

Item	Part No.	Description	
A	31-086-2508-10	Scalloped Gun System, 86mm x 1.0m, 20 spm, 60° Spiral	
	31-086-2508-15	Scalloped Gun System, 86mm x 1.5m, 20 spm, 60° Spiral	
	31-086-2508-20	Scalloped Gun System, 86mm x 2.0m, 20 spm, 60° Spiral	
	31-086-2508-25	Scalloped Gun System, 86mm x 2.5m, 20 spm, 60° Spiral	
	31-086-2508-30	Scalloped Gun System, 86mm x 3.0m, 20 spm, 60° Spiral	
	31-086-2508-35	Scalloped Gun System, 86mm x 3.5m, 20 spm, 60° Spiral	
	31-086-2508-40	Scalloped Gun System, 86mm x 4.0m, 20 spm, 60° Spiral	
	31-086-2508-50	Scalloped Gun System, 86mm x 5.0m, 20 spm, 60° Spiral	
31-086-2508-60	Scalloped Gun System, 86mm x 6.0m, 20 spm, 60° Spiral		
Includes items 1, 2, 3 and 4			
1	39-054-2508-10	Tube Strip, 54mm x 1.0m, 20 spm, 60° Spiral	21
	39-054-2508-15	Tube Strip, 54mm x 1.5m, 20 spm, 60° Spiral	31
	39-054-2508-20	Tube Strip, 54mm x 2.0m, 20 spm, 60° Spiral	41
	39-054-2508-25	Tube Strip, 54mm x 2.5m, 20 spm, 60° Spiral	51
	39-054-2508-30	Tube Strip, 54mm x 3.0m, 20 spm, 60° Spiral	61
	39-054-2508-35	Tube Strip, 54mm x 3.5m, 20 spm, 60° Spiral	71
	39-054-2508-40	Tube Strip, 54mm x 4.0m, 20 spm, 60° Spiral	81
	39-054-2508-50	Tube Strip, 54mm x 5.0m, 20 spm, 60° Spiral	101
	39-054-2508-60	Tube Strip, 54mm x 6.0m, 20 spm, 60° Spiral	121
	2	31-086-2500-10	Scalloped Carrier, 86mm x 1.0m, 20 spm, 60° Spiral
31-086-2500-15		Scalloped Carrier, 86mm x 1.5m, 20 spm, 60° Spiral	
31-086-2500-20		Scalloped Carrier, 86mm x 2.0m, 20 spm, 60° Spiral	
31-086-2500-25		Scalloped Carrier, 86mm x 2.5m, 20 spm, 60° Spiral	
31-086-2500-30		Scalloped Carrier, 86mm x 3.0m, 20 spm, 60° Spiral	
31-086-2500-35		Scalloped Carrier, 86mm x 3.5m, 20 spm, 60° Spiral	
31-086-2500-40		Scalloped Carrier, 86mm x 4.0m, 20 spm, 60° Spiral	
31-086-2500-50		Scalloped Carrier, 86mm x 5.0m, 20 spm, 60° Spiral	
31-086-2500-60		Scalloped Carrier, 86mm x 6.0m, 20 spm, 60° Spiral	
Includes item 4			
3	30-086-0005-54	Alignment Collar	
4	30-086-0004-00	Retaining Ring	
5	30-086-0001-75	Top Sub, TCP	6.5 kg (14.4 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2125-054	Top Sub Booster Puck Kit	
8	30-086-0002-0L	Tandem Sub, Long TCP	8.3 kg (18.4 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2125-054	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-086-0003-00	Bottom Sub	4.4 kg (9.8 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-231	O-Ring, #231, 90 Duro Nitrile	
	OOO-V569-231	O-Ring, #231, 90 Duro Viton	
B	A578010	Detonating Cord -LS 80gr., RDX	
	A571010	Detonating Cord -LS 80gr., HMX	
	A570010	Detonating Cord XHV 80gr., RDX	Y
	A572010	Detonating Cord XHV 80gr., HMX	Z
Approx. Req'd Detcord Length = (1.177 X Gun Length in Meters) + 0.7m			
C	DET-3050-429	Bi-Directional Booster	
D	TAG-3375-311L	Charge, 19g RDX, DP	Dry
	HSC-3375-301	Charge, 20g RDX, BH	Dry
	SDP-3375-311NT	Charge, 23g RDX, SDP	Dry
	HSC-4000-318	Charge, 26g RDX, DP	Fluid
	TAG-3375-302	Charge, 25g RDX, GH	Y Fluid
	SDP-3375-311NT3	Charge, 25g RDX, SDP, NT3- Hero	Y Fluid
SDP-3375-411NT3	Charge, 25g HMX, SDP, NT3- Hero	Z Fluid	
--	TAG-3375-905	Blank Charge Case (Non Explosive)	

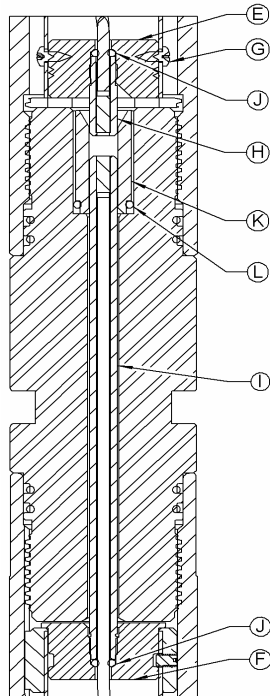


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 96.6 mm (3.8 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (488 mm)



20spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

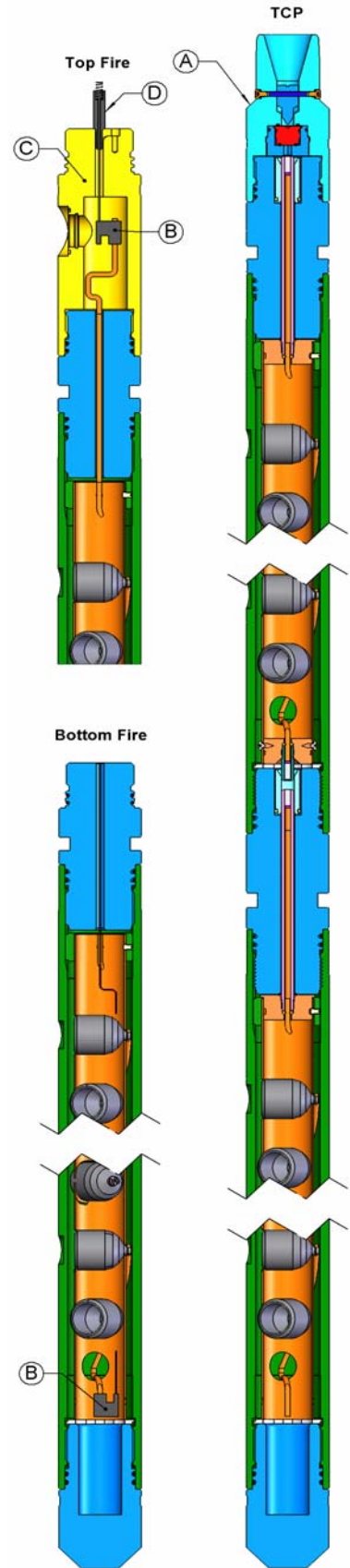
**Tandem Sub Booster Kit 2.125 in. (54 mm) Strip**

Part No.	Description
TC-251-2125-054	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

Specifications		
Pressure Rating	138 Mpa	20,000 psi
Tensile Strength	114,600 daN	257,600 lbf
Carrier Thread	2.818 - 6 TPI Acme	
Gun Weight Loaded	26.8 kg/m	18 lb/ft

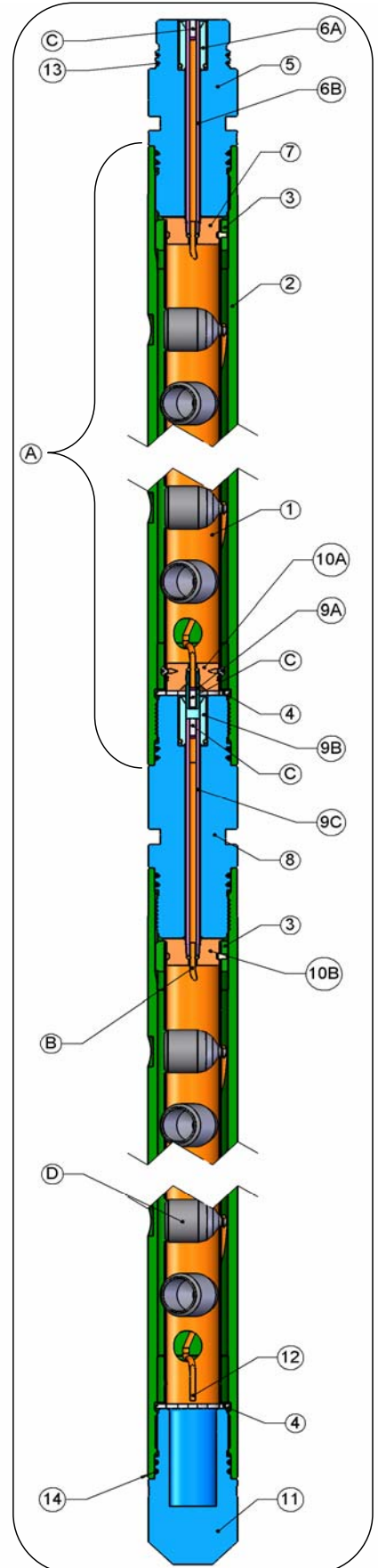
Note: Gun Weight Loaded = Carrier + Strip + Charges

**Typical Configurations**

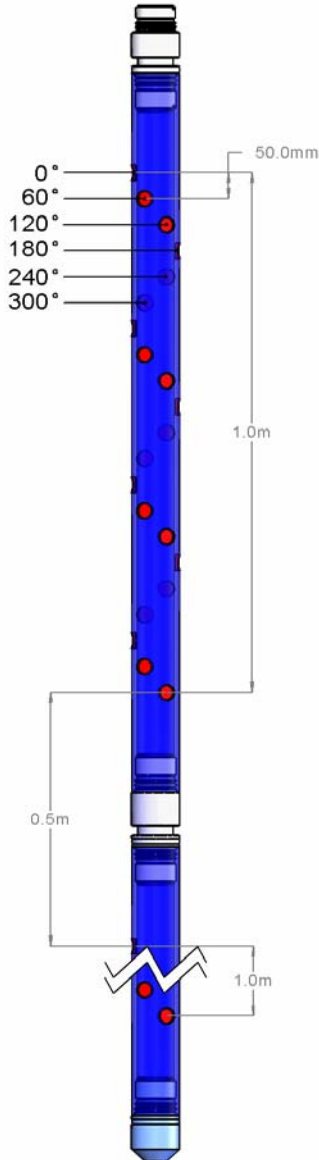
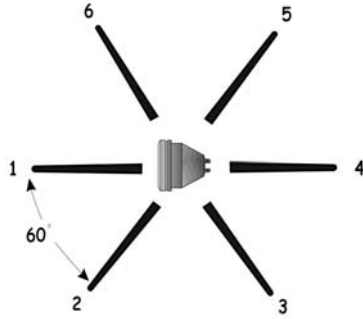


Optional Subs		
Part No.	Description	
30-086-0001-00	Top Sub, Wireline	6.1 kg (13.5 lbs)
30-086-0003-01	Bottom Sub, 86mm x 20" Long Weighted	19.9 kg (43.8 lbs)
30-086-0003-02	Bottom Sub, 86mm x 2 3/8" EU Pin	4.4 kg (9.6 lbs)
30-086-0003-05	Bottom Sub, 86mm x 2 3/8" EU Box	4 kg (8.8 lbs)
30-086-0112-0L	Tandem Sub, Orienting 86mm	8.1 kg (17.8 lbs)
30-086-0002-95	Tandem Sub, Side Port Select Fire	6.7 kg (14.7 lbs)

Item	Part No.	Description	
A	31-101-0608-10	Scalloped Gun System, 101mm x 1.0m, 14 spm, 60° Spiral	
	31-101-0608-15	Scalloped Gun System, 101mm x 1.5m, 14 spm, 60° Spiral	
	31-101-0608-20	Scalloped Gun System, 101mm x 2.0m, 14 spm, 60° Spiral	
	31-101-0608-25	Scalloped Gun System, 101mm x 2.5m, 14 spm, 60° Spiral	
	31-101-0608-30	Scalloped Gun System, 101mm x 3.0m, 14 spm, 60° Spiral	
	31-101-0608-35	Scalloped Gun System, 101mm x 3.5m, 14 spm, 60° Spiral	
	31-101-0608-40	Scalloped Gun System, 101mm x 4.0m, 14 spm, 60° Spiral	
	31-101-0608-50	Scalloped Gun System, 101mm x 5.0m, 14 spm, 60° Spiral	
31-101-0608-60	Scalloped Gun System, 101mm x 6.0m, 14 spm, 60° Spiral		
		Includes items 1, 2, 3 and 4	
1	39-054-0608-10	Tube Strip, 54mm x 1.0m, 14 spm, 60° Spiral	15
	39-054-0608-15	Tube Strip, 54mm x 1.5m, 14 spm, 60° Spiral	22
	39-054-0608-20	Tube Strip, 54mm x 2.0m, 14 spm, 60° Spiral	29
	39-054-0608-25	Tube Strip, 54mm x 2.5m, 14 spm, 60° Spiral	36
	39-054-0608-30	Tube Strip, 54mm x 3.0m, 14 spm, 60° Spiral	43
	39-054-0608-35	Tube Strip, 54mm x 3.5m, 14 spm, 60° Spiral	50
	39-054-0608-40	Tube Strip, 54mm x 4.0m, 14 spm, 60° Spiral	57
	39-054-0608-50	Tube Strip, 54mm x 5.0m, 14 spm, 60° Spiral	71
	39-054-0608-60	Tube Strip, 54mm x 6.0m, 14 spm, 60° Spiral	85
	2	31-101-0600-10	Scalloped Carrier, 101mm x 1.0m, 14 spm, 60° Spiral
31-101-0600-15		Scalloped Carrier, 101mm x 1.5m, 14 spm, 60° Spiral	
31-101-0600-20		Scalloped Carrier, 101mm x 2.0m, 14 spm, 60° Spiral	
31-101-0600-25		Scalloped Carrier, 101mm x 2.5m, 14 spm, 60° Spiral	
31-101-0600-30		Scalloped Carrier, 101mm x 3.0m, 14 spm, 60° Spiral	
31-101-0600-35		Scalloped Carrier, 101mm x 3.5m, 14 spm, 60° Spiral	
31-101-0600-40		Scalloped Carrier, 101mm x 4.0m, 14 spm, 60° Spiral	
31-101-0600-50		Scalloped Carrier, 101mm x 5.0m, 14 spm, 60° Spiral	
31-101-0600-60		Scalloped Carrier, 101mm x 6.0m, 14 spm, 60° Spiral	
			Includes item 4
3	30-101-0005-54	Alignment Collar	
4	30-101-0004-00	Retaining Ring	
5	30-101-0001-75	Top Sub, TCP	8.6 kg (19 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2125-054	Top Sub Booster Puck Kit	
8	30-101-0002-0L	Tandem Sub, Long TCP	11.8 kg (26.1 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2125-054	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-101-0003-00	Bottom Sub	9.1 kg (20.1 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-236	O-Ring, #236, 90 Duro Nitrile	
	OOO-V569-236	O-Ring, #236, 90 Duro Viton	
B	A578010	Detonating Cord -LS 80gr., RDX	Z
	A571010	Detonating Cord -LS 80gr., HMX	
	-	-	
		Approx. Req'd Detcord Length = (1.099 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	TAG-3375-311L	Charge, 19g RDX, DP	Dry
	HSC-3375-301	Charge, 20g RDX, BH	Dry
	SDP-3375-311NT	Charge, 23g RDX, SDP	Dry
	HSC-4000-318	Charge, 26g RDX, DP	Dry
	TAG-3375-302	Charge, 25g RDX, GH	Dry
	SDP-3375-311NT3	Charge, 25g RDX, SDP, NT3- Hero	Dry
	SDP-3375-411NT3	Charge, 25g HMX, SDP, NT3- Hero	Dry
	TAG-5000-360	Charge, 32g RDX, DP	Dry
--	TAG-4000-701	Blank Charge Case (Non Explosive)	

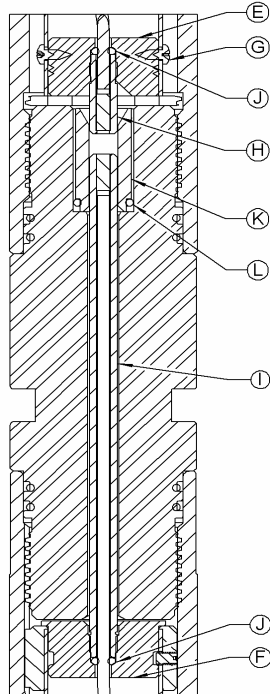


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 120.7 mm (4.75 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



20spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

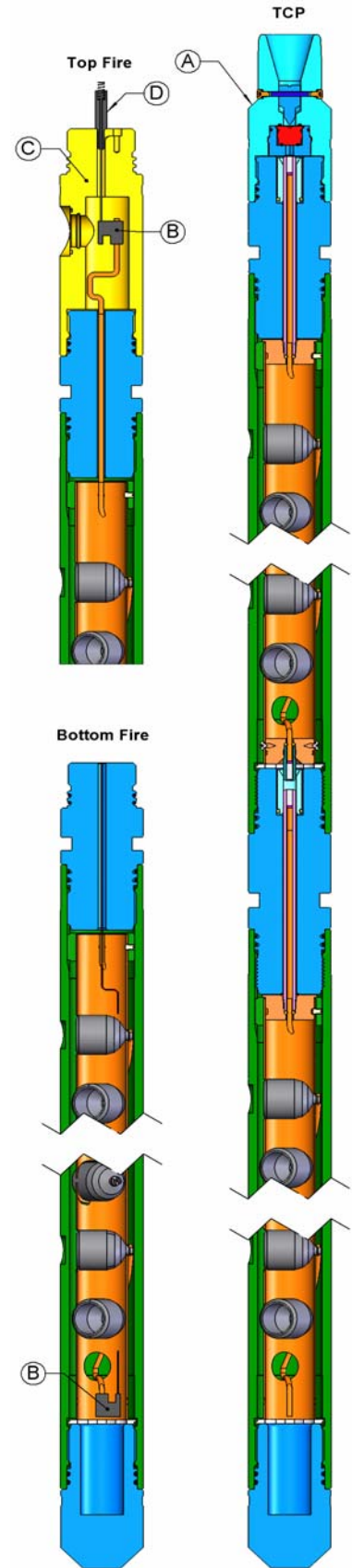
**Tandem Sub Booster Kit 2.125 in. (54 mm) Strip**

Part No.	Description
TC-251-2125-054	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

Specifications		
Pressure Rating	131 Mpa	19,000 psi
Tensile Strength	136,800 daN	307,500 lbf
Carrier Thread	3.445 - 6 TPI Acme	
Gun Weight Loaded	28.5 kg/m	19.2 lb/ft

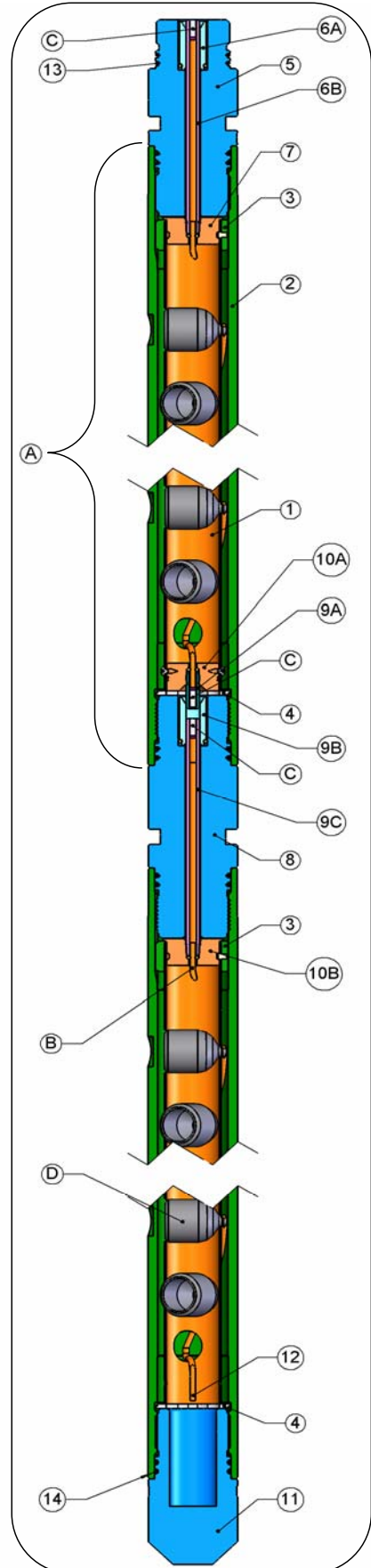
Note: Gun Weight Loaded = Carrier + Strip + Charges

**Typical Configurations**

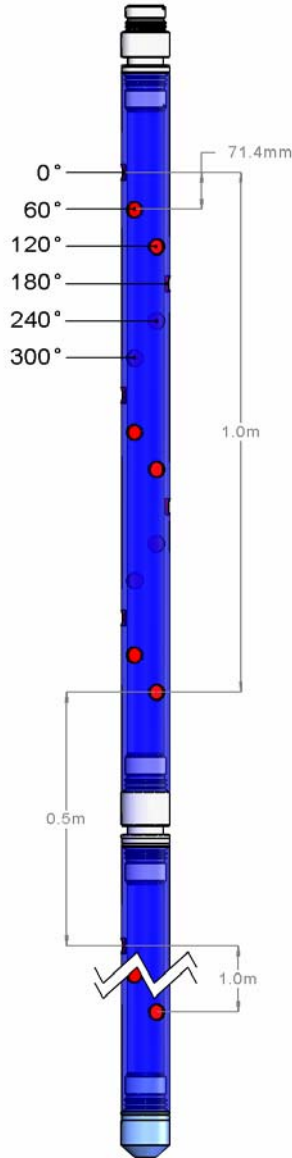
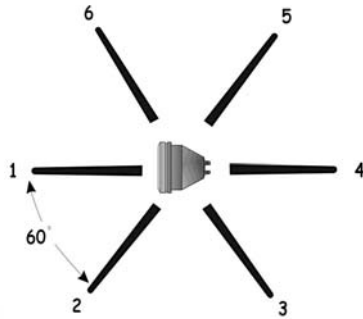


Optional Subs		
Part No.	Description	
30-101-0001-00	Top Sub, Wireline	8.8 kg (19.4 lbs)
30-101-0003-01	Bottom Sub, 101mm x 2 3/8" EU Box	7.8 kg (17.3 lbs)
30-101-0003-02	Bottom Sub, 101mm x 20" Long Weighted	28.2 kg (62.2 lbs)
30-101-0003-03	Bottom Sub, 101mm x 2 3/8" EU Pin	8.2 kg (18 lbs)
30-101-0110-0L	Tandem Sub, Orienting 101mm	11.6 kg (25.5 lbs)
30-101-0002-95	Tandem Sub, Side Port Select Fire	11.1 kg (24.4 lbs)

Item	Part No.	Description	
A	31-101-0631-10	Scalloped Gun System, 101mm x 1.0m, 14 spm, 60° Spiral	
	31-101-0631-15	Scalloped Gun System, 101mm x 1.5m, 14 spm, 60° Spiral	
	31-101-0631-20	Scalloped Gun System, 101mm x 2.0m, 14 spm, 60° Spiral	
	31-101-0631-25	Scalloped Gun System, 101mm x 2.5m, 14 spm, 60° Spiral	
	31-101-0631-30	Scalloped Gun System, 101mm x 3.0m, 14 spm, 60° Spiral	
	31-101-0631-35	Scalloped Gun System, 101mm x 3.5m, 14 spm, 60° Spiral	
	31-101-0631-40	Scalloped Gun System, 101mm x 4.0m, 14 spm, 60° Spiral	
	31-101-0631-50	Scalloped Gun System, 101mm x 5.0m, 14 spm, 60° Spiral	
31-101-0631-60	Scalloped Gun System, 101mm x 6.0m, 14 spm, 60° Spiral		
		Includes items 1, 2, 3 and 4	
1	39-057-0631-10	Tube Strip, 57mm x 1.0m, 14 spm, 60° Spiral	15
	39-057-0631-15	Tube Strip, 57mm x 1.5m, 14 spm, 60° Spiral	22
	39-057-0631-20	Tube Strip, 57mm x 2.0m, 14 spm, 60° Spiral	29
	39-057-0631-25	Tube Strip, 57mm x 2.5m, 14 spm, 60° Spiral	36
	39-057-0631-30	Tube Strip, 57mm x 3.0m, 14 spm, 60° Spiral	43
	39-057-0631-35	Tube Strip, 57mm x 3.5m, 14 spm, 60° Spiral	50
	39-057-0631-40	Tube Strip, 57mm x 4.0m, 14 spm, 60° Spiral	57
	39-057-0631-50	Tube Strip, 57mm x 5.0m, 14 spm, 60° Spiral	71
	39-057-0631-60	Tube Strip, 57mm x 6.0m, 14 spm, 60° Spiral	85
2	31-101-0600-10	Scalloped Carrier, 101mm x 1.0m, 14 spm, 60° Spiral	
	31-101-0600-15	Scalloped Carrier, 101mm x 1.5m, 14 spm, 60° Spiral	
	31-101-0600-20	Scalloped Carrier, 101mm x 2.0m, 14 spm, 60° Spiral	
	31-101-0600-25	Scalloped Carrier, 101mm x 2.5m, 14 spm, 60° Spiral	
	31-101-0600-30	Scalloped Carrier, 101mm x 3.0m, 14 spm, 60° Spiral	
	31-101-0600-35	Scalloped Carrier, 101mm x 3.5m, 14 spm, 60° Spiral	
	31-101-0600-40	Scalloped Carrier, 101mm x 4.0m, 14 spm, 60° Spiral	
	31-101-0600-50	Scalloped Carrier, 101mm x 5.0m, 14 spm, 60° Spiral	
	31-101-0600-60	Scalloped Carrier, 101mm x 6.0m, 14 spm, 60° Spiral	
		Includes item 4	
3	30-101-0005-57	Alignment Collar	
4	30-101-0004-00	Retaining Ring	
5	30-101-0001-75	Top Sub, TCP	8.6 kg (19 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2250-057	Top Sub Booster Puck Kit	
8	30-101-0002-0L	Tandem Sub, Long TCP	11.8 kg (26.1 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2250-057	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-101-0003-00	Bottom Sub	9.1 kg (20.1 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-236	O-Ring, #236, 90 Duro Nitrile	
	OOO-V569-236	O-Ring, #236, 90 Duro Viton	
B	A578010	Detonating Cord -LS 80gr., RDX	
	A571010	Detonating Cord -LS 80gr., HMX	X
	A570010	Detonating Cord XHV 80gr., RDX	Y
	A572010	Detonating Cord XHV 80gr., HMX	Z
		Approx. Req'd Detcord Length = (1.099 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	HSC-5000-325F	Charge, 32g RDX, BH	Dry
	HSC-5000-321Z	Charge, 32g RDX, DP	Dry
	TAG-5000-382	Charge, 39g RDX, SDP	Dry
	TAG-5000-482	Charge, 39g HMX, SDP	X Dry
	SDP-5000-400	Charge, 39g HMX, SDP	X Dry
	SDP-4500-311NT3	Charge, 39g RDX, SDP, NT3- Super-Hero	Y Dry
	SDP-4500-411NT3	Charge, 39g HMX, SDP, NT3- Super-Hero	Z Dry
--	TAG-4010-180	Blank Charge Case (Non Explosive)	Dry

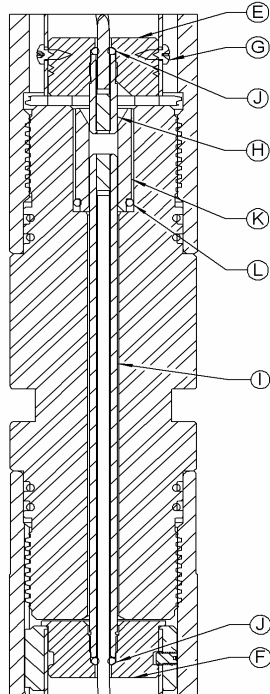


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 120.7 mm (4.75 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



14spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Specifications		
Pressure Rating	131 Mpa	19,000 psi
Tensile Strength	136,800 daN	307,500 lbf
Carrier Thread	3.445 - 6 TPI Acme	
Gun Weight Loaded	30.5 kg/m	20.5 lb/ft

Note: Gun Weight Loaded = Carrier + Strip + Charges

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

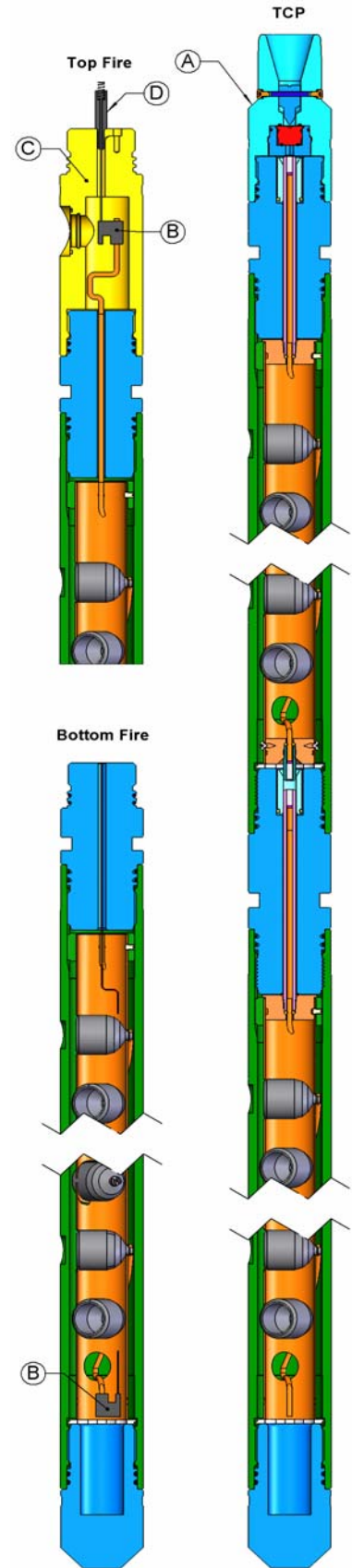
Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

Tandem Sub Booster Kit 2.25 in. (57 mm) Strip	
Part No.	Description
TC-251-2250-057	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

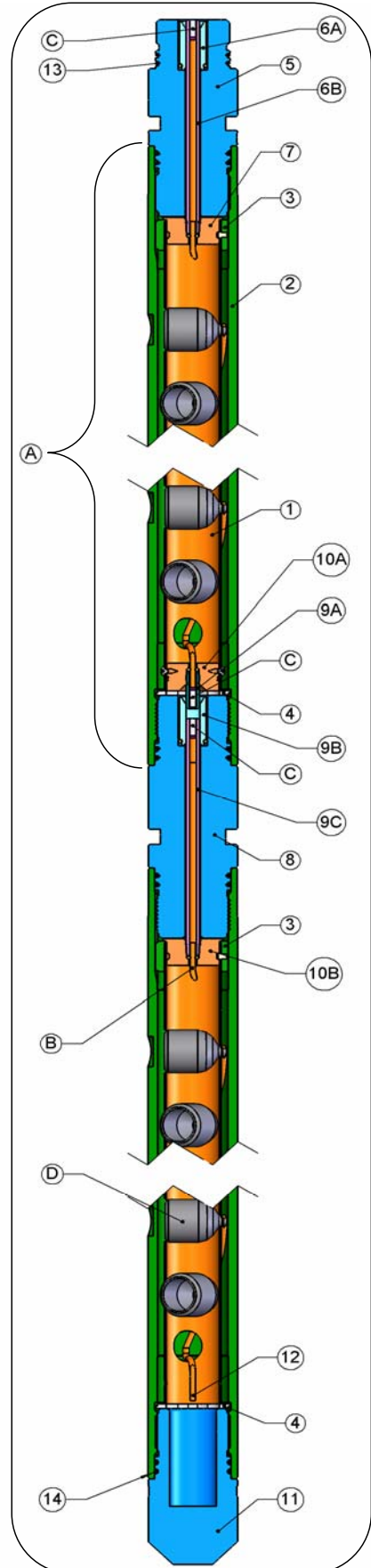
**Typical Configurations**



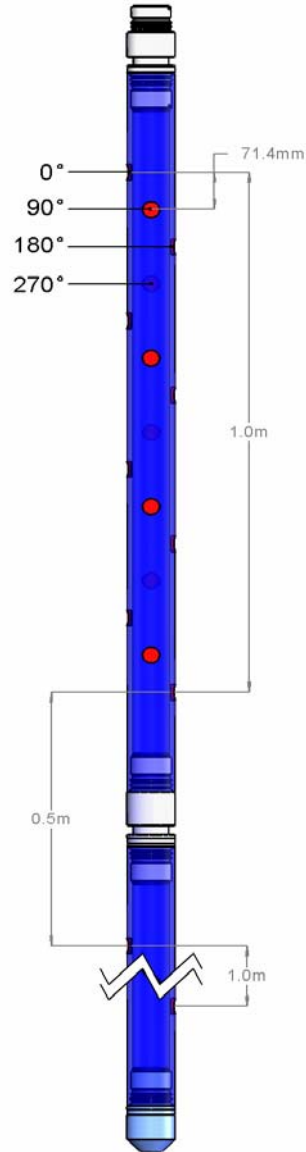
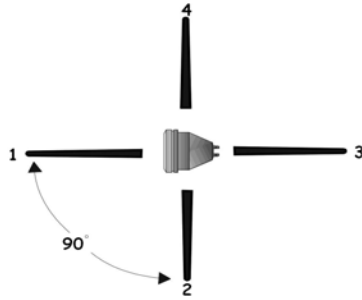
Optional Subs		
Part No.	Description	
30-101-0001-00	Top Sub, Wireline	8.8 kg (19.4 lbs)
30-101-0003-01	Bottom Sub, 101mm x 2 3/8" EU Box	7.8 kg (17.3 lbs)
30-101-0003-02	Bottom Sub, 101mm x 20" Long Weighted	28.2 kg (62.2 lbs)
30-101-0003-03	Bottom Sub, 101mm x 2 3/8" EU Pin	8.2 kg (18 lbs)
30-101-0110-0L	Tandem Sub, Orienting 101mm	11.6 kg (25.5 lbs)
30-101-0002-95	Tandem Sub, Side Port Select Fire	11.1 kg (24.4 lbs)



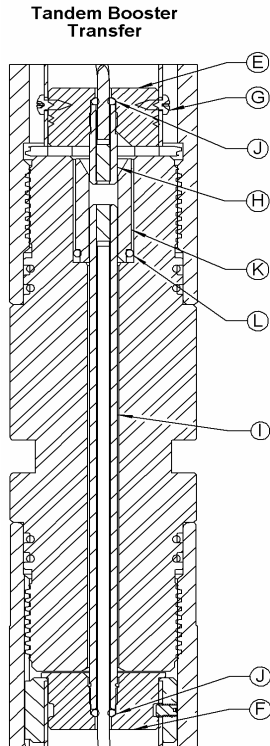
Item	Part No.	Description	
A	31-101-0731-10	Scalloped Gun System, 101mm x 1.0m, 14 spm, 90° Spiral	
	31-101-0731-15	Scalloped Gun System, 101mm x 1.5m, 14 spm, 90° Spiral	
	31-101-0731-20	Scalloped Gun System, 101mm x 2.0m, 14 spm, 90° Spiral	
	31-101-0731-25	Scalloped Gun System, 101mm x 2.5m, 14 spm, 90° Spiral	
	31-101-0731-30	Scalloped Gun System, 101mm x 3.0m, 14 spm, 90° Spiral	
	31-101-0731-35	Scalloped Gun System, 101mm x 3.5m, 14 spm, 90° Spiral	
	31-101-0731-40	Scalloped Gun System, 101mm x 4.0m, 14 spm, 90° Spiral	
	31-101-0731-50	Scalloped Gun System, 101mm x 5.0m, 14 spm, 90° Spiral	
31-101-0731-60	Scalloped Gun System, 101mm x 6.0m, 14 spm, 90° Spiral		
		Includes items 1, 2, 3 and 4	
1	39-057-0731-10	Tube Strip, 57mm x 1.0m, 14 spm, 90° Spiral	15
	39-057-0731-15	Tube Strip, 57mm x 1.5m, 14 spm, 90° Spiral	22
	39-057-0731-20	Tube Strip, 57mm x 2.0m, 14 spm, 90° Spiral	29
	39-057-0731-25	Tube Strip, 57mm x 2.5m, 14 spm, 90° Spiral	36
	39-057-0731-30	Tube Strip, 57mm x 3.0m, 14 spm, 90° Spiral	43
	39-057-0731-35	Tube Strip, 57mm x 3.5m, 14 spm, 90° Spiral	50
	39-057-0731-40	Tube Strip, 57mm x 4.0m, 14 spm, 90° Spiral	57
	39-057-0731-50	Tube Strip, 57mm x 5.0m, 14 spm, 90° Spiral	71
	39-057-0731-60	Tube Strip, 57mm x 6.0m, 14 spm, 90° Spiral	85
2	31-101-0700-10	Scalloped Carrier, 101mm x 1.0m, 14 spm, 90° Spiral	
	31-101-0700-15	Scalloped Carrier, 101mm x 1.5m, 14 spm, 90° Spiral	
	31-101-0700-20	Scalloped Carrier, 101mm x 2.0m, 14 spm, 90° Spiral	
	31-101-0700-25	Scalloped Carrier, 101mm x 2.5m, 14 spm, 90° Spiral	
	31-101-0700-30	Scalloped Carrier, 101mm x 3.0m, 14 spm, 90° Spiral	
	31-101-0700-35	Scalloped Carrier, 101mm x 3.5m, 14 spm, 90° Spiral	
	31-101-0700-40	Scalloped Carrier, 101mm x 4.0m, 14 spm, 90° Spiral	
	31-101-0700-50	Scalloped Carrier, 101mm x 5.0m, 14 spm, 90° Spiral	
	31-101-0700-60	Scalloped Carrier, 101mm x 6.0m, 14 spm, 90° Spiral	
		Includes item 4	
3	30-101-0005-57	Alignment Collar	
4	30-101-0004-00	Retaining Ring	
5	30-101-0001-75	Top Sub, TCP	8.6 kg (19 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2250-057	Top Sub Booster Puck Kit	
8	30-101-0002-0L	Tandem Sub, Long TCP	11.8 kg (26.1 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2250-057	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-101-0003-00	Bottom Sub	9.1 kg (20.1 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-236	O-Ring, #236, 90 Duro Nitrile	
	OOO-V569-236	O-Ring, #236, 90 Duro Viton	
B	A578010	Detonating Cord -LS 80gr., RDX	
	A571010	Detonating Cord -LS 80gr., HMX	X
	A570010	Detonating Cord XHV 80gr., RDX	Y
	A572010	Detonating Cord XHV 80gr., HMX	Z
		Approx. Req'd Detcord Length = (1.212 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	HSC-5000-325F	Charge, 32g RDX, BH	Dry
	HSC-5000-321Z	Charge, 32g RDX, DP	Dry
	TAG-5000-382	Charge, 39g RDX, SDP	Dry
	TAG-5000-482	Charge, 39g HMX, SDP	X Dry
	SDP-5000-400	Charge, 39g HMX, SDP	X Dry
	SDP-4500-311NT3	Charge, 39g RDX, SDP, NT3- Super-Hero	Y Dry
	SDP-4500-411NT3	Charge, 39g HMX, SDP, NT3- Super-Hero	Z Dry
--	TAG-4010-180	Blank Charge Case (Non Explosive)	Dry



Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 120.7 mm (4.75 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



14spm 90°



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Specifications		
Pressure Rating	131 Mpa	19,000 psi
Tensile Strength	136,800 daN	307,500 lbf
Carrier Thread	3.445 - 6 TPI Acme	
Gun Weight Loaded	30.5 kg/m	20.5 lb/ft

Note: Gun Weight Loaded = Carrier + Strip + Charges

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

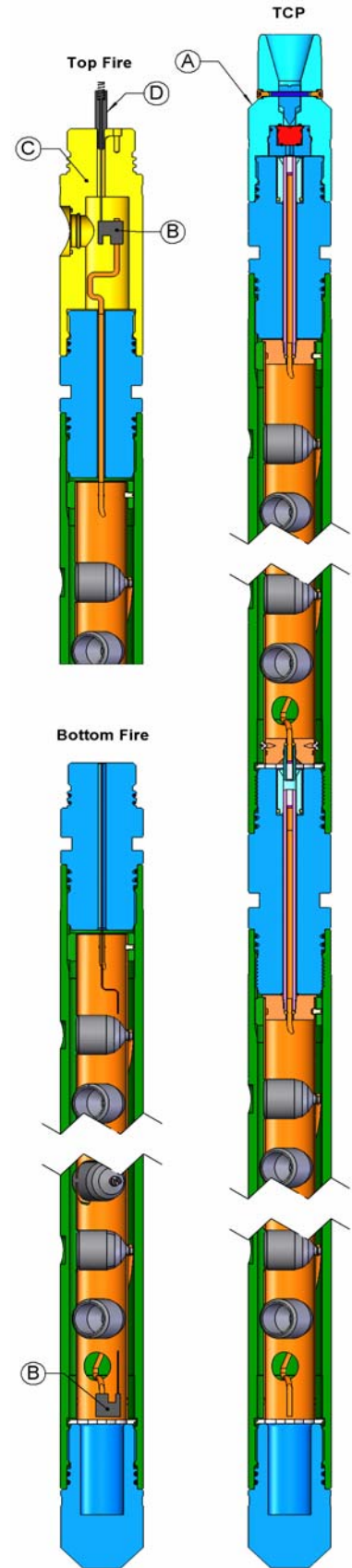
Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

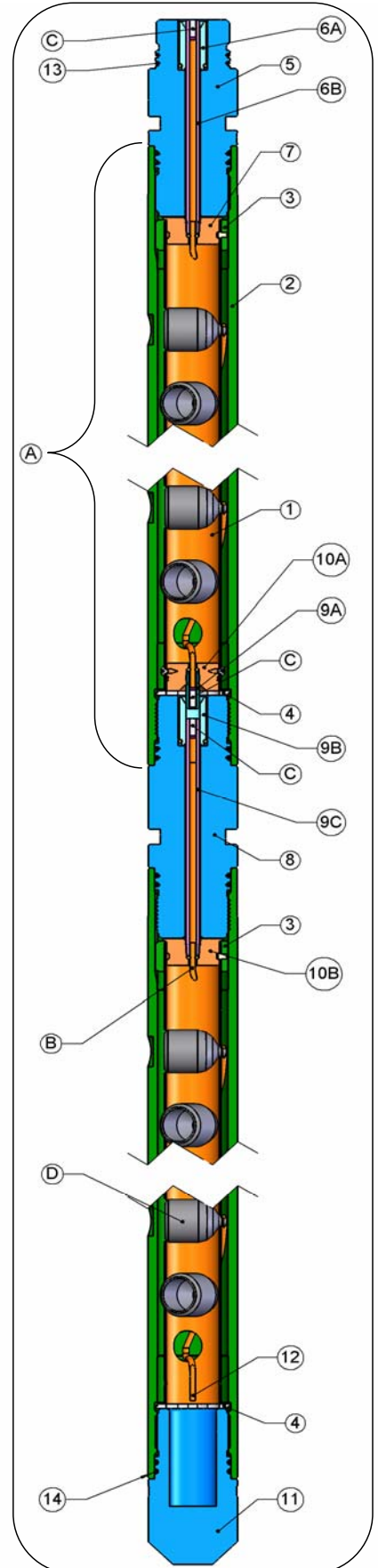
Tandem Sub Booster Kit 2.25 in. (57 mm) Strip	
Part No.	Description
TC-251-2250-057	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

Typical Configurations

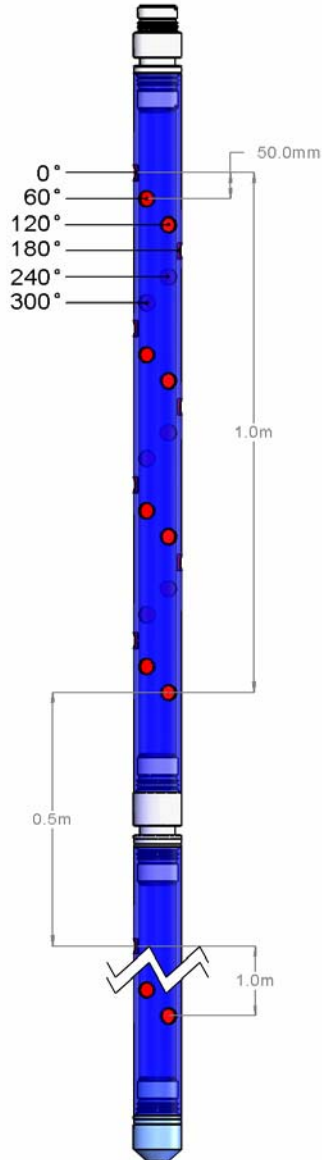
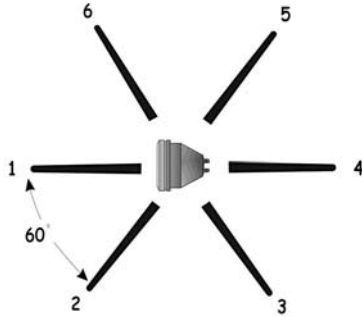


Optional Subs		
Part No.	Description	
30-101-0001-00	Top Sub, Wireline	8.8 kg (19.4 lbs)
30-101-0003-01	Bottom Sub, 101mm x 2 3/8" EU Box	7.8 kg (17.3 lbs)
30-101-0003-02	Bottom Sub, 101mm x 20" Long Weighted	28.2 kg (62.2 lbs)
30-101-0003-03	Bottom Sub, 101mm x 2 3/8" EU Pin	8.2 kg (18 lbs)
30-101-0110-0L	Tandem Sub, Orienting 101mm	11.6 kg (25.5 lbs)
30-101-0002-95	Tandem Sub, Side Port Select Fire	11.1 kg (24.4 lbs)

Item	Part No.	Description	
A	31-101-0908-10	Scalloped Gun System, 101mm x 1.0m, 16.5 spm, 60° Spiral	
	31-101-0908-15	Scalloped Gun System, 101mm x 1.5m, 16.5 spm, 60° Spiral	
	31-101-0908-20	Scalloped Gun System, 101mm x 2.0m, 16.5 spm, 60° Spiral	
	31-101-0908-25	Scalloped Gun System, 101mm x 2.5m, 16.5 spm, 60° Spiral	
	31-101-0908-30	Scalloped Gun System, 101mm x 3.0m, 16.5 spm, 60° Spiral	
	31-101-0908-35	Scalloped Gun System, 101mm x 3.5m, 16.5 spm, 60° Spiral	
	31-101-0908-40	Scalloped Gun System, 101mm x 4.0m, 16.5 spm, 60° Spiral	
	31-101-0908-50	Scalloped Gun System, 101mm x 5.0m, 16.5 spm, 60° Spiral	
31-101-0908-60	Scalloped Gun System, 101mm x 6.0m, 16.5 spm, 60° Spiral		
		Includes items 1, 2, 3 and 4	
1	39-054-0908-10	Tube Strip, 54mm x 1.0m, 16.5 spm, 60° Spiral	17
	39-054-0908-15	Tube Strip, 54mm x 1.5m, 16.5 spm, 60° Spiral	25
	39-054-0908-20	Tube Strip, 54mm x 2.0m, 16.5 spm, 60° Spiral	34
	39-054-0908-25	Tube Strip, 54mm x 2.5m, 16.5 spm, 60° Spiral	42
	39-054-0908-30	Tube Strip, 54mm x 3.0m, 16.5 spm, 60° Spiral	50
	39-054-0908-35	Tube Strip, 54mm x 3.5m, 16.5 spm, 60° Spiral	58
	39-054-0908-40	Tube Strip, 54mm x 4.0m, 16.5 spm, 60° Spiral	67
	39-054-0908-50	Tube Strip, 54mm x 5.0m, 16.5 spm, 60° Spiral	83
	39-054-0908-60	Tube Strip, 54mm x 6.0m, 16.5 spm, 60° Spiral	100
	2	31-101-0900-10	Scalloped Carrier, 101mm x 1.0m, 16.5 spm, 60° Spiral
31-101-0900-15		Scalloped Carrier, 101mm x 1.5m, 16.5 spm, 60° Spiral	
31-101-0900-20		Scalloped Carrier, 101mm x 2.0m, 16.5 spm, 60° Spiral	
31-101-0900-25		Scalloped Carrier, 101mm x 2.5m, 16.5 spm, 60° Spiral	
31-101-0900-30		Scalloped Carrier, 101mm x 3.0m, 16.5 spm, 60° Spiral	
31-101-0900-35		Scalloped Carrier, 101mm x 3.5m, 16.5 spm, 60° Spiral	
31-101-0900-40		Scalloped Carrier, 101mm x 4.0m, 16.5 spm, 60° Spiral	
31-101-0900-50		Scalloped Carrier, 101mm x 5.0m, 16.5 spm, 60° Spiral	
31-101-0900-60		Scalloped Carrier, 101mm x 6.0m, 16.5 spm, 60° Spiral	
		Includes item 4	
3	30-101-0005-54	Alignment Collar	
4	30-101-0004-00	Retaining Ring	
5	30-101-0001-75	Top Sub, TCP	8.6 kg (19 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2125-054	Top Sub Booster Puck Kit	
8	30-101-0002-0L	Tandem Sub, Long TCP	11.8 kg (26.1 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2125-054	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-101-0003-00	Bottom Sub	9.1 kg (20.1 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-236	O-Ring, #236, 90 Duro Nitrile	
	OOO-V569-236	O-Ring, #236, 90 Duro Viton	
B	A578010	Detonating Cord -LS 80gr., RDX	
	A571010	Detonating Cord -LS 80gr., HMX	
	A570010	Detonating Cord XHV 80gr., RDX	Y
	A572010	Detonating Cord XHV 80gr., HMX	Z
		Approx. Req'd Detcord Length = (1.136 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	TAG-3375-311L	Charge, 19g RDX, DP	Dry
	HSC-3375-301	Charge, 20g RDX, BH	Dry
	SDP-3375-311NT	Charge, 23g RDX, SDP	Dry
	HSC-4000-318	Charge, 26g RDX, DP	Dry
	TAG-3375-302	Charge, 25g RDX, GH	Y Dry
	SDP-3375-311NT3	Charge, 25g RDX, SDP, NT3- Hero	Y Dry
	SDP-3375-411NT3	Charge, 25g HMX, SDP, NT3- Hero	Z Dry
	TAG-5000-360	Charge, 32g RDX, DP	Y Dry
--	TAG-4000-701	Blank Charge Case (Non Explosive)	

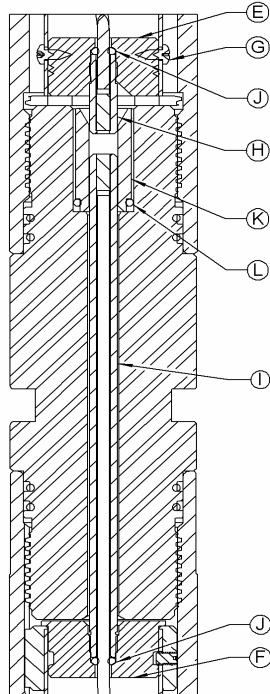


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 120.7 mm (4.75 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



20spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Specifications		
Pressure Rating	131 Mpa	19,000 psi
Tensile Strength	136,800 daN	307,500 lbf
Carrier Thread	3.445 - 6 TPI Acme	
Gun Weight Loaded	29.3 kg/m	19.7 lb/ft

Note: Gun Weight Loaded = Carrier + Strip + Charges

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

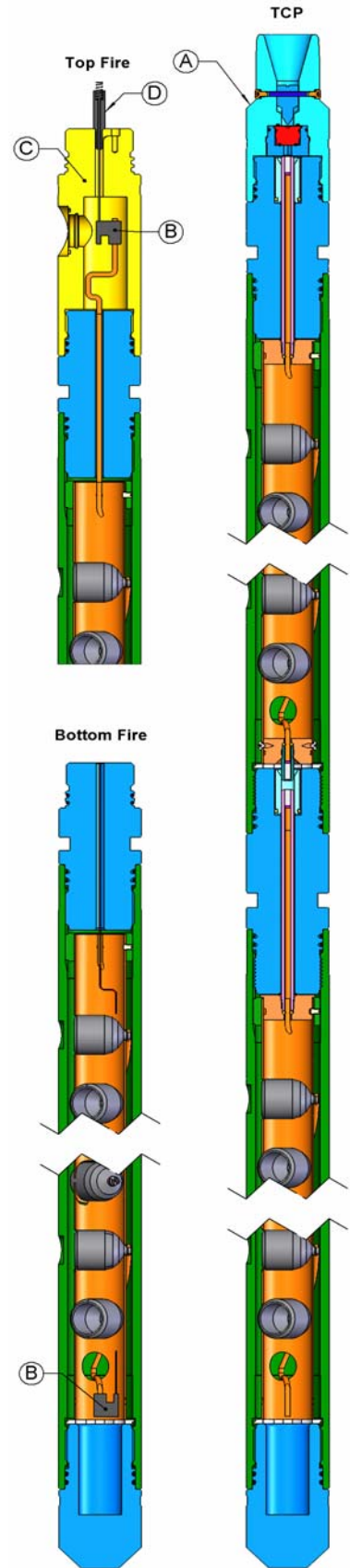
Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

**Tandem Sub Booster Kit 2.125 in. (54 mm) Strip**

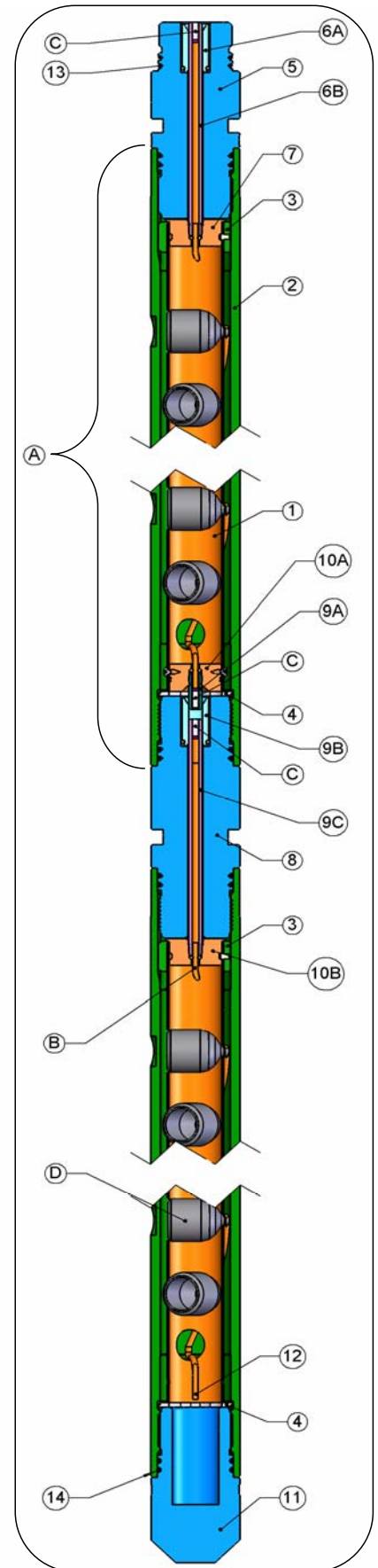
Part No.	Description
TC-251-2125-054	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

**Typical Configurations**

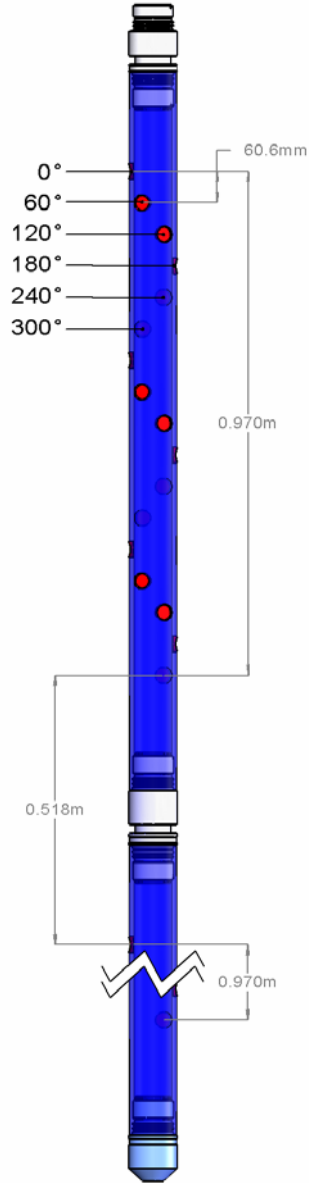
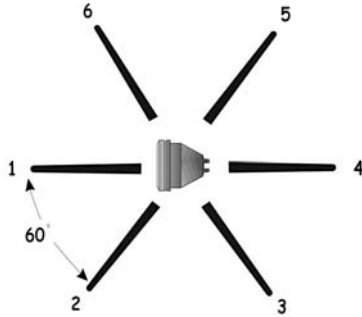


Optional Subs		
Part No.	Description	
30-101-0001-00	Top Sub, Wireline	8.8 kg (19.4 lbs)
30-101-0003-01	Bottom Sub, 101mm x 2 3/8" EU Box	7.8 kg (17.3 lbs)
30-101-0003-02	Bottom Sub, 101mm x 20" Long Weighted	28.2 kg (62.2 lbs)
30-101-0003-03	Bottom Sub, 101mm x 2 3/8" EU Pin	8.2 kg (18 lbs)
30-101-0110-0L	Tandem Sub, Orienting 101mm	11.6 kg (25.5 lbs)
30-101-0002-95	Tandem Sub, Side Port Select Fire	11.1 kg (24.4 lbs)

Item	Part No.	Description	
A	31-101-0931-10	Scalloped Gun System, 101mm x 1.0m, 16.5 spm, 60° Spiral	
	31-101-0931-15	Scalloped Gun System, 101mm x 1.5m, 16.5 spm, 60° Spiral	
	31-101-0931-20	Scalloped Gun System, 101mm x 2.0m, 16.5 spm, 60° Spiral	
	31-101-0931-25	Scalloped Gun System, 101mm x 2.5m, 16.5 spm, 60° Spiral	
	31-101-0931-30	Scalloped Gun System, 101mm x 3.0m, 16.5 spm, 60° Spiral	
	31-101-0931-35	Scalloped Gun System, 101mm x 3.5m, 16.5 spm, 60° Spiral	
	31-101-0931-40	Scalloped Gun System, 101mm x 4.0m, 16.5 spm, 60° Spiral	
	31-101-0931-50	Scalloped Gun System, 101mm x 5.0m, 16.5 spm, 60° Spiral	
31-101-0931-60	Scalloped Gun System, 101mm x 6.0m, 16.5 spm, 60° Spiral		
		Includes items 1, 2, 3 and 4	
1	39-057-0931-10	Tube Strip, 57mm x 1.0m, 16.5 spm, 60° Spiral	17
	39-057-0931-15	Tube Strip, 57mm x 1.5m, 16.5 spm, 60° Spiral	25
	39-057-0931-20	Tube Strip, 57mm x 2.0m, 16.5 spm, 60° Spiral	34
	39-057-0931-25	Tube Strip, 57mm x 2.5m, 16.5 spm, 60° Spiral	42
	39-057-0931-30	Tube Strip, 57mm x 3.0m, 16.5 spm, 60° Spiral	50
	39-057-0931-35	Tube Strip, 57mm x 3.5m, 16.5 spm, 60° Spiral	58
	39-057-0931-40	Tube Strip, 57mm x 4.0m, 16.5 spm, 60° Spiral	67
	39-057-0931-50	Tube Strip, 57mm x 5.0m, 16.5 spm, 60° Spiral	83
	39-057-0931-60	Tube Strip, 57mm x 6.0m, 16.5 spm, 60° Spiral	100
	2	31-101-0900-10	Scalloped Carrier, 101mm x 1.0m, 16.5 spm, 60° Spiral
31-101-0900-15		Scalloped Carrier, 101mm x 1.5m, 16.5 spm, 60° Spiral	
31-101-0900-20		Scalloped Carrier, 101mm x 2.0m, 16.5 spm, 60° Spiral	
31-101-0900-25		Scalloped Carrier, 101mm x 2.5m, 16.5 spm, 60° Spiral	
31-101-0900-30		Scalloped Carrier, 101mm x 3.0m, 16.5 spm, 60° Spiral	
31-101-0900-35		Scalloped Carrier, 101mm x 3.5m, 16.5 spm, 60° Spiral	
31-101-0900-40		Scalloped Carrier, 101mm x 4.0m, 16.5 spm, 60° Spiral	
31-101-0900-50		Scalloped Carrier, 101mm x 5.0m, 16.5 spm, 60° Spiral	
31-101-0900-60	Scalloped Carrier, 101mm x 6.0m, 16.5 spm, 60° Spiral		
		Includes item 4	
3	30-101-0005-57	Alignment Collar	
4	30-101-0004-00	Retaining Ring	
5	30-101-0001-75	Top Sub, TCP	8.6 kg (19 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2250-057	Top Sub Booster Puck Kit	
8	30-101-0002-0L	Tandem Sub, Long TCP	11.8 kg (26.1 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2250-057	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-101-0003-00	Bottom Sub	9.1 kg (20.1 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-236	O-Ring, #236, 90 Duro Nitrile	
	OOO-V569-236	O-Ring, #236, 90 Duro Viton	
B	A570010	Detonating Cord XHV 80gr., RDX	Z
	A572010	Detonating Cord XHV 80gr., HMX	
	-	-	
		Approx. Req'd Detcord Length = (1.136 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	HSC-5000-325F	Charge, 32g RDX, BH	Dry
	HSC-5000-321Z	Charge, 32g RDX, DP	Dry
	TAG-5000-382	Charge, 39g RDX, SDP	Fluid
	TAG-5000-482	Charge, 39g HMX, SDP	Z Fluid
	SDP-5000-400	Charge, 39g HMX, SDP	Z Fluid
	SDP-4500-311NT3	Charge, 39g RDX, SDP, NT3- Super-Hero	Fluid
	SDP-4500-411NT3	Charge, 39g HMX, SDP, NT3- Super-Hero	Z Fluid
--	TAG-4010-180	Blank Charge Case (Non Explosive)	

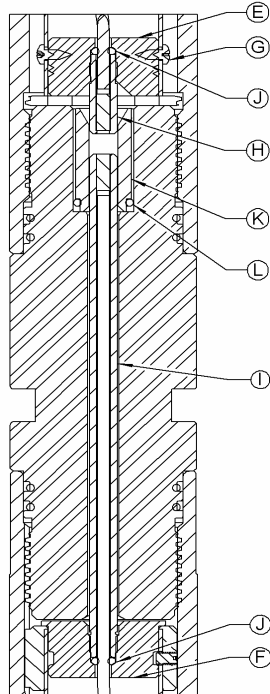


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 120.7 mm (4.75 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



16.5spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

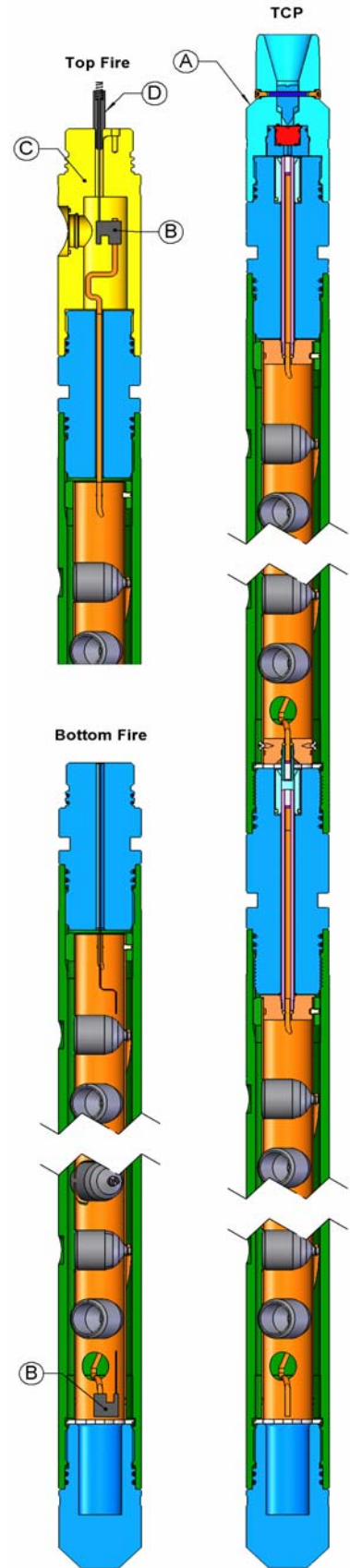
Connectors	D
Electrical Conn. Assy.	HSC-0100-061

<b>Tandem Sub Booster Kit 2.25 in. (57 mm) Strip</b>	
Part No.	Description
TC-251-2250-057	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit
contains items E, F, & G	
contains items H, I, J, K, & L	

Specifications		
Pressure Rating	131 Mpa	19,000 psi
Tensile Strength	136,800 daN	307,500 lbf
Carrier Thread	3.445 - 6 TPI Acme	
Gun Weight Loaded	31.6 kg/m	21.2 lb/ft

Note: Gun Weight Loaded = Carrier + Strip + Charges

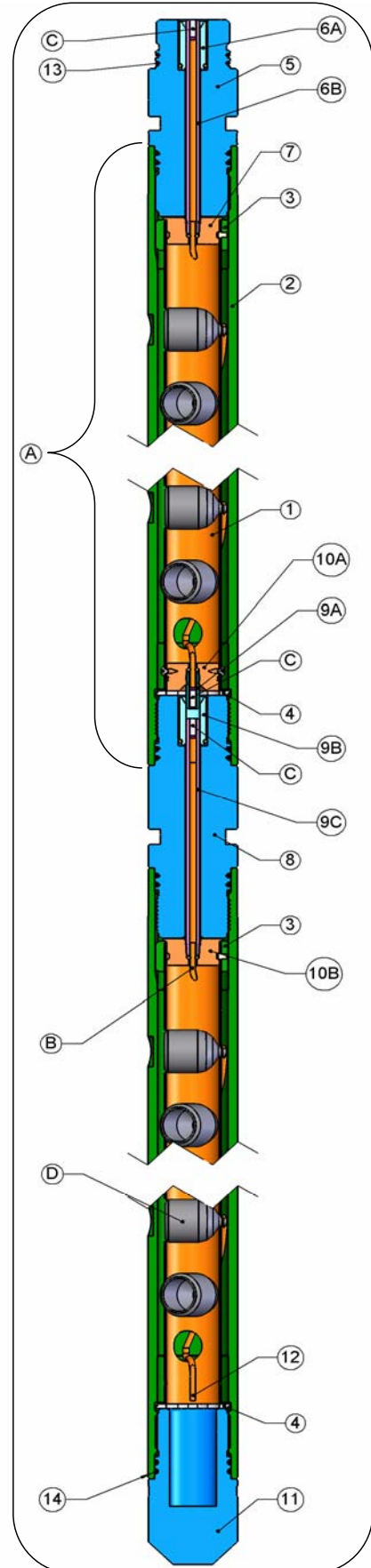
**Typical Configurations**



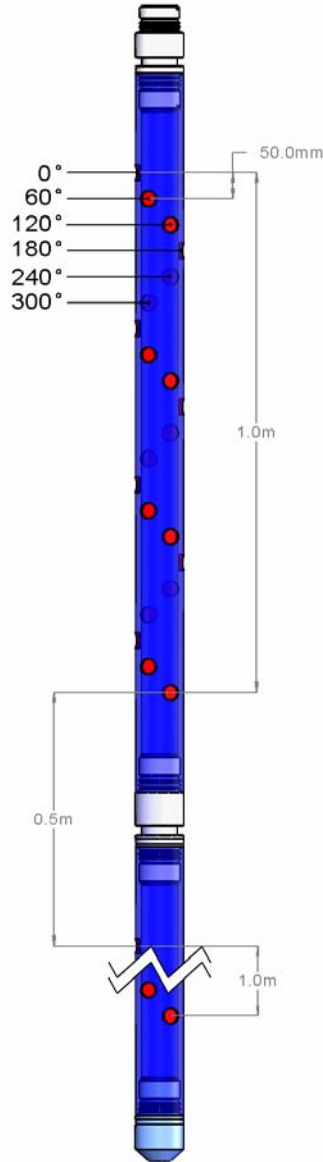
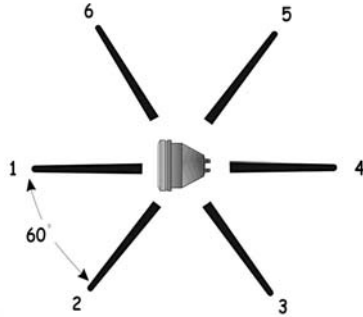
Optional Subs		
Part No.	Description	
30-101-0001-00	Top Sub, Wireline	8.8 kg (19.4 lbs)
30-101-0003-01	Bottom Sub, 101mm x 2 3/8" EU Box	7.8 kg (17.3 lbs)
30-101-0003-02	Bottom Sub, 101mm x 20" Long Weighted	28.2 kg (62.2 lbs)
30-101-0003-03	Bottom Sub, 101mm x 2 3/8" EU Pin	8.2 kg (18 lbs)
30-101-0110-0L	Tandem Sub, Orienting 101mm	11.6 kg (25.5 lbs)
30-101-0002-95	Tandem Sub, Side Port Select Fire	11.1 kg (24.4 lbs)



Item	Part No.	Description	
A	31-101-2508-10	Scalloped Gun System, 101mm x 1.0m, 20 spm, 60° Spiral	
	31-101-2508-15	Scalloped Gun System, 101mm x 1.5m, 20 spm, 60° Spiral	
	31-101-2508-20	Scalloped Gun System, 101mm x 2.0m, 20 spm, 60° Spiral	
	31-101-2508-25	Scalloped Gun System, 101mm x 2.5m, 20 spm, 60° Spiral	
	31-101-2508-30	Scalloped Gun System, 101mm x 3.0m, 20 spm, 60° Spiral	
	31-101-2508-35	Scalloped Gun System, 101mm x 3.5m, 20 spm, 60° Spiral	
	31-101-2508-40	Scalloped Gun System, 101mm x 4.0m, 20 spm, 60° Spiral	
	31-101-2508-50	Scalloped Gun System, 101mm x 5.0m, 20 spm, 60° Spiral	
31-101-2508-60	Scalloped Gun System, 101mm x 6.0m, 20 spm, 60° Spiral		
		Includes items 1, 2, 3 and 4	
1	39-054-2508-10	Tube Strip, 54mm x 1.0m, 20 spm, 60° Spiral	21
	39-054-2508-15	Tube Strip, 54mm x 1.5m, 20 spm, 60° Spiral	31
	39-054-2508-20	Tube Strip, 54mm x 2.0m, 20 spm, 60° Spiral	41
	39-054-2508-25	Tube Strip, 54mm x 2.5m, 20 spm, 60° Spiral	51
	39-054-2508-30	Tube Strip, 54mm x 3.0m, 20 spm, 60° Spiral	61
	39-054-2508-35	Tube Strip, 54mm x 3.5m, 20 spm, 60° Spiral	71
	39-054-2508-40	Tube Strip, 54mm x 4.0m, 20 spm, 60° Spiral	81
	39-054-2508-50	Tube Strip, 54mm x 5.0m, 20 spm, 60° Spiral	101
	39-054-2508-60	Tube Strip, 54mm x 6.0m, 20 spm, 60° Spiral	121
	2	31-101-2500-10	Scalloped Carrier, 101mm x 1.0m, 20 spm, 60° Spiral
31-101-2500-15		Scalloped Carrier, 101mm x 1.5m, 20 spm, 60° Spiral	
31-101-2500-20		Scalloped Carrier, 101mm x 2.0m, 20 spm, 60° Spiral	
31-101-2500-25		Scalloped Carrier, 101mm x 2.5m, 20 spm, 60° Spiral	
31-101-2500-30		Scalloped Carrier, 101mm x 3.0m, 20 spm, 60° Spiral	
31-101-2500-35		Scalloped Carrier, 101mm x 3.5m, 20 spm, 60° Spiral	
31-101-2500-40		Scalloped Carrier, 101mm x 4.0m, 20 spm, 60° Spiral	
31-101-2500-50		Scalloped Carrier, 101mm x 5.0m, 20 spm, 60° Spiral	
31-101-2500-60		Scalloped Carrier, 101mm x 6.0m, 20 spm, 60° Spiral	
			Includes item 4
3	30-101-0005-54	Alignment Collar	
4	30-101-0004-00	Retaining Ring	
5	30-101-0001-75	Top Sub, TCP	8.6 kg (19 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2125-054	Top Sub Booster Puck Kit	
8	30-101-0002-0L	Tandem Sub, Long TCP	11.8 kg (26.1 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2125-054	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-101-0003-00	Bottom Sub	9.1 kg (20.1 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-236	O-Ring, #236, 90 Duro Nitrile	
	OOO-V569-236	O-Ring, #236, 90 Duro Viton	
B	A578010	Detonating Cord -LS 80gr., RDX	
	A571010	Detonating Cord -LS 80gr., HMX	
	A570010	Detonating Cord XHV 80gr., RDX	Y
	A572010	Detonating Cord XHV 80gr., HMX	Z
		Approx. Req'd Detcord Length = (1.177 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	TAG-3375-311L	Charge, 19g RDX, DP	Dry
	HSC-3375-301	Charge, 20g RDX, BH	Dry
	SDP-3375-311NT	Charge, 23g RDX, SDP	Dry
	HSC-4000-318	Charge, 26g RDX, DP	Dry
	TAG-3375-302	Charge, 25g RDX, GH	Y Dry
	SDP-3375-311NT3	Charge, 25g RDX, SDP, NT3- Hero	Y Dry
	SDP-3375-411NT3	Charge, 25g HMX, SDP, NT3- Hero	Z Dry
	TAG-5000-360	Charge, 32g RDX, DP	Y Fluid
--	TAG-4000-701	Blank Charge Case (Non Explosive)	

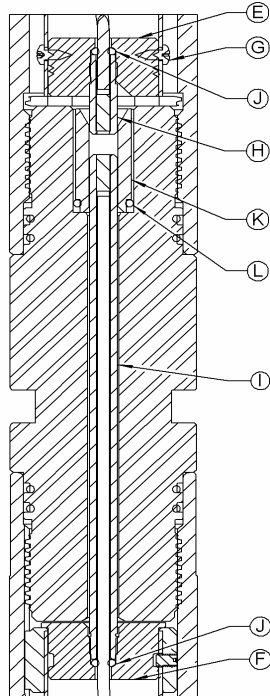


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 120.7 mm (4.75 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



20spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

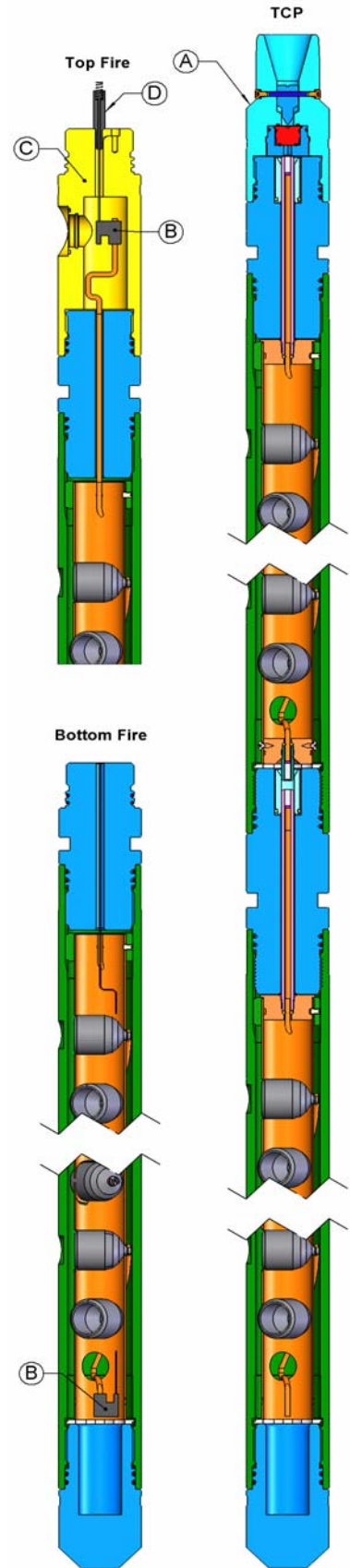
**Tandem Sub Booster Kit 2.125 in. (54 mm) Strip**

Part No.	Description
TC-251-2125-054	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

Specifications		
Pressure Rating	131 Mpa	19,000 psi
Tensile Strength	136,800 daN	307,500 lbf
Carrier Thread	3.445 - 6 TPI Acme	
Gun Weight Loaded	30.5 kg/m	20.5 lb/ft

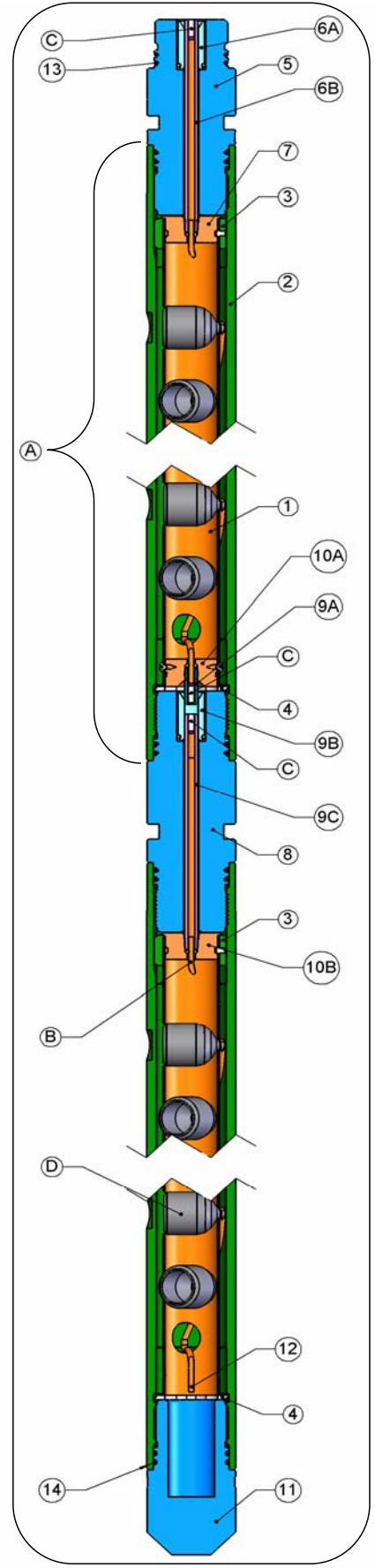
Note: Gun Weight Loaded = Carrier + Strip + Charges

**Typical Configurations**

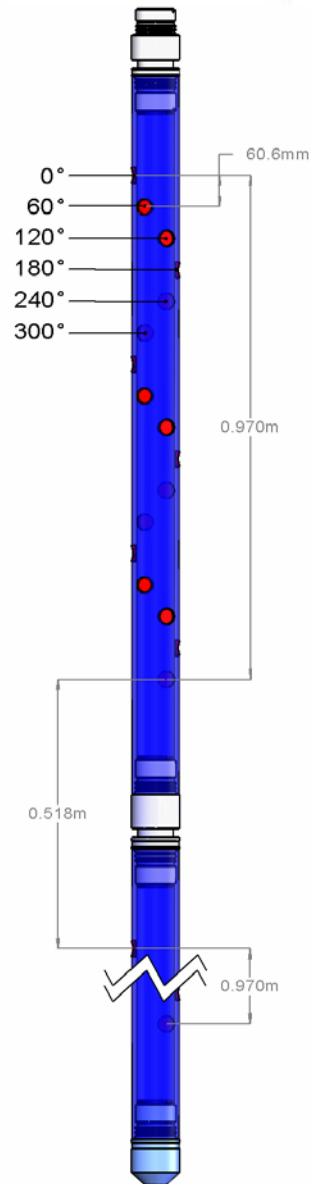
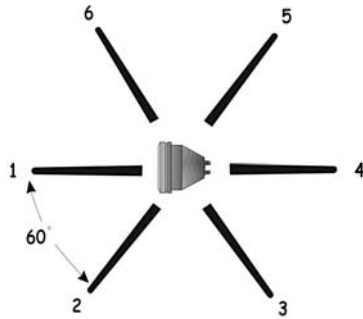


Optional Subs		
Part No.	Description	
30-101-0001-00	Top Sub, Wireline	8.8 kg (19.4 lbs)
30-101-0003-01	Bottom Sub, 101mm x 2 3/8" EU Box	7.8 kg (17.3 lbs)
30-101-0003-02	Bottom Sub, 101mm x 20" Long Weighted	28.2 kg (62.2 lbs)
30-101-0003-03	Bottom Sub, 101mm x 2 3/8" EU Pin	8.2 kg (18 lbs)
30-101-0110-0L	Tandem Sub, Orienting 101mm	11.6 kg (25.5 lbs)
30-101-0002-95	Tandem Sub, Side Port Select Fire	11.1 kg (24.4 lbs)

Item	Part No.	Description	
A	31-114-0931-10	Scalloped Gun System, 114mm x 1.0m, 16.5 spm, 60° Spiral	
	31-114-0931-15	Scalloped Gun System, 114mm x 1.5m, 16.5 spm, 60° Spiral	
	31-114-0931-20	Scalloped Gun System, 114mm x 2.0m, 16.5 spm, 60° Spiral	
	31-114-0931-25	Scalloped Gun System, 114mm x 2.5m, 16.5 spm, 60° Spiral	
	31-114-0931-30	Scalloped Gun System, 114mm x 3.0m, 16.5 spm, 60° Spiral	
	31-114-0931-35	Scalloped Gun System, 114mm x 3.5m, 16.5 spm, 60° Spiral	
	31-114-0931-40	Scalloped Gun System, 114mm x 4.0m, 16.5 spm, 60° Spiral	
	31-114-0931-50	Scalloped Gun System, 114mm x 5.0m, 16.5 spm, 60° Spiral	
31-114-0931-60	Scalloped Gun System, 114mm x 6.0m, 16.5 spm, 60° Spiral	Includes items 1, 2, 3 and 4	
1	39-057-0931-10	Tube Strip, 57mm x 1.0m, 16.5 spm, 60° Spiral	17
	39-057-0931-15	Tube Strip, 57mm x 1.5m, 16.5 spm, 60° Spiral	25
	39-057-0931-20	Tube Strip, 57mm x 2.0m, 16.5 spm, 60° Spiral	34
	39-057-0931-25	Tube Strip, 57mm x 2.5m, 16.5 spm, 60° Spiral	42
	39-057-0931-30	Tube Strip, 57mm x 3.0m, 16.5 spm, 60° Spiral	50
	39-057-0931-35	Tube Strip, 57mm x 3.5m, 16.5 spm, 60° Spiral	58
	39-057-0931-40	Tube Strip, 57mm x 4.0m, 16.5 spm, 60° Spiral	67
	39-057-0931-50	Tube Strip, 57mm x 5.0m, 16.5 spm, 60° Spiral	83
	39-057-0931-60	Tube Strip, 57mm x 6.0m, 16.5 spm, 60° Spiral	100
	2	31-114-0900-10	Scalloped Carrier, 114mm x 1.0m, 16.5 spm, 60° Spiral
31-114-0900-15		Scalloped Carrier, 114mm x 1.5m, 16.5 spm, 60° Spiral	
31-114-0900-20		Scalloped Carrier, 114mm x 2.0m, 16.5 spm, 60° Spiral	
31-114-0900-25		Scalloped Carrier, 114mm x 2.5m, 16.5 spm, 60° Spiral	
31-114-0900-30		Scalloped Carrier, 114mm x 3.0m, 16.5 spm, 60° Spiral	
31-114-0900-35		Scalloped Carrier, 114mm x 3.5m, 16.5 spm, 60° Spiral	
31-114-0900-40		Scalloped Carrier, 114mm x 4.0m, 16.5 spm, 60° Spiral	
31-114-0900-50		Scalloped Carrier, 114mm x 5.0m, 16.5 spm, 60° Spiral	
31-114-0900-60	Scalloped Carrier, 114mm x 6.0m, 16.5 spm, 60° Spiral	Includes item 4	
3	30-114-0005-57	Alignment Collar	
4	30-114-0004-00	Retaining Ring	
5	30-114-0001-75	Top Sub, TCP	10.6 kg (23.3 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2250-057	Top Sub Booster Puck Kit	
8	30-114-0002-0L	Tandem Sub, Long TCP	15.3 kg (33.7 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2250-057	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-114-0003-00	Bottom Sub	10.6 kg (23.4 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-342	O-Ring, #342, 90 Duro Nitrile	
	OOO-V569-342	O-Ring, #342, 90 Duro Viton	
B	A570010	Detonating Cord XHV 80gr., RDX	Z
	A572010	Detonating Cord XHV 80gr., HMX	Z
	-	-	-
Approx. Req'd Detcord Length = (1.136 X Gun Length in Meters) + 0.7m			
C	DET-3050-429	Bi-Directional Booster	
D	HSC-5000-325F	Charge, 32g RDX, BH	Dry
	HSC-5000-321Z	Charge, 32g RDX, DP	Dry
	TAG-5000-382	Charge, 39g RDX, SDP	Fluid
	TAG-5000-482	Charge, 39g HMX, SDP	Z Fluid
	SDP-5000-400	Charge, 39g HMX, SDP	Z Fluid
	SDP-4500-311NT3	Charge, 39g RDX, SDP, NT3- Super-Hero	Fluid
	SDP-4500-411NT3	Charge, 39g HMX, SDP, NT3- Super-Hero	Z Fluid
--	TAG-4010-180	Blank Charge Case (Non Explosive)	

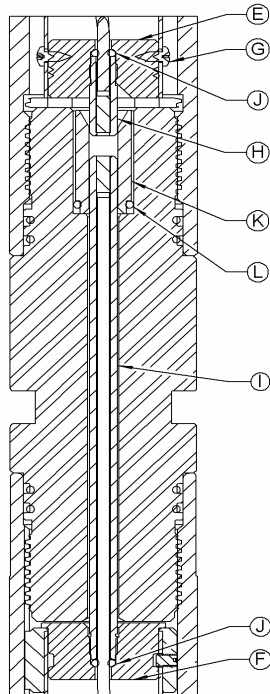


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 127 mm (5 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (455 mm)



16.5spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

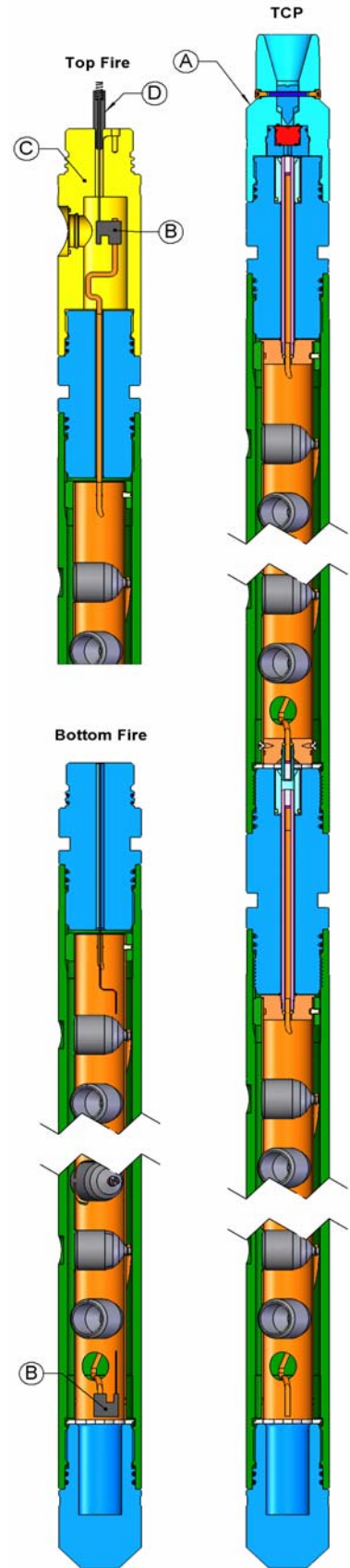
Connectors	D
Electrical Conn. Assy.	HSC-0100-061

<b>Tandem Sub Booster Kit 2.25 in. (57 mm) Strip</b>	
Part No.	Description
TC-251-2250-057	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit
contains items H, I, J, K, & L	

Specifications		
Pressure Rating	117 Mpa	17,000 psi
Tensile Strength	155,700 daN	349,900 lbf
Carrier Thread	3.943 - 6 TPI Acme	
Gun Weight Loaded	34.6 kg/m	23.2 lb/ft

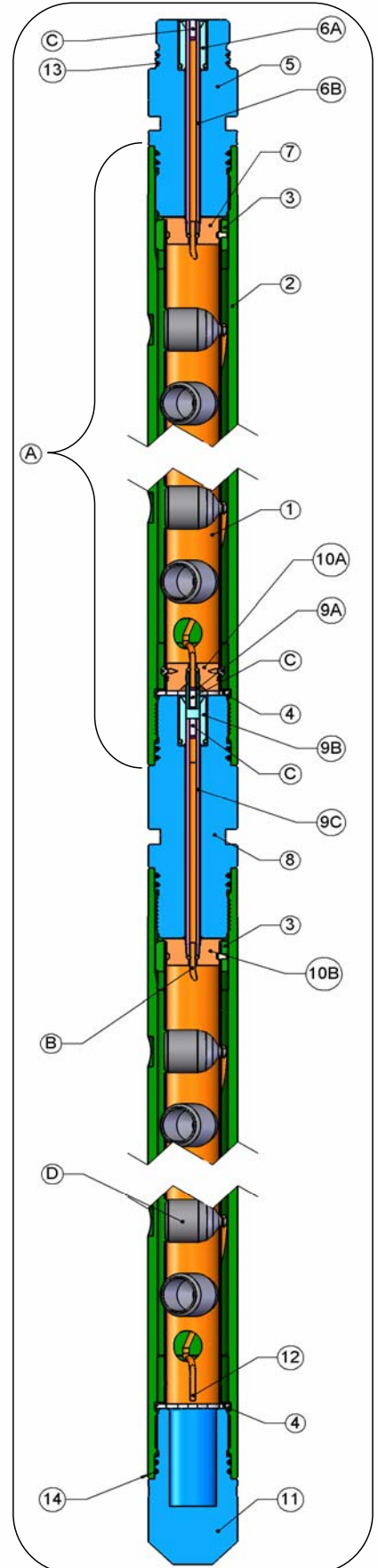
Note: Gun Weight Loaded = Carrier + Strip + Charges

**Typical Configurations**

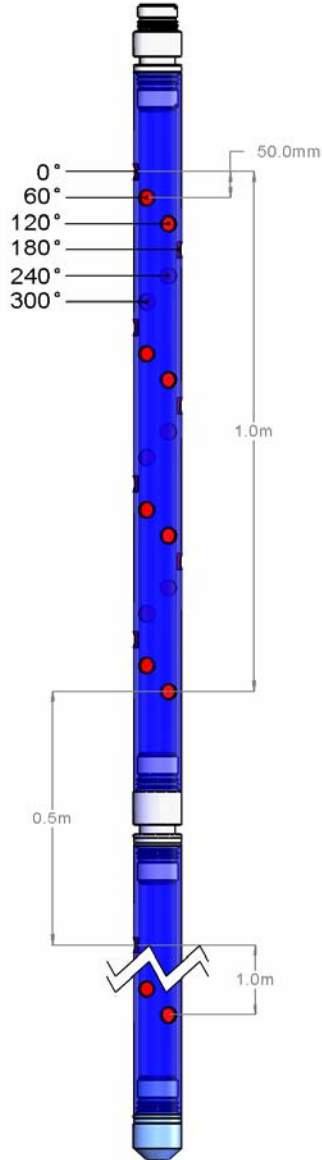
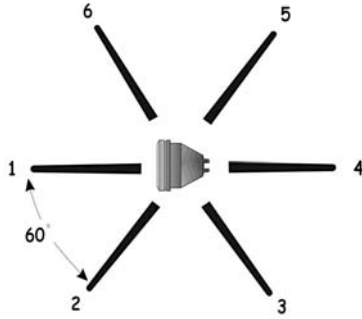


Optional Subs		
Part No.	Description	
30-114-0001-00	Top Sub, Wireline	11.7 kg (25.8 lbs)
30-114-0002-95	Tandem Sub, Side Port Select Fire	15.2 kg (33.6 lbs)
-	-	-
-	-	-
-	-	-
-	-	-

Item	Part No.	Description		
A	31-127-0608-10	Scalloped Gun System, 127mm x 1.0m, 14 spm, 60° Spiral		
	31-127-0608-15	Scalloped Gun System, 127mm x 1.5m, 14 spm, 60° Spiral		
	31-127-0608-20	Scalloped Gun System, 127mm x 2.0m, 14 spm, 60° Spiral		
	31-127-0608-25	Scalloped Gun System, 127mm x 2.5m, 14 spm, 60° Spiral		
	31-127-0608-30	Scalloped Gun System, 127mm x 3.0m, 14 spm, 60° Spiral		
	31-127-0608-35	Scalloped Gun System, 127mm x 3.5m, 14 spm, 60° Spiral		
	31-127-0608-40	Scalloped Gun System, 127mm x 4.0m, 14 spm, 60° Spiral		
	31-127-0608-50	Scalloped Gun System, 127mm x 5.0m, 14 spm, 60° Spiral		
	31-127-0608-60	Scalloped Gun System, 127mm x 6.0m, 14 spm, 60° Spiral Includes items 1, 2, 3 and 4		
1	39-054-0608-10	Tube Strip, 54mm x 1.0m, 14 spm, 60° Spiral	15	
	39-054-0608-15	Tube Strip, 54mm x 1.5m, 14 spm, 60° Spiral	22	
	39-054-0608-20	Tube Strip, 54mm x 2.0m, 14 spm, 60° Spiral	29	
	39-054-0608-25	Tube Strip, 54mm x 2.5m, 14 spm, 60° Spiral	36	
	39-054-0608-30	Tube Strip, 54mm x 3.0m, 14 spm, 60° Spiral	43	
	39-054-0608-35	Tube Strip, 54mm x 3.5m, 14 spm, 60° Spiral	50	
	39-054-0608-40	Tube Strip, 54mm x 4.0m, 14 spm, 60° Spiral	57	
	39-054-0608-50	Tube Strip, 54mm x 5.0m, 14 spm, 60° Spiral	71	
		39-054-0608-60	Tube Strip, 54mm x 6.0m, 14 spm, 60° Spiral	85
	2	31-127-0600-10	Scalloped Carrier, 127mm x 1.0m, 14 spm, 60° Spiral	
31-127-0600-15		Scalloped Carrier, 127mm x 1.5m, 14 spm, 60° Spiral		
31-127-0600-20		Scalloped Carrier, 127mm x 2.0m, 14 spm, 60° Spiral		
31-127-0600-25		Scalloped Carrier, 127mm x 2.5m, 14 spm, 60° Spiral		
31-127-0600-30		Scalloped Carrier, 127mm x 3.0m, 14 spm, 60° Spiral		
31-127-0600-35		Scalloped Carrier, 127mm x 3.5m, 14 spm, 60° Spiral		
31-127-0600-40		Scalloped Carrier, 127mm x 4.0m, 14 spm, 60° Spiral		
31-127-0600-50		Scalloped Carrier, 127mm x 5.0m, 14 spm, 60° Spiral		
		31-127-0600-60	Scalloped Carrier, 127mm x 6.0m, 14 spm, 60° Spiral Includes item 4	
3		30-127-0005-54	Alignment Collar	
4	30-127-0004-00	Retaining Ring		
5	30-127-0001-75	Top Sub, TCP	13.2 kg (29.1 lbs)	
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B	
7	TC-261-2125-054	Top Sub Booster Puck Kit		
8	30-127-0002-0L	Tandem Sub, Long TCP	20.2 kg (44.5 lbs)	
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C	
10	TC-251-2125-054	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B	
11	30-127-0003-00	Bottom Sub	13.2 kg (29 lbs)	
12	DET-0010-001	Det Cord End Seal		
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile		
	OOO-V569-230	O-Ring, #230, 90 Duro Viton		
14	OOO-N569-346	O-Ring, #346, 90 Duro Nitrile		
	OOO-V569-346	O-Ring, #346, 90 Duro Viton		
B	A578010	Detonating Cord -LS 80gr., RDX		
	A571010	Detonating Cord -LS 80gr., HMX		
	A570010	Detonating Cord XHV 80gr., RDX	Y	
	A572010	Detonating Cord XHV 80gr., HMX	Z	
Approx. Req'd Detcord Length = (1.099 X Gun Length in Meters) + 0.7m				
C	DET-3050-429	Bi-Directional Booster		
D	TAG-3375-311L	Charge, 19g RDX, DP	Dry	
	HSC-3375-301	Charge, 20g RDX, BH	Dry	
	SDP-3375-311NT	Charge, 23g RDX, SDP	Dry	
	HSC-4000-318	Charge, 26g RDX, DP	Dry	
	TAG-3375-302	Charge, 25g RDX, GH	Y Dry	
	SDP-3375-311NT3	Charge, 25g RDX, SDP, NT3- Hero	Y Dry	
	SDP-3375-411NT3	Charge, 25g HMX, SDP, NT3- Hero	Z Dry	
	TAG-5000-360	Charge, 32g RDX, DP	Y Dry	
--	TAG-4000-701	Blank Charge Case (Non Explosive)		

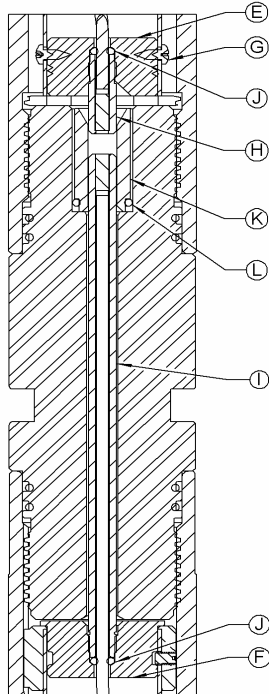


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 144.2 mm (5.675 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



20spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

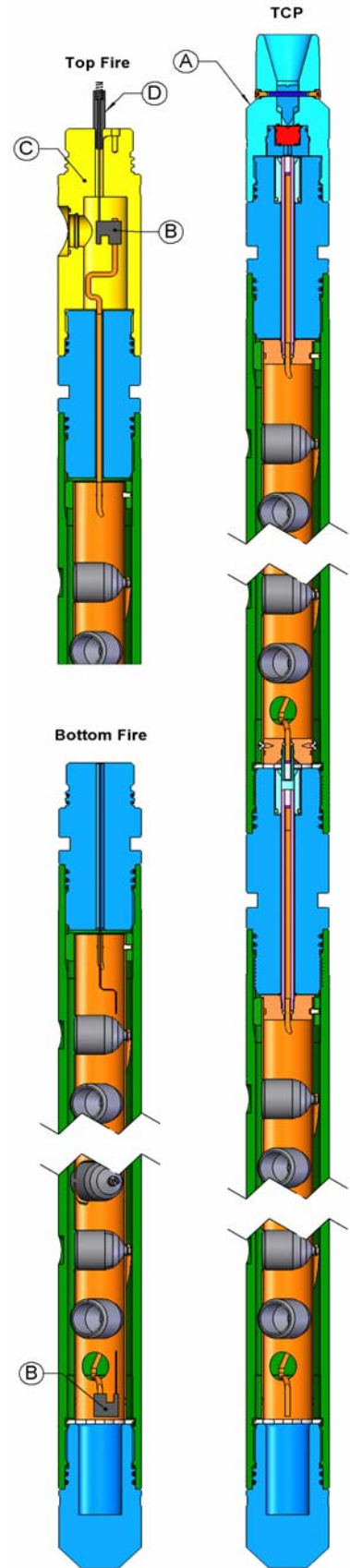
**Tandem Sub Booster Kit 2.125 in. (54 mm) Strip**

Part No.	Description
TC-251-2125-054	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

Specifications		
Pressure Rating	66 Mpa	9,500 psi
Tensile Strength	97,500 daN	219,100 lbf
Carrier Thread	4.500 - 6 TPI Stub Acme	
Gun Weight Loaded	34.5 kg/m	23.2 lb/ft

Note: Gun Weight Loaded = Carrier + Strip + Charges

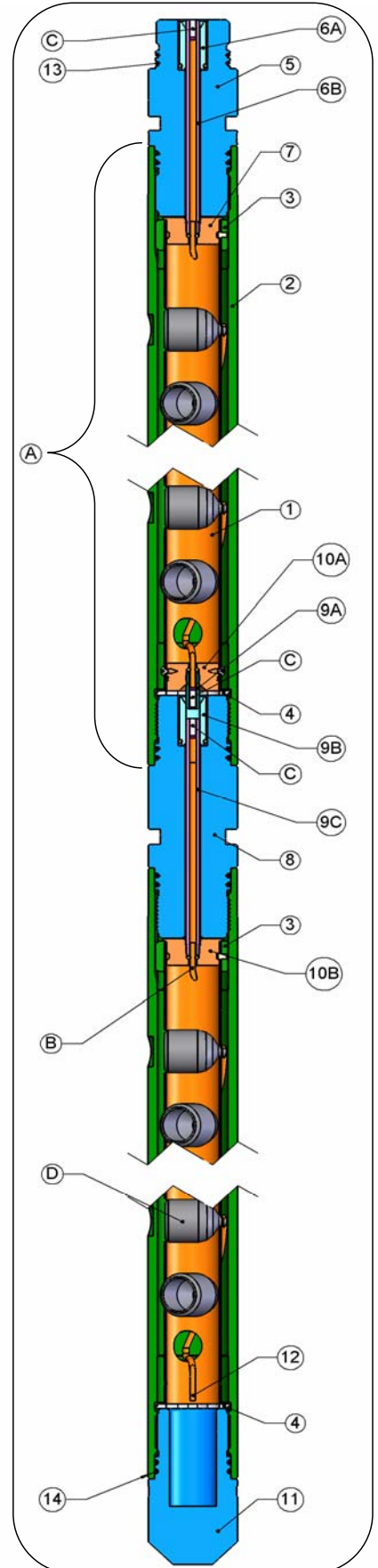
**Typical Configurations**



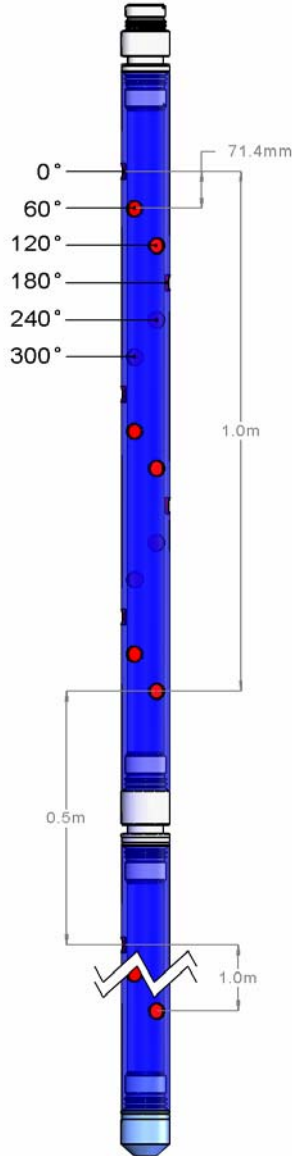
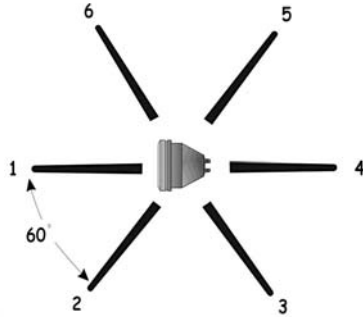
Optional Subs		
Part No.	Description	
30-127-0001-00	Top Sub, Wireline	14.5 kg (32 lbs)
30-127-0003-01	Bottom Sub, 127mm x 2 3/8" EU Box	13.1 kg (28.9 lbs)
30-127-0002-95	Tandem Sub, Side Port Select Fire	18.9 kg (41.6 lbs)
-	-	-
-	-	-
-	-	-



Item	Part No.	Description	
A	31-127-0631-10	Scalloped Gun System, 127mm x 1.0m, 14 spm, 60° Spiral	
	31-127-0631-15	Scalloped Gun System, 127mm x 1.5m, 14 spm, 60° Spiral	
	31-127-0631-20	Scalloped Gun System, 127mm x 2.0m, 14 spm, 60° Spiral	
	31-127-0631-25	Scalloped Gun System, 127mm x 2.5m, 14 spm, 60° Spiral	
	31-127-0631-30	Scalloped Gun System, 127mm x 3.0m, 14 spm, 60° Spiral	
	31-127-0631-35	Scalloped Gun System, 127mm x 3.5m, 14 spm, 60° Spiral	
	31-127-0631-40	Scalloped Gun System, 127mm x 4.0m, 14 spm, 60° Spiral	
	31-127-0631-50	Scalloped Gun System, 127mm x 5.0m, 14 spm, 60° Spiral	
31-127-0631-60	Scalloped Gun System, 127mm x 6.0m, 14 spm, 60° Spiral		
		Includes items 1, 2, 3 and 4	
1	39-057-0631-10	Tube Strip, 57mm x 1.0m, 14 spm, 60° Spiral	15
	39-057-0631-15	Tube Strip, 57mm x 1.5m, 14 spm, 60° Spiral	22
	39-057-0631-20	Tube Strip, 57mm x 2.0m, 14 spm, 60° Spiral	29
	39-057-0631-25	Tube Strip, 57mm x 2.5m, 14 spm, 60° Spiral	36
	39-057-0631-30	Tube Strip, 57mm x 3.0m, 14 spm, 60° Spiral	43
	39-057-0631-35	Tube Strip, 57mm x 3.5m, 14 spm, 60° Spiral	50
	39-057-0631-40	Tube Strip, 57mm x 4.0m, 14 spm, 60° Spiral	57
	39-057-0631-50	Tube Strip, 57mm x 5.0m, 14 spm, 60° Spiral	71
	39-057-0631-60	Tube Strip, 57mm x 6.0m, 14 spm, 60° Spiral	85
2	31-127-0600-10	Scalloped Carrier, 127mm x 1.0m, 14 spm, 60° Spiral	
	31-127-0600-15	Scalloped Carrier, 127mm x 1.5m, 14 spm, 60° Spiral	
	31-127-0600-20	Scalloped Carrier, 127mm x 2.0m, 14 spm, 60° Spiral	
	31-127-0600-25	Scalloped Carrier, 127mm x 2.5m, 14 spm, 60° Spiral	
	31-127-0600-30	Scalloped Carrier, 127mm x 3.0m, 14 spm, 60° Spiral	
	31-127-0600-35	Scalloped Carrier, 127mm x 3.5m, 14 spm, 60° Spiral	
	31-127-0600-40	Scalloped Carrier, 127mm x 4.0m, 14 spm, 60° Spiral	
	31-127-0600-50	Scalloped Carrier, 127mm x 5.0m, 14 spm, 60° Spiral	
31-127-0600-60	Scalloped Carrier, 127mm x 6.0m, 14 spm, 60° Spiral		
		Includes item 4	
3	30-127-0005-57	Alignment Collar	
4	30-127-0004-00	Retaining Ring	
5	30-127-0001-75	Top Sub, TCP	13.2 kg (29.1 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2250-057	Top Sub Booster Puck Kit	
8	30-127-0002-0L	Tandem Sub, Long TCP	20.2 kg (44.5 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2250-057	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-127-0003-00	Bottom Sub	13.2 kg (29 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-346	O-Ring, #346, 90 Duro Nitrile	
	OOO-V569-346	O-Ring, #346, 90 Duro Viton	
B	A570010	Detonating Cord XHV 80gr., RDX	
	A572010	Detonating Cord XHV 80gr., HMX	Z
	-	-	-
		Approx. Req'd Detcord Length = (1.099 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	HSC-5000-325F	Charge, 32g RDX, BH	Dry
	HSC-5000-321Z	Charge, 32g RDX, DP	Dry
	TAG-5000-382	Charge, 39g RDX, SDP	Dry
	TAG-5000-482	Charge, 39g HMX, SDP	Z Dry
	SDP-5000-400	Charge, 39g HMX, SDP	Z Dry
	SDP-4500-311NT3	Charge, 39g RDX, SDP, NT3- Super-Hero	Dry
	SDP-4500-411NT3	Charge, 39g HMX, SDP, NT3- Super-Hero	Z Dry
--	TAG-4010-180	Blank Charge Case (Non Explosive)	

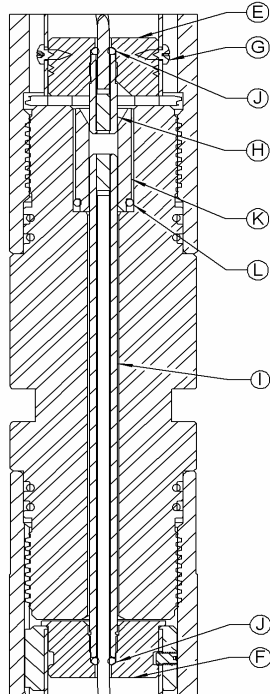


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 144.2 mm (5.675 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



14spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

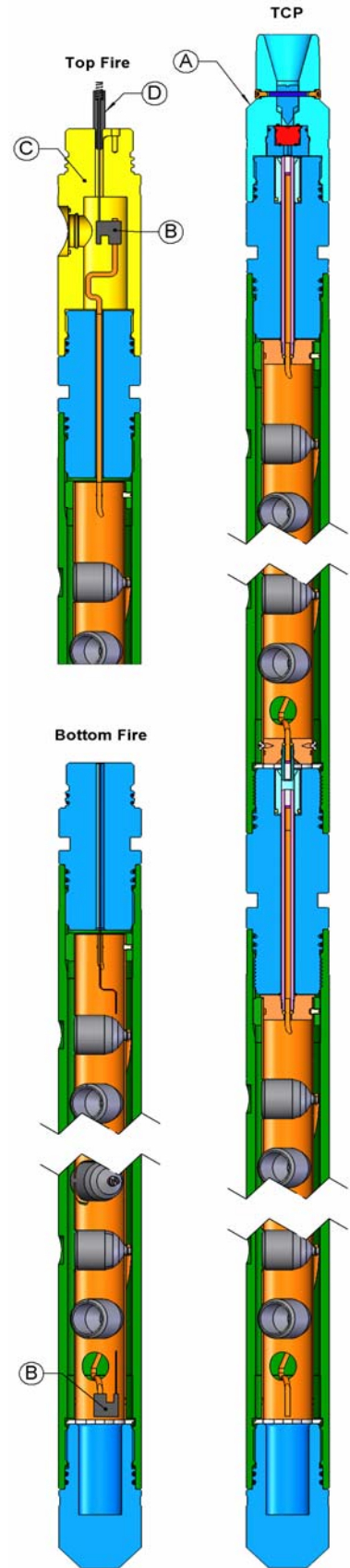
Connectors	D
Electrical Conn. Assy.	HSC-0100-061

<b>Tandem Sub Booster Kit 2.25 in. (57 mm) Strip</b>	
Part No.	Description
TC-251-2250-057	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

Specifications		
Pressure Rating	66 Mpa	9,500 psi
Tensile Strength	97,500 daN	219,100 lbf
Carrier Thread	4.500 - 6 TPI Stub Acme	
Gun Weight Loaded	36.5 kg/m	24.5 lb/ft

Note: Gun Weight Loaded = Carrier + Strip + Charges

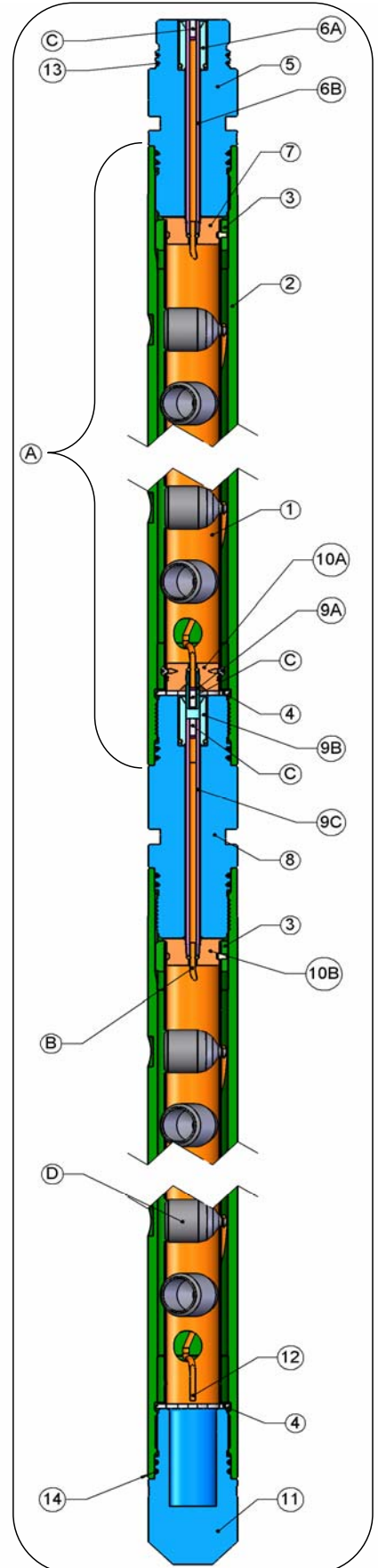
**Typical Configurations**



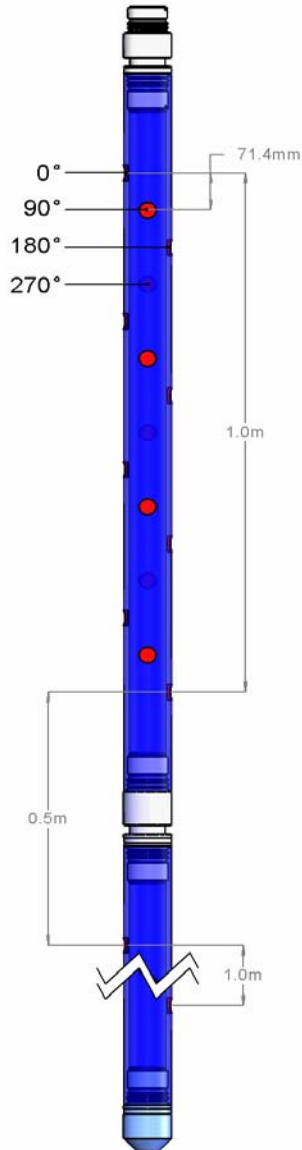
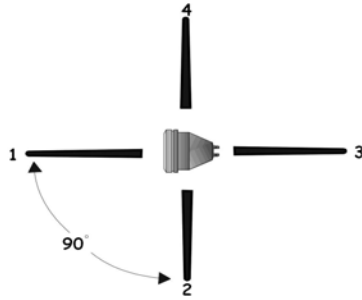
Optional Subs		
Part No.	Description	
30-127-0001-00	Top Sub, Wireline	14.5 kg (32 lbs)
30-127-0003-01	Bottom Sub, 127mm x 2 3/8" EU Box	13.1 kg (28.9 lbs)
30-127-0002-95	Tandem Sub, Side Port Select Fire	18.9 kg (41.6 lbs)
-	-	-
-	-	-
-	-	-



Item	Part No.	Description	
A	31-127-0731-10	Scalloped Gun System, 127mm x 1.0m, 14 spm, 90° Spiral	
	31-127-0731-15	Scalloped Gun System, 127mm x 1.5m, 14 spm, 90° Spiral	
	31-127-0731-20	Scalloped Gun System, 127mm x 2.0m, 14 spm, 90° Spiral	
	31-127-0731-25	Scalloped Gun System, 127mm x 2.5m, 14 spm, 90° Spiral	
	31-127-0731-30	Scalloped Gun System, 127mm x 3.0m, 14 spm, 90° Spiral	
	31-127-0731-35	Scalloped Gun System, 127mm x 3.5m, 14 spm, 90° Spiral	
	31-127-0731-40	Scalloped Gun System, 127mm x 4.0m, 14 spm, 90° Spiral	
	31-127-0731-50	Scalloped Gun System, 127mm x 5.0m, 14 spm, 90° Spiral	
31-127-0731-60	Scalloped Gun System, 127mm x 6.0m, 14 spm, 90° Spiral		
		Includes items 1, 2, 3 and 4	
1	39-057-0731-10	Tube Strip, 57mm x 1.0m, 14 spm, 90° Spiral	15
	39-057-0731-15	Tube Strip, 57mm x 1.5m, 14 spm, 90° Spiral	22
	39-057-0731-20	Tube Strip, 57mm x 2.0m, 14 spm, 90° Spiral	29
	39-057-0731-25	Tube Strip, 57mm x 2.5m, 14 spm, 90° Spiral	36
	39-057-0731-30	Tube Strip, 57mm x 3.0m, 14 spm, 90° Spiral	43
	39-057-0731-35	Tube Strip, 57mm x 3.5m, 14 spm, 90° Spiral	50
	39-057-0731-40	Tube Strip, 57mm x 4.0m, 14 spm, 90° Spiral	57
	39-057-0731-50	Tube Strip, 57mm x 5.0m, 14 spm, 90° Spiral	71
	39-057-0731-60	Tube Strip, 57mm x 6.0m, 14 spm, 90° Spiral	85
2	31-127-0700-10	Scalloped Carrier, 127mm x 1.0m, 14 spm, 90° Spiral	
	31-127-0700-15	Scalloped Carrier, 127mm x 1.5m, 14 spm, 90° Spiral	
	31-127-0700-20	Scalloped Carrier, 127mm x 2.0m, 14 spm, 90° Spiral	
	31-127-0700-25	Scalloped Carrier, 127mm x 2.5m, 14 spm, 90° Spiral	
	31-127-0700-30	Scalloped Carrier, 127mm x 3.0m, 14 spm, 90° Spiral	
	31-127-0700-35	Scalloped Carrier, 127mm x 3.5m, 14 spm, 90° Spiral	
	31-127-0700-40	Scalloped Carrier, 127mm x 4.0m, 14 spm, 90° Spiral	
	31-127-0700-50	Scalloped Carrier, 127mm x 5.0m, 14 spm, 90° Spiral	
	31-127-0700-60	Scalloped Carrier, 127mm x 6.0m, 14 spm, 90° Spiral	
		Includes item 4	
3	30-127-0005-57	Alignment Collar	
4	30-127-0004-00	Retaining Ring	
5	30-127-0001-75	Top Sub, TCP	13.2 kg (29.1 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2250-057	Top Sub Booster Puck Kit	
8	30-127-0002-0L	Tandem Sub, Long TCP	20.2 kg (44.5 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2250-057	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-127-0003-00	Bottom Sub	13.2 kg (29 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-346	O-Ring, #346, 90 Duro Nitrile	
	OOO-V569-346	O-Ring, #346, 90 Duro Viton	
B	A570010	Detonating Cord XHV 80gr., RDX	
	A572010	Detonating Cord XHV 80gr., HMX	Z
	-	-	-
		Approx. Req'd Detcord Length = (1.212 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	HSC-5000-325F	Charge, 32g RDX, BH	Dry
	HSC-5000-321Z	Charge, 32g RDX, DP	Dry
	TAG-5000-382	Charge, 39g RDX, SDP	Dry
	TAG-5000-482	Charge, 39g HMX, SDP	Z Dry
	SDP-5000-400	Charge, 39g HMX, SDP	Z Dry
	SDP-4500-311NT3	Charge, 39g RDX, SDP, NT3- Super-Hero	Dry
	SDP-4500-411NT3	Charge, 39g HMX, SDP, NT3- Super-Hero	Z Dry
--	TAG-4010-180	Blank Charge Case (Non Explosive)	

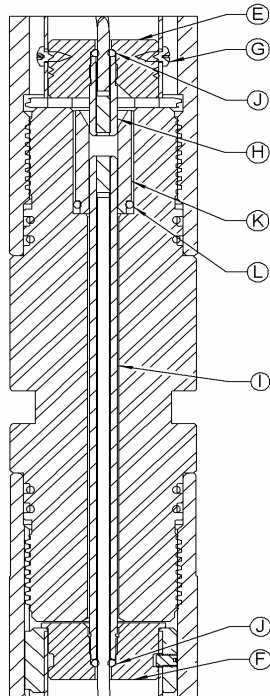


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 144.2 mm (5.675 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



14spm 90°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

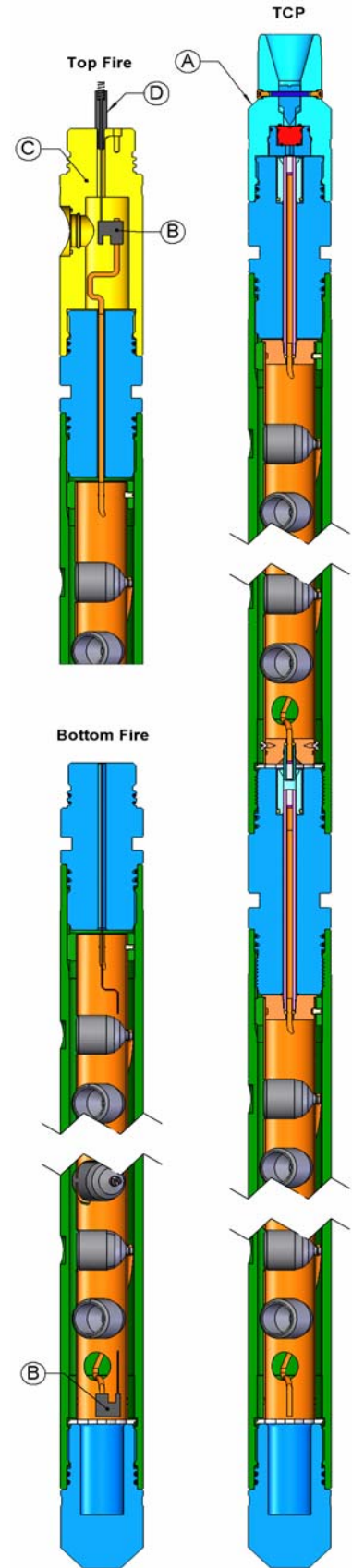
Connectors	D
Electrical Conn. Assy.	HSC-0100-061

<b>Tandem Sub Booster Kit 2.25 in. (57 mm) Strip</b>	
Part No.	Description
TC-251-2250-057	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit
contains items E, F, J, K, & L	

Specifications		
Pressure Rating	66 Mpa	9,500 psi
Tensile Strength	97,500 daN	219,100 lbf
Carrier Thread	4.500 - 6 TPI Stub Acme	
Gun Weight Loaded	36.5 kg/m	24.5 lb/ft

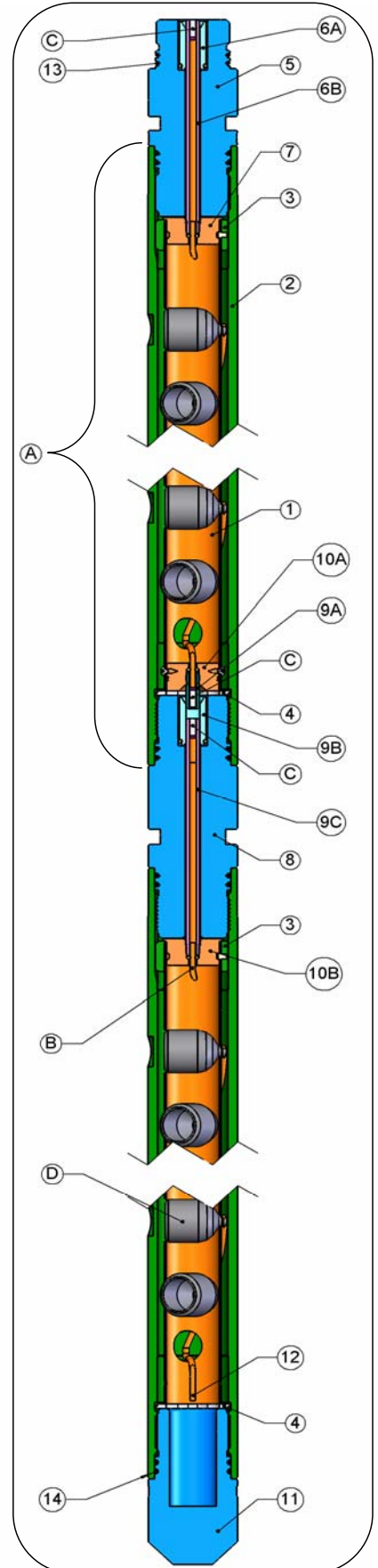
Note: Gun Weight Loaded = Carrier + Strip + Charges

**Typical Configurations**

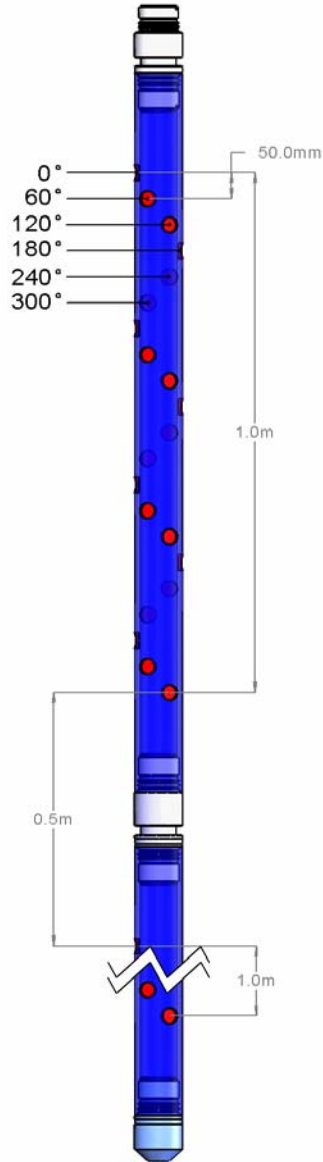
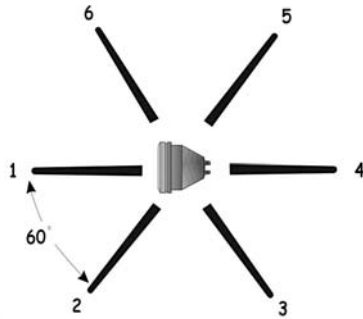


Optional Subs		
Part No.	Description	
30-127-0001-00	Top Sub, Wireline	14.5 kg (32 lbs)
30-127-0003-01	Bottom Sub, 127mm x 2 3/8" EU Box	13.1 kg (28.9 lbs)
30-127-0002-95	Tandem Sub, Side Port Select Fire	18.9 kg (41.6 lbs)
-	-	-
-	-	-
-	-	-

Item	Part No.	Description	
A	31-127-0908-10	Scalloped Gun System, 127mm x 1.0m, 16.5 spm, 60° Spiral	
	31-127-0908-15	Scalloped Gun System, 127mm x 1.5m, 16.5 spm, 60° Spiral	
	31-127-0908-20	Scalloped Gun System, 127mm x 2.0m, 16.5 spm, 60° Spiral	
	31-127-0908-25	Scalloped Gun System, 127mm x 2.5m, 16.5 spm, 60° Spiral	
	31-127-0908-30	Scalloped Gun System, 127mm x 3.0m, 16.5 spm, 60° Spiral	
	31-127-0908-35	Scalloped Gun System, 127mm x 3.5m, 16.5 spm, 60° Spiral	
	31-127-0908-40	Scalloped Gun System, 127mm x 4.0m, 16.5 spm, 60° Spiral	
	31-127-0908-50	Scalloped Gun System, 127mm x 5.0m, 16.5 spm, 60° Spiral	
31-127-0908-60	Scalloped Gun System, 127mm x 6.0m, 16.5 spm, 60° Spiral		
		Includes items 1, 2, 3 and 4	
1	39-054-0908-10	Tube Strip, 54mm x 1.0m, 16.5 spm, 60° Spiral	17
	39-054-0908-15	Tube Strip, 54mm x 1.5m, 16.5 spm, 60° Spiral	25
	39-054-0908-20	Tube Strip, 54mm x 2.0m, 16.5 spm, 60° Spiral	34
	39-054-0908-25	Tube Strip, 54mm x 2.5m, 16.5 spm, 60° Spiral	42
	39-054-0908-30	Tube Strip, 54mm x 3.0m, 16.5 spm, 60° Spiral	50
	39-054-0908-35	Tube Strip, 54mm x 3.5m, 16.5 spm, 60° Spiral	58
	39-054-0908-40	Tube Strip, 54mm x 4.0m, 16.5 spm, 60° Spiral	67
	39-054-0908-50	Tube Strip, 54mm x 5.0m, 16.5 spm, 60° Spiral	83
	39-054-0908-60	Tube Strip, 54mm x 6.0m, 16.5 spm, 60° Spiral	100
	2	31-127-0900-10	Scalloped Carrier, 127mm x 1.0m, 16.5 spm, 60° Spiral
31-127-0900-15		Scalloped Carrier, 127mm x 1.5m, 16.5 spm, 60° Spiral	
31-127-0900-20		Scalloped Carrier, 127mm x 2.0m, 16.5 spm, 60° Spiral	
31-127-0900-25		Scalloped Carrier, 127mm x 2.5m, 16.5 spm, 60° Spiral	
31-127-0900-30		Scalloped Carrier, 127mm x 3.0m, 16.5 spm, 60° Spiral	
31-127-0900-35		Scalloped Carrier, 127mm x 3.5m, 16.5 spm, 60° Spiral	
31-127-0900-40		Scalloped Carrier, 127mm x 4.0m, 16.5 spm, 60° Spiral	
31-127-0900-50		Scalloped Carrier, 127mm x 5.0m, 16.5 spm, 60° Spiral	
31-127-0900-60	Scalloped Carrier, 127mm x 6.0m, 16.5 spm, 60° Spiral		
		Includes item 4	
3	30-127-0005-54	Alignment Collar	
4	30-127-0004-00	Retaining Ring	
5	30-127-0001-75	Top Sub, TCP	13.2 kg (29.1 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2125-054	Top Sub Booster Puck Kit	
8	30-127-0002-0L	Tandem Sub, Long TCP	20.2 kg (44.5 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2125-054	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-127-0003-00	Bottom Sub	13.2 kg (29 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-346	O-Ring, #346, 90 Duro Nitrile	
	OOO-V569-346	O-Ring, #346, 90 Duro Viton	
B	A578010	Detonating Cord -LS 80gr., RDX	
	A571010	Detonating Cord -LS 80gr., HMX	
	A570010	Detonating Cord XHV 80gr., RDX	Y
	A572010	Detonating Cord XHV 80gr., HMX	Z
		Approx. Req'd Detcord Length = (1.136 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	TAG-3375-311L	Charge, 19g RDX, DP	Dry
	HSC-3375-301	Charge, 20g RDX, BH	Dry
	SDP-3375-311NT	Charge, 23g RDX, SDP	Dry
	HSC-4000-318	Charge, 26g RDX, DP	Dry
	TAG-3375-302	Charge, 25g RDX, GH	Y Dry
	SDP-3375-311NT3	Charge, 25g RDX, SDP, NT3- Hero	Y Dry
	SDP-3375-411NT3	Charge, 25g HMX, SDP, NT3- Hero	Z Dry
	TAG-5000-360	Charge, 32g RDX, DP	Y Dry
--	TAG-4000-701	Blank Charge Case (Non Explosive)	

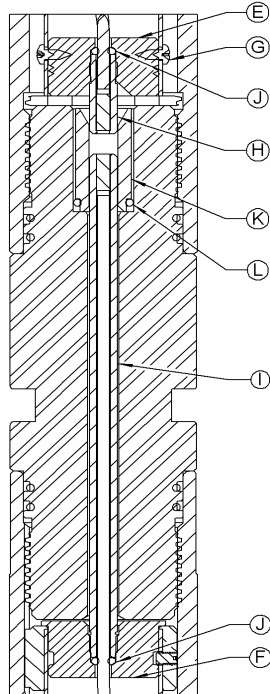


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 144.2 mm (5.675 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



20spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

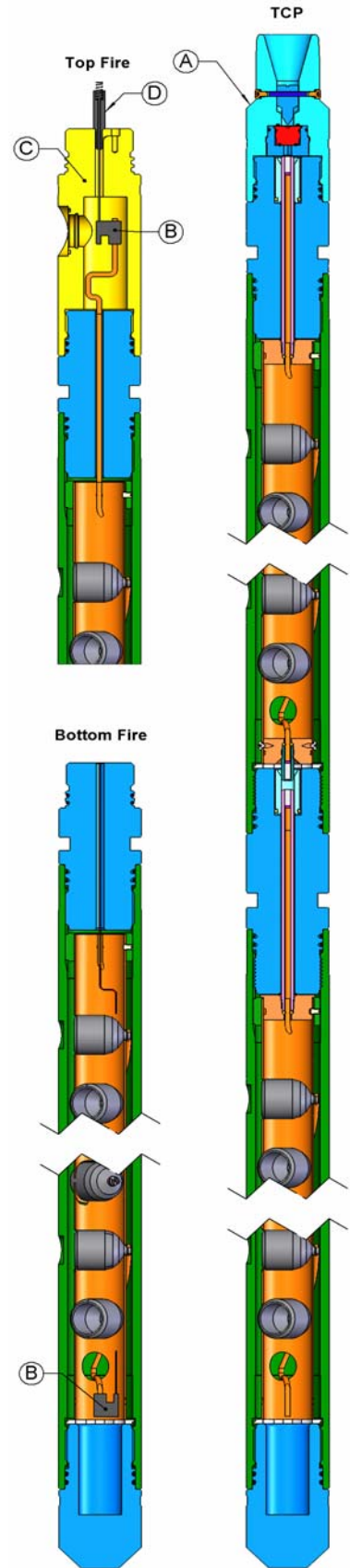
**Tandem Sub Booster Kit 2.125 in. (54 mm) Strip**

Part No.	Description
TC-251-2125-054	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

Specifications		
Pressure Rating	66 Mpa	9,500 psi
Tensile Strength	97,500 daN	219,100 lbf
Carrier Thread	4.500 - 6 TPI Stub Acme	
Gun Weight Loaded	35.3 kg/m	23.7 lb/ft

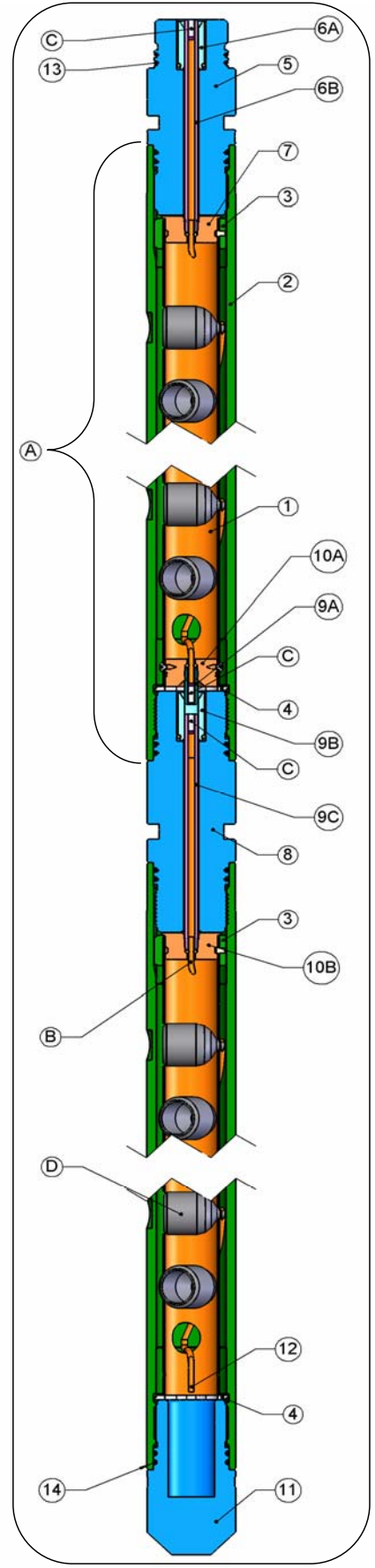
Note: Gun Weight Loaded = Carrier + Strip + Charges

**Typical Configurations**

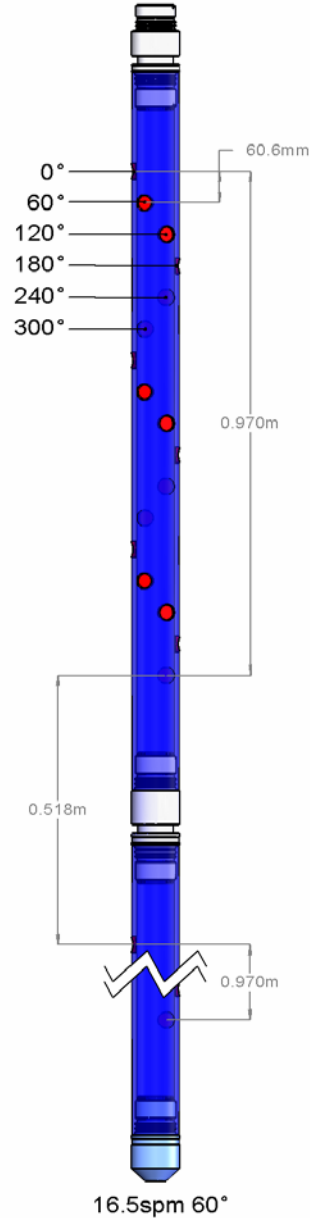
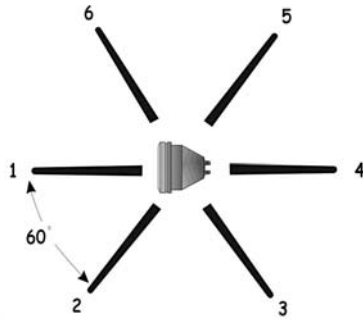


Optional Subs		
Part No.	Description	
30-127-0001-00	Top Sub, Wireline	14.5 kg (32 lbs)
30-127-0003-01	Bottom Sub, 127mm x 2 3/8" EU Box	13.1 kg (28.9 lbs)
30-127-0002-95	Tandem Sub, Side Port Select Fire	18.9 kg (41.6 lbs)
-	-	-
-	-	-
-	-	-

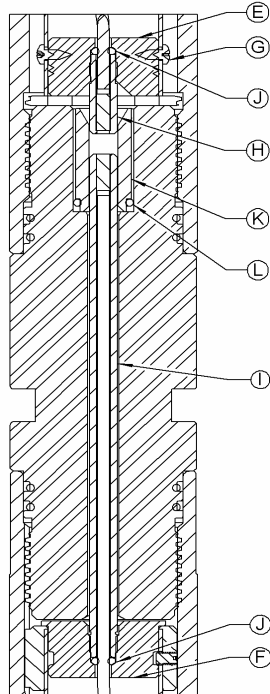
Item	Part No.	Description	
A	31-127-0931-10	Scalloped Gun System, 127mm x 1.0m, 16.5 spm, 60° Spiral	
	31-127-0931-15	Scalloped Gun System, 127mm x 1.5m, 16.5 spm, 60° Spiral	
	31-127-0931-20	Scalloped Gun System, 127mm x 2.0m, 16.5 spm, 60° Spiral	
	31-127-0931-25	Scalloped Gun System, 127mm x 2.5m, 16.5 spm, 60° Spiral	
	31-127-0931-30	Scalloped Gun System, 127mm x 3.0m, 16.5 spm, 60° Spiral	
	31-127-0931-35	Scalloped Gun System, 127mm x 3.5m, 16.5 spm, 60° Spiral	
	31-127-0931-40	Scalloped Gun System, 127mm x 4.0m, 16.5 spm, 60° Spiral	
	31-127-0931-50	Scalloped Gun System, 127mm x 5.0m, 16.5 spm, 60° Spiral	
31-127-0931-60	Scalloped Gun System, 127mm x 6.0m, 16.5 spm, 60° Spiral		
		Includes items 1, 2, 3 and 4	
1	39-057-0931-10	Tube Strip, 57mm x 1.0m, 16.5 spm, 60° Spiral	17
	39-057-0931-15	Tube Strip, 57mm x 1.5m, 16.5 spm, 60° Spiral	25
	39-057-0931-20	Tube Strip, 57mm x 2.0m, 16.5 spm, 60° Spiral	34
	39-057-0931-25	Tube Strip, 57mm x 2.5m, 16.5 spm, 60° Spiral	42
	39-057-0931-30	Tube Strip, 57mm x 3.0m, 16.5 spm, 60° Spiral	50
	39-057-0931-35	Tube Strip, 57mm x 3.5m, 16.5 spm, 60° Spiral	58
	39-057-0931-40	Tube Strip, 57mm x 4.0m, 16.5 spm, 60° Spiral	67
	39-057-0931-50	Tube Strip, 57mm x 5.0m, 16.5 spm, 60° Spiral	83
	39-057-0931-60	Tube Strip, 57mm x 6.0m, 16.5 spm, 60° Spiral	100
	2	31-127-0900-10	Scalloped Carrier, 127mm x 1.0m, 16.5 spm, 60° Spiral
31-127-0900-15		Scalloped Carrier, 127mm x 1.5m, 16.5 spm, 60° Spiral	
31-127-0900-20		Scalloped Carrier, 127mm x 2.0m, 16.5 spm, 60° Spiral	
31-127-0900-25		Scalloped Carrier, 127mm x 2.5m, 16.5 spm, 60° Spiral	
31-127-0900-30		Scalloped Carrier, 127mm x 3.0m, 16.5 spm, 60° Spiral	
31-127-0900-35		Scalloped Carrier, 127mm x 3.5m, 16.5 spm, 60° Spiral	
31-127-0900-40		Scalloped Carrier, 127mm x 4.0m, 16.5 spm, 60° Spiral	
31-127-0900-50		Scalloped Carrier, 127mm x 5.0m, 16.5 spm, 60° Spiral	
31-127-0900-60	Scalloped Carrier, 127mm x 6.0m, 16.5 spm, 60° Spiral		
		Includes item 4	
3	30-127-0005-57	Alignment Collar	
4	30-127-0004-00	Retaining Ring	
5	30-127-0001-75	Top Sub, TCP	13.2 kg (29.1 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2250-057	Top Sub Booster Puck Kit	
8	30-127-0002-0L	Tandem Sub, Long TCP	20.2 kg (44.5 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2250-057	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-127-0003-00	Bottom Sub	13.2 kg (29 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-346	O-Ring, #346, 90 Duro Nitrile	
	OOO-V569-346	O-Ring, #346, 90 Duro Viton	
B	A570010	Detonating Cord XHV 80gr., RDX	Z
	A572010	Detonating Cord XHV 80gr., HMX	Z
	-	-	-
		Approx. Req'd Detcord Length = (1.136 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	HSC-5000-325F	Charge, 32g RDX, BH	Dry
	HSC-5000-321Z	Charge, 32g RDX, DP	Dry
	TAG-5000-382	Charge, 39g RDX, SDP	Dry
	TAG-5000-482	Charge, 39g HMX, SDP	Z Dry
	SDP-5000-400	Charge, 39g HMX, SDP	Z Dry
	SDP-4500-311NT3	Charge, 39g RDX, SDP, NT3- Super-Hero	Dry
	SDP-4500-411NT3	Charge, 39g HMX, SDP, NT3- Super-Hero	Z Dry
--	TAG-4010-180	Blank Charge Case (Non Explosive)	



Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 144.2 mm (5.675 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

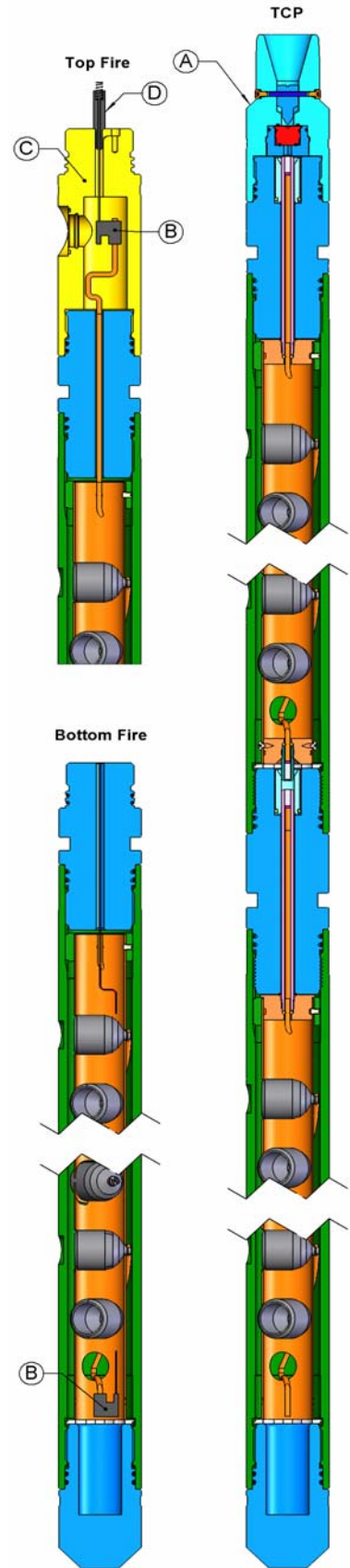
Connectors	D
Electrical Conn. Assy.	HSC-0100-061

<b>Tandem Sub Booster Kit 2.25 in. (57 mm) Strip</b>	
Part No.	Description
TC-251-2250-057	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit
contains items H, I, J, K, & L	

Specifications		
Pressure Rating	66 Mpa	9,500 psi
Tensile Strength	97,500 daN	219,100 lbf
Carrier Thread	4.500 - 6 TPI Stub Acme	
Gun Weight Loaded	37.6 kg/m	25.2 lb/ft

Note: Gun Weight Loaded = Carrier + Strip + Charges

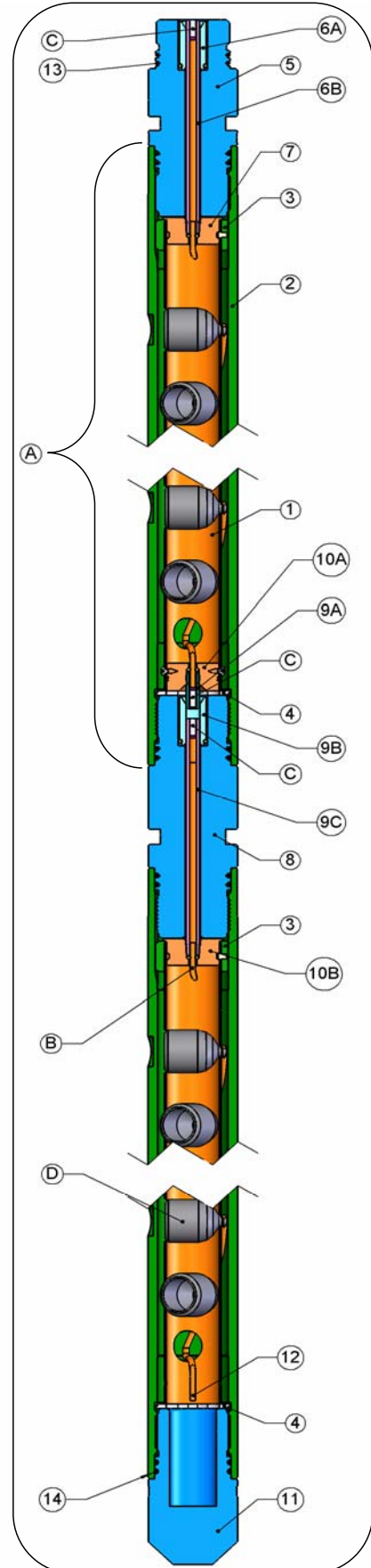
**Typical Configurations**



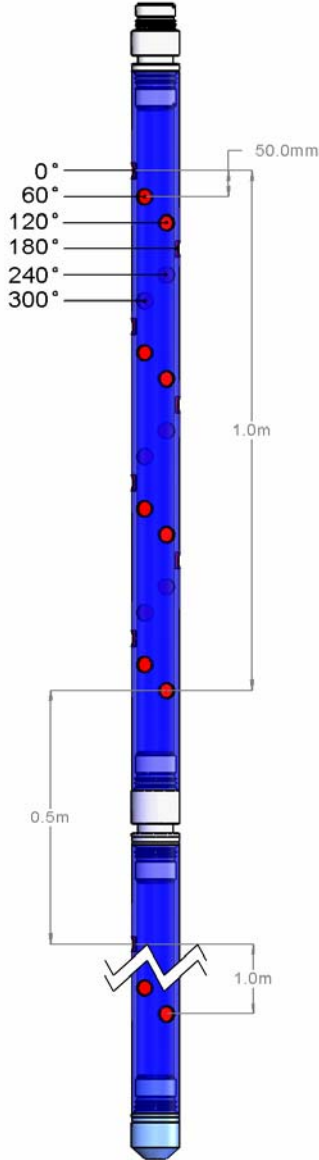
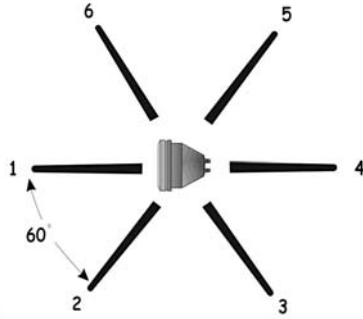
Optional Subs		
Part No.	Description	
30-127-0001-00	Top Sub, Wireline	14.5 kg (32 lbs)
30-127-0003-01	Bottom Sub, 127mm x 2 3/8" EU Box	13.1 kg (28.9 lbs)
30-127-0002-95	Tandem Sub, Side Port Select Fire	18.9 kg (41.6 lbs)
-	-	-
-	-	-
-	-	-



Item	Part No.	Description	
A	31-127-2508-10	Scalloped Gun System, 127mm x 1.0m, 20 spm, 60° Spiral	
	31-127-2508-15	Scalloped Gun System, 127mm x 1.5m, 20 spm, 60° Spiral	
	31-127-2508-20	Scalloped Gun System, 127mm x 2.0m, 20 spm, 60° Spiral	
	31-127-2508-25	Scalloped Gun System, 127mm x 2.5m, 20 spm, 60° Spiral	
	31-127-2508-30	Scalloped Gun System, 127mm x 3.0m, 20 spm, 60° Spiral	
	31-127-2508-35	Scalloped Gun System, 127mm x 3.5m, 20 spm, 60° Spiral	
	31-127-2508-40	Scalloped Gun System, 127mm x 4.0m, 20 spm, 60° Spiral	
	31-127-2508-50	Scalloped Gun System, 127mm x 5.0m, 20 spm, 60° Spiral	
31-127-2508-60	Scalloped Gun System, 127mm x 6.0m, 20 spm, 60° Spiral		
		Includes items 1, 2, 3 and 4	
1	39-054-2508-10	Tube Strip, 54mm x 1.0m, 20 spm, 60° Spiral	21
	39-054-2508-15	Tube Strip, 54mm x 1.5m, 20 spm, 60° Spiral	31
	39-054-2508-20	Tube Strip, 54mm x 2.0m, 20 spm, 60° Spiral	41
	39-054-2508-25	Tube Strip, 54mm x 2.5m, 20 spm, 60° Spiral	51
	39-054-2508-30	Tube Strip, 54mm x 3.0m, 20 spm, 60° Spiral	61
	39-054-2508-35	Tube Strip, 54mm x 3.5m, 20 spm, 60° Spiral	71
	39-054-2508-40	Tube Strip, 54mm x 4.0m, 20 spm, 60° Spiral	81
	39-054-2508-50	Tube Strip, 54mm x 5.0m, 20 spm, 60° Spiral	101
	39-054-2508-60	Tube Strip, 54mm x 6.0m, 20 spm, 60° Spiral	121
	2	31-127-2500-10	Scalloped Carrier, 127mm x 1.0m, 20 spm, 60° Spiral
31-127-2500-15		Scalloped Carrier, 127mm x 1.5m, 20 spm, 60° Spiral	
31-127-2500-20		Scalloped Carrier, 127mm x 2.0m, 20 spm, 60° Spiral	
31-127-2500-25		Scalloped Carrier, 127mm x 2.5m, 20 spm, 60° Spiral	
31-127-2500-30		Scalloped Carrier, 127mm x 3.0m, 20 spm, 60° Spiral	
31-127-2500-35		Scalloped Carrier, 127mm x 3.5m, 20 spm, 60° Spiral	
31-127-2500-40		Scalloped Carrier, 127mm x 4.0m, 20 spm, 60° Spiral	
31-127-2500-50		Scalloped Carrier, 127mm x 5.0m, 20 spm, 60° Spiral	
31-127-2500-60		Scalloped Carrier, 127mm x 6.0m, 20 spm, 60° Spiral	
			Includes item 4
3	30-127-0005-54	Alignment Collar	
4	30-127-0004-00	Retaining Ring	
5	30-127-0001-75	Top Sub, TCP	13.2 kg (29.1 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-2125-054	Top Sub Booster Puck Kit	
8	30-127-0002-0L	Tandem Sub, Long TCP	20.2 kg (44.5 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-2125-054	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-127-0003-00	Bottom Sub	13.2 kg (29 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-346	O-Ring, #346, 90 Duro Nitrile	
	OOO-V569-346	O-Ring, #346, 90 Duro Viton	
B	A578010	Detonating Cord -LS 80gr., RDX	
	A571010	Detonating Cord -LS 80gr., HMX	
	A570010	Detonating Cord XHV 80gr., RDX	Y
	A572010	Detonating Cord XHV 80gr., HMX	Z
		Approx. Req'd Detcord Length = (1.177 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	TAG-3375-311L	Charge, 19g RDX, DP	Dry
	HSC-3375-301	Charge, 20g RDX, BH	Dry
	SDP-3375-311NT	Charge, 23g RDX, SDP	Dry
	HSC-4000-318	Charge, 26g RDX, DP	Dry
	TAG-3375-302	Charge, 25g RDX, GH	Y Dry
	SDP-3375-311NT3	Charge, 25g RDX, SDP, NT3- Hero	Y Dry
	SDP-3375-411NT3	Charge, 25g HMX, SDP, NT3- Hero	Z Dry
	TAG-5000-360	Charge, 32g RDX, DP	Y Dry
--	TAG-4000-701	Blank Charge Case (Non Explosive)	

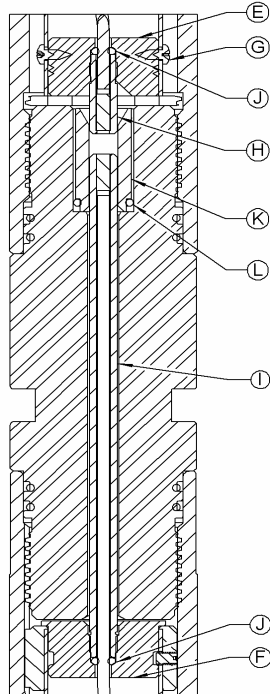


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 144.2 mm (5.675 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



20spm 60°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

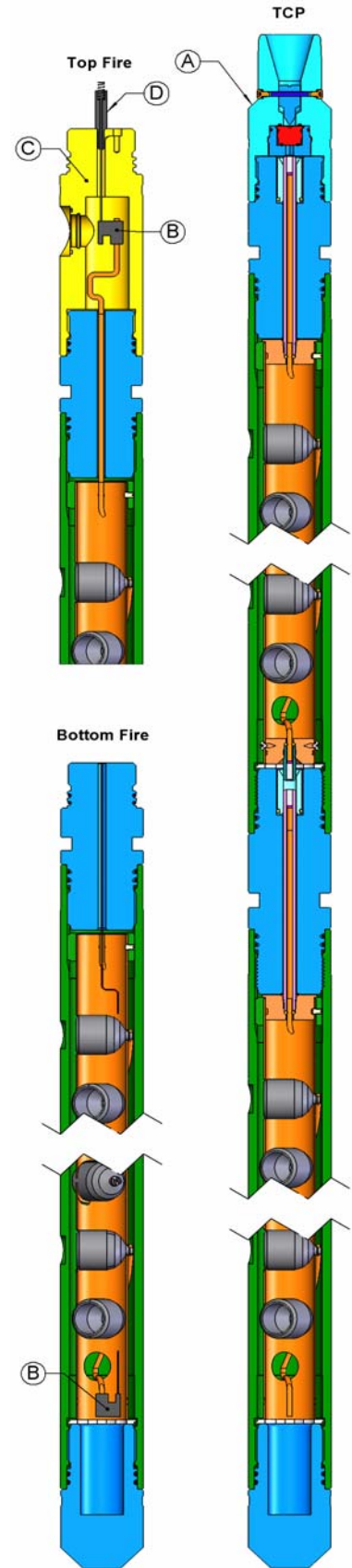
**Tandem Sub Booster Kit 2.125 in. (54 mm) Strip**

Part No.	Description
TC-251-2125-054	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

Specifications		
Pressure Rating	66 Mpa	9,500 psi
Tensile Strength	97,500 daN	219,100 lbf
Carrier Thread	4.500 - 6 TPI Stub Acme	
Gun Weight Loaded	36.5 kg/m	24.5 lb/ft

Note: Gun Weight Loaded = Carrier + Strip + Charges

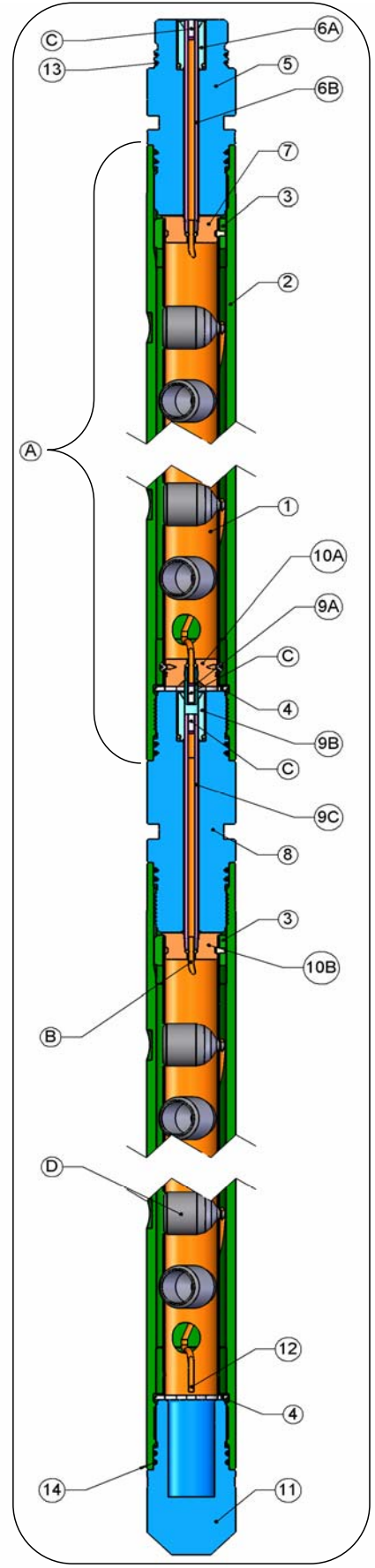
**Typical Configurations**



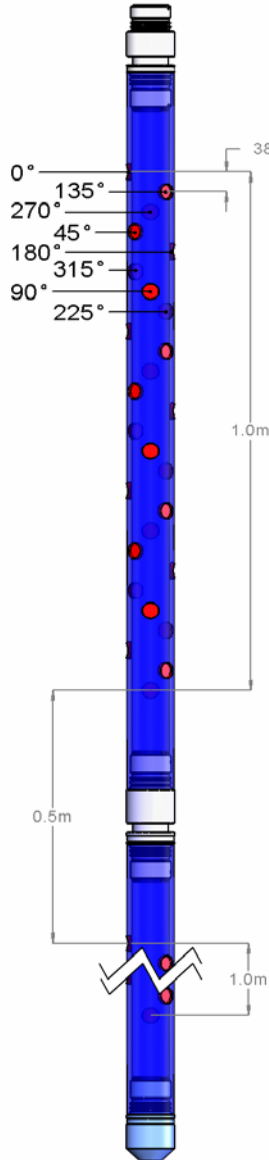
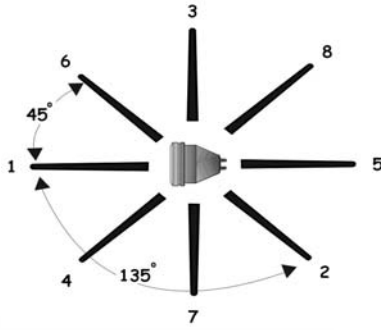
Optional Subs		
Part No.	Description	
30-127-0001-00	Top Sub, Wireline	14.5 kg (32 lbs)
30-127-0003-01	Bottom Sub, 127mm x 2 3/8" EU Box	13.1 kg (28.9 lbs)
30-127-0002-95	Tandem Sub, Side Port Select Fire	18.9 kg (41.6 lbs)
-	-	-
-	-	-
-	-	-



Item	Part No.	Description	
A	31-127-1560-10	Scalloped Gun System, 127mm x 1.0m, 26 spm, 135° Spiral	
	31-127-1560-15	Scalloped Gun System, 127mm x 1.5m, 26 spm, 135° Spiral	
	31-127-1560-20	Scalloped Gun System, 127mm x 2.0m, 26 spm, 135° Spiral	
	31-127-1560-25	Scalloped Gun System, 127mm x 2.5m, 26 spm, 135° Spiral	
	31-127-1560-30	Scalloped Gun System, 127mm x 3.0m, 26 spm, 135° Spiral	
	31-127-1560-35	Scalloped Gun System, 127mm x 3.5m, 26 spm, 135° Spiral	
	31-127-1560-40	Scalloped Gun System, 127mm x 4.0m, 26 spm, 135° Spiral	
	31-127-1560-50	Scalloped Gun System, 127mm x 5.0m, 26 spm, 135° Spiral	
	31-127-1560-60	Scalloped Gun System, 127mm x 6.0m, 26 spm, 135° Spiral	
		Includes items 1, 2, 3 and 4	
1	39-076-1560-10	Tube Strip, 76mm x 1.0m, 26 spm, 135° Spiral	27
	39-076-1560-15	Tube Strip, 76mm x 1.5m, 26 spm, 135° Spiral	40
	39-076-1560-20	Tube Strip, 76mm x 2.0m, 26 spm, 135° Spiral	53
	39-076-1560-25	Tube Strip, 76mm x 2.5m, 26 spm, 135° Spiral	66
	39-076-1560-30	Tube Strip, 76mm x 3.0m, 26 spm, 135° Spiral	79
	39-076-1560-35	Tube Strip, 76mm x 3.5m, 26 spm, 135° Spiral	92
	39-076-1560-40	Tube Strip, 76mm x 4.0m, 26 spm, 135° Spiral	105
	39-076-1560-50	Tube Strip, 76mm x 5.0m, 26 spm, 135° Spiral	131
	39-076-1560-60	Tube Strip, 76mm x 6.0m, 26 spm, 135° Spiral	157
	2	31-127-1500-10	Scalloped Carrier, 127mm x 1.0m, 26 spm, 135° Spiral
31-127-1500-15		Scalloped Carrier, 127mm x 1.5m, 26 spm, 135° Spiral	
31-127-1500-20		Scalloped Carrier, 127mm x 2.0m, 26 spm, 135° Spiral	
31-127-1500-25		Scalloped Carrier, 127mm x 2.5m, 26 spm, 135° Spiral	
31-127-1500-30		Scalloped Carrier, 127mm x 3.0m, 26 spm, 135° Spiral	
31-127-1500-35		Scalloped Carrier, 127mm x 3.5m, 26 spm, 135° Spiral	
31-127-1500-40		Scalloped Carrier, 127mm x 4.0m, 26 spm, 135° Spiral	
31-127-1500-50		Scalloped Carrier, 127mm x 5.0m, 26 spm, 135° Spiral	
31-127-1500-60		Scalloped Carrier, 127mm x 6.0m, 26 spm, 135° Spiral	
			Includes item 4
3	30-127-0005-76	Alignment Collar	
4	30-127-0004-00	Retaining Ring	
5	30-127-0001-75	Top Sub, TCP	13.2 kg (29.1 lbs)
6	TCP-0100-375	Top Sub Booster Transfer Kit	Includes 6A & 6B
7	TC-261-3000-076	Top Sub Booster Puck Kit	
8	30-127-0002-0L	Tandem Sub, Long TCP	20.2 kg (44.5 lbs)
9	TCP-0100-375L	Tandem Booster Transfer Kit	Includes 9A, 9B & 9C
10	TC-251-3000-076	Tandem Booster Insert (Puck) Kit	Includes 10A & 10B
11	30-127-0003-00	Bottom Sub	13.2 kg (29 lbs)
12	DET-0010-001	Det Cord End Seal	
13	OOO-N569-230	O-Ring, #230, 90 Duro Nitrile	
	OOO-V569-230	O-Ring, #230, 90 Duro Viton	
14	OOO-N569-346	O-Ring, #346, 90 Duro Nitrile	
	OOO-V569-346	O-Ring, #346, 90 Duro Viton	
B	A570010	Detonating Cord XHV 80gr., RDX	
	A572010	Detonating Cord XHV 80gr., HMX	
	-	-	
		Approx. Req'd Detcord Length = (2.684 X Gun Length in Meters) + 0.7m	
C	DET-3050-429	Bi-Directional Booster	
D	HSC-5000-305Z	Charge, 30g RDX, SBH	Fluid
	HSC-5000-305ZPF	Charge, 30g RDX, BH	Fluid
	TAG-5000-314	Charge, 32g RDX, DP	Fluid
--	TAG-5000-283	Blank Charge Case (Non Explosive)	

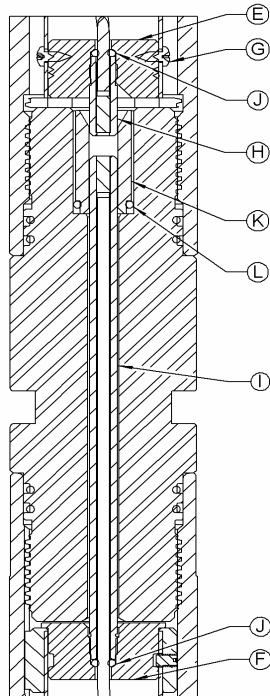


Notes:  
 Refer to Technical Section for Temperature Ratings & selection  
**Worst Case Minimum Recommended Running ID 144.2 mm (5.675 in.)**  
 See API Data Sheets or call for Individual Charge running ID's.  
 Tandem Shot Spacing = 0.5 m (468 mm)



26spm 135°

**Tandem Booster Transfer**



See Tech Manuals  
MAN-TC-251  
Tandem  
&  
MAN-TC-261 Top  
for more details on  
booster transfer kits

Firing Heads	A
<b>See TCP Section</b>	
Mech Impact	TC-010
Econo Mech Impact	TC-011
Mech Safety Impact	TC-012
Pressure Activated	TC-020
Diff Safety Ball	TC-022
Press w/Autovent	TC-023
Pr. Auto Vent & Fill	TC-024
Differential Press	TC-025
Coil Tubing Press	TC-030
CT Safety Impact	TC-031
CT AutoVent	TC-032
Auto Gun Release	TC-050
Note: TC-011 is Shown	

Detonator	B
<b>See Detonator Section</b>	
Note: DET-3050-006 is Shown	

Wireline Firing Subs	C
Ported Top Fire Sub	WT-401

Connectors	D
Electrical Conn. Assy.	HSC-0100-061

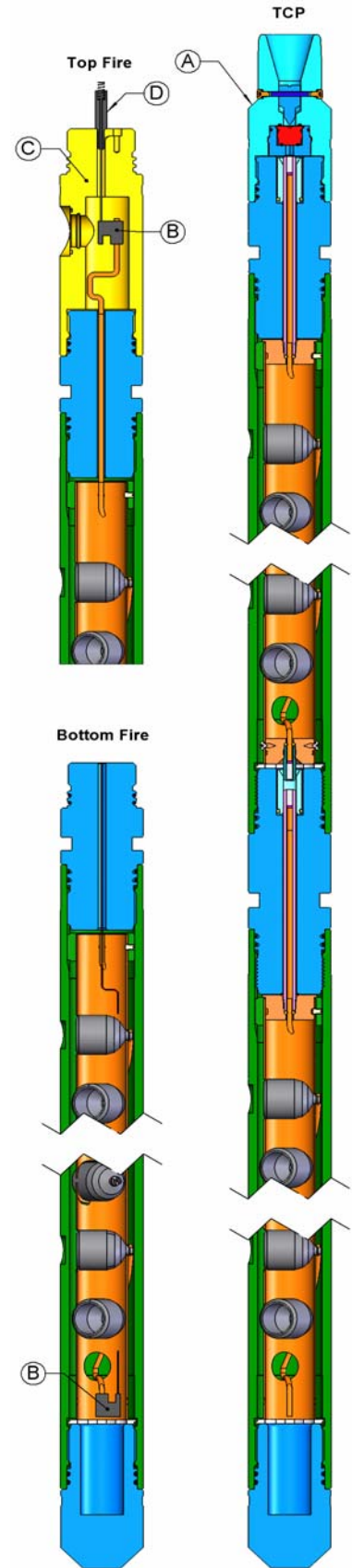
**Tandem Sub Booster Kit 3 in. (76 mm) Strip**

Part No.	Description
TC-251-3000-076	Tandem Booster Insert (Puck) Kit
TCP-0100-375L	Booster Kit

Specifications		
Pressure Rating	66 Mpa	9,500 psi
Tensile Strength	97,500 daN	219,100 lbf
Carrier Thread	4.500 - 6 TPI Stub Acme	
Gun Weight Loaded	45.2 kg/m	30.3 lb/ft

Note: Gun Weight Loaded = Carrier + Strip + Charges

**Typical Configurations**



Optional Subs		
Part No.	Description	
30-127-0001-00	Top Sub, Wireline	14.5 kg (32 lbs)
30-127-0003-01	Bottom Sub, 127mm x 2 3/8" EU Box	13.1 kg (28.9 lbs)
30-127-0002-95	Tandem Sub, Side Port Select Fire	18.9 kg (41.6 lbs)
-	-	-
-	-	-
-	-	-