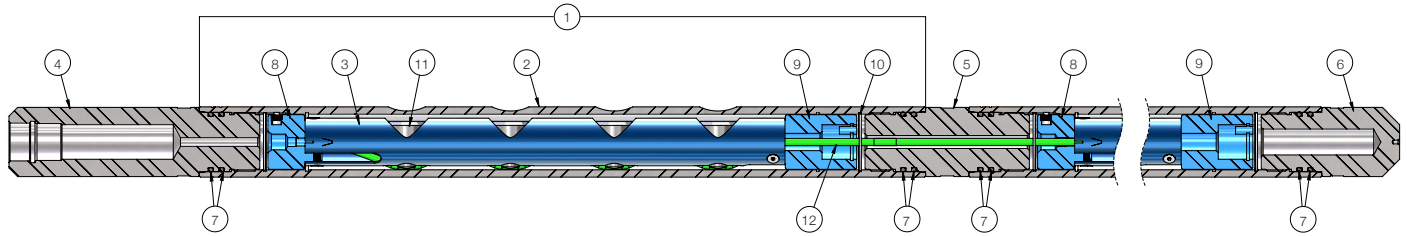


# 1-9/16 in. (40 mm) Scalloped Hollow Carrier Gun - Threaded



## 4 SPF (13 SPM) GUNFACTS®

Gun Body Material: Heat treated, seamless steel tubing  
 Gun Body Configuration: Threaded and scalloped  
 Charge Tube Type: Round steel tube  
 Mode of Fire: Simultaneous or selective firing systems such as EBFire® and ControlFire®  
 Initiation Point: Top or bottom fired options available for wireline and TCP  
 Detonating Cord: 40 grains/foot, FLAT RIBBON  
 O-Ring Material: Nitrile - 90 Durometer (Viton - 95 Durometer for temperatures >325°F [163°C])



02 Scalloped Guns

Expendable (EXP) Scalloped Hollow Carrier Assembly and Components				
ITEM	PART NO.	DESCRIPTION	Phase	
Gun Assy.	1	0220-A**-041	1-9/16 in. (40 mm) Gun Assy.	0°
		0220-A**-046	1-9/16 in. (40 mm) Gun Assy.	60°
		0220-A**-044	1-9/16 in. (40 mm) Gun Assy.	90°
		0220-A**-043	1-9/16 in. (40 mm) Gun Assy.	120°
		0220-A**-042	1-9/16 in. (40 mm) Gun Assy.	180°
	2	0220-1**-041	1-9/16 in. (40 mm) Carrier Body	0°
		0220-1**-046	1-9/16 in. (40 mm) Carrier Body	60°
		0220-1**-044	1-9/16 in. (40 mm) Carrier Body	90°
		0220-1**-043	1-9/16 in. (40 mm) Carrier Body	120°
		0220-1**-042	1-9/16 in. (40 mm) Carrier Body	180°
	3	0320-5**-041	Charge Tube	0°
		0320-5**-046	Charge Tube	60°
0320-5**-044		Charge Tube	90°	
0320-5**-043		Charge Tube	120°	
0320-5**-042		Charge Tube	180°	
Common Parts	4	0220-000-001	Top Sub	
	5	0220-000-002	Tandem Sub	
	6	0220-000-003	Gun Bottom	
	7	0111-214-V95	O-Ring	
	8	0220-500-121	Chg. Tube End Fitting - Aligning	
	9	0220-500-131	Chg. Tube End Fitting	
	10	0220-200-037	Snap Ring	
	11		Shaped Charge	
	12		Detonating Cord	

Compatible Shaped Charges (Shaped Charge Summary - Page 86 & Page 90)				
Part Number	Type	Explosive Weight (g)	Application	Explosive Type
<b>RTG-1604-421T</b>	SDP	3.5	F	HMX
<i>RTG-1603-300</i>	DP	3.2	F, G	RDX
<i>FLO-1603-410</i>	BH	3.2	F, G	HMX
CIR-1603-4T251	KO	3.0	F, G	HMX
CIR-1603-4T381	KO	3.5	F	HMX
CIR-1603-4C501	KO	3.2	F, G	HMX
CIR-1603-4C631	KO	3.5	F	HMX

xxx-xxxx-3xxx for RDX, xxx-xxxx-4xxx for HMX, xxx-xxxx-5xxx for HNS  
**Bold** indicates API-19B certification  
*Italics* indicate API RP-43 certification  
 Underlined Part Number indicates link to API Data Sheet available  
 KO indicates KnockOut circulating shaped charges  
 Application: "F" indicates that system is able to be fired in fluid  
 "G" indicates that system is able to be fired in gas  
 Phasing Compatibility: Refer to listed phasing(s) in Specifications table below

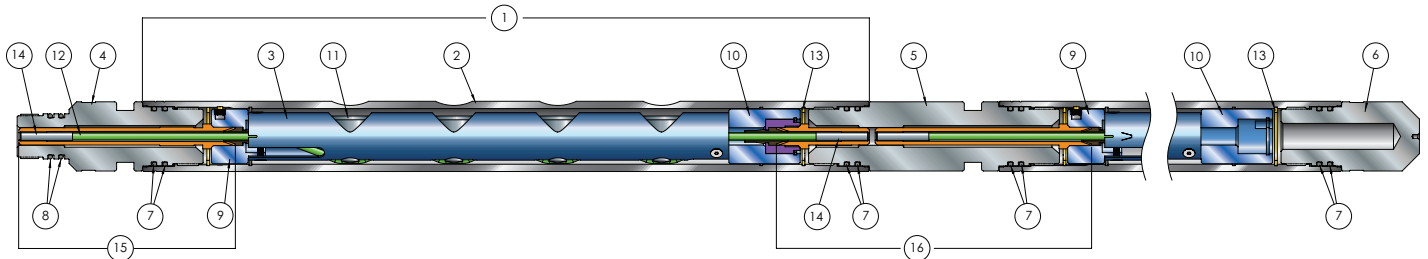
\*\* Gun length. Common Lengths are 2, 3, 4, 5, 7, 11, 15, & 21 foot.  
 Example: Use "02" for 2ft gun; etc. (0220-A02-046)

Specifications - EXP Scalloped Hollow Carrier Assy.	4 SPF (13 SPM)				
	0°	60°	90°	120°	180°
Nominal O.D. (in) [mm]	1.56 [40]				
Nominal Thickness (in) [mm]	0.17 [4.3]				
Gun Swell (in) [mm]: Ambient Fluid.	1.68 [43] ≤ 3.2g	1.68 [43] ≤ 3.5g	1.69 [43] ≤ 3.5g	1.69 [43] ≤ 3.2g	1.70 [43] ≤ 3.2g
Gun Swell (in) [mm]: Ambient Gas.	1.70 [43] ≤ 3.2g	1.70 [43] ≤ 3.2g	1.71 [43] ≤ 3.2g	1.71 [43] ≤ 3.2g	1.72 [44] ≤ 3.2g
Minimum Recommended Restriction (in) [mm]	1.78 [45]				
Maximum Pressure (psi) [MPa]	19,000 [131]	20,000 [138]			
Distance to First Scallop (in) [mm]	6.00 [152]				
Approximate Weight - Loaded (lb/ft) [kg/m]	4.00 [5.95]				
Max. Tension (lb) [kN]	80,000 [356]				

N/R Not Recommended

## 4 SPF (13 SPM) GUNFACTS®

Gun Body Material: Heat treated, seamless steel tubing  
 Gun Body Configuration: Threaded and scalloped  
 Charge Tube Type: Round steel tube  
 Mode of Fire: TCP: Hydraulic, Ball Drop, Safety Impact or Direct Impact  
 Initiation Point: Top or bottom fired options available for TCP  
 Detonating Cord: 40 grains/foot, FLAT RIBBON  
 O-Ring Material: Nitrile - 90 Durometer (Viton - 95 Durometer for temperatures >325°F [163°C])



Expendable (EXP) Scalloped Hollow Carrier Assembly and Components				
ITEM	PART NO.	DESCRIPTION	Phase	
Gun Assy.	0520-A**-041	1-9/16 in. (40 mm) TCP Gun Assy.	0°	
	0520-A**-046	1-9/16 in. (40 mm) TCP Gun Assy.	60°	
	0520-A**-044	1-9/16 in. (40 mm) TCP Gun Assy.	90°	
	0520-A**-043	1-9/16 in. (40 mm) TCP Gun Assy.	120°	
	0520-A**-042	1-9/16 in. (40 mm) TCP Gun Assy.	180°	
	0220-1**-041	1-9/16 in. (40 mm) Carrier Body	0°	
	0220-1**-046	1-9/16 in. (40 mm) Carrier Body	60°	
	0220-1**-044	1-9/16 in. (40 mm) Carrier Body	90°	
	0220-1**-043	1-9/16 in. (40 mm) Carrier Body	120°	
	0220-1**-042	1-9/16 in. (40 mm) Carrier Body	180°	
	0320-5**-041	Charge Tube	0°	
	0320-5**-046	Charge Tube	60°	
0320-5**-044	Charge Tube	90°		
0320-5**-043	Charge Tube	120°		
0320-5**-042	Charge Tube	180°		
Common Parts	4	0520-000-021	TCP Grooved Top Sub	
	5	0520-000-032	TCP Grooved Tandem Sub	
	6	0220-000-003	Gun Bottom	
	7	0111-215-090	O-Ring	
	8	0111-215-090	O-Ring	
	9	0220-500-121	Chg. Tube End Fitting - Aligning	
	10	0220-500-131	Chg. Tube End Fitting	
	11		Shaped Charge	
	12		Detonating Cord	
	13	0220-200-037	Snap Ring	
	14	BOOSTER-HMX-600-T	Bi-Directional Booster	
	15	0520-500-150	Top TCP Booster Transfer Kit	
	16	0520-500-160	Tandem TCP Booster Transfer Kit	

\*\* Gun length. Common Lengths are 2, 3, 4, 5, 7, 11, 15, & 21 foot.  
 Example: Use "02" for 2ft gun; etc. (0520-A02-046)

Compatible Shaped Charges (Shaped Charge Summary - Page 86 & Page 90)				
Part Number	Type	Explosive Weight (g)	Application	Explosive Type
<b>RTG-1604-421T</b>	SDP	3.5	F	HMX
<i>RTG-1603-300</i>	DP	3.2	F, G	RDX
<i>FLO-1603-410</i>	BH	3.2	F, G	HMX
<i>CIR-1603-4T251</i>	KO	3.0	F, G	HMX
<i>CIR-1603-4T381</i>	KO	3.5	F	HMX
<i>CIR-1603-4C501</i>	KO	3.2	F, G	HMX
<i>CIR-1603-4C631</i>	KO	3.5	F	HMX

xxx-xxxx-3xxx for RDX, xxx-xxxx-4xxx for HMX, xxx-xxxx-5xxx for HNS  
**Bold indicates API-19B certification**  
*Italics indicate API RP-43 certification*  
 Underlined Part Number indicates link to API Data Sheet available  
 KO indicates KnockOut circulating shaped charges  
 Application: "F" indicates that system is able to be fired in fluid  
 "G" indicates that system is able to be fired in gas  
 Phasing Compatibility: Refer to listed phasing(s) in Specifications table below

Specifications - EXP Scalloped Hollow Carrier Assy.	4 SPF (13 SPM)				
	0°	60°	90°	120°	180°
Nominal O.D. (in) [mm]	1.56 [40]				
Nominal Thickness (in) [mm]	0.17 [4.3]				
Gun Swell (in) [mm]: Ambient Fluid.	1.68 [43] ≤ 3.2g	1.68 [43] ≤ 3.5g	1.69 [43] ≤ 3.5g	1.69 [43] ≤ 3.2g	1.70 [43] ≤ 3.2g
Gun Swell (in) [mm]: Ambient Gas.	1.70 [43] ≤ 3.2g	1.70 [43] ≤ 3.2g	1.71 [43] ≤ 3.2g	1.71 [43] ≤ 3.2g	1.72 [44] ≤ 3.2g
Minimum Recommended Restriction (in) [mm]	1.78 [45]				
Maximum Pressure (psi) [MPa]	19,000 [131]	20,000 [138]			
Distance to First Scallop (in) [mm]	6.00 [152]				
Approximate Weight - Loaded (lb/ft) [kg/m]	4.00 [5.95]				
Max. Tension (lb) [kN]	80,000 [356]				

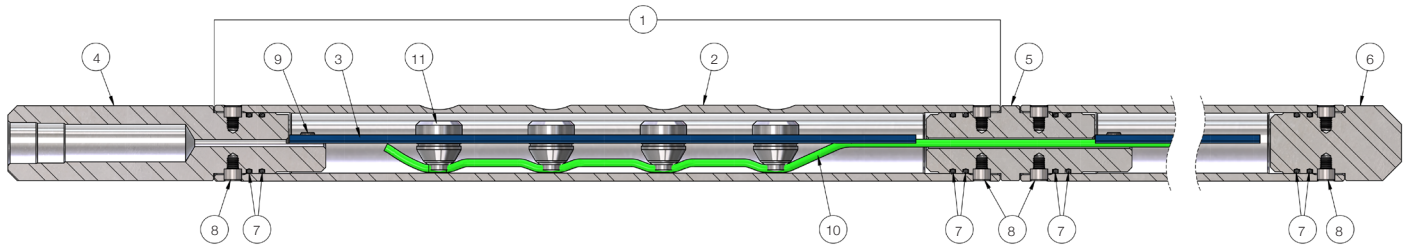
NR Not Recommended

# 1-9/16 in. (40 mm) Scalloped Hollow Carrier Gun - Bolted



## 4 SPF (13 SPM) GUNFACTS®

Gun Body Material: Heat treated, seamless steel tubing  
 Gun Body Configuration: Bolted and scalloped  
 Charge Tube Type: Round steel tube or flat strip option (for 0° and 180°)  
 Mode of Fire: Simultaneous or selective firing systems such as EBFire® and ControlFire®  
 Initiation Point: Top or bottom fired options available for wireline and TCP  
 Detonating Cord: 40 grains/foot, FLAT RIBBON  
 O-Ring Material: Nitrile - 90 Durometer (Viton - 95 Durometer for temperatures >325°F [163°C])



02 Scalloped Guns

Expendable (EXP) Scalloped Hollow Carrier Assembly and Components				
	ITEM	PART NO.	DESCRIPTION	Phase
Gun Assy.	1	0320-A**-041	1-9/16 in. (40 mm) Gun Assy.	0°
		0320-A**-046	1-9/16 in. (40 mm) Gun Assy.	60°
		0320-A**-044	1-9/16 in. (40 mm) Gun Assy.	90°
		0320-A**-043	1-9/16 in. (40 mm) Gun Assy.	120°
		0320-A**-042	1-9/16 in. (40 mm) Gun Assy.	180°
	2	0320-***-041	1-9/16 in. (40 mm) Carrier Body	0°
		0320-***-046	1-9/16 in. (40 mm) Carrier Body	60°
		0320-***-044	1-9/16 in. (40 mm) Carrier Body	90°
		0320-***-043	1-9/16 in. (40 mm) Carrier Body	120°
		0320-***-042	1-9/16 in. (40 mm) Carrier Body	180°
	3	0327-800-†††	Charge Strip	0°
		0320-5**-046	Charge Tube	60°
0320-5**-044		Charge Tube	90°	
0320-5**-043		Charge Strip	120°	
Common Parts	4	0320-000-001	Top Sub	
	5	0320-000-002	Tandem Sub	
	6	0320-000-004	Gun Bottom	
	7	0111-214-V95	O-Ring	
	8	0320-000-019	Cap Screw	
	9	0320-000-003	Cap Screw	
	11		Shaped Charge	

\*\* Gun assembly length. Common Lengths are 2, 3, 4, 5, 7, 11, 15, & 21 foot.  
 Example: Use "02" for 2ft gun; etc. (0227-A02-046)  
 \*\*\* Carrier body length. Example: Use "021" for a 21 in carrier  
 ††† Number of shots on the charge strip. Example: Use "080" for 80 shots.

Compatible Shaped Charges (Shaped Charge Summary - Page 86 & Page 90)				
Part Number	Type	Explosive Weight (g)	Application	Explosive Type
<b>RTG-1604-421T</b>	SDP	3.5	F	HMX
<i>RTG-1603-300</i>	DP	3.2	F, G	RDX
<i>FLO-1603-410</i>	BH	3.2	F, G	HMX
CIR-1603-4T251	KO	3.0	F, G	HMX
CIR-1603-4T381	KO	3.5	F	HMX
CIR-1603-4C501	KO	3.2	F, G	HMX
CIR-1603-4C631	KO	3.5	F	HMX

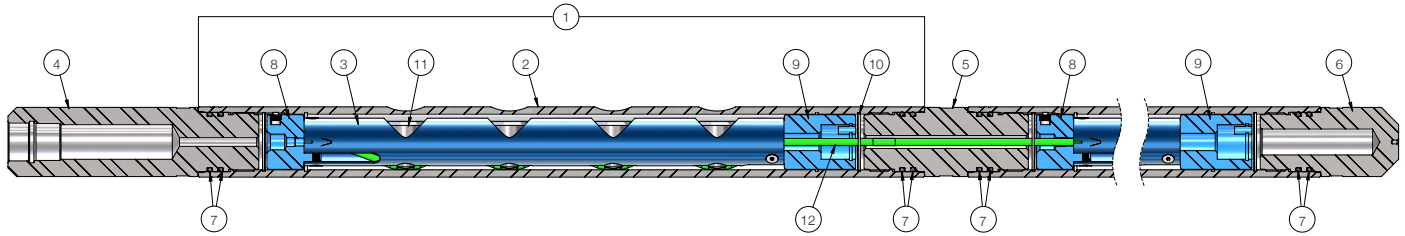
xxx-xxxx-8xxx for RDX, xxx-xxxx-4xxx for HMX, xxx-xxxx-5xxx for HNS  
**Bold** indicates API-19B certification  
*Italics* indicate API RP-43 certification  
 Underlined Part Number indicates link to API Data Sheet available  
 KO indicates KnockOut circulating shaped charges  
 Application: "F" indicates that system is able to be fired in fluid  
 "G" indicates that system is able to be fired in gas  
 Phasing Compatibility: Refer to listed phasing(s) in Specifications table below

Specifications - EXP Scalloped Hollow Carrier Assy.	4 SPF (13 SPM)				
	0°	60°	90°	120°	180°
Nominal O.D. (in) [mm]	1.56 [40]				
Nominal Thickness (in) [mm]	0.17 [4.3]				
Gun Swell (in) [mm]: Ambient Fluid.	1.68 [43] ≤ 3.2g	1.68 [43] ≤ 3.5g	1.69 [43] ≤ 3.5g	1.69 [43] ≤ 3.2g	1.70 [43] ≤ 3.2g
Gun Swell (in) [mm]: Ambient Gas.	1.70 [43] ≤ 3.2g	1.70 [43] ≤ 3.2g	1.71 [43] ≤ 3.2g	1.71 [43] ≤ 3.2g	1.72 [44] ≤ 3.2g
Minimum Recommended Restriction (in) [mm]	1.78 [45]				
Maximum Pressure (psi) [MPa]	19,000 [131]	20,000 [138]			
Distance to First Scallop (in) [mm]	6.00 [152]				
Approximate Weight - Loaded (lb/ft) [kg/m]	4.00 [5.95]				
Max. Tension (lb) [kN]	35,000 [156]				

N/R Not Recommended

## 6 SPF (20 SPM) GUNFACTS®

Gun Body Material: Heat treated, seamless steel tubing  
 Gun Body Configuration: Threaded and scalloped  
 Charge Tube Type: Round steel tube  
 Mode of Fire: Simultaneous or selective firing systems such as EBFire® and ControlFire®  
 Initiation Point: Top or bottom fired options available for wireline and TCP  
 Detonating Cord: 40 grains/foot, FLAT RIBBON  
 O-Ring Material: Nitrile - 90 Durometer (Viton - 95 Durometer for temperatures >325°F [163°C])



Expendable (EXP) Scalloped Hollow Carrier Assembly and Components				
ITEM	PART NO.	DESCRIPTION	Phase	
Gun Assy.	0220-A**-061	1-9/16 in. (40 mm) Gun Assy.	0°	
	0220-A**-066	1-9/16 in. (40 mm) Gun Assy.	60°	
	0220-A**-062	1-9/16 in. (40 mm) Gun Assy.	180°	
	2	0220-1**-061	1-9/16 in. (40 mm) Carrier Body	0°
		0220-1**-066	1-9/16 in. (40 mm) Carrier Body	60°
		0220-1**-062	1-9/16 in. (40 mm) Carrier Body	180°
	3	0320-5**-061	Charge Tube	0°
		0320-5**-066	Charge Tube	60°
		0320-5**-062	Charge Tube	180°
Common Parts	4	0220-000-001	Top Sub	
	5	0220-000-002	Tandem Sub	
	6	0220-000-003	Gun Bottom	
	7	0111-214-V95	O-Ring	
	8	0220-500-121	Chg. Tube End Fitting - Aligning	
	9	0220-500-131	Chg. Tube End Fitting	
	10	0220-200-037	Snap Ring	
	11		Shaped Charge	
	12		Detonating Cord	

Compatible Shaped Charges (Shaped Charge Summary - Page 86 & Page 90)				
Part Number	Type	Explosive Weight (g)	Application	Explosive Type
<u>RTG-1604-421T</u>	SDP	3.5	F	HMX
<i>RTG-1603-300</i>	DP	3.2	F	RDX
<i>FLO-1603-410</i>	BH	3.2	F	HMX
CIR-1603-4T251	KO	3.0	F	HMX
CIR-1603-4T381	KO	3.5	F	HMX
CIR-1603-4C501	KO	3.2	F	HMX
CIR-1603-4C631	KO	3.5	F	HMX

xxx-xxxx-3xxx for RDX, xxx-xxxx-4xxx for HMX, xxx-xxxx-5xxx for HNS  
 Bold indicates API-19B certification  
 Italics indicate API RP-43 certification  
 Underlined Part Number indicates link to API Data Sheet available  
 KO indicates KnockOut circulating shaped charges  
 Application: "F" indicates that system is able to be fired in fluid  
 "G" indicates that system is able to be fired in gas  
 Phasing Compatibility: Refer to listed phasing(s) in Specifications table below

\*\* Gun length. Common Lengths are 2, 3, 4, 5, 7, 11, 15, & 21 foot.  
 Example: Use "02" for 2ft gun; etc. (0220-A02-046)

Specifications - EXP Scalloped Hollow Carrier Assy.	6 SPF (20 SPM)		
	0°	60°	180°
Nominal O.D. (in) [mm]	1.56 [40]		
Nominal Thickness (in) [mm]	0.17 [4.3]		
Gun Swell (in) [mm]: Ambient Fluid.	1.68 [43] ≤ 3.2g	1.68 [43] ≤ 3.5g	1.70 [43] ≤ 3.2g
Gun Swell (in) [mm]: Ambient Gas.	NR	NR	NR
Minimum Recommended Restriction (in) [mm]	1.78 [45]		
Maximum Pressure (psi) [MPa]	15,000 [1003]	20,000 [138]	18,000 [124]
Distance to First Scallop (in) [mm]	5.50 [140]		
Approximate Weight - Loaded (lb/ft) [kg/m]	4.00 [5.95]		
Max. Tension (lb) [kN]	80,000 [356]		

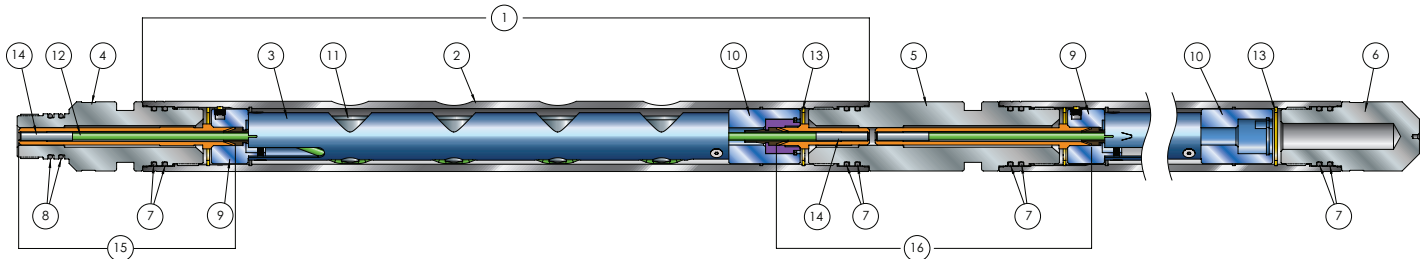
NR Not Recommended

# 1-9/16 in. (40 mm) Scalloped Hollow Carrier Gun - TCP



## 6 SPF (20 SPM) GUNFACTS®

Gun Body Material: Heat treated, seamless steel tubing  
 Gun Body Configuration: Threaded and scalloped  
 Charge Tube Type: Round steel tube  
 Mode of Fire: TCP: Hydraulic, Ball Drop, Safety Impact or Direct Impact  
 Initiation Point: Top or bottom fired options available for TCP  
 Detonating Cord: 40 grains/foot, FLAT RIBBON  
 O-Ring Material: Nitrile - 90 Durometer (Viton - 95 Durometer for temperatures >325°F [163°C])



02 Scalloped Guns

Expendable (EXP) Scalloped Hollow Carrier Assembly and Components				
	ITEM	PART NO.	DESCRIPTION	Phase
Gun Assy.	1	0520-A**-061	1-9/16 in. (40 mm) TCP Gun Assy.	0°
		0520-A**-066	1-9/16 in. (40 mm) TCP Gun Assy.	60°
		0520-A**-062	1-9/16 in. (40 mm) TCP Gun Assy.	180°
	2	0220-1**-061	1-9/16 in. (40 mm) Carrier Body	0°
		0220-1**-066	1-9/16 in. (40 mm) Carrier Body	60°
		0220-1**-062	1-9/16 in. (40 mm) Carrier Body	180°
	3	0320-5**-061	Charge Tube	0°
		0320-5**-066	Charge Tube	60°
		0320-5**-062	Charge Tube	180°
Common Parts	4	0520-000-021	TCP Grooved Top Sub	
	5	0520-000-032	TCP Grooved Tandem Sub	
	6	0220-000-003	Gun Bottom	
	7	0111-215-090	O-Ring	
	8	0111-215-090	O-Ring	
	9	0220-500-121	Chg. Tube End Fitting - Aligning	
	10	0220-500-131	Chg. Tube End Fitting	
	11		Shaped Charge	
	12		Detonating Cord	
	13	0220-200-037	Snap Ring	
	14	BOOSTER-HMX-600-T	Bi-Directional Booster	
	15	0520-500-150	Top TCP Booster Transfer Kit	
	16	0520-500-160	Tandem TCP Booster Transfer Kit	

Compatible Shaped Charges (Shaped Charge Summary - Page 86 & Page 90)				
Part Number	Type	Explosive Weight (g)	Application	Explosive Type
<b>RTG-1604-421T</b>	SDP	3.5	F	HMX
<i>RTG-1603-300</i>	DP	3.2	F	RDX
<i>FLO-1603-410</i>	BH	3.2	F	HMX
CIR-1603-4T251	KO	3.0	F	HMX
CIR-1603-4T381	KO	3.5	F	HMX
CIR-1603-4C501	KO	3.2	F	HMX
CIR-1603-4C631	KO	3.5	F	HMX

xxx-xxxx-8xxx for RDX, xxx-xxxx-4xxx for HMX, xxx-xxxx-5xxx for HNS  
**Bold** indicates API-19B certification  
*Italics* indicate API RP-43 certification  
 Underlined Part Number indicates link to API Data Sheet available  
 KO indicates KnockOut circulating shaped charges  
 Application: "F" indicates that system is able to be fired in fluid  
 "G" indicates that system is able to be fired in gas  
 Phasing Compatibility: Refer to listed phasing(s) in Specifications table below

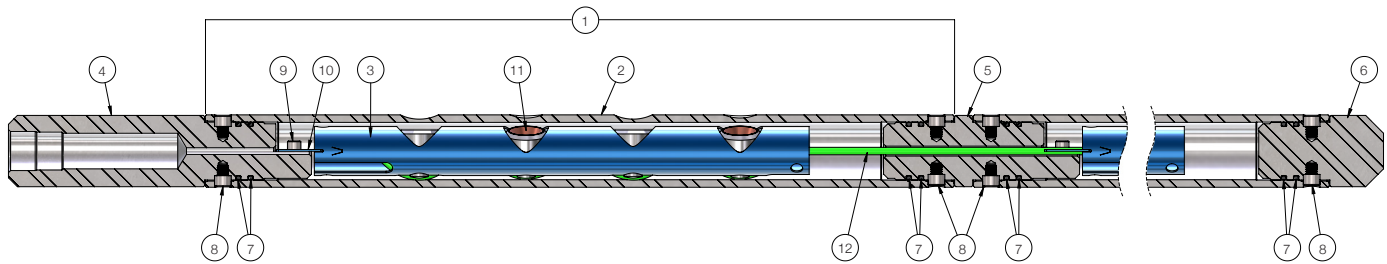
\*\* Gun length. Common Lengths are 2, 3, 4, 5, 7, 11, 15, & 21 foot.  
 Example: Use "02" for 2ft gun assembly; etc. (0220-A02-046)

Specifications - EXP Scalloped Hollow Carrier Assy.	6 SPF (20 SPM)		
	0°	60°	180°
Nominal O.D. (in) [mm]	1.56 [40]		
Nominal Thickness (in) [mm]	0.17 [4.3]		
Gun Swell (in) [mm]: Ambient Fluid.	1.68 [43] ≤ 3.2g	1.68 [43] ≤ 3.5g	1.70 [43] ≤ 3.2g
Gun Swell (in) [mm]: Ambient Gas.	NR	NR	NR
Minimum Recommended Restriction (in) [mm]	1.78 [45]		
Maximum Pressure (psi) [MPa]	15,000 [1003]	20,000 [138]	18,000 [124]
Distance to First Scallop (in) [mm]	5.50 [140]		
Approximate Weight - Loaded (lb/ft) [kg/m]	4.00 [5.95]		
Max. Tension (lbf) [kN]	80,000 [356]		

NR Not Recommended

## 6 SPF (20 SPM) GUNFACTS®

Gun Body Material: Heat treated, seamless steel tubing  
 Gun Body Configuration: Threaded and scalloped  
 Charge Tube Type: Round steel tube  
 Mode of Fire: Simultaneous or selective firing systems such as EBFire® and ControlFire®  
 Initiation Point: Top or bottom fired options available for wireline and TCP  
 Detonating Cord: 40 grains/foot, FLAT RIBBON  
 O-Ring Material: Nitrile - 90 Durometer (Viton - 95 Durometer for temperatures >325°F [163°C])



Expendable (EXP) Scalloped Hollow Carrier Assembly and Components				
ITEM	PART NO.	DESCRIPTION	Phase	
Gun Assy.	0320-A**-061	1-9/16 in. (40 mm) Gun Assy.	0°	
	0320-A**-066	1-9/16 in. (40 mm) Gun Assy.	60°	
	0320-A**-062	1-9/16 in. (40 mm) Gun Assy.	180°	
	2	0320-***-061	1-9/16 in. (40 mm) Carrier Body	0°
		0320-***-066	1-9/16 in. (40 mm) Carrier Body	60°
		0320-***-062	1-9/16 in. (40 mm) Carrier Body	180°
	3	0320-5**-061	Charge Tube	0°
		0320-5**-066	Charge Tube	60°
		0320-5**-062	Charge Tube	180°
Common Parts	4	0320-000-001	Top Sub	
	5	0320-000-002	Tandem Sub	
	6	0320-000-004	Gun Bottom	
	7	0111-214-V95	O-Ring	
	8	0320-000-019	Cap Screw	
	9	0320-000-003	Cap Screw	
	10	0320-500-031	Charge Tube Mounting Piece	
	11		Shaped Charge	
	12		Detonating Cord	

Compatible Shaped Charges (Shaped Charge Summary - Page 86 & Page 90)				
Part Number	Type	Explosive Weight (g)	Application	Explosive Type
<b>RTG-1604-421T</b>	SDP	3.5	F	HMX
<i>RTG-1603-300</i>	DP	3.2	F	RDX
<i>FLO-1603-410</i>	BH	3.2	F	HMX
CIR-1603-4T251	KO	3.0	F	HMX
CIR-1603-4T381	KO	3.5	F	HMX
CIR-1603-4C501	KO	3.2	F	HMX
CIR-1603-4C631	KO	3.5	F	HMX

xxx-xxxx-3xxx for RDX, xxx-xxxx-4xxx for HMX, xxx-xxxx-5xxx for HNS  
**Bold indicates API-19B certification**  
*Italics indicate API RP-43 certification*  
 Underlined Part Number indicates link to API Data Sheet available  
 KO indicates KnockOut circulating shaped charges  
 Application: "F" indicates that system is able to be fired in fluid  
 "G" indicates that system is able to be fired in gas  
 Phasing Compatibility: Refer to listed phasing(s) in Specifications table below

\*\* Gun length. Common Lengths are 2, 3, 4, 5, 7, 11, 15, & 21 foot.  
 Example: Use "02" for 2ft gun assembly; etc. (0320-A02-066)

Specifications - EXP Scalloped Hollow Carrier Assy.	6 SPF (20 SPM)		
	0°	60°	180°
Nominal O.D. (in) [mm]	1.56 [40]		
Nominal Thickness (in) [mm]	0.17 [4.3]		
Gun Swell (in) [mm]: Ambient Fluid.	1.68 [43] ≤ 3.2g	1.68 [43] ≤ 3.5g	1.70 [43] ≤ 3.2g
Gun Swell (in) [mm]: Ambient Gas.	NR	NR	NR
Minimum Recommended Restriction (in) [mm]	1.78 [45]		
Maximum Pressure (psi) [MPa]	15,000 [1003]	20,000 [138]	18,000 [124]
Distance to First Scallop (in) [mm]	5.50 [140]		
Approximate Weight - Loaded (lb/ft) [kg/m]	4.00 [5.95]		
Max. Tension (lbf) [kN]	35,000 [156]		

NR Not Recommended