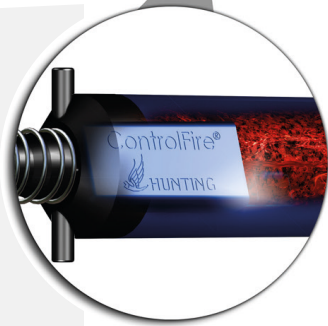
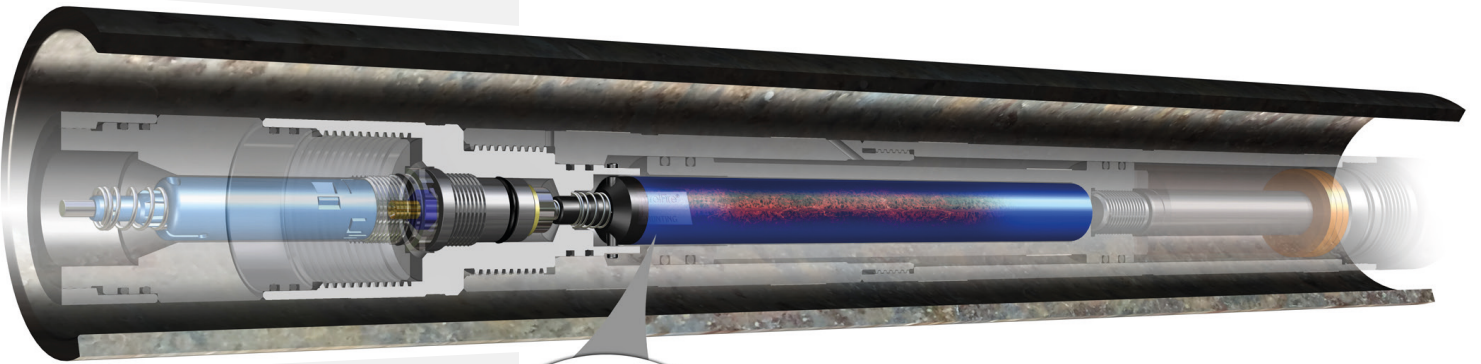


PowerSet Recon®

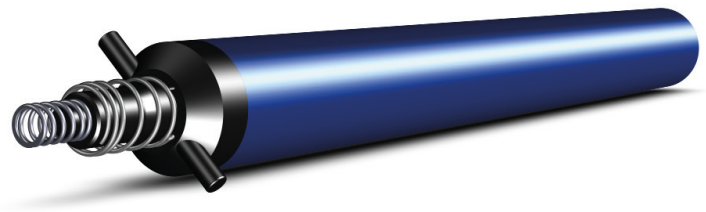


Power Charge w/ ControlFire Switch Technology
Plug Shoot Assembly w/ Contact Feed Thru

PowerSet® Recon Specifications

Hunting Titan's PowerSet® Recon power charge enables the only fully addressable 'plug and perf' tool string.

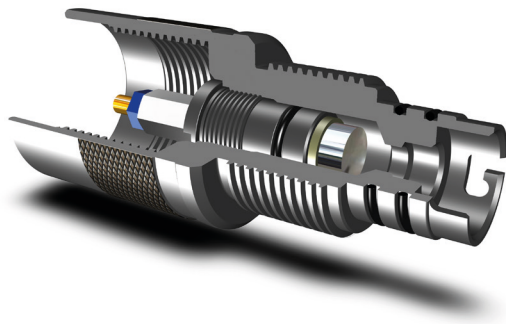
PowerSet Recon features an embedded ControlFire switch and initiation device, eliminating the cost of a plug switch and igniter on every stage. This advanced technology allows top to bottom tool string interrogation providing operational confirmation both at surface and when running down hole.



PowerSet® Recon is the only addressable power charge, complete with a built in initiation device.

Features & Benefits

- Embedded ControlFire Recon switch enables power charge detection
- Ability to read PowerSet resistance at surface with VeriFire or downhole via ControlFire software
- Built in initiation device eliminates igniter
- Optimal, consistent setting times at temperature
- Compatible with existing setting tools
- Short Plug Shoot Assembly with reusable contacts



PowerSet® Recon Power Charge Specifications

Part Number	#10	#20	3-1/2" Shorty	3-5/8" Compact
		HPC-0010-441	HPC-0020-541	HPC-3500-741

ENVIRONMENTAL

Temperature Rating (°F)[°C]	350 [177]
Firing Capability	ControlFire® only
Resistance	56 ohm +/- 10
Operating Voltage Range	-5 VDC to -500 VDC
Max Firing Voltage	+/- 500V
Operating Current - Standby	>1 mA
Current - Communicating	10 mA at Surface 30 mA Downhole
Max Firing Current	1 A for 5 seconds
Bi-directional Communications	Bi-directional

PowerSet® Recon PSA Specifications

PowerSet® Recon PSA	#10	#10	3-5/8" COMPACT*	#20	3-1/2" SHORTY
Part Number	2010-275-500	2010-312-500	2020-312-500	2020-337-500	WST-5321-PSA-350-1A

MECHANICAL

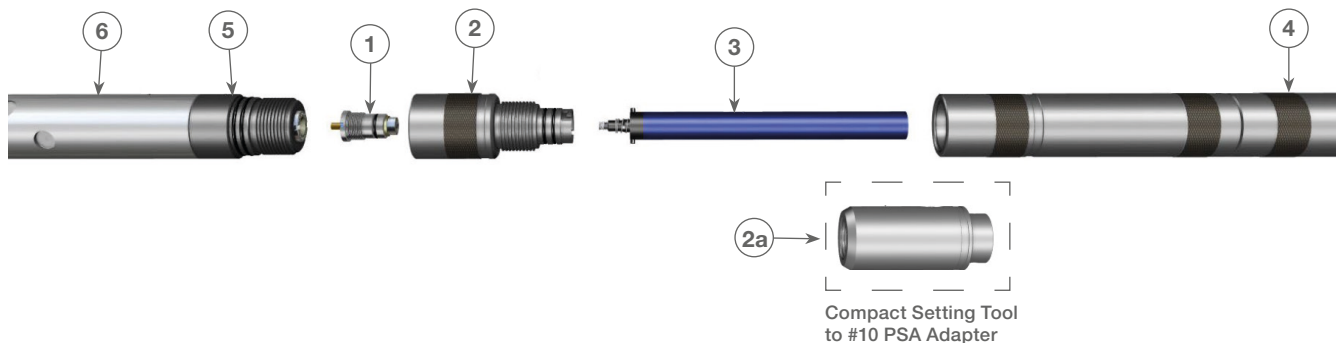
Diameter (in)[mm]	2-3/4 [70]	3-1/8 [79]	3-1/8 [79]	3-5/8 [86]	3-1/2" [89]
Make-Up Length* (in)[mm]	4.00 [102]	4.00 [102]	3.63 [92]	3.63 [92]	5.31 [135]
Weight (lb)[kg]	--	6 [3]	8 [4]	--	12 [6]
Upper Head Connection	2-3/8"-6 Acme Box	2-3/4"-6 Acme Box	2-3/4"-6 Acme Box	2-13/16"-6 Acme Box	2-3/4"-6 Acme Box
Lower Head Connection	2-3/8"-6 Acme Pin	2-3/8"-6 Acme Pin	2-7/8"-6 Acme Pin	2-7/8"-6 Acme Pin	2-3/4"-6 Acme Pin
Max. Tension (lbf) [kN]	160,000 [712]	172,000 [765]	283,000 [1259]	283,000 [1259]	283,000 [1259]

*Requires Adapter WST-3625-532A

ENVIRONMENTAL

Temperature Rating (°F)[°C]	350 [177]
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PowerSet® Recon Parts List

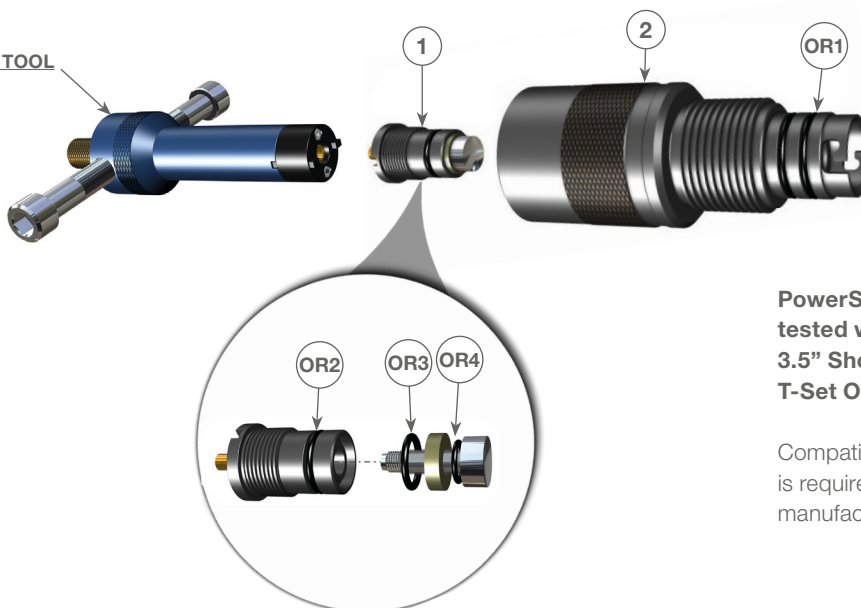


Parts List | PowerSet Recon and Associated Hardware

ID	DESCRIPTION	PART NUMBER	
1	POWERSET RECON CONTACT ASSEMBLY	2010-APC-010	
2	POWERSET RECON PLUG SHOOT BODY	#10	2010-312-501
		#20	2020-312-501
		3-1/2" Shorty	WST-5321-PSA-350-1A
1-2	POWERSET RECON PLUG SHOOT ASSEMBLY (PSA)	2010-312-500	
2a	COMPACT SETTING TOOL TO #10 PSA ADAPTER	WST-3625-532A	
3	POWERSET RECON POWER CHARGE	#10	HPC-0010-441
		#20	HPC-0020-541
		3-1/2" Shorty	HPC-3500-741
		3-5/8" Compact	HPC-3625-441
4	T-SET® SETTING TOOL	SEE T-SET COMPATIBILITY TABLE	
5	ESUB TANDEM ASSEMBLY	0363-ESUB-040B	
	EB TANDEM ASSEMBLY	0363-000-389A	
6	GUN ASSEMBLY 6 SPF / 60° PHASE	GUN	
OR1	O-RING; NITRILE†	#10	0111-222-090
		#20	0111-328-090
		3.5" Shorty	0111-332-090
OR2	O-RING; NITRILE†	0111-213-090	
OR3	O-RING; NITRILE†	0111-210-090	
OR4	O-RING; NITRILE†	0111-113-090	

Note: Part numbers displayed are 3-1/8" O.D. for reference. 2-3/4", 3-5/8" and 3-1/2" hardware also available. PSA's are available for all Hunting Titan perforating gun strings | †Viton O-Rings required in applications above 325°F.

H1 EXTENDED TOOL HTS-UCP-100



PowerSet® Recon was designed and tested with Hunting's T-Set #10, #20, 3.5" Shorty, 3-5/8" Compact, and T-Set One setting tools.

Compatibility analysis and/or testing is required prior to using another manufacturer's tool with PowerSet Recon.

PowerSet® Recon Power Charge

PowerSet® Recon Power Charge Setting Times

POWERSSET SIZE	SETTING FORCE*	75°F [24°C]	180°F [82°C]	250°F [121°C]
#10 Power Charge	25,000 LBS	30 - 50 s	20 - 40 s	10 - 25 s
	35,000 LBS	35 - 55 s	25 - 45 s	10 - 30 s
#20 Power Charge	35,000 LBS	25 - 50 s	15 - 30 s	10 - 20 s
	45,000 LBS	30 - 60 s	15 - 30 s	10 - 20 s
	55,000 LBS	30 - 65 s	15 - 30 s	10 - 20 s
3-1/2" Shorty Power Charge	45,000 LBS	25 - 40 s	15 - 30 s	0 - 20 s
3-5/8" Compact Power Charge	45,000 LBS	10 - 20 s	5 - 15 s	0 - 10 s
	55,000 LBS	10 - 20 s	5 - 15 s	0 - 10 s

*All PowerSet Recons are rated for use up to 55,000 lbs shear



T-Set #10



T-Set #20

T-Set Setting Tool Compatibility with PowerSet® Recon Power Charges

COMPATIBLE T-SET PART NUMBER	#10 POWER CHARGE HPC-0010-441	#20 POWER CHARGE HPC-0020-541	3-1/2" SHORTY POWER CHARGE HPC-3500-741	3-5/8" COMPACT* POWER CHARGE HPC-3625-441
T-Set #10 Setting Tool WST-BK10-001	✓			
T-Set #10 Non-Ported Setting Tool WST-BK10-201	✓			
T-Set #10 High Pressure Setting Tool WST-BK10-002	✓			
T-Set #20 Setting Tool WST-BK20-001		✓		
T-Set #20 Non-Ported Setting Tool WST-BK20-201		✓		
T-Set #20 High Pressure Setting Tool WST-BK20-002		✓		
T-Set 3-1/2" Shorty Setting Tool WST-5321-501			✓	
T-Set 3-5/8" Compact Setting Tool WST-3625-501				✓

Further Information

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