

Safe Green Det Ignition System Small RTG & TAG Systems

ADP-PX16-155

MAN-PX1-013 (R01)

OWEN OIL TOOLS

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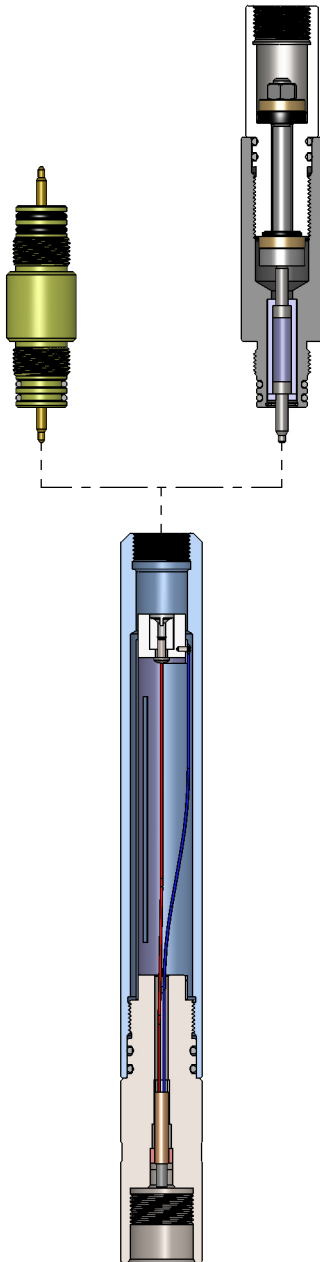
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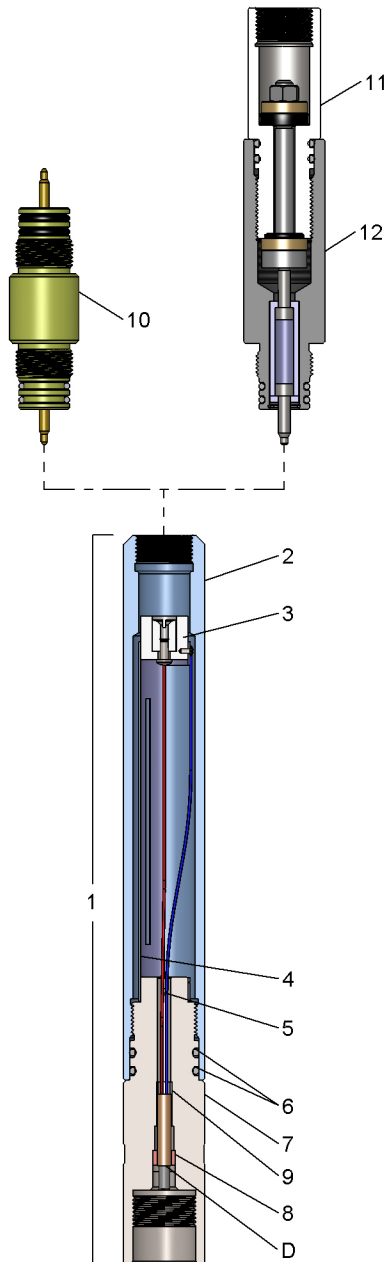
INTRODUCTION

The ADP-PX16-155 is a Safe Fire Initiation System that utilizes the Green Det™ to initiate RTG Gun Systems and small TAG Gun Systems. This system is an improvement over the standard ADP-PX16-100 RTG/Cut PX1 Firing System in that it utilizes a sealed system to ensure high pressure wellbore fluids do not migrate into wireline string.

Incorporation of the Green Det™ detonator into the Firing Systems adds increased safety against rig-site hazards such as RF transmitter, cathodic protection, and stray voltages. The Green Det™ allows normal oilfield operation to continue while perforating and other completion services are being performed.

All safety rules and regulations should be strictly followed when storing, handling, assembling, and using these tools and /or detonators. Safety precautions should be taken in accordance with your company's safety policies, governmental regulations, and the American Petroleum Institute Recommended Practice 67 (API RP-67)





ITEM	PART NO.	DESCRIPTION
1	ADP-PX16-155	Assembly, Small TAG and Bolted Guns, Green Det™ Firing System
2	ADP-PX16-102	Top Housing
3	ADP-PX16-107	Contact Assembly
4	SEV-1375-250	Carriage, PX1 Fireset
5	PUR-0509-040	6-32 x 1/4 Pan Head Screw - 2 Required
6	OOO-V569-217	O-Ring, Viton - 2 Required
7	ADP-PX16-119	Detonator Housing
8	TC-001-0003-000	Rubber Grommet
9	PUR-3100-009	Teflon Tubing, 5/16" OD x 1/4" ID x 1/4" Lg.
*10	AES-8079	Internal Sealed Contact Sub (Sold Separately)
11	AES-AS80005	1-1/2" HP Firing Head (Sold Separately)
12	ADP-PX16-245	Sub Assembly, Double Contact, 1-11/16" OD (Sold Separately)
D	2-300750-1	GreenDET™ (Sold Separately)
	ADP-PX16-152	Redress Kit for Green Det™. Includes Items 3, 4, 5, 6, 8, 9
**	TAG-2750-281X	2-3/4" TAG Crossover Sub
	TAG-2875-280X	2-7/8" TAG Crossover Sub

*Item 10 can be interchanged with Items 11 & 12 to provide a sealed contact at the top of the assembly

** In order to use the ADP-PX16-155 Firing System with 2-3/4" and 2-7/8" TAG Systems, the appropriate TAG Crossover Sub (Item **) needs to be used between the TAG Top Gun and the Detonator Housing (Item 7).

To use this system with the PX1 Fireset see the catalog page for ADP-PX16-150 or MAN-PX1-007.



Note: When using the Green Det™ detonator, the red wire should be electrically connected with red wire to hot lead and blue wire to ground.

1.0 Pre-Assembly



Warning: *Explosives are destructive by nature! Do not attempt to disassemble or alter explosive products in any manner! Do not crush, hammer, pinch, impact, pull wires or abuse any explosive product!*



Warning: *Be sure to follow safe operating practices as found in API RP-67 in accordance with governmental regulations, company policies and manufacturer's recommendations!*



Note: *Before assembly, visually inspect all components for any defects.*

2.0 Assembly 2-300750-1 (Green Det)

- 2.1 Install the O-Rings (item #6) onto the Detonator Housing (item #7) and lubricate.
- 2.2 Attach the Detonator Housing to the PX-1 Carriage (item #4) using the Pan Head Screws (item #5). Attach the Contact Assembly (item #3) to the other end of the PX-1 Carriage using the provided screws.
- 2.3 Feed the Detonator (item D) lead wires through the Teflon Tubing (item #9) and the O-Ring end of the Detonator Housing. The Teflon tubing will seat in the bore behind the detonator and will prevent it from moving further into the detonator housing. Slide the Rubber Grommet (item #8) onto the end of the Detonator to center and hold the Detonator in the end of the Housing.
- 2.4 Thread a 1-11/16" Bull Plug from the Gun System you are running into the Detonator Housing. The use of a Bull Plug will keep the Detonator in place and serve as a blast shield for future assembly steps.
- 2.5 Cut the Detonator leads to an appropriate length, then strip 0.500 in. (1.3 cm) of insulation from each lead.

- 2.6 Using an approved digital blaster's multimeter, check the resistance of the detonator. The resistance should read approximately 1 MegaOhm when used with alligator clip leads attached to the lead wires.
- 2.7 Connect the red wire from the Detonator to the center screw in the Contact Assembly (item #3). Connect the blue wire from the detonator to ground. One of the screws used to connect the PX1 Carriage (item #4) to the Detonator Housing (item #7) can be used for this.
- 2.8 Insert the PX-1 Carriage assembly into the Top Housing (item #2) and tighten. The Detonator Housing will only thread into one end of the Top Housing.



Caution: *Make sure the lead wires are not damaged while threading the Detonator Housing into the Top Housing!*

- 2.9 Connect to the wireline toolstring. (Use an Internally Sealed Contact Sub)
- 2.10 Remove the Bull Plug.
- 2.11 Mechanically connect the Gun System (not shown) to the Detonator Housing.
- 2.12 Follow the standard running procedure for the Gun System you are using.



Note: *Note: For information regarding the Procedures for Panel Setup, Firing the Green Det or FAQ, refer to MAN-DET-RF.*