

Safe Green Det Ignition System Owen Det Bodies

ADP-PX16-165

MAN-PX1-014 (R01)

OWEN OIL TOOLS

12001 Cr 1000
Godley, Texas, 76044, USA
Phone: +1 (817) 551-0540
Fax: +1 (817) 551-1674
www.corelab.com/owen

Warning: use of owen equipment contrary to manufacturer's specifications or operating instructions may result in property damage, serious injury or fatality. If you are not trained in the handling and use of explosive devices, do not attempt to use or assemble any owen perforating systems or owen firing devices.

This technology is regulated by and, if exported, was exported from the united states in accordance with the export administration regulations (EAR). Diversion contrary to U.S. Law is prohibited. Export and/or re-export of this technology may require issuance of a license by the bureau of industry and security (BIS), U.S. Department of Commerce. Consult the BIS, the EAR, and/or Owen Compliance Services, Inc. To determine licensing requirements for export or re-export of this technology.

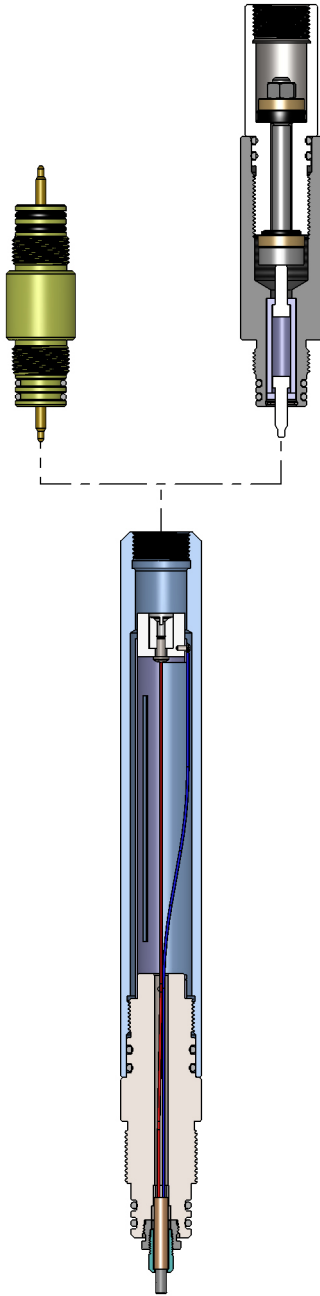
This document contains confidential information of Owen Oil Tools LP (Owen) and is furnished to the customer for information purposes only. This document must not be reproduced in any way whatsoever, in part or in whole, or distributed outside the customer organization, without first obtaining the express written authorization of owen. This document is the property of owen and returnable upon request of Owen.

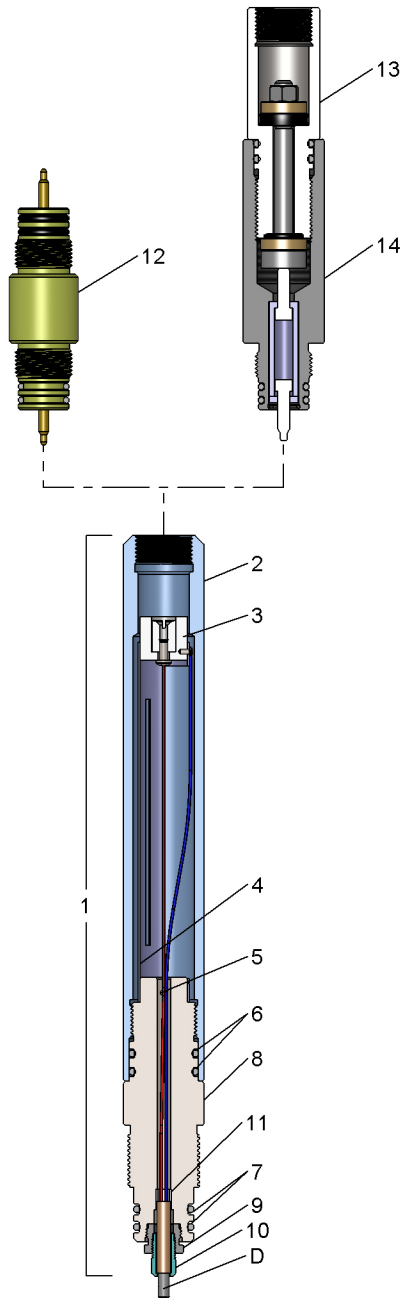
INTRODUCTION

The ADP-PX16-165 is a Safe Fire Initiation System that utilizes Green Det™ to initiate RTG Gun Systems and small TAG Gun Systems with Owen Det Bodies. This system utilizes a sealed system to ensure high pressure wellbore fluids do not migrate into wireline string.

Incorporation of the Green Det™ 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-PX16-165	Assembly, Owen Det Bodies, 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	OOO-V569-214	O-Ring, Viton - 2 Required
8	TC-010-0001-PX1	Detonator Housing
9	TC-010-0002-PX1	Detonator Housing Nose
10	TCP-0100-247GD	Detonator Holder
11	PUR-3100-009	Teflon Tubing, 5/16" OD x 1/4" ID x 1/4" Lg
*12	AES-8079	Internal Sealed Contact Sub
13	AES-A580005	1-1/2" HP Firing Head (Sold Separately)
14	ADP-PX16-245	Sub Assembly, Double Contact, 1-11/16" OD (Sold Separately)
D	2-300750-1	Green Det™ (Sold Separately)
	ADX-PX16-162	Redress Kit for Green Det™, Includes Items 3, 4, 5, 6, 7, 9, 10, 11

*Item 12 can be interchanged with Items 13 & 14 to provide a sealed contact at the top of the assembly.

To use this system with the PX-1 Fireset see the catalog page for ADP-PX16-160 or MAN-PX1-012



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 and #7) onto the Detonator Housing (item #8) and lubricate. Lightly grease the Detonator Housing Nose (item #9) and thread into Detonator Housing.
- 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 #11) 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. Place the detonator into the Detonator Holder (item #10) and thread it into the Detonator Housing Nose (item #9), already installed in the Detonator Housing.
- 2.4 Thread an arming cap onto the Detonator Housing. The use of a an arming cap 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 #8) 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 arming cap.
- 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: *For information regarding the Procedures for Panel Setup, Firing the Green Det or FAQ, refer to MAN-DET-RF.*