



Extended TD Hardware for the 6 Minute Delay Fuse

TC-043-2750-100
TC-043-3125-100

MAN-TC-043-100 (R05)

Owen Oil Tools LP

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.

Owen Oil Tools pre-assembles its tools as per the field operating manual. It is the responsibility of the purchaser to insure that this tool is assembled as required, prior to use.

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.

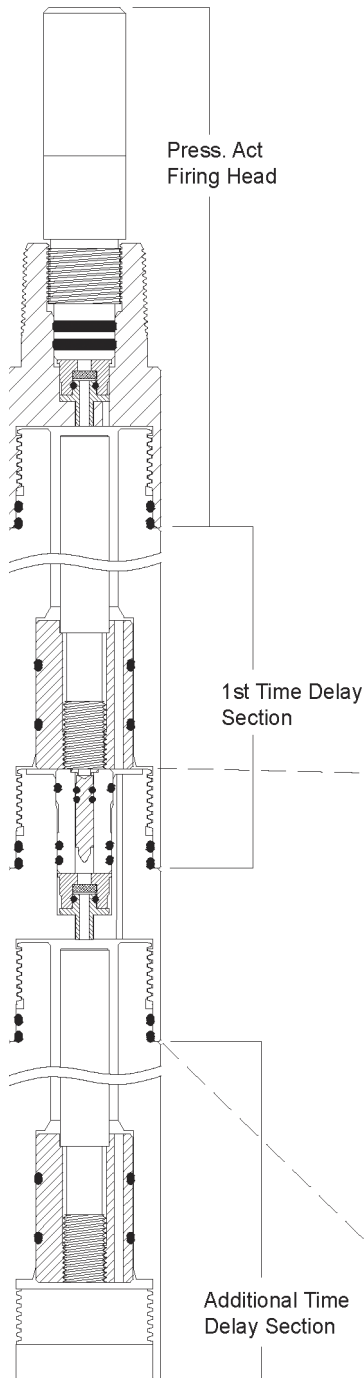
This document contains Confidential Information of Owen Oil Tools LP (Owen) and is furnished to the customer for information purposes only. This document must not be reproduced in any way whatsoever, in part or in whole, or distributed outside the customer organization, without first obtaining the express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

© 2010 Owen Oil Tools

Extended TD Hardware for the 6 Minute Delay Fuse



TC-043-2750-100 BOM and Schematics



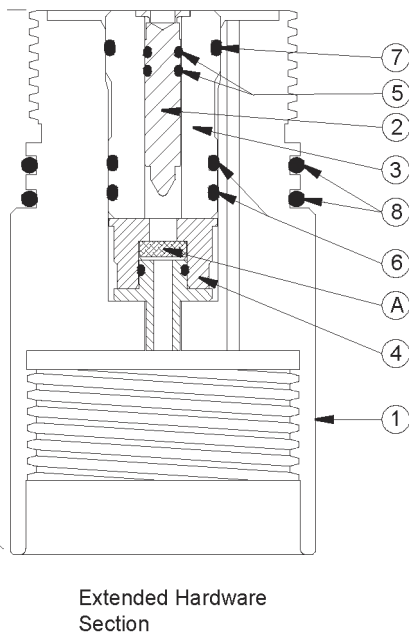
Item	Part Number	Qty	Description
1	TC-043-0002-100	1	Body, Ext. 6-Min. Delay 2.750
2**	TC-044-0003-000	1	Firing Pin
3**	TC-044-0004-000	1	Housing, Firing Pin
4	TC-043-0003-000	1	Igniter Support Assembly
5**	OOO-N569-010	2	O-ring, N-90
6**	OOO-N569-119	2	O-ring, N-90
7**	OOO-N569-120	1	O-ring, N-90
8**	OOO-N569-225	2	O-ring, N-90
A	2-350220-1	1	Igniter, (explosive component)
--	TC-043-2750-199		Redress Kit, Ext. 6-Min. Delay
--	TC-043-2750-599		Redress Kit, HT Ext. 6-Min. Delay
--	MAN-TC-043-100		Manual, Ext. 6-Min. Delay

** Denotes parts that are in the redress kit.

TC-043-2750-599 contains Viton O-rings

Note: Explosive components are sold separately

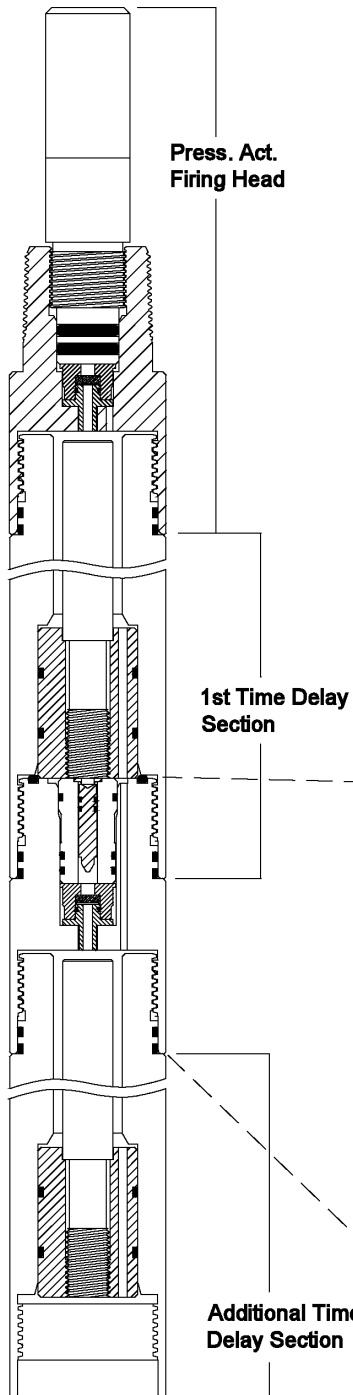
This assembly and redress kits do not include Igniter Support Assembly (TC-043-0003-000). This part comes with the 6-Minute Fuse Assembly and their redress kits.



Extended TD Hardware for the 6 Minute Delay Fuse



TC-043-3125-100 BOM and Schematics



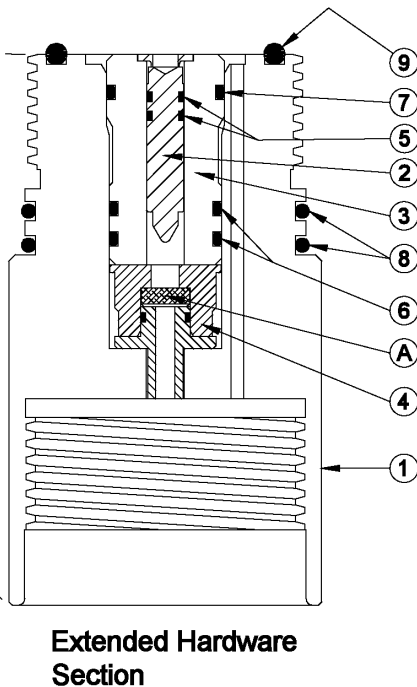
Item	Part Number	Qty	Description
1	TC-043-0001-100	1	Body, Ext. 6-Min. Delay 3.125
2**	TC-044-0003-000	1	Firing Pin
3**	TC-044-0004-000	1	Housing, Firing Pin
4	TC-043-0003-000	1	Igniter Support Assembly
5**	OOO-N569-010	2	O-ring, N-90
6**	OOO-N569-119	2	O-ring, N-90
7**	OOO-N569-120	1	O-ring, N-90
8**	OOO-N569-230	2	O-ring, N-90
9**	OOO-N569-329	1	O-ring, N-90
A	2-350220-1	1	Igniter, (explosive component)
--	TC-043-3125-199		Redress Kit, Ext. 6-Min. Delay
--	TC-043-3125-299		Redress Kit, HT Ext. 6-Min. Delay
--	MAN-TC-043-100		Manual, Ext. 6-Min. Delay

** Denotes parts that are in the redress kit.

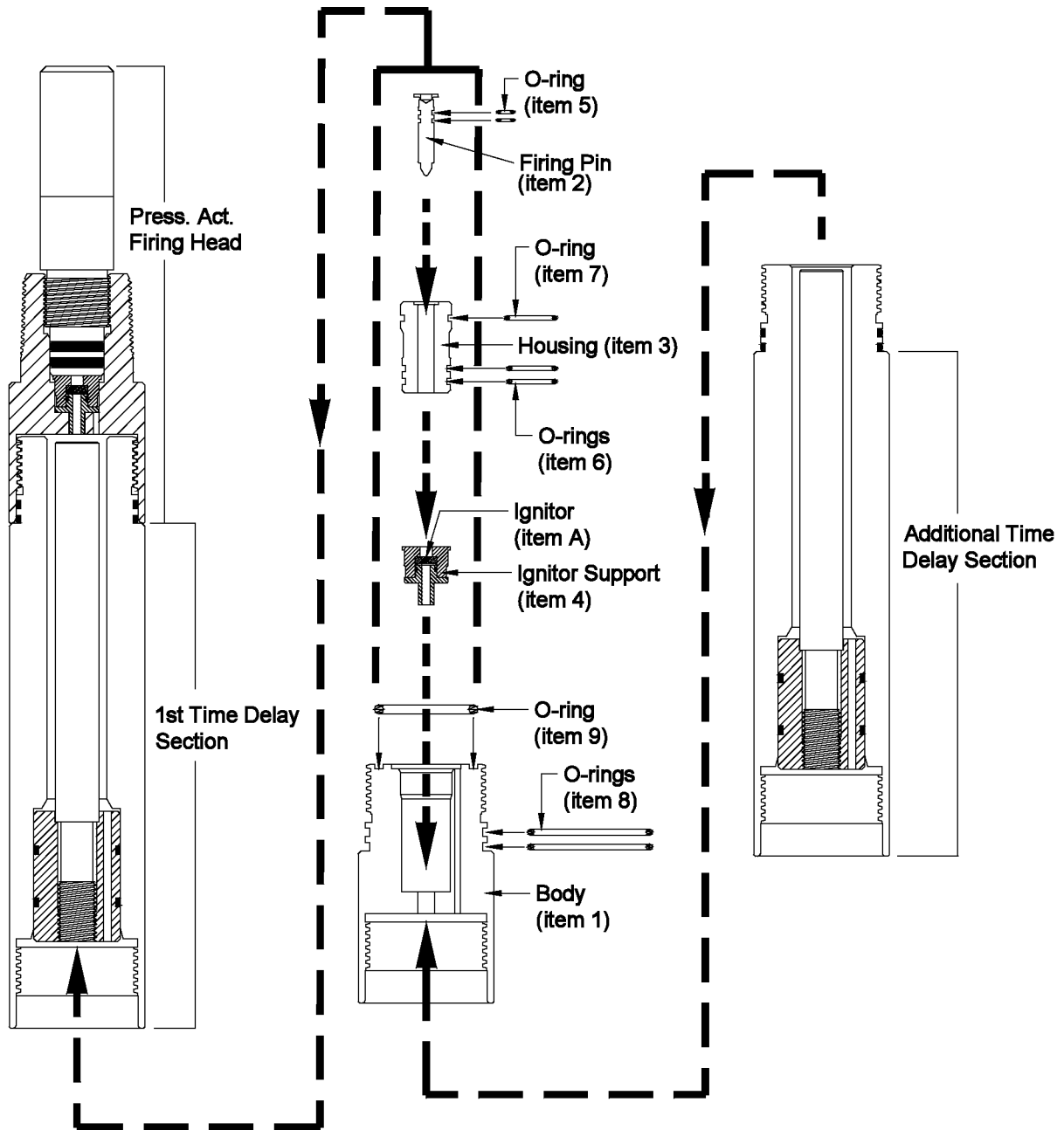
TC-043-3125-299 contains Viton O-rings

Note: Explosive components are sold separately

This assembly and redress kits do not include Igniter Support Assembly (TC-043-0003-000). This part comes with the 6-Minute Fuse Assembly and their redress kits.



Exploded View for Extending Time of Fuse



Note: Item 9 not used in TC-043-2750-100.

Extended TD Hardware for the 6 Minute Delay Fuse





Warning: *The assembly of this tool requires the use of an Explosive Device and all safety precautions must be adhered to and observed! Only personnel trained in explosive handling procedures should be allowed to arm this firing head assembly!*



Note: *Check all items against the parts list to be sure of having the correct parts and quantities.*



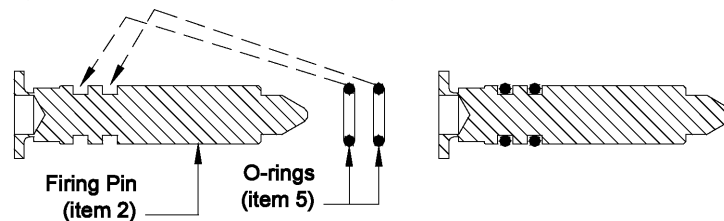
Note: *Check for any damage to the parts which would prevent the part from being assembled correctly, easily and safely.*

1.0 Assembly

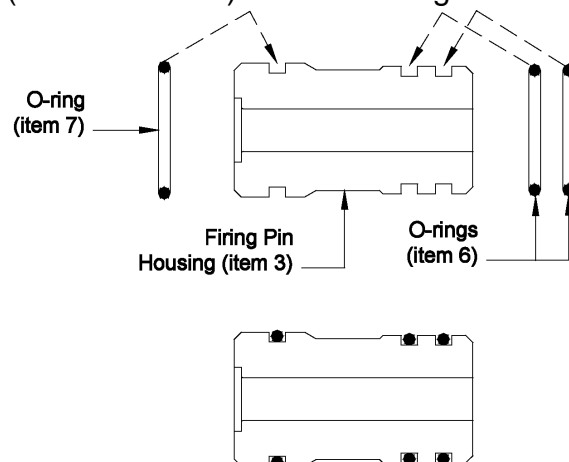


Note: *For each additional 6 minute fuse that will be run, an Extended Hardware Sub must be run also. This sub will contain an Ignitor that will be needed to ignite the additional time delay fuse.*

1.1 Install the O-rings (item #5) onto the Firing Pin (item #2).



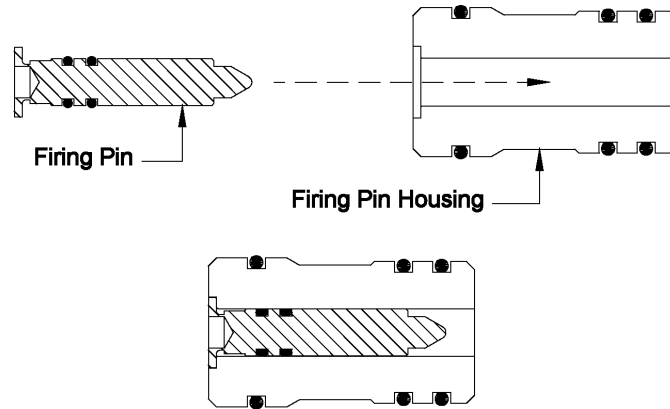
1.2 Install the O-rings (items #6 and 7) onto the Firing Pin Housing.



Extended TD Hardware for the 6 Minute Delay Fuse



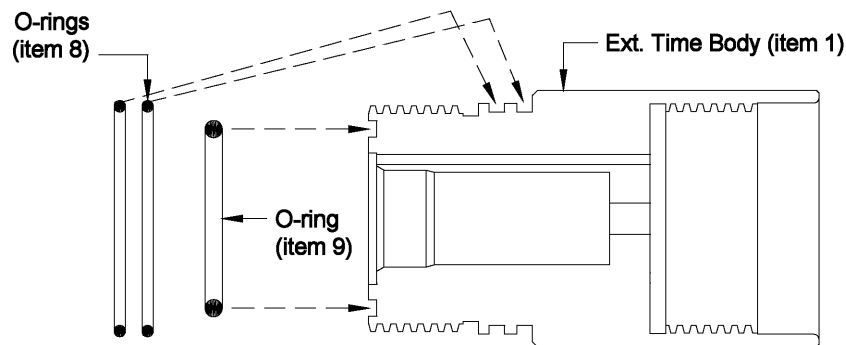
1.3 Apply grease to the O-rings on the Firing Pin and insert into the Firing Pin Housing.



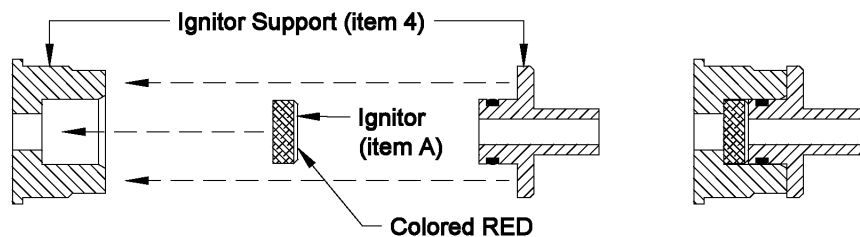
1.4 Install the O-rings (items #8 and 9) onto the Extended Time Body (item #1).



Note: Apply, in two or three places, some grease around the groove which holds the O-ring (item #9). This will help retain the O-ring during assembly.. This only applies to TC-043-3125-100.



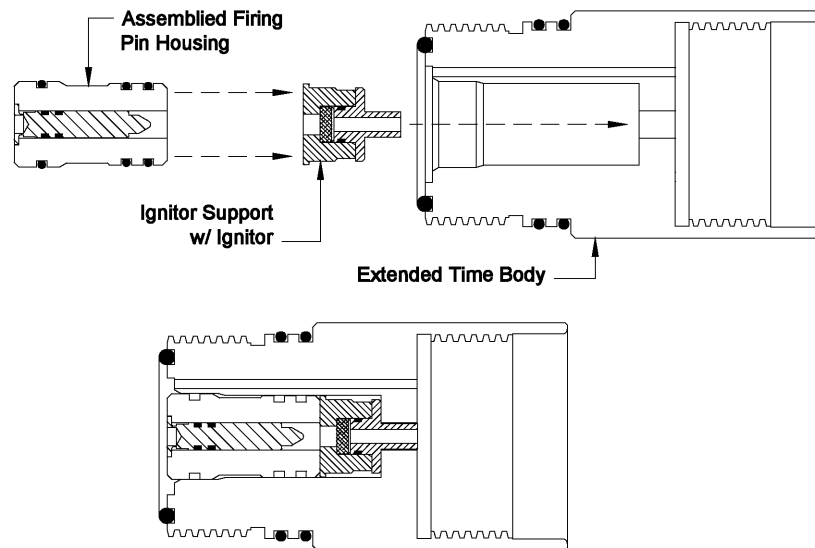
1.5 Install the Ignitor (item A) into the Ignitor Support Assembly (item #4).



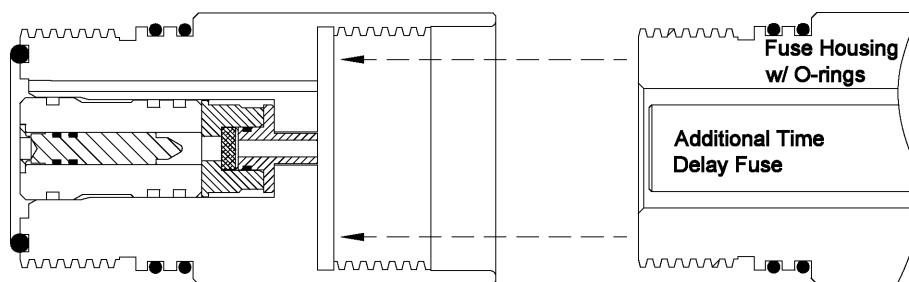


Note: The ignitor has lettering on one side and the other side is marked in red. The lettering faces the Firing Pin and the red side faces downward toward the time delay fuse.

1.6 Insert the **armed** Ignitor Support into the Extended Time Body. Apply grease to the O-rings of the assembled Firing Pin Housing and insert into the Extended Time Body, securing the Ignitor support in place.



1.7 The Extended Time Delay Hardware, TC-043-3125-100, is now **armed** and ready to be threaded onto the additional time delay fuse to be used.



1.8 Remember, for each additional 6 minute time delay fuse to be used, the tool must be accompanied by an Extended TD Hardware Sub and Ignitor.

Extended TD Hardware for the 6 Minute Delay Fuse

