



Kill Sub Technical Manual

MAN-PAT-120 (R00)

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.

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.

© 2009 Owen Oil Tools

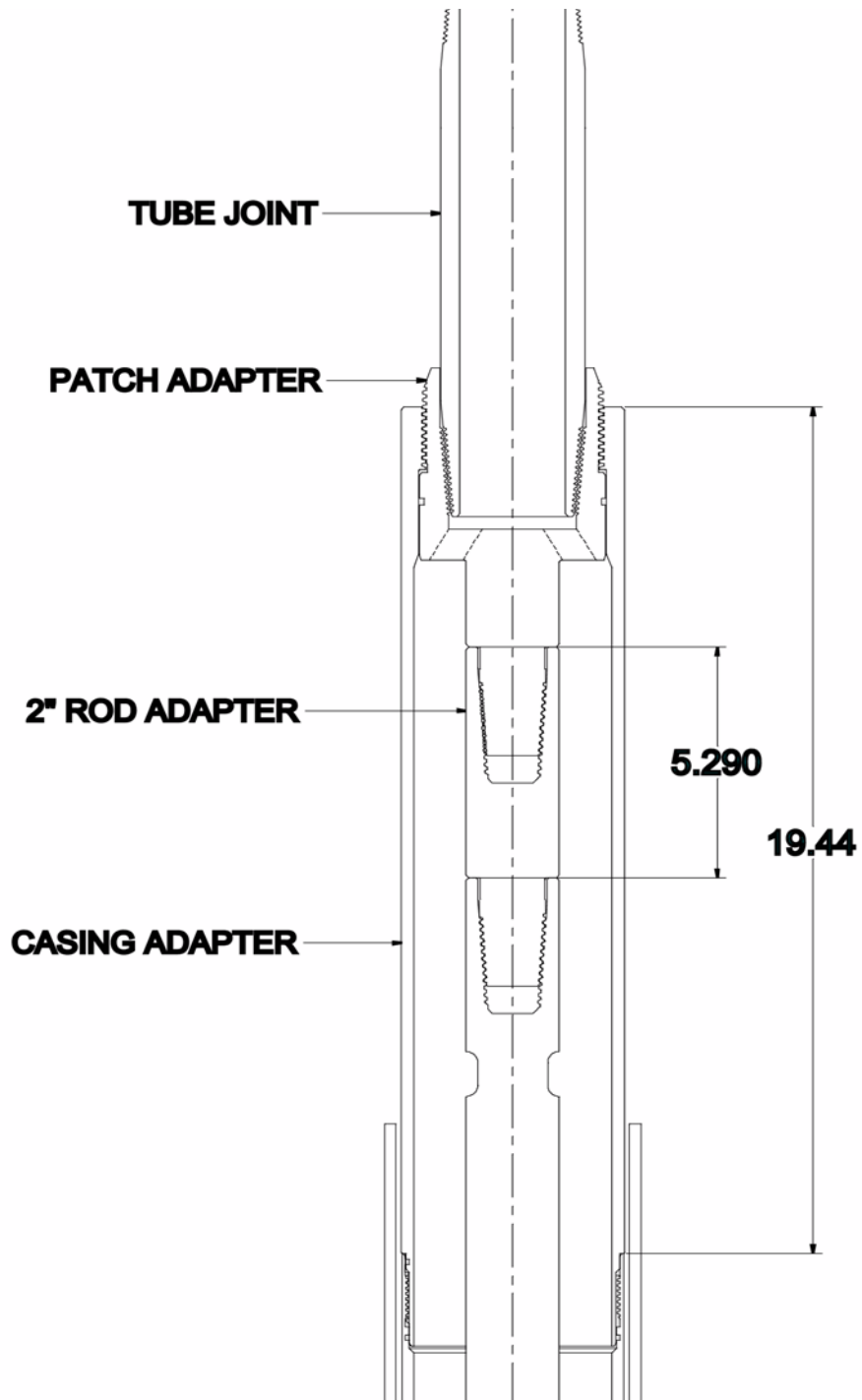




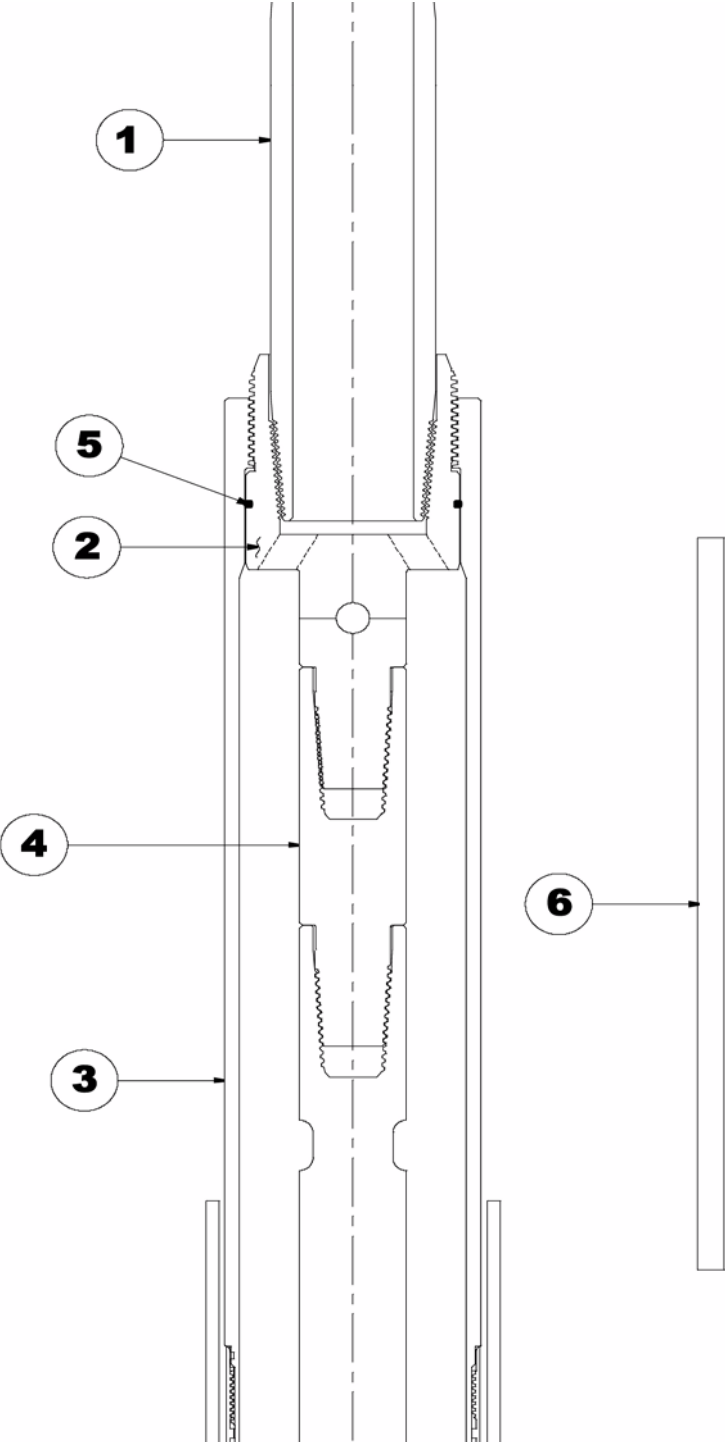
Table of Contents

Kill Sub Fishing Dimensions	1
Kill Sub Schematics	2
Kill Sub Bill of Materials	3
1.0 Pre-Assembly	5
2.0 Assembly	5
3.0 Kill Sub Recommended Procedures	6

Kill Sub Fishing Dimensions



Kill Sub Schematics



Kill Sub Bill of Materials

SIZE	ASSEMBLY	ITEM	QTY.	DESCRIPTION	O.A.L.	O.D.	I.D.
5-1/2" 14#	SIS-5500-001						
		1	1	2-7/8" TUBE JOINT	36.00	3.09	2.259
		2	1	PATCH ADAPTER	8.89	4.05	N/A
		3	1	CASING ADAPTER	21.56	4.79	3.71
		4	1	2" ROD ADAPTER	7.70	2.00	N/A
		5	1	O-RING			
		6	1	SUPPORT TOOL	15.00	0.50	N/A
7" 26#	SIS-7000-001						
		1	1	2-7/8" TUBE JOINT	36.00	3.09	2.259
		2	1	PATCH ADAPTER	8.89	5.25	N/A
		3	1	CASING ADAPTER	21.56	6.11	4.97
		4	1	2" ROD ADAPTER	7.70	2.00	N/A
		5	1	O-RING			
		6	1	SUPPORT TOOL	15.00	0.50	N/A
8-5/8" 32#	SIS-8625-001						
		1	1	2-7/8" TUBE JOINT	36.00	3.09	2.259
		2	1	PATCH ADAPTER	8.89	6.58	N/A
		3	1	CASING ADAPTER	21.56	7.50	6.28
		4	1	2" ROD ADAPTER	7.70	2.00	N/A
		5	1	O-RING			
		6	1	SUPPORT TOOL	15.00	0.50	N/A

1.0 Pre-Assembly



Warning: *Make sure all tool parts and components have been thoroughly cleaned or serious damage and/or injury could occur!*



Warning: *Personal Protective Equipment (PPE) such as steel toed footwear, safety glasses, etc..., should be worn at all times!*



Note: *Verify that the correct O-Ring redress kit and quantities are used as specified on the Bill Of Materials (for example, 5 each etc....). Lay out all redress kit components on a clean surface.*



Note: *Make sure to lubricate all O-Rings and threaded surfaces.*



Caution: *Make sure to wrench only on wrenching surfaces (knurled areas) provided! Always file wrench marks and burrs and clean off debris!*

2.0 Assembly

2.1 Install 1 O-Ring (item #5) onto the OD of the Patch Adapter (item # 2).

2.2 Place the 2" Rod Adapter (item #4) into a vise. Now screw the Patch Adapter into the Rod Adapter and make wrench tight.

2.3 Move the tool down in the vise to the Patch Adapter/Rod Adapter connection. Then, screw the Tube Joint (item #1) into the Patch Adapter (item #2) and make wrench tight.

2.4 If needed, install and tighten an EUE Coupling on top of the Tube Joint (item #1).

2.5 If needed, install an X-over to the EUE coupling to the required tubing size being used.



Note: *This complete assembly should be made up prior to running in the hole and be on or near the drill floor and readily available.*

3.0 Kill Sub Recommended Procedures

In the case of taking a kick or having to circulate while the patch is only partially assembled, do the following:

3.1 Land the patch on the support plate.

3.2 Slide the Casing Adapter (item #3) over the Kill Sub assembly and leave loose. Do not engage threads until step 3.7 .

3.3 Pick up the Kill Sub assembly with the rig elevators.

3.4 Now lift up the Casing Adapter until you can put the Support Tool (item #6) through the hole in the Patch Adapter (item #2). The Support Tool is now supporting the weight of the Casing Adapter.

3.5 Make up the Kill Sub assembly to the rods of the patch in the well.

3.6 Raise the patch assembly with the elevators and remove the support plate.

3.7 Lift up on the Casing Adapter (item #3) and take out the Support Tool (item #6), then thread the Casing Adapter onto the Kill Sub until it bottoms out and make wrench tight.

3.8 Lower the complete patch assembly into the well so as the top of the Kill Sub is below the BOP pipe rams.

3.9 Close the pipe rams on the tubing.