



# Kill Sub Technical Manual

MAN-PAT-120 (R00)

## Owen Oil Tools LP

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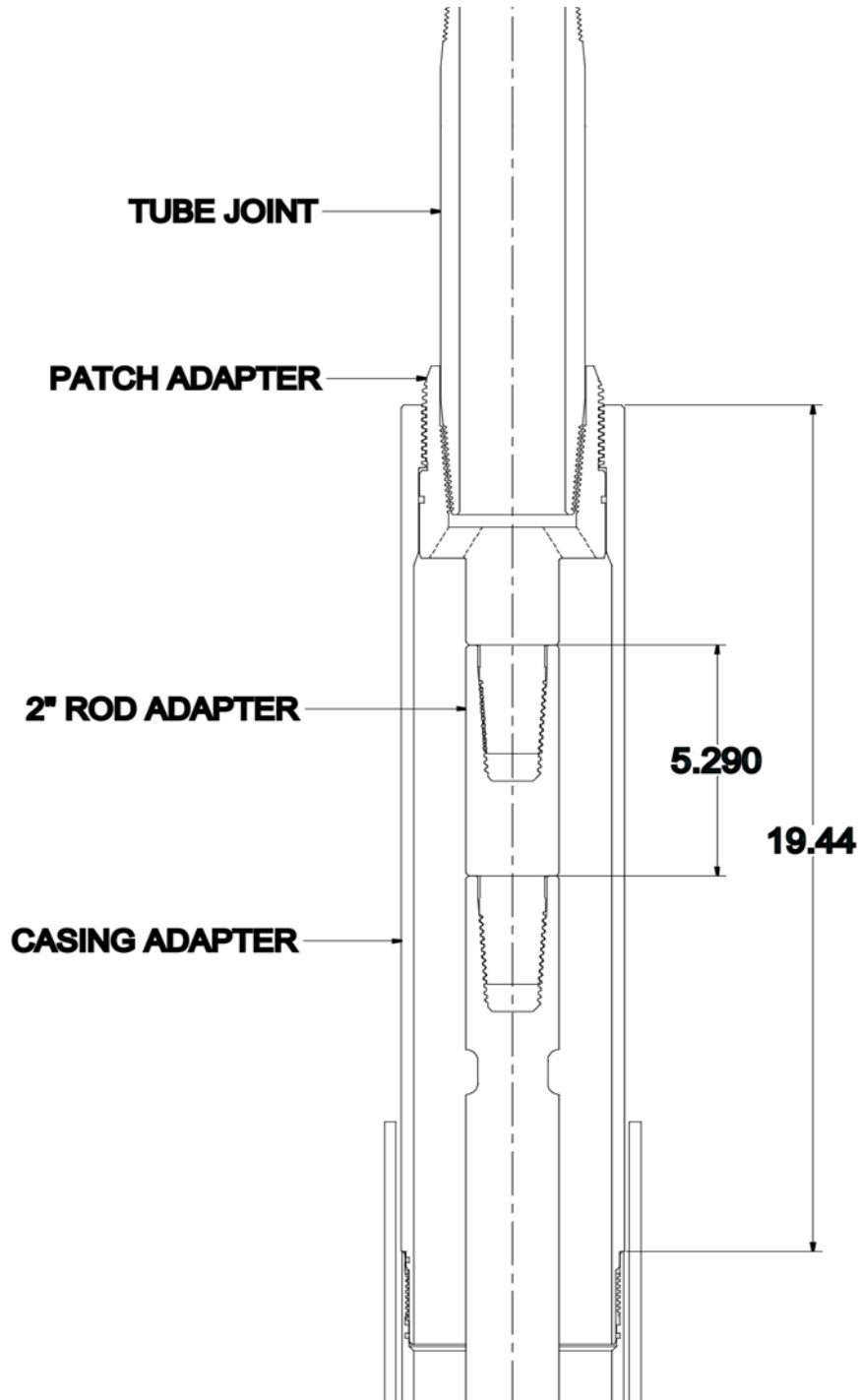


## Table of Contents

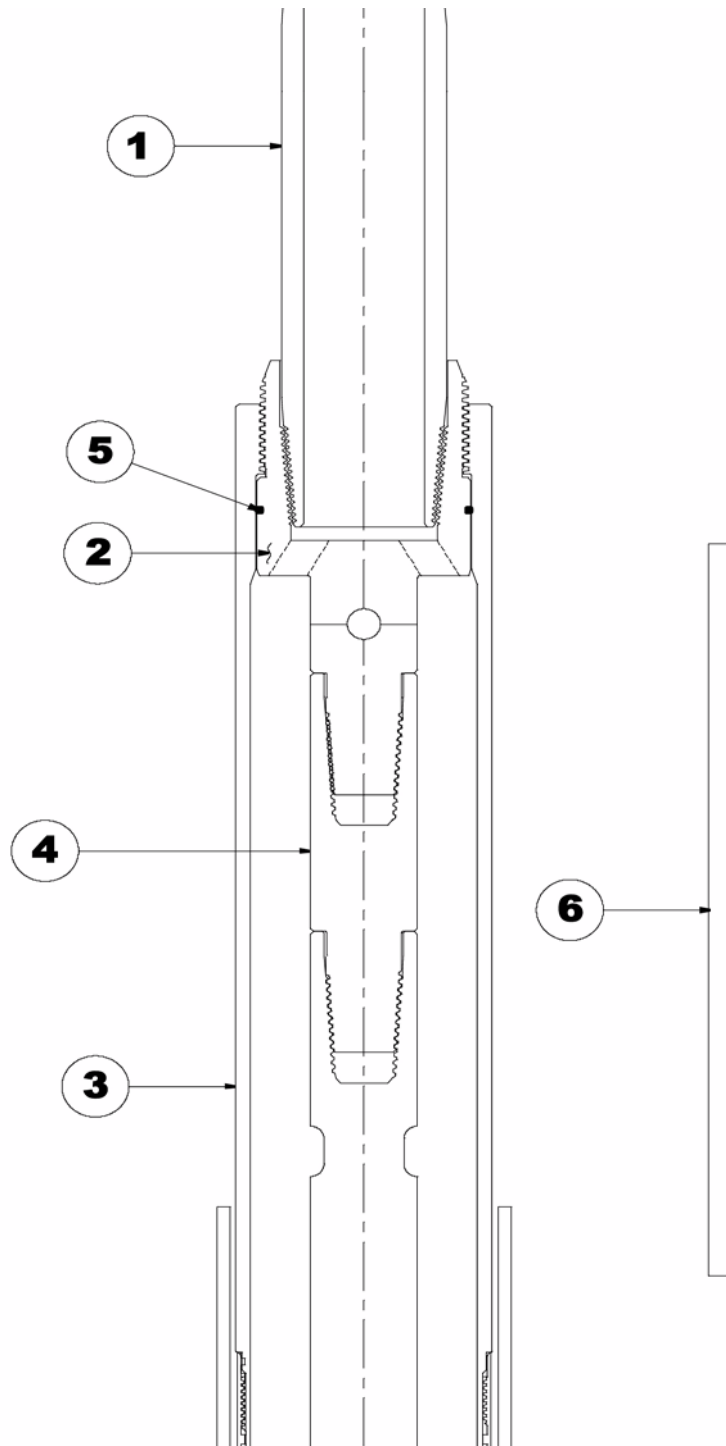
Kill Sub Fishing Dimensions .....	1
Kill Sub Schematics .....	2
Kill Sub Bill of Materials .....	3
1.0 Pre-Assembly .....	5
2.0 Assembly .....	5
3.0 Kill Sub Recommended Procedures .....	6



## 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.