page 1



Installation Procedure for TC-1A-EN Tubing Hanger

# **TC-1A-EN Tubing Hanger**

**Product Description** 

The TC-1A-EN Tubing Hanger is an extended neck mandreltype tubing hanger.

The seal element is compressed and activated via the lock-down pins in the tubing head. This function enables the hanger to be easily snubbed through a BOP / Frac stack into the tubing head bowl.

The hanger incorporates lower suspension threads, upper lift threads, and internal back pressure valve threads.

Control line ports can be added to facilitate chemical injection or subsurface valve operation.

#### **SCOPE**\*

The hanger and seal element are available in a wide variety of materials for all well applications. \* Must See Delivery Ticket.

#### **PURPOSE**

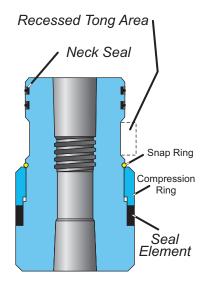
This procedure must be followed in order to properly install the tubing hanger and the Christmas tree.

PRODUCT DESCRIPTION	1
SCOPE	1
PURPOSE	1
REQUIRED EQUIPMENT	2
A. INSTALLATION PROCEDURE	4
B. REMOVE THE BOP	6
C. INSTALL THE CHRISTMAS TREE	7
D. TEST PROCEDURE	9
E. REVISION LOG	11



#### **Required Forms:**

- **1** DELIVERY TICKET
  - \* Check your Delivery Ticket and verify that you have all the components listed.
- 2 FIELD SERVICE ORDER
- 3 JSA



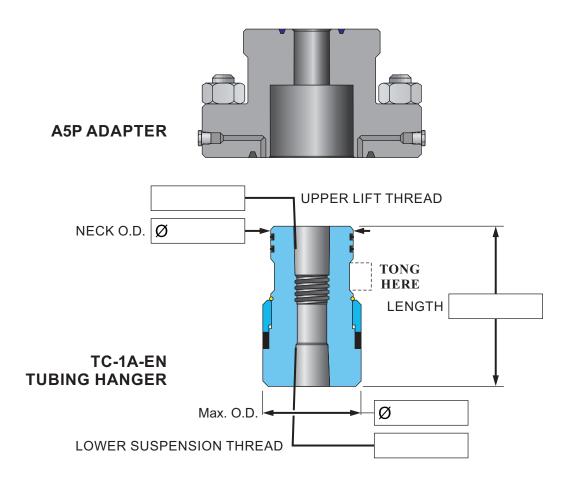
Cross Sectional View

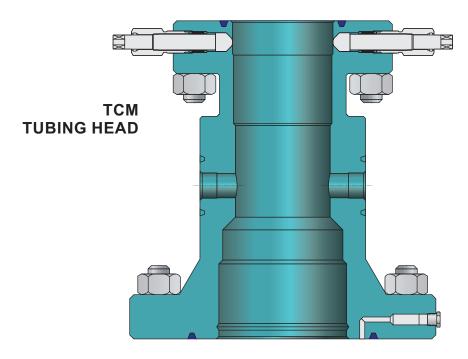


page 2

AIN EQUIPMENT	
IBING HANGER SPECIFICS	
	TC-1A-EN
	Tubing Hanger
EQUIRED SPARE PARTS	
OOLS	









#### A. Installation Procedure:

- **1** □ Run the tubing to the specified depth and space-out appropriately.
- **2** ☐ Examine the Tubing Hanger.

## Verify the following:

- The seal element is clean and in good condition.
- All bolts and / or snap rings are properly secured.
- The neck seals are properly installed and in good condition.
- All threads are clean and undamaged.

**3** □ Install the Tubing Hanger on the last joint of tubing to be run.

**Note:** Follow the thread manufacturer's recommendations for pipe dope or thread compounds.

Take care to tong ONLY on the specified section of the hanger neck.

# Tighten to thread manufacturer's specs.

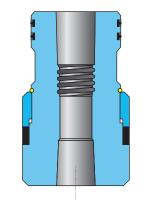
**4** ☐ Make up a landing joint to the lift threads in the Tubing Hanger.

**Note:** Follow the thread manufacturer's recommendations for pipe dope or thread compounds.

Tighten to the thread manufacturer's minimum torque specs.

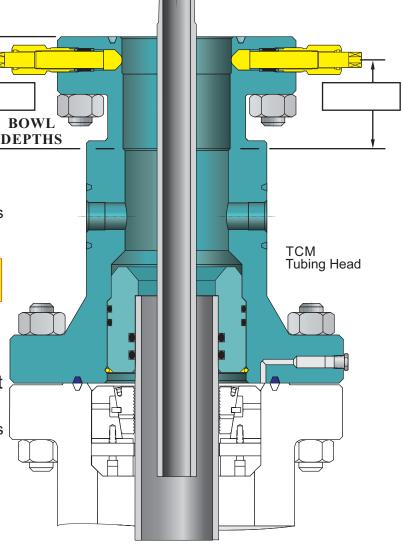
**5** □ Verify that all of the lockdown screws are **fully retracted**.





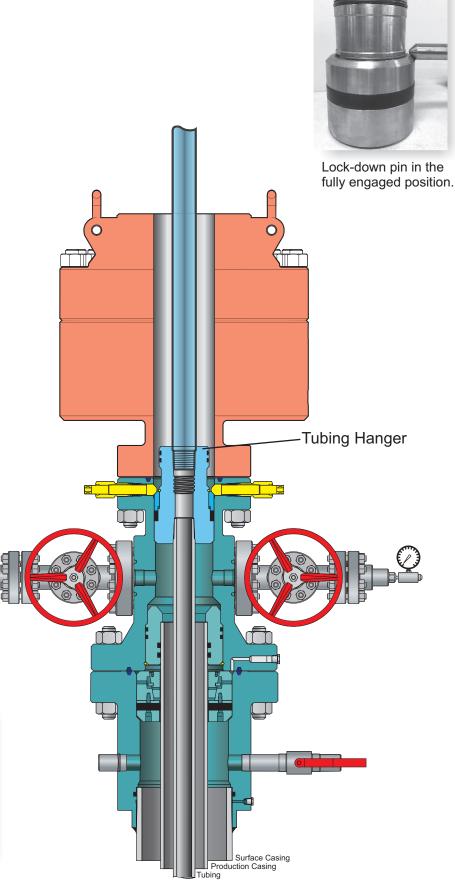


TC-1A-EN
Tubing Hanger



- **6** □ Pick up the tubing string and remove the floor slips.
- **7** □ Verify that there are no obstructions in the stack.
- **8** ☐ Apply oil or light grease to the O.D. of the hanger.
- 9 ☐ Lower the tubing string so the Tubing Hanger lands in the tubing head bowl. Slack off all weight.
- **10** □ Run in the lock-down pins in an alternating pattern until tight.
- 11 ☐ Verify pin engagement at this time or verify proper hanger location via the optional inspection port.
- 12 ☐ Remove the landing joint and install the proper Back Pressure Valve. Note:

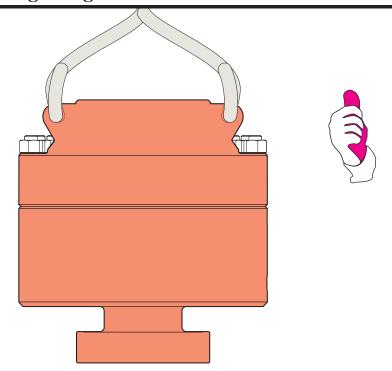
If the Tree is to be tested, install a 2-way check valve instead.

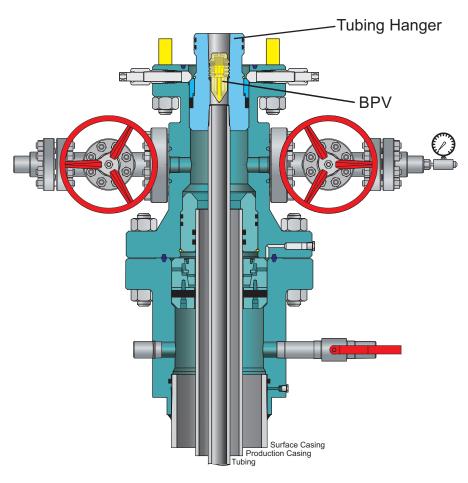


page 6

## **B.** Remove the BOP

**13** □ Release all pressure and remove the BOP stack.





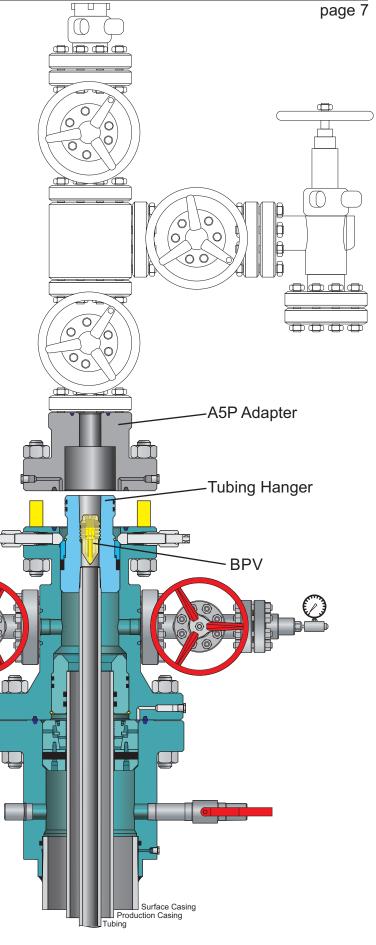


## C. Install the Christmas Tree

**14** □ Examine the **A-5P Adapter** on the tree assembly.

Verify that the seal pocket and ring groove are clean and undamaged.

If the Tree is to be tested, install a 2-way check valve.



page 8

- **C.** Installing the Tree (Continued)
- **15** □ Pick up the Tree assembly and position it over the Tubing Hanger.

Ensure the Tree is straight; level, and properly secured.

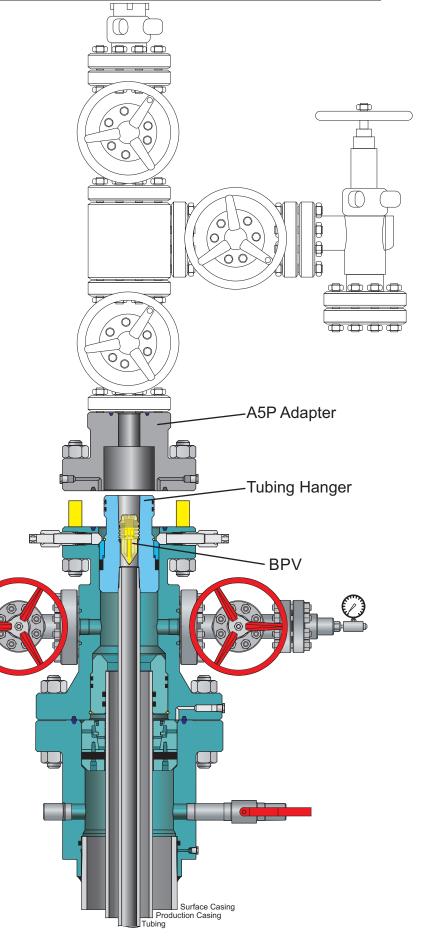
- **16** □ Clean the Tubing Hanger neck, A5P seal pocket and mating ring grooves.
- **17** □ Apply oil or light grease to the neck seals and the seal pocket in the A-5P adapter.
- **18** ☐ Install a new ring gasket and fill the void with clean oil.

Do not allow oil into the ring groove.

**19** ☐ Slowly lower the Tree assembly over the Tubing Hanger neck until it seats on the ring gasket.

Ensure the Tree remains level at all times to avoid damaging the neck seals.

20 ☐ Install the studs and tighten in an alternating pattern to the recommended API torque specs.

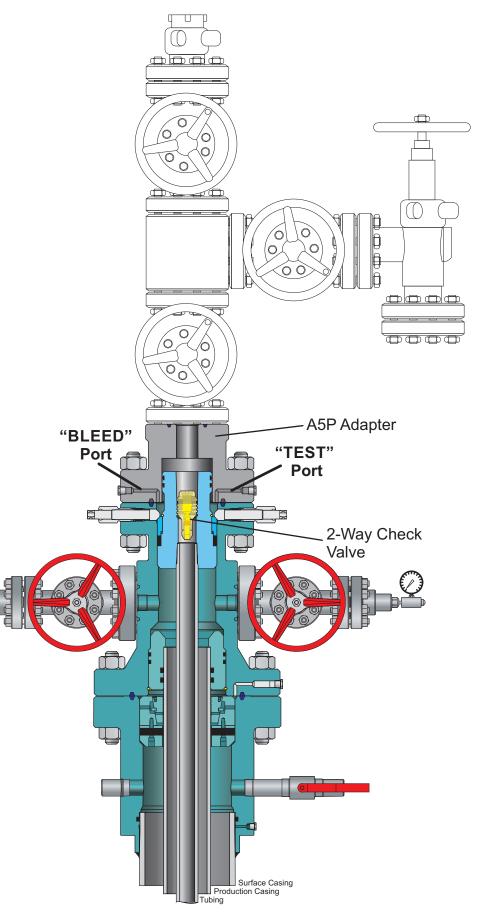


#### **D.** Test Procedure

21 ☐ Install your test pump to the test fitting and inject fluid, pressuring to the maximum rated pressure of the flange.

Never exceed 80% of Tubing Collapse.

- 22 ☐ Hold the test pressure for 15 minutes or as required by the Well Site Supervisor.
- 23 After a satisfactory test is achieved, bleed off pressure and remove your test pump.
- 24 Attach a bleeder tool and remove internal pressure from the test void. Re-install the dust cap on the test fitting.
- 25 ☐ At this time, the Tree can be internally tested against the 2- Way Check valve.
- 26 ☐ Bleed off test pressure and remove the 2-way check valve.





Revision Log							
Revision	Date		Details				
0	March 4, 2015	Initial Relea	ase				
ENGINEERING							
Approval Log  Approved By:  SIGNATURE  PRINT NAME							
Revision		reviewer NAME	REVIEWER TITLE	DATE			
	0						

**Date of Printing** 

