FH™ 2125 HYDRAULIC SETTING TOOL

The Alpha 2125 FH™ Hydraulic Setting Tool is designed to run and set the Alpha FH One-Trip Cement Retainer then squeeze or spot cement in one trip. It is recommended for deviated wells. No rotation is required; simply run tool to the predetermined setting depth, drop ball, then pressure up either the drill pipe, tubing or coil tubing to shear release. The 2125 FH™ Hydraulic Setting Tool sets the FH Cement Retainer, unlocks the ball seat, closes the circulation ports, opens the bypass and compensates setting travel automatically.

Applications:
Designed to run and set the Alpha FH™ One-Trip Cement Retainer then squeeze or spot cement in one-trip. It is recommended for deviated wells where conditions are not suitable for rotating or wireline set cement retainers.

Features:
• One-trip system
• Simple operation and easy clean up makes it ideal for applications on drill pipe, tubing or coil tubing
• No rotation required

TOOL O.D.	PART NUMBER	TOP CONNECTION	MAX. STROKE LENGTH	SETTING AREA	MAX. APPLIED PRESSURE
2.125	019-2125-200	1-½" MT Box	5.92”	3.88 in^2	5,000 psi

CEMENT RETAINERS
Utilizing the Alpha FH Cement Retainer with the 2125 FH™ Setting Tool, the Retainer can be run, set and squeezed through in one-trip using the Alpha FH™ Hydraulic Setting Tool. No rotation is required. The sliding sleeve valve located inside the cement retainer is controlled by picking up 2 inches to close and setting down weight to open then squeeze. Cement can also be placed on top of the cement retainer. The 2125 FH™ Setting Tool is compatible with the following Alpha FH™ Cement Retainers:

Part Number	Setting Sleeve Part Number
005-2187-500	019-2187-247
005-2720-500	019-2720-247
005-2750-500	019-2750-247
005-3125-500	019-3125-247

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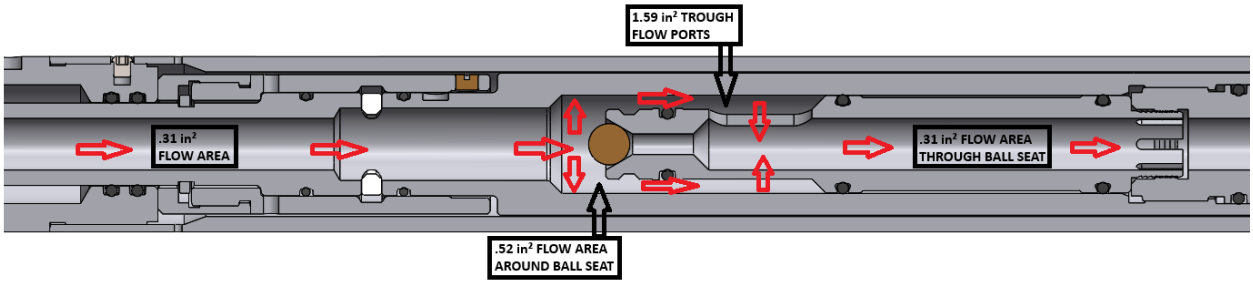
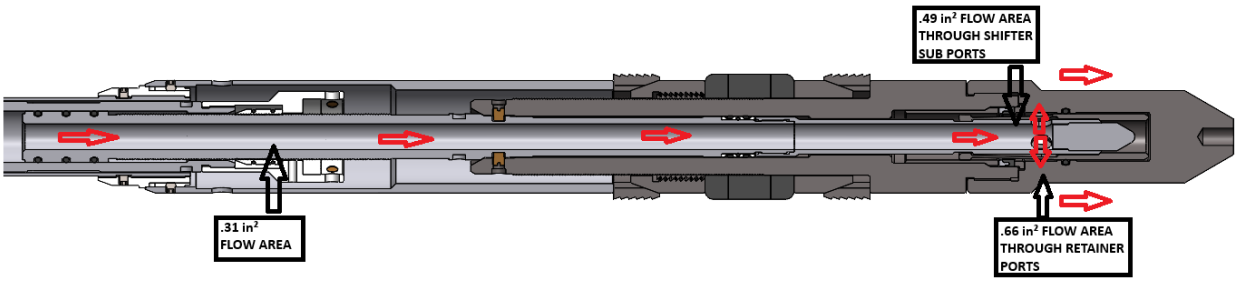
HOW THE 2125 FH™ SETTING TOOL WORKS

The ball lands on the ball seat which diverts the well fluid into the three hydraulic setting chambers (3.88 in^2 total piston area). The workstring is pressurized the to establish differential at the tool. That pressure is held for 5 minutes to allow the cement retainer packing system to conform to the tubing ID. The pressure in the workstring is then increased in order to shear the Shear Screws that connect to the cement retainer (this fully sets the cement retainer and disconnects the Setting Tool from the Cement Retainer). The FH™ Hydraulic Setting Tool continues to stroke and at the end of its 5.92 inches stroke it unlocks the ball seat by shearing the shear screws which positions an undercut over the ball seat locks. These locks are tapered so they cannot enter the cement flow path. The ball seat is now free to move downward, close circulation ports and latch into the tandem sub. The ball seat latch keeps the ball seat from moving upward during the reverse circulation process which keeps the flow path the same as the ID of the Hydraulic Setting Tool.

FLOW PATH AROUND BALL SEAT



FLOW PATH THROUGH CEMENT RETAINER



Min. Flow Area	Max. Recommended Flow Rate
.31 in^2	1 BPM

The stinger remains pinned to in the cement retainer body, unaffected by the setting force because the stroke compensation sleeve moves independently from the stinger. The squeeze operation should be performed then apply overpull to remove stinger from cement retainer. See the operational illustration on next page:

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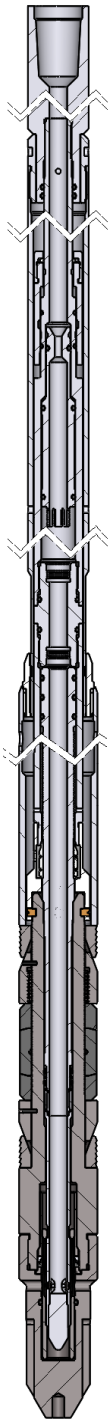
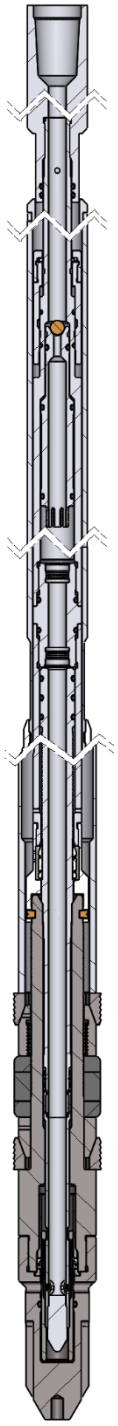
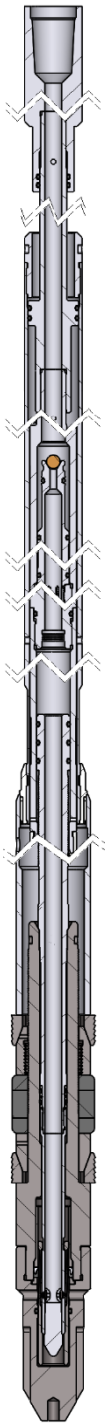


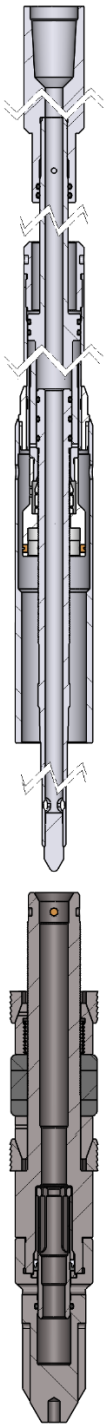
RUN IN POSITION VALVE OPEN



DROP BALL & PRESSURE WORKSTRING TO ANCHOR RETAINER



INCREASE PRESSURE TO OPEN BYPASS



PULL TENSION & RELEASE FROM RETAINER

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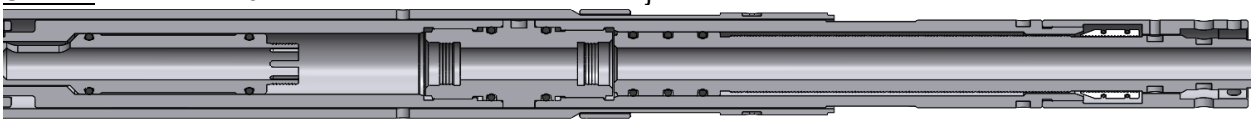
The installation of the FH™ Cement Retainers onto the 2125 FH™ Setting Tool differs per each Retainer size.

ASSEMBLY PROCEDURE FOR 2187 RETAINERS

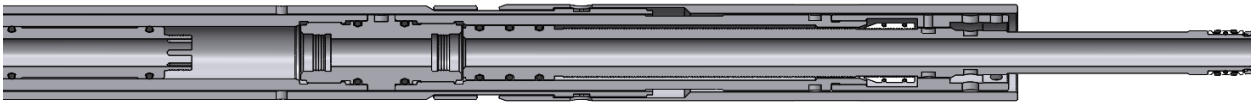
REQUIRED PARTS FOR ASSEMBLY OF 2187 FH RETAINERS	
PART NAME	**PART NUMBER**
SETTING SLEEVE	019-2187-247

Since the Retainer is so small, it is recommended that the Retainer is assembled to the Setting Tool off the rig floor in a vice or on stands.

STEP 1: Thread the Jam Nut off the threads off the Adjuster Sleeve.



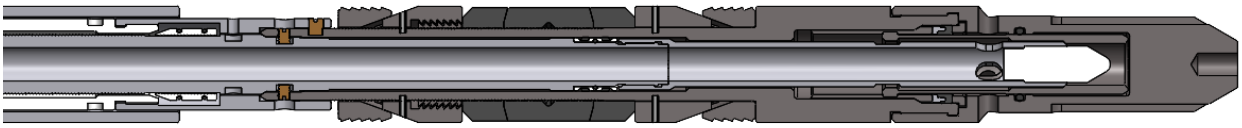
STEP 2: Thread the Setting Sleeve (019-2187-247) onto the Adjuster Sleeve and thread back far enough to expose the tapped holes in the Latch Housing.



STEP 3: Grease to all parts from the to the stinger on the seal down.

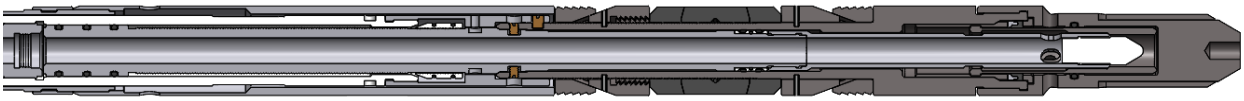
STEP 4: Install the setting tool into the seal bore of the Retainer until the Retainer shoulders onto the Setting Tool. (A mallet may be required to cycle the Sliding Valve of the Retainer inward).

STEP 5: Rotate as needed to align the two thru holes in the Latch Housing of Setting Tool with two tapped holes in the Body of the Retainer. Install the two 5/16 -24 dog point Brass Shear Screws into the tapped holes of the Body until they bottom out on the Stinger/Stroke Piston then back off ¼ turn. Install the five other 5/16 -24 dog point Brass Shear Screws into the tapped holes of the Latch Housing until they bottom out on the Body of the Retainer then back off ¼ turn.



STEP 6: Thread the Setting Sleeve down until it touches Top Slip of the Retainer. Back the Setting Sleeve off slightly to align the closest slot in Adjuster Sleeve with the tapped holes in the Setting Sleeve and install two ¼-20 x ¼ long socket head set screws hand tight. ***NOTE: THE TOP SLIP MUST BE FREE TO ROTATE***.

STEP 7: Thread the Jam Nut down until it touches Setting Sleeve and tighten wrench tight with a 24" wrench.



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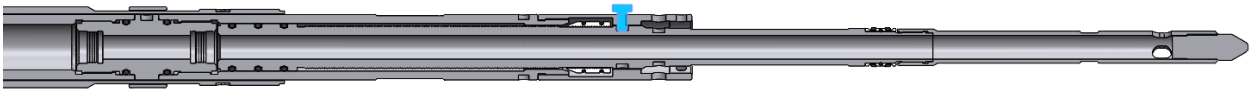
ASSEMBLY PROCEDURE FOR 2720/2750/3125 RETAINERS

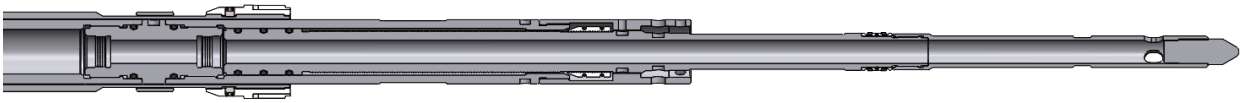
REQUIRED PARTS FOR ASSEMBLY OF 2720/2750/3125 FH RETAINERS & 2125 FH™ SETTING TOOL			
Cement Retainer	**Setting Sleeve**	**Latch Housing**	**Adjuster Nut**
005-2720-500	019-2720-247	019-2750-240	019-2750-237
005-2750-500	019-2750-247	019-2750-240	019-2750-237
005-3125-500	019-3125-247	019-2750-240	019-2750-237

Since the Retainer is so small, it is recommended that the Retainer is assembled to the Setting Tool off the rig floor in a vice or on stands.

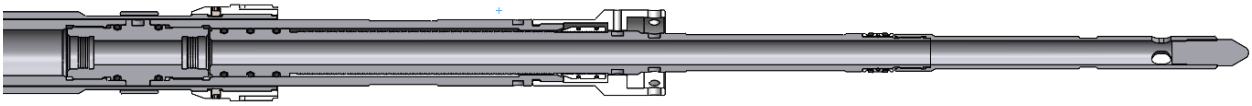
STEP 1: Remove the shipping bolt and the standard Latch Housing from the Setting Tool.



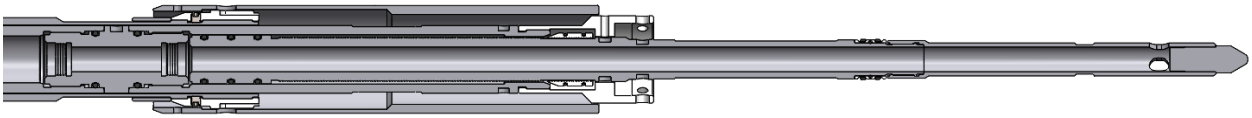
STEP 2: Thread on the Adjuster Nut and align the ¼ -20 tapped holes in the Adjuster Nut with the milled slots in the Adjuster Sleeve. Install the qty-2 ¼-20 X ¼ long Set Screws into the tapped holes in the Adjuster Nut hand tight.



STEP 3: Remove the Latch Housing (item 19) from the tool and thread the special 2750 Latch Housing (019-2750-240) onto the Stroke Compensation Housing until it fully bottoms out.

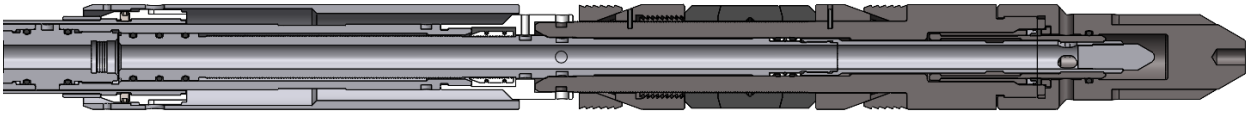


STEP 4: Thread the Setting Sleeve onto the Adjuster Nut and thread back far enough to expose the tapped holes in the Latch Housing.



STEP 5: Grease to all parts from the to the stinger on the seal down.

STEP 6: Install the setting tool into the seal bore of the Retainer until the Retainer shoulders onto the Setting Tool. (A mallet may be required to fold the Sliding Valve of the Retainer inward).



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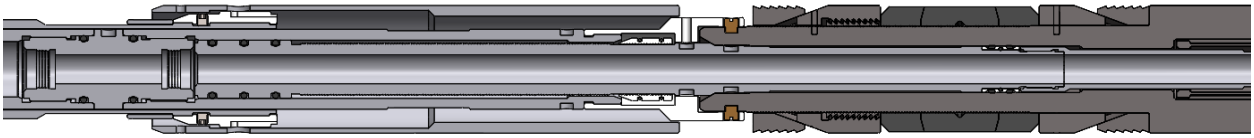
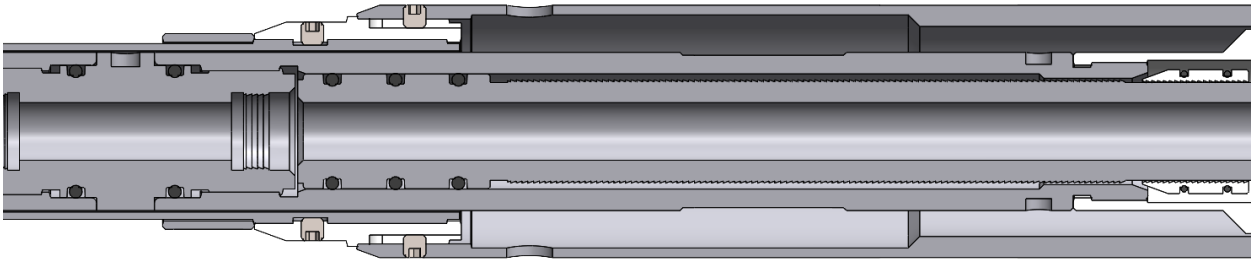
STEP 7: Rotate as needed to align the two thru holes in the Latch Housing of Setting Tool with two tapped holes in the Body of the Retainer. Install the two 5/16 -24 dog point Brass Shear Screws into the tapped holes of the Body until they bottom out on the Stinger/Stroke Piston then back off ¼ turn.



STEP 8: Install the six other 5/16 -24 dog point Brass Shear Screws into the tapped holes of the Latch Housing until they bottom out on the Body of the Retainer then back off ¼ turn.

STEP 9: Thread the Setting Sleeve down until it touches Top Slip of the Retainer. Back the Setting Sleeve off slightly to align the closest slot in Adjuster Sleeve with the tapped holes in the Setting Sleeve and install two ¼-20 x ¼ long socket head set screws hand tight. ***NOTE: THE TOP SLIP MUST BE FREE TO ROTATE***.



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RUNNING PROCEDURES

RUNNING GUIDELINES

1. Use a casing scraper before running any equipment in the well to remove scale and other materials from the casing wall.
2. Circulate the well to clean the well of debris and junk.
3. Drift the casing ID 80-100 feet below setting depth with a full OD gage ring and junk basket to ensure no restrictions or debris exist.
4. Use the correct FH™ Sleeve Valve Cement Retainer for the temperature, pressure, casing size, casing weight and environment.
5. Casing should have 100% cement bond before running the cement retainer in the well.
6. Never set the retainer in a casing collar or a location where milling has occurred.
7. Always set the retainer in static well conditions (no fluid or gas movement).
8. When perforating, the cement retainer should be protected with a minimum of ten feet of cement dumped directly on top of the retainer. Cement should be given sufficient time to harden before perforating.
9. Perforating should not be done closer than fifty feet of cement retainer without putting a minimum of 10 feet of hard cement on top of retainer.

OPERATION PROCEDURE

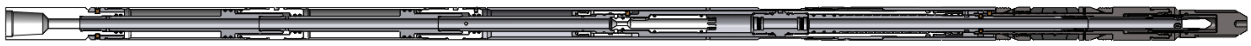
1. Use tubing/casing scraper before running any equipment in the well to remove scale and other materials from the tubing/casing wall.

NOTE: Skipping this step may cause the cement retainer to not properly grip the tubing/casing wall.

2. Circulate well to clean well of debris and junk.
3. Drift tubing/casing ID 80-100 feet below setting depth with full OD gage ring and junk basket to ensure no restrictions or debris exist.
4. Use the correct Alpha FH™ SVCR for the temperature, pressure, tubing size, tubing weight and environment.
5. Run the Alpha FH™ Hydraulic Setting Tool & Cement Retainer several feet below the setting depth.

NOTE: The FH HST circulation ports located below the Ball Seat and that the stinger is holding the cement retainer valve in the open position will allow the workstring to fill while running in the hole.

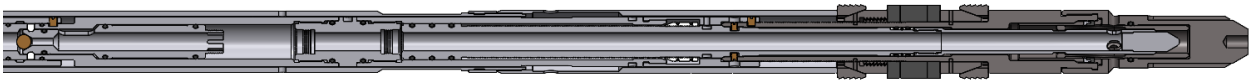
6. Pick up slowly to setting depth to remove slack from tubing string.



7. Drop the provided ½" diameter Brass Ball and slowly pump down until the Ball has seated.

NOTE: A pressure increase will be observed upon seating the Ball.

8. Slowly pressure the workstring to establish a 1,000 *psi* (1,500 *psi* max.) differential pressure inside the workstring "at the tool" to begin the setting sequence.
9. Continue pressuring workstring to establish a 2,000 *psi* differential pressure inside the workstring "at the tool" to anchor the cement retainer against the casing wall and hold the pressure for 5 minutes.



10. Continue pressuring workstring to establish a 2,500 *psi* (3,000 *psi* max) differential pressure inside the workstring "at the tool" to complete the set (weight indicator will drop off). Pressure workstring again

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to 500 *psi* differential pressure inside the workstring "at the tool" to unlock the ball seat (the pressure will bleed off on its own). If the pressure does not bleed off pick up the Workstring 4" at tool to allow the Ball Seat to shift downward.

NOTE: It is not recommended to pick up out of cement retainer prior to squeezing due to double flapper safety valve may cause HST to become hydraulically locked and prevent re-entry in cement retainer.

11. Set down weight is required on the Cement Retainer to perform a maximum 5,000 *psi* squeeze operation, apply the corresponding set down weight per chart below and start squeeze operation.

Squeeze Pressure (*psi*)	Set Down Weight Required (*lbs*)
1,000	785
2,000	1,570
3,000	2,355
4,000	3,140
5,000	3,925

TROUBLESHOOTING

If the 2125 FH™ Setting Tool does not release from the Cement Retainer by hydraulic pressure as in Step 10: Pressure workstring to establish a 2,500 *psi* (3,000 *psi* max.) differential pressure inside the tubing "at the tool" to release from cement retainer.

If unsuccessful, then bleed off pressure and reverse circulate capacity of the tubing (+10 BBL) to remove debris that may be inside the tubing and tool. Circulate Ball back to the Ball Seat and attempt pressuring tubing again to 3,000 *psi* max. Note: The Ball Seat cannot be pumped out until the setting stroke has been completed. Carefully remove workstring from well.

If the FH™ Setting Tool still does not release does not disconnect from CR

Pull 2,000 pounds over tubing weight and pressure workstring to establish a 2,500 *psi* (3,000 *psi* max) differential pressure inside the tubing "at the tool" to release from cement retainer.

If unsuccessful, then bleed off pressure, return tubing to the neutral point and reverse circulate capacity of the tubing (+10 BBL) to remove debris that may be inside the tubing and tool. Circulate Ball back to the Ball Seat and attempt pressuring tubing again to 3,000 *psi* max. Note: The Ball Seat cannot be pumped out until the setting stroke has been completed.

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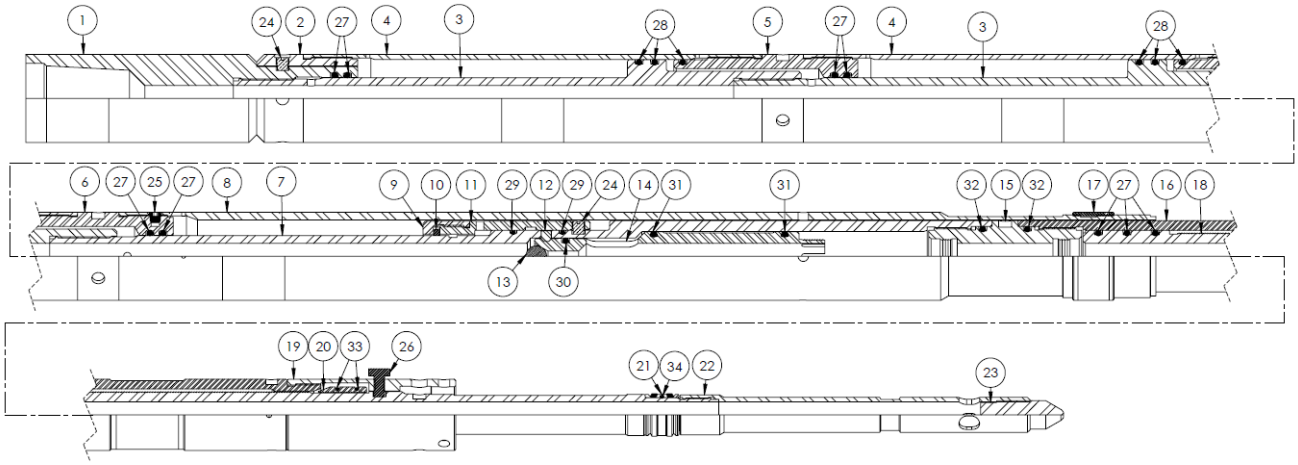
2125 FH™ SETTING TOOL PARTS LIST



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	019-2125-220	TOP SUB	1	13	019-2125-236	.500 BRASS BALL	1	25	250S20X250	1/4 -20 X .25 SET SCREW	1
2	019-2125-221	CYLINDER CAP	1	14	019-2125-228	BALL SEAT	1	26	250H20X500	1/4-20 x 1-1/2" Bolt	1
3	019-2125-223	PISTON	2	15	019-2125-242	TANDEM SUB	1	27	000-214N-090	214 O-RING	9
4	019-2125-222	CYLINDER	2	16	019-2125-243	STROKE COMPENSATING	1	28	000-223N-090	223 O-RING	6
5	019-2125-224	LOWER CONNECTOR	1	17	019-2125-251	JAM NUT	1	29	000-121N-090	121 O-RING	2
6	019-2125-225	LOWER CONNECTOR	1	18	019-2125-244	STINGER/ STROKE	1	30	000-208N-090	208 O-RING	1
7	019-2125-227	BALL SEAT HOUSING	1	19	019-2125-240	LATCH HOUSING	1	31	000-213N-090	213 O-RING	2
8	019-2125-226	ADJUSTER SLEEVE	1	20	019-2125-241	STINGER LATCH	3	32	000-217N-090	217 O-RING	2
9	019-2125-231	LOCK RETAINER NUT	1	21	019-2125-233	STINGER MOLDED SEAL	1	33	000-025N-090	025 O-RING	2
10	019-2125-232	SNAP RING	1	22	019-2125-234	SHIFTER SUB	1	34	000-019N-090	019 O-RING	1
11	019-2125-230	LOCK RETAINER	1	23	019-2125-235	SHIFTER SUB GUIDE	1				
12	019-2125-229	BALL SEAT LOCK	2	24	062-4500-127	SHEAR SCREW	3				

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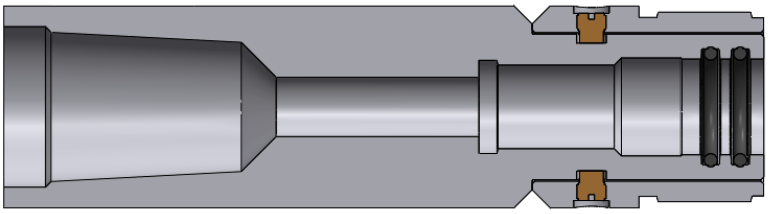
ASSEMBLY INSTRUCTIONS FOR 2125 FH™ SETTING TOOL

Anti-galling compound should be used on all threads. Lithium grease or equivalent should be used on all O-rings and sealing surfaces. To avoid damage to parts, use a soft jaw vise and strap wrenches when tightening connections. Wrench on knurled areas or utilize spanner holes. File away wrench marks.

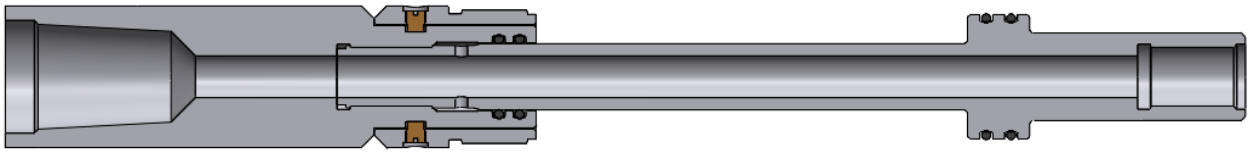
NOTES:

- Spanner wrench tight means hand tight then striking spanner handle with rubber mallet two or three times.
- Wrench tight means putting your weight on the end of a 36" pipe wrench.
- Screwdriver tight means hand tight with a medium blade 6" long screwdriver.

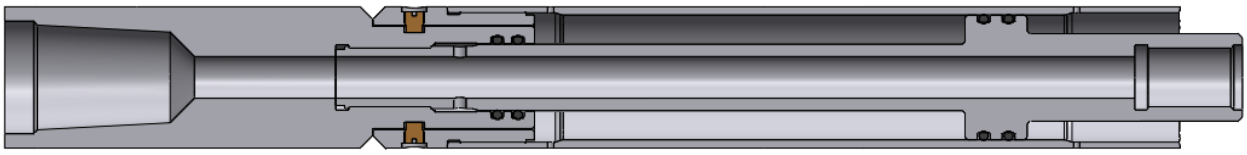
1. Place Top Sub (item 1) in vise at box connection.
2. Install (2) 214 O-Rings (item 27) into Top Sub.
3. Slide Cylinder Cap (item 2) on Top Sub (item 1) then align holes. Install two (2) Brass Shear Screws (item 24) screwdriver tight then back-off 1/8 turn.



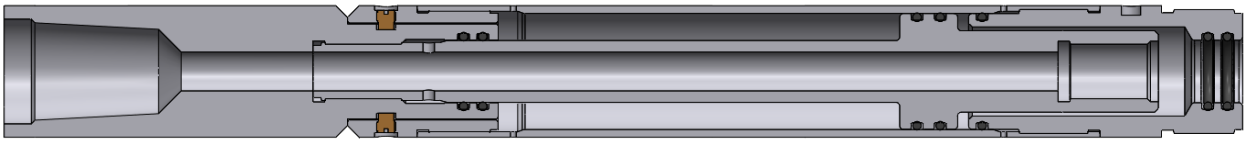
4. Install (2) 223 O-Rings (item 28) onto Piston (item 3).
5. Screw Piston (item 3) into Top Sub and wrench tight. Lubricate entire Cylinder I.D. with grease.



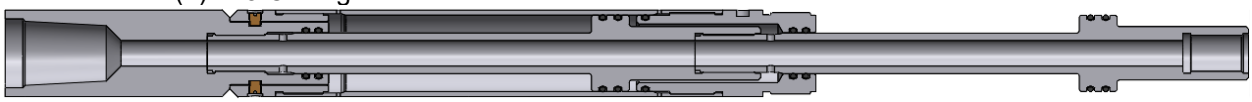
6. Slide Cylinder (item 4) over Piston and screw Cylinder onto Cylinder Cap. Make strap wrench tight.



7. Install (1) 223 O-Ring (item 28) onto Lower Connector (item 5).
8. Install (2) 214 O-Rings (item 27) into Lower Connector.
9. Screw Lower Connector into Cylinder and make spanner wrench tight.



10. Screw 2nd Piston (item 3) into 1st Piston and wrench tight. Lubricate entire Cylinder I.D. with grease.
11. Install (2) 223 O-Rings onto 2nd Piston.



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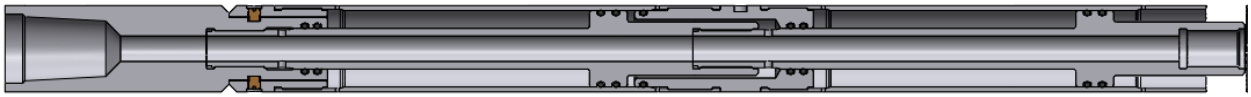
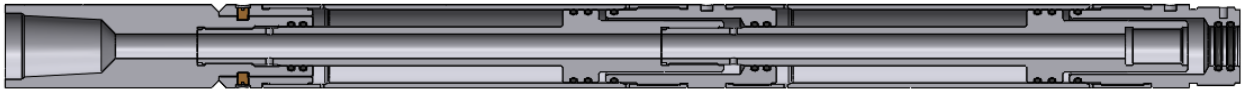
12. Slide 2nd Cylinder over Piston and screw Cylinder onto Lower Connector. Make strap wrench tight.

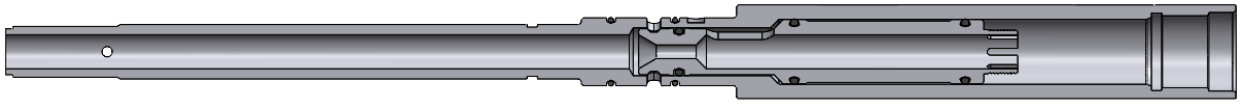


13. Install (1) 223 O-Ring onto 2nd Lower Connector.
14. Install (2) 214 O-Rings into 2nd Lower Connector.
15. Install Lower Connector (item 6) into second Cylinder (item 4)

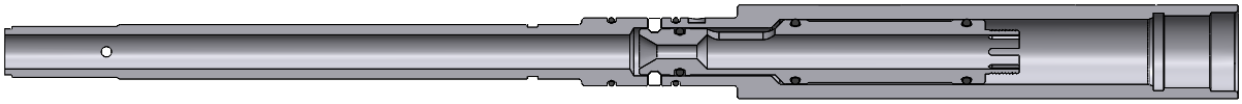


16. Install (1) 208 O-Ring (item 14) onto Ball Seat (item 13).
17. Install (2) 213 O-Rings (item 14) onto Ball Seat.
18. Install (2) 121 O-Rings (item 9) onto Ball Seat Housing
19. Slide Ball Seat inside Ball Seat Housing (item 7) as far as possible by hand, then with the aid of a 1/2" diameter x 36" long steel rod push the Ball Seat in place with a rubber mallet.

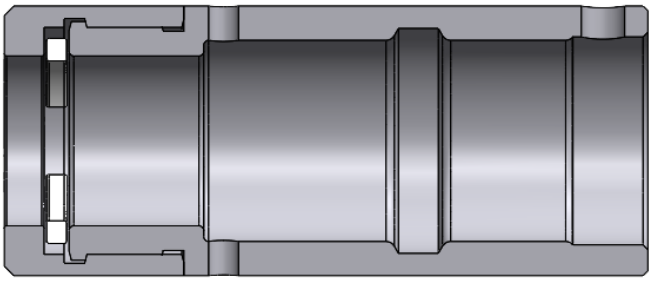
NOTE: Ball Seat is in place when the Ball Seat groove can be viewed through windows in Ball Seat Housing.



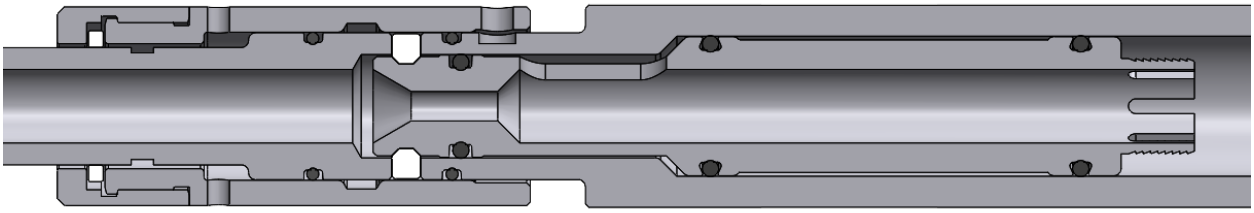
20. Pack windows with grease and install (2) Ball Seat Locks (item 12).



21. Sandwich Snap Ring halves (item 10) between Screw Lock Retainer Nut (item 9) and Lock Retainer (item 11) and thread together wrench tight.



22. Slide Lock Retainer over upper end of Ball Seat Housing and up to the first O-ring. Align tapped hole in Lock Retainer with flat bottom hole in Ball Seat Housing.



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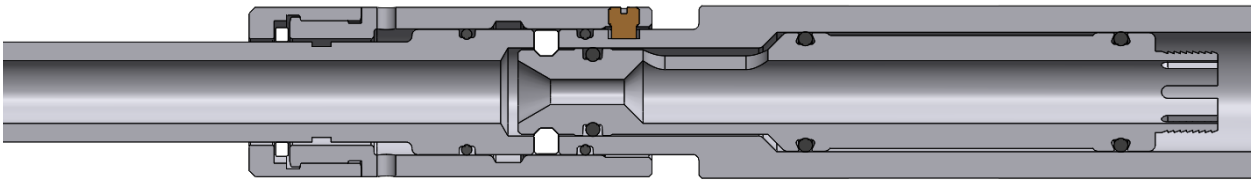
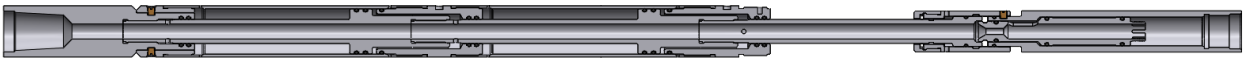
23. Carefully push Lock Retainer over both O-rings then install (1) Brass Shear Screw screwdriver tight.

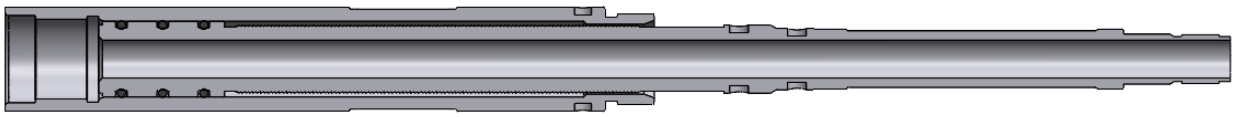


24. Screw Ball Seat Housing Assembly into Piston wrench Tight.

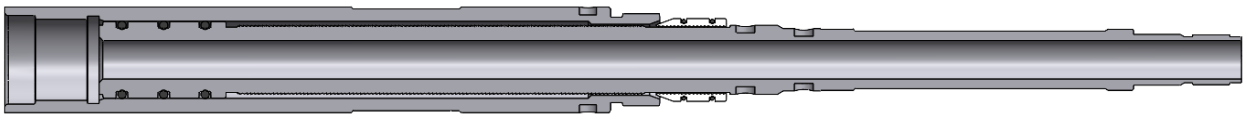


25. Install (2) 217 O-Rings (item 32) onto Tandem Sub (item 15).
26. Screw Tandem Sub into Ball Seat Housing spanner wrench tight.

27. Install (3) 214 O-Rings onto Stinger/Stroke Compensation Piston (item 18).
28. Lubricate Stroke Compensation Housing (item 16) I.D. Slide Stinger/Stroke Compensation Piston leaving the unthreaded section of the Stinger/Stroke Compensation Piston exposed as seen below:

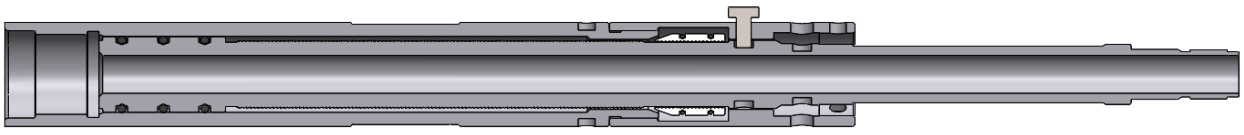


29. Install Stinger Latch segments (item 20) over Stinger/Stroke Compensation Piston with tapered end of Stinger Latch positioned toward Stroke Compensation Housing. Utilize (2) 025 O-Rings (item 23) in the grooves of the to hold the Stinger Latch segments in place.



NOTE: Saw cuts should remain the same width.

30. Slide Latch Housing (item 19) over Stinger/Stroke Compensation Piston and align the tapped hole with the spot face in the Stinger/Stroke Compensation Piston. Install the ¼”-20 shipping bolt hand tight.



31. Thread the Latch Housing onto the Stroke Compensation Housing wrench tight.

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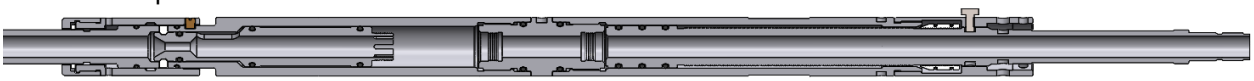
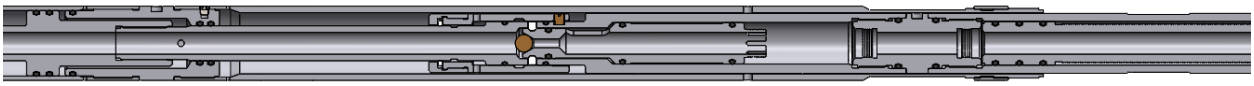
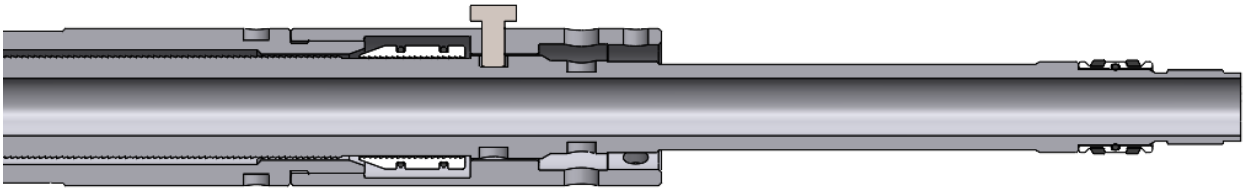
32. Screw Stroke Compensation Housing to Tandem Sub wrench tight. Push Stinger/Stroke Compensation Piston back until it bottoms on Tandem Sub.



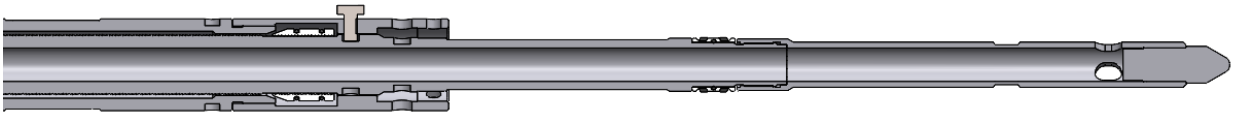
33. Slide Adjuster Sleeve (item 8) over Stinger and thread Adjuster Sleeve onto Lower Connector wrench tight. **NOTE**: Stinger will rotate when installing Latch Housing. Install Jam Nut (item 17).



34. Install (1) 019 O-ring (item 34) into Stinger Molded Seal (item 21).
35. Slide Stinger Molded Seal onto Stinger/Stroke Compensation Piston until it bottoms out.



36. Thread Shifter Sub (item 22) onto Stinger/Stroke Compensation Piston wrench tight.
37. Thread Shifter Sub Guide (item 23) onto Shifter Sub wrench tight.



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DISASSEMBLY OF THE 2125 FH™ SETTING TOOL

1. Drain all well fluids from Hydraulic Setting Tool and dispose of properly.
2. Place the Setting Tool in a pipe vise and vise onto the Top Sub (item 1).
3. Push the Outer components of the tool as far back as possible by hammering the Setting Sleeve towards the Top Sub (item 1) with a dead blow hammer or mallet. Use caution as to ensure not to damage the Setting Sleeve.

NOTE: Step 4 differs between the 2187 and 2720/2750/3125 FH™ Cement Retainers due to the different parts required to connect to the FH™ Setting Tool.

4. **REMOVAL OF THE SPECIAL SETTING ACCESSORIES FOR THE 2187 FH™ RETAINER:**
    a. Loosen the connection of the Jam Nut and the Setting Sleeve.
    b. Unthread the Setting Sleeve from the Adjuster Sleeve (item 8) and fully remove.
    c. Unthread the Jam Nut from the Adjuster Sleeve (item 8) and fully remove.
    d. While holding back-up on the Stroke Compensation Housing (item 16), unthread the Latch Housing (item 19) from the Stroke Compensation Housing and fully remove. Remove and discard all Shear Screw remnants.

4. **REMOVAL OF THE SPECIAL SETTING ACCESSORIES FOR THE 2750 FH™ RETAINER:**
    a. Fully remove the ¼-20 x ¼ long socket head set screws in the Setting Sleeve.
    b. Unthread the Setting Sleeve from the Adjuster Nut and fully remove.
    c. While holding back-up on the Stroke Compensation Housing (item 16), unthread the Latch Housing (item 19) from the Stroke Compensation Housing and fully remove. Remove and discard all Shear Screw remnants.
    d. Fully remove the ¼-20 x ¼ long socket head set screws in the Adjuster Nut.
    e. Unthread the Adjuster Nut from the Adjuster Sleeve (item 8) and fully remove.

5. While holding back-up on the Shifter Sub (item 22), unthread the Shifter Sub Guide (item 23) from the Shifter Sub and fully remove
6. While holding back-up on the Stinger/Stroke Compensating Piston (item 18), unthread the Shifter Sub (item 22) from the Stinger/Stroke Piston and fully remove.
7. Remove the Molded Seal (item 21) from the Stinger/Stroke Compensating Piston and discard.
8. Fully remove the three segments of the Stinger Latch (item 20) from the Stinger/Stroke Compensating Piston (item 18). Remove and discard the two O-Rings.
   NOTE: ENSURE TO KEEP ALL THREE SEGMENTS TOGETHER
9. While holding back-up on the Tandem Sub (item 15), fully unthread the Stroke Compensating Housing (item 16).
10. Using a dead blow hammer or mallet, hammer the remove the Stinger/Stroke Compensating Piston from the Stroke Compensating Housing. Remove and discard all O-Rings.
11. Remove the ¼ -20 x ¼" long Set Screw in the Adjuster Sleeve (item 8).
12. While holding back-up on the Lower Connector (item 6), fully unthread the Adjuster Sleeve from the Lower Connector.
13. While holding back-up on the Ball Seat Housing (item 7), unthread the Tandem Sub (item 15) from the Ball Seat Housing. The Ball Seat (item 14) will come out with the Tandem Sub.
14. Remove the Ball Seat from the Tandem Sub. Remove and discard all O-Rings.
15. While holding back-up on the Cylinder (item 4), unthread the Lower Connector (item 6) from the Cylinder. Shift the Lower Connector as far downward towards the Lock Retainer Nut (item 9) as it will go.
16. While holding back-up on the knurled section of the lower Piston (item 3), unthread the Ball Seat Housing (item 7) from the lower Piston. Set the Ball Seat Housing sub-assembly aside.

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17. While holding back-up on the Upper Connector (item 5), unthread the lower Cylinder (item 4) from the Upper Connector and fully remove the lower Cylinder.
18. While holding back-up on the upper Cylinder (item 4), unthread the Upper Connector from the upper Cylinder (item 4). Shift the upper Connector as far downward towards the lower Piston (item 3) as it will go.
19. While holding back-up on the knurled section of the upper Piston (item 3), unthread the lower Piston (item 3).
20. Using a dead blow hammer or mallet, hammer the remove the upper Connector (item 5) from the lower Piston (item 3). Remove and discard all O-Rings.
21. While holding back-up on the Cylinder Cap (item 2), unthread the upper Cylinder (item 4) from the Cylinder Cap and fully remove the upper Cylinder.
22. Unthread the upper Piston (item 3) from the Top Sub (item 1). Remove and discard all O-Rings.
23. Remove the Cylinder Cap (item 2) from the Top Sub (item 1). Remove and discard all Shear Screw remnants.
24. Remove the O-Rings from the Top Sub (item 1) and discard.
25. Remove the Top Sub (item 1) from the vise.
26. Place the Ball Seat Housing sub-assembly in the vice and clamp down on the knurled section of the Ball Seat Housing (item 7).
27. Remove the Lower Connector (item 5) from the Ball Seat Housing (item 7). Remove and discard all O-Rings.
28. While holding back-up on the Lock Retainer (item 11), unthread the Lock Retainer Nut (item 9) from the Lock Retainer and fully remove.
29. Remove the Snap Ring (item 10) from the Ball Seat Housing (item 7).
30. Remove the Lock Retainer (item 11) from the Ball Seat Housing (item 7). Remove and discard all Shear Screw remnants.
31. Remove the two Ball Seat Locks (item 12) from the Ball Seat Housing (item 7).
32. Remove and discard the O-Rings on the Ball Seat Housing (item 7).

REDRESS KIT
(AFTER DISASSEMBLY THE TOOL)

Required Part for Redress Kit (019-2125-215)		
PART NAME	**PART NUMBER**	**QTY.**
Bronze Ball 0.500	019-2125-236	1
Shear Screw	062-4500-127	3
214 O-ring	000-214N-090	9
223 O-ring	000-223N-090	6
208 O-ring	000-208N-090	1
121 O-ring	000-121N-090	2
213 O-ring	000-213N-090	2
217 O-ring	000-217N-090	2
025 O-ring	000-025N-090	2
019 O-ring	000-019N-090	1
Set Screw ¼ x 20 x ¼	250S20x250	1

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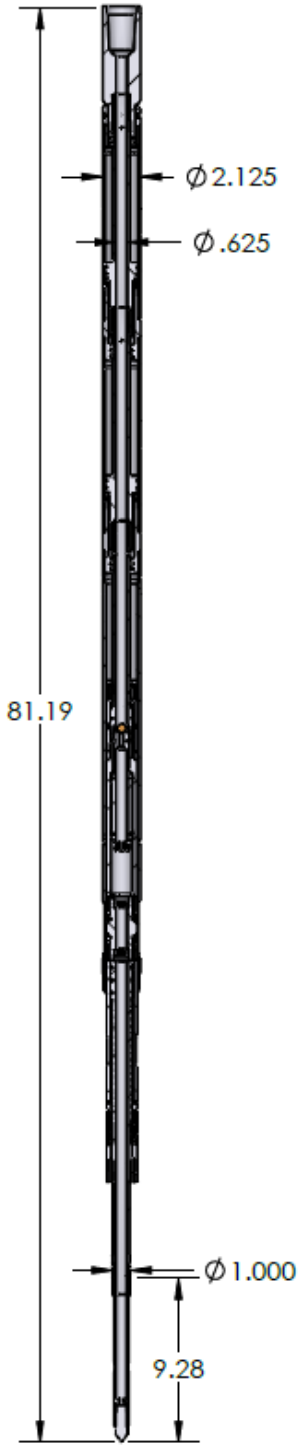
2125 FH™ HYDRAULIC SETTING TOOL
DIMENSIONAL DATA

MAX. O.D.	2.125 *in*
OVERALL LENGTH	81.19 *in*
MIN. I.D.	.625 *in*
SEAL DIA.	1.000 *in*



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