



SPRING LOADED RETRIEVING TOOL

4-1/2" X 2-3/8"

Manual No:
DL-577-4500-045

Revision: C

Revision Date:
12/22/2015

Authored by: B.Mathis

Approved by: D.Hushbeck

A) DESCRIPTION

The Spring Loaded Retrieving Tool is used to set and retrieve the AS Retrievable Bridge Plug.

B) RELATED TOOLS (sold separately)

B-1) 4-1/2" AS Retrievable Bridge Plug - refer to Technical Manual *DL-725-4500-210*.

C) SPECIFICATION GUIDE

| CASING SIZE (INCHES) | TOOL OD (INCHES) | TOOL ID (INCHES) | THREAD CONNECTION BOX UP | PART NUMBER |
|-------------------------|---------------------|---------------------|-----------------------------|----------------|
| 4-1/2 | 3.625 | 2.00 | 2-3/8 EUE | 57741 |
| | 3.656 | 2.00 | 2-3/8 EUE | 57744 |
| | 3.750 | 2.00 | 2-3/8 EUE | 57745 |

NOTE₁: Auto on / Left-hand release.

NOTE₂: Most of the component parts are manufactured from heat treated alloy steel. Therefore, extended exposure to corrosives can be detrimental to the metallurgy. Care in cleaning the tool soon after removal from the well can help extend the life of component parts. Close inspection of the parts is necessary, after removal, to identify any parts which require replacement.

D) PRE-INSTALLATION INSPECTION PROCEDURES

CAUTION₁: D&L ships tool connections made-up HAND TIGHT—labeled with hand-tight tape on the tool (Fig. 1) — unless stated otherwise. Tighten/torque all connections properly before operating tool.



Fig. 1

| GENERAL THREAD CONNECTION TORQUE RECOMMENDATIONS | | | |
|--|---------------------------------|---------------------|--|
| STUB ACME / ACME THREADS | INTERNAL TAPERED TUBING THREADS | | PREMIUM THREADS |
| | UP TO 2-3/8" | GREATER THAN 2-3/8" | |
| 600 – 800 FT-LBS | 600 – 800 FT-LBS | 800 – 1,200 FT-LBS | Consult thread manufacturer's recommendations. |

Before first use, D&L recommends disassembly and inspection of the tool unless stated otherwise. Ensure parts have not been damaged during shipping. Replace damaged parts with D&L replacement parts. Contact D&L sales for replacement part information.

Re-assemble the tool after inspection. Install parts in the correct order and orientation. Properly tighten connections.

Before re-using the tool, D&L recommends disassembly and inspection of the tool. Clean parts and ensure parts are in good working condition. Replace worn or damaged parts with D&L replacement parts.

E) STORAGE RECOMMENDATIONS

When preparing the tool for storage, follow the Pre-Installation Inspection Procedures. Re-assemble the tool with connections hand-tight only and in running position if applicable.

Store the tool, if possible, in an enclosed, temperature and humidity controlled environment. Avoid excessively high temperatures over long periods of time. Keep tool dry and protected from condensation. Do not store in contact with or near volatile or corrosive chemicals. Do not store near ozone generating equipment or operations such as welding.

D & L OIL TOOLS
P.O. BOX 52220 TULSA, OK 74152
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F) OPERATING PROCEDURES

F-1) RUN IN AND SETTING AS RETRIEVABLE BRIDGE PLUG

Attach the Spring Loaded Retrieving Tool to the AS Retrievable Bridge Plug pulling head. Run the tool to desired depth and set the AS Retrievable Bridge Plug normally.

To remove Spring Loaded Retrieving Tool after setting AS Retrievable Bridge Plug - slack off work string weight while holding left-hand torque. Pick up slowly on work string to free Spring Loaded Retrieving Tool from AS Retrievable Bridge Plug.

F-2) RETRIEVING AS RETRIEVABLE BRIDGE PLUG

Run to the depth of the AS Retrievable Bridge Plug. The retrieving tool will connect to pulling head automatically. Retrieve the AS Retrievable Bridge Plug normally.

G) RECOMMENDED HAND TOOLS

- VISE
- GLOVES
- ALLEN WRENCHES
- TAPE MEASURE
- O-RING PICK
- BAR
 - 1/2-INCH
 - 3/4-INCH
- PAINT BRUSH, 2-INCH
- PIPE WRENCH, 3-FT (2 EA)
- "CHEATER" PIPE, 4-FT LONG
- ADJUSTABLE WRENCH, 12-INCH
- CORDLESS DRILL, 18V
- SNAP RING SPREADER PLIERS
- ALIGNING PUNCH
- SCREWDRIVER SET, FLAT-TIPPED
- SOCKET SETS
 - 3/8-INCH DRIVE
 - 1/2-INCH DRIVE
- HAMMERS
 - SLEDGE
 - BALL PEEN
 - DEAD BLOW

H) DISASSEMBLY

NOTE₄: During disassembly, inspect and replace set screws as needed.

H-1) Clamp J-body (1) in vise.

H-1.1) Unscrew and remove set screws (5) from J-body (1).

H-1.2) Unscrew and remove top sub (2) from J-body (1).

CAUTION₂: Compression spring (4) has spring tension against top sub (2).

H-1.3) Remove compression spring (4) and spring plunger (3) from J-body (1).

H-2) Unclamp and remove J-body (1) from vise.

I) ASSEMBLY

NOTE₃: Clean and inspect all parts. Replace all worn and damaged parts. Install parts in proper order, and orientation and tighten/torque all connections properly.

I-1) Clamp J-body (1) in vise.


I-1.1) Install spring plunger (3) and compression spring (4) into J-body (1).

I-1.2) Screw top sub (2) into J-body (1).

CAUTION₂: Compression spring (4) will be compressed with spring tension against top sub (2).

I-1.3) Screw set screws (5) from J-body (1).

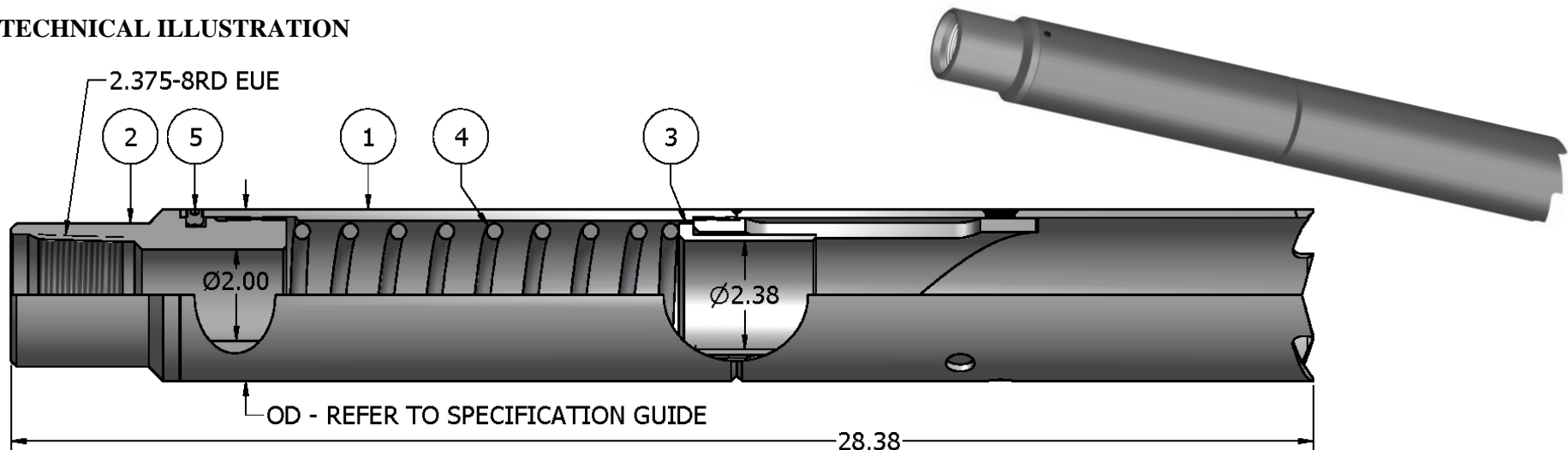
I-2) Unclamp J-body (1) in vise and remove assembled tool.


| | | | |
|---|---|-------------------------|--------------------------------------|
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J) PARTS LIST

| ITEM | QTY | DESCRIPTION | MATERIAL | P/N 57741 | P/N 57744 | P/N 57745 |
|------------------|-----|-----------------------------|-----------------|----------------------------|-----------|---------------------------|
| 1 | 1 | J-BODY ASSEMBLY | P-110 | 57741315 | 57744315 | 57745315 |
| 2 | 1 | TOP SUB | P-110 | 57741610 | 57744610 | 57745610 |
| 3 | 1 | SPRING PLUNGER | DLMS110 | 57756910 | | |
| 4 | 1 | COMPRESSION SPRING | CHROME VANADIUM | 57745920 | | |
| 5 | 2 | SOCKET SET SCREW 3/8-16 UNC | STEEL | SSS037C031 (5/16" LONG) | | SSS037C037 (3/8" LONG) |
| ASSEMBLED WEIGHT | | | | 26 LBS | 27 LBS | 32 LBS |

K) TECHNICAL ILLUSTRATION



| | | |
|---|--|--------------------------------------|
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L) REVISION HISTORY

| DATE | REVISION | DECRPTION OF CHANGES | REVISED BY | APPROVED BY |
|------------|----------|---|------------|-------------|
| 12/22/2015 | C | Added: P/N's 57741, 57744 - Data and Parts, RELATED TOOLS, Tool ID, ASSEMBLY instructions, STORAGE RECOMMENDATIONS, RECOMMENDED HAND TOOLS, REVISION HISTORY; Revised: Logo, "NOTE1: Auto on" was "Right-hand set", MATERIAL was BLANK (P/N 57745315), MATERIAL was P-110 (P/N 57756910), P/N 57756910 was P/N 57745910; | B.Mathis | N.Banker |