	<div>SPRING LOADED RETRIEVING TOOL</div> <div>5" X 2-3/8"</div>	Manual No: DL-577-5000-302
		Revision: C
		Revision Date: 06/26/2023
Authored by: B.Mathis		Approved by: H.Bringham

## 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) 5" (11.5 – 15.0#) (15.0 – 18.0#) AS Retrievable Bridge Plug—refer to technical manual *DL-725-5000-301*.

B-2) 5" (18.0 – 21.4#) AS Retrievable Bridge Plug—refer to technical manual *DL-725-5000-1129*.

## C) SPECIFICATION GUIDE

CASING SIZE (INCHES)	CASING WEIGHT (LBS/FT)	TOOL OD (INCHES)	TOOL ID (INCHES)	THREAD CONNECTION BOX UP	PART NUMBER
5	11.5 – 15.0	4.125	2.00	2-3/8 EUE	57750
	15.0 – 18.0	4.063	2.00	2-3/8 EUE	57749
	18.0 – 21.4	3.969	2.00	2-3/8 EUE	57752

**NOTE<sub>1</sub>:** Auto on / Left-hand release.

**NOTE<sub>2</sub>:** 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

**CAUTION<sub>1</sub>:** 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.

GENERAL SCREW TORQUE RECOMMENDATIONS									
SCREW SIZE (INCHES)	#6	#8	#10	1/4	5/16	3/8	7/16	1/2	5/8 and larger
TORQUE RANGE (INCH-POUNDS)	5 – 8	10 – 15	18 – 25	25 – 40	50 – 80	90 – 135	160 – 210	250 – 330	450 – 650

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.

D & L OIL TOOLS  
P.O. BOX 52220 TULSA, OK 74152  
PHONE: (800) 441-3504 [www.dloiltools.com](http://www.dloiltools.com)

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## D) PRE-INSTALLATION INSPECTION PROCEDURES (cont'd)

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.

## 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

**NOTE<sub>3</sub>:** During disassembly, inspect and replace set screws as needed.

H-1) Clamp retrieving tool assembly (1) in vise.


H-1.1) Unscrew and remove set screws (5) from retrieving tool assembly (1).

H-1.2) Unscrew and remove top sub (2) from retrieving tool assembly (1).

**CAUTION<sub>2</sub>:** Compression spring (4) has spring tension against top sub (2).

H-1.3) Remove compression spring (4) and spring plunger (3) from retrieving tool assembly (1).

H-2) Unclamp and remove retrieving tool assembly (1) from vise.

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## I) ASSEMBLY

**NOTE<sub>4</sub>:** 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 retrieving tool assembly (1) in vise.

I-1.1) Install spring plunger (3) and compression spring (4) into retrieving tool assembly (1).

I-1.2) Screw top sub (2) into retrieving tool assembly (1).

**CAUTION<sub>2</sub>:** Compression spring (4) has spring tension against top sub (2).

I-1.3) Screw set screws (5) into upper end of retrieving tool assembly (1).

I-2) Unclamp retrieving tool assembly (1) in vise and remove assembled tool.

## J) PARTS LIST

### J-1) P/N 57749

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 57749
1	1	RETRIEVING TOOL ASSEMBLY	DLMS110	57749315
2	1	TOP SUB	DLMS110	57745610
3	1	SPRING PLUNGER	DLMS110	57756910
4	1	COMPRESSION SPRING	DLMCRSP	57745920
5	2	3/8-16 UNC X 3/8 SOCKET SET SCREW	STEEL	SSS037C037

ASSEMBLED WEIGHT	37 LBS
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### J-2) P/N 57750


ITEM	QTY	DESCRIPTION	MATERIAL	P/N 57750
1	1	RETRIEVING TOOL ASSEMBLY	DLMS110	57750315
2	1	TOP SUB	DLMS110	57745610
3	1	SPRING PLUNGER	DLMS110	57756910
4	1	COMPRESSION SPRING	DLMCRSP	57745920
5	2	3/8-16 UNC X 3/8 SOCKET SET SCREW	STEEL	SSS037C037

ASSEMBLED WEIGHT	38 LBS
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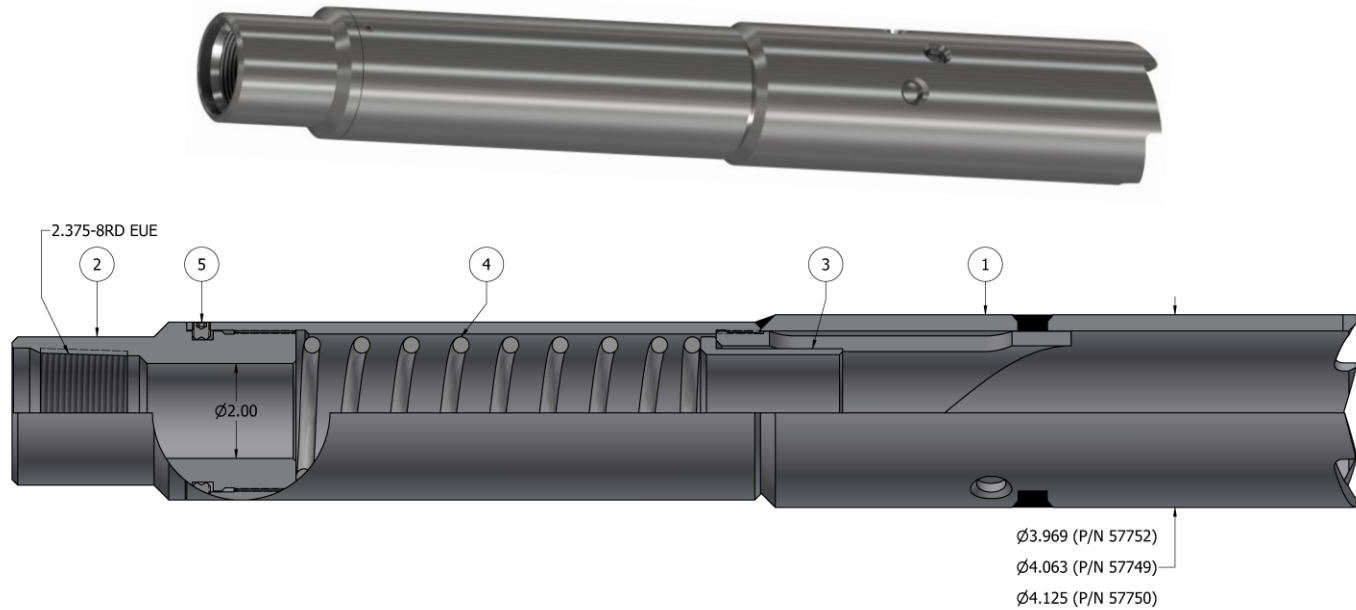
### J-3) P/N 57752

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 57752
1	1	RETRIEVING TOOL ASSEMBLY	DLMS110	57752315
2	1	TOP SUB	DLMS110	57745610
3	1	SPRING PLUNGER	DLMS110	57756910
4	1	COMPRESSION SPRING	DLMCRSP	57745920
5	2	3/8-16 UNC X 3/8 SOCKET SET SCREW	STEEL	SSS037C037

ASSEMBLED WEIGHT	35 LBS
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## K) TECHNICAL ILLUSTRATION



## L) REVISION HISTORY

DATE	REVISION	DECIPTION OF CHANGES	REVISED BY	APPROVED BY
06/26/2023	C	Added P/N 57749, General Screw Torque Recommendations; revised P/N 57752 O.D and weight range	J.Anderson	E.Visaez
12/21/2015	B	Added: RELATED TOOLS, Tool OD, Tool ID, P/N 57752 and data/parts, PRE-INSTALLATION INSPECTION PROCEDURES, STORAGE RECOMMENDATIONS, RECOMMENDED HAND TOOLS, ASSEMBLY instructions, REVISION HISTORY; Revised: Logo, "NOTE1: Auto on" was "Right-hand set", Operating Procedures, Technical Illustration	B.Mathis	N.Banker
04/22/2010	A	Created new tech manual;	-	-