

9-5/8" X 3-1/2"

Manual No: **DL-641-9625-1716** 

Revision: A

Revision Date:

Authored by: J.Anderson

11/06/2023 Approved by: K.Plunkett

### A) DESCRIPTION

The Set Down Isolation Packer is an economical, compact compression set tool used to isolate casing or perforations. It can also be used in multi-zone injection applications. This packer runs above a compression set packer (such as the AS-II Packer or AS-III Packer). Applied compression will shear the shear screws and allow pack-off. Straight pick-up releases the packer.

## **B) SPECIFICATION GUIDE**

	CASIN	G	TOOL				
SIZE (INCHES)	WEIGHT (LBS/FT)	RECOMMENDED HOLE SIZE (INCHES)	GAGE OD (INCHES)	<b>ID</b> (INCHES)	THREAD CONNECTION BOX UP / PIN DOWN	PART NUMBER	
9-5/8	32.3 - 47.0	8.681 - 9.001	8.438	3.00	3-1/2 EUE	64196 64196H <sup>1</sup> 64196V <sup>2</sup>	

Elastomer Trim Options: <sup>1</sup>HSN, <sup>2</sup>Viton

DIFFERENTIAL	TENSILE LOAD
PRESSURE	THRU TOOL
(MAX)	(MAX)
4,000 PSI	80,000 LBS

### C) 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

H

HAND TIGHT	Gl	ENERAL THREAD CO	IMENDATIONS	
	STUB ACME /	INTERNAL TAPI	ERED TUBING THREADS	PREMIUM THREADS
	ACME 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.

		GEN	ERAL SCR	EW TORQ	UE RECON	IMENDATIO	ONS		
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.

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.

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



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

When redressing the tool, D&L recommends replacement of all element, o-rings, shear screws, etc. Contact D&L sales for redress kit and/or other replacement part information.

## D) SETTING PROCEDURES

CAUTION<sub>2</sub>: Do not run the tool without properly tightening connections. Running the tool with loose connections may damage the tool and cause malfunction.

Run the packer to desire depth and set the lower packer. Slack off enough weight to shear the isolation packer setting shear screws (2,375 lbs/screw). Maintain a minimum of 20,000 lbs set down weight at the tool to keep the element packed off.

### **E) RELEASING PROCEDURES**

Pick up on work string to release and retrieve packer.

#### F) 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. Elements should be in a relaxed state—free from tension, compression, and other stresses that could cause deformation.

Store the tool, if possible, in an enclosed, temperature and humidity controlled environment. Avoid excessively high temperatures over long periods of time. Shield elastomeric parts from ultraviolet light sources. 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.

### G) ELASTOMER TRIM TEMPERATURE GUIDE

RUBBER TYPE	TEMPERATURE RANGE
NITRILE	40° - 250°F
HSN (HNBR)	70° - 300°F
VITON	100° - 350°F

### H) 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
- STRAP WRENCH
- 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



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## I) DISASSEMBLY

- I-1) Clamp top sub (1) in vise.
  - I-1.1) Unscrew and remove set screws (9) from body (3).
  - I-1.2) Unscrew and remove bottom sub (4) from body (3).
  - I-1.3) Remove o-ring (10) from bottom sub (4).
  - I-1.4) Unscrew and remove pipe plug (7) from mandrel (2).
  - I-1.5) Unscrew and remove shear screws (8) from body (3).
  - I-1.6) Unscrew and remove body (3) from rubber retainer (5).
  - I-1.7) Unscrew and remove mandrel (2) from top sub (1).
    - I-1.7.1) Remove element (6) and rubber retainer (5) from mandrel (2).
- I-2) Unclamp and remove top sub (1) from vise.

## J) ASSEMBLY

- NOTE<sub>1</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.
- J-1) Clamp top sub (1) in vise.
  - J-1.1) Install rubber retainer (5) and element (6) onto mandrel (2).
  - J-1.2) Screw mandrel (2) into top sub (1).
  - J-1.3) Install body (3) onto mandrel (2) and screw onto rubber retainer (5). Align threaded holes in body (3) with counterbores in mandrel (2). Align slot in body (3) with threaded hole for pressure plug (7) in mandrel (2).
  - J-1.4) Screw shear screws (8) into body (3). Tighten until shear screws contact mandrel (2). Back out 1/4 turn.
  - J-1.5) Screw pipe plug (7) into mandrel (2).
  - J-1.6) Install o-ring (10) in o-ring groove bottom sub (4).
  - J-1.7) Screw bottom sub (4) into body (3).
    - CAUTION<sub>3</sub>: Do NOT rip or tear o-ring while installing.
  - J-1.8) Screw set screws (9) into body (3).
- J-2) Unclamp and remove top sub (1) from vise.



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# K) PARTS LIST

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 64196
1	1	TOP SUB	1026	64196610
2	1	MANDREL	1026 CD	64196210
3	1	BODY	DLMS60	64195310
4	1	BOTTOM SUB	DLMS80	64196630
5	1	GAGE RING	DLMS35	64195850
6	1	ELEMENT	80 DURO NITRILE	64196512
7	3	3/4" PIPE PLUG	STEEL	SPP075_OLD
8	9	SHEAR SCREW (2375#)	DLM360BRS	60100990
9	3	5/16-18 UNC X 5/16 SOCKET SET SCREW	STEEL	SSS031C031
10	1	351 O-RING	90 DURO NITRILE	90351

REDRESS KIT (RDK)	64196050
ASSEMBLED WEIGHT	143 LBS

### **K-1) ELASTOMER TRIM OPTIONS**

NOTE<sub>2</sub>: For temperature range, refer to Elastomer Trim Temperature Guide.

K-1.1) HSN

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 64196H
6	1	ELEMENT	80 DURO HSN	64196512H
10	1	351 O-RING	90 DURO HSN	90351H

REDRESS KIT (RDK)		64196050H
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#### K-1.2) VITON

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 64196V
6	1	ELEMENT	80 DURO VITON	64196512V
10	1	351 O-RING	90 DURO VITON	90351V

REDRESS KIT (RDK) 64196050V
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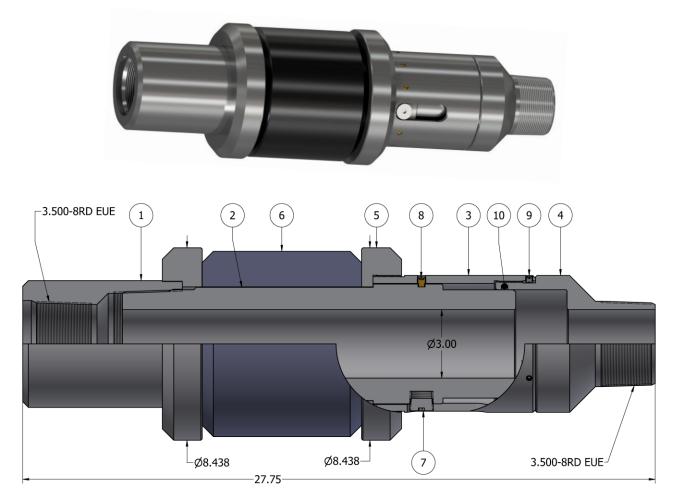
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# L) TECHNICAL ILLUSTRATION



### **M) REVISION HISTORY**

DATE	REVISION	DESCRIPTION OF CHANGES	REVISED BY	APPROVED BY
11/06/2023	А	Created manual.	-	-