



**ASW (WIRELINE SET) RETRIEVABLE  
BRIDGE PLUG**  
RIGHT-HAND SET / RIGHT-HAND RELEASE  
7" W/ 2-3/8" EUE (PIN DOWN)

Manual No:  
**DL-724-7000-333**

Revision: **L**

Revision Date:  
**09/23/2022**

Authored by: B.Mathis

Approved by: J.McArthur

## A) DESCRIPTION

The ASW Retrievable Bridge Plug is a high pressure plug for multiple zone and selective single-zone operations such as acidizing, fracturing, cementing, and testing. It features a large internal by-pass to reduce swabbing when running and retrieving. The by-pass closes during the setting of the plug and opens prior to releasing the upper slips to equalize pressure when unsetting. The by-pass is located directly below the upper slips to help wash debris when the by-pass is open.

This tool is a version of the AS Retrievable Bridge Plug that allows the plug to be set on wireline or with a hydraulic setting tool and retrieved with tubing. It cannot be reset in the wellbore once it is unset, but it can be pulled, re-dressed and run again. A Wireline Adapter Kit is required for this version.

**CAUTION<sub>1</sub>:** When running this tool with a packer, make sure the J-slots in the plug, running/ retrieving tool, and packer are all compatible.

**NOTE<sub>1</sub>:** This packer requires at least a 30 second burn on the wireline setting tool to ensure a proper set. A burn time less than 30 seconds may shear the setting tool from the packer before fully setting the packer.

## B) RELATED TOOLS (sold separately)

B-1) 7" X 2-7/8" Spring Loaded Retrieving Tool (P/N 57770) – refer to Technical Manual *DL-577-7000-326*.

B-2) 7" Wireline Adapter Kit (WLAK) (P/N 72370) – refer to Technical Manual *DL-723-7000-552*.

## C) SPECIFICATION GUIDE

CASING			GAGE OD (INCHES)	THREAD CONNECTION PIN DOWN	PART NUMBER
SIZE (INCHES)	WEIGHT (LBS/FT)	RECOMMENDED HOLE SIZE (INCHES)			
7	17.0 – 26.0	6.276 – 6.538	5.969	2-3/8 EUE	72470RR 72470RRH <sup>1</sup> 72470RRV <sup>2</sup>
	26.0 – 32.0	6.094 – 6.276	5.875	2-3/8 EUE	72471RR 72471RRH <sup>1</sup> 72471RRV <sup>2</sup>

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

**NOTE<sub>2</sub>:** Tool listed is right-hand set / right-hand release. Additional J-slot designs are available.

DIFFERENTIAL PRESSURE (MAX)	HANGING WEIGHT ON SET TOOL (MAX)	TENSILE LOAD THRU TOOL (MAX)	TORQUE THRU TOOL (MAX)
10,000 PSI	80,000 LBS <sup>†</sup>	80,000 LBS	2,000 FT-LBS

<sup>†</sup>Casing must be cemented for this load rating.

**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

**CAUTION<sub>2</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.

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.

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

## E) SETTING PROCEDURES

**CAUTION<sub>3</sub>:** Do not run the tool without properly tightening connections. Running the tool with loose connections may damage the tool and cause malfunction.

**CAUTION<sub>4</sub>:** Lift the ASW Retrievable Bridge Plug by placing the sling or chain just below the pulling head. **DO NOT** lift the bridge plug by the upper slip body assembly (Fig. 2).

The 7" ASW Retrievable Bridge Plug is attached to a wireline setting tool (Size #20 Baker E-4 Wireline Setting Assembly or similar) via a wireline adapter kit. When attaching the inner adapter to the bridge plug, 10 Driv-Lok pins should be used to ensure proper setting.



Fig. 2

Once the setting tool and bridge plug are run to setting depth, the setting tool is activated. The ASW Retrievable Bridge Plug will set and the adapter kit will shear loose.

**NOTE<sub>1</sub>:** This packer requires at least a 30 second burn on the wireline setting tool to ensure a proper set. A burn time less than 30 seconds may shear the setting tool off of the packer before fully setting the packer.

When set with a hydraulic setting tool, the ASW Retrievable Bridge Plug is also attached with an adapter kit to the setting tool. Pressure, or pressure and tension, are used to set the plug and shear loose.



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## F) RELEASING PROCEDURES

Lower work string until the retrieving tool automatically latches to the ASW Retrievable Bridge Plug. Sand may be washed from the upper slip by circulating through the upper portion of the plug. Slack off weight, hold right-hand torque pick up to open the by-pass valve, and wait until differential pressure has equalized. Continue upward movement to release upper slips, relax packing elements and re-latch. The tool may now be removed or re-located.

### F-1) EMERGENCY RELEASE

If the plug will not release conventionally, slack off re-set, then pick straight up to shear J-pins and release the plug (standard J-pins will shear at 40,000 lbs each – refer to Parts List for J-pins with other shear values) Once the J-pins are sheared, the tool cannot be moved down hole.

**NOTE<sub>3</sub>:** Contact D&L Engineering if running tool equipped with lower than standard value shear J-pins.

## G) 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.

## H) PRESSURE AFFECTED AREA GUIDE

When set downhole, the packer mandrel is subjected to a force created by differential pressure above or below the packer that acts on the pressure affected area (i.e., the piston effect). Depending on the tubing size and weight and the seal area of the packer the force created by differential pressure acts upwards or downwards on the packer mandrel. An upward force, designated as a negative (-) value, acts to push the packer mandrel up hole and must be accounted for when releasing the packer. A downward force, designated as a positive value, acts to push the packer mandrel down hole and must be accounted for when releasing the packer. Other factors (e.g., tubing movement due to temperature change) must be considered separately to determine all the forces acting on the packer.

PACKER SIZE (INCHES)	PRESSURE AFFECTED AREA (SQ. INCHES)	
	ABOVE	BELOW
7	4.312 (DOWN)	-4.312 (UP)

**Example:** Consider a 7" AS Bridge Plug set on tubing with a differential pressure of 3,000 psi in the annulus around the tubing above the packer. What is the force acting on the seal area of the mandrel?

To calculate the force (lbs) acting on the seal area of the mandrel, refer to the Pressure Affected Area Guide for a 7" AS Bridge Plug. In this example, the differential pressure from above the packer acts on the seal area of the packer mandrel across a pressure affected area of 4.312 in<sup>2</sup>. Multiplying the differential pressure (3,000 psi) by the pressure affected area (4.312 in<sup>2</sup>) results in a force of 12,934 lbs. The piston effect on the packer mandrel is a downward force of 12,934 lbs.



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## I) ELASTOMER TRIM TEMPERATURE GUIDE

NITRILE (STD)			
TEMPERATURE RANGE (F°)	DUROMETER		
	END	MIDDLE	END
40° - 125°	80	70	80
125° - 250°	90	70	90
150° - 250°	90	80	90
250° +	Contact D&L Sales		

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

## J) 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, 4-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

## K) DISASSEMBLY

K-1) Clamp upper cone (9) in vise.

K-1.1) Rotate and move J-slot mandrel (20) upwards to move J-pins (15) to lower landing in slot on J-slot mandrel (20).

**CAUTION:** Compression spring (4) is compressed with spring tension against upper slip body assembly.

K-1.2) Unscrew and remove set screws (37) from body extension (28).

K-1.3) Unscrew and separate body extension (28) from J-pin body (23) (**NOTE:** Left-hand threads).

K-1.3.1) Remove J-pins (15) from J-pin body (23).

K-1.4) Unscrew and remove shear screws (22) from body extension (28).

K-1.5) Unscrew and remove set screws (35) from drag block body (18). Rotate drag block retainer (21) as needed.

K-1.6) Unscrew and remove body extension (28) from drag block body (18) (**NOTE:** Left-hand threads).

K-1.6.1) Remove retaining ring (31) from body extension (28).

K-1.7) Unscrew and remove rubber mandrel cap (19) from lower slip sleeve (32).

**NOTES:** If the lower slip sleeve (32) moves in relation to the rubber mandrel (11), **STOP - Tighten the connection before trying to loosen the cap again.**

K-1.8) Unscrew and remove set screws (36) from J-slot mandrel (20).

K-1.9) Unscrew and remove J-slot mandrel (20) from sealing mandrel (27).

K-1.10) Remove drag block retainer (21) from drag block body (18).

K-1.11) Wedge lower slips (17) outwards (if needed). Remove drag block body assembly and disassemble:

K-1.11.1) Remove wedges (if needed). Remove lower slips (17) and lower slip springs (25) from drag block body (18).

K-1.12) Unscrew and remove set screws (36) from lower slip sleeve (32).



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## K) DISASSEMBLY (cont'd)

- K-1.13) Unscrew and remove lower slip sleeve (32) from rubber mandrel (11).
- K-1.14) Unscrew rubber mandrel (11) from center coupling (10).
- K-1.15) Remove rubber mandrel assembly and disassemble:
  - K-1.15.1) Remove elements (13, 14), rubber spacers (12), and lower cone (16) from rubber mandrel (11).
- K-1.16) Unscrew and remove gage ring (29) from center coupling (10).
- K-1.17) Move to upper end of tool - unscrew and remove set screws (37) from pulling head (1).
- K-1.18) Unscrew and remove pulling head (1) from upper mandrel (2).
  - K-1.18.1) Unscrew and remove spring retaining ring (34) from pulling head (1).
- K-1.19) Remove compression spring (4) from upper mandrel (2).
- K-1.20) Unscrew and remove shear screws (3) from upper slip body (6).
- K-1.21) Remove upper slip body assembly and disassemble:
  - K-1.21.1) Wedge releasing slip (7) and upper slips (8) outward (if needed). Unscrew and remove upper slip pickup (33) from upper slip body (6).
  - K-1.21.2) Remove wedges (if needed). Remove releasing slip (7), upper slips (8) and upper slip springs (26) from upper slip body (6).
- K-1.22) Unscrew and remove set screws (36) from upper mandrel (2).
- K-1.23) Unscrew and remove upper mandrel (2) from sealing mandrel (27).
- K-1.24) Remove plug (5) from sealing mandrel (27).
  - K-1.24.1) Remove o-ring (41) from plug (5).
- K-1.25) Remove sealing mandrel (27) from center coupling (10).
- K-1.26) Unscrew and remove set screws (36) from upper cone (9).
- K-1.27) Unscrew and remove center coupling (10) from upper cone (9).
  - K-1.27.1) Remove o-ring (40) from center coupling (10).
  - K-1.27.2) Remove bonded seals (24) and internal ring (38) from center coupling (10).
    - K-1.27.2.1) Remove o-rings (39) from bonded seals (24).
- K-2) Remove seal retaining ring (30) from upper cone (9).
- K-3) Unclamp and remove upper cone (9) from vise.

**NOTE<sub>6</sub>:** To redress tool assembly, follow disassembly instructions. It is recommended by D&L Oil Tools to replace all seals, elements, o-rings, shear screws, etc. when redressing tool.

## L) ASSEMBLY

**NOTE<sub>7</sub>:** Clean and inspect all parts. Replace all worn and damaged parts. Install parts in proper order, orientation and tighten/torque all connections properly.

**CAUTION<sub>6</sub>:** To ensure tool operates properly, install o-rings in o-ring grooves NOT thread reliefs (Fig. 3).

L-1) Clamp upper cone (9) in vise.

- L-1.1) Install seal retaining ring (30) into upper cone (9).
- L-1.2) Install o-ring (40) in o-ring groove in center coupling (10).
- L-1.3) Install o-rings (39) in o-ring grooves in bonded seals (24).
- L-1.4) Install lower bonded seal (24) in center coupling (10).

**CAUTION<sub>7</sub>:** Do not rip or tear o-ring during installation.

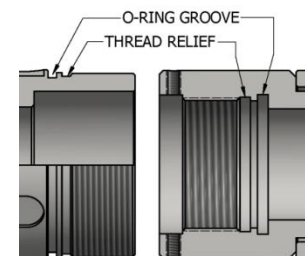


Fig. 3



# ASW (WIRELINE SET) RETRIEVABLE BRIDGE PLUG RIGHT-HAND SET / RIGHT-HAND RELEASE 7" W/ 2-3/8" EUE (PIN DOWN)

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## L) ASSEMBLY (cont'd)

L-1.5) Install internal ring (38) in groove in center coupling (10) above lower bonded seal (24).

L-1.6) Install upper bonded seal (24) in center coupling (10).

**CAUTION<sub>7</sub>:** Do not rip or tear o-ring during installation.

L-1.7) Screw center coupling (10) into upper cone (9).

**CAUTION<sub>8</sub>:** Do not damage bonded seal during installation.

L-1.8) Screw set screws (36) into upper cone (9)

L-1.9) Screw gage ring (29) onto center coupling (10).

L-1.10) Install sealing mandrel (27) into center coupling (10).

**CAUTION<sub>9</sub>:** Do not damage bonded seals during installation.

L-1.11) Install o-ring (41) in o-ring groove in plug (5).

L-1.12) Install plug (5) into sealing mandrel (27).

**CAUTION<sub>7</sub>:** Do not rip or tear o-ring during installation.

L-1.13) Screw upper mandrel (2) onto sealing mandrel (27).

L-1.14) Screw set screws (36) into upper mandrel (2).

L-1.15) Assemble upper slip body assembly and install:

L-1.15.1) Install upper slip springs (26), releasing slips (7), and upper slips (8) into upper slip body (6).

**NOTE<sub>s</sub>:** Uses one (1ea) spring per slip (Fig. 4).

L-1.15.2) Wedge releasing slips (7) and upper slips (8) outward. Screw upper slip pickup (33) into upper slip body (6). Remove wedges.

L-1.15.3) Install upper slip body assembly onto upper mandrel (2).

L-1.15.4) Align threaded holes in upper slip body (6) with groove in upper cone (9). Screw shear screws (3) into upper slip body (6). Tighten until shear screws (3) make contact with upper cone (9). Back shear screws (3) out 1/4 turn.

L-1.16) Install compression spring (4) onto upper mandrel (2).

L-1.17) Screw spring retaining ring (34) onto pulling head (1).

L-1.18) Screw pulling head (1) onto upper mandrel (2).

L-1.19) Screw set screws (37) into pulling head (1).

L-1.20) Assemble rubber mandrel assembly and install:

L-1.20.1) Install lower cone (16), elements (13, 14), and rubber spacers (12) onto rubber mandrel (11).

L-1.20.2) Install rubber mandrel assembly onto sealing mandrel (27). Screw rubber mandrel (11) into center coupling (10).

**CAUTION<sub>7</sub>:** Do not rip or tear o-ring during installation.

L-1.21) Screw J-slot mandrel (20) onto sealing mandrel (27).

L-1.22) Screw set screws (36) into J-slot mandrel (20).

L-1.23) Screw lower slip sleeve (32) onto rubber mandrel (11).

L-1.24) Screw set screws (36) into lower slip sleeve (32).

L-1.25) Assemble drag block body assembly and install:

L-1.25.1) Install lower slips (17) and lower slip springs (25) into drag block body (18). Wedge lower slips (17) outward.

**NOTE<sub>9</sub>:** Uses one (2ea) springs per slip (Fig. 5).

L-1.25.2) Install drag block retainer (21) onto drag block body (18).



Fig. 4



Fig. 5





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## L) ASSEMBLY (cont'd)

L-1.25.3) Install drag block body assembly onto lower slip sleeve (32). Remove wedges.

L-1.26) Screw rubber mandrel cap (19) onto lower slip sleeve (32).

L-1.27) Install retainer ring (31) onto body extension (28).

L-1.28) Back up on drag block body (18) with wrench. Screw body extension (28) into drag block body (18) (**NOTE4:** Left-hand threads).

L-1.29) Screw set screws (35) into drag block body (18). Rotate drag block retainer (21) as needed to access threaded holes in drag block body (18).

L-1.30) Move body extension (28) and drag block body assembly up and out-of-the-way temporarily.

L-1.31) Install J-pin body (23) onto J-slot mandrel (20).

L-1.32) Align holes in J-pin body (23) with lower landing in slot in J-slot mandrel (20). Install J-pins (15) into J-pin body (23) (Fig. 6).

L-1.33) Slide drag block body assembly and body extension (28) down to J-pin body (23). Screw body extension (28) onto J-pin body (23) (**NOTE4:** Left-hand threads).

**NOTE10:** Drag block body assembly must be free to rotate.

L-1.34) Screw set screws (37) into body extension (28).

L-1.35) Align threaded holes in body extension (28) with groove in rubber mandrel cap (19). Screw shear screws (22) into body extension (28). Tighten until shear screws (22) make contact with rubber mandrel cap (19). Back shear screws (22) out 1/4 turn.

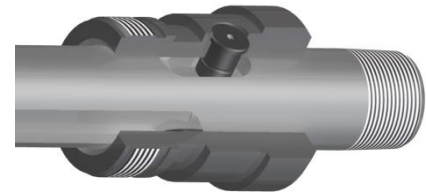


Fig. 6

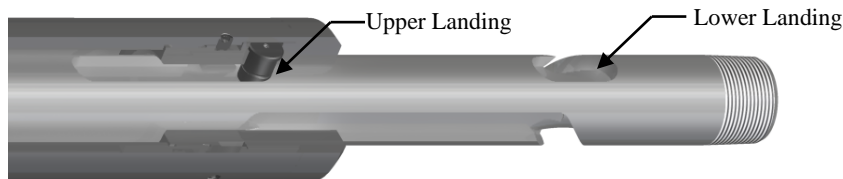


Fig. 7

L-1.36) Rotate and move J-slot mandrel (20) downwards to move J-pins (15) to upper landing in slot on J-slot mandrel (20) (Fig. 7).

**CAUTIONs:** Compression spring (4) is compressed with spring tension against upper slip body assembly.

L-2) Unclamp upper cone (9) from vise and remove tool assembly.

## M) PARTS LIST

ITEM	QTY	DESCRIPTION	MATERIAL	17.0 – 26.0# P/N 72470RR	26.0 – 32.0# P/N 72471RR
1	1	PULLING HEAD	DLMS110	72470711	
2	1	UPPER MANDREL	DLMS110	72570212	
3	8	SHEAR SCREW (3000#) 3/8-16 UNC X 1/2	DLM360BRS	BSSSLT037C050	
4	1	COMPRESSION SPRING	DLMCRSP	72570920	
5	1	PLUG	DLMS110	72570216	
6	1	UPPER SLIP BODY	DLMS80	72470320	72471320
7	2	RELEASING SLIP	DLMS110	61977120	72571125



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ITEM	QTY	DESCRIPTION	MATERIAL	17.0 – 26.0# P/N 72470RR	26.0 – 32.0# P/N 72471RR
8	2	UPPER SLIP W/ CARBIDE	DLMS110	61977110C	72571115C
9	1	UPPER CONE	DLMS110	72470411	
10	1	CENTER COUPLING	DLMS110	72570620	
11	1	RUBBER MANDREL	DLMS110	72570220	
12	2	RUBBER SPACER	DLMS35	72570840	72571840
13	1	ELEMENT	70 DURO NITRILE	72072511	72070511
14	2	ELEMENT	90 DURO NITRILE	72072513	72070513
15	2	J-PIN <b>NOTE<sub>10</sub></b> : Shear value is stamped on J-pin.	DLMS110	72570870-25 (25,000#)	
				72570870-30 (30,000#)	
				72570870-35 (35,000#)	
				72570870-40 (STD 40,000#)	
16	1	LOWER CONE	DLMS110	72570420	72571420
17	4	LOWER SLIP W/ CARBIDE	DLMS110	60070135C	
18	1	DRAW BLOCK BODY	DLMS35	60070335	
19	1	RUBBER MANDREL CAP	DLMS110	72470230	
20	1	J-SLOT MANDREL	DLMS110	72570230	
21	1	DRAW BLOCK RETAINER	DLMS60	60070910	
22	8	SHEAR SCREW (2375#)	DLM360BRS	60100990	
23	1	J-PIN BODY	DLMS110	72570875	
24	2	BONDED SEAL	90 DURO NITRILE	60045520	
25	8	LOWER SLIP SPRING	-	7170901	
26	4	UPPER SLIP SPRING	-	DL94830	
27	1	SEALING MANDREL	DLMS110	72570214	
28	1	BODY EXTENSION	DLMS110	72570370	
29	1	GAGE RING	DLMS80	72570830	72571830
30	1	SEAL RETAINING RING	DLMS110	72570225	
31	1	RETAINING RING	DLMS60	60070911	
32	1	LOWER SLIP SLEEVE	DLMS110	72570912	
33	1	UPPER SLIP PICKUP	DLMS110	72470345	
34	1	SPRING RETAINING RING	DLMS110	72570820	
35	3	SET SCREW 5/16-18 UNC X 1/2	STEEL	SSS031C050	
36	12	SET SCREW 3/8-16 UNC X 3/8	STEEL	SSS037C037	





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## M) PARTS LIST (cont'd)

ITEM	QTY	DESCRIPTION	MATERIAL	17.0 – 26.0# P/N 72470RRR	26.0 – 32.0# P/N 72471RRR
37	6	SET SCREW 3/8-16 UNC X 1/2	STEEL	SSS037C050	
38	1	SMALLEY HEAVY DUTY INTERNAL RING	DLMSC	WHM-275	
39	2	145 O-RING	90 DURO NITRILE	90145	
40	1	234 O-RING	90 DURO NITRILE	90234	
41	1	322 O-RING	90 DURO NITRILE	90322	
42	10	DRIV-LOK PIN (4800#) 5/16 X 1"	4140	DLP031062*	

\*Refer to WLAK Technical Manual for placement.

REDRESS KIT (RDK)		72470050	72471050
ASSEMBLED WEIGHT		327 LBS	324 LBS

## M-1) ELASTOMER TRIM OPTIONS

**NOTE11:** For temperature range, refer to Elastomer Trim Temperature Guide.

### M-1.1) HSN

ITEM	QTY	DESCRIPTION	MATERIAL	17.0 – 26.0# P/N 72470RRH	26.0 – 32.0# P/N 72471RRH
13	1	ELEMENT	70 DURO HSN	72072511H	72070511H
14	2	ELEMENT	90 DURO HSN	72072513H	72070513H
24	2	BONDED SEAL	90 DURO HSN	60045520H	
40	2	145 O-RING	90 DURO HSN	90145H	
41	1	234 O-RING	90 DURO HSN	90234H	
42	1	322 O-RING	90 DURO HSN	90322H	

REDRESS KIT (RDK)		72470050H	72471050H
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### M-1.2) VITON

ITEM	QTY	DESCRIPTION	MATERIAL	17.0 – 26.0# P/N 72470RRV	26.0 – 32.0# P/N 72471RRV
13	1	ELEMENT	70 DURO VITON	72072511V	72070511V
14	2	ELEMENT	90 DURO VITON	72072513V	72070513V
24	2	BONDED SEAL	90 DURO VITON	60045520V	
40	2	145 O-RING	90 DURO VITON	90145V	
41	1	234 O-RING	90 DURO VITON	90234V	
42	1	322 O-RING	90 DURO VITON	90322V	

REDRESS KIT (RDK)		72470050V	72471050V
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# ASW (WIRELINE SET) RETRIEVABLE BRIDGE PLUG RIGHT-HAND SET / RIGHT-HAND RELEASE 7" W/ 2-3/8" EUE (PIN DOWN)

Manual No:  
**DL-724-7000-333**

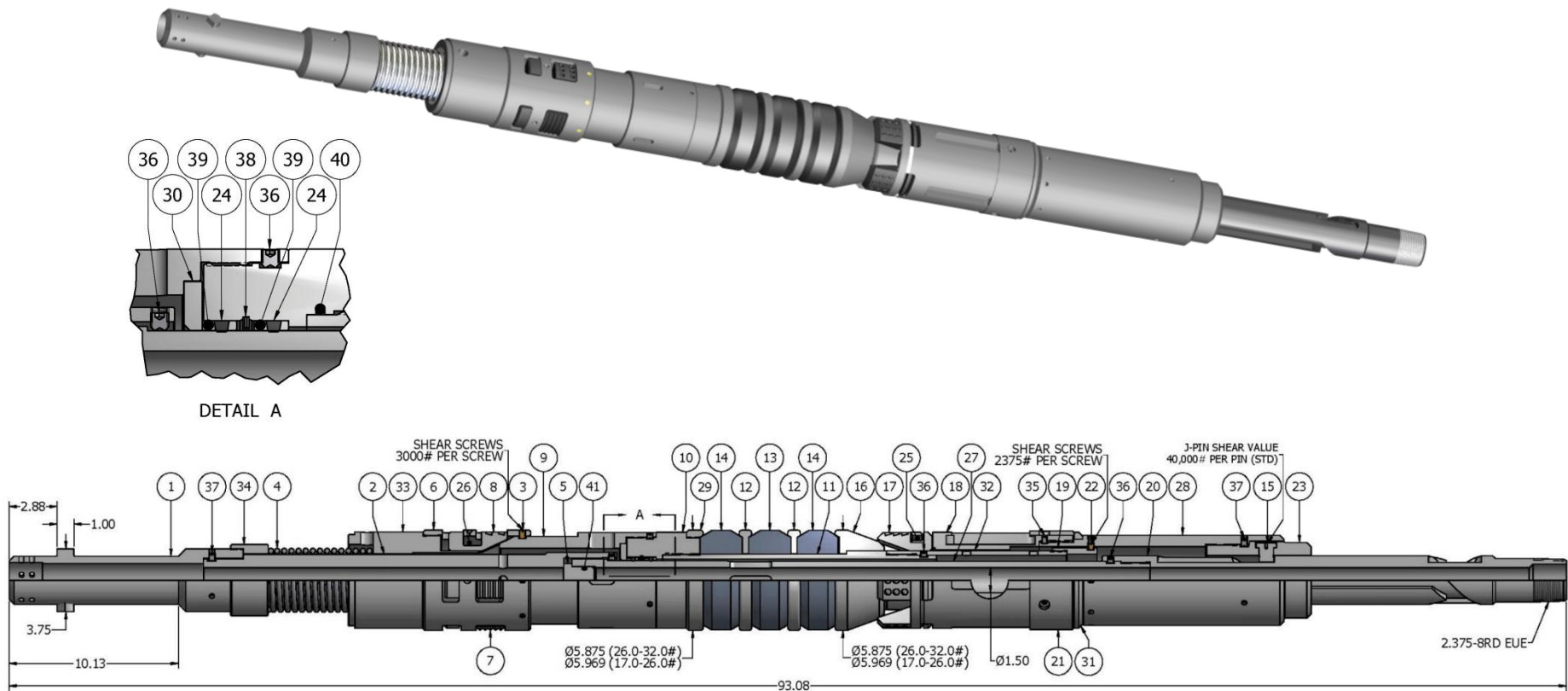
Revision: **L**


Revision Date:  
**09/23/2022**

Authored by: B.Mathis

Approved by: J.McArthur

## N) TECHNICAL ILLUSTRATION



	<b>ASW (WIRELINE SET) RETRIEVABLE BRIDGE PLUG</b>  <b>RIGHT-HAND SET / RIGHT-HAND RELEASE</b>  <b>7” W/ 2-3/8” EUE (PIN DOWN)</b>	Manual No: <b>DL-724-7000-333</b>
		Revision: <b>L</b>
		Revision Date: <b>09/23/2022</b>
<i>Authored by: B.Mathis</i>		<i>Approved by: J.McArthur</i>

## O) REVISION HISTORY

DATE	REVISION	DESCRIPTION OF CHANGES	REVISED BY	APPROVED BY
09/23/2022	L	Revised tensile load and hanging weight	J.Anderson	E.Visaez
02/11/2020	K	Revised Elastomer Trim Temp. Guide nitrile rating, P/N DLP031062 was DLP031100	J.Anderson	E.Visaez
06/10/2016	J	Added General Screw Torque Recommendations, Note <sub>3</sub> , Pressure Affected Area Guide	J.Anderson	K.Riggs
12/14/2015	H	Revised Elastomer Durometer Temperatures – Nitrile (90/80/90 Duro) was 250° - 300°F, Nitrile (Contact D&L Sales) was 300°F +, Rubber Type Temperature Ranges – Nitrile was 70° - 300°F, HSN was 70° - 325°F	J.Anderson	B.Oligschlaeger
10/29/2015	G	Added max. torque thru tool, max. hanging weight on set tool, max. tensile load thru tool	J.Anderson	K.Riggs
12/12/14	F	Revised – Description, Fig. 5, Note <sub>9</sub> , P/N 7170901 – Qty was 4, Assembled Weight P/N 72471RR was 326 Lbs;	B.Mathis	J.McArthur
09/25/14	E	Revised P/N DLP031100 was DLP031062; Added related tools, pre-installation inspection and storage procedures, caution for lifting plug	J.Anderson	J.McArthur