A) DESCRIPTION

The AS 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 can be set in tension or compression. It can be set shallow in unsupported casing to contain pressure while working on wellhead equipment. It can be set in tension making it ideal for setting shallow to test wellhead equipment and also deep, high-pressure wells.

The ASW Retrievable Bridge Plug 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$_1$: When running this tool with a packer, make sure the J-slots in the plug, running/ retrieving tool, and packer are all compatible

NOTE$_1$: 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.

B) RELATED TOOLS (sold separately)

B-1) 4-1/2" Wireline Adapter Kit (WLAK) (P/N varies)—refer to Technical Manual *DL-723-4500-545*.
B-2) 4-1/2" X 2-3/8" Spring Loaded Retrieving Tool (P/N 57745)—refer to Technical Manual *DL-577-4500-045*.

C) SPECIFICATION GUIDE

CASING			GAGE OD (INCHES)	THREAD CONNECTION PIN DOWN	PART NUMBER
SIZE (INCHES)	WEIGHT (LBS/FT)	RECOMMENDED HOLE SIZE (INCHES)			
4-1/2	9.5 – 13.5	3.920 – 4.090	3.750	2-3/8 EUE	72445RR 72445RRH[1] 72445RRV[2]
	15.1	3.826	3.656	2-3/8 EUE	72444RR 72444RRH[1] 72444RRV[2]
	15.1 – 16.6	3.754 – 3.826	3.625	2-3/8 EUE	72441RR 72441RRH[1] 72441RRV[2]

Elastomer Trim Options: [1]HSN, [2]Viton

NOTE$_2$: 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	64,000 LBS[†]	64,000 LBS	1,300 FT-LBS

[†]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

D) PRE-INSTALLATION INSPECTION PROCEDURES

CAUTION2: 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

CAUTION3: Do not run the tool without properly tightening connections. Running the tool with loose connections may damage the tool and cause malfunction.

CAUTION4: Lift the AS 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).

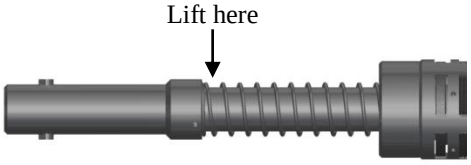


Fig. 2

The ASW Bridge Plug is attached to a wireline setting tool (Size #10 Baker E-4 Wireline Setting Assembly or similar) via a wireline adapter kit. when attaching the inner adapter to the bridge plug, six (6) Driv-Lok pins should be used to ensure proper setting.

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

NOTE1: 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 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.

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 ASW Retrievable Bridge Plug 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 30,000 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.

NOTE3: 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**
4-1/2	2.895 (DOWN)	-2.895 (UP)

Example: Consider a 4-1/2" ASW 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 4-1/2" ASW 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 2.895in^2. Multiplying the differential pressure (3,000 psi) by the pressure affected area (2.895 in^2) results in a force of 8,685 lbs. The piston effect on the packer mandrel is a downward force of 8,685 lbs.

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**
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, 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

K) DISASSEMBLY

K-1) Clamp center coupling (10) in vise.

K-1.1) Unscrew and remove changeover sub (21) from J-slot mandrel (20).

K-1.2) Unscrew and remove set screws (31) from body extension (28).

K-1.3) Unscrew and remove shear screws (22) from body extension (28).

K-1.4) Unscrew body extension (28) from J-pin body (23) (**NOTE$_4$**: Left-hand threads). Move body extension (28) and drag block body assembly up and out-of-the-way temporarily.

NOTE$_5$: Drag block body assembly must be free to rotate.

K-1.5) Remove J-pins (15) from J-pin body (23).

K-1.6) Remove J-pin body (23) from J-slot mandrel (20).

K-1.7) Unscrew and remove set screws (3) from body extension (28).

K-1.8) Unscrew and remove body extension (28) from drag block body (18) (**NOTE$_4$**: Left-hand threads).

K-1.9) Unscrew and remove rubber mandrel cap (19) from rubber mandrel (11).

K-1.10) Wedge lower slips (17) outwards (if needed). Remove drag block body assembly and disassemble:

K-1.10.1) Remove wedges (if needed). Remove lower slips (17) and lower slip springs (25) from drag block body (18).

K-1.11) Unscrew and remove set screws (29) from J-slot mandrel (20).

K-1.12) Unscrew and remove J-slot mandrel (20) from sealing mandrel (27).

K-1.13) Unscrew rubber mandrel (11) from center coupling (10).

K-1.14) Remove rubber mandrel assembly and disassemble:

K-1.14.1) Remove elements (13, 14), rubber spacers (12), and lower cone (16) from rubber mandrel (11).

K-1.15) Moving to upper end of tool, unscrew and remove set screws (31) from pulling head (1).

K) DISASSEMBLY (cont'd)

K-1.16) Unscrew and remove pulling head (1) from upper mandrel (2).

CAUTION5: Compression spring (4) is compressed with spring tension against upper slip body assembly.

K-1.17) Remove compression spring (4) from upper mandrel (2).

K-1.18) Unscrew and remove shear screws (22) from upper slip body (6).

K-1.19) Wedge releasing slip (7) and upper slips (8) outward (if needed). Remove upper slip body assembly and disassemble:

K-1.19.1) Remove wedges (if needed). Remove releasing slip (7), upper slips (8) and upper slip springs (26) from upper slip body (6).

K-1.20) Unscrew and remove set screws (31) from upper mandrel (2). Move upper mandrel (2) to access set screws as necessary.

K-1.21) Unscrew and remove upper mandrel (2) from sealing mandrel (27).

CAUTION8: Do NOT wrench or clamp on seal surface.

K-1.22) Remove plug (5) from sealing mandrel (27).

K-1.22.1) Remove o-ring (33) from plug (5).

K-1.23) Unscrew and remove set screws (31) from center coupling (10).

K-1.24) Unscrew and remove upper cone (9) from center coupling (10).

K-1.24.1) Remove upper bonded seal (24) and o-ring (35) from upper cone (9).

K-1.24.1.1) Remove o-ring (32) from upper bonded seal (24).

K-1.25) Remove sealing mandrel (27) from center coupling (10).

K-2) Unclamp and remove center coupling (10) from vise.

K-3) Remove seal retaining ring (30) from center coupling (10).

K-4) Remove lower bonded seal (24) from center coupling (10).

K-4.1) Remove o-ring (32) from lower bonded seal (24).

K-5) Remove o-ring (34) from center coupling (10).

NOTE8: 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

NOTE6: Clean and inspect all parts. Replace all worn and damaged parts. Install parts in proper order, and orientation and tighten/torque all connections properly.

CAUTION6: To ensure tool operates properly, install o-rings in o-ring grooves **NOT** thread reliefs (Fig. 3).

L-1) Install o-ring (34) in groove in center coupling (10).

L-2) Install o-rings (32) in grooves in bonded seals (24).

L-3) Install lower bonded seal (24) in center coupling (10).

CAUTION7: Do not rip or tear o-ring during installation.

L-4) Clamp center coupling (10) in vise.

L-4.1) Install seal retaining ring (30) in center coupling (10).

L-4.2) Install upper bonded seal (24) in upper cone (9).

CAUTION7: Do not rip or tear o-ring during installation.

L-4.3) Install o-ring (35) in groove in upper cone (9).

L-4.4) Screw upper cone (9) into center coupling (10).

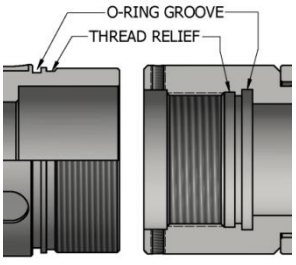


Fig. 3

L) ASSEMBLY (cont'd)

L-4.5) Screw set screws (31) into center coupling (31).

L-4.6) Assemble mandrel assembly and install:

L-4.6.1) Install o-ring (33) in groove in plug (5).

L-4.6.2) Install plug (5) into sealing mandrel (27).

CAUTION$_7$: Do not rip or tear o-ring during installation.

L-4.6.3) Screw upper mandrel (2) onto sealing mandrel (27).

L-4.6.4) Screw set screws (31) into upper mandrel (2).

L-4.6.5) Install mandrel assembly into center coupling (10).

CAUTION$_8$: Do not damage seals during installation.

L-4.7) Assemble upper slip body assembly and install:

L-4.7.1) Install upper slip springs (26), releasing slips (7), and upper slips (8) into upper slip body (6). Wedge slips outwards.

NOTE$_7$: Install one (1 ea) spring per slip (Fig. 4).

L-4.7.2) Install upper slip body assembly onto upper mandrel (2). Remove wedges.

L-4.8) Align threaded holes in upper slip body (6) with pocket holes in upper mandrel (2). Screw shear screws (22) into upper slip body (6). Tighten until shear screws (22) make contact with upper mandrel (2). Back shear screws (22) out 1/4 turn.

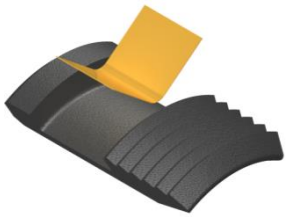


Fig. 4

L-4.9) Install compression spring (4) onto upper mandrel (2).

L-4.10) Screw pulling head (1) onto upper mandrel (2).

CAUTION$_5$: Compression spring (4) is compressed with spring tension against upper slip body assembly.

L-4.11) Screw set screws (31) into pulling head (1).

L-4.12) Moving to lower end of tool, assemble rubber mandrel assembly and install:

L-4.12.1) Install lower cone (16), elements (13, 14), and rubber spacers (12) onto rubber mandrel (11).

L-4.12.2) Install rubber mandrel assembly onto J-slot mandrel (20) and sealing mandrel (27). Screw rubber mandrel (11) into center coupling (10).

CAUTION$_7$: Do not rip or tear o-ring during installation.

L-4.13) Screw J-slot mandrel (20) onto sealing mandrel (27).

L-4.14) Screw set screws (29) into J-slot mandrel (20).

L-4.15) Assemble drag block body assembly and install:

L-4.15.1) Install lower slips (17) and lower slip springs (25) into drag block body (18). Wedge slips outward.

NOTE$_7$: Install one (1 ea) spring per slip (Fig. 5).

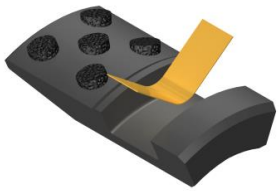


Fig. 5

L-4.15.2) Install drag block body assembly onto rubber mandrel (11). Remove wedges.

L-4.16) Screw rubber mandrel cap (19) onto rubber mandrel (11).

L-4.17) Install body extension (28) onto J-slot mandrel (20) and screw onto drag block body (18) (**NOTE$_4$**: Left-hand threads).

L-4.18) Screw set screws (3) into body extension (28).

L-4.19) Push body extension (28) and drag block body assembly up and out-of-the-way temporarily.

L-4.20) Install J-pin body (23) onto J-slot mandrel (20).

L) ASSEMBLY (cont'd)

L-4.21) 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).

Fig. 6

L-4.22) Slide drag block body assembly and body extension (35) down to J-pin body (23). Screw body extension (35) onto J-pin body (23) (**NOTE$_4$**: Left-hand threads).

NOTE$_5$: Drag block body assembly must be free to rotate.

L-4.23) Screw set screws (31) into body extension (28).

L-4.24) Screw changeover sub (21) onto J-slot mandrel (20).

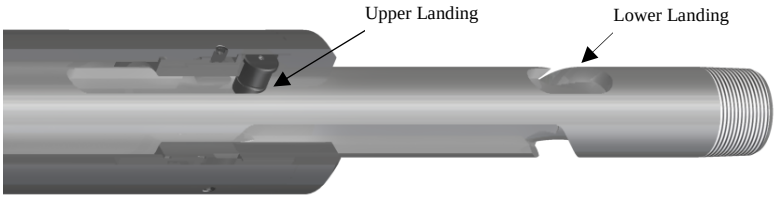


Fig. 7

L-4.25) 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).

CAUTION$_5$: Compression spring (4) is compressed with spring tension against upper slip body assembly.

L-4.26) Align threaded holes in body extension (28) with groove in rubber mandrel cap (19). Screw shear screws (22) into body extension (35). Tighten until shear screws (22) make contact with rubber mandrel cap (19). Back shear screws (22) out 1/4 turn.

L-5) Unclamp center coupling (10) from vise and remove assembled tool.

M) PARTS LIST

ITEM	QTY	DESCRIPTION	MATERIAL	15.1 – 16.6# P/N 72441RR	15.1# P/N 72444RR	9.5 - 13.5# P/N 72445RR
1	1	PULLING HEAD	DLMS110	72445710		
2	1	UPPER MANDREL	DLMS125	72445211	72444211	72445211
3	4	SET SCREW 1/4-20 UNC	STEEL	SSS025C031 (5/16" LONG)	SSS025C037 (3/8" LONG)	
4	1	COMPRESSION SPRING	CHROME VANADIUM	72545920		
5	1	PLUG	DLMS110	72555216		
6	1	UPPER SLIP BODY	P-110/1026	72441355	72444355	72445355
7	1	RELEASING SLIP	DLMS110	72541125	60045125	
8	2	UPPER SLIP W/CARBIDE	DLMS110	72541115C	60045115C	
9	1	UPPER CONE	P-110	72541410	72544410	72545410
10	1	CENTER COUPLING	P-110	72541620	72544620	72545620
11	1	RUBBER MANDREL	P-110	72541220	72544220	72545220
12	2	RUBBER SPACER	1026	72541851	72044851	72045851
13	1	ELEMENT	70 DURO NITRILE	72041511	72044511	72045511
14	2	ELEMENT	90 DURO NITRILE	72041513	72044513	72045513
15	2	J-PIN **NOTE9**: Shear value is stamped on J-pin.	P-110	72541870 (30,000#)	72545870-20 (20,000#) 72545870-25 (25,000#) 72545870-30 (STD 30,000#)	
16	1	LOWER CONE	P-110	72541420	72044420	72045420
17	4	LOWER SLIP W/CARBIDE	DLMS110	60045135C		
18	1	DRAG BLOCK BODY	DLMS60	72541335	60044335	60045335

L) PARTS LIST (cont'd)

ITEM	QTY	DESCRIPTION	MATERIAL	15.1 – 16.6# P/N 72441RR	15.1# P/N 72444RR	9.5 - 13.5# P/N 72445RR
19	1	RUBBER MANDREL CAP	P-110	72445230		
20	1	J-SLOT MANDREL	DLMS125	72545230		
21	1	CHANGEOVER SUB	P-110	CH1900E2375EHT		
22	16	SHEAR SCREW (2375#)	DLM360BRS	60100990		
23	1	J-PIN BODY	P-110	72541875	72544875	72545875
24	2	BONDED SEAL	90 DURO NITRILE	60040520		
25	4	LOWER SLIP SPRING	ELGILOY	7145901		
26	3	UPPER SLIP SPRING	ELGILOY	7145902		
27	1	SEALING MANDREL	DLMS125	72545215		
28	1	BODY EXTENSION	P-110	72441370	72444370	72445370
29	3	SET SCREW 5/16-18 UNC X 5/16	STEEL	SSS031C031		
30	1	SEAL RETAINING RING	DLMS60	72055830		
31	12	SET SCREW 3/8-16 UNC X 3/8	STEEL	SSS037C037		
32	2	140 O-RING	90 DURO NITRILE	90140		
33	1	211 O-RING	90 DURO NITRILE	90211		
34	1	229 O-RING	90 DURO NITRILE	90229		
35	1	233 O-RING	90 DURO NITRILE	90233		
36	6	DRIV-LOK PIN (4800#) 5/16 X 5/8	4140	DLP031062*		

*Refer to WLAK tech manual for placement.

REDRESS KIT (RDK)		72441050	72444050	72445050
ASSEMBLED WEIGHT		115 LBS	117 LBS	124 LBS

M-1) ELASTOMER TRIM OPTIONS

NOTE$_{10}$: For temperature range, refer to Elastomer Trim Temperature Guide.

M-1.1) HSN

ITEM	QTY	DESCRIPTION	MATERIAL	15.1 – 16.6# P/N 72441RRH	15.1# P/N 72444RRH	9.5 - 13.5# P/N 72445RRH
13	1	ELEMENT	70 DURO HSN	72041511H	72044511H	72045511H
14	2	ELEMENT	90 DURO HSN	72041513H	72044513H	72045513H
24	2	BONDED SEAL	90 DURO HSN	60040520H		
32	2	140 O-RING	90 DURO HSN	90140H		
33	1	211 O-RING	90 DURO HSN	90211H		
34	1	229 O-RING	90 DURO HSN	90229H		
35	1	233 O-RING	90 DURO HSN	90233H		

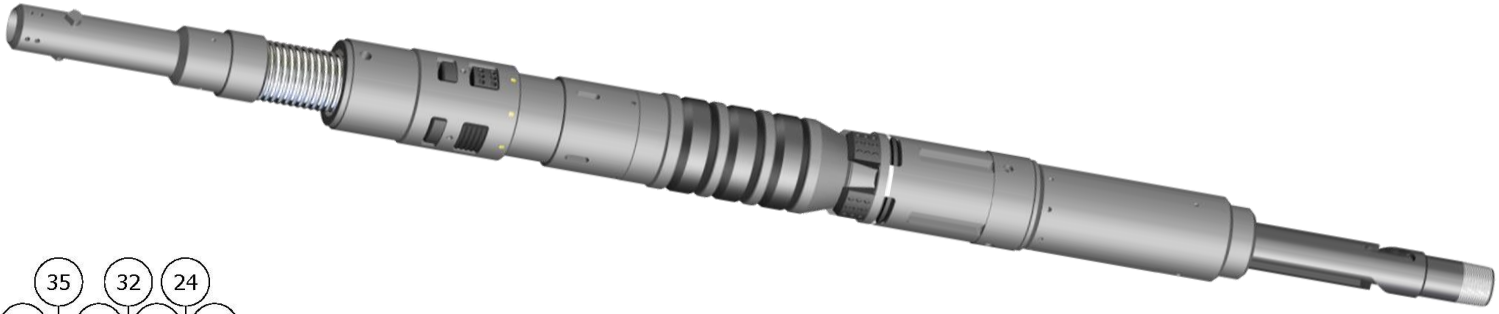
REDRESS KIT (RDK)		72441050H	72444050H	72445050H

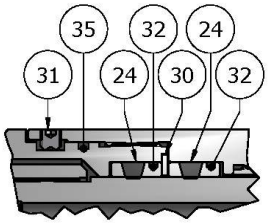
M-1.2) VITON

ITEM	QTY	DESCRIPTION	MATERIAL	15.1 – 16.6# P/N 72441RRV	15.1# P/N 72444RRV	9.5 - 13.5# P/N 72445RRV
13	1	ELEMENT	70 DURO VITON	72041511V	72044511V	72045511V
14	2	ELEMENT	90 DURO VITON	72041513V	72044513V	72045513V
24	2	BONDED SEAL	90 DURO VITON	60040520V		
32	2	140 O-RING	90 DURO VITON	90140V		
33	1	211 O-RING	90 DURO VITON	90211V		
34	1	229 O-RING	90 DURO VITON	90229V		
35	1	233 O-RING	90 DURO VITON	90233V		

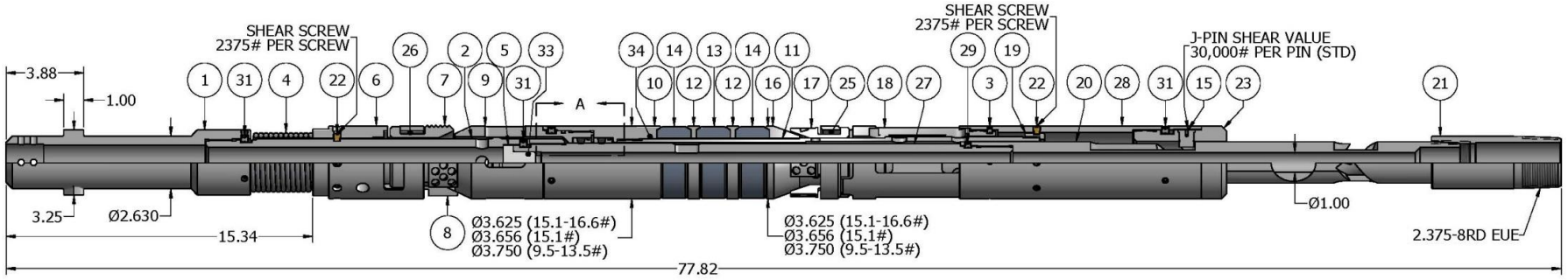
REDRESS KIT (RDK)		72441050V	72444050V	72445050V

N) TECHNICAL ILLUSTRATION





DETAIL A



O) REVISION HISTORY

DATE	REVISION	DESCRIPTION OF CHANGES	REVISED BY	APPROVED BY
12/08/2017	G	Revised tensile load was 67.000 lbs, torque was 2,000 ft-lbs	J.Anderson	K.Riggs
06/08/2016	F	Added General Screw Torque Recommendations, Note3, Pressure Affected Area Guide	J.Anderson	K.Riggs
12/14/2015	E	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	D	Added max. torque thru tool, max. hanging weight on set tool, max. tensile load thru tool	J.Anderson	K.Riggs
03/27/15	C	Added related tools, pre-installation inspection and storage procedures, HSN and Viton options, max. diff. pressure, element selection guide, recommended hand tools, P/N DLP031062, and revision history; Removed Setting Kit	J.Anderson	D.Hushbeck