	<div>HD RETRIEVABLE PACKER</div> <div>RIGHT-HAND AUTO</div> <div>10-3/4” X 4-1/2” (65.7 – 91.2#)</div>	Manual No:
		DL-613-10750-1742
		Revision: A
		Revision Date:
		02/28/2024
Authored by: J.Anderson		Approved by: E.Visaez

A) DESCRIPTION

The HD Retrievable Packer is a heavy duty service packer ideally suited for all types of squeeze cementing, formation fracturing, high pressure acidizing, etc. It is a large opening compression set packer with hydraulic button-type hold down. This packer withstands high pressure from above or below and uses a 3-element packing system, J-slot, and a drag block mechanism for easy setting. This packer has a built-in unloader which circulates across the hydraulic hold down buttons to improve retrievability and run in performance.

B) SPECIFICATION GUIDE

CASING			TOOL			
SIZE (INCHES)	WEIGHT (LBS/FT)	RECOMMENDED HOLE SIZE (INCHES)	GAGE OD (INCHES)	NOMINAL ID (INCHES)	THREAD CONNECTIONS BOX UP / PIN DOWN	PART NUMBER
10-3/4	65.7 – 91.2	9.032 – 9.560	8.813	4.00	4-1/2 EUE	61399RS 61398RSH ¹ 61399RSV ²

Elastomer Trim Options: ¹HSN, ²Viton

NOTE₁: Tools listed are right-hand auto set / straight pick-up.

DIFFERENTIAL PRESSURE (MAX)	TENSILE LOAD THRU UNSET TOOL (MAX)	HANGING WEIGHT ON SET TOOL (MAX)*	TORQUE THRU TOOL (MAX)
8,000 PSI	214,500 LBS	214,500 LBS*	2,000 FT-LBS

*Casing must be cemented for this load rating.

CAUTION₁: Before running the tool, check the pressure affected areas chart and consider other effects to be certain that the unloader will remain closed during operation.

CAUTION₂: If the HD Packer is run with a retrievable bridge plug, make sure the bridge plug J-slot is compatible with the J-slot on the packer. Whichever direction you set the plug, the packer should set in the **opposite** direction.

C) PRE-INSTALLATION INSPECTION PROCEDURES

CAUTION₃: D&L ships tool connections made-up hand-tight—labeled with hand-tight tape on the tool—unless stated otherwise. Properly tighten connections before operating tool (Fig. 1).

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.

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



HD RETRIEVABLE PACKER RIGHT-HAND AUTO 10-3/4" X 4-1/2" (65.7 – 91.2#)

Manual No:
DL-613-10750-1742

Revision: **A**

Revision Date:
02/28/2024

Authored by: J.Anderson

Approved by: E.Visaez

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

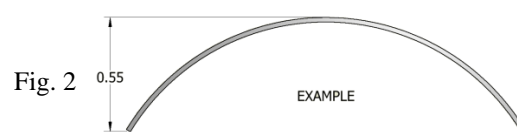
GENERAL SCREW TORQUE RECOMMENDATIONS									
SCREW SIZE (INCHES)	#6	#8	#10	1/4	5/16	3/8	7/16	1/2	5/8 and larger
TORQUE RANGE (INCH-POUNDS)	5 – 8	10 – 15	18 – 25	25 – 40	50 – 80	90 – 135	160 – 210	250 – 330	450 - 650

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.

DRAG BLOCK SPRING (MIN HEIGHT)	HOLD DOWN BUTTON SPRING (MIN HEIGHT)
0.55 INCHES	0.55 INCHES



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.

D) SETTING PROCEDURES

CAUTION₄: Do not run the tool without properly tightening connections. Running the tool with loose connections may damage the tool and cause malfunction.

Run to setting depth. The unloader remains open while running in. Pick up the tubing string and rotate 1/4 right-hand turn at the packer. Slack off weight and set down on the packer to set the slips, close the unloader and compress the packing elements. A minimum weight of 22,000 lbs. at the packer is required to pack off the elements.

CAUTION₅: Run the tool slowly, as with any hold down type packer, to help prevent dulling of the hydraulic buttons.

E) RELEASING PROCEDURES

Pick up on the tubing string to open the unloader, allowing time for the tubing and casing pressure to equalize. Refer to Pressure Affected Area Guide to determine weight in addition to pipe weight required to pick up on packer. Continued upward movement of the tubing string unsets the slips, relaxes the packing elements and re-jays the packer. The tool may now be moved and reset, or pulled from the well.

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. Elastomers 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.



HD RETRIEVABLE PACKER RIGHT-HAND AUTO 10-3/4" X 4-1/2" (65.7 – 91.2#)

Manual No:
DL-613-10750-1742

Revision: **A**

Revision Date:
02/28/2024

Authored by: J.Anderson

Approved by: E.Visaez

G) 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 to ensure that the packer remains set. 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 (IN)	TUBING TO PACKER			PRESSURE AFFECTED AREA (IN ²)	
	SIZE (IN)	WEIGHT (LB/FT)	ID (IN)	ABOVE	BELOW
10-3/4	1.900*	2.40	1.650	12.749 (DOWN)	2.348 (DOWN)
		2.90	1.610	12.749 (DOWN)	2.245 (DOWN)
	2.375*	4.00	2.041	11.154 (DOWN)	3.481 (DOWN)
		4.70	1.995	11.154 (DOWN)	3.335 (DOWN)
		5.95	1.867	11.154 (DOWN)	2.947 (DOWN)
	2.875*	6.50	2.441	9.093 (DOWN)	4.889 (DOWN)
		7.90	2.323	9.093 (DOWN)	4.448 (DOWN)
		8.70	2.259	9.093 (DOWN)	4.217 (DOWN)
	3.500	7.70	3.068	5.963 (DOWN)	7.602 (DOWN)
		9.30	2.992	5.963 (DOWN)	7.240 (DOWN)
		10.20	2.922	5.963 (DOWN)	6.915 (DOWN)
		12.95	2.750	5.963 (DOWN)	6.149 (DOWN)
	4.000	9.50	3.548	3.018 (DOWN)	10.096 (DOWN)
		11.00	3.476	3.018 (DOWN)	9.699 (DOWN)
	4.500	12.75	3.958	-0.320 (UP)	12.513 (DOWN)

*Tubing sizes not recommended.

Example: Consider a 10-3/4" X 4-1/2" HD Packer set on 4.500", 12.75 lbs/ft 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 10-3/4" X 4-1/2" HD Packer run on 4.500", 12.75 lbs/ft tubing. 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 -0.320 in². Multiplying the differential pressure (3,000 PSI) by the pressure affected area (-0.320 in²) results in a force of -960 lbs. The piston effect on the packer mandrel is an upward force of 960 lbs.



HD RETRIEVABLE PACKER RIGHT-HAND AUTO 10-3/4" X 4-1/2" (65.7 – 91.2#)

Manual No:
DL-613-10750-1742

Revision: **A**

Revision Date:
02/28/2024

Authored by: J.Anderson

Approved by: E.Visaez

H) 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

I) RECOMMENDED TOOLS

I-1) 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
- JACK STANDS

I-2) SPECIAL TOOLS

ITEM	QTY	DESCRIPTION	PART NUMBER
T1	1	DRAW BLOCK ASSEMBLY TOOL	AT010110
T2	1	BUTTON REMOVAL TOOL	AT-BRT000
T3	1 GAL	KOPR-KOTE® ANTI-SEIZE LUBRICANT	DL-KOPR-KOTE-1G

J) DISASSEMBLY

NOTE₂: Ensure vise is capable of handling weight of tool.

NOTE₃: Support tool during disassembly and assembly with jack stands as necessary.

J-1) Clamp top sub (1) in vise.

J-1.1) Unscrew and remove set screws (37) from J-pin bottom sub (23). Move J-body (20) as needed to access set screws (37).

J-1.2) Unscrew and remove J-pin bottom sub (23) from inner mandrel (2).

NOTE₄: Drag block body assembly must be free to rotate.

J-1.2.1) Remove o-ring (43) from J-pin bottom sub (23).

J-1.3) Compress drag blocks (22) with drag block assembly tool (T1).

J-1.4) Rotate drag block retainer (21) as needed to access set screws (26). Unscrew and remove set screws (26) from drag block body (18).

J-1.5) Unscrew and remove J-body (20) from drag block body (18) (**NOTE₅:** Left-hand threads).

J-1.5.1) Remove retaining ring (31) from J-body (20).

J-1.6) Remove drag block retainer (21) from drag block body (18).

J-1.7) Release drag blocks (22). Remove drag blocks (22) and drag block springs (3) from drag block body (18).



HD RETRIEVABLE PACKER RIGHT-HAND AUTO 10-3/4" X 4-1/2" (65.7 – 91.2#)

Manual No:
DL-613-10750-1742

Revision: **A**

Revision Date:
02/28/2024

Authored by: J.Anderson

Approved by: E.Visaez

J) DISASSEMBLY (cont'd)

J-1.8) Unscrew and remove rubber mandrel cap (19) from rubber mandrel (11).

NOTE: For added leverage, insert a rod through lower cone (16) and rubber mandrel (11) as needed.

J-1.9) Remove drag block body assembly and disassemble:

J-1.9.1) Unscrew and remove cap screw (36) from drag block body (18).

J-1.9.2) Wedge lower slips (17) outward (if needed). Remove lower slip support sleeve (32) from drag block body (18).

J-1.9.3) Remove wedges (if needed). Remove lower slips (17) and lower slip springs (25) from drag block body (18).

J-1.10) Unscrew and remove lower cone (16) from rubber retainer (15).

J-1.11) Unscrew rubber mandrel (11) from valve body (28). Remove rubber mandrel assembly and disassemble:

J-1.11.1) Remove elements (13, 14), rubber spacers (12) and rubber retainer (15) from secondary rubber mandrel (34).

J-1.11.2) Remove secondary rubber mandrel (34) from rubber mandrel (11).

J-1.11.3) Remove o-ring (40) from rubber mandrel (11).

J-1.12) Unscrew and remove gage ring (29) from valve body (28).

J-1.13) Unscrew and remove valve body (28) from central body (10).

J-1.13.1) Remove o-ring (38) from valve body (28).

J-1.14) Unscrew and remove central body (10) from hold down body (6).

J-2) Unclamp and remove top sub (1) from vise. Clamp lower end of inner mandrel (2) in vise.

CAUTION: Do NOT wrench or clamp on seal surface.

J-2.1) Unscrew and remove set screws (26) from top sub (1).

J-2.2) Unscrew and remove top sub (1) from inner mandrel (2).

J-2.2.1) Remove o-ring (44) from top sub (1).

J-2.3) Unscrew and remove hold down extension (33) from hold down body (6).

J-2.3.1) Remove o-ring (45) from hold down extension (33).

J-2.4) Unscrew and remove hold down cap (4) from hold down body (6).

J-2.5) Unscrew and remove flat head cap screws (35) from hold down body (6).

J-2.6) Remove hold down straps (7) from hold down body (6).

J-2.7) Remove drag block springs (3) from hold down buttons (30).

J-2.8) Remove hold down buttons (30) from hold down body (6) with button removal tool (T2).

J-2.8.1) Remove o-rings (42) from hold down buttons (30).

J-2.9) Remove hold down body (6) from inner mandrel (2).

J-2.9.1) Remove o-rings (47, 48) from hold down body (6).

J-2.10) Unscrew and remove compensating mandrel (8) from seal receptacle (5).

J-2.11) Remove compensating piston (9) from compensating mandrel (8).

J-2.11.1) Remove o-rings (46, 48) from compensating piston (9).

J-3) Unclamp and remove inner mandrel (2) from vise.

J-3.1) Remove seal receptacle (5) from inner mandrel (2).

J-3.1.1) Unscrew and remove seal retainer (27) from seal receptacle (5).

J-3.1.2) Remove o-rings (39, 41) and seal (24) from seal receptacle (5).



HD RETRIEVABLE PACKER RIGHT-HAND AUTO 10-3/4" X 4-1/2" (65.7 – 91.2#)

Manual No:
DL-613-10750-1742

Revision: **A**

Revision Date:
02/28/2024

Authored by: J.Anderson

Approved by: E.Visaez

K) ASSEMBLY

NOTE7: Clean and inspect all parts. Replace all worn and damaged parts. Install parts in proper order, orientation and tighten/torque all connections properly.

CAUTION7: To ensure tool operates properly, install o-rings in o-ring grooves **NOT** thread reliefs (Fig. 3).

NOTE8: Apply KOPR-KOTE® anti-seize lubricant (T3) on STUB ACME and drill pipe connections when making up connections.

NOTE2: Ensure vise is capable of handling weight of tool.

NOTE3: Support tool during disassembly and assembly with jack stands as necessary.

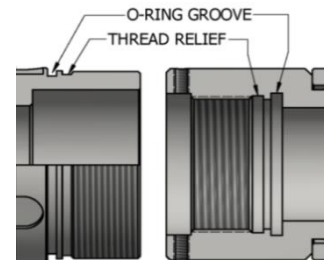


Fig. 3

K-1.1) Install o-rings (39, 41) into o-ring grooves in seal receptacle (5).

K-1.2) Install seal (24) in place on seal receptacle (5).

K-1.3) Screw seal retainer (27) onto seal receptacle (5).

CAUTION8: Do not rip or tear o-rings or seal during installation.

K-1.4) Install seal receptacle (5) and assembly onto inner mandrel (2).

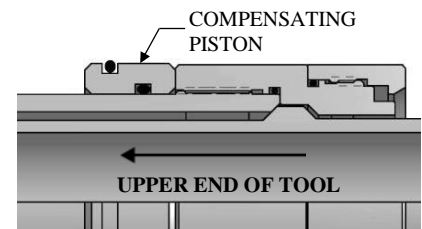


Fig. 4

K-2) Clamp lower part of inner mandrel (2) in vise.

CAUTION6: Do **NOT** wrench or clamp on seal surface.

K-2.1) Assemble compensating mandrel assembly and install:

K-2.1.1) Install o-rings (46, 48) into o-ring grooves in compensating piston (9).

K-2.1.2) Install compensating piston (9) onto compensating mandrel (8).

NOTE10: Compensating piston **MUST** be installed in correct direction (Fig. 4).

CAUTION9: Do not rip or tear o-ring during installation.

K-2.1.3) Screw compensating mandrel (8) into seal receptacle (5).

K-2.2) Install o-rings (47, 48) into o-ring grooves in hold down body (6).

K-2.3) Install o-ring (45) into o-ring groove in hold down extension (33).

K-2.4) Screw hold down extension (33) into hold down body (6).

CAUTION9: Do not rip or tear o-ring during installation.

K-2.5) Install hold down body (6) onto inner mandrel (2).

K-2.6) Assemble hold down buttons and install:

K-2.6.1) Install o-rings (42) into o-ring grooves in hold down buttons (30).

K-2.6.2) Install hold down buttons (30) into hold down body (6) (Fig. 5).

CAUTION9: Do not rip or tear o-rings during installation.

K-2.6.3) Align slot in hold down buttons (30) with slot in hold down body (6). Install drag block springs (3) into hold down buttons (30).

NOTE11: Install two (2 ea) springs per hold down button (Fig. 5).

K-2.6.4) Set hold down straps (7) in slots in hold down buttons (30) and hold down body (6).

K-2.6.5) Screw flat head cap screws (35) into hold down body (6) securing hold down straps (7) (Fig. 6).

K-2.7) Screw hold down cap (4) onto hold down body (6) capturing ends of hold down straps (7).

K-2.8) Install o-ring (44) into o-ring groove in top sub (1).



Fig. 5



Fig. 6



HD RETRIEVABLE PACKER RIGHT-HAND AUTO 10-3/4" X 4-1/2" (65.7 – 91.2#)

Manual No:
DL-613-10750-1742

Revision: **A**

Revision Date:
02/28/2024

Authored by: J.Anderson

Approved by: E.Visaez

K) ASSEMBLY (cont'd)

K-2.9) Screw top sub (1) onto inner mandrel (2).

CAUTION₉: Do not rip or tear o-rings during installation.

K-2.10) Screw set screws (26) into top sub (1).

K-3) Unclamp and remove inner mandrel (2) from vise. Clamp top sub (1) in vise.

K-3.1) Screw central body (10) onto hold down body (6).

CAUTION₉: Do not rip or tear o-rings during installation.

K-3.2) Install o-ring (38) into o-ring groove in valve body (28).

K-3.3) Screw valve body (28) into central body (10).

K-3.4) Screw gage ring (29) onto valve body (28).

K-3.5) Assemble rubber mandrel assembly:

K-3.5.1) Install o-ring (40) into o-ring groove in rubber mandrel (11).

K-3.5.2) Install secondary rubber mandrel (34) onto rubber mandrel (11).

CAUTION₉: Do not rip or tear o-rings during installation.

K-3.5.3) Install rubber retainer (15), rubber spacers (12), and elements (13, 14) onto secondary rubber mandrel (34).

K-3.5.4) Screw rubber mandrel (11) into valve body (28).

CAUTION₉: Do not rip or tear o-ring during installation.

K-3.6) Screw lower cone (16) into rubber retainer (15).

K-3.7) Assemble drag block body assembly and install:

K-3.7.1) Install lower slips (17) and lower slip springs (25) into drag block body (18). Wedge lower slips (17) outward.

NOTE₁₂: Install two (2 ea) springs per slip (Fig. 7).

K-3.7.2) Install lower slip support (32) into drag block body (18). Align hole in lower slip support (32) with threaded hole in drag block body (18).

K-3.7.3) Screw cap screw (36) into drag block body (18). Remove wedges.

K-3.7.4) Install drag block body (18) and assembly onto rubber mandrel (11). Slide temporarily upwards out of the way.

K-3.8) Screw rubber mandrel cap (19) onto rubber mandrel (11).

K-3.9) Install drag blocks (22) and drag block springs (3) into drag block body (18). Compress drag blocks (22) with drag block assembly tool (T1).

NOTE₁₃: Install six (6 ea) drag block springs per drag block (Fig. 8).

K-3.10) Install drag block retainer (21) capturing ends of drag blocks (22).

K-3.11) Install retaining ring (31) onto J-body (20).

K-3.12) Screw J-body (20) into drag block body (18) (**NOTE₅:** Left-hand threads).

K-3.13) Screw set screws (26) into drag block body (18). Rotate drag block retainer (21) as needed to access threaded holes in drag block body (18). Release drag blocks (22).

K-3.14) Install o-ring (43) into o-ring groove in J-pin bottom sub (23).

K-3.15) Screw J-pin bottom sub (23) onto inner mandrel (2).

NOTE₄: Drag block body assembly must be free to rotate.

CAUTION₉: Do not rip or tear o-ring during installation.

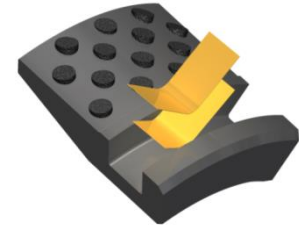


Fig. 7

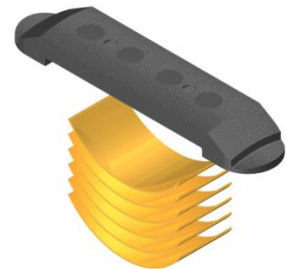


Fig. 8



HD RETRIEVABLE PACKER RIGHT-HAND AUTO 10-3/4" X 4-1/2" (65.7 – 91.2#)

Manual No:
DL-613-10750-1742

Revision: **A**

Revision Date:
02/28/2024

Authored by: J.Anderson

Approved by: E.Visaez

K) ASSEMBLY (cont'd)

K-3.16) Screw set screws (37) into J-pin bottom sub (23). Move J-body (20) as needed to access threaded holes in J-pin bottom sub (23).

K-4) Unclamp top sub (1) from vise and remove assembled tool.

L) PARTS LIST

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 61399RS
1	1	TOP SUB	DLMS110	61395610
2	1	INNER MANDREL	DLMS110	61395215
3	52	DRAG BLOCK SPRING	-	9101900
4	1	HOLD DOWN CAP	DLMS110	61399370
5	1	SEAL RECEPTACLE	DLMS110	61395730
6	1	HOLD DOWN BODY	DLMS110	61395320
7	4	HOLD DOWN STRAP - TYPE 2	DLMSFB4	61395361
8	1	COMPENSATING MANDREL	DLMS110	61395240
9	1	COMPENSATING PISTON	DLMS110	61395715
10	1	CENTRAL BODY	DLMS110	61395385
11	1	RUBBER MANDREL	DLMS110	60313220HT
12	2	RUBBER SPACER	DLMS35	60299840S
13	1	ELEMENT	70 DURO NITRILE	60299511S
14	2	ELEMENT	90 DURO NITRILE	60299513S
15	1	RUBBER RETAINER	DLMS110	60299850SHT
16	1	LOWER CONE	DLMS110	60399420SHT
17	5	CARBIDE LOWER SLIP	DLMS110	60099135C
18	1	DRAG BLOCK BODY	DLMS35 / DLMS110	61599335
19	1	RUBBER MANDREL CAP	DLMS80	60095230
20	1	J-BODY	DLMS110	61395340
21	1	DRAG BLOCK RETAINING RING	DLMS60	60399910
22	6	800 CARBIDE DRAG BLOCK, TYPE 2	DLMSDB4	9080900C
23	1	BOTTOM SUB	DLMS110	61395630
24	1	SEAL	90 DURO NITRILE	61395520
25	10	LOWER SLIP SPRING	-	7170901
26	6	3/8-16 UNC X 1/2 SOCKET SET SCREW	STEEL	SSS037C050
27	1	SEAL RETAINER	DLMS110	61395530
28	1	VALVE BODY	DLMS110	61395350
29	1	GAGE RING	DLMS110	60299830HT
30	8	HOLD DOWN BUTTON	DLMSSP	61399974
31	1	RETAINING RING	DLMS35	60099911
32	1	LOWER SLIP SUPPORT	DLMS110	60399912HT



HD RETRIEVABLE PACKER RIGHT-HAND AUTO 10-3/4" X 4-1/2" (65.7 – 91.2#)

Manual No:
DL-613-10750-1742

Revision: **A**

Revision Date:
02/28/2024

Authored by: J.Anderson

Approved by: E.Visaez

L) PARTS LIST (cont'd)

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 61399RS
33	1	HOLD DOWN EXTENSION	DLMS110	61395310
34	1	SECONDARY RUBBER MANDREL	DLMS110	60095221HT
35	12	3/8-16 UNC X 5/8 FLAT HEAD SOCKET CAP SCREW	STEEL	FHSC037C062
36	1	1/2-13 UNC X 1 SOCKET CAP SCREW	STEEL	SCS050C100
37	2	3/8-16 UNC X 3/8 SOCKET SET SCREW	STEEL	SSS037C037
38	1	160 O-RING	90 DURO NITRILE	90160
39	1	253 O-RING	90 DURO NITRILE	90253
40	1	254 O-RING	90 DURO NITRILE	90254
41	1	256 O-RING	90 DURO NITRILE	90256
42	8	338 O-RING	90 DURO NITRILE	90338
43	1	348 O-RING	90 DURO NITRILE	90348
44	1	350 O-RING	90 DURO NITRILE	90350
45	1	351 O-RING	90 DURO NITRILE	90351
46	1	356 O-RING	90 DURO NITRILE	90356
47	1	357 O-RING	90 DURO NITRILE	90357
48	2	363 O-RING	90 DURO NITRILE	90363

REDRESS KIT (RDK)		61399050
ASSEMBLED WEIGHT		616 LBS



HD RETRIEVABLE PACKER RIGHT-HAND AUTO 10-3/4" X 4-1/2" (65.7 – 91.2#)

Manual No:
DL-613-10750-1742

Revision: **A**

Revision Date:
02/28/2024

Authored by: J.Anderson

Approved by: E.Visaez

L) PARTS LIST (cont'd)

L-1) ELASTOMER TRIM OPTIONS

NOTE₁₄: For temperature range, refer to Elastomer Trim Temperature Guide.

L-1.1) HSN

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 61399RSH
13	1	ELEMENT	70 DURO HSN	60299511SH
14	2	ELEMENT	90 DURO HSN	60299513SH
24	1	SEAL	90 DURO HSN	61395520H
38	1	160 O-RING	90 DURO HSN	90160H
39	1	253 O-RING	90 DURO HSN	90253H
40	1	254 O-RING	90 DURO HSN	90254H
41	1	256 O-RING	90 DURO HSN	90256H
42	8	338 O-RING	90 DURO HSN	90338H
43	1	348 O-RING	90 DURO HSN	90348H
44	1	350 O-RING	90 DURO HSN	90350H
45	1	351 O-RING	90 DURO HSN	90351H
46	1	356 O-RING	90 DURO HSN	90356H
47	1	357 O-RING	90 DURO HSN	90357H
48	2	363 O-RING	90 DURO HSN	90363H

REDRESS KIT (RDK)		61399050H
-------------------	--	-----------

L-1.2) VITON

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 61399RSV
13	1	ELEMENT	70 DURO VITON	60299511SV
14	2	ELEMENT	90 DURO VITON	60299513SV
24	1	SEAL	90 DURO VITON	61395520V
38	1	160 O-RING	90 DURO VITON	90160V
39	1	253 O-RING	90 DURO VITON	90253V
40	1	254 O-RING	90 DURO VITON	90254V
41	1	256 O-RING	90 DURO VITON	90256V
42	8	338 O-RING	90 DURO VITON	90338V
43	1	348 O-RING	90 DURO VITON	90348V
44	1	350 O-RING	90 DURO VITON	90350V
45	1	351 O-RING	90 DURO VITON	90351V
46	1	356 O-RING	90 DURO VITON	90356V
47	1	357 O-RING	90 DURO VITON	90357V
48	2	363 O-RING	90 DURO VITON	90363V

REDRESS KIT (RDK)		61399050V
-------------------	--	-----------



HD RETRIEVABLE PACKER RIGHT-HAND AUTO 10-3/4" X 4-1/2" (65.7 – 91.2#)

Manual No:
DL-613-10750-1742

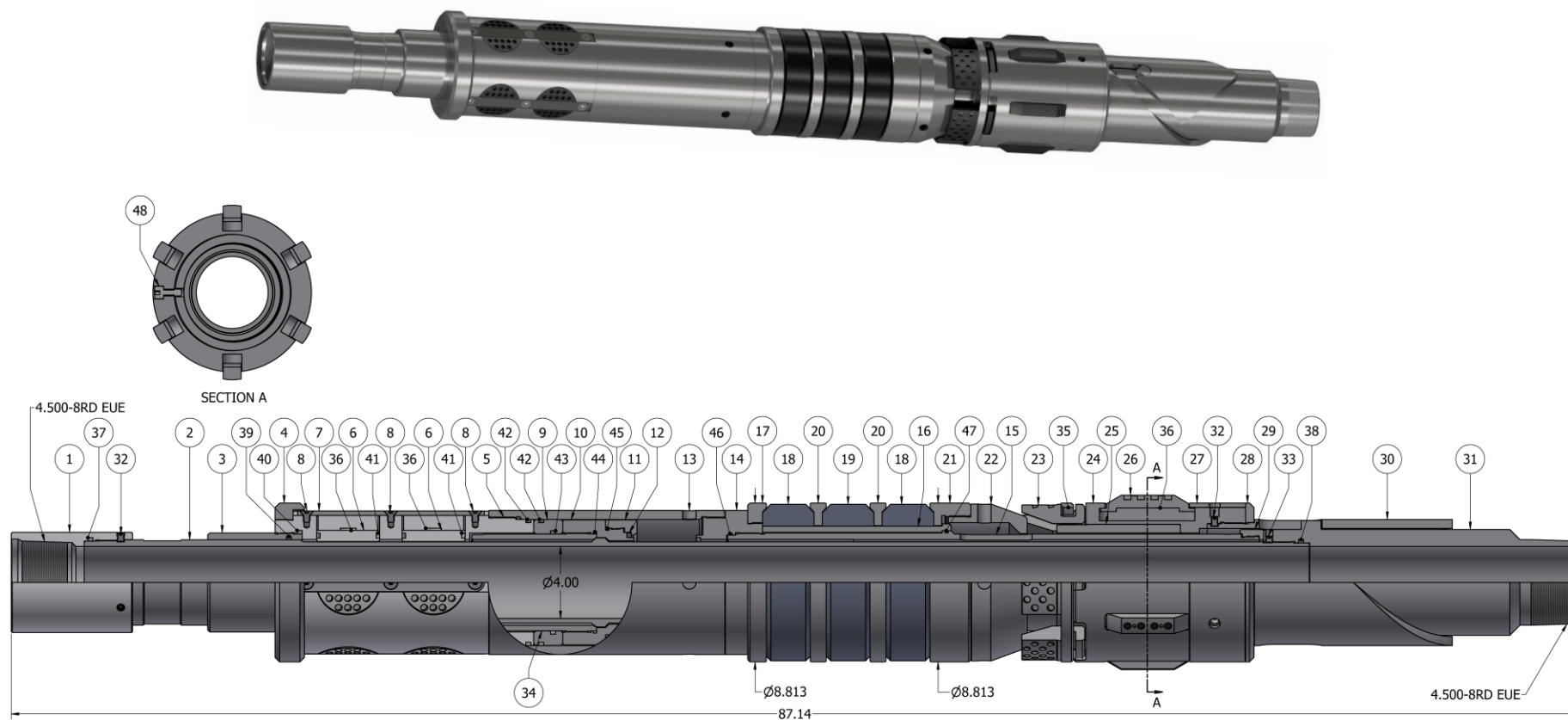
Revision: **A**


Revision Date:
02/28/2024

Authored by: J.Anderson

Approved by: E.Visaez

M) TECHNICAL ILLUSTRATION



	HD RETRIEVABLE PACKER RIGHT-HAND AUTO 10-3/4” X 4-1/2” (65.7 – 91.2#)	Manual No: DL-613-10750-1742
		Revision: A
		Revision Date: 02/28/2024
Authored by: J.Anderson		Approved by: E.Visaez

N) REVISION HISTORY

DATE	REVISION	DESCRIPTION OF CHANGES	REVISED BY	APPROVED BY
02/28/2024	A	Created manual	-	-