A) DESCRIPTION

The HD Abandonment Packer is a heavy duty service packer ideally suited for all types of squeeze cementing, formation fracturing, high pressure acidizing, etc. This packer 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 hold down buttons to improve retrievability and run in performance.

B) SPECIFICATION GUIDE

CASING			TOOL		THREAD CONNECTIONS BOX UP / PIN DOWN	PART NUMBER
SIZE (INCHES)	WEIGHT (LBS/FT)	RECOMMENDED HOLE SIZE (INCHES)	GAGE OD (INCHES)	NOMINAL ID (INCHES)		
7	26.0 – 32.0	6.094 - 6.276	5.875	2.50	NC 38 TOOL JOINT	61570RM-XBEC 61570RMH-XBEC[1] 61570RMV-XBEC[2]

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

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

DIFFERENTIAL PRESSURE (MAX)	HANGING WEIGHT ON SET PACKER (MAX)	TENSILE LOAD THRU UNSET PACKER (MAX)	TORQUE THRU TOOL (MAX)
10,000 PSI	150,000 LBS*	150,000 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 Abandonment Packer is run with a Retrievable Bridge Plug, make sure the Retrievable Bridge Plug J-slot is compatible with the J-slot on the HD Abandonment 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 (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"	
1,000 – 1,500 FT-LBS	600 – 800 FT-LBS	800 – 1,200 FT-LBS	Consult thread manufacturer's recommendations.

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.

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 work string and rotate to the right a 1/4 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 25,000 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 work string to open the unloader, allowing time for the tubing and casing pressure to equalize. Continued upward movement of the tubing unsets the slips, relaxes the packing elements and re-jays the packer. Rotate to the left a 1/4 turn at the packer and set down to return the J-pin to the running position in the J-slot. 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. 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) PRESSURE AFFECTED AREAS 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 drill pipe 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)	**DRILL PIPE TO PACKER**			**PRESSURE AFFECTED AREA** (IN^2)			
	SIZE (IN)	**WEIGHT** (LB/FT)	**ID** (IN)	**ABOVE**		**BELOW**	
7	2.375	4.85	1.995	2.764	(DOWN)	3.774	(DOWN)
		6.65	1.815	2.764	(DOWN)	3.235	(DOWN)
	2.875	6.85	2.441	0.702	(DOWN)	5.328	(DOWN)
		10.40	2.151	0.702	(DOWN)	4.282	(DOWN)
	3.500	8.50	3.063	-2.427	(UP)	8.017	(DOWN)
		13.30	2.764	-2.427	(UP)	6.648	(DOWN)
		15.50	2.602	-2.427	(UP)	5.965	(DOWN)
	4.000	11.85	3.476	-5.373	(UP)	10.138	(DOWN)
		14.00	3.340	-5.373	(UP)	9.410	(DOWN)
		15.70	3.240	-5.373	(UP)	8.893	(DOWN)
	ABANDONED	N/A	PLUGGED	7.194	(DOWN)	0.648	(DOWN)

Example: Consider a 7” X 3-1/2” HD Abandonment Packer set on 3.500”, 13.30 lbs/ft drill pipe with a differential pressure of 3,000 PSI in the annulus around the drill pipe 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” X 3-1/2” HD Abandonment Packer run on 3.500”, 13.30 lbs/ft drill pipe. 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 -2.427 in^2. Multiplying the differential pressure (3,000 PSI) by the pressure affected area (-2.427 in^2) results in a force of -7,281 lbs. The piston effect on the packer mandrel is an upward force of 7,281 lbs.

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

I-2) OPTIONAL SPECIAL TOOLS

ITEM	QTY	DESCRIPTION	PART NUMBER
T1	1	DRAG BLOCK ASSEMBLY TOOL	AT070110
T2	1	BUTTON REMOVAL TOOL	AT-BRT000
T3	1 GAL	KOPR-KOTE® ANTI-SEIZE LUBRICANT	DL-KOPR-KOTE-1G

J) DISASSEMBLY

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

J-1.1) Unscrew and remove set screws (35) from bottom sub (28).

J-1.2) Unscrew and remove bottom sub (28) from J-pin bottom sub (23).

J-1.2.1) Remove o-ring (45) from bottom sub (28).

J-1.3) Unscrew and remove set screws (39) from J-pin bottom sub (23). Slide J-body (20) and drag block body assembly as needed to access screws.

J-1.4) Unscrew and remove J-pin bottom sub (23) from inner mandrel (2).

NOTE$_2$: Drag block body assembly must be free to rotate.

J-1.4.1) Remove o-ring (41) from J-pin bottom sub (23).

J-1.5) Compress drag blocks (22) with drag block assembly tool (T1).

J-1.6) Unscrew and remove set screws (37) from drag block body (18). Rotate drag block retainer (21) as needed to access screws.

J-1.7) Unscrew J-body (20) from drag block body (18) (**NOTE$_3$**: Left-hand threads).

J-1.7.1) Remove retaining ring (31) from J-body (20).

J-1.8) Remove drag block retainer (21) from drag block body (18).

J-1.9) Release drag blocks (22). Remove drag blocks (22) and drag block springs (3) from drag block body (18).

J-1.10) Unscrew and separate lower cone (16) from rubber retainer (15) to allow access to rubber mandrel (11).

J-1.11) Unscrew rubber mandrel (11) from valve body (32). Remove rubber mandrel assembly and disassemble:

J-1.11.1) Remove elements (13, 14), rubber spacers (12), and rubber retainer (15) from rubber mandrel (11).

J-1.11.1.1) Unscrew and remove lower gage ring (29) from rubber retainer (15).

J-1.11.2) Unscrew and remove rubber mandrel cap (19) from rubber mandrel (11). Move drag block body (18) upwards as necessary to access rubber mandrel cap (19).

J-1.11.3) Wedge lower slips (17) outward (if needed). Remove drag block body assembly and disassemble:

J-1.11.3.1) Remove wedges (if needed). Remove lower slips (17) and lower slip springs (25) from drag block body (18).

J) DISASSEMBLY (cont’d)

J-1.11.4) Remove lower cone (16) from rubber mandrel (11).

J-1.12) Unscrew and remove upper gage ring (29) from valve body (32).

J-1.13) Unscrew and remove valve body (32) from central body (10).

J-1.13.1) Remove o-ring (43) from valve body (32).

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

J-1.15) Unscrew and remove seal retainer (27) from seal receptacle (5).

J-1.16) Unscrew and remove seal receptacle (5) from compensating mandrel (8).

J-1.16.1) Remove o-rings (43, 44) and seal (24) from seal receptacle (5).

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

CAUTION$_6$: Do NOT wrench or clamp on seal surface.

J-2.1) Unscrew and remove set screws (38) from top sub (1).

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

J-2.2.1) Remove o-ring (42) from top sub (1).

J-2.3) Unscrew and remove hold down cap (7) from hold down body (6).

J-2.4) Slide strap retainer (33) down and out-of-the-way temporarily.

J-2.5) Unscrew and remove flat head cap screws (34) from hold down body (6).

J-2.6) Remove hold down straps (36) from hold down body (6).

J-2.7) Remove hold down button springs (26) from hold down body (6).

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 (40) from hold down buttons (30).

J-2.9) Unscrew and remove hold down extension (4) from hold down body (6).

J-2.9.1) Remove o-rings (45) from hold down extension (4).

J-2.10) Remove hold down body (6) from inner mandrel (2).

J-2.10.1) Remove o-rings (43, 47) from hold down body (6).

J-2.11) Remove strap retainer (33) from inner mandrel (2).

J-2.12) Remove compensating mandrel (8) from inner mandrel (2).

J-2.12.1) Remove compensating piston (9) from compensating mandrel (8).

J-2.12.2) Remove o-rings (46, 47) from compensating piston (9).

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

K) ASSEMBLY

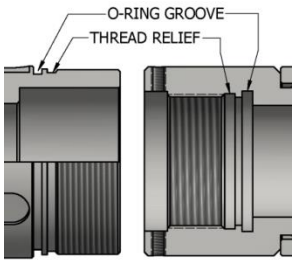


Fig. 2

NOTE$_4$: Clean and inspect all parts. Replace all worn and damaged parts. Install parts in proper order, and orientation and tighten/torque all connections properly.

CAUTION$_7$: To ensure tool operates properly, install o-rings in o-ring grooves **NOT** thread reliefs (Fig. 2).

NOTE$_8$: Apply anti-seize lubricant (T3) on STUB ACME and drill pipe connections when making up connections.

K-1) Clamp inner mandrel (2) in vise.

CAUTION$_6$: Do NOT wrench or clamp on seal surface.

K-1.1) Install o-rings (46, 47) in o-ring grooves in compensating piston (9).

K) ASSEMBLY (cont’d)

K-1.2) Install compensating piston (9) onto compensating mandrel (8).

NOTE7: Compensating piston MUST be installed in correct direction.

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

K-1.3) Install compensating mandrel (8) on to inner mandrel (2).

K-1.4) Install strap retainer (33) onto inner mandrel (2).

K-1.5) Install o-rings (43, 47) in o-ring grooves in hold down body (6).

K-1.6) Install hold down body (6) onto inner mandrel (2).

K-1.7) Install o-rings (45) in o-ring grooves in upper hold down extension (4).

K-1.8) Screw hold down extension (4) into hold down body (6).

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

Fig. 3

K-1.9) Install o-rings (40) in o-ring grooves in hold down buttons (30).

K-1.10) Install hold down buttons (30) (Fig. 3) and hold down button springs (26) into hold down body (6).

NOTE5: Install three (3 ea) springs per button (Fig. 4).

K-1.11) Align slot in hold down buttons (30) with slot in hold down body (6). Set hold down straps (36) in slots in hold down buttons (30) and hold down body (6) (Fig. 4).

K-1.12) Screw flat head cap screws (34) into hold down body (6) (Fig. 4).

K-1.13) Install strap retainer (33) onto hold down body (6) to capture lower ends of hold down straps (36).

K-1.14) Screw hold down cap (7) onto hold down body (6) to capture upper ends of hold down straps (36).

K-1.15) Install o-ring (42) in o-ring groove in top sub (1).

K-1.16) Screw top sub (1) onto inner mandrel (2).

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

K-1.17) Screw set screws (38) into top sub (1).


Fig. 4

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

K-2.1) Install o-rings (43, 44) in o-ring grooves in seal receptacle (5).

K-2.2) Install seal (24) onto seal receptacle (5).

K-2.3) Screw seal receptacle (5) onto compensating mandrel (30).

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

K-2.4) Screw seal retainer (27) onto seal receptacle (5).

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

K-2.5) Screw central body (10) onto hold down body (6).

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

K-2.6) Install o-ring (43) in o-ring groove in valve body (32).

K-2.7) Screw valve body (32) into central body (10).

K-2.8) Screw upper gage ring (29) onto valve body (32).

K-2.9) Assemble rubber mandrel assembly and install:

K-2.9.1) Install lower cone (16) onto rubber mandrel (11).

K-2.9.2) Assemble drag block body assembly and install:

K-2.9.2.1) Install lower slips (17) and lower slip springs (25) into drag block body (18). Wedge slips outwards.

NOTE6: Install two (2ea) springs per slip (Fig. 5).


Fig. 5

K-2.9.2.2) Install drag block body assembly onto rubber mandrel (11). Remove wedges.

K) ASSEMBLY (cont’d)

K-2.9.3) Screw rubber mandrel cap (19) onto rubber mandrel (11). Move drag block body (18) upwards on rubber mandrel (11) as necessary to access threads.

K-2.9.4) Screw gage ring (29) onto rubber retainer (15).

K-2.9.5) Install rubber retainer (15), elements (13, 14), and rubber spacers (12) onto rubber mandrel (11).

K-2.9.6) Install rubber mandrel assembly onto inner mandrel (2). Screw rubber mandrel (11) into valve body (32).

CAUTION$_8$: Do not rip or tear o-ring during installation.

K-2.10) Screw lower cone (16) into rubber retainer (15).

K-2.11) Install drag blocks (22) and drag block springs (3) into drag block body (18). Compress drag blocks (22) with drag block assembly tool (T1).

NOTE$_{10}$: Install six (6ea) springs per drag block (Fig. 6).

Fig. 6

K-2.12) Install drag block retainer (21) onto drag block body (18) to capture ends of drag blocks (22).

K-2.13) Install retaining ring (31) onto J-body (20).

K-2.14) Screw J-body (20) into drag block body (18) (**NOTE$_3$**: Left-hand threads).

NOTE$_2$: Drag block body assembly must be free to rotate.

K-2.15) Screw set screws (37) into drag block body (18). Move drag block retainer (21) as necessary to access threaded holes in drag block body (18). Release drag blocks (22).

K-2.16) Install o-ring (41) in o-ring groove in J-pin bottom sub (23).

K-2.17) Screw J-pin bottom sub (23) onto inner mandrel (2).

CAUTION$_8$: Do not rip or tear o-ring during installation.

K-2.18) Screw set screws (39) into J-pin bottom sub (23). Slide J-body (20) and drag block body assembly as needed to access threaded holes in J-pin bottom sub (23).

K-2.19) Install o-ring (45) in o-ring groove in bottom sub (28).

K-2.20) Screw bottom sub (28) into J-pin bottom sub (23).

CAUTION$_8$: Do not rip or tear o-ring during installation.

K-2.21) Screw set screws (35) into bottom sub (28).

K-3) Unclamp top sub (1) from vise and remove assembled tool.

L) PARTS LIST

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 61570RM-XBEC
1	1	TOP SUB	DLMS110	61370615-XBEC
2	1	INNER MANDREL	DLMS125	61370215-T
3	36	DRAG BLOCK SPRING	-	9101900
4	1	HOLD DOWN EXTENSION	DLMS110	61370310
5	1	SEAL RECEPTACLE	DLMS110	61370730
6	1	HOLD DOWN BODY	DLMS110	61370320
7	1	HOLD DOWN CAP	DLMS110	61370370
8	1	COMPENSATING MANDREL	DLMS110	61370240
9	1	COMPENSATING PISTON	DLMS110	61370715
10	1	CENTRAL BODY	DLMS110	61370385
11	1	RUBBER MANDREL	DLMS110	61370220
12	2	RUBBER SPACER	DLMS60	60270840
13	1	ELEMENT	80 DURO NITRILE	60270512
14	2	ELEMENT	90 DURO NITRILE	60270513
15	1	RUBBER RETAINER	DLMS110	61170850HT
16	1	LOWER CONE	DLMS110	60070420HT
17	4	CARBIDE LOWER SLIP	DLMS110	60070135C
18	1	DRAG BLOCK BODY	DLMS110	61370335
19	1	RUBBER MANDREL CAP	DLMS60	60070230
20	1	J-BODY	DLMS110	61370342
21	1	DRAG BLOCK RETAINER	DLMS60	60070910
22	6	700 CARBIDE DRAG BLOCK	DLMSDB4	9070900C
23	1	J-PIN BOTTOM SUB	DLMS110	61370630-XAB
24	1	SEAL	90 DURO NITRILE	61370520
25	8	LOWER SLIP SPRING	-	7170901
26	18	HOLD DOWN BUTTON SPRING	-	61370975
27	1	SEAL RETAINER	DLMS110	61370530
28	1	BOTTOM SUB	DLMS110	61370635-XBEC
29	2	GAGE RING	DLMS60	61170830
30	6	CARBIDE HOLD DOWN BUTTON	DLMSSP	61370140C
31	1	RETAINING RING	DLMS60	60070911
32	1	VALVE BODY	DLMS110	61370350
33	1	STRAP RETAINER	DLMS110	61370650
34	3	5/16-18 UNC X 1/2 FLAT HEAD SOCKET CAP SCREW	STEEL	FHSC031C050
35	4	1/4-20 UNC X 1/2 SOCKET SET SCREW	STEEL	SSS025C050
36	3	HOLD DOWN STRAP	DLMSFB4	61370360

L) PARTS LIST (cont’d)

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 61570RM-XBEC
37	3	5/16-18 UNC X 1/2 SOCKET SET SCREW	STEEL	SSS031C050
38	3	3/8-16 UNC X 3/8 SOCKET SET SCREW	STEEL	SSS037C037
39	2	3/8-16 UNC X 1/2 SOCKET SET SCREW	STEEL	SSS037C050
40	6	230 O-RING	90 DURO NITRILE	90230
41	1	233 O-RING	90 DURO NITRILE	90233
42	1	235 O-RING	90 DURO NITRILE	90235
43	3	241 O-RING	90 DURO NITRILE	90241
44	1	243 O-RING	90 DURO NITRILE	90243
45	3	339 O-RING	90 DURO NITRILE	90339
46	1	344 O-RING	90 DURO NITRILE	90344
47	2	350 O-RING	90 DURO NITRILE	90350

REDRESS KIT (RDK)		61570050
REDRESS KIT (RDK) W/SCREWS		61570050-1
ASSEMBLED WEIGHT		383 LBS

L-1) ELASTOMER TRIM OPTIONS

NOTE9: For temperature range, refer to Elastomer Trim Temperature Guide.

L-1.1) HSN

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 61570RMH-XBEC
13	1	ELEMENT	80 DURO HSN	60270512H
14	2	ELEMENT	90 DURO HSN	60270513H
24	1	SEAL	90 DURO HSN	61370520H
40	6	230 O-RING	90 DURO HSN	90230H
41	1	233 O-RING	90 DURO HSN	90233H
42	1	235 O-RING	90 DURO HSN	90235H
43	3	241 O-RING	90 DURO HSN	90241H
44	1	243 O-RING	90 DURO HSN	90243H
45	3	339 O-RING	90 DURO HSN	90339H
46	1	344 O-RING	90 DURO HSN	90344H
47	2	350 O-RING	90 DURO HSN	90350H

REDRESS KIT (RDK)		61570050H
REDRESS KIT (RDK) W/SCREWS		61570050H-1

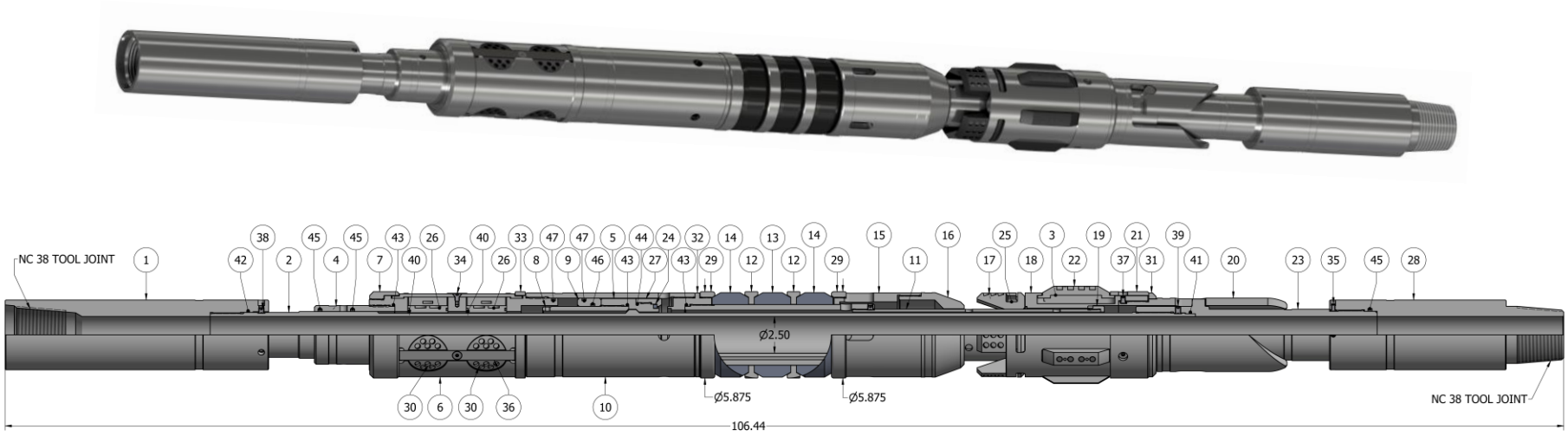
L) PARTS LIST (cont’d)

L-1.2) VITON

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 61570RMV-XBEC
13	1	ELEMENT	80 DURO VITON	60270512V
14	2	ELEMENT	90 DURO VITON	60270513V
24	1	SEAL	90 DURO VITON	61370520V
40	6	230 O-RING	90 DURO VITON	90230V
41	1	233 O-RING	90 DURO VITON	90233V
42	1	235 O-RING	90 DURO VITON	90235V
43	3	241 O-RING	90 DURO VITON	90241V
44	1	243 O-RING	90 DURO VITON	90243V
45	3	339 O-RING	90 DURO VITON	90339V
46	1	344 O-RING	90 DURO VITON	90344V
47	2	350 O-RING	90 DURO VITON	90350V

REDRESS KIT (RDK)		61570050V
REDRESS KIT (RDK) W/SCREWS		61570050V-1

M) TECHNICAL ILLUSTRATION



N) REVISION HISTORY

DATE	REVISION	DESCRIPTION OF CHANGES	REVISED BY	APPROVED BY
07/11/2022	A	Created manual	-	-