



CASING PACKER RIGHT HAND AUTO 10-3/4" X 7"

Manual No:
DL-441-10750-445

Revision: **B**

Revision Date:
08/29/2023

Authored by: B.Mathis

Approved by: D.Hushbeck

A) DESCRIPTION

The Casing Packer is a large bore, single grip packer used to isolate casing and for production or injection. This packer can run in tension or compression and can be used as a liner hanger when equipped with a right-hand release sub. Coarse, deep wickered slips allow this packer to set in open-hole or scaly casing. For open-hole set, this packer can be equipped with two elongated packing elements to assure a positive seal.

B) SPECIFICATION GUIDE

CASING			TOOL		THREAD CONNECTION BOX UP / BOX DOWN	PART NUMBER
SIZE (INCHES)	WEIGHT (LBS/FT)	RECOMMENDED HOLE SIZE (INCHES)	GAGE OD (INCHES)	MINIMUM ID (INCHES)		
10-3/4	32.75 – 55.5	9.760 – 10.192	9.500	6.50	7" LTC	44110 44110H ¹ 44110V ² 44110C ³ 44110HC ⁴ 44110VC ⁵

Tool Options: ¹HSN, ²Viton, ³Nitrile, Carbide, ⁴HSN, Carbide, ⁵Viton, Carbide

NOTE: Tool listed is right-hand set / left-hand release. Additional J-slot designs are available.

DIFFERENTIAL PRESSURE (MAX)	TENSILE LOAD THRU TOOL (MAX)	TORQUE THRU TOOL (MAX)
3,000 PSI	342,000 LBS	2,000 FT-LBS

C) PRE-INSTALLATION INSPECTION PROCEDURES

CAUTION: 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 tools 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.

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



CASING PACKER RIGHT HAND AUTO 10-3/4" X 7"

Manual No:
DL-441-10750-445

Revision: **B**

Revision Date:
08/29/2023

Authored by: B.Mathis

Approved by: D.Hushbeck

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

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 elements, cap screws, etc. Contact D&L sales for redress kit and/or other part information.

D) SETTING PROCEDURE

CAUTION₂: Do not run the tool without properly tightening connections. Running the tool with loose connections may damage the tool and cause malfunction.

D-1) TENSION SET

Run packer to setting depth. Slack off on the casing approximately three inches (3"). Pick up on the casing while rotating 1/4 turn to the right at the packer. Pull tension to set slips and pack off elements (22,000 lbs). The casing must be left in tension or packer will unset.

D-2) COMPRESSION SET

CAUTION₃: Casing Packer **MUST** be run upside down to set with compression.

Run packer upside down to setting depth. While holding right-hand torque, pick up on the casing approximately three inches (3") and rotate the 1/4 turn to the left at the packer. Slack off with enough weight to set the packer (22,000 lbs). The casing must be left in compression or packer will unset.

E) RELEASING PROCEDURE

E-1) TENSION SET

Slack off on the casing and rotate 1/4 turn to the left at the packer. Pick up on the casing while holding left-hand torque to return J-pin to the J-slot running position. The tool may now be retrieved or moved downhole and reset.

E-2) COMPRESSION SET

Pick up on the casing and rotate 1/4 turn to the right at the packer. The tool may now be retrieved or moved downhole and reset.

F) STORAGE RECOMMENDATIONS

When preparing the tool for storage, follow the Pre-Installation Inspection Procedures. Re-assemble the tool with connections hand-tight only and in running position if applicable. Elements should be in a relaxed state—free from tension, compression and other stresses that could cause deformation.

Store the tool, if possible, in an enclosed, temperature and humidity controlled environment. Avoid excessively high temperatures over long periods of time. Shield elastomeric parts from ultraviolet light sources. Keep tool dry and protected from condensation. Do not store in contact with or near volatile or corrosive chemicals. Do not store near ozone generating equipment or operations such as welding.

G) ELASTOMER TRIM TEMPERATURE GUIDE

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



CASING PACKER RIGHT HAND AUTO 10-3/4" X 7"

Manual No:
DL-441-10750-445

Revision: **B**

Revision Date:
08/29/2023

Authored by: B.Mathis

Approved by: D.Hushbeck

H) RECOMMENDED HAND TOOLS

- VISE
- GLOVES
- ALLEN WRENCHES
- TAPE MEASURE
- O-RING PICK
- BAR
 - 1/2-INCH
 - 3/4-INCH
- PAINT BRUSH, 2-INCH
- PIPE WRENCH, 3-FT (2 EA)
- "CHEATER" PIPE, 4-FT LONG
- ADJUSTABLE WRENCH, 12-INCH
- 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) DISASSEMBLY

I-1) Clamp coupling (1) in vise.

I-1.1) Unscrew and remove bottom sub (10) from mandrel (2).

I-1.2) Remove elements (8), rubber spacer (7), and cone (6) from mandrel (2).

I-1.3) Unscrew and remove flat head cap screws (13) securing drag springs (3) to J-body (9).

I-1.4) Remove drag springs (3) from J-body (9).

I-1.5) Unscrew and remove flat head cap screws (13) securing slip arms (5) to J-body (9).

I-1.6) Remove slip arm assemblies and disassemble:

I-1.6.1) Unscrew and remove flat head cap screws (12) from slips (4).

I-1.6.2) Separate slips (4) from slip arms (5).

I-1.7) Unscrew and remove low head cap screw (14) from mandrel (2).

I-1.8) Remove J-body (9) from mandrel (2).

I-1.9) Unscrew and remove mandrel (2) from coupling (1).

CAUTION4: Do NOT wrench or clamp on seal surface.

I-2) Unclamp and remove coupling (1) from vise.

J) ASSEMBLY

NOTE2: Clean and inspect all parts. Replace all worn and damaged parts. Install parts in proper order, and orientation and tighten/torque all connections properly.

J-1) Clamp coupling (1) in vise.

J-1.1) Screw mandrel (2) into coupling (1).

CAUTION4: Do NOT wrench or clamp on seal surface.

J-1.2) Install J-body (9) onto mandrel (2). Align running position of J-slot on J-body (9) with threaded hole in mandrel (2).

J-1.3) Screw low head cap screw (14) into mandrel (2).

J-1.4) Set drag springs (3) in place on mandrel (2). Align holes in drag springs (3) with threaded holes in J-body (9).

J-1.5) Screw flat head cap screws (13) into J-body (9) to secure drag springs (3).

J-1.6) Assemble slip arm assemblies and install:

J-1.6.1) Set slips (4) in place on slip arms (5). Align threaded holes in slips (4) with holes in slip arms (5).

J-1.6.2) Screw flat head cap screws (12) into slips (5).

J-1.6.3) For each assembly, set in place on J-body (9). Align holes in slip arms (5) with threaded holes in J-body (9).

J-1.6.4) Screw flat head cap screws (13) into J-body (9).

J-1.7) Install cone (6), elements (8), and rubber spacer (7) onto mandrel (2).



CASING PACKER RIGHT HAND AUTO 10-3/4" X 7"

Manual No:
DL-441-10750-445

Revision: **B**

Revision Date:
08/29/2023

Authored by: B.Mathis

Approved by: D.Hushbeck

J) ASSEMBLY (cont'd)

J-1.8) Screw bottom sub (10) onto mandrel (2).

J-2) Unclamp coupling (1) from vise and remove assembled tool.

K) PARTS LIST

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 44110
1	1	COUPLING	DLMS60	CP700LTC700LTC
2	1	MANDREL WELDMENT	1018	44110210
3	4	DRAG SPRING	-	45570920
4	4	SLIP	1026	45510110
5	4	SLIP ARM	STAINLESS STEEL	45570900
6	1	CONE	DLMS35	44110410
7	1	RUBBER SPACER	DLMS35	44110840
8	2	ELEMENT	80 DURO NITRILE	44110512
9	1	J-BODY RIGHT HAND AUTO	1026	44110310
10	1	BOTTOM SUB	1018	44010610
11	1	CAGE RING	1026	44110210E
12	8	FLAT HEAD SOCKET CAP SCREW 5/16-18 UNC X 1/2	STEEL	FHSC031C050
13	16	FLAT HEAD SOCKET CAP SCREW 5/16-18 UNC X 3/4	STEEL	FHSC031C075
14	1	LOW HEAD SOCKET CAP SCREW 1/2-13 UNC X 7/16	STEEL	LHSC050C043

REDRESS KIT (RDK)		44110050
ASSEMBLED WEIGHT		229 LBS

K-1) ELASTOMER TRIM OPTIONS

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

K-1.1) HSN

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 44110H
8	2	ELEMENT	80 DURO HSN	44110512H

REDRESS KIT (RDK)		44110050H
-------------------	--	-----------

K-1.2) VITON

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 44110V
8	2	ELEMENT	80 DURO VITON	44110512V

REDRESS KIT (RDK)		44110050V
-------------------	--	-----------

K-2) CARBIDE OPTION

ITEM	QTY	DESCRIPTION	MATERIAL	P/N 44110C
4	4	CARBIDE SLIP	DLMS110	45510110C



CASING PACKER **RIGHT HAND AUTO** **10-3/4" X 7"**

Manual No:
DL-441-10750-445

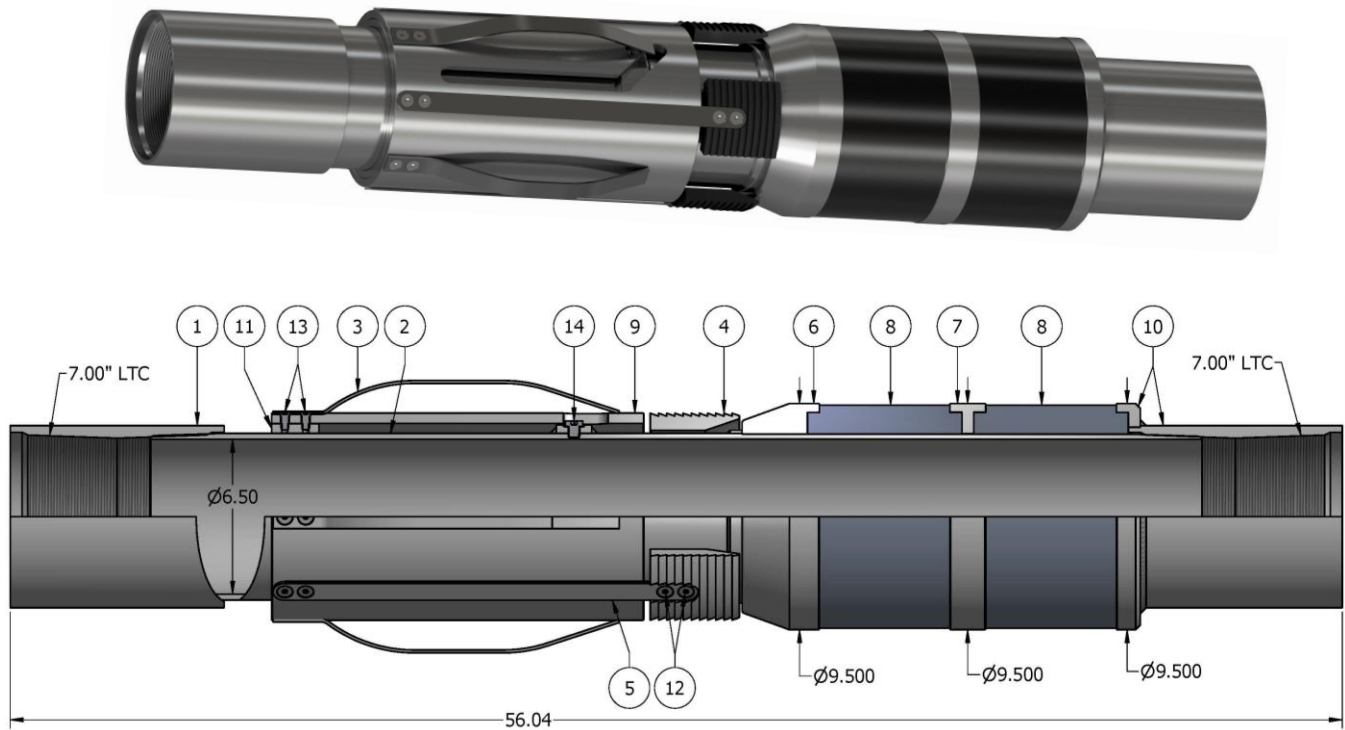
Revision: **B**

Revision Date:
08/29/2023

Authored by: B.Mathis

Approved by: D.Hushbeck

L) TECHNICAL ILLUSTRATIONS



M) REVISION HISTORY

DATE	REVISION	DESCRIPTION OF CHANGES	REVISED BY	APPROVED BY
08/29/2023	B	Revised entire manual	J.Anderson	K.Plunkett