



MECHANICAL COLLAR LOCATOR

4-1/2" (15.1 – 16.6#)

Manual No:
DL-205-4500-1166

Revision: **A**

Revision Date:
09/21/2018

Authored by: *J.Anderson*

Approved by: *J.Johnson*

A) DESCRIPTION

The Mechanical Collar Locator is designed to provide a positive indication when pulled through each casing collar. An accurate tubing depth can be calculated by combining the number of collars the locator has traveled through and the casing tally.

B) SPECIFICATION GUIDE

CASING			TOOL		THREAD CONNECTION BOX UP / PIN DOWN	PART NUMBER
SIZE (INCHES)	WEIGHT (LBS/FT)	RECOMMENDED HOLE SIZE (INCHES)	GAGE OD (INCHES)	ID (INCHES)		
4-1/2	15.1 – 16.6	3.754 – 3.826	3.648 3.664*	1.94	2-3/8 EUE	20543

*Max OD across compressed locator blocks.

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 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.

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



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D) 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.

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.

E) RECOMMENDED TOOLS

E-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
- STRAP WRENCH
- 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

E-2) OPTIONAL SPECIAL TOOLS

ITEM	QTY	DESCRIPTION	PART NUMBER
T1	1	DRAG BLOCK ASSEMBLY TOOL	AT045110

F) DISASSEMBLY

F-1) Clamp upper end of mandrel (2) in vise.

F-1.1) Compress collar locator blocks (3) with drag block assembly tool (T1).

F-1.2) Unscrew and remove set screws (5) from body (1).

F-1.3) Unscrew retainer (6) from body (1) and remove from mandrel (2).

F-1.4) Remove drag block assembly tool (T1) and remove collar locator blocks (3) and springs (4) from body (1).

F-1.5) Remove snap ring (7) from mandrel (2).

F-1.6) Remove body (1) from mandrel (2).

F-2) Unclamp mandrel (2) and remove from vise.

G) ASSEMBLY

NOTE₁: Clean and inspect all parts. Replace all worn and damaged parts. Install parts in proper order and orientation.

G-1) Clamp upper end of mandrel (2) in vise.

G-1.1) Install body (1) onto mandrel (2).

G-1.2) Install snap ring (7) into snap ring groove in mandrel (2).

G-1.3) Install collar locator blocks (3) and drag block springs (4) into body (1). Compress blocks with drag block assembly tool (T1).

NOTE₂: Install six (6 ea) springs per block.

G-1.4) Install retainer (6) onto mandrel (2) and screw onto body (1) capturing lower end of locator blocks (3).

G-1.5) Screw set screws (5) into retainer (6). Remove drag block assembly tool (T1).

G-2) Unclamp mandrel (2) and remove assembled tool from vise.



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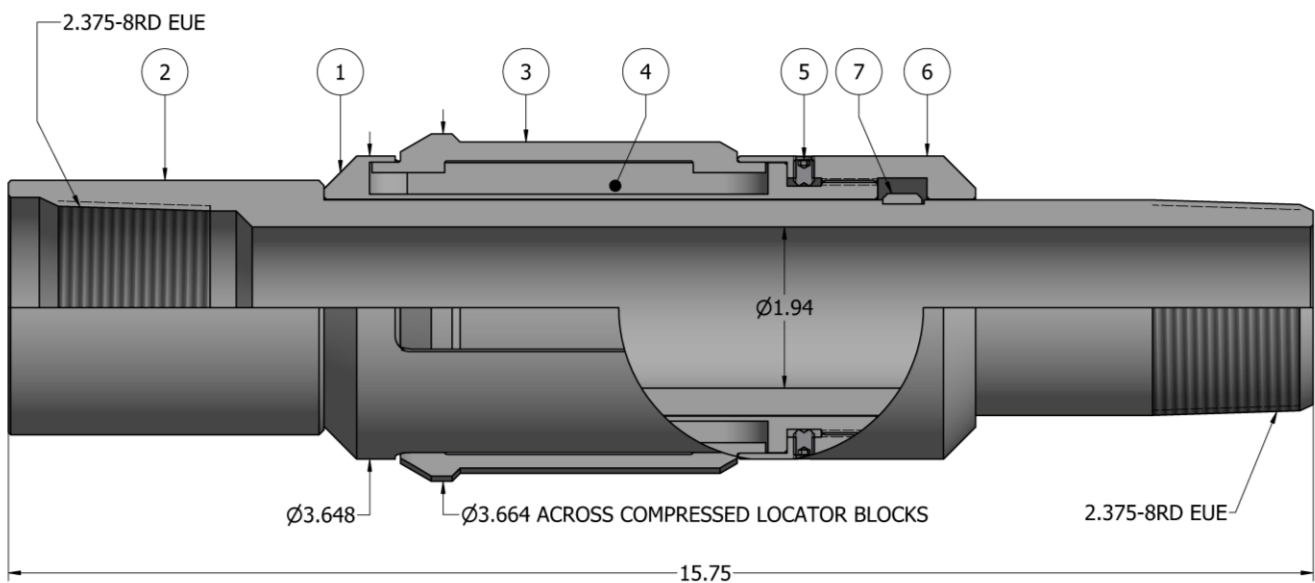
H) PARTS LIST

ITEM	QTY	DESCRIPTION	MATERIAL	PART NUMBER
1	1	BODY	DLMS80	20543002
2	1	MANDREL	DLMS110	20543001
3	4	COLLAR LOCATOR BLOCK	DLMSDB8	20543003
4	24	DRAG BLOCK SPRING	-	9100900
5	4	SET SCREW 1/4-20 UNC X 5/16	STEEL	SSS025C031
6	1	RETAINER	DLMS80	20543005
7	1	SNAP RING	DLMS80	20543006

*Install six (6 ea) springs per locator block.

ASSEMBLED WEIGHT	21 LBS
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I) TECHNICAL ILLUSTRATION





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J) REVISION HISTORY

DATE	REVISION	DESCRIPTION OF CHANGES	REVISED BY	APPROVED BY
09/21/2018	A	Created new manual	-	-