



**REBCO OIL TOOLS**

EXCEEDING EXPECTATIONS ONE  
TOOL AT A TIME

# Shifting Tool Equipment



## SECTION V: SHIFTING TOOLS

SHIFTING TOOLS were designed primarily to open or close inner sleeve in several types of Sliding Sleeves.

There are many Types of Shifting Tools designed for specific applications and its use.

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## SECTION V: SHIFTING TOOLS

### Type 'ROTBO' Shifting Tool Assembly: 1.250" – 4.562"

Rebco Type 'ROTBO' Shifting Tool is used to move the inner sleeve of several types of Sliding Sleeves.

The [Alternate](#) (Positive) Keys are also available. These Keys are used for specific applications.

Product Code: 42

#### TECHNICAL DATA

SLEEVE SIZE	1.250"	1.375"	1.500"	1.625"
ASSEMBLY NUMBER	42012012500	42012013700	42012015000	42012016200

#### ENGINEERING DATA:

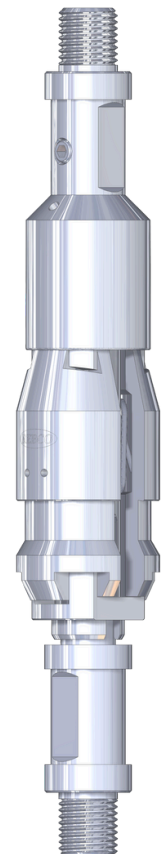
KEYS EXPANDED – OD Min	1.39"	1.64"	1.63"	1.89"
BODY OD	1.24"	1.36"	1.42"	1.61"
LENGTH	11.1"	11.1"	12.4"	12.75"
MATERIAL	Alloy	Alloy	Alloy	Alloy
PIN THREAD	5/8" - 11	5/8" - 11	15/16" - 10	15/16" - 10
FISHING NECK SIZE	1.000"	1.000"	1.187"	1.187"
Ref: <a href="#">ALTERNATE</a> (Positive) KEY	42004	42005	42006	420180

#### TECHNICAL DATA

SLEEVE SIZE	1.710"	1.781"	1.875"	2.125"
ASSEMBLY NUMBER	42012017100	42012017800	42012018700	42012021200

#### ENGINEERING DATA:

KEYS EXPANDED – OD Min	2.11"	2.08"	2.11"	2.49"
BODY OD	1.69"	1.75"	1.75"	1.97"
LENGTH	12.75"	12.75"	13.38"	13.3"
MATERIAL	Alloy	Alloy	Alloy	Alloy
PIN THREAD	15/16" - 10	15/16" - 10	15/16" - 10	15/16" - 10
FISHING NECK SIZE	1.187"	1.375"	1.375"	1.375"
Ref: <a href="#">ALTERNATE</a> (Positive) KEY	42007	420137	4201153	4201388





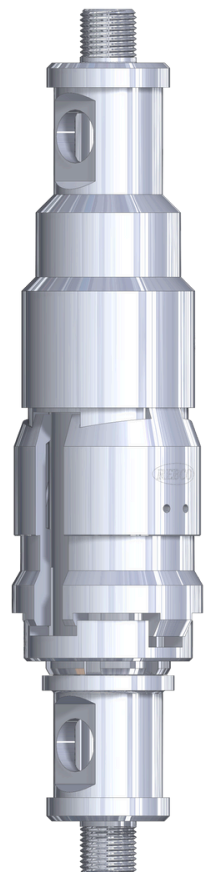
## SECTION V: SHIFTING TOOLS

Type '**ROTBO**' Shifting Tool Assembly:

TECHNICAL DATA				
SLEEVE SIZE	2.188"	2.313"	2.562"	2.750"
ASSEMBLY NUMBER	42012021800	42012023100	42012025600	42012027500
ENGINEERING DATA:				
KEYS EXPANDED – OD Min	2.59"	2.59"	2.96"	3.02"
BODY OD	2.17"	2.17"	2.53"	2.71"
LENGTH	13.94"	13.94"	13.94"	14.19"
MATERIAL	Alloy	Alloy	Alloy	Alloy
PIN THREAD	15/16" - 10	15/16" - 10	15/16" - 10	1 1/16" - 10
FISHING NECK SIZE	1.750"	1.750"	1.750"	2.313"
Ref: <b>ALTERNATE</b> (Positive) KEY	42008	4201146	42003	420151



TECHNICAL DATA				
SLEEVE SIZE	2.813"	3.313"	3.688"	3.750"
ASSEMBLY NUMBER	42012028100	42012033100	42012036800	42012037500
ENGINEERING DATA:				
KEYS EXPANDED – OD Min	3.02"	3.62"	4.07"	4.15"
BODY OD	2.71"	3.25"	3.66"	3.67"
LENGTH	14.19"	16.19"	14.86"	14.86"
MATERIAL	Alloy	Alloy	Alloy	Alloy
PIN THREAD	1 1/16" - 10	1 1/16" - 10	1 1/16" - 10	1 1/16" - 10
FISHING NECK SIZE	2.313"	2.313"	3.125"	3.125"
Ref: <b>ALTERNATE</b> (Positive) KEY	4201349	42009	42002	420010



**NOTE:** Ordering Type '**ROTBO**' Shifting Tool Assembly with POSITIVE (**Alternate**) Keys, please specify.



## SECTION V: SHIFTING TOOLS

Type 'ROTBO' Shifting Tool Assembly:

TECHNICAL DATA			
SLEEVE SIZE	3.813"	4.313"	4.562"
ASSEMBLY NUMBER	42012038100	42012043100	42012045600
ENGINEERING DATA:			
KEYS EXPANDED – OD Min	4.12"	4.84"	4.93"
BODY OD	3.75"	4.25"	4.52"
LENGTH	14.86"	17.25"	17.38"
MATERIAL	Alloy	Alloy	Alloy
PIN THREAD	1 1/16" - 10	1 1/16" - 10	1 1/16" - 10
FISHING NECK SIZE	3.125"	2.313"	3.125"
Ref: <a href="#">ALTERNATE</a> (Positive) KEY	42001	420011	4201451



New Type 'ROTBO' Shifting Tool Assembly: 3.437" – 3.562"

Rebco Type 'ROTBO' Shifting Tool is a new version of the 'ROTBO' Shifting Tool. The difference is that the Keys are expanded with an aid of Coil Springs.

TECHNICAL DATA			
SLEEVE SIZE	3.437" / 3.562"		
ASSEMBLY NUMBER	Selective	420120242	
	Positive		420120278
ENGINEERING DATA:			
KEYS EXPANDED – OD Min	4.08"	4.08"	
BODY OD	3.41"	3.41"	
LENGTH	15.2"	15.2"	
MATERIAL	Alloy	Alloy	
PIN THREAD	1 1/16" - 10	1 1/16" - 10	
FISHING NECK SIZE	2.313"	2.313"	



Selective Keys



Positive Keys



## SECTION V: SHIFTING TOOLS

### Type 'ROTBP' Selective Positioning Tool Assembly: 2" – 4 1/2"

Rebco Type 'ROTBP' Selective Positioning Tool is designed to select and downshift only, several types of Sliding Sleeves. The tool is made selective by the feature of the lower section.

Type 'ROTBP' Selective Positioning Tool has a trip design that holds the shifting keys retracted. This feature allows the Tool to pass through the Sliding Sleeve that is not required to be shifted.

Product Code: 142

#### TECHNICAL DATA

NOMINAL SIZE	2"	2 1/2"	3"	3"
SLEEVE SIZE	1.875"	2.313"	2.750"	2.813"
ASSEMBLY NUMBER	142011118700	142011123100	142011127500	142011128100

#### ENGINEERING DATA:

KEYS EXPANDED – OD Min	1.94"	2.37"	2.84"	3.01"
LOCATOR DOG - MAX. OD	1.97"	2.40"	2.84"	2.90"
BODY OD	1.75"	2.18"	2.72"	2.72"
LENGTH	18.31"	18.94"	18.94"	18.94"
MATERIAL	Alloy	Alloy	Alloy	Alloy
PIN THREAD	15/16" - 10	15/16" - 10	1 1/16" - 10	1 1/16" - 10
FISHING NECK SIZE	1.375"	1.750"	2.313"	2.313"
BOTTOM THREAD CONNECTION	15/16" - 10	15/16" - 10	1 1/16" - 10	1 1/16" - 10
ACCESSORIES:	Assembly Sleeve (NS)	167151413200	167151413250	167151413300
	Test Sleeve (NS)	1671514187	1671514231	1671514275





## SECTION V: SHIFTING TOOLS

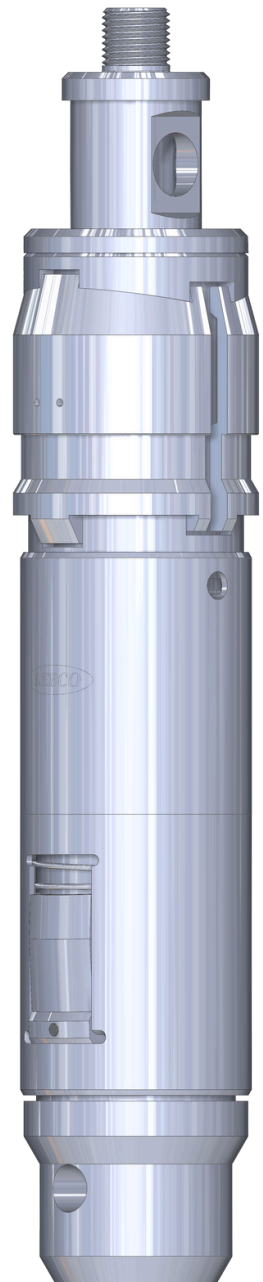
Type 'ROTBP' Selective Positioning Tool Assembly:

### TECHNICAL DATA

NOMINAL SIZE	4 1/2"	4 1/2"
SLEEVE SIZE	3.688"	3.813"
ASSEMBLY NUMBER	142011136800	142011138100

### ENGINEERING DATA:

KEYS EXPANDED – OD Min		4.07"	4.08"
LOCATOR DOG - MAX. OD		3.78"	3.91"
BODY OD		3.62"	3.75"
LENGTH		19.88"	19.88"
MATERIAL		Alloy	Alloy
PIN THREAD		1 1/16" - 10	1 1/16" - 10
FISHING NECK SIZE		2.313"	2.313"
BOTTOM THREAD CONNECTION		1 1/16" - 10	1 1/16" - 10
ACCESSORIES:	Assembly Sleeve (NS)	167151413450	167151413450
	Test Sleeve (NS)	1671514368	1671514381





## SECTION V: SHIFTING TOOLS

### Type 'ROTD-2' Shifting Tool Assembly: 1.900" – 4 1/2"

Rebco Type 'ROTD-2' Shifting Tool is used to provide a safe, selective and controlled method of opening and closing Type 'BL' Sliding Sleeve.

NOTE: Run Tool with the Collet (DET 4) up to Open Sleeves ,or with Collet down (inverted position) to Close the Sleeves.

See Fig 1. For the proper adjustment procedures of Type 'ROTD-2' Shifting Tool

Product Code: 42

TECHNICAL DATA				
NOMINAL SIZE	1.900"		2 1/16"	
SIZE	1.43"	1.50"	1.56"	1.62"
ASSEMBLY NUMBER	42032021430	42032021500	42032021560	42032021620
ENGINEERING DATA:				
MAXIMUM OD - COLLET	1.468"	1.531"	1.593"	1.656"
MAXIMUM OD - BODY	1.375"		1.500"	
ADJUSTMENT LENGTH	14.94"			
PIN THREAD CONNECTION	15/16" - 10			
FISHING NECK SIZE	1.187"			
LENGTH	35.38"			
MATERIAL	Alloy			







## SECTION V: SHIFTING TOOLS

Type 'ROTD-2' Shifting Tool Assembly:

### TECHNICAL DATA

NOMINAL SIZE	2 3/8"		
SIZE	1.78"	1.81"	1.87"
ASSEMBLY NUMBER	42032021780	42032021810	42032021870

### ENGINEERING DATA:

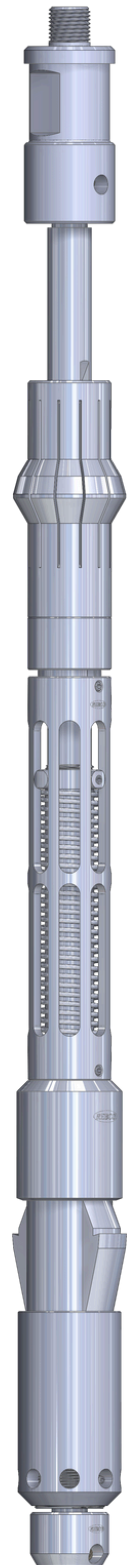
MAXIMUM OD - COLLET	1.807"	1.843"	1.906"
MAXIMUM OD - BODY	1.740"		
ADJUSTMENT LENGTH	15.69"		
PIN THREAD CONNECTION	15/16" - 10		
FISHING NECK SIZE	1.375"		
LENGTH	35.38"		
MATERIAL	Alloy		

### TECHNICAL DATA

NOMINAL SIZE	2 7/8"		3 1/2"	
SIZE	2.25"	2.31"	2.75"	2.81"
ASSEMBLY NUMBER	42032022250	42032022310	42032022750	42032022810

### ENGINEERING DATA:

MAXIMUM OD - COLLET	2.281"	2.307"	2.781"	2.843"
MAXIMUM OD - BODY	2.187"		2.687"	
ADJUSTMENT LENGTH	16.62"		17.12"	
PIN THREAD CONNECTION	15/16" - 10		1 1/16" - 10	
FISHING NECK SIZE	1.750"		2.313"	
LENGTH	39.38"		39.44"	
MATERIAL	Alloy			





## SECTION V: SHIFTING TOOLS

Type '**ROTD-2**' Shifting Tool Assembly:

TECHNICAL DATA		
NOMINAL SIZE	4 1/2"	
SIZE	3.68"	3.81"
ASSEMBLY NUMBER	42032023680	42032023810
ENGINEERING DATA:		
MAXIMUM OD - COLLET	3.743"	3.867"
MAXIMUM OD - BODY	3.036"	
ADJUSTMENT LENGTH	22.687"	
PIN THREAD CONNECTION	1 1/16" - 10	
FISHING NECK SIZE	2.313"	
LENGTH	47.5"	
MATERIAL	Alloy	

Fig.1. Proper operation of '**ROTD-2**' Shifting Tool requires that dimension 'A' be adjusted accurately and the proper Collet be installed prior to running the Tool.

TECHNICAL DATA			
NOM SIZE	SIZE	ADJUSTMENT 'A'	COLLET OD
1.900" 2 1/16"	1.43"	14 15/16"	1.468"
	1.50"		1.531"
	1.56"		1.593"
	1.62"		1.656"
2 3/8"	1.78"	15 11/16"	1.807"
	1.81"		1.843"
	1.87"		1.906"
2 7/8"	2.25"	16 5/8"	2.281"
	2.31"		2.343"
3 1/2"	2.75"	17 1/8"	2.781"
	2.81"		2.843"
4 1/2"	3.68"	22 11/16"	3.743"
	3.81"		3.867"

