



1/4 Turn Tubing Anchor /Catcher

The 1/4 Turn Tubing Anchor/Catcher is a rugged and compact 1/4 turn set & released anchor/catcher designed for horizontal well applications and works great in vertical and deviated well bores. It holds your tubing stationary during pumping and catches your tubing if a tubing failure occurs. It also has emergency shear release and a Left-hand back off coupling.

The 1/4 Turn Tubing Anchor/Catcher is specially designed for rod pumping operations but can also be used to anchor or position a string of tubing at depth. Bidirectional cone and slip design holds force from upward or downward movement.

When properly set to overcome buckling and breathing the 1/4 Turn Set Tubing Anchor/Catcher eliminates tubing movement that causes excessive rod, tubing, and pump wear and loss of pumping efficiency. Tubing is protected from impact of parted rods and cyclic stresses caused by pump pounding and breathing. Once the Tubing Anchor Catcher is set, there is no travel of the upper and lower cones to cause impact loading between anchoring and catching position.

When the 1/4 Turn Set Tubing Anchor/Catcher is set with proper tension to overcome both breathing and buckling, operating costs are reduced by reducing excessive rod, tubing and casing wear and the number of resulting pulling jobs. Elimination of breathing and buckling also increases production by lengthening the effective stroke of the pump, thereby increasing volumetric efficiency.



SPECIFICATION GUIDE

CASING O.D. WEIGHT (IN.) (Lbs. /FT.)	CASING I.D. RANGE (IN.) MIN. MAX.	MAX O.D. OF TOOL (IN.)	MAX ANCHOR BORE (IN.)	THREAD CONNECTION BOX UP/ PIN DOWN
5 1/2" 13-23#	4.670" 5.004"	4.5"	2.41"	2.875 EUE*
5 1/2" 26# **	4.41" drift	4.395"	2.41"	2.875 EUE*
7" 17-26#***	6.276" 6.538"	6.25	2.41"	2.875 EUE*
7" 26-38#***	5.920" 6.276"	5.75	2.41"	2.875 EUE*

*Available with 2 3/8" Connections

**Special Order Only

***Coming Soon Available through Tech-Tac LLC



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1/4 TURN ANCHOR CATCHERS

Product Features:

- Stainless Steel drag springs – shortened for higher tension
- Left-hand back off coupling
- 1/4 Turn set & release
- Easy adjustable shear emergency release
- Available with Carbide slips

Product Advantages:

- Anchors tubing
- Reduce operating costs
- Less pulling unit jobs
- No threads to seize up
- No cone sleeve to seize up in lower cone
- Sets easily in horizontal wells
- Positive cone control
- Increases pump efficiency
- Eliminates need for tubing swivel
- No body nut to malfunction
- Cap that will not unscrew itself
- Works with PC pumps
- No guess work setting slips
- Easy to redress

Pre run in:

Check bore of Anchor/Catcher verses O.D. of pump if pump is to be run thru Anchor/catcher. Do not use Drag Springs as carrying handle, Damage to drag springs may occur. Consideration of pumping condition should be made to determine number of shear pins to be used. When installing Anchor/Catcher in tubing string hold backup wrench on the top coupling do not torque thru anchor/catcher. Wrench only on bottom sub when making up to tubing below anchor. Hold backup wrench going in hole to prevent premature setting of Anchor/Catcher which could cause damage to slips or possible shearing of safety release.

Running and Setting Procedure:

Before running in hole make sure Anchor/Catcher is in the released position- J-Pin should be in the right hand short J-Slot. At the desired setting depth rotate tubing to the right 1/4 turn at the tool with hand tongs only. Do not rotate with tubing tongs. While maintaining right hand torque pick-up on tubing, this will rotate j-pin into setting slot, continue to pull tension into the anchor until a minimum of 10,000 lbs. above string weight is pulled. Release tension and set-down full tubing weight to insure proper setting of slips. At this point pull tension into anchor and set well head slips with a minimum of 10,000 lbs. above string weight.

Releasing Procedure:

Set down slight compression on to anchor/catcher, Hold left-hand torque on tool and pick-up on tubing. Pick-up far enough to release, set back down to assure complete retraction of slips. Remove anchor from the well.

Emergency Release:

If it is impossible to release Anchor in this manner, an upstrain greater than the total shear strength of the shear pins plus tubing weight will shear the Shear pins and the Anchor can then be retrieved from well. In the event the first safety does not release anchor, a second safety joint can be broken by rotating tubing to the right 8-10 rounds thus releasing tubing from anchor.



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TUBUNG ANCHOR CATCHERS "TAC"s

OE&M's History with Baker Anchors

Since 1956 the model B-2 & B-3 Baker anchor has been a staple in oil production and since 1983 when Dennis was approached by Baker to produce the tools OEM has been a premier manufacturer of them.

Application

Tubing Anchor Catchers "TAC's" (B-2 & B-3) perform 2 primary functions.

- 1) Anchors the tubing string in an oil well.
- 2) Acts as a catcher if the tubing parts which prevents the tubing string from falling down hole. A unique feature of the tools is that it is simultaneously set in anchoring and catching positions at all times.

Features and Benefits

TAC's cut operating costs of excessive rod, tubing, and casing wear and reduce the number of resulting pulling jobs if set with the proper tension to overcome breathing and buckling in the tubing string. Eliminating breathing and buckling also increases production by lengthening the effective pump stroke, thereby increasing volumetric efficiency.

- Vertical movement of the tubing during the pump cycle at the anchor is prevented by the slips; if the tubing happens to part, it is caught by the tubing anchor before it falls
- The tension applied to the tubing when the anchor is set will not increase which keeps tubing stress at safe levels
- The anchor will protect the tubing from impact of parted rods and cyclic stress caused by pump pounding and breathing
- The cone of the anchor does not move in relation to the slips once the anchor catcher is set which prevents loading between the anchoring and catching positions
- Each slip contains two sets of directional wickers: one set is designed to prevent upward movement while the other prevents downward movement
- Variable shear pin design permits emergency release at preselected loads with an

upward pull when normal release is impossible

- The drag springs are constructed of stainless steel specially designed with a low-stress value to minimize breaking under corrosive conditions

TOOL CASING RANGES

4.5" 9.5-13# casing & 15.10# casing

OEM fully stocks standard 4.5" tools with 9.5-13# casing range. Currently shipping within a week. We can make 4.5" tools for 15.10# casing by request with up to 4 week lead time.

5" 11.5-18# casing

OEM stocks a limited number of 5" tools with 11.5-18# casing range at any given time. If we do not have housings in stock it may take up to 6 weeks to make them available.

5.5" 13-23# casing

OEM fully stocks 5.5" tools with 13-23# casing range it is rare to not have parts available on the shelf. Current ship times are within a week.

5.5" 26# casing

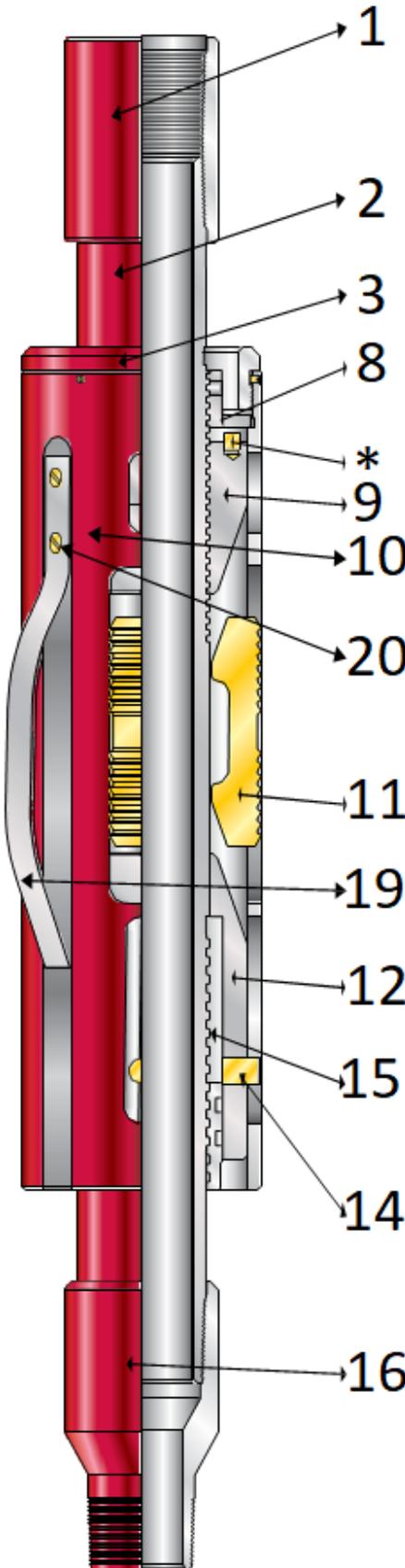
OEM provides 5.5" for 26# tools by request only with a 4-6 week lead time.

7" 17-38# casing

OEM fully stocks and ships 7" tools with EX slips standard. The casing range of the EX slips is 17-32#. Current shipping is within a week. If you need a tool to reach 32-38# casing we can make standard 7" slips available it just may take a week to get them delivered to us.

7-5/8" 20-39# casing

OEM stocks a very limited number of slips and housings for 7-5/8 tools. lead time may be up to 4 weeks if we do not have the slips and housings in stock.



ASSEMBLY POSITIONS AND PART NUMBERS

1 TOP (SUB) COUPLING				
	2-3/8"PN	2-7/8"PN		
4.5"	45CP01	45CP02		
5.5"	55CP01	55CP02		
7"	57CP01	57CP02		

2 MANDREL (BODY)				
	STANDARD	RH SET	HEAVY DUTY	SLEEVE INSERT
4.5"	45BD02	45BD02-REV	45BD02-HD (1.75"ID)	XXXXXXX
5.5"	55BD02	55BD02-REV	55BD02-HD (2"ID)	55SLEV (2"ID)
7"	57BD02	57BD02-REV	XXXXXXX	57SLEV (2"ID)

3 HOUSING CAP (CAGE CAP)			
	SPLIT	NON SPLIT	CAP LOCK SCREW
4.5"	XXXXXXX	45CA03	45SC01
5.5"	55CA03	55CA03-NS	55SC01
7"	57CA03	57CA03-NS	57SC01

8 BODY NUT (LOCK NUT)			
	STANDARD	RH SET	BODY NUT SCREW
4.5"	45BN04	45BN04-REV	45SC02
5.5"	55BN04	55BN04-REV	55SC02
7"	57BN04	57BN04-REV	57SC02

9 UPPER CONE		
	STANDARD	RH SET
4.5"	45UC05	45UC05-REV
5.5"	55UC05	55UC05-REV
7"	57UC05	57UC05-REV

10 HOUSING (CAGE)		
	STANDARD	ALTERNATE
4.5"	45HO08	50HO08 (5")
5.5"	55HO08	XXXXXXX
7"	57HO08	57HO08-7-5/8 (7-5/8")

11 SLIP			
	STANDARD WICKER	CARBIDE	SLIP SPRINGS
4.5"	45SL01	45SL01-TC	45SS01
5.5"	55SL01	55SL01-TC	55SS01
7"	57SL01	57SL01-TC	57SS01

12 LOWER CONE			
	STANDARD	RH SET	LOWER CONE GUIDE PLUG
4.5"	45LC09	45LC09-REV	45SC03
5.5"	55LC09	55LC09-REV	55SC03
7"	57LC09	XXXXXXX	57SC03

14 SHEER PIN	
	STANDARD
4.5"	45SP57
5.5"	55SP57
7"	57SP57

15 LOWER CONE SLEEVE		
	STANDARD	RH SET
4.5"	45LS10	45LS10-REV
5.5"	55LS10	55LS10-REV
7"	57LS10	57LS10-REV

16 BOTTOM (SUB) CROSSOVER		
	2-3/8"PN	2-7/8"PN
4.5"	45CS11	45CS12
5.5"	55CS11	55CS12
7"	57CS11	55CS12

19 DRAG SPRINGS				
	OEM	BAKER STYLE	DRAG SPRING SCREWS	LOCK WASHERS
4.5"	45DR56	45DR54	45SC05	45SC04
5.5"	55DR56	55DR54	55SC05	XXXXXXX
7"	55DR57	XXXXXXX	55SC04	XXXXXXX