



# DISCONNECT TOOLS

NEXT GENERATION MILLING TECHNOLOGY



# HEAVY DUTY HYDRAULIC DISCONNECT

TEC's Heavy Duty Hydraulic Disconnect is simple to redress and maintain, yet designed to withstand tremendous abuse imposed upon it during high-torque/ high-flow/ high-agitation milling applications.

This Release Tool is a ball-activated tool & can be "disconnected" simply by pumping an appropriately-sized drop-ball onto a piston seat within the tool creating differential pressure, which ultimately shears the disconnect mechanism inside.

This allows the upper section of the Disconnect Tool & Bottom Hole Assembly to be released, leaving the bottom section of the Disconnect Tool & the rest of the Bottom Hole Assembly below left downhole for Fishing Operations.

Standard with all 2.875" & 3.125" OD HD Hydraulic Disconnect Tools is a #3 GS internal profile for "slim-hole" recovery options.

## Design Features:

- High Torsional Yield for High-Torque Milling Operations
- Robust Design for Milling & Jarring Operations
- Customizable Shear Values
- Highly Dependable & Durable

HydroPull™  
Certified

*\*When using the tool, an appropriate allowance should be made as a safety factor when fishing bottom sub with a Pulling tool- see subsequent Specifications Sheet for details.*

# HEAVY DUTY HYDRAULIC DISCONNECT



## TECHNICAL SPECIFICATIONS

TOOL OD	MINIMUM YIELD POINT & LOAD TO YIELD	TORSION WEAK POINT & LOAD TO YIELD	PSI TO RELEASE PER SHEAR SCREW	SHEAR SCREW SIZE	O-RINGS	DISCONNECT BALL SIZE	TOP & BOTTOM SUB M.U.T.
42.86mm/ 1.690"	Bottom Sub 1.00" AMMT Pin Connection 25,334 daNs/ 56,750 lbf; Internal B&W Fishing Neck Strength 22,500 daNs/ 50,400 lbf (note fishing neck is not tensile loaded when assembled. Above number is used as a guide line when fishing bottom sub with pulling tool)	Bottom Sub 1.00" AMMT Pin Connection 638 ft-lbs	1700-2100 (NO SHEAR SCREWS) 2378-3138 (1 SHEAR SCREW) 3416-4176 (2 SHEAR SCREWS) 4454-5214 (3 SHEAR SCREWS) 5492-6252 (4 SHEAR SCREWS) 6530-7290 (5 SHEAR SCREWS) 7568-8328 (6 SHEAR SCREWS)	10-32 UNC X 3/16"	FLOW TUBE 2-018 (1)  TOP SUB 2-123 (1) 2-123BU (2)  SUPPORT PISTON 2-118 (1)	1/2"	500 ft-lbs
54mm/ 2.125"	Bottom Sub 1-1/2" AMMT Pin Connection 55,491 daNs/ 124,300 lbf; Internal Custom Fishing Neck Strength 33,616 daNs/ 75,300 lbf (note fishing neck is not tensile loaded when assembled, above number is used as a guide line when fishing bottom sub with pulling tool)	Bottom Sub 1-1/2" AMMT Pin Connection 1,770 ft-lbs	1900-2400 (NO SHEAR SCREWS) 2581-3081 (1 SHEAR SCREW) 3262-3762 (2 SHEAR SCREWS) 3943-4443 (3 SHEAR SCREWS) 4624-5124 (4 SHEAR SCREWS) 5305-5805 (5 SHEAR SCREWS) 5986-6486 (6 SHEAR SCREWS)	10-32 UNC X 1/4"	TOP SUB 2-128 (1) 2-128BU (2)  SUPPORT PISTON 2-122 (1)	3/4"	950 ft-lbs
73mm/ 2.875"	Bottom Sub 2-3/8" PAC Pin Connection 88,705 daNs/ 198,700 lbf; Internal 3" GS Fishing Neck Strength 65,223 daNs/ 146,100 lbf (note fishing neck is not tensile loaded when assembled. Above number is used as a guide line when fishing bottom sub with pulling tool)	Bottom Sub 2-3/8" PAC Pin Connection 4,800 ft-lbs	1900-2300 (NO SHEAR SCREWS) 2488-2888 (1 SHEAR SCREW) 3076-3476 (2 SHEAR SCREWS) 3664-4064 (3 SHEAR SCREWS) 4252-4652 (4 SHEAR SCREWS) 4840-5240 (5 SHEAR SCREWS) 5428-5828 (6 SHEAR SCREWS)	1/4-20 UNC X 5/16"	TOP SUB 2-226 (1) 2-226BU (2)  SUPPORT PISTON 2-222 (1) 2-222BU (1)	7/8"	1,500 ft-lbs
79mm/ 3.125"	Top Sub Collet Section 100,446 daNs/ 225,000 lbf; Internal 3" GS Fishing Neck strength 263,700 lbs/117,723 daNs (note fishing neck is not tensile loaded when assembled. This number is used as a guide line when fishing bottom sub with pulling tool)	Bottom Sub 2-3/8" REG Pin Connection 5,800 ft-lbs	1900-2300 (NO SHEAR SCREWS) 2488-2888 (1 SHEAR SCREW) 3076-3476 (2 SHEAR SCREWS) 3664-4064 (3 SHEAR SCREWS) 4252-4652 (4 SHEAR SCREWS) 4840-5240 (5 SHEAR SCREWS) 5428-5828 (6 SHEAR SCREWS)	1/4-20 UNC X 5/16"	TOP SUB 2-226 (1) 2-226BU (2)  SUPPORT PISTON 2-222 (1) 2-222BU (1)	7/8"	1,500 ft-lbs

*Unless otherwise stated, all the strength figures shown are the results of calculations based on the yield strength of the material used to manufacture this tool. The strength calculations are considered accurate within ~20% of the stated value, and should be used as a guide line only. They do not constitute a guarantee, actual or implied. When using the tool an appropriate allowance should be made as a safety factor.*