



High Powered Magnet

MAN-TTT-381 (R01)

Thru-Tubing Technology

A Division of Owen Oil Tools LP

402 Machine Loop

Scott, Louisiana, 70583, USA

Phone: +1 (337) 984-1181

Fax: +1 (337) 984-3044

www.corelab.com/owen

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High Powered Magnet

Description

The High Powered Magnet is used to retrieve small objects, such as metal fragments, balls, small slips, springs, and any other objects that have a magnetic attraction. Only advanced high power, long life magnets are used for extended operational life.

Operation

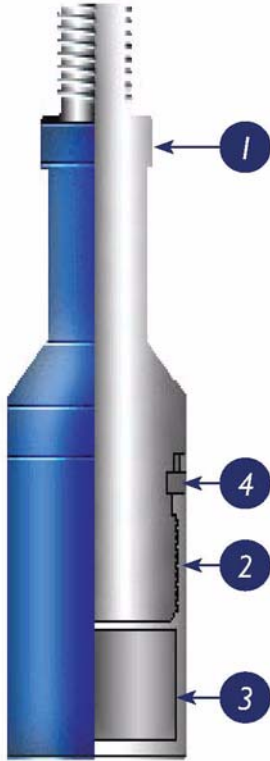
Due to the magnetic force of the High Powered Magnet, it is highly recommended that a centralizer/stabilizer be run in conjunction with this tool. This will decrease sidewall drag along with the possibility of extreme sidewall wear on the magnet.



Note: Unless otherwise indicated, all the strength figures given in this manual, are the result of calculations based on the yield strength of the material used in the manufacture of this product. These strength calculations are considered accurate within plus or minus 20% and are to be used only as a guide. They do not constitute a guarantee, actual or implied. In use, appropriate allowance should be made as a safety factor.

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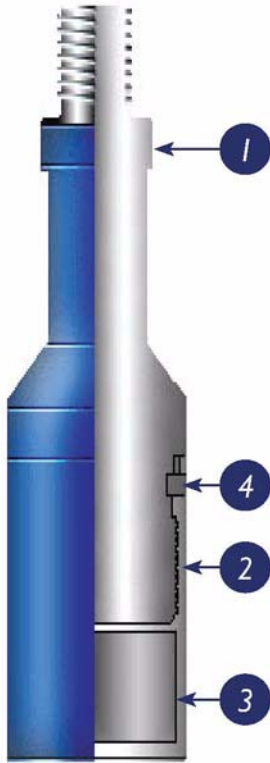
TT0381-125A-SS BOM and Schematic



ITEM	QTY	TOOL PARTS DESCRIPTION	PART NUMBER
1	1	Top Sub	TT0381-125A-001-SS
2	1	Bottom Sub	TT0381-125A-002-SS
3	3	Disc Magnet 1" x .750" Nickel Plated	PUR-TMAGD48-064
4	2	Roll Pin 3/16" x ****	PUR-TOPS188-****

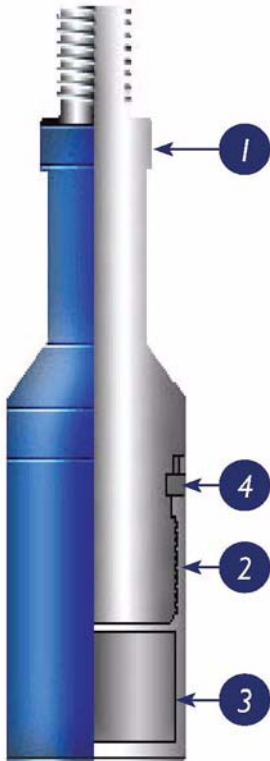
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TT0381-150A-SS BOM and Schematic



ITEM	QTY	TOOL PARTS DESCRIPTION	PART NUMBER
1	1	Top Sub	TT0381-150A-001-SS
2	1	Bottom Sub	TT0381-150A-002-SS
3	2	Disc Magnet 1.188" x 1" Nickel Plated	PUR-TMAGD64-076
4	2	Roll Pin 3/16" x ****	PUR-TOPS188-****

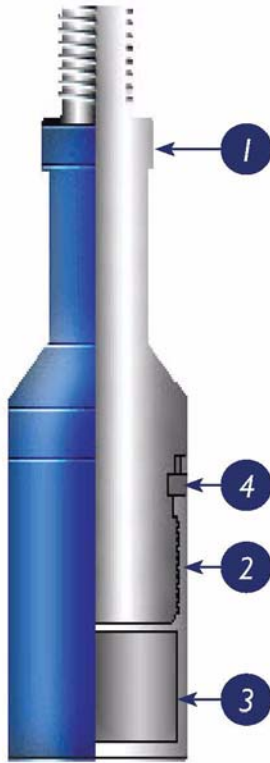
TT0381-169A-SS BOM and Schematic



ITEM	QTY	TOOL PARTS DESCRIPTION	PART NUMBER
1	1	Top Sub	TT0381-169A-001-SS
2	1	Bottom Sub	TT0381-169A-002-SS
3	2	Disc Magnet 1.375" x 1" Nickel Plated	PUR-TMAGD64-088
4	2	Roll Pin 3/16" x ****	PUR-TOPS188-****

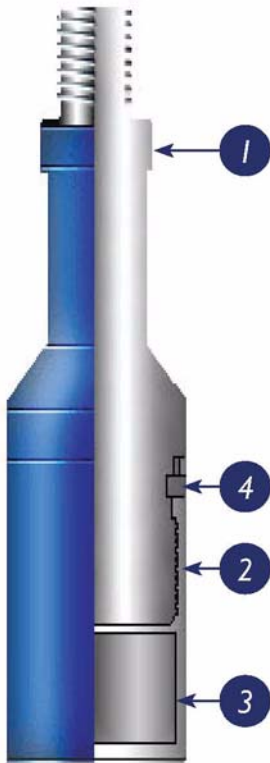
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TT0381-181A-SS BOM and Schematic



ITEM	QTY	TOOL PARTS DESCRIPTION	PART NUMBER
1	1	Top Sub	TT0381-181A-001-SS
2	1	Bottom Sub	TT0381-181A-002-SS
3	2	Disc Magnet 1.500" x 1" Nickel Plated	PUR-TMAGD64-096
4	2	Roll Pin 3/16" x ****	PUR-TOPS188-****

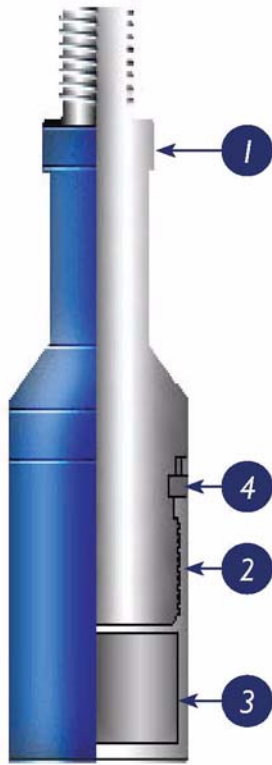
TT0381-184A-SS BOM and Schematic



ITEM	QTY	TOOL PARTS DESCRIPTION	PART NUMBER
1	1	Top Sub	TT0381-184A-001-SS
2	1	Bottom Sub	TT0381-184A-002-SS
3	2	Disc Magnet 1.500" x 1" Nickel Plated	PUR-TMAGD64-096
4	2	Roll Pin 3/16" x ****	PUR-TOPS188-****

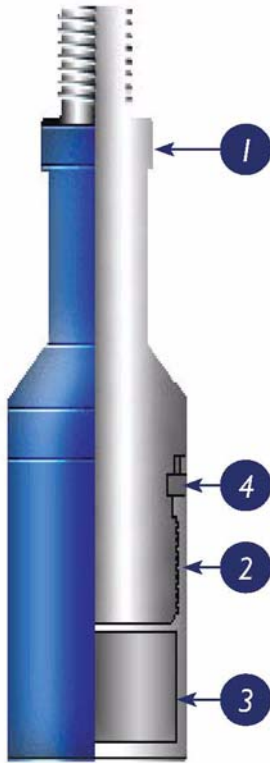
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TT0381-206A-SS BOM and Schematic



ITEM	QTY	TOOL PARTS DESCRIPTION	PART NUMBER
1	1	Top Sub	TT0381-206A-001-SS
2	1	Bottom Sub	TT0381-206A-002-SS
3	2	Disc Magnet 1.750" x 1" Nickel Plated	PUR-TMAGD64-112
4	2	Roll Pin 3/16" x ****	PUR-TOPS188-****

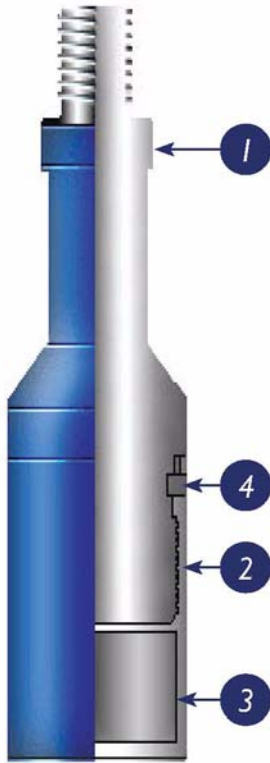
TT0381-230A-SS BOM and Schematic



ITEM	QTY	TOOL PARTS DESCRIPTION	PART NUMBER
1	1	Top Sub	TT0381-230A-001-SS
2	1	Bottom Sub	TT0381-230A-002-SS
3	1	Disc Magnet 2" x 1" Nickel Plated	PUR-TMAGD64-128
4	2	Roll Pin 3/16" x ****	PUR-TOPS188-****

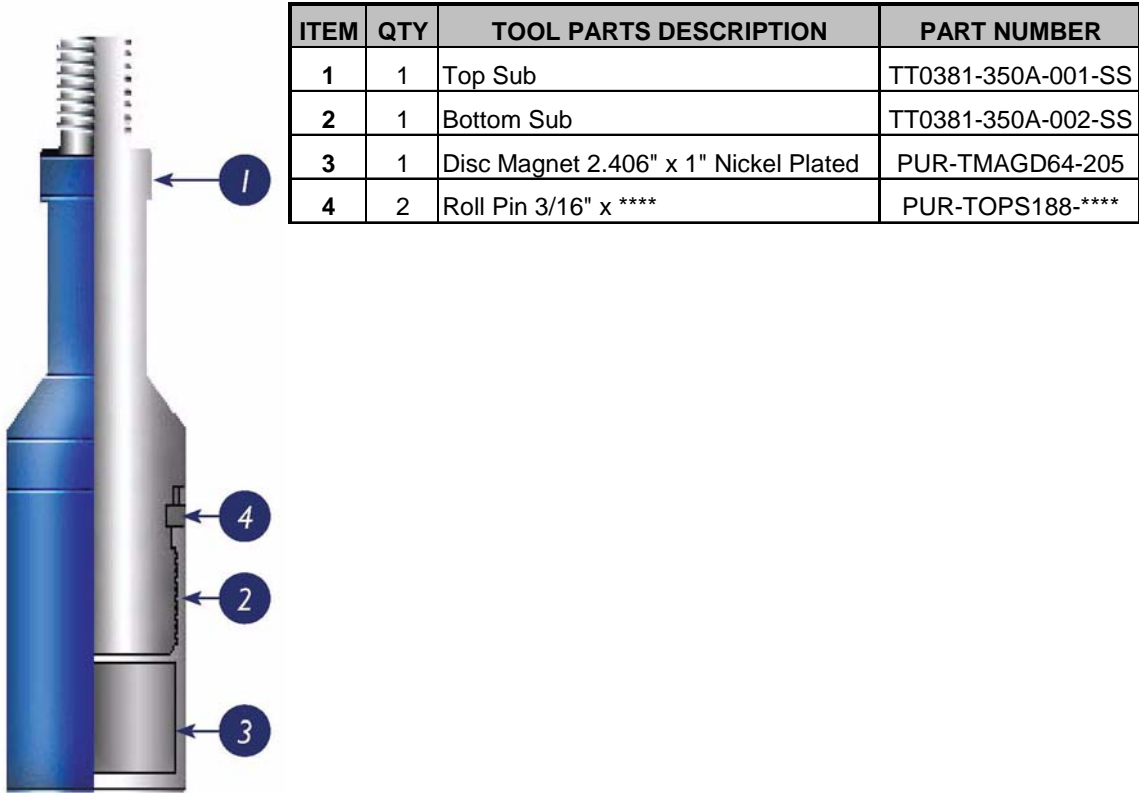
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TT0381-270A-SS BOM and Schematic



ITEM	QTY	TOOL PARTS DESCRIPTION	PART NUMBER
1	1	Top Sub	TT0381-270A-001-SS
2	1	Bottom Sub	TT0381-270A-002-SS
3	1	Disc Magnet 2.406" x 1" Nickel Plated	PUR-TMAGD64-154
4	2	Roll Pin 3/16" x ****	PUR-TOPS188-****

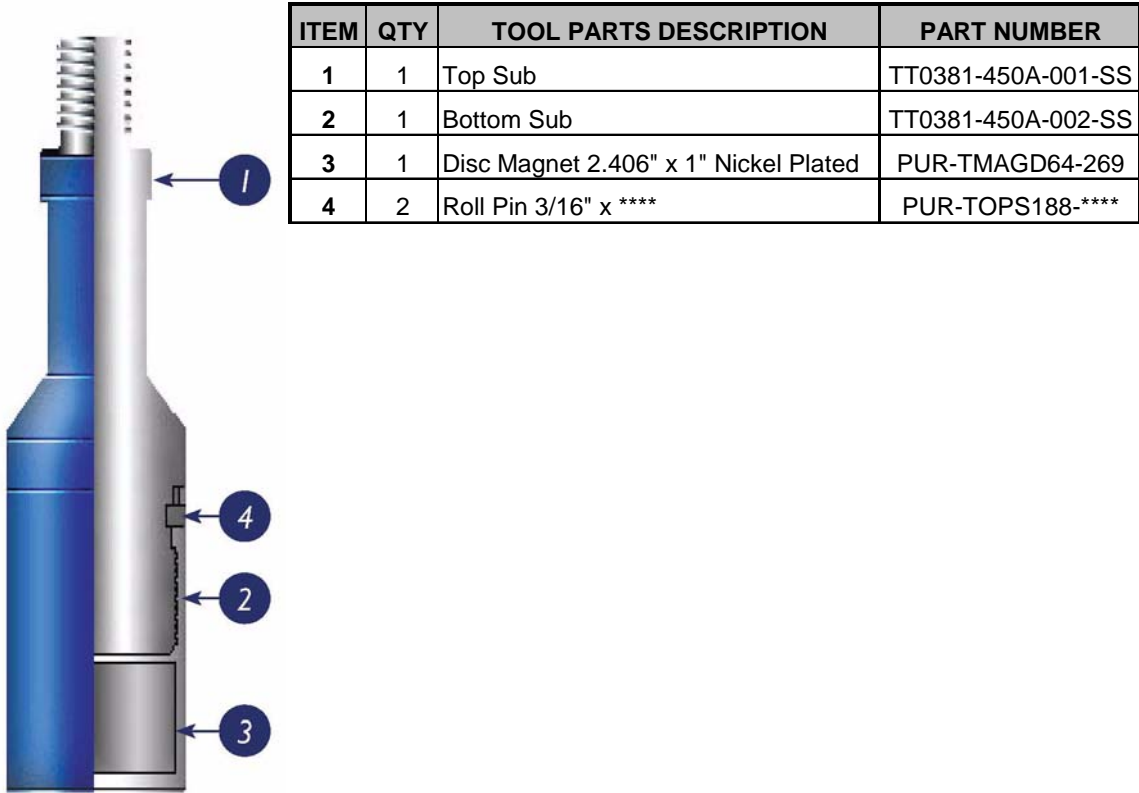
TT0381-350A-SS BOM and Schematic



ITEM	QTY	TOOL PARTS DESCRIPTION	PART NUMBER
1	1	Top Sub	TT0381-350A-001-SS
2	1	Bottom Sub	TT0381-350A-002-SS
3	1	Disc Magnet 2.406" x 1" Nickel Plated	PUR-TMAGD64-205
4	2	Roll Pin 3/16" x ****	PUR-TOPS188-****

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TT0381-450A-SS BOM and Schematic



ITEM	QTY	TOOL PARTS DESCRIPTION	PART NUMBER
1	1	Top Sub	TT0381-450A-001-SS
2	1	Bottom Sub	TT0381-450A-002-SS
3	1	Disc Magnet 2.406" x 1" Nickel Plated	PUR-TMAGD64-269
4	2	Roll Pin 3/16" x ****	PUR-TOPS188-****

1.0 Pre-Assembly



Warning: *Make sure all tool parts and components have been thoroughly cleaned or serious damage and/or injury could occur!*



Note: *Make sure to lubricate all O-rings and threaded surfaces.*



Note: *Visually inspect all parts for damage or wear. Thread parts together without the O-rings to check fit. Repair or replace damaged parts.*



Caution: *Always file wrench marks or burrs and clean off debris!*

2.0 Assembly



Warning: *Because these magnets are very powerful, extreme care should be taken when handling them! Never let any body part come between the magnet and a metal surface or serious bodily harm can occur!*



Caution: *Keep magnets away from computers, cell phones and other electronic products!*

2.1 Grease the ID of the Bottom Sub (item #2) and **put it on a wood block or non-magnetic surface.**

2.2 Drop in the Disc Magnet(s) (item #3) and make sure they are seated properly.

2.3 Grease the threads of the Top Sub (item #1) and screw into the Bottom Sub hand tight.

2.4 Wrap a shop rag or two around the Bottom Sub, then put the assembly into a vise, on the rags/Bottom Sub.

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Note: This step will help protect the stainless steel surface and aid in taking the tool out of the vise.

2.5 Tighten the connection between the two subs until it shoulders out and the 2 sub pin holes align.

2.6 Finally, install a 3/16 in. Roll Pin(s) into the pin holes. Make sure the pin(s) are flush with the tool.

3.0 Disassembly

3.1 Carefully remove the Roll Pin with a punch or similar tool.

3.2 Unscrew the Top Sub From the Bottom Sub.

3.3 Drop the Bottom Sub, box end first, on a wood block or non-magnetic surface to remove the Disc Magnet(s).



Note: Visually inspect tool for swelling after each use. Damaged or swelled components must be replaced.



Note: It is recommended that a Magnetic Particle Inspection (MPI) or Dye Penetrant be completed on all components after each job.