# **Specialty Tools**

# LEFT-HAND SPIRAL JOBBER LENGTH, LEFT-HAND VORTEX-POINT

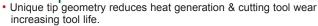
Type 190-AL Magnum Super Premium - Left Hand Spiral

- Special Hi-Molybdenum tool steel.
- 135° split point for fast penetration and accurate starting without center punch.
- · Precision ground point, flutes, body, clearance and drill diameter for the ultimate in accuracy and performance.
- · Ideal for removing broken studs.

Part #	Diameter Inches	OAL Inches	Flute Length Inches	Qty. per/pack
92430	1/16"	1-7/8	7/8	6
23150	5/64	2"	1"	6
89290	3/32"	2-1/4	1-1/4	6
23160	7/64	2-5/8	1-1/2	6
92440	1/8"	2-3/4	1-5/8	6
92441	9/64	2-7/8	1-3/4	6
23170	5/32"	3-1/8	2"	6
92442	11/64	3-1/4	2-1/8	6
92450	3/16"	3-1/2	2-5/16	6
92443	13/64	3-5/8	2-7/16	6
92444	7/32"	3-3/4	2-1/2	6
92451	15/64	3-7/8	2-5/8	6
92460	1/4"	4"	2-3/4	6
92452	17/64	4-1/8	2-7/8	6
92453	9/32"	4-1/4	2-15/16	6
23180	19/64	4-3/8	3-1/16	6 3 3
92470	5/16"	4-1/2	3-3/16	3
92471	21/64	4-5/8	3-5/16	3
92472	11/32"	4-3/4	3-7/16	3
92473	23/64	4-7/8	3-1/2	3
92480	3/8"	5"	3-5/8	3
92481	25/64	5-1/8	3-3/4	3
92482	13/32"	5-1/4	3-7/8	3
92483	27/64	5-3/8	3-15/16	3
92490	7/16"	5-1/2	4-1/16	3
92491	29/64	5-5/8	4-3/16	3 3 3 3 3 3 3 3 3 3 3
92492	15/32"	5-3/4	4-5/16	3
92493	31/64	5-7/8	4-3/8	3
92500	1/2"	6"	4-1/2"	3
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#### Type 175-VTL

#### Left-Hand VORTEX-POINT & Spiral Hi-Carbon NEW Screw Pipe Extractor



· Remove broken screws, bolts threaded parts, and pipes.

Part #	Diameter Inches	OAL Inches	Flute Length Inches
35582	1/8"	2-1/2"	1-7/16"
35622	3/16"	3"	2-7/8"
35662	1/4"	3-1/2"	2"
35702	5/16"	4"	2-1/2"
35742	3/8"	4-1/4"	2-11/16"

## TYPE 420 & VORTEX-POINT™ SET

LEFT-HAND VORTEX-POINT & SPIRAL EXTRACTOR

Part #		Description of Sizes	Qty of each
35852	BR-10VT	EX 1, 2, 3, 4, 5 + 1/8", 3/16"	1
		1/4", 5/16", 3/8"	

# **Broken Bolt Remover Combo**

#### Type 420-AL

· Carded left hand drill combined with spiral style screw extractor is ideal for removing broken studs.

Part #	Screw Extractor Number	Description of Sizes	Qty of each
30137	EX-1	3/32" LH drill	1
30147	EX-2	1/8" LH drill	1
30157	EX-3	3/16" LH drill	1
30167	EX-4	1/4" LH drill	1
30177	EX-5	5/16" LH drill	1



PRODUCT: TIPS
Bolt Remover Sets Include BOTH Left-Hand Spiral Drills and Bolt/Screw Extractors



### TYPE 190-AL LEFT-HAND SPIRAL SETS

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		o PC.		
Part #		Description of Sizes	Qty of ea	ch
87650	LF-8	1/16-1/2" by 16ths	1	
		12 Pc.		
Part #		<b>Description of Sizes</b>	Qty of ea	ch
87651	LF-12	1/16-5/16" by 32nds, 3/8, 7/16 &	1/2" 1	
		13 Pc.		
Part #		Description of Sizes	Oty of ea	ch

Part #		Description of Sizes	Qty of each
87652 I	LF-13	1/16-1/4" by 64ths	1
		15 Pc.	
Part #		Description of Sizes	Qty of each
87654 I	LF-15	1/16 - 1/2" by 32nds	1
		47 Do	

Part #		<b>Description of Sizes</b>	Qty	of each
87853	LF-17	1/16-1/4" by 64ths, 5/16-1/2" by	16ths	1
		29 Pc.		

Part #		<b>Description of Sizes</b>	Qty of each
87854	LF-29	1/16-1/2" by 64ths	1
B - 4 #		29 Pc Ultra Dex	01 -1

Part # **Description of Sizes** Qty of each 87859 LF-29P 1/16-1/2" by 64ths

## Left-Hand Screw Machine Length 135° Split Point, 3-Flats on Shank 3/16" & Larger Type 135-AL Black & Gold

- · Ideal for removing broken studs in tight areas.
- · Left hand spiral drills often remove bolt without the need for an extractor.

135-AL				
Black/Gold Part #	Diameter Inches	Overall Length Inches	Flute Length Inches	Qty. per/pack
35214	3/32"	1-3/4"	3/4"	6
35234	1/8"	1-7/8"	7/8"	6
35254	5/32"	2-1/16"	1"	6
35274	3/16"	2-3/16"	1-1/8"	6
35294	7/32"	2-3/8"	1-1/4"	6
35314	1/4"	2-1/2"	1-3/8"	6
35334	9/32"	2-11/16"	1-1/2"	3
35354	5/16"	2-13/16"	1-5/8"	3
35374	11/32"	3"	1-11/16"	3
35394	3/8"	3-1/8"	1-13/16"	3
35414	13/32"	3-5/16"	1-15/16"	3
35434	7/16"	3-7/16"	2-1/16"	3
35454	15/32"	3-5/8"	2-1/8"	3
35474	1/2"	3-3/4"	2-1/4"	3







		TYPE 421-USA SET	
Part #		SQUARE EXTRACTOR  Description of Sizes	Qty of each
35484	BR-10SQ	E 1, 2, 3, 4, 5 + 3/32", 1/8" 3/16", 1/4", 5/16"	1
35491	BR-10SQX	E 1, 2, 3, 4, 5 + 1/8" 3/16", 1/4", 5/16", 3/8"	1