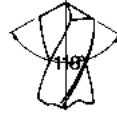


CHAMPION[®] CUTTING TOOLS
CUTTING TOOL CORP.

General Purpose Jobber Drills
Part No. 705 - Black Oxide Treated
Straight Shank 118° Point, HSS



Designed for general purpose drilling under a wide range of operating conditions in various materials. Surface treated with a black oxide finish for abrasion resistance and improved coolant adherence. The 705/405 series are initially identical. The 705 series incorporates an additional stress relief in the presence of low pressure live steam — actually forming a controlled rust (oxide) appearance.



Part No./ Diameter	Overall Length
705-80	3/4
705-79	3/4
705-1/64	3/4
705-78	7/8
705-77	7/8
705-76	7/8
705-75	1
705-74	1
705-73	1-1/8
705-72	1-1/8
705-71	1-1/4
705-70	1-1/4
705-69	1-3/8
705-68	1-3/8
705-1/32	1-3/8
705-67	1-3/8
705-66	1-3/8
705-65	1-1/2
705-64	1-1/2
705-63	1-1/2
705-62	1-1/2
705-61	1-5/8
705-60	1-5/8
705-59	1-5/8
705-58	1-5/8
705-57	1-3/4
705-56	1-3/4
705-3/64	1-3/4
705-55	1-7/8
705-54	1-7/8
705-53	1-7/8
705-1/16	1-7/8
705-52	1-7/8
705-51	2
705-50	2
705-49	2
705-48	2
705-5/64	2
705-47	2
705-46	2-1/8
705-45	2-1/8
705-44	2-1/8
705-43	2-1/4
705-42	2-1/4
705-3/32	2-1/4
705-41	2-3/8
705-40	2-3/8
705-39	2-3/8
705-38	2-1/2
705-37	2-1/2

Part No./ Diameter	Overall Length
705-36	2-1/2
705-7/64	2-5/8
705-35	2-5/8
705-34	2-5/8
705-33	2-5/8
705-32	2-3/4
705-31	2-3/4
705-1/8	2-3/4
705-30	2-3/4
705-29	2-7/8
705-28	2-7/8
705-9/64	2-7/8
705-27	3
705-26	3
705-25	3
705-24	3-1/8
705-23	3-1/8
705-5/32	3-1/8
705-22	3-1/8
705-21	3-1/4
705-20	3-1/4
705-19	3-1/4
705-18	3-1/4
705-11/64	3-1/4
705-17	3-3/8
705-16	3-3/8
705-15	3-3/8
705-14	3-3/8
705-13	3-1/2
705-3/16	3-1/2
705-12	3-1/2
705-11	3-1/2
705-10	3-5/8
705-9	3-5/8
705-8	3-5/8
705-7	3-5/8
705-13-64	3-5/8
705-6	3-3/4
705-5	3-3/4
705-4	3-3/4
705-3	3-3/4
705-7/32	3-3/4
705-2	3-7/8
705-1	3-7/8
705-A	3-7/8
705-15/64	3-7/8
705-B	4
705-C	4
705-D	4
705-1/4E	4

Part No./ Diameter	Overall Length
705-F	4-1/8
705-G	4-1/8
705-17/64	4-1/8
705-H	4-1/8
705-I	4-1/8
705-J	4-1/8
705-K	4-1/4
705-9/32	4-1/4
705-L	4-1/4
705-M	4-3/8
705-19/64	4-3/8
705-N	4-3/8
705-5/16	4-1/2
705-O	4-1/2
705-P	4-5/8
705-21/64	4-5/8
705-Q	4-3/4
705-R	4-3/4
705-11/32	4-3/4
705-S	4-7/8
705-T	4-7/8
705-23/64	4-7/8
705-U	5
705-3/8	5
705-V	5
705-W	5-1/8
705-25/64	5-1/8
705-X	5-1/8
705-Y	5-1/4
705-13/32	5-1/4
705-Z	5-1/4
705-27/64	5-3/8
705-7/16	5-1/2
705-29/64	5-5/8
705-15/32	5-3/4
705-31/64	5-7/8
705-1/2	6
705-33/64*	6-5/8
705-17/32*	6-5/8
705-35/64*	6-5/8
705-9/16*	6-5/8
705-37/64*	6-5/8
705-19/32*	7-1/8
705-39/64*	7-1/8
705-5/8*	7-1/8
705-41/64*	7-1/8
705-21/32*	7-1/8
705-13/64*	7-5/8
705-11/16*	7-5/8

* Will not fit 1/2" capacity chucks.

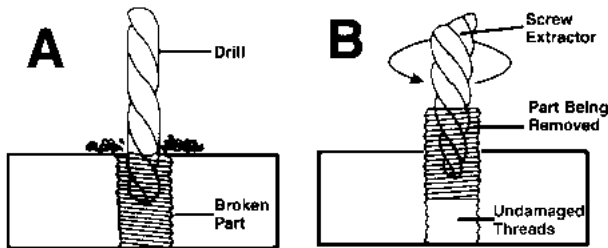
CHAMPION[®] CUTTING TOOLS

CUTTING TOOL CORP.

Screw Extractors

Part No. X1

Left Hand, Spiral Flute



Screw extractors are designed to be held in a tap wrench for the removal of broken screws, studs, bolts or pipe fittings. The left hand rotation of the tapered flutes forces out almost any right hand threaded part. Penetrating oil can be helpful in removing rusty or corroded parts.

To remove a broken screw: Drill a hole in the broken screw with the recommended diameter drill (fig. A.) Insert the proper screw extractor into the hole and start a counterclockwise, (left-hand) rotation. (fig. B).

Part No.	For Bolt Sizes	For Pipe Sizes	Drill Size
X1-1	3/16 to 1/4	—	5/64
X1-2	1/4 to 5/16	—	7/64
X1-3	5/16 to 7/16	—	5/32
X1-4	7/16 to 9/16	—	1/4
X1-5	9/16 to 3/4	1/8, 1/4	17/64
X1-6	3/4 to 1-3/8	3/8	13/32
X1-7	1 to 1-3/8	1/2	17/32
X1-8	1-3/8 to 1-3/4	3/4	13/16
X1-9	1-3/4 to 2-1/8	1	1-1/16
X1-10	2-1/8 to 2-1/2	1-1/4	1-5/16
X1-11	2-1/2 to 3	1-1/2	1-9/16
X1-12	3 to 3-1/2	2	1-15/16

Silver and Deming Drills

Part No. 712

1/2" Shank, 118° Point
Black and Bright Finish, HSS



Used extensively in maintenance departments, machine shops, body shops and garages; "S&D" drills are ideal for portable drilling and drill presses where the maximum chuck capacity is 1/2". Their short rigid design, consistent 6" overall length and 1/2" reduced shank, make them popular in numerical control applications. **Note: S&D drill should not be used to enlarge holes.**

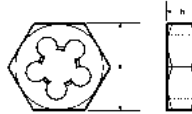
Part No./ Diameter	Decimal Equivalent	Flute Length	Overall Length
712-33/64	.5156	3-1/8	6
712-17/32	.5312	3-1/8	6
712-35/64	.5469	3-1/8	6
712-9/16	.5625	3-1/8	6
712-37/64	.5781	3-1/8	6
712-19/32	.5938	3-1/8	6
712-39/64	.6094	3-1/8	6
712-5/8	.6250	3-1/8	6
712-41/64	.6406	3-1/8	6
712-21/32	.6562	3-1/8	6
712-43/64	.6719	3-1/8	6
712-11/16	.6875	3-1/8	6
712-45/64	.7031	3-1/8	6
712-23/32	.7188	3-1/8	6
712-47/64	.7344	3-1/8	6
712-3/4	.7500	3-1/8	6
712-49/64	.7656	3-1/8	6
712-25/32	.7812	3-1/8	6
712-51/64	.7969	3-1/8	6
712-13/16	.8125	3-1/8	6
712-53/64	.8281	3-1/8	6
712-27/32	.8438	3-1/8	6
712-55/64	.8594	3-1/8	6
712-7/8	.8750	3-1/8	6
712-57/64	.8906	3-1/8	6

Part No./ Diameter	Decimal Equivalent	Flute Length	Overall Length
712-29/32	.9062	3-1/8	6
712-59/64	.9219	3-1/8	6
712-15/16	.9375	3-1/8	6
712-61/64	.9531	3-1/8	6
712-31/32	.9688	3-1/8	6
712-63/64	.9844	3-1/8	6
712-1	1.0000	3-1/8	6
712-1-1/64	1.0156	3-1/8	6
712-1-1/32	1.0312	3-1/8	6
712-1-3/64	1.0469	3-1/8	6
712-1-1/16	1.0625	3-1/8	6
712-1-5/64	1.0781	3-1/8	6
712-1-3/32	1.0938	3-1/8	6
712-1-7/64	1.1094	3-1/8	6
712-1-1/8	1.1250	3-1/8	6
712-1-9/64	1.1406	3-1/8	6
712-1-5/32	1.1562	3-1/8	6
712-1-11/64	1.1719	3-1/8	6
712-1-3/16	1.1875	3-1/8	6
712-1-13/64	1.2031	3-1/8	6
712-1-7/32	1.2188	3-1/8	6
712-1-15/64	1.2344	3-1/8	6
712-1-1/4	1.2500	3-1/8	6
712-1-9/32	1.2812	3-1/8	6
712-1-5/16	1.3125	3-1/8	6
712-1-3/8	1.3750	3-1/8	6
712-1-7/16	1.4375	3-1/8	6
712-1-1/2	1.5000	3-1/8	6

CHAMPION[®] CUTTING TOOLS
CUTTING TOOL CORP.

Hexagon Rethreading Dies
Part No. 330 Carbon Steel

Used in repair work for dressing over bruised or rusty threads.



The hexagon shape enables use with an open end, box or adjustable wrench. Chamfered on both sides, these dies offer double the life of the single chamfer style. Often referred to as thread chasers.

Part No./ Size	(A) Size Across Flats	(B) Die Thickness
330-6-32	19/32	1/4
330-8-32	19/32	1/4
330-10-24	19/32	1/4
330-10-32	19/32	1/4
330-12-24	19/32	1/4
330-1/4-20	19/32	1/4
330-1/4-28	19/32	1/4
330-5/16-18	11/16	5/16
330-5/16-24	11/16	5/16
330-3/8-16	25/32	3/8
330-3/8-24	25/32	3/8
330-7/16-14	7/8	7/16
330-7/16-20	7/8	7/16
330-1/2-13	1-1/16	1/2
330-1/2-20	1-1/16	1/2
330-9/16-12	1-1/16	1/2
330-9/16-18	1-1/16	1/2
330-5/8-11	1-1/4	5/8

Part No./ Size	(A) Size Across Flats	(B) Die Thickness
330-5/8-18	1-1/4	5/8
330-11/16-11	1-7/16	3/4
330-11/16-16	1-7/16	3/4
330-3/4-10	1-7/16	3/4
330-3/4-16	1-7/16	3/4
330-7/8-9	1-5/8	7/8
330-7/8-14	1-5/8	7/8
330-1-8	1-13/16	1
330-1-12-12	1-13/16	1
330-1-14	1-13/16	1
330-1-1/8-7	2	1
330-1-1/8-12	2	1
330-1-1/4-7	2-3/16	1
330-1-1/4-12	2-3/16	1
330-1-3/8-6	2-3/8	1
330-1-3/8-12	2-3/8	1

Part No./ Size	(A) Size Across Flats	(B) Die Thickness
330-1-1/2-6	2-9/16	1
330-1-1/2-12	2-9/16	1
330-1-3/4-5	3	1
330-1-3/4-12	3	1
330-2-4-1/2	3-7/16	1-1/4
330-2-12	3-7/16	1-1/4
330-2-1/4-4-1/2	3-3/4	1-1/4
330-2-1/4-12	3-3/4	1-1/4
330-2-1/2-4	4-1/4	1-7/16
330-2-1/2-12	4-1/4	1-7/16
330-1/8NPT	1-1/16	3/8
330-1/4NPT	1-1/4	5/8
330-3/8NPT	1-7/16	5/8
330-1/2NPT	1-5/8	3/4
330-3/4NPT	2	13/16
330-1 NPT	2-3/8	1

Bar Handle Tap Wrench
Part No. 3001



These tools feature forged bodies and hardened jaws. Used in hand operations with all styles of taps or reamers with squared shanks.

Part No./Size	Range
3001-0	1/16-1/4
3001-15	5/32-1/2
3001-13	5/32-3/4
3001-7	1/4-1-1/8
3001-8	3/4-1-5/8
3001-22	1-2-1/2

Die Stocks
Part No. 3291



Forged body, solid handle die stocks have three adjustable screws for use with either screw adjustable or stock adjustable dies.

Part No./Size	Overall Length
3291x13/16	6-1/4
3291x1	9
3291x1-1/2	14
3291x2	23

Tap Wrenches
Part No. 3002



"T" Handle

"T" handle style tap wrenches are used with all styles of taps or reamers with squared shanks for hand operations. When starting a tap by hand, care should be taken to assure that the tap and the drilled hole are correctly aligned or failure of the tap or wrench will occur.

Part No./Size	Range
3002-1	1/16-1/4
3002-2	7/32-1/2

Auger Drills

Part No. 8006
Mono-Spur, Single Flute



For general purpose boring in most types of wood. 8" OAL, 5" twist length, 1/4" shank.

Part No./ Diameter	Flute Length	Overall Length
8006-1/4	6	8
8006-5/16	6	8
8006-3/8	6	8
8006-7/16	6	8
8006-1/2	6	8
8006-9/16	6	8

Part No./ Diameter	Flute Length	Overall Length
8006-5/8	6	8
8006-11/16	6	8
8006-3/4	6	8
8006-13/16	6	8
8006-7/8	6	8
8006-15/16	6	8
8006-1	6	8

CHAMPION[®] CUTTING TOOLS

Wood Boring Bits Part No. 8001 Spade Style, HSS



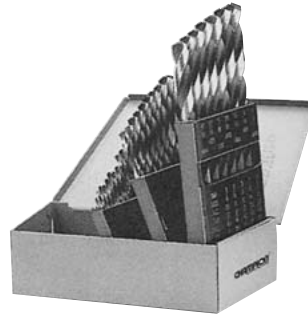
Part No./ Diameter	Shank Diameter	Overall Length
8001-1/4	7/32	6
8001-5/16	7/32	6
8001-3/8	7/32	6
8001-7/16	7/32	6
8001-1/2	7/32	6
8001-9/16	7/32	6
8001-5/8	7/32	6
8001-11/16	7/32	6
8001-3/4	7/32	6
8001-13/16	7/32	6
8001-7/8	7/32	6
8001-15/16	7/32	6
8001-1	7/32	6
8001-1-1/8	7/32	6
8001-1-1/4	7/32	6
8001-1-3/8	7/32	6
8001-1-1/2	7/32	6

Taper Pipe Taps Part No. 324

NPT, Regular Hook,
Ground Thread, HSS

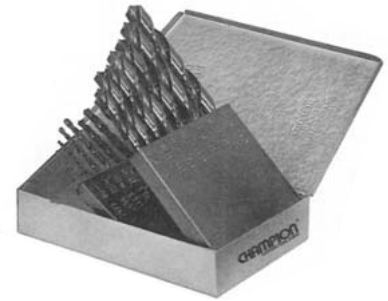


Drill Sets 29 Pieces Drill Set 1/16 thru 1/2 x 64ths



Part No.	Description
129C	#705

15 Piece Drill Set 1/16 thru 1/2 x 32nds A thru Z



Part No.	Description
115C	#705

115 Piece Super Drill Set 1/16 thru 1/2 x 64ths, #1 thru #60, A thru Z



Part No.	Description
SS-150C	#705

Used for general purpose tapping of pipe and pipe fittings. Designed to produce threads where mated parts are not required to withstand high fluid or gas pressures, and where the use of a sealing compound or tape is acceptable to produce a leakproof thread.

Part No./ Size	Length of Thread
324-1/16-27	11/16
321-1/8-27	3/4
324-1/4-18	1-1/16
324-3/8-18	1-1/16
324-1/2-14	1-3/8
324-3/4-14	1-3/8
324-1-11-1/2	1-3/4
324-1-1/4-11-1/2	1-3/4
324-1-1/2-11-1/2	1-3/4
324-2-11-1/2	1-3/4