

**A CUT  
ABOVE  
THE  
REST.**



Sticky clays, packed sand,  
and rocky soils are no match  
for our wide selection of bits  
and blades. And with over 60 years  
of experience behind each and every bit  
and blade, we should know.

# BLADE SELECTION CHARTS

To use the blade charts, find the hole pattern for your machine and sonde housing on the first chart. Use the second chart to find the blade style for your particular soil conditions. Generally, larger blades work better in softer soils and smaller blades work better in harder soils.

Pattern #	Machine	# Holes	Bolt Size
-09	Ditch Witch JT520	3	10mm
-14	Ditch Witch JT920, JT920L, JT1720, JT2720 (some), JT1220, JT2020	5	12mm
-15	Ditch Witch JT2720 (some) JT4020 (some)	6	16mm
-25	Ditch Witch JT4020 (some) JT7020	6	20mm
-13	All Vermeers up to D40x40	6 + 1	1/2"-13
-23	Vermeer D50x100, D80x100	6 + 1	5/8"-11

SOIL CONDITION	1ST CHOICE BLADE	2ND CHOICE BLADE	3RD CHOICE BLADE
Sand	Gator	Excalibur	Chunky
Sand with cobbles	Steep Taper UltraBit 3	UltraBit 3	Grizzly
Sandstone	UltraBit 3	Bear Claw	Excalibur
Sticky clay	Samurai	Excalibur	Gator
Clay with cobbles	Steep Taper UltraBit 3	UltraBit 3	Grizzly
Hardpan	Steep Taper UltraBit 3	Samurai	Bear Claw
Shale	UltraBit 3	Grizzly	Bear Claw
Caliche	Grizzly	UltraBit 3	Steep Taper UltraBit 3
River rock	Steep Taper UltraBit 3	Grizzly	Bear Claw
Glacial til	Excalibur	UltraBit 3	Bear Claw
Sandy loam	Excalibur	UltraBlade	Chunky

## EXCALIBUR

For rocky and abrasive soil conditions

- Carbide button bits grind through tough ground conditions
- Bullnose design minimizes drag while rotating
- Strategically placed carbides along side give this blade a long, productive life

**1612-23-50-BBX** 5" Excalibur



**1600-15-40-BBX** 4" Excalibur



Excalibur	
<b>2-1/2" Cut - Bolt Pattern</b>	<b>Part #</b>
3-hole Ditch Witch for 10mm bolt	<b>1600-09-25-BX</b>
<b>3-1/2" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole Ditch Witch for 12mm bolt	<b>1600-14-35-BBX</b>
7-hole Vermeer for 1/2" bolt	<b>1600-13-35-BBX</b>
<b>4" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole Ditch Witch for 12mm bolt	<b>1600-14-40-BBX</b>
6-hole Ditch Witch, for 16mm bolt	<b>1600-15-40-BBX</b>
7-hole Vermeer for 1/2" bolt	<b>1600-13-40-BBX</b>
<b>5" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole Ditch Witch for 12mm bolt	<b>1600-14-50-BBX</b>
6-hole Ditch Witch, for 16mm bolt	<b>1600-15-50-BBX</b>
7-hole Vermeer for 1/2" bolt	<b>1600-13-50-BBX</b>
<b>5" Cut - Bolt Pattern, 1" Thick</b>	<b>Part #</b>
6-hole Ditch Witch, for 16mm bolt	<b>1610-15-50-BBX</b>
7-hole Vermeer for 1/2" bolt	<b>1610-13-50-BBX</b>
7-hole Vermeer for 5/8" bolt	<b>1610-23-50-BBX</b>
<b>5" Cut - Bolt Pattern, 1-1/4" Thick</b>	<b>Part #</b>
6-hole Vermeer for 5/8" bolt	<b>1612-23-50-BBX</b>
<b>6" Cut - Bolt Pattern, 1" Thick</b>	<b>Part #</b>
7-hole Vermeer for 5/8" bolt	<b>1610-23-60-BBX</b>

**1600-09-25-BX** 2-1/2" Excalibur



To place an order or find a dealer **800-833-1252**

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**LONG LASTING PREMIUM BLADES**

**ULTRA BIT 3**

For hard, compact soil and gravel

<b>UltraBit 3</b>	
<b>4" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole, Ditch Witch for 12mm bolt	1600-14-40-BBU3
7-hole, Vermeer for 1/2" bolt	1600-13-40-BBU3
6-hole, Ditch Witch for 16mm bolt	1600-15-40-BBU3
<b>5" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole, Ditch Witch for 12mm bolt	1600-14-50-BBU3
7-hole, Vermeer for 1/2" bolt	1600-13-50-BBU3
6-hole, Ditch Witch for 16mm bolt	1600-15-50-BBU3
<b>6" Cut - Bolt Pattern</b>	<b>Part #</b>
7-hole, Vermeer for 5/8" bolt	1610-23-60-BBU3
6-hole, Ditch Witch for 20mm bolt	1610-25-60-BBU3

- Conical carbide cutters make this an aggressive bit for hard soils
- Chunky carbide hardfacing the entire length of blade for maximum longevity
- Low-profile, tapered design to minimize torque stealing drag

**1600-15-50-BBU3** 5" UltraBit 3



**STEEP TAPER ULTRA BIT 3**

For hard, compact soil and gravel

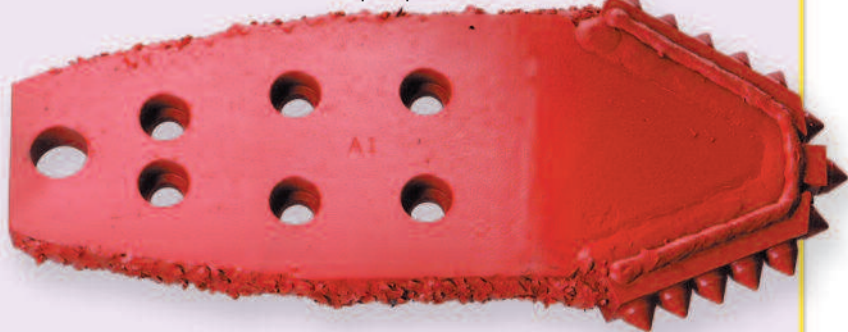
<b>Steep Taper UltraBit 3</b>	
<b>4" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole, Ditch Witch for 12mm bolt	1600-14-40-BSU3
7-hole, Vermeer for 1/2" bolt	1600-13-40-BSU3
<b>5" Cut - Bolt Pattern</b>	<b>Part #</b>
7-hole, Vermeer for 1/2" bolt	1600-13-50-BSU3
6-hole, Ditch Witch for 16mm bolt	1600-15-50-BSU3

- Bit of choice for ground where it is hard to do directional "pushes"
- Conical carbide cutters set in an aggressive angle to get through cobbles
- Center point tooth for easier penetration
- Chunky carbide hardfacing the entire length of blade for maximum longevity
- Low-profile, tapered design to minimize torque stealing drag

**1600-14-40-BSU3** 4" Steep Taper UltraBit 3



**1600-13-50-BSU3** 5" Steep Taper UltraBit 3

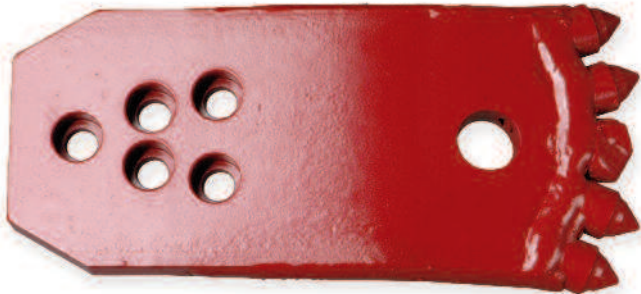


## BEAR CLAW

For hard, rocky soil conditions

- *The King of the Beasts uses large conical carbide cutters to eat through caliche, sandstone and other tough conditions*
- *Hardfacing along all wear edges makes this one long lasting blade*

**1600-14-40-BBBC** 4" Bear Claw



### Bear Claw

3-1/2" Cut - Bolt Pattern	Part #
5-hole, Ditch Witch for 12mm bolt	1600-14-35-BBBC
7-hole, Vermeer for 1/2" bolt	1600-13-35-BBBC
4" Cut - Bolt Pattern	Part #
5-hole, Ditch Witch for 12mm bolt	1600-14-40-BBBC
6-hole, Ditch Witch for 16mm bolt	1600-15-40-BBBC
7-hole, Vermeer for 1/2" bolt	1600-13-40-BBBC
5" Cut - Bolt Pattern	Part #
5-hole, Ditch Witch for 12mm bolt	1600-14-50-BBBC
6-hole, Ditch Witch for 16mm bolt	1600-15-50-BBBC
7-hole, Vermeer for 1/2" bolt	1600-13-50-BBBC

## GRIZZLY

For hard, rocky soil conditions

- *Angled conical carbide cutters shred through the hardest soils*
- *Carbide impregnated hardfacing for maximum wear resistance*

**1610-23-50-BBZ** 5" Grizzly



- *Build on a foundation of 1" thick, heat-treated steel for ultimate durability*

### Grizzly

4" Cut - Bolt Pattern	Part #
6-hole Ditch Witch for 16mm bolt	1610-15-40-BBZ
7-hole Vermeer for 1/2" bolt	1610-13-40-BBZ
5" Cut - Bolt Pattern	Part #
6-hole Ditch Witch for 16mm bolt	1610-15-50-BBZ
7-hole Vermeer for 1/2" bolt	1610-13-50-BBZ
7-hole Vermeer for 5/8" bolt	1610-23-50-BBZ
6" Cut - Bolt Pattern	Part #
7-hole Vermeer for 5/8" bolt	1610-23-60-BBZ

## GATOR

For sand and sticky clays

- *Aggressive, stepped-carbide design for efficient cutting*
- *Heat-treat alloy steel for maximum durability*

**1600-13-40-BBG** 4" Gator



- *Wear edges are covered in hardfacing to extend life of Gator*

### Gator

3-1/2" Cut - Bolt Pattern	Part #
5-hole Ditch Witch for 12mm bolt	1600-14-35-BBG
7-hole Vermeer for 1/2" bolt	1600-13-35-BBG
4" Cut - Bolt Pattern	Part #
5-hole Ditch Witch for 12mm bolt	1600-14-40-BBG
6-hole Ditch Witch for 16mm bolt	1600-15-40-BBG
7-hole Vermeer for 1/2" bolt	1600-13-40-BBG



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**FANG**

For sand and sticky clays with cobbles

<b>Fang</b>	
<b>3-1/2" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole Ditch Witch for 12mm bolt	1600-14-35-BBRC
7-hole Vermeer for 1/2" bolt	1600-13-35-BBRC
<b>4" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole Ditch Witch for 12mm bolt	1600-14-40-BBRC
6-hole Ditch Witch for 16mm bolt	1600-15-40-BBRC
7-hole Vermeer for 1/2" bolt	1600-13-40-BBRC
<b>5" Cut - Bolt Pattern, 1" Thick</b>	<b>Part #</b>
6-hole Ditch Witch for 20mm bolt	1610-25-50-BBRC
7-hole Vermeer for 5/8" bolt	1610-23-50-BBRC
<b>6" Cut - Bolt Pattern, 1" Thick</b>	<b>Part #</b>
7-hole Vermeer for 5/8" bolt	1610-23-60-BBRC

- Steep taper enables the Fang to wedge in between stones during steering pushes
- Carbide impregnated hardfacing along cutting edges for longer bit life

**1600-13-40-BBRC** 4" Fang



**SAMURAI**

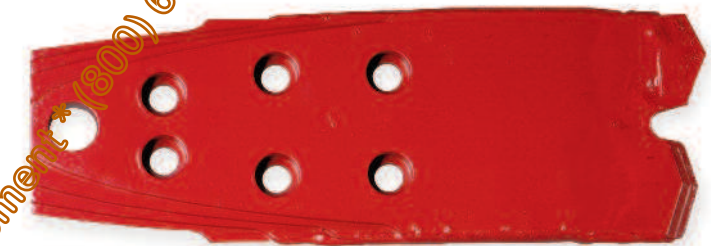
For hardpan and sticky clays

- Low-profile, tapered design to minimize torque stealing drag
- Excellent breakout and drilling action

<b>Samurai</b>	
<b>4" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole, Ditch Witch for 12mm bolt	1600-14-40-BBS
6-hole, Ditch Witch, for 16mm bolt	1600-15-40-BBS
7-hole, Vermeer for 1/2" bolt	1600-13-40-BBS

- Large carbide-tipped piercing points make directional pushes much easier in dense clay

**1600-13-40-BBS** 4" Samurai



**VALU-BLADE**

For standard soil conditions

<b>Valu-Blade</b>	
<b>2-1/2" Cut - Bolt Pattern</b>	<b>Part #</b>
3-hole Ditch Witch for 10mm bolt	1600-14-25-BV
<b>3-1/2" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole Ditch Witch for 12mm bolt	1600-14-35-BBV
<b>4" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole Ditch Witch for 12mm bolt	1600-14-40-BBV
6-hole Ditch Witch for 16mm bolt	1600-15-40-BBV
<b>5" Cut - Bolt Pattern, 1" Thick</b>	<b>Part #</b>
6-hole Ditch Witch for 16mm bolt	1610-15-50-BBV
6-hole Ditch Witch for 20mm bolt	1610-25-50-BBV
7-hole Vermeer for 1/2" bolt	1610-13-50-BBV
7-hole Vermeer for 5/8" bolt	1610-23-50-BBV
<b>6" Cut - Bolt Pattern, 1" Thick</b>	<b>Part #</b>
6-hole Ditch Witch for 20mm bolt	1610-25-60-BBV
7-hole Vermeer for 5/8" bolt	1610-23-60-BBV

- Economical bit holds up through multiple bores
- Ideal bit for drilling in standard soil conditions
- Heat-treated steel for resistance to abrasive soils

**1600-14-35-BBV** 3.5" Valu-Blade



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## CHUNKY

For sand and sandy loams

- *An economical and long lasting blade*
- *Cutting edges are impregnated with carbide chunks to resist wear*
- *Heat-treated steel for resistance to abrasive soils*

**1600-14-40-BBVC** 4" Chunky



<b>Chunky</b>	
<b>2-1/2" Cut - Bolt Pattern</b>	<b>Part #</b>
3-hole Ditch Witch for 10mm bolt	1600-09-25-BVC
<b>3-1/2" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole Ditch Witch for 12mm bolt	1610-14-35-BBVC
<b>4" Cut - Bolt Pattern</b>	<b>Part #</b>
5-hole Ditch Witch for 12mm bolt	1610-14-40-BBVC
6-hole Ditch Witch for 16mm bolt	1610-15-40-BBVC
<b>5" Cut - Bolt Pattern, 1" Thick</b>	<b>Part #</b>
6-hole Ditch Witch for 16mm bolt	1610-15-50-BBVC
6-hole Ditch Witch for 20mm bolt	1610-25-50-BBVC
7-hole Vermeer for 1/2" bolt	1610-13-50-BBVC
7-hole Vermeer for 5/8" bolt	1610-23-50-BBVC
<b>6" Cut - Bolt Pattern, 1" Thick</b>	<b>Part #</b>
6-hole Ditch Witch for 20mm bolt	1610-25-60-BBVC
7-hole Vermeer for 5/8" bolt	1610-23-60-BBVC

## VALU-BLADE II

Cast blade for standard soil conditions

**1600-13-35-BBV2** 3-1/2" Valu-Blade II



<b>Valu-II</b>	
<b>3-1/2" Cut - Bolt Pattern, 3/4" Thick</b>	<b>Part #</b>
7-hole Vermeer for 1/2" bolt	1600-13-35-BBV2
<b>4" Cut - Bolt Pattern, 7/8" Thick</b>	<b>Part #</b>
7-hole Vermeer for 1/2" bolt	1600-13-40-BBV2

- *A cast, heat-treated blade that is economical yet very durable*
- *Low-profile, tapered design to minimize torque stealing drag*

## CHUNKY II

Cast blade for sand and sandy loams

**1600-13-40-BVC2** 4" Chunky II



<b>Chunky-II</b>	
<b>3-1/2" Cut - Bolt Pattern, 3/4" Thick</b>	<b>Part #</b>
7-hole Vermeer for 1/2" bolt	1600-13-35-BVC2
<b>4" Cut - Bolt Pattern, 7/8" Thick</b>	<b>Part #</b>
7-hole Vermeer for 1/2" bolt	1600-13-40-BVC2

- *A cast, heat-treated blade that is economical yet very durable*
- *Cutting edges are impregnated with carbide chunks to resist wear*
- *Low-profile, tapered design to minimize torque stealing drag*



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