

A full family of sonic tooling includes casing in a wide range of sizes, bits to match, inner rods, samplers, liners, and retainers. All of this sonic tooling is available from your single Geoprobe® source and includes unique sonic soil sampling systems available only from Geoprobe®.

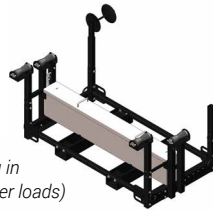
Geoprobe® sonic casing is designed so that each incremental casing is sized with bit clearances and annular space in mind, uniquely designed so that each incremental casing size works efficiently with the next. Notice the similarities in the annular space between the casing sizes in the diagram. This results in a very efficient combination of casings for use in conventional sonic sampling applications such as 4x6, 6x8, or 8x10.

All sizes of Geoprobe® sonic casing are made from aircraft quality alloy steel with heat treated tool joints. All heat treatment, metal improvement, and machining is performed by Geoprobe Systems® to give you the high quality and consistency you have come to expect in a Genuine Geoprobe® product.

Geoprobe® sonic tooling joints are engineered for ease of make-up and break-out with no galling or deforming in the thread area. Field operators report they can immediately tell the difference.

What's New

- *Hardfaced Carbide Bits*
- *Improved Sonic Core Catchers*
- *4x6 Rack (Holds 100 ft. of both 4.5 in. and 6 in. casing in standard configuration, adjustable to accommodate other loads)*



Geoprobe® 4.5 in. Heavy Duty (HD) Sonic Drill Rod

Increased tool joint strength holds up to the harshest sonic drilling conditions, lasting longer, which saves you time and money.

- *Consists of two pieces – the sonic drill rod and the coupler.*
- *Larger cross section on tool joint strengthens the drill rod and maximizes overall thread life.*
- *Breakout flats on the coupler minimize wear on the jaw pads when breaking tool joints apart.*
- *Engineered to withstand continuous use in harsh conditions and complement the 8150LS full-size sonic rig with 50K dynamic force.*
- *Continuously sample and set casing in excess of 300 ft. in a wide range of formations.*

geoprobe.com/4.5-sonic-hd



A two man crew was able to obtain high-quality samples in a difficult subsurface formation using the Geoprobe® 8150LS and 4.5-inch HD sonic drill rods.



Geoprobe® 4.5 in. Heavy Duty (HD) sonic drill rod (front) and traditional sonic drill rod (back).

9.625 in. SONIC CASING

OD: 9.625 in. / ID: 8.755 in.
Weight: 43.5 lbs./ft

10 in.
(9.625 in.)

7.625 in. SONIC CASING

OD: 7.625 in. / ID: 6.765 in.
Weight: 33.7 lbs./ft

8 in.
(7.625 in.)

6.0 in. SONIC CASING

OD: 6.0 in. / ID: 5.25 in.
Weight: 22.5 lbs./ft

6 in.

4.5 in. SONIC CASING

OD: 4.5 in. / ID: 3.75 in.
Weight: 16.5 lbs./ft

4.5 in.

HD | 4.5 in.

4.5 in. HD SONIC CASING

COUPLER: OD: 4.5 in. / ID: 3.00 in.
MIDBODY: OD: 4.5 in. / ID: 3.75 in.
Weight: 18.9 lbs./ft

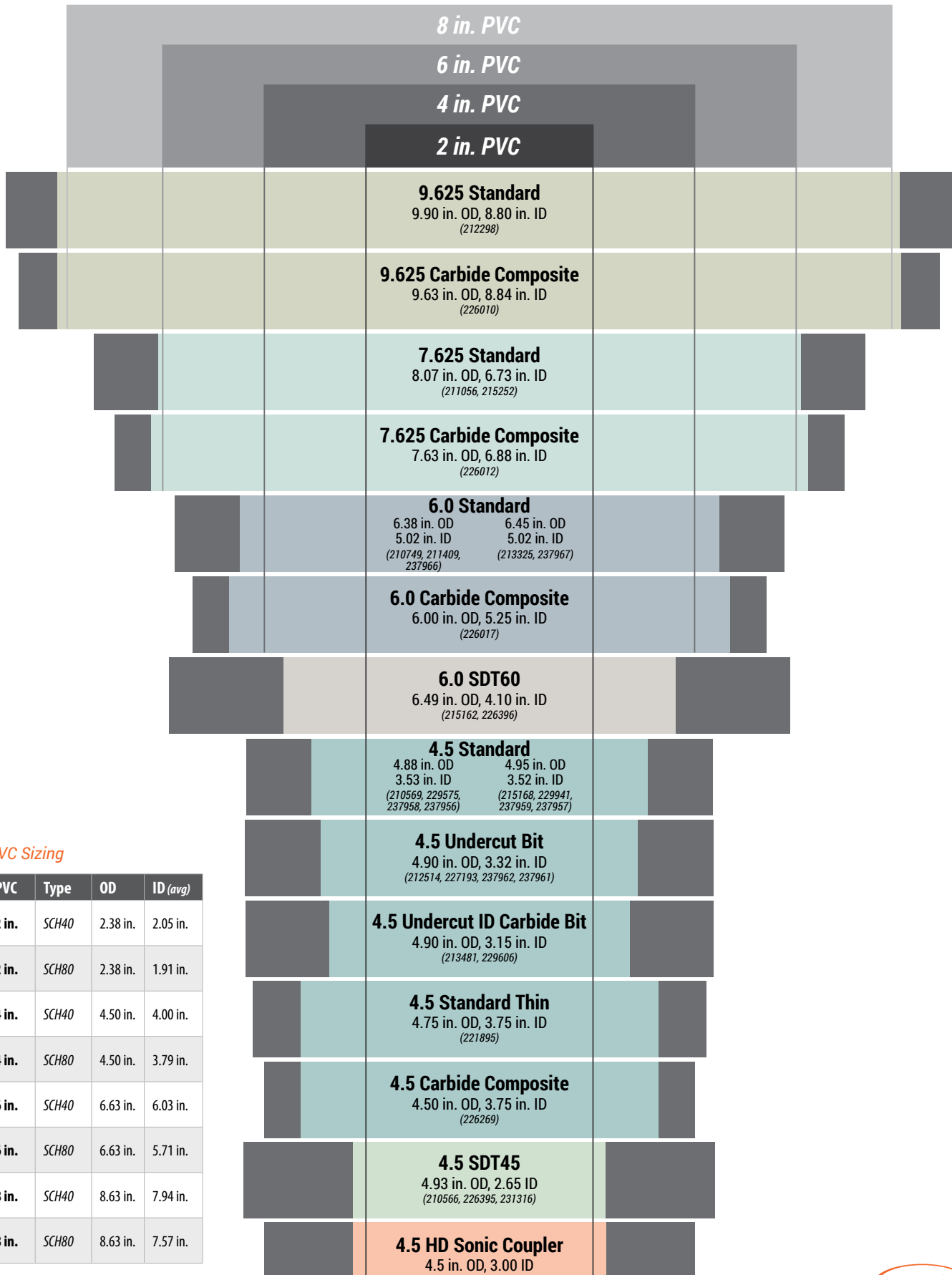
PVC Casing Diameters for Sonic Bits

geoprobe.com/sonic-pvc



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The graphic below illustrates how common PVC well sizes fit into the ID of Geoprobe® sonic bits.



PVC Sizing

PVC	Type	OD	ID (avg)
2 in.	SCH40	2.38 in.	2.05 in.
2 in.	SCH80	2.38 in.	1.91 in.
4 in.	SCH40	4.50 in.	4.00 in.
4 in.	SCH80	4.50 in.	3.79 in.
6 in.	SCH40	6.63 in.	6.03 in.
6 in.	SCH80	6.63 in.	5.71 in.
8 in.	SCH40	8.63 in.	7.94 in.
8 in.	SCH80	8.63 in.	7.57 in.

Traditional Sonic - Carbide Button Bits

Components	Part	MN	Notes
	4.5 in. Sonic Bit RHSL, Dome	229575	4.88 in. OD 3.53 in. ID
	4.5 in. Sonic Bit RHSL, Para	229941	4.95 in. OD 3.52 in. ID
	4.5 in. Sonic Bit RHSL, Dome Hardfaced	237958	4.88 in. OD 3.53 in. ID
	4.5 in. Sonic Bit RHSL, Para Hardfaced	237959	4.95 in. OD 3.52 in. ID
	4.5 in. Sonic Bit RHSL Undercut, Para	227193	4.90 in. OD 3.32 in. ID
	4.5 in. Sonic Bit RHSL Undercut, Para Hardfaced	237962	4.90 in. OD 3.32 in. ID
	4.5 in. Sonic Bit RHSL Undercut ID Carbide, Para	229606	4.90 in. OD 3.15 in. ID
	4.5 in. Sonic Bit LHSL, Dome	210569	4.88 in. OD 3.53 in. ID
	4.5 in. Sonic Bit LHSL, Para	215168	4.95 in. OD 3.52 in. ID
	4.5 in. Sonic Bit LHSL, Dome Hardfaced	237956	4.88 in. OD 3.53 in. ID
	4.5 in. Sonic Bit LHSL, Para Hardfaced	237957	4.95 in. OD 3.52 in. ID
	4.5 in. Sonic Bit LHSL Undercut, Para	212514	4.90 in. OD 3.32 in. ID
	4.5 in. Sonic Bit LHSL Undercut, Para Hardfaced	237961	4.90 in. OD 3.32 in. ID
	4.5 in. Sonic Bit LHSL Undercut ID Carbide, Para	213481	4.90 in. OD 3.15 in. ID
	4.5 in. Sonic Bit LHSL, Para	221895	4.75 in. OD 3.75 in. ID
	6.0 in. Sonic Bit RHSL, Dome	210749	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL, Para	213325	6.45 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL, Dome Hardfaced	237966	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL, Para Hardfaced	237967	6.45 in. OD 5.02 in. ID
	6.0 in. Sonic Bit LHSL, Dome	211409	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit LHSL ID Carbide, Dome	216273	6.38 in. OD 4.71 in. ID
	7.625 in. Sonic Bit RHSL, Dome	211056	8.07 in. OD 6.73 in. ID
	7.625 in. Sonic Bit LHSL, Dome	215252	8.07 in. OD 6.73 in. ID
	9.625 in. Sonic Bit RHSL, Dome	212298	9.90 in. OD 8.80 in. ID

Conventional Sonic - Carbide Composite Bits

Components	Part	MN	Notes
	4.5 in. Sonic Bit LHSL CC	226269	4.50 in. OD 3.75 in. ID
	6.0 in. Sonic Bit RHSL CC	226017	6.00 in. OD 5.25 in. ID
	7.625 in. Sonic Bit RHSL CC	226012	7.63 in. OD 6.88 in. ID
	9.625 in. Sonic Bit RHSL CC	226010	9.63 in. OD 8.84 in. ID

Conventional Sonic - Flapper Bits

Components	Part	MN	Notes
	4.5 in. Sonic Bit LHSL Flapper Single	226328	4.75 in. OD 3.75 in. ID
	4.5 in. Sonic Bit LHSL Flapper Double	224628	4.75 in. OD 3.75 in. ID

Dual Tube Sonic Bits

Components	Part	MN	Notes
	4.5 in. Sonic Bit RHSL SDT45, Dome	231316	4.93 in. OD 2.65 in. ID
	4.5 in. Sonic Bit RHSL SDT45, Para	223864	4.93 in. OD 2.65 in. ID
	4.5 in. Sonic Bit LHSL SDT45, Dome	226395	4.93 in. OD 2.65 in. ID
	4.5 in. Sonic Bit LHSL SDT45, Para	210566	4.93 in. OD 2.65 in. ID
	6.0 in. Sonic Bit RHSL SDT60, Dome	226396	6.49 in. OD 4.10 in. ID
	6.0 in. Sonic Bit RHSL SDT60, Para	215162	6.49 in. OD 4.10 in. ID

Full Face Sonic Bits

Components	Part	MN	Notes
	4.5 in. Sonic Bit RHSL Full Face, Para	229954	4.88 in. OD
	4.5 in. Sonic Bit RHSL Full Face, Dome	229961	6.23 in. OD
	4.5 in. Sonic Bit RHSL Full Face, Para	229957	6.23 in. OD
	4.5 in. Sonic Bit LHSL Full Face, Para	215779	4.88 in. OD
	4.5 in. Sonic Bit LHSL Full Face, Dome	218682	6.23 in. OD
	4.5 in. Sonic Bit LHSL Full Face, Para	218923	6.23 in. OD
	6.0 in. Sonic Bit RHSL Full Face, Para	222884	6.35 in. OD

4.5 in. Sonic Tooling LHSL

geoprobe.com/4.5-sonic



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Spindle Adapters

Components	Part	MN	Notes
	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
	GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	

4.5 in. Sonic Casing LHSL

Components	MN	Length	Weight	OD	ID
	210172	120 in.	165 lbs.	4.5 in.	3.75 in.
	210495	60 in.	82.5 lbs.		
	210563	24 in.	33 lbs.		
	210602	12 in.	16.5 lbs.		

Core Catchers

Components	Part	MN	Notes
	4.5 in. Sonic Core Catcher	209675	LH
	4.5 in. Sonic Core Catcher	231171	LH, Short
	4.5 in. Sonic Core Catcher	213151	LH, Thin

Expendable Points / Holders

Components	Part	MN	Notes
	4.5 in. Sonic Expendable Point Holder LHSL	210600	
	4.5 in. Sonic Locking Expendable Point	209984	

Subs / Adapters

Components	Part	MN	Notes
	4.5 LHSL Box x 7.625 LHSL Pin	212893	5.40 in. S-S
	4.5 LHSL Box x 6.0 LHSL Pin	211647	11.00 in. S-S
	4.5 LHSL Box x 4.5 LHSL Pin	212679	4.00 in. S-S Sub Saver
	3.5 LHSL Pin x 4.5 LHSL Pin	211122	5.50 in. S-S

Accessories

Components	Part	MN	Notes
	4.5 in. Swivel Lift Cap LHSL	210606	Pin
	4.5 in. Taper Tap LHSL	216804	
	Rod Wiper Donut	600448	4.5 in.
	Thread Compound	600729	1 Gallon

Bits

Components	Part	MN	Notes
	4.5 in. Sonic Bit LHSL, Dome	210569	4.88 in. OD 3.53 in. ID
	4.5 in. Sonic Bit LHSL, Para	215168	4.95 in. OD 3.52 in. ID
	4.5 in. Sonic Bit LHSL, Dome Hardfaced	237956	4.88 in. OD 3.53 in. ID
	4.5 in. Sonic Bit LHSL, Para Hardfaced	237957	4.95 in. OD 3.52 in. ID
	4.5 in. Sonic Bit LHSL Undercut, Para	212514	4.90 in. OD 3.32 in. ID
	4.5 in. Sonic Bit LHSL Undercut, Para Hardfaced	237961	4.90 in. OD 3.32 in. ID
	4.5 in. Sonic Bit LHSL Undercut ID Carbide, Para	213481	4.90 in. OD 3.15 in. ID
	4.5 in. Sonic Bit LHSL, Para	221895	4.75 in. OD 3.75 in. ID
	4.5 in. Sonic Bit LHSL CC	226269	4.50 in. OD 3.75 in. ID
	4.5 in. Sonic Bit LHSL Flapper Single	226328	4.75 in. OD 3.75 in. ID
	4.5 in. Sonic Bit LHSL Flapper Double	224628	4.75 in. OD 3.75 in. ID
	4.5 in. Sonic Bit LHSL SDT45, Dome	226395	4.93 in. OD 2.65 in. ID
	4.5 in. Sonic Bit LHSL SDT45, Para	210566	4.93 in. OD 2.65 in. ID
	4.5 in. Sonic Bit LHSL Full Face, Para	215779	4.88 in. OD
	4.5 in. Sonic Bit LHSL Full Face, Dome	218682	6.23 in. OD
	4.5 in. Sonic Bit LHSL Full Face, Para	218923	6.23 in. OD

Key
 S-S (Shoulder to Shoulder)
 LH (Left Hand)
 RH (Right Hand)
 CC (Carbide Composite)

4.5 in. Sonic Tooling HD RHSL

geoprobe.com/4.5-sonic-hd



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Spindle Adapters

Components	Part	MN	Notes
	GV5 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	228765	HD
	GV4 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL NEW	234730	HD

4.5 in. HD Sonic Rod RHSL Midbody

Components	MN	Length	Weight	OD	ID
	226643	120 in.	189 lbs.	4.5 in.	3.75 in.
	226634	60 in.	94.5 lbs.		
	226641	24 in.	37.8 lbs.		

Sampler Barrel

Components	Part	MN	Notes
	4.5 in. Sonic Sampler Barrel RHSL	227183	60 in.
		223849	12 in.
		229565	6 in.

Core Catchers

Components	Part	MN	Notes
	4.5 in. Sonic Core Catcher	227260	RH
	4.5 in. Sonic Core Catcher	231159	RH, Short

Accessories

Components	Part	MN	Notes
	4.5 in. HD Swivel Lift Cap RHSL	228940	Pin
	4.5 in. HD Taper Tap NEW	236068	Midbody
		239860	Coupler
	Rod Wiper Donut	600448	4.5 in.
	Thread Compound	600729	1 Gallon

Bits

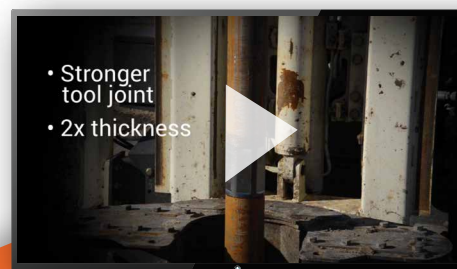
Components	Part	MN	Notes
	4.5 in. Sonic Bit RHSL, Dome	229575	4.88 in. OD 3.53 in. ID
	4.5 in. Sonic Bit RHSL, Para	229941	4.95 in. OD 3.52 in. ID
	4.5 in. Sonic Bit RHSL, Dome Hardfaced	237958	4.88 in. OD 3.53 in. ID
	4.5 in. Sonic Bit RHSL, Para Hardfaced	237959	4.95 in. OD 3.52 in. ID
	4.5 in. Sonic Bit RHSL Undercut, Para	227193	4.90 in. OD 3.32 in. ID
	4.5 in. Sonic Bit RHSL Undercut, Para Hardfaced NEW	237962	4.90 in. OD 3.32 in. ID
	4.5 in. Sonic Bit RHSL Undercut ID Carbide, Para	229606	4.90 in. OD 3.15 in. ID
	4.5 in. Sonic Bit RHSL SDT45, Dome	231316	4.93 in. OD 2.65 in. ID
	4.5 in. Sonic Bit RHSL SDT45, Para	223864	4.93 in. OD 2.65 in. ID
	4.5 in. Sonic Bit RHSL Full Face, Para	229954	4.88 in. OD
	4.5 in. Sonic Bit RHSL Full Face, Dome	229961	6.23 in. OD
	4.5 in. Sonic Bit RHSL Full Face, Para	229957	6.23 in. OD

Coupler / Subs / Adapters

Components	Part	MN	Notes
	4.5 in. HD Sonic Rod RHSL Coupler	226658	4.5 in. OD 3.0 in ID
	SUB 4.5 in. HD RHSL Box to 4.5 RHSL Pin	227102	
	4.5 HD Box x 6.0 RHSL Pin	226740	4.00 in. S-S
	4.5 HD Pin x 6.0 RHSL Box	226741	8.50 in. S-S
	4.5 HD Box x 4.5 HD Pin	229271	4.00 in. S-S Sub Saver

4.5 in. HD Sonic Rods

geoprobe.com/4.5-sonic-hd



Go "Behind the Design" to find out the engineering perspective on our HD sonic tooling.

Spindle Adapters

Components	Part	MN	Notes
	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
	GV5 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	228765	HD
	GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	
	GV4 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	234730	HD

6.0 in. Sonic Casing RHSL

Components	MN	Length	Weight	OD	ID
	210979	120 in.	225 lbs.	6.0 in.	5.25 in.
	210648	60 in.	112.5 lbs.		
	211174	24 in.	45 lbs.		
	211277	18 in.	33.75 lbs.		
	212350	12 in.	22.5 lbs.		
	212351	6 in.	11.25 lbs.		

Sampler Barrel LHSL

Components	Part	MN	Notes
	6.0 in. Sonic Sampler Barrel LHSL	211383	60 in.
	6.0 in. Sonic Sampler Barrel LHSL	222663	12 in.

Core Catchers

Components	Part	MN	Notes
	6.0 in. Sonic Core Catcher	211107	RH
	6.0 in. Sonic Core Catcher	231193	RH, Short
	6.0 in. Sonic Core Catcher	211746	LH
	6.0 in. Sonic Core Catcher	231202	LH, Short

Accessories

Components	Part	MN	Notes
	6.0 in. Threadless Pin Sand Slip	216182	
	6.0 in. Swivel Lift Cap RHSL	210649	Pin
	6.0 in. Taper Tap	226847	RH
	Core Bags (6x8)	114850	10 in. flat x 725 ft.
	Rod Wiper Donut	600624	6.0 in.
	Thread Compound	600729	1 Gallon

Bits

Components	Part	MN	Notes
	6.0 in. Sonic Bit RHSL, Dome	210749	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL, Para	213325	6.45 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL, Dome Hardfaced	237966	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL, Para Hardfaced	237967	6.45 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL CC	226017	6.00 in. OD 5.25 in. ID
	6.0 in. Sonic Bit RHSL SDT60, Dome	226396	6.49 in. OD 4.10 in. ID
	6.0 in. Sonic Bit RHSL SDT60, Para	215162	6.49 in. OD 4.10 in. ID
	6.0 in. Sonic Bit RHSL Full Face, Para	222884	6.35 in. OD
	6.0 in. Sonic Bit LHSL, Dome	211409	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit LHSL ID Carbide, Dome	216273	6.38 in. OD 4.71 in. ID

Subs / Adapters

Components	Part	MN	Notes
	6.0 RHSL Box x 9.625 RHSL Pin	212962	10.00 in. S-S
	6.0 RHSL Box x 7.625 RHSL Pin	228177	10.50 in. S-S, Long
	6.0 RHSL Box x 7.625 RHSL Pin	212218	4.00 in. S-S
	4.5 HD Box x 6.0 RHSL Pin	226740	4.00 in. S-S
	4.5 HD Pin x 6.0 RHSL Box	226741	8.50 in. S-S
	4.5 LHSL Box x 6.0 LHSL Pin	211647	11.00 in. S-S
	3.5 LHSL Pin x 6.0 LHSL Pin	211412	8.00 in. S-S
	Adapter 6.0 RHSL to 2.25 Welded 9.3L	212343	
	Adapter 6.0 RHSL to 2.25 Welded 6.0L	215236	

Key
S-S (Shoulder to Shoulder)
LH (Left Hand)
RH (Right Hand)
CC (Carbide Composite)

Spindle Adapters

Components	Part	MN	Notes
	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
	GV5 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	228765	HD
	GV5 ADPT 7.625 RHSL	229302	Bolt On
	GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	
	GV4 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	234730	HD
	GV4 ADPT 7.625 RHSL	211060	Bolt On, Requires: 211154

7.625 in. Sonic Casing RHSL

Components	MN	Length	Weight	OD	ID
	211216	120 in.	337 lbs.	7.625 in.	6.765 in.
	211055	60 in.	168.5 lbs.		
	211380	24 in.	67.4 lbs.		

Sampler Barrel LHSL

Components	Part	MN	Notes
	7.625 in. Sonic Sampler Barrel LHSL	215250	60 in.

Accessories

Components	Part	MN	Notes
	7.625 in. Lift Cap RHSL	211301	Pin
	Rod Wiper Donut	106478	7.625 in.
	Thread Compound	600729	1 Gallon

Bits

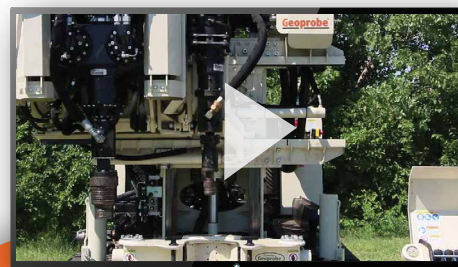
Components	Part	MN	Notes
	7.625 in. Sonic Bit RHSL, Dome	211056	8.07 in. OD 6.73 in. ID
	7.625 in. Sonic Bit RHSL CC	226012	7.63 in. OD 6.88 in. ID
	7.625 in. Sonic Bit LHSL, Dome	215252	8.07 in. OD 6.73 in. ID

Subs / Adapters

Components	Part	MN	Notes
	7.625 RHSL Box x 9.625 RHSL Pin	212620	10.00 in. S-S
	6.0 RHSL Box x 7.625 RHSL Pin	228177	10.50 in. S-S, Long
	6.0 RHSL Box x 7.625 RHSL Pin	212218	4.00 in. S-S
	4.5 LHSL Box x 7.625 LHSL Pin	212893	5.40 in. S-S

High-Speed Coring Head (Sonic)

geoprobe.com/coring-head



Learn about the Geoprobe® high-speed coring head for sonic drill rigs in this short video.

Spindle Adapters

Components	Part	MN	Notes
	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
	GV5 ADPT 7.625 RHSL	229302	Bolt On
	GV5 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	228765	HD
	GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	
	GV4 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	234730	HD
	GV4 ADPT 7.625 RHSL	211060	Bolt On, Requires: 211154

9.625 in. Sonic Casing RHSL

Components	MN	Length	Weight	OD	ID
	212297	120 in.	435 lbs.	9.625 in.	8.755 in.
	215137	60 in.	217.5 lbs.		
	212296	24 in.	87 lbs.		

Accessories

Components	Part	MN	Notes
	9.625 in. Lift Cap RHSL	212401	Pin
	Rod Wiper Donut	106768	9.625 in.
	Thread Compound	600729	1 Gallon

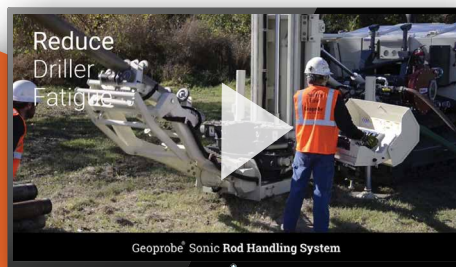
Bits

Components	Part	MN	Notes
	9.625 in. Sonic Bit RHSL, Dome	212298	9.90 in. OD 8.80 in. ID
	9.625 in. Sonic Bit RHSL CC	226070	9.63 in. OD 8.84 in. ID

Subs / Adapters

Components	Part	MN	Notes
	7.625 RHSL Box x 9.625 RHSL Pin	212620	10.00 in. S-S
	6.0 RHSL Box x 9.625 RHSL Pin	212962	10.00 in. S-S

Sonic Rod Handling System
geoprobe.com/sonic-handling



The rod handling system is designed to reduce operator contact with the tooling, for a safer and more efficient work environment.

Key
 S-S (Shoulder to Shoulder)
 LH (Left Hand)
 RH (Right Hand)
 CC (Carbide Composite)

Rod Racks

Components	Part	MN	Notes
	Sonic Rod Rack 4x6 NEW	238030	
	Rod Rack with Roller	216786	

Indexing Rack

Components	Part	MN	Notes
	Indexing Rack (4.5 in. Casing)	226096	Holds 200 ft. of Sonic Casing
	Indexing Rack (6.0 in. Casing)	226133	Holds 150 ft. of Sonic Casing
	Indexing Rack (7.625 in. Casing)	226314	Holds 120 ft. of Sonic Casing

Sonic Indexing Rack Overview

geoprobe.com/index-rack



The Geoprobe® sonic indexing rack is safe, easy to use, and cost effective.