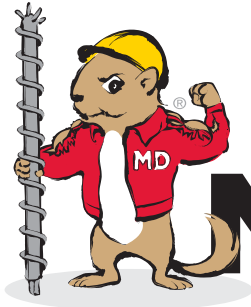


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# Mobile Drill Intl

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## TOOLING CATALOG

**Split Spoon Samplers**

**Shelby Tubes**

**Augers**

**Drive Components**

**Soil Sampling**

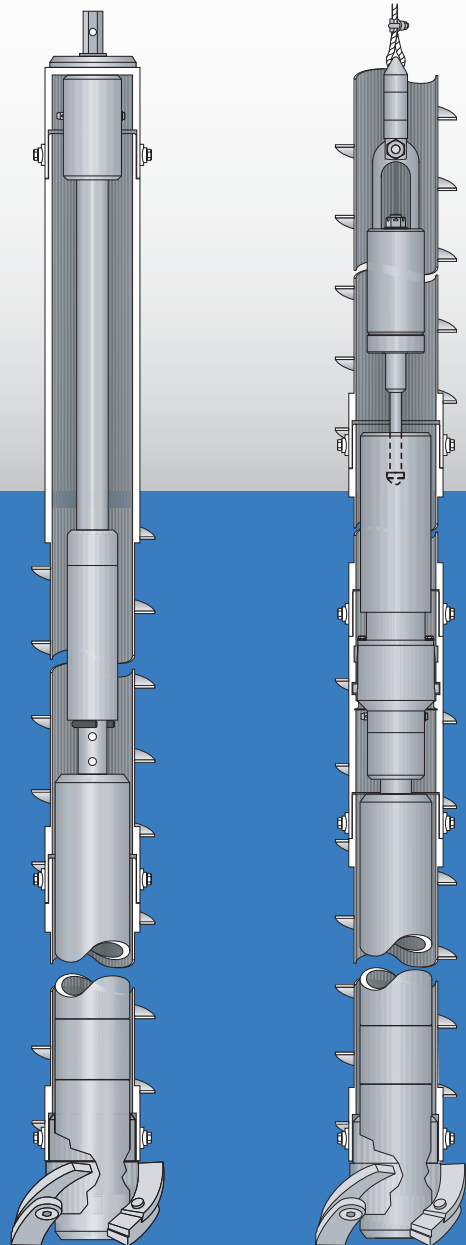
**Drill Rod**

**Hoses & Swivels**

**Continuous Sampling**

**Direct Push**

**Drill Accessories**



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## **MOBILE – OVER 50 YEARS OF LEADERSHIP**

- We invented auger drills over 50 years ago and overburden drilling with augers as the standard geotechnical exploration method.
- We invented hollow stem augers.
- We donated **MOBILOK™** drill rod to the DCDMA and it became “J” Series rod for AW and NW applications. AWML and NWML drill is still the best rod for the money in the industry.

The industry’s most extensive catalog starts here and by the time you’re done, you will understand why Mobile provides the highest quality products at less cost per drilled foot!

**CONTINUOUS FLIGHT AUGERS, BITS AND  
ACCESSORIES**

**1**

**HOLLOW STEM AUGERS, CUTTERHEADS AND  
ACCESSORIES**

**2**

**AUGER DRIVE COMPONENTS**

**3**

**SOIL SAMPLING TOOLS**

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**DRILL ROD, SUBS, ROTARY TOOLS  
AND BITS**

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**HOISTING AND DRIVING TOOLS**

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**CONTINUOUS SAMPLING SYSTEMS**

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**DRILL ACCESSORIES**

**9**

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Fork (see Auger Holder).....1-12, 2-42	6" (152mm).....2-26	Rod.....2-41	Automatic Hammer.....9-1
Guide.....1-11	TRI-LOK Auger, 3-1/4" (83mm).....2-2	Hose, Pressure.....7-4	Shelby Tube Sampler.....4-5
HEX-COR.....1-1	4-1/4" (108mm).....2-5	Suction.....7-5	Shoe, ASTM (Sharp).....4-1, 4-4
HEX-COR (meter length).....1-2	6-5/8" (168mm).....2-8		Terzaghi (Blunt).....4-1, 4-4
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10-1/4" (260mm).....2-13	Direct Push (see Enviro-Core)	Mobile D-P Rock Head.....1-7	Rod Box to Rod Box.....5-5
12-1/4" (311mm).....2-15	Discrete Samplers.....9-2	Mobile Safety Drive Hammer.....6-1	Rod Box to Rod Pin.....5-6
2-Key Standard Duty,	D-P Rock Head.....1-7, 1-10	Mobilkit.....1-12, 2-43	Rod Pin to Rod Pin.....5-4
2-1/4" (57mm).....2-27	Drag Bit.....5-7	MOBILOK Drill Rod.....5-1	Suction Hose.....7-5
3-1/4" (83mm).....2-29	Drift Punch.....1-12	MOBILOK Drill Rod Wiper.....5-1	SD Blade Bullet Cutterhead
2-Key Heavy Duty,	Drill Pipe, Sample Thru.....5-2	MOBILOK Jet Auger.....1-10	(see Cutterhead)
3-1/4" (83mm).....2-32	Drill Rod	Moyno Pumps.....9-2	SD Slim Blade Bullet Cutterhead
4-1/4" (108mm).....2-35	Adapter.....5-3		(see Cutterhead)
6-1/4" (159mm).....2-38	Continuous Sampling.....8-6	O	Swing Arm Automatic
Automatic SPT Hammer.....9-1	DCDMA.....5-2	Overshot Wireline Sampler.....8-2, 8-4	SPT Hammer.....9-1
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Cast Steel Blades.....1-8	Enviro-Core EC-4.....9-1	Recovery Tap, Drill Rod.....5-6	3-Wing Carbide Insert Drag Bit.....1-10
Mining.....1-5	Expansion Adapter.....7-6	Retriever, Auger.....1-11, 2-44	TRI-LOK Auger (see Auger)
Mobile B-T Rock Head.....1-6	Extension, Auger.....2-43	Rock Bit, B-T Rock Head.....1-6	Two-Piece Fishtail Bit.....1-8
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D-P Head.....1-7, 1-10	F	Rod Holding Slip.....2-41	Wash Tee.....2-45
Roller Rock Chisel.....5-7	Finger Bit Type Cutterhead.....1-4	Rod Hook.....6-3	Water Pumps.....9-2
STINGER.....1-9	Fishtail Head.....1-8, 1-9	Rod Lifter.....6-3	Water Pump Hoses (see Hoses)
Thinline Throwaway.....7-6	Footvalve.....7-5	Rod Ring.....6-3	Water Swivels (see Swivels)
Three-Cone Roller Rock.....5-7, 5-8			Wiper, Drill Rod.....5-1
Blade Cutterhead (see Cutterhead)	G		
BULLDOG Head.....1-5	Gimbal Coupling.....3-1		
Bullet Cutterhead (see Cutterhead)	Gimbal Couple, Heavy Duty.....3-2		
Bullet Spade Cutterhead (see Cutterhead)	Gimbal to Hex Adapter.....3-2		
	Grout Swivel.....7-4		
	Guide, Auger.....1-11		

Mobile Standard Construction and HEX-COR® augers have been tested in the field and independently tested in the laboratory and proven to be equal to or stronger than any other auger in the industry.

All Mobile continuous flight augers are manufactured through use of an automatic inert gas metal arc welding process to assure consistent high quality and maximum strength.

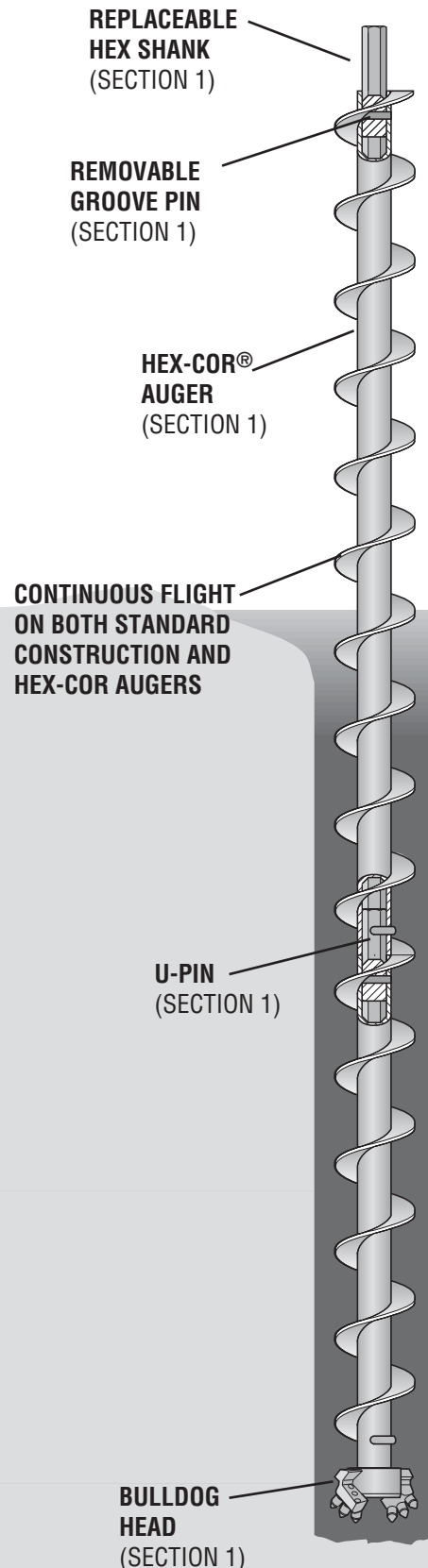
Flights are formed with a slightly tapered concave surface designed to throw cuttings toward the shaft, minimizing clogging and auger drag. Timed flight pitch is set at an optimum angle to produce the best conveyance of material for general auger exploration work and to maintain continuity of the flight spiral from one section to the next.

Uniform bead hardfacing, standard on HEX-COR® augers and optional on Standard Construction, ensures flight edges have sufficient chrome-manganese alloy for non-brittle toughness and greater resistance to abrasion.

Standard Construction augers are manufactured by conventional methods with the exception of the continuous flighting which is welded on both sides to the center shaft by an exclusive manufacturing process. The center shafts of Standard Construction augers are formed of high quality, low carbon steel tubing to provide minimum weight with maximum strength and rigidity.

Innovative HEX-COR® augers have many advantages over Standard Construction augers. In addition to superior strength, they have no shank/socket bulge to impede cutting conveyance and come with full length, flight-edge hardfacing standard. They are completely interchangeable with other augers of common shank and socket size, use all auger heads of matching shank design, and are easily repaired in the field.

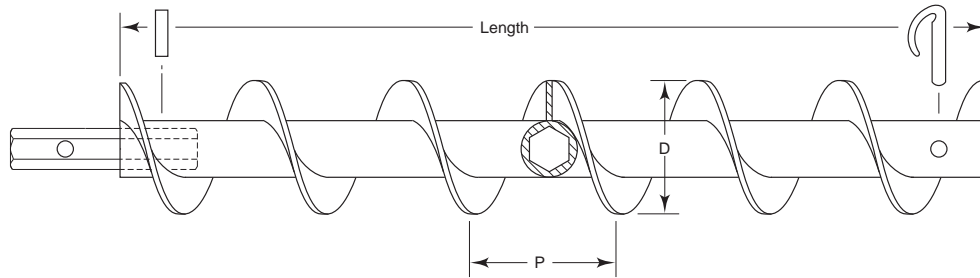
The flighting and the center shaft, made of the highest quality steels, are welded into one unit utilizing inert gas metal arc welding. The center shaft tube of HEX-COR® auger is hex-pierced to the hex shank size throughout its length so that shanks simply slip into the center shaft. This design allows fast replacement of worn or broken shanks in the field.



## HEX-COR™ AUGERS

*Don't replace the entire auger, just the "shank" –  
HEX-COR™ exclusively from Mobile*

1



Available in Hole Sizes 2-1/2" (64 mm) through 12" (305 mm) Hex Sized 13/16", 1-1/8" and 1-5/8" (20.6 mm, 29 mm and 41 mm)

- Field replacement shank
- Internal hex tubing
- Hardfaced flight edges
- U-pin furnished with each section.

**TUBING** AISI 4130 Cold Drawn, Stress Relief Annealed, Steel Tubing

**HEX SHANK** Cold Drawn 13/16", 1-1/8" or 1-5/8" (20.6 mm, 28.6mm or 41.3 mm) Hexagon AISI 4140 Steel, Heat Treated

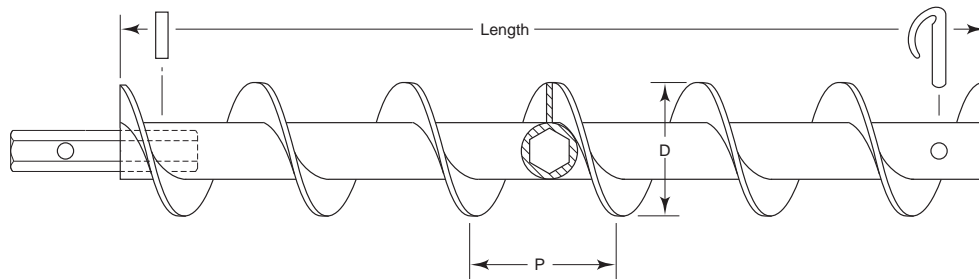
**FLIGHT** Hot Rolled Flat AISI 1020 Steel—Thickness 1/4" (6.35mm)

**RETAINING PIN** AISI 4140 Steel, Heat Treated to 43-48 Rockwell C-Scale

HOLE SIZE		"D" DIAMETER		"P" PITCH		HEX CONN.		STOCK LENGTH		WEIGHT		PART NUMBER	SERIES
in	mm	in	mm	in	mm	in	mm	ft	m	lb	kg		
2-1/2	64	2-3/8	60	2	51	13/16	21	3	.91	12	5.4	001165	1125
								5	1.5	18	8.2	001167	
3	76	2-5/8	67	2	51	13/16	21	3	.91	14	6.4	001168	
								5	1.5	22	10.0	001170	
3-1/2	89	3-1/4	83	3-1/3	85	1-1/8	29	3	.91	18	8.2	001171	1500
								5	1.5	30	13.6	001173	
								10	3.1	61	27.7	004811	
3-3/4	95	3-1/2	89	3-1/3	85	13/16	21	3	.91	18	8.2	BKNFOLLY	1500
4-1/2	114	4	102	3-1/3	85	1-1/8	29	3	.91	22	10.0	001174	
								5	1.5	34	15.4	001176	
5	127	4-1/2	114	4	102	1-1/8	29	3	.91	27	12.2	001177	
								5	1.5	36	16.3	001179	
6	152	5-1/2	140	5	127	1-1/8	29	3	.91	26	11.8	001180	
								5	1.5	40	18.1	001182	
4-1/2	114	4	102	3-1/3	85	1-5/8	41	3	.91	+	+	007208	2000
								5	1.5	54	24.5	001185	
								10	3.0	104	47.2	001186	
5	127	4-1/2	114	4	102	1-5/8	41	5	1.5	54	24.5	001189	
								10	3.0	106	48.1	001190	
6	152	5-1/2	140	5	127	1-5/8	41	5	1.5	58	26.3	001191	
								10	3.0	115	50.3	001192	
7	178	6	152	5	127	1-5/8	41	5	1.5	64	29.0	001193	2000
8	203	7	178	7	178	1-5/8	41	5	1.5	72	32.7	001195	
								10	3.0	139	63.0	001196	
10	254	8-1/2	225	7	178	1-5/8	41	5	1.5	+	+	007240	
12	305	10	254	8	203	1-5/8	41	5	1.5	+	+	007241	

Special sizes available upon request – based on minimum order quantities.

## HEX-COR™ AUGERS — METER LENGTHS — FOR INTERNATIONAL REQUIREMENTS



Available in Hole Sizes 4-1/2" (114mm) through 12" (305mm) Hex Sized 13/16", 1-1/8" and 1-5/8" (20.6mm, 29mm and 41mm)

- Field replacement shank
- Internal hex tubing
- Hardfaced flight edges
- U-pin furnished with each section.

**TUBING** AISI 4130 Cold Drawn, Stress Relief Annealed, Steel Tubing

**HEX SHANK** Cold Drawn 13/16", 1-1/8" or 1-5/8" (20.6mm, 28.6mm or 41.3mm) Hexagon AISI 4140 Steel, Heat Treated

**FLIGHT** Hot Rolled Flat AISI 1020 Steel—Thickness 1/4" (6.35mm)

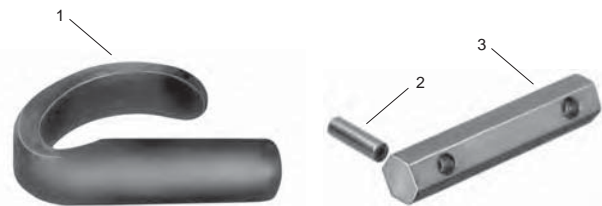
**RETAINING PIN** AISI 4140 Steel, Heat Treated to 43-48 Rockwell C-Scale

HOLE SIZE		"D" DIAMETER		"P" PITCH		HEX CONN.		STOCK LENGTH	WEIGHT		PART NUMBER	SERIES
in	mm	in	mm	in	mm	in	mm	m	lb	kg		
4-1/2	114	4	102	3-1/3	85	1-1/8	29	1	+	+	150473-01	1500
								3	+	+	150473-02	
5	127	4-1/2	114	4	102	1-1/8	29	1	+	+	150473-03	
								3	+	+	150473-04	
4-1/2	114	4	102	3-1/3	85	1-5/8	41	1	+	+	150744-01	2000
								3	+	+	150744-02	
5	127	4-1/2	114	4	102	1-5/8	41	1	+	+	150744-03	
								3	+	+	150744-04	
7	178	6	152	5	127	1-5/8	41	1	+	+	150744-05	
								3	+	+	150744-06	
8	203	7	178	7	178	1-5/8	41	1	+	+	150744-07	
								3	+	+	150744-08	
10	254	8-7/8	225	7	178	1-5/8	41	1	+	+	150744-09	
								3	+	+	150744-10	
12	305	10	254	8	203	1-5/8	41	1	+	+	150744-11	
								3	+	+	150744-12	

Special sizes available upon request – based on minimum order quantities.

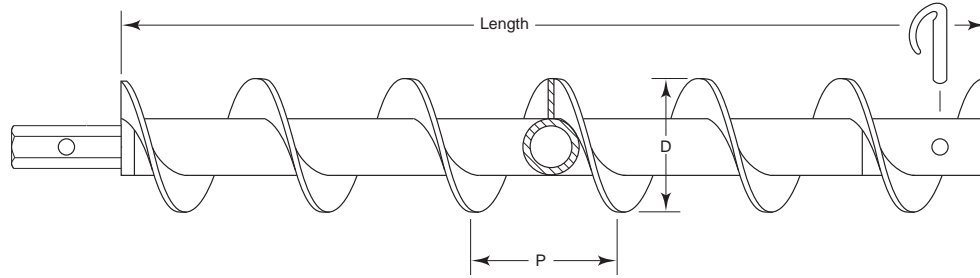
### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	U-Pin (1125 Series), 13/16" (21mm) Hex ....*		001305
1	U-Pin (1500 Series), 1-1/8" (29mm) Hex ..*		001306
1	U-Pin (2000 Series), 1-5/8" (41mm) Hex ..*		001307
2	Groove Pin, 13/16" (21mm) Hex .....	*	150279
2	Groove Pin, 1-1/8" (29mm) Hex .....	*	150280
2	Groove Pin, 1-5/8" (41mm) Hex .....	1 (.5)	150281
3	Repair Shank, 13/16" (21mm) Hex .....	1 (.5)	003997
3	Repair Shank, 1-1/8" (29mm) Hex .....	2 (.9)	003996
3	Repair Shank, 1-5/8" (41mm) Hex .....	5 (2.3)	003995



## STANDARD CONSTRUCTION AUGERS

1

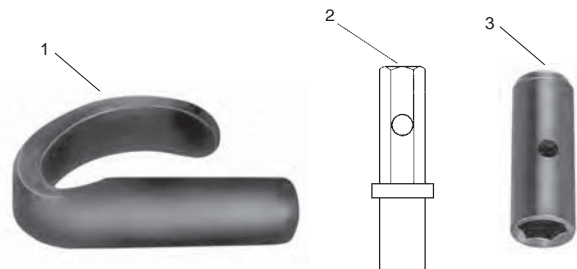


The hex shank and socket connector are welded to the auger and a U-Pin connector is supplied with each auger section.  
**Hardfacing of flight edges is available at an additional cost; please contact factory.** Larger diameters up to 24" (610mm) are available on request, based on minimum order quantities. Special lengths are available in 10" (254mm) and 12" (305mm) diameters only. For other special lengths, see **HEX-COR™** augers, Section 1. **Sizes are identified by the hole size, not actual flight diameter.**

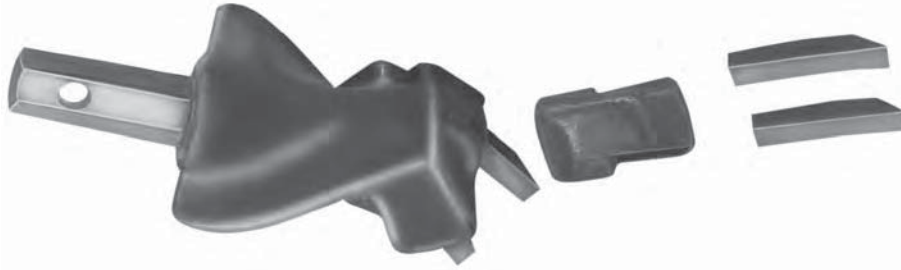
HOLE SIZE		"D" DIAMETER		"P" PITCH		HEX CONN.		STOCK LENGTH		WEIGHT		PART NUMBER	SERIES
in	mm	in	mm	in	mm	in	mm	ft	m	lb	kg		
4-1/2	114	4	102	3-1/3	85	1-5/8	41	5	1.5	42	19.1	004360	2000
								10	3.0	†	†		
5	127	4-1/2	114	4	102	1-5/8	41	5	1.5	44	20.0	004364	2000
6	152	5-1/2	140	5	127	1-5/8	41	5	1.5	48	21.8	004366	
								10	3.0	†	†	004367	
7	178	6	152	5	127	1-5/8	41	5	1.5	54	24.5	004368	2000
8	203	7	178	7	178	1-5/8	41	3	.91	†	†	150254-03	
								5	1.5	60	27.2	004370	
10	254	8-7/8	225	8	203	1-5/8	41	5	1.5	90	40.8	004374	2875
								10	3.0	127	57.6	004375	
12	305	10	254	9	229	1-5/8	41	5	1.5	102	46.3	004376	2875
								10	3.0	135	61.2	004377	
6	152	5-1/2	140	5	127	2	51	5	1.5	68	30.8	003472	2625
8	203	7	178	7	170	2	51	5	1.5	74	33.6	003474	
10	254	8-7/8	225	8	203	2	51	5	1.5	104	47.2	003475	
12	305	10	254	8	203	2	51	5	1.5	112	55.3	003476	
14	356	12	305	9	229	2	51	5	1.5	139	63.1	004975	

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	U-Pin (2000 Series) 1-5/8" (41mm) Hex...*		001307
1	U-Pin 3-1/2" (89mm) 2625 & 2875 Series .....		* 001308
1	U-Pin 4-1/2" (114mm) 2875 Series .....		* 004620
2	Repair Shank 13/16" (21mm) Hex.....*		001336
2	Repair Shank 1-1/8" (29mm) Hex .....		* 001337
2	Repair Shank 1-5/8" (41mm) Hex .....	7 (3.2)	001338
2	Repair Shank 2" (51mm) Hex.....	12 (5.4)	003479
3	Repair Socket 13/16" (21mm) Hex.....	2 (.9)	001340
3	Repair Socket 1-1/8" (29mm) Hex.....*		001341
3	Repair Socket 1-5/8" (41mm) Hex .....	4 (1.8)	150324
3	Repair Socket 2" (51mm) Hex.....	6 (2.7)	003478



## FINGER BIT TYPE MULTI-PURPOSE

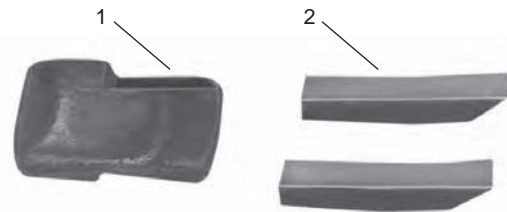


A tough, multi-purpose auger head for full range drilling. Uses replaceable borium or carbide insert bits depending upon the formation encountered. Borium tip bits are suitable for work in light to moderate soil formations such as silt, sand, fine gravel and shale. Tungsten carbide bits are used for more abrasive conditions or for longer bit life in any of the above formations, but are not recommended for nonuniform formations such as gravel where impact or shock might be encountered. Bits are held in place by malleable iron bit wedges that deform as necessary to grip bits within the head. Cutterhead sizes are identified by the hole size, not actual flight diameter.

HOLE SIZE		HEX CONNECTOR		WEIGHT		NO. BITS PER HEAD	HEAD WITH 006000 BITS	HEAD WITH 006002 BITS	NO. WEDGES REQUIRED	USES WEDGE PART NO.
in	mm	in	mm	lb	kg					
4-1/2	114	1-1/8	29	9	4.1	4	001536	001536-01	2	005474
5	127	1-1/8	29	11	5.0	6	006959	006959-01	2 and 2	005477 & 78
6	152	1-1/8	29	17	7.7	8	001540	001540-01	4	005477
4-1/2	114	1-5/8	41	11	5.0	4	001538	001538-01	2	005474
5	127	1-5/8	41	12	5.4	6	006960	006960-01	2 and 2	005477 & 78
6	152	1-5/8	41	19	8.6	8	001543	001543-01	4	005477
7	178	1-5/8	41	21.5	9.8	8	001544	001544-01	4	005477
8	203	1-5/8	41	21	9.5	10	001545	001545-01	4 and 2	005477 & 78
10	254	1-5/8	41	24	10.9	12	001547	001547-01	6	005477
12	305	1-5/8	41	27	12.2	14	001548	001548-01	6 and 2	005477 & 78
6	152	2	51	21	9.5	8	003480	003480-01	4	005477
8	203	2	51	24	10.9	10	003482	003482-01	4 and 2	005477 & 78
10	254	2	51	27	12.2	12	003483	003483-01	6	005477
12	305	2	51	29	13.1	14	003484	003484-01	6 and 2	005477 & 78

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Wedge Bit 4-1/2" (114mm)		
	Head Only .....	*	005474
1	Wedge Bit (Double).....	*	005477
1	Wedge Bit (Single).....	*	005478
2	Finger Bit, Barium Tip .....	*	006000
2	Finger Bit, Carbide Insert .....	*	006002





## BULLDOG HEAD

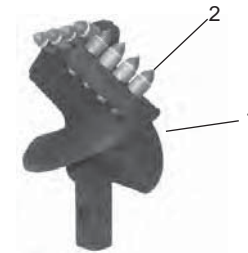
1



A tough, multi-purpose auger head for full range drilling. Uses replaceable cone-shaped carbide insert bits depending upon the formation requirements. Bits are designed to revolve during the cutting action for a more uniform wear pattern and longer service life. Recommended for abrasive conditions and difficult hard formations. **Note:** Bits are furnished with lock rings installed. Drill head O.D. is approximately 10% larger than corresponding auger flight O.D. Sizes are identified by the hole size, not actual flight diameter.

### Bulldog Cutterhead Assembly

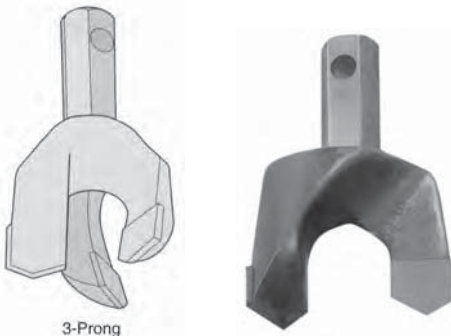
Used with	HEX CONN.		WEIGHT		No. BITS PER HEAD	Part No.
	in	mm	lb	kg		
4-1/2" (114mm) hole size flight auger	1-1/8	29	9	4.0	6	61017-04
4-1/2" (114 mm) hole size flight auger	1-5/8	41	10	4.5	6	61017-14
6" (152 mm) hole size flight auger	1-1/8	29	13.5	6.1	8	61017-06
6" (152 mm) hole size flight auger	1-5/8	41	16	7.3	8	61017-16
6" (152 mm) hole size flight auger	2	51	20.0	9.1	8	61017-25



### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	HF Cutterhead Body: 4-1/2" (114mm), 1-1/8" (29mm) Hex.....8 (3.6).....		150230-01
1	HF Cutterhead Body: 4-1/2" (114mm), 1-5/8" (41mm) Hex.....9 (4.1).....		150231-01
1	HF Cutterhead Body: 6" (152mm), 1-1/8" (29mm) Hex.....16 (7.3).....		150228-01
1	HF Cutterhead Body: 6" (152mm), 1-5/8" (41mm) Hex.....18 (8.2).....		150229-01
2	BULLDOG Bit, Carbide Insert.....*		150233

## MINING BIT



Bit prongs with brazed-on tungsten carbide inserts are set to "bite" for maximum penetration and minimum machine load. Recommended for medium hard non-uniform formation. Especially good for small bore horizontal or vertical holes. **Note:** 3 3/4" (95.2mm) bit recommended for 3 1/2" (88.9mm) hole size auger. Sizes are identified by the hole size, not actual flight diameter.

HOLE SIZE		HEX CONNECTOR		WEIGHT		ASSEMBLY PART NO.	NO. OF INSERTS	EXTRA INSERTS PART NO.	EXTRA CORE BREAKER PART NO.
in	mm	in	mm	lb	kg				
2	51	13/16	21	1	.45	004981	2	001457	None
2-1/2	64	13/16	21	1	.45	004982	2	001457	None
3	76	13/16	21	1	.45	001445	2	001457	None
3	76	1-1/8	29	1	.45	200024	2	001457	None
3-1/2	89	1-1/8	29	2	.91	004304	1 ea	004305 & 4306	None
*3-3/4	95	1-1/8	29	4.2	1.0	001447	3	001459	001471

\*3-Prong.

## MOBILE D-P ROCK HEAD



The Mobile D-P cutterhead is constructed of high tensile steel and has milled surfaces to ensure accurate bit alignment. Each shank is keyed and welded securely to the head. Tough, carbide insert bits are induction brazed for smoother, faster cutting and up to 70% longer life in the hardest formations. D-P Rock heads are recommended for use in soft shales, soft limestone and other low compressive strength rocks. Assembly part number includes full set of bits and bit punch. **Sizes are identified by the hole size, not actual flight diameter.**

### ACCESSORIES

Description	Lb/Kg	Part No.
D-P Bit Punch .....	* .....	004626
D-P Bit .....	* .....	004627

HOLE SIZE		HEX CONNECTOR		WEIGHT		ASSEMBLY PART No.	NUMBER OF BITS REQUIRED	BIT PART No.
in	mm	in	mm	lb	kg			
4-1/2	114	1-1/8	29	7	3.2	001481-10	5	004627
4-1/2	114	1 5/8	41	8	3.6	001482-10	5	
6	152	1-1/8	29	14	6.4	001483-10	7	
6	152	1-5/8	41	14	6.4	001484-10	7	
6	152	2	51	17	7.7	004623	7	
8	203	1-5/8	41	26	11.8	001486-10	11	
8	203	2	51	27	12.3	004625	11	
9	229	1-5/8	41	†	†	150746	†	
9	229	2	51	†	†	150747	†	
10	254	1-5/8	41	†	†	150748	†	
10	254	2	51	†	†	150749	†	

Assembly part number includes full set of bits.

## TWO-PIECE FISHTAIL HEAD WITH CAST STEEL BLADES



Especially designed cast steel bit eliminates “dead-spot” at hole center and bores clean, straight holes through semi-consolidated clay, loam, sand, gravel and similar formations. Cutterhead part number includes bit and shank complete. Bolt and nut included in assembly. **Sizes are identified by the hole size, not actual flight diameter.**

COMPLETE HEAD WITH BIT							BIT ONLY			SHANK ONLY		
HOLE SIZE		HEX CONN.		WEIGHT		PART NO.	WEIGHT		PART NO.	WEIGHT		PART NO.
IN	MM	IN	MM	LB	KG		LB	KG		LB	KG	
2	51	13/16	51	1.5	.68	004563	*	*	004575	*	37	004586
2	51	1-1/8	29	1.5	.68	004564	*	*	004575	.8	37	004587
2-1/2	64	13/16	21	2	.9	001435	*	*	004575	.8	37	004586
2-1/2	64	1-1/8	29	2.3	1.0	004565	*	*	004575	1.5	.68	004587
3	76	13/16	21	2	.9	001436	1	.45	004577	.8	.37	004586
3	76	1-1/8	29	3	1.4	004566	1	.45	004577	1.5	.68	004587
3-1/2	89	1-1/8	29	3	1.4	001437	2	.9	004578	1.5	.68	004588
4-1/2	114	1-1/8	29	5	2.3	001438	3	1.4	004579	1.5	.68	004588
4-1/2	114	1-5/8	41	6	2.7	004567	3	1.4	004579	3	1.4	004589
5	127	1-1/8	29	5	2.3	001439	3	1.4	004580	1.5	.68	004590
5	127	1-5/8	41	7	3.2	004568	3	1.4	004580	3	1.4	004591
6	152	1-1/8	29	5	2.3	001440	4	1.8	004581	1.5	.68	004590
6	152	1-5/8	41	8	3.6	004569	4	1.8	004581	3	1.4	004591
6	152	2	51	11	5.0	004570	4	1.8	004581	4.5	2.0	004592
7	178	1-5/8	41	9	4.1	001441	4.5	2.0	004582	3	1.4	004591
8	203	1-5/8	41	9	4.1	001442	5	2.3	004583	3	1.4	004591
8	203	2	51	12	5.4	004572	5	2.3	004583	4.5	2.0	004592
10	254	1-5/8	41	11	5.0	001444	7	3.2	004585	3	1.4	004591
10	254	2	51	14	6.4	004574	7	3.2	004585	4.5	2.0	004592
12	305	1-5/8	41	†	†	150750	†	†	150572	†	†	004591
12	305	2	51	†	†	150751	†	†	150572	†	†	004592

## TWO-PIECE FISHTAIL HEAD WITH CARBIDE INSERT BLADE



Carbide insert blade is recommended for stiff clay, soft shale and similar formations. Cutterhead part number includes bit and shank complete. Locking bolt and nut included in assembly. **Sizes are identified by the hole size, not actual flight diameter.**

COMPLETE HEAD WITH BIT							BIT ONLY			SHANK ONLY		
HOLE SIZE		HEX CONN.		WEIGHT		PART NO.	WEIGHT		PART NO.	WEIGHT		PART NO.
IN	MM	IN	MM	LB	KG		LB	KG		LB	KG	
2-1/2	64	13/16	21	2	.9	007122	*	*	007123	*	*	004586
2-1/2	64	1-1/8	29	2	.9	007124	*	*	007123	2	.9	004587
3	76	13/16	21	2	.9	007248	1	.5	007147	*	*	004586
3	76	1-1/8	29	3	1.4	007149	1	.5	007147	2	.9	004587
3-1/2	89	1-1/8	29	3	1.4	007125	2	.9	007126	2	.9	004588
4-1/2	114	1-1/8	29	5	2.3	007127	3	1.4	007128	2	.9	004588
4-1/2	114	1-5/8	41	6	2.7	007129	3	1.4	007128	3	1.4	004589
5	127	1-1/8	29	5	2.3	007130	4	1.8	007131	2	.9	004590
5	127	1-5/8	41	6	2.7	007132	4	1.8	007131	3	1.4	004591
6	152	1-1/8	29	5	2.3	007133	4	1.8	007134	2	.9	004590
6	152	1-5/8	41	7	3.2	007135	4	1.8	007134	3	1.4	004591
6	152	2	51	11	5.0	007136	4	1.8	007134	7	3.2	004592
7	178	1-5/8	41	8	3.6	007137	5	2.3	007138	3	1.4	004591
8	203	1-5/8	41	8	3.6	007139	5	2.3	007140	3	1.4	004591
8	203	2	51	12	5.4	007141	5	2.3	007140	7	3.2	004592
10	254	1-5/8	41	9	4.1	007142	6	2.7	007143	3	1.4	004591
10	254	2	51	13	5.9	007144	6	2.7	007143	7	3.2	004592

## STINGER™ BIT



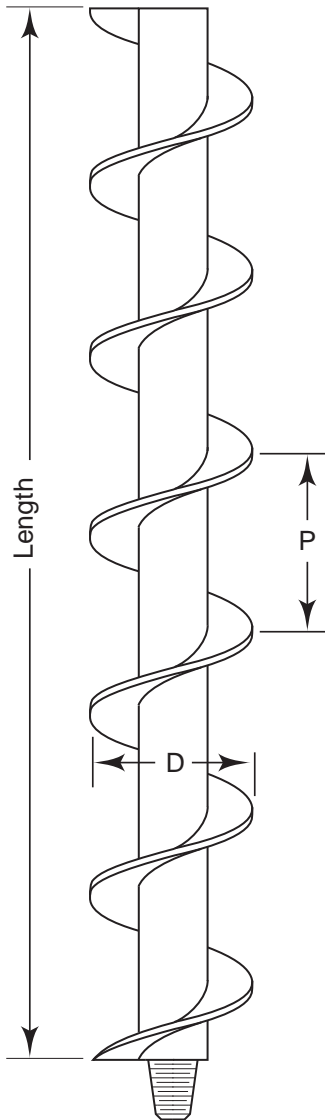
The STINGER's self-centering one-piece, cast steel construction with a smooth contoured shape permits free flow of material to the auger flight. Interchangeable with the two-piece Fishtail bit, it works well in clay, loam, sand, gravel and similar formations. Designed for use with standard construction and **HEX-COR™** augers and as a pilot bit with large diameter hollow stem augers. **Sizes are identified by the hole size, not actual flight diameter.**

HOLE SIZE		HEX CONN.		WEIGHT		PART NO.	HOLE SIZE		HEX CONN.		WEIGHT		PART NO.
in	mm	in	mm	lb	kg		in	mm	in	mm	lb	kg	
2-1/2	64	13/16	21	1.0	.45	005502	5	127	1-1/8	29	3.7	1.7	005509
3	76	13/16	21	1.2	.54	005504	6	152	1-1/8	29	6.4	2.9	005511
3	76	1-1/8	29	1.7	.76	005505	6	152	1-5/8	41	7.3	3.3	005512
4-1/2	114	1-1/8	29	3.4	1.73	005507	6	152	2	51	10.8	4.9	005513
4-1/2	114	1-5/8	41	5.0	2.3	005508							

## MOBILOK™ JET AUGER

The premier retraction grouting tool for overburden applications with augers.

MOBILOK jet augers are designed for wet or dry hard formation drilling in lime rock, bauxite or like materials. Premium MOBILOK drill rod “J” Series is used for the center stem and allows for circulation of drilling mud, grout or fresh water to aid in well installation or tie-back. Excellent auger for use during retraction grouting if ENVIRO-CORE® is not at the site. Flight edges are hardfaced for wear resistance. Heavy wall couplings and tapered threaded connections provide an extra strong, water tight joint and speed “making and breaking” joints. **MOBILOK jet augers are identified by the hole size, not actual flight diameter.**



AMWL Hole Size	D-Diam	P-Pitch	Rod I.D.	Rod O.D.	Coupling I.D.	
4-1/2" (114mm)	4" (102mm)	3-1/8" (89mm)	1-3/8" (35mm)	1-3/4" (44mm)	5/8" (16mm)	
NWML Hole Size	4-1/2" (114mm)	4-1/8" (105mm)	3-1/8" (89mm)	2-1/4" (57mm)	2-5/8" (67mm)	1-1/8" (29mm)
6" (152mm)	5-5/8" (143mm)	5" (127mm)	2-1/4" (57mm)	2-5/8" (67mm)	1-1/8" (29mm)	

### AWML AUGER

Description	Lb/Kg	Part No.
4-1/2" (114mm) x 3'0" (914mm) .....	13 (5.9) .....	007161
4-1/2" (114mm) x 5'0" (1.5m) .....	22 (10.0) .....	006271
4-1/2" (114mm) x 10'0" (3.1m) .....	43 (19.5) .....	006272

### NWML AUGER

Description	Lb/Kg	Part No.
4-1/2" (114mm) x 5'0" (1.5m) .....	46 (20.9) .....	006275
4-1/2" (114mm) x 10'0" (3.1m) .....	81 (36.7) .....	005655
6" (152mm) x 5'0" (1.5m) .....	53 (24.0) .....	006273
6" (152mm) x 10'0" (3.1m) .....	96 (43.5) .....	006274

### D-P ROCK HEAD



Description	Lb/Kg	Part No.
4-1/2" (114mm), AWML Pin (5 Bits) .....	8 (3.6) .....	006290
4-1/2" (114mm), NWML Pin (5 Bits) .....	9 (4.1) .....	006291
6" (152mm), NWML Pin (7 Bits) .....	17 (7.7) .....	006293

### COMPONENT PARTS

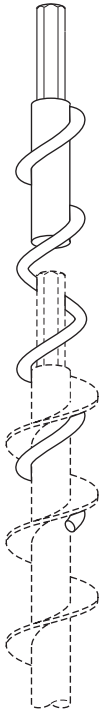
Description	Lb/Kg	Part No.
Carbide Insert Bit .....	3 (1.4) .....	004627
D-P Bit Punch .....	4 (1.8) .....	004628



### 3-WING CARBIDE INSERT DRAG BIT

Description	Lb/Kg	Part No.
Cutterhead: 4-1/2" (114mm), AWML Pin .....	7 (3.2) .....	006765
Cutterhead: 4-1/2" (114mm), NWML Pin .....	7 (3.2) .....	006766
Cutterhead: 6" (152mm), NWML Pin .....	20 (9.1) .....	006768

## AUGER RETRIEVER



An auger retriever allows catching hold of **HEX-COR™** or standard construction augers lost down the hole. Check hole size of your auger and hex shank size before ordering retriever. Retrievers are used with the continuous flight augers noted in parentheses. **Sizes are identified by the hole size, not actual flight diameter.**

### AUGER RETRIEVER - OUTSIDE TYPE

Description	Lb/Kg	Part No.
1 <sup>3</sup> / <sub>16</sub> " (21mm) Hex, 2-1 <sup>1</sup> / <sub>2</sub> " (64mm) & 3" (76mm)	7 (3.2)	004912
1-1 <sup>1</sup> / <sub>8</sub> " (29mm) Hex, 3-1 <sup>1</sup> / <sub>2</sub> " (89mm) & 4-1 <sup>1</sup> / <sub>2</sub> " (114mm)	20 (9.1)	004913
1-1 <sup>1</sup> / <sub>8</sub> " (29mm) Hex, 5" (127mm)	16 (7.3)	004914
1-1 <sup>1</sup> / <sub>8</sub> " (29mm) Hex, 6" (152mm)	20 (9.1)	004915
1-5 <sup>8</sup> / <sub>16</sub> " (41mm) Hex, 4-1 <sup>1</sup> / <sub>2</sub> " (114mm)	26 (11.8)	004916
1-5 <sup>8</sup> / <sub>16</sub> " (41mm) Hex, 5" (127mm)	27 (12.2)	004917
1-5 <sup>8</sup> / <sub>16</sub> " (41mm) Hex, 6" (152mm) & 7" (178mm)	30 (13.6)	004918
1-5 <sup>8</sup> / <sub>16</sub> " (41mm) Hex, 8" (203mm)	31 (14.0)	004919
1-5 <sup>8</sup> / <sub>16</sub> " (41mm) Hex, 10" (254mm)	34 (15.4)	004921
1-5 <sup>8</sup> / <sub>16</sub> " (41mm) Hex, 12" (305mm)	36 (16.3)	004922
2" (51mm) Hex, 6" (152mm)	32 (14.5)	003477
2" (51mm) Hex, 8" (203mm)	33 (15.0)	004929
2" (51mm) Hex, 10" (254mm)	35 (15.9)	004930
2" (51mm) Hex, 12" (305mm)	37 (16.8)	004931
2" (51mm) Hex, 14" (356mm)	39 (17.7)	004932

## AUGER GUIDE



Auger guides help position the bore hole as vertically as possible. They mount on all Mobile drill rigs and are recommended for safe operation. **Sizes are identified by the hole size, not actual flight diameter.** Give drill rig model and serial number when ordering.

### MINUTEMAN DRILLS

Description	Lb/Kg	Part No.
2-1 <sup>1</sup> / <sub>2</sub> " (64mm)	3 (1.4)	060256
3" (76mm)	5 (2.3)	060141
3-1 <sup>1</sup> / <sub>2</sub> " (89mm)	4 (1.8)	060457
4-1 <sup>1</sup> / <sub>2</sub> " (114mm)	9 (4.1)	060283
5" (127mm)	9 (4.1)	060534
6" (152mm)	7 (3.2)	060194

### B-80, INSPECTOR SERIES DRILLS

Description	Lb/Kg	Part No.
4-1 <sup>1</sup> / <sub>2</sub> " (114mm)	18 (8.2)	212106-01
5" (127mm)	19 (8.6)	212106-02
6" (152mm)	23 (10.4)	212106-03
7" (178mm)	23 (10.4)	212106-04
8" (203mm)	23 (10.4)	212106-05
9" (229mm) & 10" (254mm)	25 (11.3)	212106-06
12" (305mm)	†	212107-27
14" (356mm)	†	212107-28

### B-90 DRILL

Description	Lb/Kg	Part No.
4-1 <sup>1</sup> / <sub>2</sub> " (114mm)	†	212987-01
5" (127mm)	†	212987-02
6" (152mm)	†	212987-03
7" (178mm)	†	212987-04
8" (203mm)	†	212987-05
9" (229mm)	†	212987-06
10" (254mm)	†	212987-07
12" (305mm)	†	212987-08
14" (356mm)	†	212987-09

### ALL OTHER DRILLS

Description	Lb/Kg	Part No.
2-1 <sup>1</sup> / <sub>2</sub> " (64mm)	7 (3.2)	005257
3" (76mm)	8 (3.6)	005258
3-1 <sup>1</sup> / <sub>2</sub> " (89mm)	9 (4.1)	005259
4-1 <sup>1</sup> / <sub>2</sub> " (114mm)	9 (4.1)	005260
5" (127mm)	10 (4.5)	005261
6" (152mm)	10 (4.5)	005262
7" (178mm) & 8" (203mm)	10 (4.5)	005263
9" (229mm)	16 (7.3)	050077
10" (254mm)	18 (8.2)	005265
12" (305mm)	30 (13.6)	050079
14" (356mm)	32 (14.5)	005266

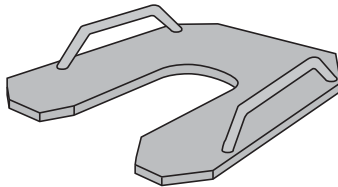
## AUGER HOISTING ASSEMBLY



An auger hoisting assembly is used when it is required to pull standard construction or **HEX-COR™** augers vertically utilizing the main hoist. This technique allows the driller to pull more than five feet of auger at a time.

Description	Lb/Kg	Part No.
1 <sup>3</sup> / <sub>16</sub> " (21mm) Hex Socket	2 (.9)	004656
1 <sup>1</sup> / <sub>8</sub> " (29mm) Hex Socket	3 (1.4)	004657
1 <sup>5</sup> / <sub>8</sub> " (41mm) Hex Socket	4 (1.8)	004517
2" (51mm) Hex Socket	7 (3.2)	004658

## AUGER HOLDER (4-1/4" I.D. HSA Shown)



An auger holder is used to temporarily support standard construction or **HEX-COR™** augers during removal of the drill string after soil sampling or monitoring well installation has been completed. The above design is only representative. Other designs may vary.

Description	Lb/Kg	Part No.
1125 Series	4 (1.8)	001328
1500 Series <sup>1</sup>	9 (4.1)	001329
2000 Series	14 (6.4)	001330
2875 & 2625 Series	21 (9.5)	001332

<sup>1</sup>Order P/N 01330 for 5" (127mm) and 6" (152mm) hole size augers in this series.

## DRIFT PUNCH



AIDS IN THE REMOVAL OF **GROOVE AND U-PINS.**

Description	Lb/Kg	Part No.
Drift Punch.....*		006038

## POINTED HAMMER



AIDS IN THE REMOVAL OF GROOVE AND U-PINS.

Description	Lb/Kg	Part No.
Pointed Hammer.....	2 (.9)	005471

## AUGER PINCH BAR



USED TO SEPARATE AUGERS.

Description	Lb/Kg	Part No.
Pinch Bar.....	18 (8.2)	212081

## MOBILKIT

Contains all the accessory tools required to facilitate auger drilling. Kits include: 1 Retriever, 1 Holder, 1 Extension Rod, 1 Pointed Hammer, 1 Pinch Bar, and 6 U-Pins. Select by auger hex connection size and hole size. Auger Guides (in this section) are ordered separately.

### MOBILKIT: 1-1/8" (29mm) Hex

Description	Lb/Kg	Part No.
<b>1500 Series Auger</b>		
3-1/2" (89mm) & 4-1/2" (114mm).....	68 (30.8)	21014-02
5" (127mm).....	68 (30.8)	21014-03
6" (152mm).....	68 (30.8)	21014-04

### MOBILKIT: 1-5/8" (41mm) Hex

Description	Lb/Kg	Part No.
<b>2000 Series Auger</b>		
4-1/2" (114mm).....	102 (46.3)	21014-05
5" (127mm).....	102 (46.3)	21014-06
6" (152mm) &		
7" (178mm).....	102 (46.3)	21014-07
8" (203mm).....	102 (46.3)	21014-08
2875 Series Auger, 10" (254mm).....	132 (59.9)	21014-09
3875 Series Auger, 12" (305mm).....	132 (59.9)	21014-10

### MOBILKIT: 2" (51mm) Hex

Description	Lb/Kg	Part No.
<b>2625 Series Auger</b>		
6" (152mm).....	120 (54.4)	21014-11
8" (203mm).....	120 (54.4)	21014-12
10" (254mm).....	120 (54.4)	21014-13
12" (305mm).....	120 (54.4)	21014-14
14" (356mm).....	120 (54.4)	21014-15

## Types and Functions

Mobile introduced hollow stem augers to the drilling industry in 1954 as an innovative method of casing advancement for the construction and geotechnical industry. The hollow stem auger is recognized as a versatile, fast and effective tool for advancing the bore hole. Once the drilling depth is achieved, the center stem of the auger is quickly removed which allows working inside the auger using coring tools, soil sampling equipment, the In-Hole Hammer, insertion of tie back rods and cables, or environmental monitor well installations.

The hollow stem auger is widely used in conjunction with ground water monitoring applications and hazardous waste operations. Auger sizes range from 2-1/4" to 12-1/4" (57 to 311mm) I.D., including Mobile's exclusive 6-5/8" (168mm) I.D., the industry's preferred size for 4" (102mm) monitor and remediation well installations.

Mobile's TRI-LOK™, 2-Key and threaded hollow stem augers utilize slightly tapered concave flights designed to throw cuttings toward the shaft and are engineered and manufactured to exceed the rugged demands of today's groundwater monitoring and geotechnical applications, translating into a lower cost per foot for the drilling contractor.

Mobile's threaded, **water-tight**, hollow-stem augers are fully reversible through the use of a locking wedge that prevents unthreading down hole. Threaded hollow stems are available in 2-1/2", 3-3/8", 4" and 6" (64, 86, 102 and 152mm) I.D. sizes.

Mobile's premier TRI-LOK™ series offers tapered heavy-duty couplings with three chamfered, deep set, key ways and twin high-tensile lock bolts with sure grip heads for easy make and break. This exclusive design provides full torque loading throughout the heat treated coupling by dispersing the power equally to the three key ways. This ensures that the lock bolts only function in vertical auger removal.

TRI-LOK™ augers are currently available in 3-1/4", 4-1/4", 6-5/8", 8-1/4", 10-1/4" and 12-1/4" (83, 108, 168, 210, 260 and 311mm) I.D.

Mobile's 2-key augers take advantage of all of our experience with the industry's premiere line — TRI-LOK™. Slightly tapered, heat treated pins, deep set durable keyways, coarse thread bushings will all match up to your existing 2-key hollow stem auger. **Standard duty** styles come in 2-1/4" (57mm) and 3-1/4" (83mm) ID sizes, while **heavy duty** styles come in 3-1/4" (83mm), 4-1/4" (108mm), and 6-1/4" (168mm) ID sizes.

For very light duty drilling using low torque machines such as Mobile's MINUTEMAN®, Mobile manufactures the LITE-FLITE™ auger in the 2-1/4" (57mm) I.D. size in 2'6" lengths only.

LITE-FLITE™ augers are designed as lightweight, low cost hollow stem augers for use with lightweight drilling rigs having a maximum torque output of not more than 350 ft lbs. LITE-FLITE™'s 2-1/4" (57mm) I.D. allows standard penetration testing with 2" (51mm) tools and monitoring equipment to a maximum of 22'.

LITE-FLITE™ augers represent a practical alternative to the use of heavier, more expensive hollow-stem augers designed for greater depths and hole diameters. A 2'6" section of LITE-FLITE™ "weighs in" at a modest 16 lbs.

SAFE-T-DRIVER HOIST  
CABLE CONNECTION, FOR  
SPT SAMPLING  
(SECTION 10)

HEAVY DUTY  
GIMBAL  
COUPLING  
(SECTION 3)

4-1/4" I.D. HSA  
AUGER CONNECTOR,  
FLANGE MOUNTED  
(SECTION 3)

4-1/4" I.D. HSA  
(SECTION 3)

IN-HOLE  
140# HAMMER  
WITH SWIVEL  
(SECTION 6)

TAPERED  
HEAT-TREATED  
PIN

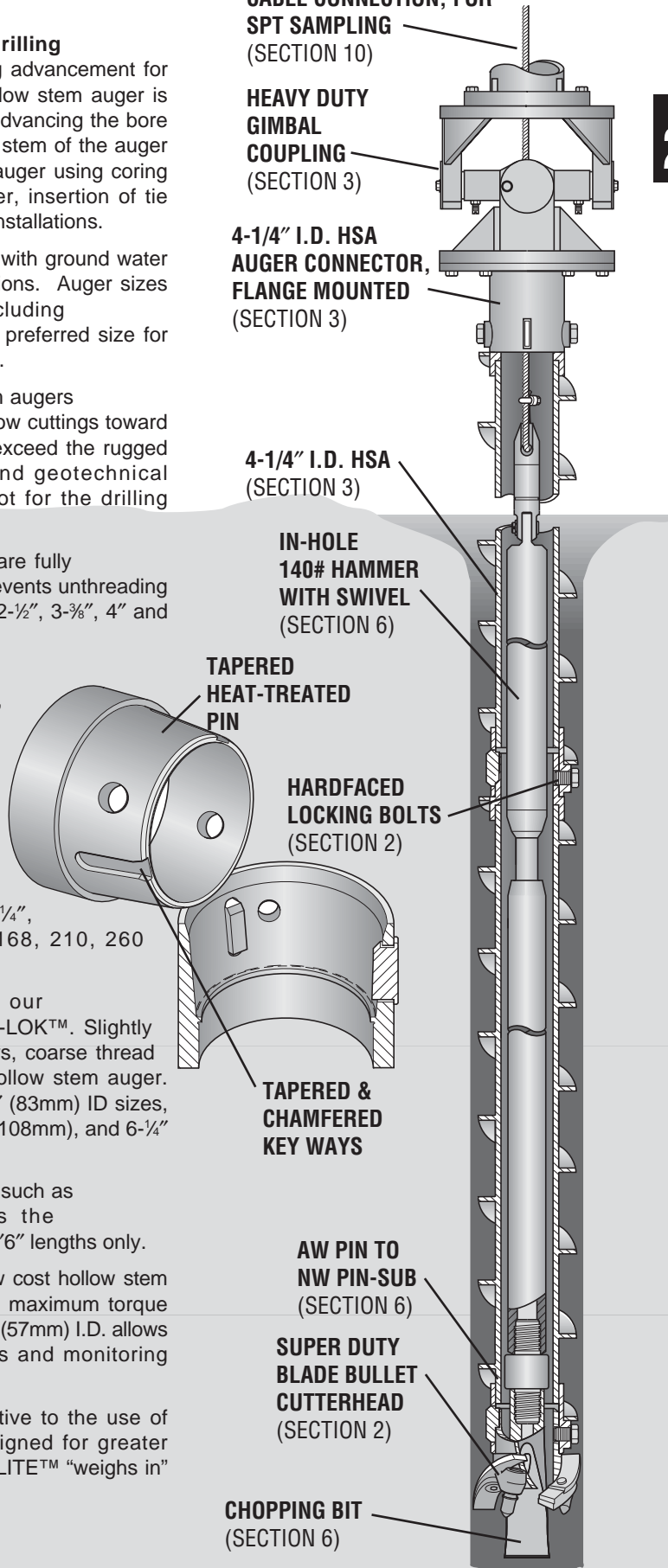
HARDFACED  
LOCKING BOLTS  
(SECTION 2)

TAPERED &  
CHAMFERED  
KEY WAYS

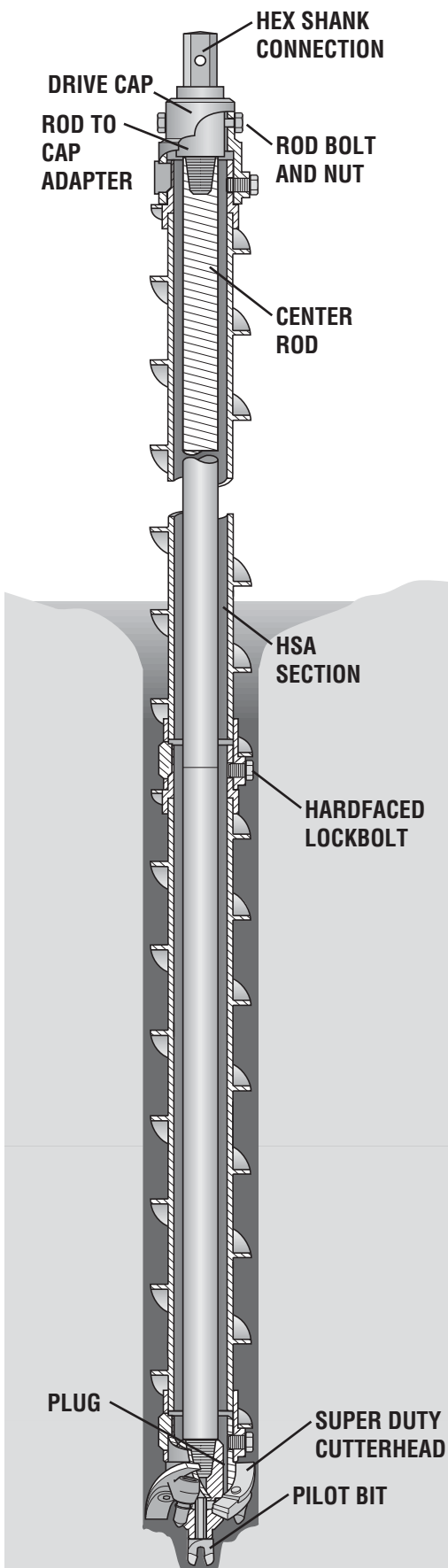
AW PIN TO  
NW PIN-SUB  
(SECTION 6)

SUPER DUTY  
BLADE BULLET  
CUTTERHEAD  
(SECTION 2)

CHOPPING BIT  
(SECTION 6)







A wide range of cutterheads for hollow stem augers are available to suit any type of material being drilled. The Blade Type Cutterhead can be used with steel or carbide insert cutter blades designed to perform better in less demanding formations. The BULLDOG™ head available in select sizes, makes use of carbide-tipped bullet teeth for coarse formations. Combining the best features of both, **Mobile's Super Duty (SD) Cutterhead** meets the requirements of the widest range of applications and is more than a match for **glacial till, caliche rock and hardpan**.

Mobile's exclusive Hard Facing process provides highly abrasion resistant wear surfaces on each type of cutter head and lock bolt head. Carbide insert blade and bullet bit life are extended well beyond the normal replacement point. Research indicates that treated surfaces last 50% longer under normal conditions, reducing maintenance and therefore **resulting in a lower cost per foot drilled**.

**Since Mobile introduced hollow stems in 1954**, their focus has changed to a more environmental concern. Innovative design, state of the art engineering and manufacturing processes make Mobile the recognized industry leader in hollow stem augers and related accessories.

## Using Hollow-Stem Augers

The hollow-stem auger is used to advance and case the hole simultaneously. It may be used with or without a plug assembly depending on the job requirements. When a plug is used for the purpose of keeping soil from entering the mouth of the lead auger, it is held in place by center (drill) rod and rod to cap adapter, pinned in the drive cap..

Upon reaching the sampling depth, the center rod with plug and pilot bit attached is removed from the mouth of the auger and replaced by a solid/split barrel soil sampler or tube sampler, lowered to the bottom of the hole through the hollow stem of the auger and sampling or coring is initiated.

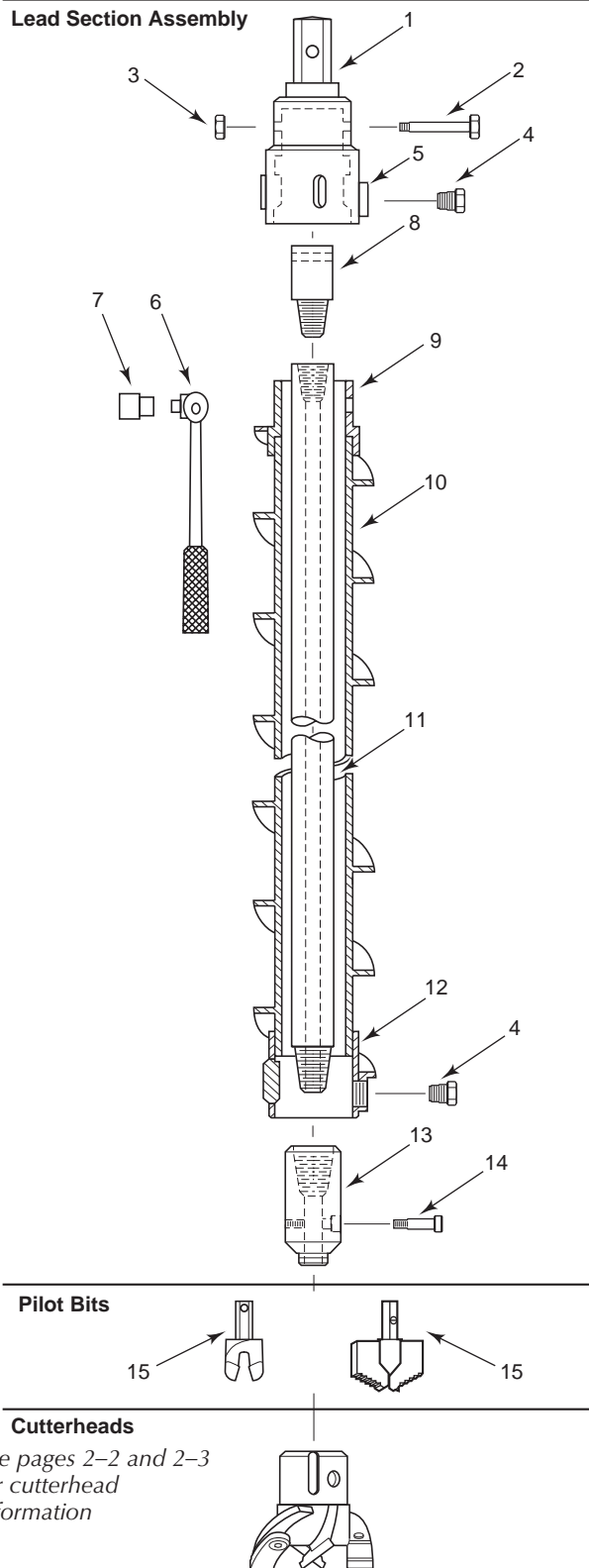
The use of a hollow-stem auger without the plug has shown that most clay type material will form its own 2"—4" (51—102mm) plug which can be driven or washed through for sampling or core barrel operations. **When flowing sands are encountered, mud may be added inside the hollow stem to serve as a "head" to equalize the hydrostatic pressure in lieu of the plug assembly.**

Hollow-stems are rotated dry and often to depths of 300 feet (91.4m). Many special applications can be carried out in addition to full range soil sampling. Piezometer and well point placement, slope indicator placement, cathodic protection devices, water wells, ground water monitoring wells, diamond drilling, anchor bolt placement as well as grouting and blast hole loading are some of the jobs that hollow-stem augers facilitate.

## 3-1/4" (83mm) TRI-LOK™ AUGER

Now with thicker flight and heat-treated pins for extended life. Predominately used for geotechnical applications such as split spoon sampling. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods. **Also available in 2-key heavy-duty and standard tapered style.**

### 5'0" (1.5m) LEAD SECTION ASSEMBLY: 6-1/2" (165mm) O.D.



Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....	126 (57.2)	.....61018-03
1-5/8" (41mm) Hex, AWML Rod.....	126 (57.2)	.....61018-04
1-5/8" (41mm) Hex, NW Rod .....	165 (74.8)	.....61018-01
1-5/8" (41mm) Hex, NWML Rod .....	165 (74.8)	.....61018-02

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	1 Drive Cap: 1-1/2" (29mm) Hex.....†	.....17 (7.7)	150292
1	Drive Cap: 1-5/8" (41mm) Hex .....	.....22 (10)	150322
1	Drive Cap: 2" (51mm) Hex .....	*	3100-0184
2	Rod Bolt .....	*	3122-0012
3	Hex Nut .....	*	217136
4	Lockbolt - 1 Req'd .....	*	150307
4	Lockbolt - 1 Req'd (Hard Faced) .....	*	150308
5	Bushing, Field Replaceable.....	*	150300
5	Bushing, Replaceable .....	*	3781-0009
6	Handle .....	*	3782-0016
7	Socket .....	5 (2.3)	150310
8	Adapter: AW Rod to Drive Cap.....	5 (2.3)	150311
8	Adapter: AWML Rod to Drive Cap....	11 (5)	180049-03
8	Adapter: NW Rod to Drive Cap .....	11 (5)	180054-04
9	Coupling Pin, Heat-Treated (Repair Only) .....	6 (2.7)	150296
10	Auger Section - 3'0" (.91m) .....	38 (17.2)	150288-02
10	Auger Section - 5'0" (1.5m), .....	69 (31.3)	150288
10	Auger Section - 5'0" (1.5m), Double Flight .....	85 (38.6)	150288-01
11	Center Rod - 5'0" (1.5m), AW .....	22 (10.0)	001605
11	Center Rod - 5'0" (1.5m), AWML .....	15 (6.8)	006276
11	Center Rod - 5'0" (1.5m), NW .....	32 (14.5)	001608
11	Center Rod - 5'0" (1.5m), NWML .....	35 (15.9)	006278
12	Box Coupling (Repair Only) .....	6 (2.7)	150295
13	Plug - 1-1/2" (29mm) Hex to AW Box .....	12 (5.4)	150312
13	Plug - 1-1/2" (29mm) Hex to AWML Box .....	12 (5.4)	150379
13	Plug - 1-1/2" (29mm) Hex to NW Box.....	11 (5)	150306
13	Plug - 1-1/2" (29mm) Hex to NWML Box.....	11 (5)	150377
14	Plug Bolt.....*	.....3130-0098	
15	Pilot Bit, 2-Prong, 1-1/2" (29mm) Hex...2	(.9)	200024
15	Pilot Bit, 3-Wing, 1-1/2" (29mm) Hex.....*	.....150574-01	
	Coupling, TRI-LOK to CME Pin .....	13 (5.9)	150290
	Coupling, TRI-LOK to CME Socket ...13	(5.9)	150304
	Repair Key .....	*	150576
	Clean Out Tap (For Bushing) .....	*	150562
	O-Ring .....	*	3538-0238

†Not recommended for torque over 8,000 ft-lbs (9,556 Nm).

## CUTTERHEADS – 3-1/4" (83mm) TRI-LOK™ AUGER

### BULLDOG



A tough multi-purpose cutterhead for full range drilling. Bits are designed for a uniform wear pattern and longer service life. Recommended for abrasive conditions and difficult hard formations.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm).....	†	61001-10

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bit.....	*	150233
3-1/4" (83mm) Body .....	†	150289

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-3/4" (197mm) .....	19 (8.6)	61031-01

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....	*	004303
Blade Bolt.....	*	001293
Flight Segment .....	†	150593
3-1/4" (83mm) Body w/ Flight Segment.....	†	150289

## SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-3/4" (197mm) .....	20 (8.6)	61032-01

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....	*	004303
Blade Bolt.....	*	001293
Bullet Bit w/Retainer.....	*	150194-03
Bullet Bit Holder.....	*	216044-01
3-1/4" (83mm) Body w/ Flight Segment and Bit Holders.....	†	150599

### SLIM BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6)	61031-05

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....	*	004303
Blade Bolt.....	*	001293
Flight Segment .....	†	150593
3-1/4" (83mm) Body w/ Flight Segment.....	†	150655

*Continued on next page*

## CUTTERHEADS – 3-1/4" (83mm) TRI-LOK™ AUGER (cont.)

### SUPER DUTY SLIM BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	19 (8.6)	61032-05

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/ Carbide	*	004303
Blade Bolt	*	001293
Bullet Bit w/Retainer	*	150194-03
3-1/4" (83mm) Body w/ Flight Segment and Bit Holders	†	150659

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	13 (5.9)	61036-01

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer	*	150194-04
Spade Bit Holder	*	216044-02
Nail	*	150678
3-1/4" (83mm) Body	†	150652

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

**2**

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	19 (8.6)	61037-01

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer	*	150194-03
Spade Bit w/Retainer	*	150194-04
Bullet Bit Holder	*	216044-01
Spade Bit Holder	*	216044-02
Nail	*	150678
Flight Segment	†	150593-01
3-1/4" (83mm) Body	†	150652-10

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	19 (8.6)	61038-01

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer	*	150194-03
Bullet Bit Holder	*	216044-01
Flight Segment	†	150593-01
3-1/4" (83mm) Body	†	150652-10

## 4-1/4" (108mm) TRI-LOK™ AUGER

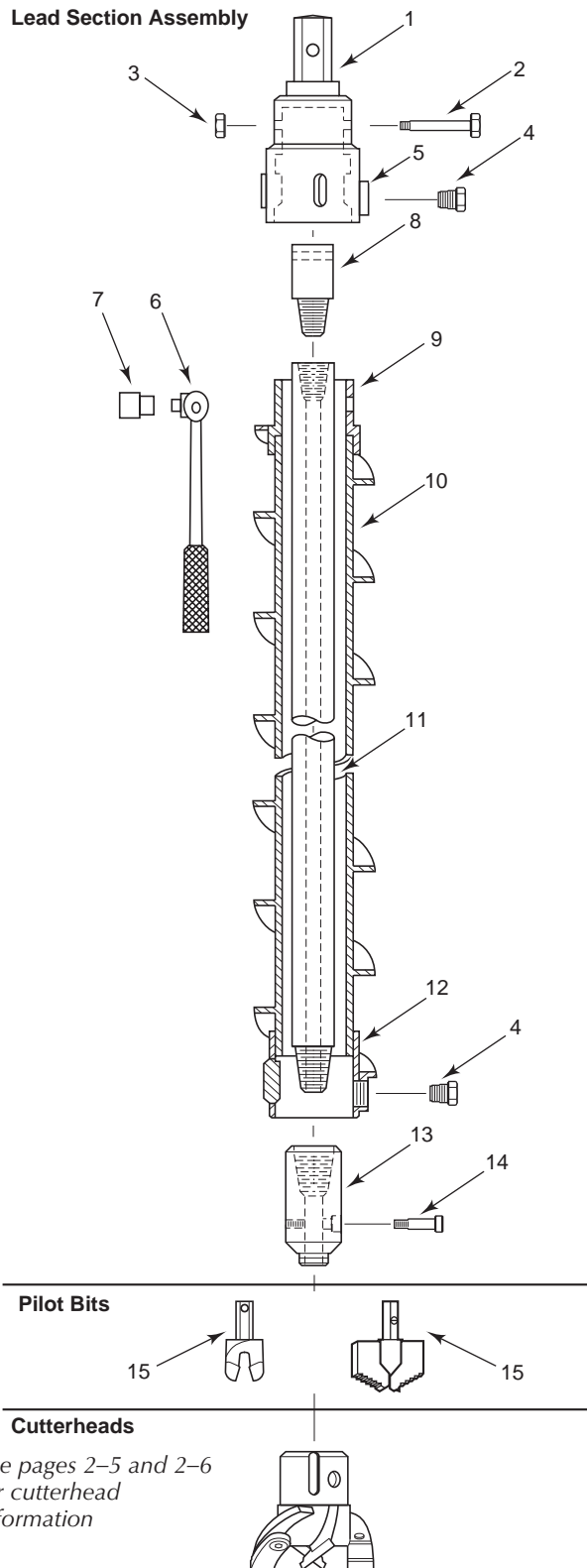
Now with thicker flight and heat-treated pins for extended life. Often used for 2" (51mm) monitoring well installation. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods. Also available in 2-key heavy duty tapered style.

### 5'0" (1.5m) LEAD SECTION ASSEMBLY: 7-5/8" (194mm) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod	175 (79.4)	61025-05
1-5/8" (41mm) Hex, AWML Rod	175 (79.4)	61025-06
1-5/8" (41mm) Hex, NW Rod	185 (83.9)	61025-01
1-5/8" (41mm) Hex, NWML Rod	185 (83.9)	61025-02
2" (51mm) Hex, AW Rod	180 (81.6)	61025-07
2" (51mm) Hex, AWML Rod	180 (81.6)	61025-08
2" (51mm) Hex, NW Rod	190 (86.2)	61025-04
2" (51mm) Hex, NWML Rod	190 (86.2)	61025-03

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	1 Drive Cap, 1-5/8" (41mm) Hex	24 (10.9)	150482
1	Drive Cap, 2" (51mm) Hex	28 (12.7)	150490
2	Rod Bolt	*	3100-0279
3	Hex Nut	*	3122-0012
4	Lockbolt - 2 Req'd	*	217136
4	Lockbolt - 2 Req'd (Hard Faced)	*	150307
5	Repair Bushing	*	150477
6	Handle	*	3781-0009
7	Socket	*	3782-0016
8	Adapter: AW Rod to Drive Cap	5 (2.3)	150310
8	Adapter: AWML Rod to Drive Cap	5 (2.3)	150311
8	Adapter: NW Rod to Drive Cap	11 (5)	180049-03
8	Adapter: NWML Rod to Drive Cap	11 (5)	180054-04
9	Pin Coupling, Heat-treated (Repair Only)	9 (4.1)	150474
10	Auger Section: 3'0" (.91m)	45 (20.4)	150473-02
10	Auger Section: 5'0" (1.5m)	90 (40.8)	150473
10	Auger Section: 5'0" (1.5m), Double Flight	110 (49.9)	150473-01
11	Center Rod: 5'0" (1.5m), AW	22 (10)	001605
11	Center Rod: 5'0" (1.5m), AWML	15 (6.8)	006276
11	Center Rod: 5'0" (1.5m), NW	32 (14.5)	0001608
11	Center Rod: 5'0" (1.5m), NWML	35 (15.9)	006278
12	Box Coupling (Repair Only)	9 (4.1)	150475
13	Plug: 1-1/8" (29mm) Hex to AW Box	19 (8.6)	150492
13	Plug: 1-1/8" (29mm) Hex to AWML Box	19 (8.6)	150494
13	Plug: 1-1/8" (29mm) Hex to NW Box	18 (8.2)	150488
13	Plug: 1-1/8" (29mm) Hex to NWML Box	18 (8.2)	150486
14	Plug Bolt	*	3130-0118
15	Pilot Bit, 1-1/8" (29mm) Hex, 2-Prong	2 (.9)	004304
15	Pilot Bit, 1-1/8" (29mm) Hex, 3-Wing	4 (1.8)	150574-02
	Repair Key	*	150577
	Clean Out Tap (for Lockbolt Hole)	*	150562
	O-Ring	*	3538-0246



See pages 2-5 and 2-6 for cutterhead information

## CUTTERHEADS – 4-1/4" (108mm) TRI-LOK™ AUGER

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm)	9" (229mm)	20 (9.1)	61031-02

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*		004303
Blade Bolt.....*		001293
Flight Segment.....†		150586
4-1/4" (108mm) Body w/ Flight Segment.....†		150596

### SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm)	9" (229mm)	21 (9.5)	61032-02

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*		004303
Blade Bolt.....*		001293
Bullet Bit w/Retainer.....*		150194-03
Bullet Bit Holder.....*		216044-01
Flight Segment.....†		150586
4-1/4" (108mm) Body w/ Flight Segments and Bit Holders.....†		150600

### SLIM BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm)	8-1/2" (216mm)	20 (9.1)	61031-06

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*		004303
Blade Bolt.....*		001293
Flight Segment.....†		150586
4-1/4" (108mm) Body.....†		150656

### SUPER DUTY SLIM BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm)	8-1/2" (216mm)	20 (9.1)	61032-06

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/ Carbide.....*		004303
Blade Bolt.....*		001293
Bullet Bit w/Retainer.....*		150194-03
Bullet Bit Holder.....*		216044-01
Flight Segment.....†		150586
4-1/4" (108mm) Body w/ Flight Segment and Bit Holders.....†		150660

*Continued on next page*

# HOLLOW STEM AUGERS AND CUTTERHEADS



## CUTTERHEADS – 4-1/4" (108mm) TRI-LOK™ AUGER (cont.)

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm)	8-1/2" (216mm)	16 (7.3)	61036-02

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer.....*		150194-04
Spade Bit Holder.....*		216044-02
Nail.....*		150678
4-1/4" (108mm) Body.....†		150651

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm)	8-1/2" (216mm)	19 (8.6)	61038-02

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer.....*		150194-03
Bullet Bit Holder.....*		216044-01
Flight Segment.....†		150586-01
4-1/4" (108mm) Body.....†		150651-10

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

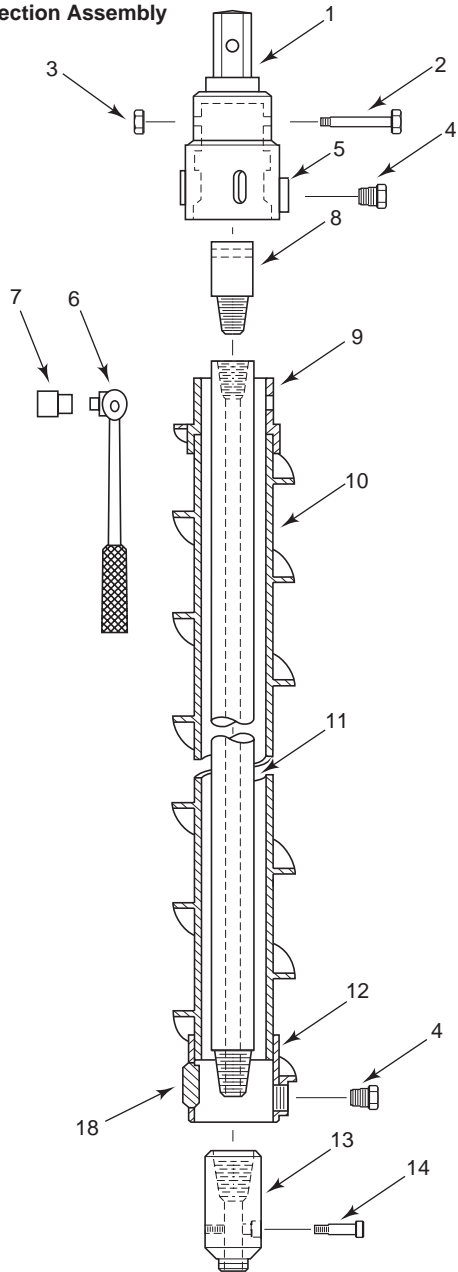
#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm)	8-1/2" (216mm)	19 (8.6)	61037-02

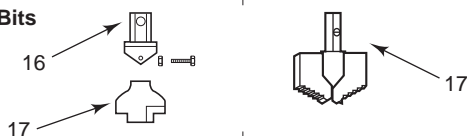
#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer.....*		150194-03
Spade Bit w/Retainer.....*		150194-04
Bullet Bit Holder.....*		216044-01
Spade Bit Holder.....*		216044-02
Nail.....*		150678
Flight Segment.....†		150586-01
4-1/4" (108mm) Body.....†		150651-10

### Lead Section Assembly

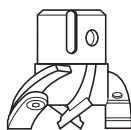


### Pilot Bits



### Cutterheads

See pages 2-8 and 2-9 for cutterhead information



## 6-5/8" (168mm) TRI-LOK™ AUGER

Now with thicker flight and heat-treated pins for extended life. The preferred size for 4" (102mm) monitoring/recovery well installation. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### 5'0" (1.5m) LEAD SECTION ASSEMBLY: 10" (254mm) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, NW Rod	.....280 (127)	.....61020-01
1-5/8" (41mm) Hex, NWML Rod	.....280 (127)	.....61020-02
2" (51mm) Hex, NW Rod	.....285 (129.3)	.....61020-03
2" (51mm) Hex, NWML Rod	.....285 (129.3)	.....61020-04

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	<sup>1</sup> Drive Cap: 1-5/8" (41mm) Hex	.....46 (20.9)	...150394
1	Drive Cap: 2" (51mm) Hex	.....49 (22.2)	...150401
2	Rod Bolt	.....*	.....3100-0280
3	Hex Nut	.....*	.....3122-0012
4	Lockbolt - 2 Req'd	.....*	.....217136
4	Lockbolt - 2 Req'd (Hard Faced)	.....*	.....150307
5	Repair Bushing	.....*	.....150477
6	Handle	.....*	.....3781-0009
7	Socket	.....*	.....3782-0016
8	Adapter: NW Rod to Drive Cap	.....11 (5)	.....180049-03
8	Adapter: NWML Rod to Drive Cap	.....5 (2.3)	.....180054-04
9	Pin Coupling, Heat-Treated (Repair Only)	.....15 (6.8)	.....150388
10	Auger Section: 5'0" (1.5m)	.....105 (47.6)	...150392
11	Center Rod: 5'0" (1.5m), NW	.....32 (14.5)	...001608
11	Center Rod: 5'0" (1.5m), NWML	.....35 (15.9)	...006278
12	Box Coupling (Repair Only)	.....15 (6.8)	.....150391
13	Plug: 1-5/8" (41mm) Hex to NW Box	.....50 (22.7)	...180036-15
13	Plug: 1-5/8" (41mm) Hex to NWML Box	.....50 (22.7)	...180036-14
14	Plug Bolt	.....*	.....3130-0170
16	Pilot Bit Shank: 1-5/8" (41mm) Hex	.....3 (1.4)	.....004591
17	Pilot Bit	.....11 (5)	.....004950
17	Pilot Bit, 1-5/8" (41mm) Hex, 3-Wing	.....*	.....150574-03
18	Repair Key	.....*	.....150578
	Clean Out Tap (For Lockbolt Hole)	.....*	.....150562
	O-Ring	.....*	.....3538-0262

<sup>1</sup>Not recommended for torque over 8,000 ft-lbs (9,556 Nm).



## CUTTERHEADS – 6-5/8" (168mm) TRI-LOK™ AUGER

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm)	11-1/2" (292mm)	20 (9.1)	61031-03

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide	*	004303
Blade Bolt	*	001293
Flight Segment	†	150587
6-5/8" (168mm) Body w/ Flight Segment	†	150597

### SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm)	11-1/2" (292mm)	33 (15.0)	61032-03

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide	*	004303
Blade Bolt	*	001293
Bullet Bit w/Retainer	*	150194-03
Bullet Bit Holder	*	216044-01
Flight Segment	†	150587
6-5/8" (168mm) Body w/ Flight Segments and Bit Holders	†	150601

### SLIM BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm)	11" (279mm)	27 (12.2)	61031-07

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide	*	004303
Blade Bolt	*	001293
Flight Segment	†	150587
6-5/8" (168mm) Body	†	150657

### SUPER DUTY SLIM BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm)	11" (279mm)	31 (14.1)	61032-07

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/ Carbide	*	004303
Blade Bolt	*	001293
Bullet Bit w/Retainer	*	150194-03
Bullet Bit Holder	*	216044-01
Flight Segment	†	150587
6-5/8" (168mm) Body w/ Flight Segment and Bit Holders	†	150661

*Continued on next page*

## CUTTERHEADS – 6-5/8" (168mm) TRI-LOK™ AUGER (cont.)

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm)	11" (279mm)	25 (11.3)	61036-03

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer.....*		150194-04
Spade Bit Holder.....*		216044-02
Nail.....*		150678
6-5/8" (168mm) Body.....†		150653

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm)	11" (279mm)	33 (15.0)	61037-03

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer.....*		150194-03
Spade Bit w/Retainer.....*		150194-04
Bullet Bit Holder.....*		216044-01
Spade Bit Holder.....*		216044-02
Nail.....*		150678
Flight Segment.....†		150587-01
6-5/8" (168mm) Body.....†		150653-10

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

2

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-5/8" (168mm)	11" (279mm)	30 (13.6)	61038-03

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer.....*		150194-03
Bullet Bit Holder.....*		216044-01
Flight Segment.....†		150587-01
6-5/8" (168mm) Body.....†		150653-10

## 8-1/4" (210mm) TRI-LOK™ AUGER

Now with thicker flight and heat-treated pins for extended life. Used for 6" (152mm) monitoring/recovery well installation. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

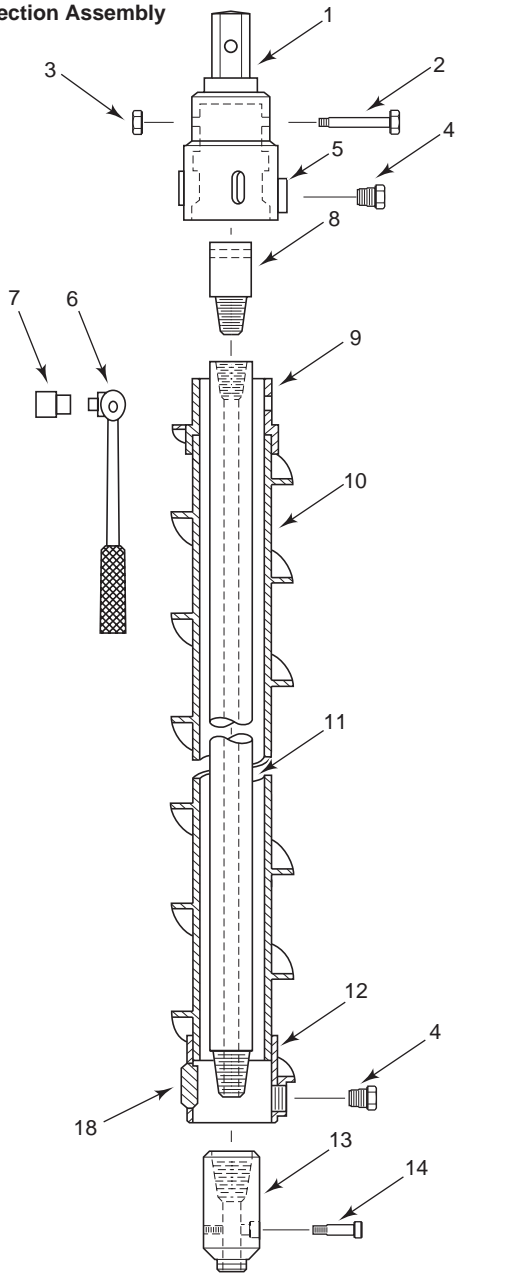
### 5'0" (1.5m) LEAD SECTION ASSEMBLY: 12" (305mm) O.D.

Description	Lb/Kg	Part No.
2" (51mm) Hex, NW Rod .....	326 (147.9)	61026-03
2" (51mm) Hex, NWML Rod .....	326 (147.9)	61026-04

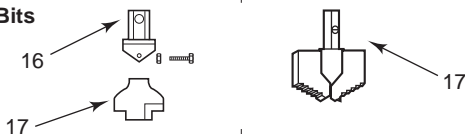
### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 2" (51mm) Hex .....	57 (25.9)	150534
2	Rod Bolt.....*		3100-0289
3	Hex Nut.....*		3122-0012
4	Lockbolt - 2 Req'd .....	*	217136
4	Lockbolt - 2 Req'd (Hard Faced) .....	*	150307
5	Repair Bushing.....*		150477
6	Handle.....*		3781-0009
7	Socket.....*		3782-0016
8	Adapter: NW Rod to Drive Cap.....	11 (5)	180049-03
8	Adapter: NWML Rod to Drive Cap ....	5 (2.3)	180054-04
9	Pin Coupling, Heat-Treated (Repair Only).....	18 (8.2)	150525
10	Auger Section: 5'0" (1.5m), .....	144 (65.3)	150531
11	Center Rod: 5'0" (1.5m), NW.....	32 (14.5)	001608
11	Center Rod: 5'0" (1.5m), NWML.....	35 (15.9)	006278
12	Box Coupling (Repair Only).....	18 (8.2)	150529
13	Plug: 1-5/8" (41mm) Hex to NW Box .....	34 (15.4)	180036-19
13	Plug: 1-5/8" (41mm) Hex to NWML Box .....	34 (15.4)	180036-20
14	Plug Bolt .....	*	3130-0191
16	Pilot Bit Shank: 1-5/8" (41mm) Hex.....	3 (1.4)	004591
17	Pilot Bit .....	8 (3.6)	007188
17	Pilot Bit: 1-5/8" (41mm) Hex 3-Wing.....*		150574-04
18	Repair Key .....	†	150579
	Clean Out Tap (For Lockbolt Hole) .....	*	150562
	O-Ring .....	*	3538-0263

#### Lead Section Assembly

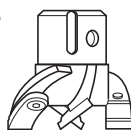


#### Pilot Bits



#### Cutterheads

See pages 2-11 and 2-12 for cutterhead information



## CUTTERHEADS – 8-1/4" (210mm) TRI-LOK™ AUGER

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm)	14-1/4" (362mm)	44(20)	61031-04

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide	*	004303
Blade Bolt	*	001293
Flight Segment	†	150593
8-1/4" (210mm) Body w/ Flight Segment	†	150598

### SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm)	14-1/4" (362mm)	33 (15.0)	61032-03

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide	*	004303
Blade Bolt	*	001293
Bullet Bit w/Retainer	*	150194-03
Bullet Bit Holder	*	216044-01
Flight Segment	†	150588
8-1/4" (210mm) Body w/ Flight Segments and Bit Holders	†	150598

### SLIM BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm)	13-3/4" (349mm)	33 (15.0)	61031-08

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide	*	004303
Blade Bolt	*	001293
Flight Segment	†	150588
8-1/4" (168mm) Body	†	150658

### SUPER DUTY SLIM BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm)	13-3/4" (349mm)	31 (14.1)	61032-07

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/ Carbide	*	004303
Blade Bolt	*	001293
Bullet Bit w/Retainer	*	150194-03
Bullet Bit Holder	*	216044-01
Flight Segment	†	150588
8-1/4" (210mm) Body w/ Flight Segment and Bit Holders	†	150662

*Continued on next page*

## CUTTERHEADS – 8-1/4" (210mm) TRI-LOK™ AUGER (cont.)

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm)	13-3/4" (349mm)	33 (15.0)	61036-04

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer	*	150194-04
Spade Bit Holder	*	216044-02
Nail	*	150678
8-1/4" (210mm) Body	†	150654

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm)	11" (279mm)	36 (16.3)	61038-04

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer	*	150194-03
Bullet Bit Holder	*	216044-01
Flight Segment	†	150588-01
8-1/4" (210mm) Body	†	150654-10

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
8-1/4" (210mm)	13-3/4" (349mm)	44(20)	61037-04

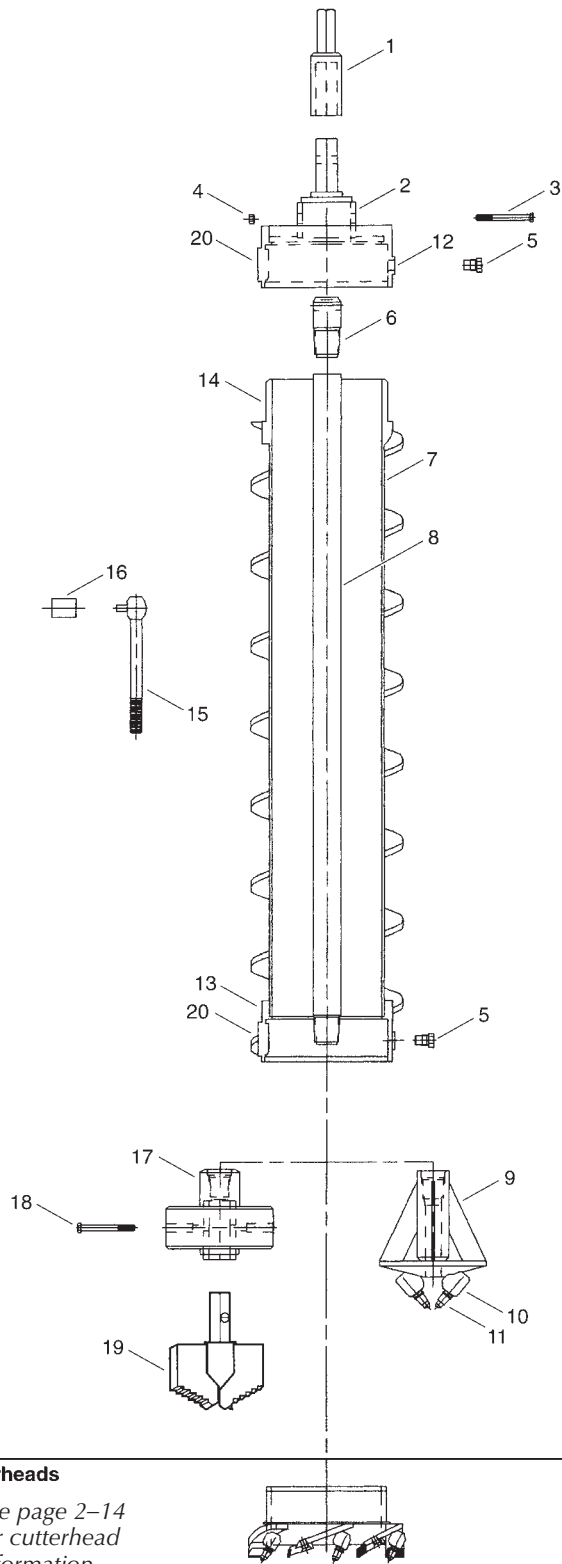
#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer	*	150194-03
Spade Bit w/Retainer	*	150194-04
Bullet Bit Holder	*	216044-01
Spade Bit Holder	*	216044-02
Nail	*	150678
Flight Segment	†	150588-01
8-1/2" (210mm) Body	†	150654-10

## 10-1/4" (260mm) TRI-LOK™ AUGER

Now with thicker flight and heat-treated pins for extended life. Used for 4" (102mm) or larger monitoring/recovery well installation. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### 5'0" (1.5m) LEAD SECTION ASSEMBLY: 14-1/4" (362mm) O.D.



Description	Lb/Kg	Part No.
2" (51mm) Hex, NW Rod.....	470 (213.2)	.61034-02
2" (51mm) Hex, NWML Rod.....	470 (213.2)	.61034-01

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Adapter, Auger 1-5/8" (41mm) Hex to 2" (51mm) Hex Socket.....	11 (5.0)	.....004643
2	Drive Cap: 2" (51mm) Hex .....	70 (31.8)	.....150618
3	Rod Bolt.....	*	.....3100-0279
4	Rod Nut .....	*	.....3122-0012
5	Lockbolt - 2 Req'd.....	*	.....150666-01
6	Adapter: NW Rod to Drive Cap .....	5 (2.3)	.....180049-03
6	Adapter: NWML Rod to Drive Cap .....	5 (2.3)	.....180054-04
7	Auger Section: 5'0" (1.5m), .....	256 (116.1)	.....150543-02
8	Center Rod: 5'0" (1.5m), NW Rod .....	32 (14.5)	.....001608
8	Center Rod: 5'0" (1.5m), NWML Rod .....	35 (15.9)	.....006278
9	Plug-Pilot Bit Combo w/ Ten (10) Bullet Bits and Blocks NW Rod.....	48 (21.8)	.....150565-04
9	Plug-Pilot Bit Combo w/ Ten (10) Bullet Bits and Blocks NWML Rod..	25 (11.3)	.....150565-03
10	Bit Block.....	*	.....216044-01
11	Bullet Bit.....	*	.....150194-03
12	Repair Bushing .....	*	.....150665
13	Repair Box.....	35 (15.9)	.....150610
14	Repair Pin .....	28 (12.7)	.....150611
15	Handle .....	*	.....3781-0010
16	Socket.....	*	.....3818-0020
17	NW Rod Box Center Plug .....	93 (42.2)	.....180036-27
17	NWML Rod Box Center Plug .....	92 (41.7)	.....180036-25
18	Bolt.....	*	.....3130-0163
19	3 Wing Pilot Bit .....	24 (10.9)	.....150574-05
20	Repair Key .....	†	.....150614

#### Cutterheads

See page 2-14 for cutterhead information

## CUTTERHEADS – 10-1/4" (260mm) TRI-LOK™ AUGER

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
10-1/4" (260mm).....	15" (381mm) .....	56 (25.4) .....	61031-11

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*	.....	004303
Blade Bolt.....*	.....	001293
Flight Segment.....†	.....	150681-01
10-1/4" (260mm) Body w/ Flight Segment...†	.....	150699

### SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
10-1/4" (260mm).....	15" (381mm) .....	56 (25.4) .....	61032-11

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*	.....	004303
Blade Bolt.....*	.....	001293
Bullet Bit w/Retainer .....	.....	150194-03
Bullet Bit Holder .....	.....	216044-01
Flight Segment.....†	.....	150681-01
10-1/4" (260mm) Body w/ Flight Segments and Bit Holders .....	.....	150698

## 12-1/4" (311mm) TRI-LOK™ AUGER

Now with thicker flight and heat-treated pins for extended life. Used for 4" (102mm) or larger monitoring/recovery well installation. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

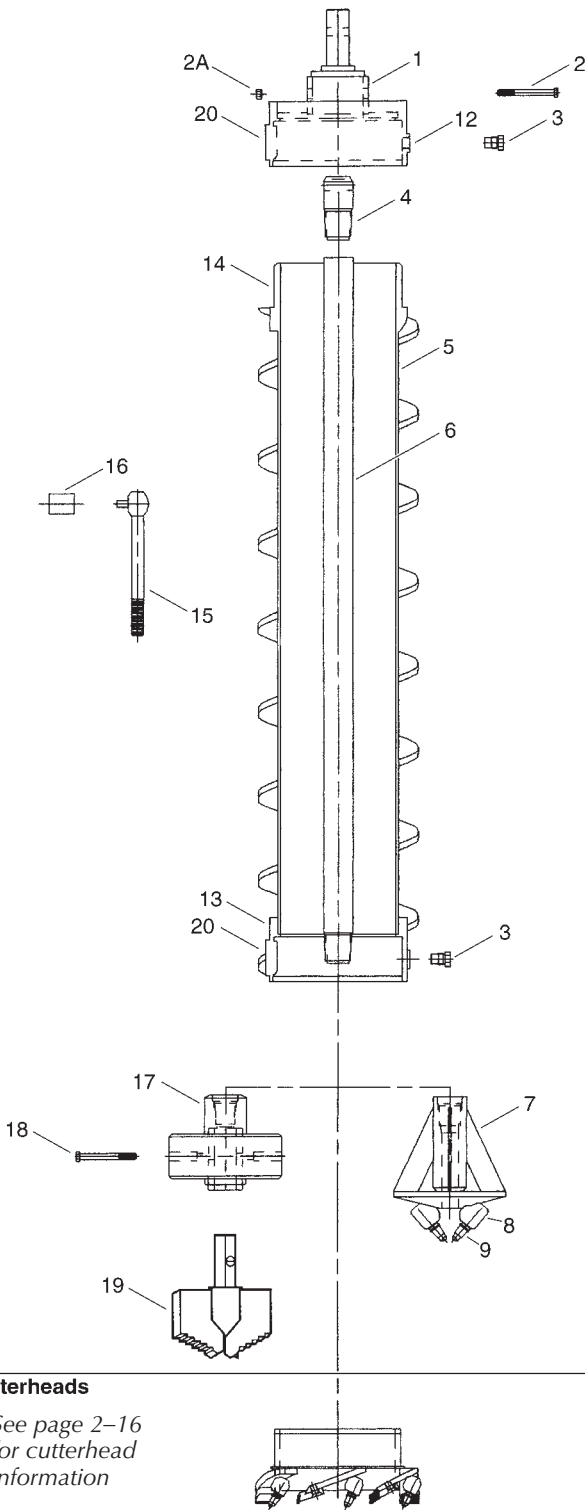
### 5'0" (1.5m) LEAD SECTION ASSEMBLY: 17" (432mm) O.D.

2

Description	Lb/Kg	Part No.
2" (51mm) Hex, NWML Rod .....	470 (213.2)	61035-01

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 2" (51mm) Hex.....	70 (31.8)	150643
2	Rod Bolt .....	*	3100-0242
2A	Rod Nut.....	*	3122-0012
3	Lockbolt - 2 req'd.....	*	150666-01
4	Adapter: NWML Rod to Drive Cap...5 (2.3) .....	180054-04	
5	Auger Section: 5'0" (1.5m), .....	256 (116.1)	150572-02
6	Center Rod: 5'0" (1.5m), NWML Rod.....	35 (15.9)	006278
7	Plug-Pilot Bit Combo w/ Ten (10) Bullet Bits and Blocks NWML Rod .25 (11.3) .....	150565-05	
8	Bit Block .....	*	216044-01
9	Bullet Bit.....	*	150194-03
12	Repair Bushing.....	*	150665
13	Repair Box .....	35 (15.9)	150639
14	Repair Pin .....	28 (12.7)	150640
15	Handle.....	*	3781-0010
16	Socket.....	*	3818-0020
17	NWML Rod Box Center Plug.....	92 (41.7)	180036-25
18	Bolt.....	*	3130-0163
19	3 Wing Pilot Bit.....	24 (10.9)	150574-05
20	Repair Key .....	†	150642



### Cutterheads

See page 2-16 for cutterhead information



## CUTTERHEADS – 12-1/4" (311mm) TRI-LOK™ AUGER

### SLIM BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
12-1/4" (311mm).....	15" (381mm) .....	.68 (30.8) .....	61031-12

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*	.....	004303
Blade Bolt.....*	.....	001293
Flight Segment.....†	.....	150681-01
12-1/4" (311mm) Body .....	.....	150681

### SUPER DUTY SLIM BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed with a smaller diameter to minimize drag when pulling out of hole and minimizing material sloughing.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
12-1/4" (311mm).....	15" (381mm) .....	.68 (30.8) .....	61032-12

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/ Carbide.....*	.....	004303
Blade Bolt.....*	.....	001293
Bullet Bit w/Retainer.....*	.....	150194-03
Bullet Bit Holder.....*	.....	216044-01
Flight Segment.....†	.....	150681-01
12-1/4" (311mm) Body w/ Flight Segment and Bit Holders .....	.....	150688

## 2-1/4" (57mm) LITE-FLITE™ AUGER

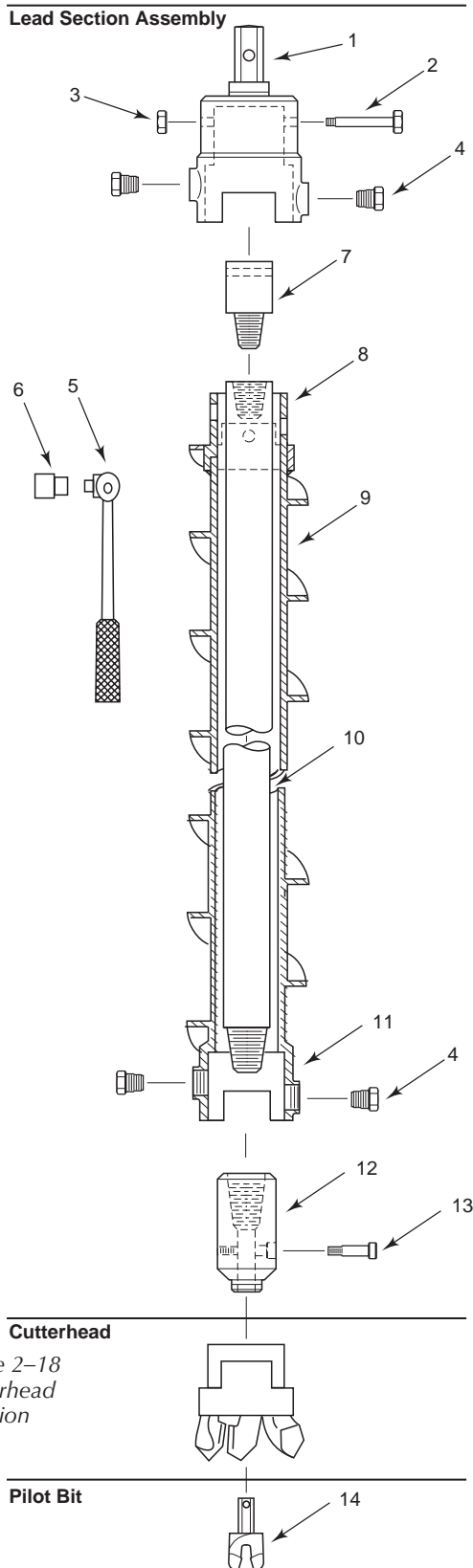
LITE-FLITE augers are designed to fill the need for a lightweight, low cost hollow stem auger for use with lightweight drilling rigs having a maximum torque output of not more than 3750 ft-lbs. For stronger machines, use standard duty 2-1/4" I.D. 2-key HSA. LITE-FLITE's 2-1/4" (57mm) I.D. will allow monitor well placement and standard penetration testing with 2" (51mm) tools and equipment to a maximum of 22.5' (6.8m). **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### LEAD SECTION ASSEMBLY: 4-3/8" (111mm) O.D.

Description	Lb/Kg	Part No.
2'6" (762mm), 13/16" (21mm) Hex, AWML Rod .....	38 (17.2)	61023-01
2'6" (762mm), 13/16" (21mm) Hex, EW Rod .....	35 (15.9)	61023-04

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap 13/16" (21mm) Hex .....	6 (2.7)	150404
1	Drive Cap 1-1/8" (29mm) Hex .....	6 (2.7)	150399
2	Rod Bolt .....	*	3100-0128
3	Hex Nut .....	*	3122-0012
4	Lock Bolt Without Hard Facing .....		217135
4	Lock Bolt With Hard Facing .....	*	150383
5	Handle, 1/2" (13mm) Sq Drive Flex x 1'6" (457mm) .....	3 (1.4)	3781-0009
6	Socket, 15/16" (24mm) Hex .....	*	3782-0013
7	Adapter: EW Rod to Drive Cap .....	1 (.5)	150402
7	Adapter: AWML Rod to Drive Cap .....	2 (.9)	150310
7	Adapter: AWML Rod to Drive Cap .....	2 (.9)	150311
8	Pin Coupling (Repair Only) .....	3 (1.4)	150384
9	Auger Section: 2'6" (762mm) .....	17 (7.7)	150414
10	Center Rod: 2'6" (762mm), AWML .....	7 (3.2)	150416
10	Center Rod: 2'6" (762mm), EW .....	7 (3.2)	001753
11	Box Coupling (Repair Only) .....	3 (1.4)	150385
12	Plug: 13/16" (21mm) Hex Socket to EW Box .....	4 (1.8)	180448-01
12	Plug: 13/16" (21mm) Hex Socket to AW Box .....	4 (1.8)	180448-02
12	Plug: 13/16" (21mm) Hex Socket to AWML Box .....	4 (1.8)	180448-03
13	Plug Bolt .....	*	3130-0062
14	Pilot Bit: 13/16" (21mm) Hex .....	1 (.5)	004981



See page 2-18  
for cutterhead  
information

## CUTTERHEAD – 2-1/4" (57mm) LITE-FLITE™ AUGER



**CUTTERHEAD**

Description	Lb/Kg	Part No.
4-3/8" (111mm) O.D. with Carbide insert bits.....	3 (1.4).....	150397

### COMPONENT PARTS

Description	Lb/Kg	Part No.
2-1/4" (57mm) Body .....	† .....	150387
Carbide Insert .....	† .....	180462-02
Carbide Insert .....	† .....	180462-03
Carbide Insert .....	† .....	180462-04

## 2-1/2" (64mm) THREADED AUGER

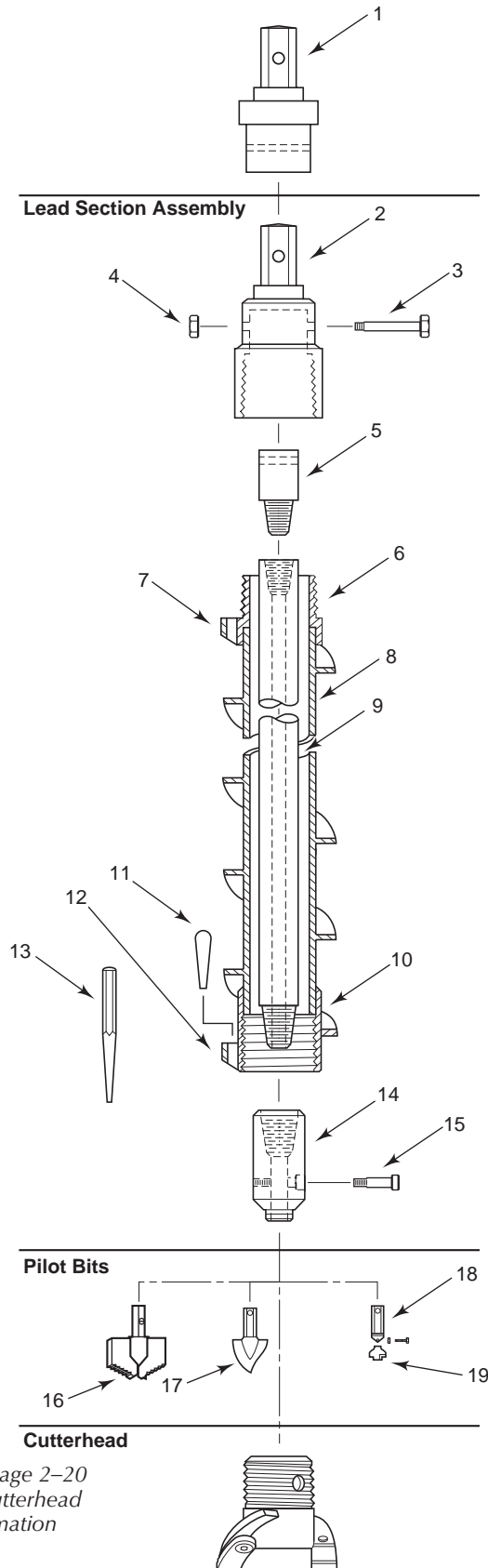
The only water-tight auger in the industry.

Augers are furnished with hardfaced flight edges and locking wedges. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Break-out adapter, cutterhead, pilot bit, extra auger sections and center rods.

2

## 2-1/2" (64mm) THREADED AUGER

### 5'0" (1.5m) LEAD SECTION ASSEMBLY: 6-1/4" (159mm) O.D.



See page 2-20  
for cutterhead  
information

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod .....	130 (58.9)	61000-01
1-5/8" (41mm) Hex, AWML Rod .....	130 (58.9)	61000-02
2" (51mm) Hex, AW Rod .....	133 (60.3)	61000-04
2" (51mm) Hex, AWML Rod .....	134 (60.8)	61000-05

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Auger Break-out Adapter: 1-5/8" (41mm) Hex .....	14 (6.4)	005284
1	Auger Break-out Adapter: 2" (51mm) Hex .....	15 (6.8)	005285
2	Drive Cap: 1-5/8" (41mm) Hex .....	9 (4.1)	005000
2	Drive Cap: 2" (51mm) Hex .....	11 (5)	005001
3	Rod Bolt .....	*	3100-0212
4	Hex Nut .....	*	3122-0012
5	Adapter: AW Rod to Drive Cap .....	5 (2.3)	001030
5	Adapter: AWML Rod to Drive Cap .....	5 (2.3)	007014
6	Pin Coupling (Repair Only) .....	7 (3.2)	005358
7	Wedge Pocket (Pin Coupling) .....	*	006904
8	Auger Section: 5'0" (1.5m) .....	80 (36.3)	004386
9	Center Rod: 5'0" (1.5m), AW .....	22 (10)	001605
9	Center Rod: 5'0" (1.5m), AWML .....	15 (6.8)	006276
10	Box Couplings (Repair Only) .....	7 (3.2)	005359
11	Locking Wedge .....	*	004070
12	Wedge Pocket (Box Coupling) .....	*	005633
13	Drift Punch .....	2 (.9)	006038
14	Plug: 1-1/8" (29mm) Hex to AW Box .....	17 (7.7)	180036-02
14	Plug: 1-1/8" (29mm) Hex to AWML Box .....	17 (7.7)	007020
15	Plug Bolt .....	*	3130-0072
16	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex ...	*	t
17			
18	Capscrew (1 per Blade Req'd) .....	*	001293
19	Pilot Bit: 1-1/8" (29mm) Hex .....	2 (.9)	005503

## CUTTERHEAD – 2-1/2" (64mm) THREADED AUGER

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	Lb/Kg	Part No.
8" (203mm) O.D., Blade Type.....	21 (9.5)	004282

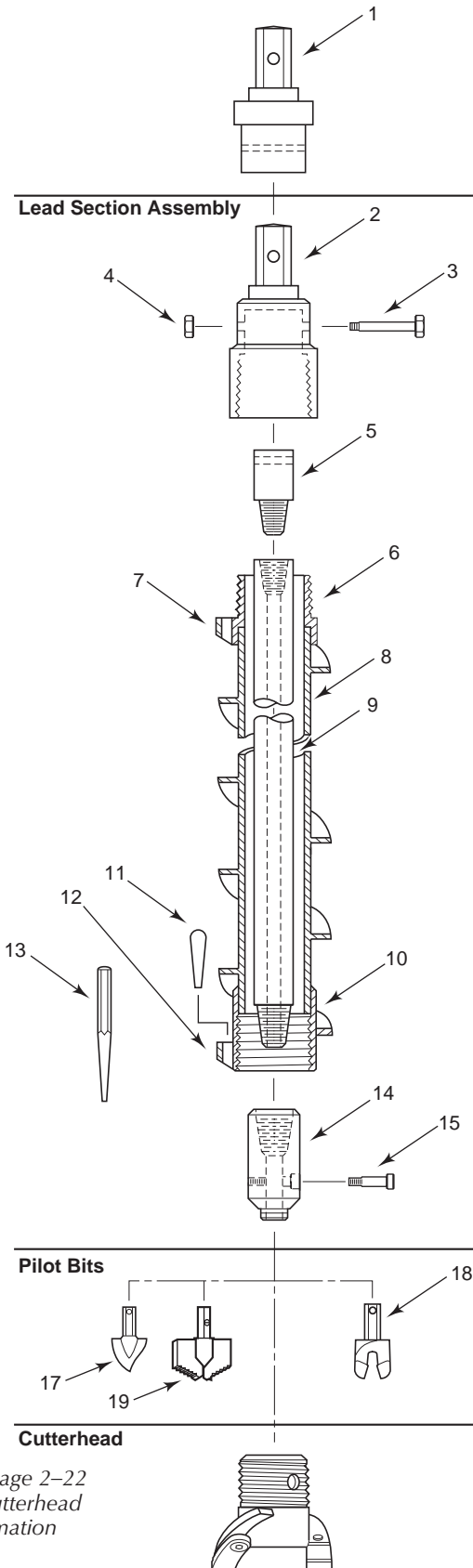
### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutter Blade w/Carbide .....	†	004303
Blade Bolt .....	†	001293
2-1/2" (64mm) Body .....	†	004831
Locking Wedge .....	†	004070-10

## 3-3/8" (86mm) THREADED AUGER

Augers are furnished with hardfaced flight edges and locking wedges. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Break-out adapter, cutterhead, pilot bit, extra auger sections and center rods.

### 5'0" (1.5m) LEAD SECTION ASSEMBLY: 8-1/4" (210mm) O.D.

**2**


Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....	140 (63.5)	61003-01
1-5/8" (41mm) Hex, AWML Rod.....	140 (63.5)	61003-02
1-5/8" (41mm) Hex, NW Rod.....	150 (68)	61003-04
1-5/8" (41mm) Hex, NWML Rod.....	150 (68)	61003-05
2" (51mm) Hex, AW Rod .....	142 (64.4)	61003-06
2" (51mm) Hex, AWML Rod .....	142 (64.4)	61003-07
2" (51mm) Hex, NW Rod.....	153 (69.4)	61003-09
2" (51mm) Hex, NWML Rod.....	153 (69.4)	61003-10

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Auger Break-out Adapter: 1-5/8" (41mm) Hex .....	25 (11.3)	005286
1	Auger Break-out Adapter: 2" (51mm) Hex .....	27 (12.2)	005287
2	Drive Cap: 1-5/8" (41mm) Hex.....	11 (5)	005002
2	Drive Cap: 2" (51mm) Hex.....	13 (5.9)	005003
3	Rod Bolt.....	*	3100-02222
4	Hex Nut.....	*	3122-0012
5	Adapter: AW Rod to Drive Cap .....	5 (2.3)	001030
5	Adapter: AWML Rod to Drive Cap.....	5 (2.3)	007014
5	Adapter: NW Rod to Drive Cap .....	11 (5)	003511
5	Adapter: NWML Rod to Drive Cap .....	11 (5)	006950
6	Pin Coupling (Repair Only) .....	9 (4.1)	005356
7	Wedge Pocket (Pin Coupling).....	*	006904
8	Auger Section: 3'0" (914mm).....	48 (21.8)	150363-03
8	Auger Section: 5'0" (1.5m).....	83 (37.6)	004147
8	Auger Section: 5'0" (1.5m) Double Flight .....	115 (52.2)	150338-01
9	Center Rod: 5'0" (1.5m), AW .....	22 (10)	001605
9	Center Rod: 5'0" (1.5m), AWML .....	15 (6.8)	006276
9	Center Rod: 5'0" (1.5m), NW .....	32 (14.5)	001608
9	Center Rod: 5'0" (1.5m), NWML.....	33 (15)	006278
10	Box Coupling (Repair Only) .....	9 (4.1)	005357
11	Locking Wedge .....	*	004070
12	Wedge Pocket (Box Coupling) .....	*	005633
13	Drift Punch.....	2 (.9)	006038
14	Plug: 1-1/8" (29mm) Hex to AW .....	17 (7.7)	180036-03
14	Plug: 1-1/8" (29mm) Hex to AWML .....	17 (7.7)	007013
14	Plug: 1-1/8" (29mm) Hex to NW.....	30 (13.6)	180036-06

Continued on next page

## COMPONENT PARTS (cont.)

Ref	Description	Lb/Kg	Part No.
14	Plug: 1-1/8" (29mm) Hex to NWML.....	30 (13.6)	.....006963
15	Plug Bolt .....	*	.....3130-0098
17	Pilot Bit: 1-1/8" (29mm) Hex (Soft Formation).....	2 (.9)	.....005505
18	Pilot Bit: 2-Prong, 1-1/8" (29mm) Hex (Hard Formation) .....	1 (.5)	.....200024
19	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex.... *		.....†

## CUTTERHEAD - 3-3/8" (86mm) THREADED AUGER

### BLADE AND BULLET



### CUTTERHEAD

Description	Lb/Kg	Part No.
9"(229mm) O.D. Blade Type .....	17 (7.7)	.....61031-10
9"(229mm) O.D. Super Duty Type .....	21 (9.5)	.....61032-10

### COMPONENT PARTS

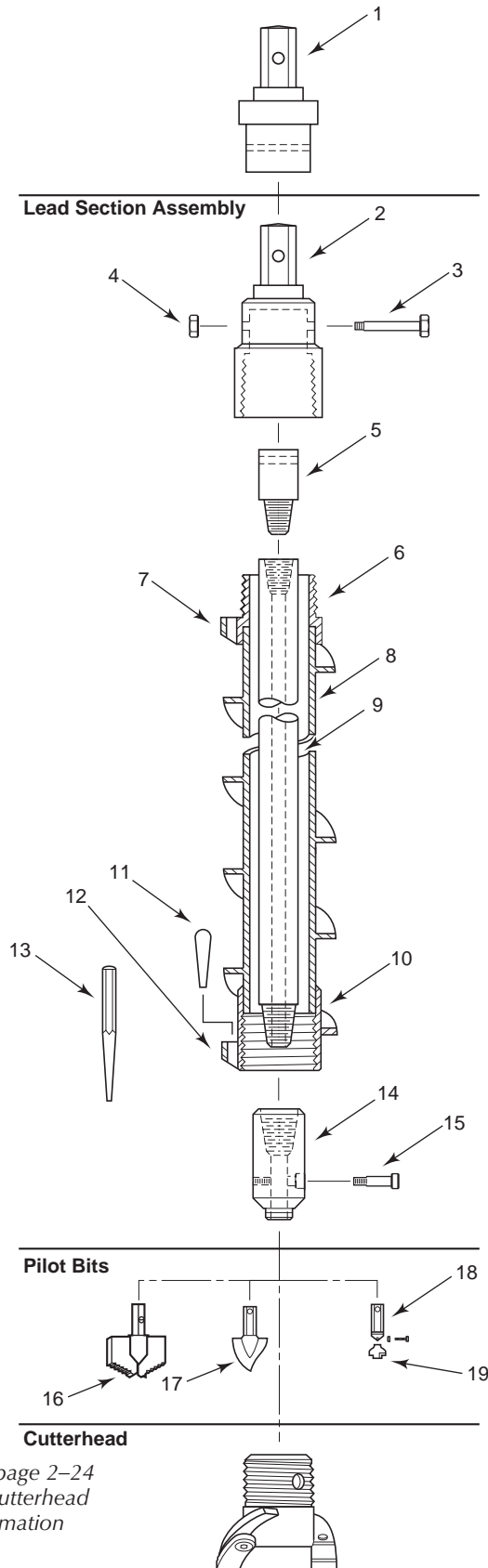
Description	Lb/Kg	Part No.
Cutter Blade w/Carbide .....	†	.....004303
Blade Bolt .....	†	.....001293
3-3/8" (86mm) Body.....	†	.....150620
Locking Wedge .....	†	.....004070-10
Bullet Cutter with Retainer .....	†	.....150194-03
Block Holder for Bullet Cutter .....	†	.....216044-01

## 4" (102mm) THREADED AUGER

Augers are furnished with hardfaced flight edges and locking wedges. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Break-out adapter, cutterhead, pilot bit, extra auger sections and center rods.

### 5'0" (1.5m) LEAD SECTION ASSEMBLY: 8-1/2" (216mm) O.D.

2



See page 2-24  
for cutterhead  
information

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, NW Rod	154 (69.9)	61006-02
1-5/8" (41mm) Hex, NWML rod	155 (70.3)	61006-03
2" (51mm) Hex, NW Rod	157 (71.2)	61006-05
2" (51mm) Hex, NWML Rod	157 (71.2)	61006-06

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Auger Break-out Adapter: 1-5/8" (41mm) Hex	29 (13.2)	005290
1	Auger Break-out Adapter: 2" (51mm) Hex	30 (13.6)	005291
2	Drive Cap: 1-5/8" (41mm) Hex	16 (7.3)	001218
2	Drive Cap: 2" (51mm) Hex	16 (7.3)	004617
3	Rod Bolt	*	3100-0279
4	Hex Nut	*	3122-0012
5	Adapter: NW Rod to Drive Cap	11 (5)	003511
5	Adapter: NWML Rod to Drive Cap	11 (5)	006950
6	Coupling Pin (Repair Only)	10 (4.5)	005689
7	Wedge Pocket (Pin Coupling)	*	006904
8	Auger Section: 5'0" (1.5m)	90 (40.8)	001212
8A	Auger Section: 5'0" (1.5m) Double Flight	150	515-01
9	Center Rod: 5'0" (1.5m) NW	32 (14.5)	001608
9	Center Rod: 5'0" (1.5m) NWML	35 (15.9)	006278
10	Box Coupling (Repair Only)	10 (4.5)	005690
11	Locking Wedge	*	004070
12	Wedge Pocket (Box Coupling)	*	005633
13	Drift Punch	2 (.9)	006038
14	Plug: 1-1/8" (29mm) Hex to NW Box	32 (14.5)	180036-22
14	Plug: 1-1/8" (29mm) Hex to NWML Box	32 (14.5)	007019
15	Plug Bolt	*	3130-0118
16	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex	*	†
17	Pilot Bit: 1-1/8" (29mm) Hex	2 (.9)	001437
18	Pilot Bit Shank: 1-1/8" (29mm) Hex	2 (.9)	004588
19	Pilot Bit, hard formation, carbide	.5 (2.3)	004948



## CUTTERHEAD – 4" (102mm) THREADED AUGER

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	Lb/Kg	Part No.
11"(279mm) O.D., Blade Type .....	23 (10.4) .....	61031-13

### COMPONENT PARTS

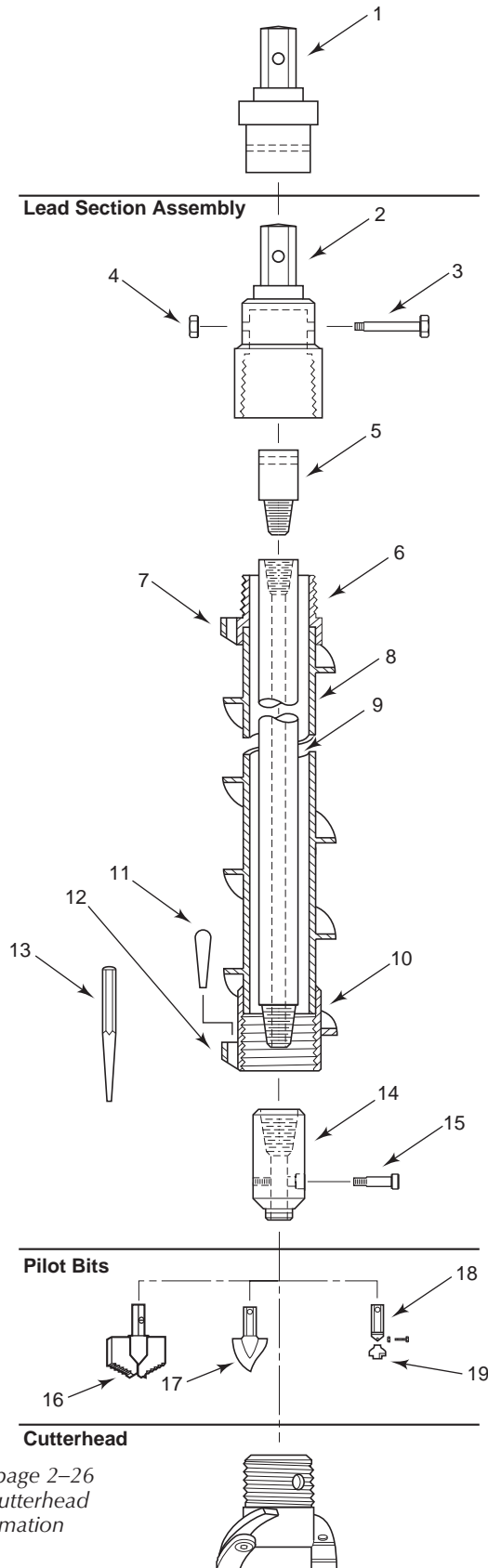
Description	Lb/Kg	Part No.
Cutter Blade w/Carbide .....	† .....	004303
Blade Bolt .....	† .....	001293
4" (102mm) Body .....	† .....	217965
Locking Wedge .....	† .....	004070-10

## 6" (152mm) THREADED AUGER

Augers are furnished with hardfaced flight edges and locking wedges. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Break-out adapter, cutterhead, pilot bit, extra auger sections and center rods.

### 5'0" (1.5m) LEAD SECTION ASSEMBLY: 11" (279mm) O.D.

2



Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, NW Rod	232 (105.2)	61009-02
1-5/8" (41mm) Hex, NWML Rod	233 (105.7)	61009-03
2" (51mm) Hex, NW Rod	234 (106.1)	61009-05
2" (51mm) Hex, NWML Rod	235 (106.6)	61009-06

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Auger Break-out Adapter: 1-5/8" (41mm) Hex	48 (21.8)	005294
1	Auger Break-out Adapter: 2" (51mm) Hex	49 (22.2)	005295
2	Drive Cap: 1-5/8" (41mm) Hex	22 (10)	001220
2	Drive Cap: 2" (51mm) Hex	23 (10.4)	004619
3	Rod Bolt	*	3100-0280
4	Hex Nut	*	3100-0280
5	Adapter: NW Rod to Drive Cap	11 (5)	003511
5	Adapter: NWML Rod To Drive Cap	11 (5)	006950
6	Pin Coupling (Repair Only)	17 (7.7)	005693
7	Wedge Pocket (Pin Coupling)	*	006904
8	Auger Section: 5'0" (1.5m)	141 (64)	001214
9	Center Rod: 5'0" (1.5m), NW	32 (14.5)	001608
9	Center Rod: 5'0" (1.5m), NWML	25 (11.3)	006278
10	Box Coupling (Repair Only)	15 (6.8)	005694
11	Locking Wedge	*	004070
12	Wedge Pocket (Box Coupling)	*	005633
13	Drift Punch	2 (.9)	006038
14	Plug: 1-5/8" (41mm) Hex to NW Box	35 (15.9)	180036-24
14	Plug: 1-5/8" (41mm) Hex to NWML Box	35 (15.9)	006949
15	Plug Bolt	*	3130-0163
	Cutterhead Body: Blade Type (3 Blades Req'd)	25 (11.3)	001280
	Cutter Blade: Carbide Insert	1 (.5)	004303
	Capscrew (1 req'd per blade)	*	001293
16	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex	*	t
17	Pilot Bit: 1-5/8" (41mm)	4 (1.8)	005509
18	Shank Pilot Bit: 1-5/8" (41mm) Hex	2 (.9)	004591
19	Pilot Bit, hard formation, carbide	11 (5)	004950

See page 2-26  
for cutterhead  
information

## CUTTERHEAD – 6" (152mm) THREADED AUGER

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

### CUTTERHEAD

Description	Lb/Kg	Part No.
13-1/4" (337mm), Blade Type .....	44(20) .....	61031-14

### COMPONENT PARTS

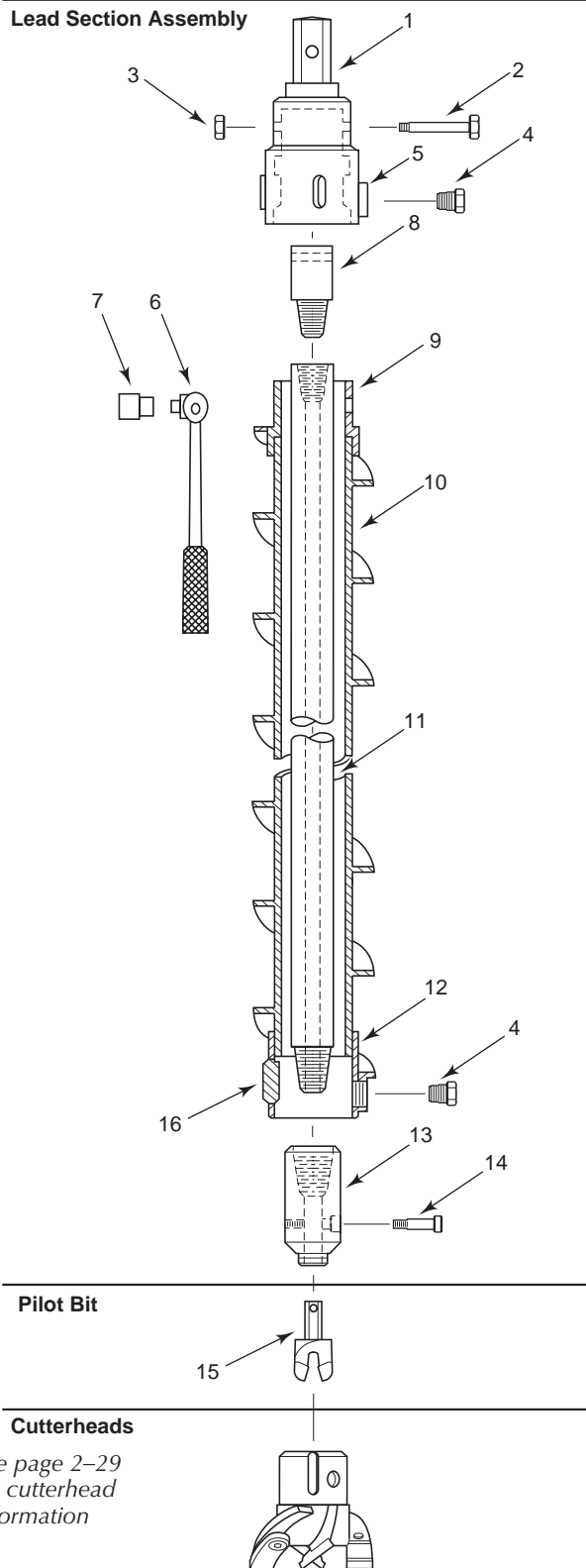
Description	Lb/Kg	Part No.
Cutterhead w/Carbide .....	† .....	004303
Blade Bolt .....	† .....	001293
6" (152mm) Body .....	† .....	001280
Locking Wedge .....	† .....	004070-10

## 2-1/4" (57mm) 2-KEY STANDARD DUTY AUGER

Predominately used for geotechnical applications such as split spoon sampling. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### 5'0" (1.5m) LEAD SECTION ASSEMBLY: 5-5/8" (143mm) O.D.

**2**



Description	Lb/Kg	Part No.
1-1/8" (29mm) Hex, AW Rod.....	†	61021-07
1-1/8" (29mm) Hex, AWML Rod.....	†	61021-08
1-3/8" (41mm) Hex, AW Rod.....	†	61021-09
1-3/8" (41mm) Hex, AWML Rod.....	†	61021-10

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 1-1/8" (29mm) Hex .....	†	150717
1	Drive Cap: 1-3/8" (41mm) Hex .....	†	150732
2	Hex Bolt .....	†	3100-0128
3	Hex Nut.....	†	3122-0012
4	Lockbolt .....	†	150712-07
5	Bushing .....	†	218889-04
6	Handle .....	†	3781-0009
7	Socket.....	†	3782-0016
8	Rod to Cap Adapter AW .....	†	001030
8	Rod to Cap Adapter AWML .....	†	007014
9	Pin Coupling, Heat-Treated (Repair Only).....	†	150712-01
10	Auger 5' (1.5m) Lg .....	†	150712
11	Center Rod AW .....	†	001605
11	Center Rod AWML .....	†	006276
12	Box Coupling (Repair Only).....	†	150712-02
13	Center Plug AW Connection.....	†	180448-02
13	Center Plug AWML Connection.....	†	180448-03
14	Plug Bolt.....	†	3130-0062
15	Pilot Bit.....	†	004981
16	Repair Key .....	†	150577
	O-Ring.....	†	3538-0232

## CUTTERHEAD – 2-¼” (57mm) 2-KEY STANDARD DUTY AUGER

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
2-¼” (57mm) .....	6-½” (165mm) .....	† .....	61036-14

### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer.....*	.....*	150194-04
Spade Bit Holder .....	.....*	216044-02
Nail .....	.....*	150678
2-¼” (57mm) Body .....	.....†	150718-01

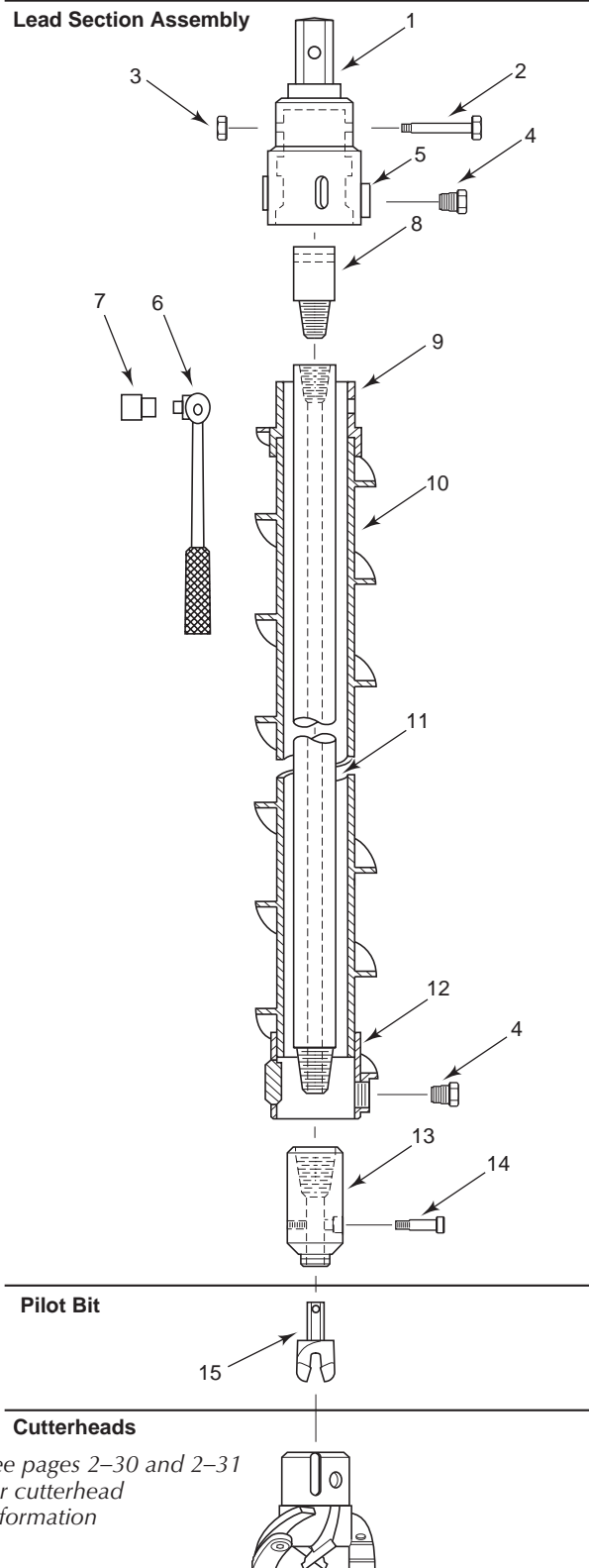
## 3-1/4" (83mm) 2-KEY STANDARD DUTY AUGER

Predominately used for geotechnical applications such as split spoon sampling. **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

**Also available in 2-key heavy-duty and TRI-LOK™.**

**5'0" (1.5m) LEAD SECTION ASSEMBLY:  
6-1/2" (165mm) O.D.**

**2**



See pages 2-30 and 2-31  
for cutterhead  
information

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....	†	61049-01
1-5/8" (41mm) Hex, AWML Rod.....	†	61049-02
1-5/8" (41mm) Hex, NW Rod.....	†	61049-03
1-5/8" (41mm) Hex, NWML Rod.....	†	67049-04
2" (51mm) Hex, AW Rod.....	†	61049-05
2" (51mm) Hex, AWML Rod.....	†	61049-06
2" (51mm) Hex, NW Rod.....	†	61049-07
2" (51mm) Hex, NWML Rod.....	†	61049-08

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 1-1/8" (29mm) Hex.....	†	150731
1	Drive Cap: 1-5/8" (41mm) Hex.....	17 (7.7)	150730
1	Drive Cap: 2" (51mm) Hex.....	22 (10)	150732
2	Rod Bolt.....	*	3100-0184
3	Hex Nut.....	*	3122-0012
4	Lockbolt - 1 Req'd.....	*	150712-06
4	Lockbolt - 1 Req'd (Hard Faced).....	*	150712-07
5	Bushing (Repair Only).....	*	218889-04
6	Handle.....	*	3781-0009
7	Socket.....	*	3782-0016
8	Adapter: AW Rod to Drive Cap.....	5 (2.3)	150310
8	Adapter: AWML Rod to Drive Cap.....	5 (2.3)	150311
8	Adapter: NW Rod to Drive Cap.....	11 (5)	180049-03
8	Adapter: NWML Rod to Drive Cap.....	11 (5)	180054-04
9	Coupling Pin, Heat-Treated (Repair Only).....	6 (2.7)	150711-01
10	Auger Section - 5'0" (1.5m).....	69 (31.3)	150711
11	Center Rod - 5'0" (1.5m), AW.....	22 (10.0)	001605
11	Center Rod - 5'0" (1.5m), AWML.....	15 (6.8)	006276
11	Center Rod - 5'0" (1.5m), NW.....	32 (14.5)	001608
11	Center Rod - 5'0" (1.5m), NWML.....	35 (15.9)	006278
12	Box Coupling (Repair Only).....	6 (2.7)	150711-02
13	Plug - 1-1/8" (29mm) Hex to AW Box.....	12 (5.4)	150312
13	Plug - 1-1/8" (29mm) Hex to AWML Box.....	12 (5.4)	150379
13	Plug - 1-1/8" (29mm) Hex to NW Box.....	11 (5)	150306
13	Plug - 1-1/8" (29mm) Hex to NWML Box.....	11 (5)	150377
14	Plug Bolt.....	*	3130-0098
15	Pilot Bit, 2-Prong, 1-1/8" (29mm) Hex...2	(.9)	200024
15	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex.....	*	150574-01
	Coupling, TRI-LOK to CME Pin.....	13 (5.9)	150290
	Coupling, TRI-LOK to CME Socket...13	(5.9)	150304
	Repair Key.....	*	150577
	Clean Out Tap (For Bushing).....	*	150562

## CUTTERHEADS – 3-1/4" (83mm) 2-KEY STANDARD DUTY AUGER

### BULLDOG



A tough multi-purpose cutterhead for full range drilling. Bits are designed for a uniform wear pattern and longer service life. Recommended for abrasive conditions and difficult hard formations.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	19 (8.6)	61032-16

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bit.....*		150233
3-1/4" (83mm) Body .....†		150728

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	19 (8.6)	61031-16

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*		004303
Blade Bolt.....*		001293
Flight Segment.....†		150593
3-1/4" (83mm) Body w/ Flight Segment.....†		150723

## SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	19 (8.6)	61032-15

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*		004303
Blade Bolt.....*		001293
Bullet Bit w/Retainer.....*		150194-03
Bullet Bit Holder.....*		216044-01
3-1/4" (83mm) Body w/ Flight Segment and Bit Holders .....†		150724

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	19 (8.6)	61036-12

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer.....*		150194-04
Spade Bit Holder .....*		216044-02
Nail.....*		150678
3-1/4" (83mm) Body .....†		150653

*Continued on next page*

**CUTTERHEADS –  
3-1/4" (83mm) 2-KEY  
STANDARD DUTY AUGER (cont.)**

**BULLET SPADE**



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

**CUTTERHEAD**

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61037-05

**COMPONENT PARTS**

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	*	150194-03
Spade Bit w/Retainer.....	*	150194-04
Bullet Bit Holder.....	*	216044-01
Spade Bit Holder .....	*	216044-02
Nail .....	*	150678
Flight Segment .....	†	150593-01
3-1/4" (83mm) Body .....	†	150726

**BULLET**



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

**CUTTERHEAD**

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61038-05

**COMPONENT PARTS**

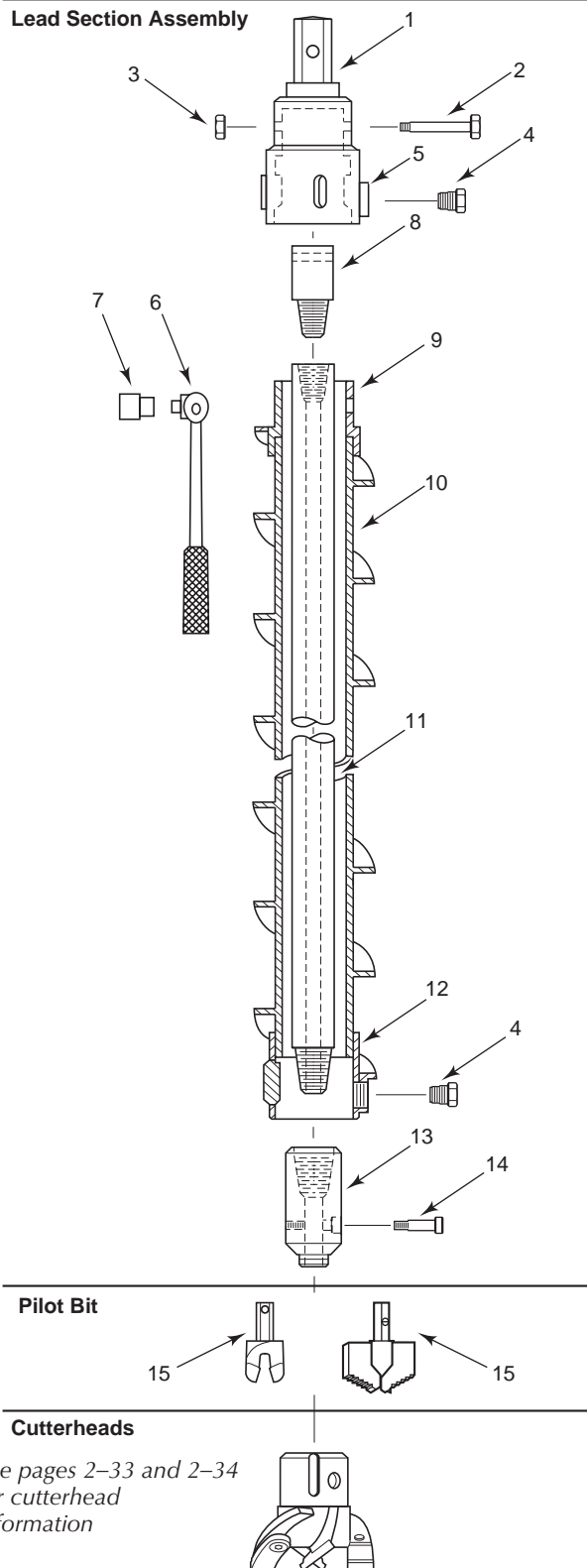
Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	*	150194-03
Bullet Bit Holder.....	*	216044-01
Flight Segment .....	†	150593-01
3-1/4" (83mm) Body .....	†	150727



## 3-1/4" (83mm) 2-KEY HEAVY DUTY AUGER

H.D. key size is 5/8" (16mm) **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### 5' (1.5m) LEAD SECTION ASSEMBLY: 6-1/2" (165mm) O.D.



See pages 2-33 and 2-34 for cutterhead information

Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....	†.....	61046-01
1-5/8" (41mm) Hex, AWML Rod.....	†.....	61046-02
1-5/8" (41mm) Hex, NW Rod.....	†.....	61046-03
1-5/8" (41mm) Hex, NWML Rod.....	†.....	61046-04
2" (51mm) Hex, AW Rod.....	†.....	61046-05
2" (51mm) Hex, AWML Rod.....	†.....	61046-06
2" (51mm) Hex, NW Rod.....	†.....	61046-07
2" (51mm) Hex, NWML Rod.....	†.....	61046-08

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 2" (51mm) Hex.....	22 (10)	150646
2	Rod Bolt.....	*	3100-0184
3	Hex Nut.....	*	3122-0012
4	Lockbolt - 1 Req'd (Repair Only).....	*	150631-06
5	Bushing.....	*	150631-03
6	Handle.....	*	3781-0010
7	Socket.....	*	3782-0017
8	Adapter: AW Rod to Drive Cap.....	5 (2.3)	150310
8	Adapter: AWML Rod to Drive Cap....	5 (2.3)	150311
8	Adapter: NW Rod to Drive Cap.....	11 (5)	180049-03
8	Adapter: NWML Rod to Drive Cap....	11 (5)	180054-04
9	Coupling Pin (Repair Only).....	6 (2.7)	150631-07
10	Auger Section - 5'0" (1.5m).....	69 (31.3)	150631
11	Center Rod - 5'0" (1.5m), AW.....	22 (10.0)	001605
11	Center Rod - 5'0" (1.5m), AWML.....	15 (6.8)	006276
11	Center Rod - 5'0" (1.5m), NW.....	32 (14.5)	001608
11	Center Rod - 5'0" (1.5m), NWML.....	35 (15.9)	006278
12	Box Coupling (Repair Only).....	6 (2.7)	150631-01
13	Plug - 1-1/8" (29mm) Hex to AW Rod Box.....	12 (5.4)	150312
13	Plug - 1-1/8" (29mm) Hex to AWML Rod Box.....	12 (5.4)	150379
13	Plug - 1-1/8" (29mm) Hex to NW Rod Box.....	11 (5)	150306
13	Plug - 1-1/8" (29mm) Hex to NWML Rod Box.....	11 (5)	150377
14	Plug Bolt.....	*	3130-0098
15	Pilot Bit, 2-Prong, 1-1/8" (29mm) Hex ..	2 (.9)	200024
15	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex.....	*	150574-01
	Repair Key.....	*	150631-04

## CUTTERHEADS – 3-1/4" (83mm) 2-KEY HEAVY DUTY AUGER

### BULLDOG



A tough multi-purpose cutterhead for full range drilling. Bits are designed for a uniform wear pattern and longer service life. Recommended for abrasive conditions and difficult hard formations.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	19 (8.6)	61032-17

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bit.....*		150233
3-1/4" (83mm) Body .....†		150763

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	19 (8.6)	61031-17

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*		004303
Blade Bolt.....*		001293
Flight Segment.....†		150593
3-1/4" (83mm) Body w/ Flight Segment.....†		150764

## SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	19 (8.6)	61033-03

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*		004303
Blade Bolt.....*		001293
Bullet Bit w/Retainer.....*		150194-03
Bullet Bit Holder.....*		216044-01
3-1/4" (83mm) Body w/ Flight Segment and Bit Holders .....†		150635-01

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm)	7-1/4" (184mm)	19 (8.6)	61036-13

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer.....*		150194-04
Spade Bit Holder.....*		216044-02
Nail.....*		150678
3-1/4" (83mm) Body .....†		150766

*Continued on next page*

## CUTTERHEADS – 3-1/4" (83mm) 2-KEY HEAVY DUTY AUGER (cont.)

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61037-06

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	* .....	150194-03
Spade Bit w/Retainer.....	* .....	150194-04
Bullet Bit Holder .....	* .....	216044-01
Spade Bit Holder .....	* .....	216044-02
Nail .....	* .....	150678
Flight Segment.....	† .....	150593-01
3-1/4" (83mm) Body .....	† .....	150767

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
3-1/4" (83mm) .....	7-1/4" (184mm) .....	19 (8.6) .....	61038-06

#### COMPONENT PARTS

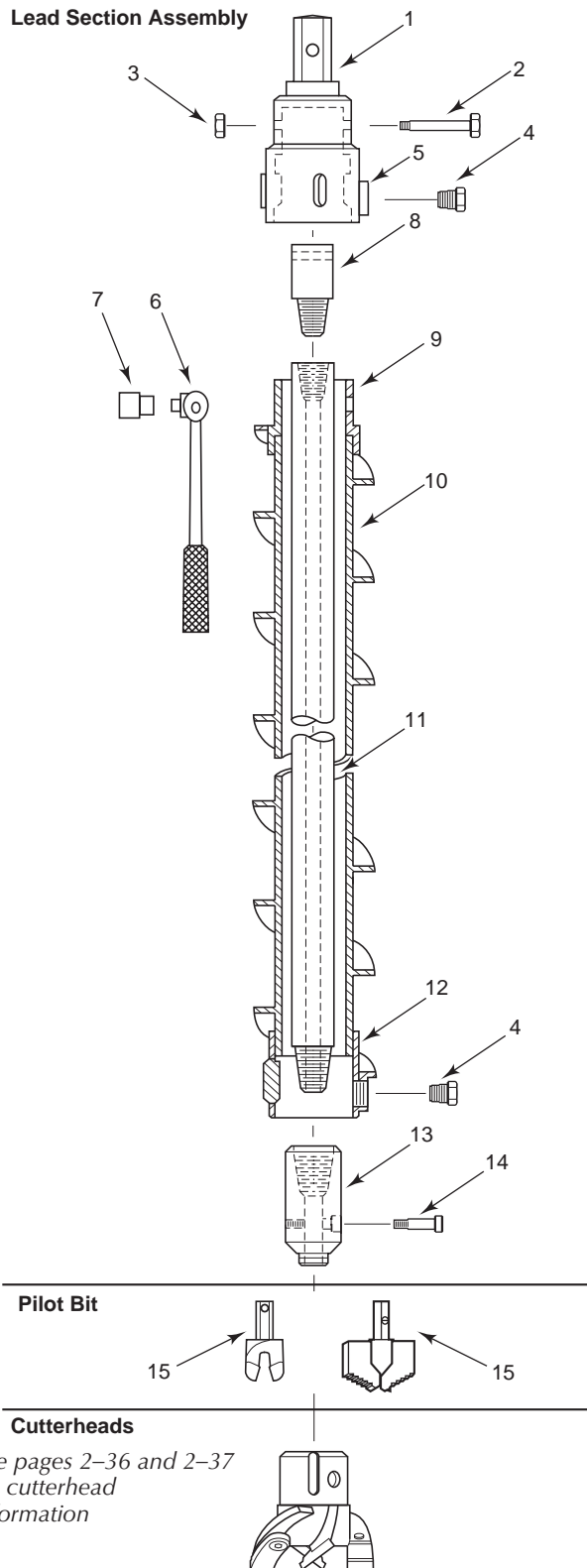
Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	* .....	150194-03
Bullet Bit Holder .....	* .....	216044-01
Flight Segment.....	† .....	150593-01
3-1/4" (83mm) Body .....	† .....	150768

## 4-1/4" (108mm) 2-KEY HEAVY DUTY AUGER

Often used for 2" (51mm) monitoring well installation. H.D. key size is 5/8" (16mm). **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

**5' (1.5m) LEAD SECTION ASSEMBLY:  
8-1/4" (165mm) O.D.**

**2**



Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....	†.....	61047-01
1-5/8" (41mm) Hex, AWML Rod.....	†.....	61047-02
1-5/8" (41mm) Hex, NW Rod.....	†.....	61047-03
1-5/8" (41mm) Hex, NWML Rod.....	†.....	61047-04
2" (51mm) Hex, AW Rod.....	†.....	61047-05
2" (51mm) Hex, AWML Rod.....	†.....	61047-06
2" (51mm) Hex, NW Rod.....	†.....	61047-07
2" (51mm) Hex, NWML Rod.....	†.....	61047-08

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap, 2" (51mm) Hex Shank ...28 (12.7) ..	150649	
2	Rod Bolt.....	*.....	3100-0279
3	Hex Nut.....	*.....	3122-0012
4	Lockbolt - 2 Req'd (Repair Only).....	*.....	150631-06
5	Repair Bushing.....	*.....	150631-03
6	Handle.....	*.....	3781-0009
7	Socket.....	*.....	3782-0016
8	Adapter: AW Rod Pin to Drive Cap ...5 (2.3) ....	150310	
8	Adapter: AWML Rod Pin to Drive Cap.....	5 (2.3) ....	150311
8	Adapter: NW Rod Pin to Drive Cap.....	11 (5).....	180049-03
8	Adapter: NWML Rod Pin to Drive Cap.....	11 (5).....	180054-04
9	Pin Coupling (Repair Only) .....	9 (4.1) ....	150632-04
10	Auger Section: 5'0" (1.5m) .....	90 (40.8) ..	150632
11	Center Rod: 5'0" (1.5m), AW.....	22 (10)....	001605
11	Center Rod: 5'0" (1.5m), AWML.....	15 (6.8) ...	006276
11	Center Rod: 5'0" (1.5m), NW.....	32 (14.5) ..	001608
11	Center Rod: 5'0" (1.5m), NWML.....	35 (15.9) ..	006278
12	Box Coupling (Repair Only) .....	9 (4.1) ....	150632-01
13	Plug: 1-1/8" (29mm) Hex Socket to AW Rod Box .....	19 (8.6) ...	150492
13	Plug: 1-1/8" (29mm) Hex Socket to AWML Rod Box .....	19 (8.6) ...	150494
13	Plug: 1-1/8" (29mm) Hex Socket to NW Rod Box.....	18 (8.2) ...	150488
13	Plug: 1-1/8" (29mm) Hex Socket to NWML Rod Box.....	18 (8.2) ...	150486
14	Plug Bolt.....	*.....	3130-0118
15	Pilot Bit, 1-1/8" (29mm) Hex Shank, 2-Prong .....	2 (.9) ....	004304
15	Pilot Bit, 1-1/8" (29mm) Hex Shank, 3-Wing.....	4 (1.8) ....	150574-02
	Repair Key.....	*.....	150632-03

## CUTTERHEADS – 4-1/4" (108mm) 2-KEY HEAVY DUTY AUGER

### BULLDOG



A tough multi-purpose cutterhead for full range drilling. Bits are designed for a uniform wear pattern and longer service life. Recommended for abrasive conditions and difficult hard formations.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	20 (9.1) .....	61032-18

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bit.....*		150233
4-1/4" (108mm) Body .....	†	150769

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	20 (9.1) .....	61031-18

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*		004303
Blade Bolt.....*		001293
Flight Segment.....†		150586
4-1/4" (108mm) Body w/ Flight Segment.....†		150771

## SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	20 (9.1) .....	61033-04

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*		004303
Blade Bolt.....*		001293
Bullet Bit w/Retainer.....*		150194-03
Bullet Bit Holder.....*		216044-01
4-1/4" (108mm) Body w/ Flight Segment and Bit Holders .....	†	150635-01

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm) .....	8-1/2" (216mm) .....	20 (9.1) .....	61036-15

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer.....*		150194-04
Spade Bit Holder .....		216044-02
Nail.....*		150678
4-1/4" (108mm) Body .....	†	150772

*Continued on next page*

## CUTTERHEADS – 4-1/4" (108mm) 2-KEY HEAVY DUTY AUGER (cont.)

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm)	8-1/2" (216mm)	20 (9.1)	61037-07

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer	*	150194-03
Spade Bit w/Retainer	*	150194-04
Bullet Bit Holder	*	216044-01
Spade Bit Holder	*	216044-02
Nail	*	150678
Flight Segment	†	150586-01
4-1/4" (108mm) Body	†	150773

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
4-1/4" (108mm)	8-1/2" (216mm)	20 (9.1)	61038-07

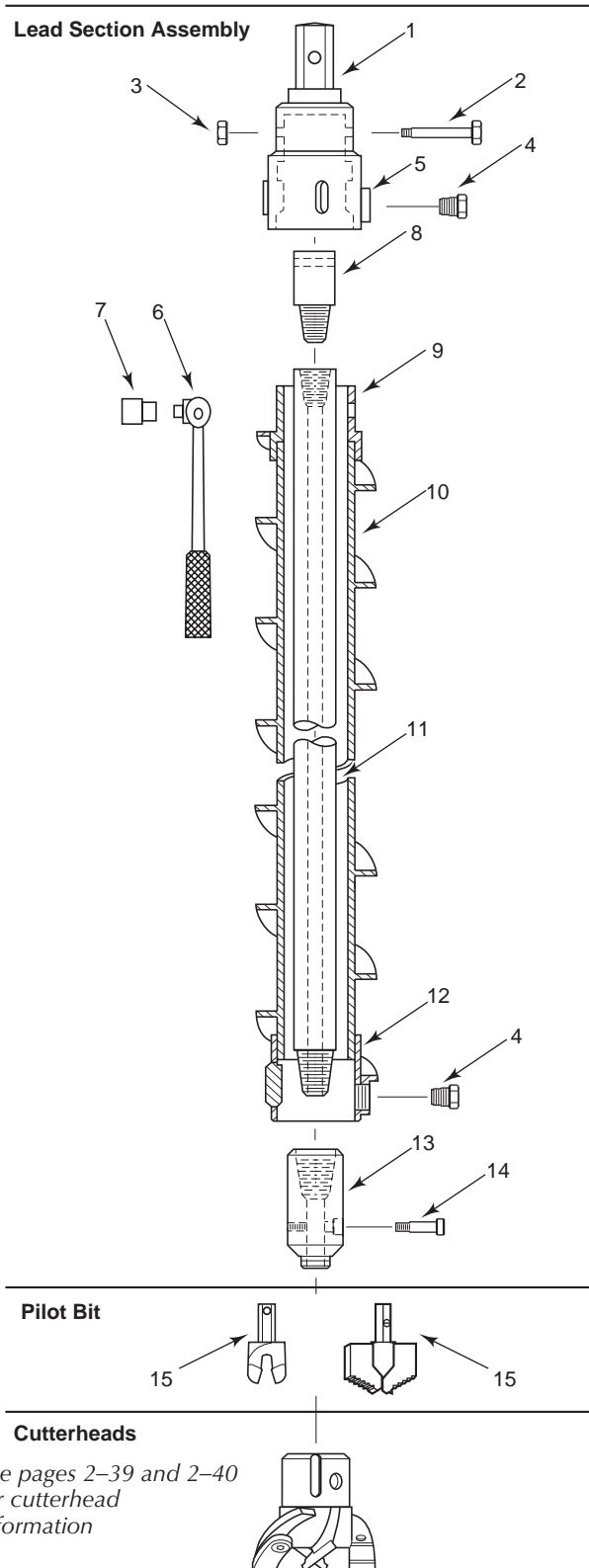
#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer	*	150194-03
Bullet Bit Holder	*	216044-01
Flight Segment	†	150586-01
4-1/4" (108mm) Body	†	150774

## 6-1/4" (159mm) 2-KEY HEAVY DUTY AUGER

H.D. key size is 5/8" (16mm). **Sizes are identified by hollow stem auger I.D.** Order a lead section and the following as needed: Cutterhead, pilot bit, extra auger sections and center rods.

### 5' (1.5m) LEAD SECTION ASSEMBLY: 10-1/4" (165mm) O.D.



Description	Lb/Kg	Part No.
1-5/8" (41mm) Hex, AW Rod.....	†	61048-01
1-5/8" (41mm) Hex, AWML Rod.....	†	61048-02
1-5/8" (41mm) Hex, NW Rod.....	†	61048-03
1-5/8" (41mm) Hex, NWML Rod.....	†	61048-04
2" (51mm) Hex, AW Rod.....	†	61048-05
2" (51mm) Hex, AWML Rod.....	†	61048-06
2" (51mm) Hex, NW Rod.....	†	61048-07
2" (51mm) Hex, NWML Rod.....	†	61048-08

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Drive Cap: 2" (51mm) Hex .....	22 (10)	150650
2	Rod Bolt.....	*	3100-0184
3	Hex Nut.....	*	3122-0012
4	Lockbolt - 2 Req'd (Repair Only).....	*	150631-06
5	Bushing.....	*	150631-03
6	Handle.....	*	3781-0009
7	Socket.....	*	3782-0016
8	Adapter: AW Rod to Drive Cap.....	5 (2.3)	150310
8	Adapter: AWML Rod to Drive Cap....	5 (2.3)	150311
8	Adapter: NW Rod to Drive Cap .....	11 (5)	180049-03
8	Adapter: NWML Rod to Drive Cap ...	11 (5)	180054-04
9	Coupling Pin (Repair Only) .....	6 (2.7)	150633-04
10	Auger Section - 5'0" (1.5m) .....	69 (31.3)	150633
11	Center Rod - 5'0" (1.5m), AW .....	22 (10.0)	001605
11	Center Rod - 5'0" (1.5m), AWML .....	15 (6.8)	006276
11	Center Rod - 5'0" (1.5m), NW .....	32 (14.5)	001608
11	Center Rod - 5'0" (1.5m), NWML .....	35 (15.9)	006278
12	Box Coupling (Repair Only) .....	6 (2.7)	150633-01
13	Plug - 1-1/8" (29mm) Hex to AW Rod Box .....	12 (5.4)	150312
13	Plug - 1-1/8" (29mm) Hex to AWML Rod Box .....	12 (5.4)	150379
13	Plug - 1-1/8" (29mm) Hex to NW Rod Box .....	11 (5)	150306
13	Plug - 1-1/8" (29mm) Hex to NWML Rod Box .....	11 (5)	180036-32
14	Plug Bolt.....	*	3130-0170
15	Pilot Bit, 2-Prong, 1-1/8" (29mm) Hex ..	2 (.9)	200024
15	Pilot Bit, 3-Wing, 1-1/8" (29mm) Hex.....	*	150574-08
	Repair Key .....	*	150633-03

See pages 2-39 and 2-40  
for cutterhead  
information

## CUTTERHEADS – 6-1/4" (159mm) 2-KEY HEAVY DUTY AUGER

### BULLDOG



A tough multi-purpose cutterhead for full range drilling. Bits are designed for a uniform wear pattern and longer service life. Recommended for abrasive conditions and difficult hard formations.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-1/4" (159mm)	11" (279mm)	27 (12.2)	61032-19

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bit.....*		150233
6-1/4" (159mm) Body .....†		150770

### BLADE



Suited for drilling in unconsolidated formations such as sandy loam and clay. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-1/4" (159mm)	11" (279mm)	27 (12.2)	61031-19

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*		004303
Blade Bolt.....*		001293
Flight Segment.....†		150587
6-1/4" (159mm) Body w/ Flight Segment.....†		150765

## SUPER DUTY BLADE BULLET



Ideal for consolidated formations, cemented gravel and concrete. Hard surfacing increases cutterhead life in hard, abrasive formations. Designed to accept a wooden plug or brass guide for use with the overshot wireline system.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-1/4" (159mm)	11" (279mm)	27 (12.2)	61033-05

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Cutterblade w/Carbide.....*		004303
Blade Bolt.....*		001293
Bullet Bit w/Retainer.....*		150194-03
Bullet Bit Holder.....*		216044-01
6-1/4" (159mm) Body w/ Flight Segment and Bit Holders .....†		150636-01

### SPADE



Superior cleaning action of spade's cutter blades reduces cutterhead clogging in soft, sticky clays. Blade angle enhances material conveyance.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-1/4" (159mm)	11" (279mm)	27 (12.2)	61036-15

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Spade Bit w/Retainer.....*		150194-04
Spade Bit Holder.....*		216044-02
Nail.....*		150678
6-1/4" (159mm) Body .....†		150775

*Continued on next page*



## CUTTERHEADS – 6-1/4" (159mm) 2-KEY HEAVY DUTY AUGER (cont.)

### BULLET SPADE



Combines chipping action of bullet bits with the cleaning action of spade blades. Ideal for shale and glacial tills.

#### CUTTERHEAD

Description	O.D.	Lb/Kg	Part No.
6-1/4" (159mm) .....	11" (279mm) .....	27 (12.2) .....	61037-08

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	* .....	150194-03
Spade Bit w/Retainer.....	* .....	150194-04
Bullet Bit Holder.....	* .....	216044-01
Spade Bit Holder .....	* .....	216044-02
Nail .....	* .....	150678
Flight Segment.....	† .....	150587-01
6-1/4" (159mm) Body .....	† .....	150776

### BULLET



For very efficient penetration in gravel, cobble or fractured formations. Bullet bit angles maintain hole gauge and reduce auger wear.

#### CUTTERHEAD

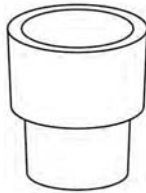
Description	O.D.	Lb/Kg	Part No.
6-1/4" (159mm) .....	11" (279mm) .....	27 (12.2) .....	61038-08

#### COMPONENT PARTS

Description	Lb/Kg	Part No.
Bullet Bit w/Retainer .....	* .....	150194-03
Bullet Bit Holder.....	* .....	216044-01
Flight Segment.....	† .....	150587-01
6-1/4" (159mm) Body .....	† .....	150777



**ROD HOLDING SLIP & SPIDER BOWL**



A rod holding slip is used in conjunction with a spider bowl to speed rod handling by centering the drill rod or casing and holding it securely. The spider bowl centers and holds the slip in the hollow stem auger at the top of the drill string. This technique eliminates the need for pipe wrenches or other holding devices. Order a spider bowl to fit each hollow stem auger size used and a slip assembly for each rod or casing size used. Spider bowls are used with the hollow stem augers noted in parenthesis. **Auger sizes are identified by auger I.D.**

**AUGER SPIDER BOWL: LITE-FLITE AUGER**

Description	Lb/Kg	Part No.
2-1/4" (57mm)	12 (5.4)	150184-12

**AUGER SPIDER BOWL: THREADED AUGER**

Description	Lb/Kg	Part No.
2-1/2" (64mm)	14 (6.4)	150184-01
3-3/8" (86mm)	15 (6.8)	150184-02
4" (102mm)	15 (6.8)	150184-03
6" (152mm)	19 (8.6)	150184-04

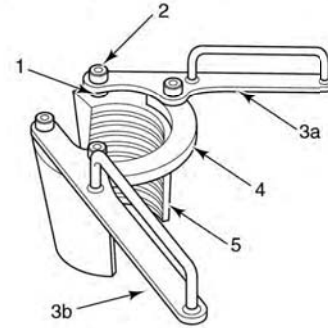
**AUGER SPIDER BOWL: TRI-LOK/2-KEY AUGERS**

Description	Lb/Kg	Part No.
3-1/4" (83mm)	14 (6.4)	150184-08
4-1/4" (108mm)	16 (7.3)	150184-09
6-1/4" (159mm)	†	150184-13
6-1/2" (168mm)	22 (10)	150184-10
8-1/4" (210mm)	25 (11.3)	150184-11
10-1/4" (260mm)	†	150184-14
12-1/4" (311mm)	†	150184-15

**ROD HOLDING SLIP ASSEMBLY**

Description	Lb/Kg	Part No.
A Rod	7 (3.2)	61013-06
AW, AWML & AWL Rod	7 (3.2)	61013-01
BW & BWL Rod	6 (2.7)	61013-02
N Rod	6 (2.7)	61013-08
NW & NWML Rod	6 (2.7)	61013-03
NWL Rod	6 (2.7)	61013-04
NXWL & 2-7/8" (73mm) Rod	6 (2.7)	61013-05

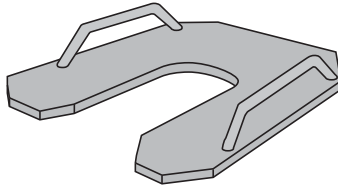
**2**



**COMPONENT PARTS**

Ref	Description	Lb/Kg	Part No.
1	Spacer (2 req'd)	*	210032-03
2	Hex Screw (4 req'd)	*	3319-0001
3a	Handle (R)	*	150171
3b	Handle (L)	*	150361
4	Link	*	150172-01
5	Rod Holding Slip, AW, AWML & AW Rod (2 req'd)	3 (1.4)	150173-01
5	Rod Holding Slip, BW & BWL Rod (2 req'd)	2 (.9)	150174-01
5	Rod Holding Slip, NW & NWML Rod (2 req'd)	2 (.9)	150175-01
5	Rod Holding Slip, NWL Rod (2 req'd)	2 (.9)	150176-01
5	Rod Holding Slip, NXWL & 2-7/8" (73mm) Rod (2 req'd)	2 (.9)	150177-01
5	Rod Holding Slip, N Rod (2 req'd)	2 (.9)	150207-01

## AUGER HOLDER (4-1/4" HSA style shown)



An auger holder is used to temporarily support hollow stem augers during removal of the drill string after soil sampling or monitoring well installation has been completed. Holders are used with the auger noted in parentheses. The above design is only representative. Other designs may vary.

### AUGER HOLDER: LITE-FLITE AUGER

Description	Lb/Kg	Part No.
2-1/4" (57mm) .....	10 (4.5) .....	150419-01

### AUGER HOLDER: MOBILOK JET AUGER

Description	Lb/Kg	Part No.
AWML .....	9 (4.1) .....	001329
NWML .....	9 (4.1) .....	001330

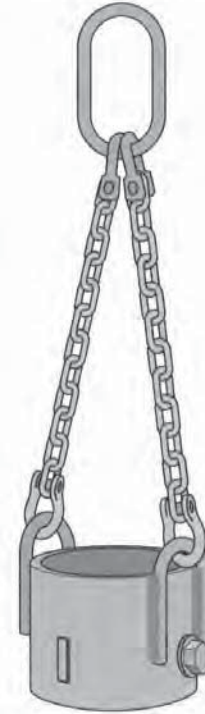
### AUGER HOLDER: THREADED AUGER

Description	Lb/Kg	Part No.
2-1/2" (64mm) .....	24 (10.9) .....	001332
3-3/8" (86mm) & 4" (102mm) .....	33 (15) .....	001335
6" (152mm) & 6-5/8" (168mm) .....	30 (13.6) .....	007076

### AUGER HOLDER: TRI-LOK/2-KEY AUGERS

Description	Lb/Kg	Part No.
3-1/4" (83mm) & 4-1/4" (108mm) .....	33 (15) .....	001335
6-5/8" (168mm) .....	30 (13.6) .....	007076
8-1/4" (210mm) .....	30 (13.6) .....	007166
10-1/4" (260mm) .....	50 (22.7) .....	217694
12-1/4" (311mm) .....	† .....	150419-04

## AUGER HOISTING ASSEMBLY



An auger hoisting assembly is used when it is required to pull hollow stem augers vertically utilizing the main hoist, as a part of the ground water monitoring or remediation well installation process. This technique allows the driller to pull up and back fill more than five feet at a time.

### AUGER HOISTING ASSEMBLY: THREADED AUGERS

Description	Lb/Kg	Part No.
2-1/2" (64mm) .....	22 (10) .....	61030-06
3-3/8" (86mm) .....	24 (10.9) .....	61030-07
4" (102mm) .....	25 (11.3) .....	61030-08
6" (152mm) .....	30 (13.6) .....	61030-09

### AUGER HOISTING ASSEMBLY: TRI-LOK AUGERS

Description	Lb/Kg	Part No.
3-1/4" (83mm) .....	21 (9.5) .....	61030-01
4-1/4" (108mm) .....	24 (10.9) .....	61030-02
6-5/8" (168mm) .....	30 (13.6) .....	61030-03
8-1/4" (210mm) .....	28 (12.7) .....	61030-04
10-1/4" (260mm) .....	59 (26.8) .....	61030-05
12-1/4" (311mm) .....	78 (35.4) .....	61030-10

## MOBILKIT

Mobilkits insure that all necessary accessories are included at shipment. They are used with the hollow stem augers noted in parentheses. **Auger sizes are identified by auger I.D.**

### Mobilkits for threaded augers contain:

- 1 retriever
- 1 holder
- 1 pointed hammer
- 1 pinch bar
- 6 rod bolt & nut sets
- 2 - 36" (.91 mm) pipe wrenches (2 - 48" (1.2 m) for 6" (152 mm) augers),
- 1 wedge tool
- 6 WedgLoks (2 for 6" (152 mm) augers).

Order extensions and auger guides separately.

### Mobilkits for TRI-LOK™ augers contain:

- 1 retriever
- 1 holder
- 1 pinch bar
- 6 rod bolt & nut sets
- 1 bolt wrench
- 6 lock bolts
- 3 clean out taps.

Order extensions and auger guides separately.

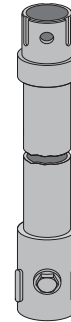
### MOBILKIT: THREADED AUGER

Description	Lb/Kg	Part No.
2-1/2" (64mm) .....	230 (104.3) .....	21014-16
3-3/8" (86mm) .....	240 (108.9) .....	21014-17
4" (102mm) .....	270 (122.5) .....	21014-18
6" (152mm) .....	270 (122.5) .....	21014-19

### MOBILKIT: TRI-LOK/2-KEY AUGERS

Description	Lb/Kg	Part No.
3-1/4" (83mm) .....	130 (59) .....	21014-20
4-1/4" (108mm) .....	200 (90.7) .....	21014-22
6-5/8" (168mm) .....	200 (90.7) .....	21014-23
8-1/4" (210mm) .....	† .....	21014-24
10-1/4" (260mm) .....	† .....	21014-25
12-1/4" (311mm) .....	† .....	21014-26

## AUGER EXTENSION



2

Essentially a flightless hollow stem auger, extensions are used to compensate for height of drill above ground when mounted on a truck or trailer. Sizes are identified by I.D.

### AUGER EXTENSIONS: THREADED

Description	Lb/Kg	Part No.
2-1/2" (64mm) x 2'0" (610mm) .....	29 (13.2) .....	006327
2-1/2" (64mm) x 2'6" (762mm) .....	33 (15) .....	006328
3-3/8" (86mm) x 1'6" (457mm) .....	† .....	150329-13
3-3/8" (86mm) x 2'0" (610mm) .....	32 (14.5) .....	006330
3-3/8" (86mm) x 2'6" (762mm) .....	36 (16.3) .....	006331
4" (102mm) x 2'0" (610mm) .....	35 (15.9) .....	006867
4" (102mm) x 2'6" (762mm) .....	39 (17.7) .....	006868
6" (152mm) x 2'0" (610mm) .....	38 (17.2) .....	007069
6" (152mm) x 2'6" (762mm) .....	42 (19.1) .....	007070

### AUGER EXTENSIONS: TRI-LOK

Description	Lb/Kg	Part No.
3-1/4" (83mm) x 1'6" (457mm) .....	† .....	150329-13
3-1/4" (83mm) x 2'0" (610mm) .....	31 (14.1) .....	150329-01
3-1/4" (83mm) x 2'6" (762mm) .....	35 (15.9) .....	150329-02
4-1/4" (108mm) x 1'4" (406mm) .....	15 (6.8) .....	150329-08
4-1/4" (108mm) x 2'0" (610mm) .....	18 (8.2) .....	150329-09
4-1/4" (108mm) x 3'0" (914mm) .....	20 (9.1) .....	150329-11
6-5/8" (168mm) x 1'4" (406mm) .....	44 (20) .....	150329-07
6-5/8" (168mm) x 2'0" (610mm) .....	52 (23.6) .....	150329-04
6-5/8" (168mm) x 2'6" (762mm) .....	56 (25.4) .....	150329-05
6-5/8" (168mm) x 3'0" (914mm) .....	64 (29) .....	150329-06
8-1/4" (210mm) x 2'6" (762mm) .....	66 (29.9) .....	150329-15
10-1/4" (260mm) x 2'0" (610mm) .....	† .....	150329-19
12-1/4" (311mm) x 2'0" (610mm) .....	† .....	150329-20

### AUGER EXTENSIONS: 2-KEY STANDARD DUTY

Description	Lb/Kg	Part No.
2-1/4" (57mm) x 24" (610mm) .....	† .....	150329-01
2-1/4" (57mm) x 30" (762mm) .....	† .....	150329-26
3-1/4" (83mm) x 24" (610mm) .....	† .....	150329-22
3-1/4" (83mm) x 30" (762mm) .....	† .....	150329-27

### AUGER EXTENSIONS: 2-KEY HEAVY DUTY

Description	Lb/Kg	Part No.
3-1/4" (83mm) x 24" (610mm) .....	† .....	150329-23
3-1/4" (83mm) x 30" (762mm) .....	† .....	150329-28
4-1/4" (108mm) x 24" (610mm) .....	† .....	150329-24
4-1/4" (108mm) x 30" (762mm) .....	† .....	150329-29
6-1/4" (159mm) x 24" (610mm) .....	† .....	150329-25
6-1/4" (159mm) x 30" (762mm) .....	† .....	150329-30

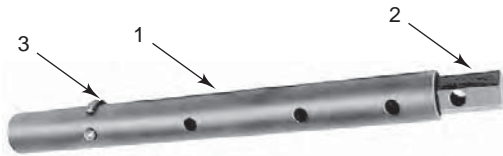
## EXTENSION ROD ASSEMBLY



Extension rods are essentially flightless augers. They are used to compensate for the drill base height above the ground when the drill is mounted in a truck, trailer, ORV or tracked carrier.

Description	Lb/Kg	Part No.
2'-0" (610mm), 2" (51mm) Hex .....	26 (11.8)	004604
2'-6" (762mm), 2" (51mm) Hex .....	28 (12.7)	003570
3'-0" (914mm), 2" (51mm) Hex .....	35 (15.9)	003573
5'-0" (1.5m), 2" (51mm) Hex.....	50 (22.7)	006735
5'-0" (1.5m), 1-5/8" (41mm) Hex.....	50 (22.7)	006090

## ADJUSTABLE EXTENSION ROD ASSEMBLY



Description	Lb/Kg	Part No.
1-3/16" (21mm) Hex .....	8 (3.6)	005364
1-1/8" (29mm) Hex .....	15 (6.8)	005365
1-5/8" (41mm) Hex .....	26 (11.8)	005363
2" (51mm) Hex.....	35(15.9)	338620

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Extension Tube - 1-3/16" (21mm) Hex Tube .....	5 (2.3)	006957
1	Extension Tube - 1- 1/8" (29mm) Hex Tube .....	7 (3.2)	006958
1	Extension Tube - 1- 5/8" (41mm) Hex Tube .....	13 (5.9)	006956
2	Extension Rod - 1-3/16" (21mm) Hex .....	5 (2.3)	006954
2	Extension Rod - 1- 1/8" (29mm) Hex.....	7 (3.2)	006955
2	Extension Rod - 1- 5/8" (41mm) Hex.....	15 (6.8)	006953
3	U-Pin 1-3/16" (21mm) Hex .....	*	001305
3	U-Pin 1- 1/8" (29mm) Hex .....	*	001306
3	U-Pin 1- 5/8" (41mm) Hex .....	*	001307
3	U-Pin 2" (51mm) Hex.....	*	001308

## AUGER RETRIEVER



An auger retriever is used to catch hold of hollow stem augers lost down the hole. Outside type retrievers achieve a firm grasp on the flights of the lost auger while inside type can be used where space is restricted. Check auger I.D. before ordering retriever. Retrievers are used with the hollow stem augers noted in parentheses. **Auger sizes are identified by auger I.D.**

### AUGER RETRIEVER: LITE-FLITE AUGER

Description	Lb/Kg	Part No.
Outside 2-1/4" (57mm) .....	15 (6.8)	150418-01
Inside 2-1/4" (57mm) .....	10 (4.5)	150327-07

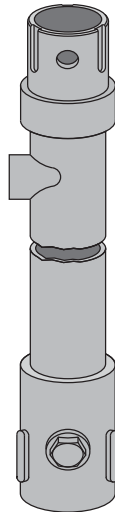
### AUGER RETRIEVER: THREADED AUGER

Description	Lb/Kg	Part No.
Outside 2-1/2" (64mm) .....	80 (36.3)	004923
Outside 3-3/8" (86mm) .....	100 (45.4)	004924
Outside 4" (102mm).....	104 (47.2)	004925
Outside 6" (152mm).....	140 (63.5)	004927
Inside Tap, RH Thread, 3-3/8" (86mm) .....	35 (15.9)	150327-03
Inside Tap, RH Thread, 4" (102mm).....	40 (18.1)	150327-04
Inside Tap, RH Thread, 6" (152mm).....	48 (21.8)	150327-05

### AUGER RETRIEVER: TRI-LOK AUGER

Description	Lb/Kg	Part No.
Outside 3-1/4" (83mm).....	85 (38.6)	150418-04
Outside 4-1/4" (108mm).....	180 (81.6)	150418-03
Inside Tap, LH Thread, 3-1/4" (83mm) .....	33 (15)	150327-01
Inside Tap, LH Thread, 6-5/8" (168mm) .....	87 (39.5)	150327-06
Outside, 10-1/4" (260mm).....	†	150418-07
Inside Tap, LH Thread, 4-1/4" (108mm).....	†	150327-08
Outside 2-1/4"(57mm).....	16 (7.3)	150418-01

## WASH TEE



Used for mud rotary drilling, the hollow stem auger wash tee greatly simplifies the recovery of circulation fluid. It provides a return port so that fluid used while drilling inside the hollow stem is delivered directly to the recirculation tank through the side port of the tee. Overall length is 21- $\frac{1}{2}$ " (546 mm). **Sizes are identified by hollow stem auger I.D.**

### WASH TEE: THREADED NPT SIDE PORT

Description	Lb/Kg	Part No.
2- $\frac{1}{2}$ " (64mm), 2" (51mm) .....	19 (8.6).....	150170-02
3- $\frac{3}{8}$ " (86mm), 2" (51mm) .....	27 (12.2) .....	150170-03
4" (102mm), 2" (51mm).....	30 (13.6) .....	150170-04
6" (152mm), 3" (76mm).....	42 (19.1) .....	150170-06

### WASH TEE: TRI-LOK NPT SIDE PORT

Description	Lb/Kg	Part No.
3- $\frac{1}{4}$ " (83mm), 2" (51mm).....	26 (11.8).....	150170-07
4- $\frac{1}{4}$ " (108mm), 2" (51mm).....	28 (12.7).....	150170-09
6- $\frac{5}{8}$ " (168mm), 3" (76mm).....	45 (20.4).....	150170-08
8- $\frac{1}{4}$ " (210mm), 3" (76mm).....	50 (22.7).....	150170-10
10- $\frac{1}{4}$ " (260mm), 2" (51mm).....	† .....	150170-11
10- $\frac{1}{4}$ " (260mm), 3" (76mm).....	† .....	150170-13
12- $\frac{1}{4}$ " (311mm), 2" (51mm).....	† .....	150170-12
12- $\frac{1}{4}$ " (311mm), 3" (76mm).....	† .....	150170-14

### WASH TEE: 2-KEY STANDARD DUTY NPT SIDE PORT

Description	Lb/Kg	Part No.
2- $\frac{1}{4}$ " (57mm), $\frac{1}{2}$ " (38mm).....	† .....	150170-16
3- $\frac{1}{4}$ " (83mm), 2" (51mm).....	† .....	150170-17

### WASH TEE: 2-KEY STANDARD DUTY NPT SIDE PORT

Description	Lb/Kg	Part No.
4- $\frac{1}{4}$ " (108mm), 2" (51mm).....	† .....	150170-18
6- $\frac{1}{4}$ " (159mm), 3" (76mm).....	† .....	150170-19

This section covers the standard components that are required to upgrade the performance of your existing Mobile drill. Heads are equipped with open spindles. Change quickly from auger drilling to either mud/air rotary or diamond core drilling.

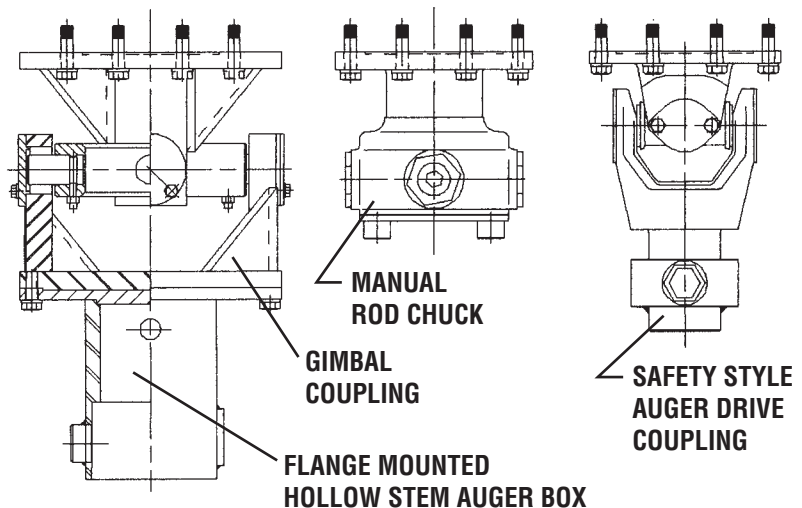
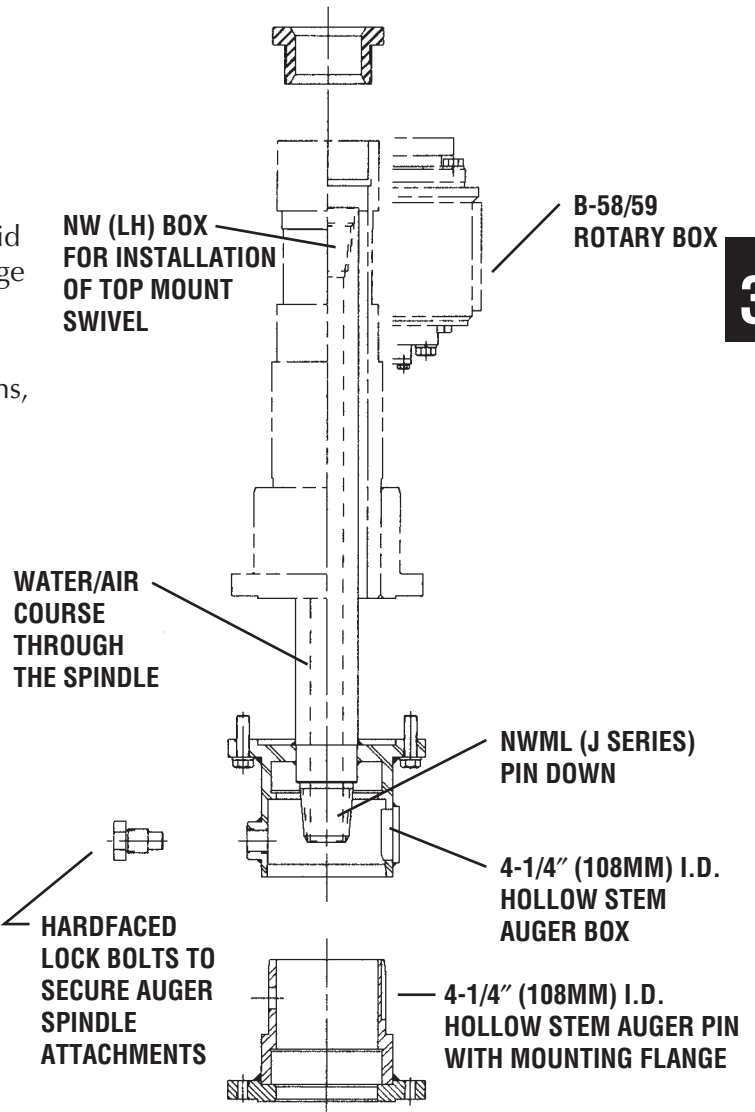
The gimbal assemblies and universal drives are designed with the driller in mind for easy and rapid coupling to the drill string. Additional quick change adapters are available that allow for faster field changes when changing auger or hex sizes.

For assistance in selecting the correct combinations, please contact the factory for further information.

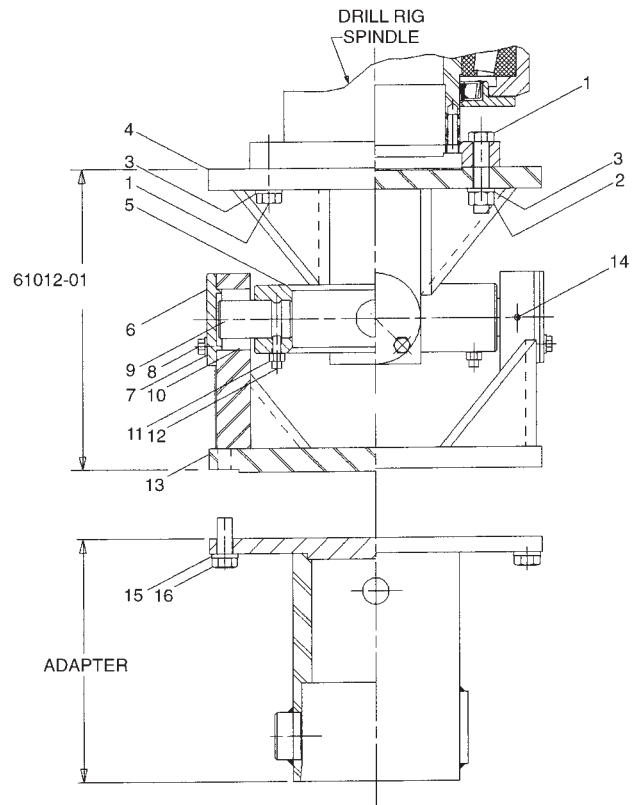
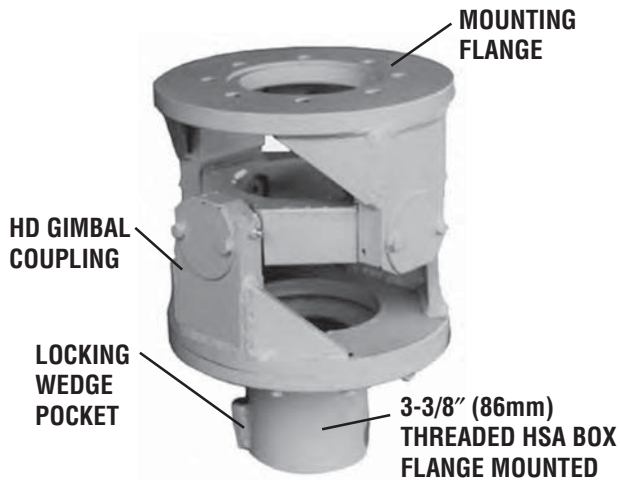
## QUICK CHANGE ADAPTER WITH QUILL ROD & BUSHING

A quick change coupling using a 4-1/4" (108mm) TRI-LOK box and pin combination with drill rod through the spindle for instant change between auger drilling and rotary/core drilling. The 4-1/4" (108mm) TRI-LOK box coupling is connected to the drill spindle through a multi-bolt flange. The 4-1/4" (108mm) TRI-LOK pin is connected to the safety auger coupling or the gimbal coupling. A drill rod through the spindle with a bushing allows for rotary drilling with the use of a top mount water swivel. Available in the following combinations: NWML rod pin bottom and NW rod box (L.H.) top or NWML rod pin bottom and NWML rod box top. NOTE: Order the auger couplings separately.

*Specifications on page 3-4.*



## MOBILE HD GIMBAL COUPLING



**3**

Mobile's Gimbal Coupling is an open center auger coupling that can be used with Mobile's exclusive in-hole sampling hammer. The coupling connects hollow stem augers to drill rigs with open spindles and permits continuous access through the spindle and augers to the bottom of the hole. Available only for the MOBILE DRILL models listed below, gimbal couplings are used with the drill model and hollow stem auger noted in parentheses. **Auger sizes are identified by auger I.D.**

### ADAPTER: THREADED AUGER

Description	Lb/Kg	Part No.
2-1/2" HSA (63.5mm).....	19 (8.6)	150109
3-3/8" HSA (86mm) .....	20 (9.1)	140635
4" HSA (102mm) .....	21 (9.5)	140840
6" HSA (152mm).....	24 (10.9)	150191

### ADAPTER: TRI-LOCK AUGER (3-KEY)

Description	Lb/Kg	Part No.
3-1/4" HSA (83mm) .....	19(8.6)	213296
4-1/4" HSA (108mm).....	27 (12.2)	150480
6-5/8" HSA (168mm).....	35 (15.9)	150453
8-1/4" HSA (210mm).....	40 (18.1)	216561
10-1/4" HSA (261mm).....	63 (28.6)	150619
12-1/4" HSA (311mm).....	86 (39.1)	217486
BLANK FLANGE .....	24 (10.9)	217013

### ADAPTER: 2-KEY HEAVY DUTY

Description	Lb/Kg	Part No.
4-1/4" HSA (108mm).....	27 (12.2)	150694
6-1/4" HSA (159mm).....	33 (15.0)	217904

Other Adapters available on request.

### COMPONENT PARTS

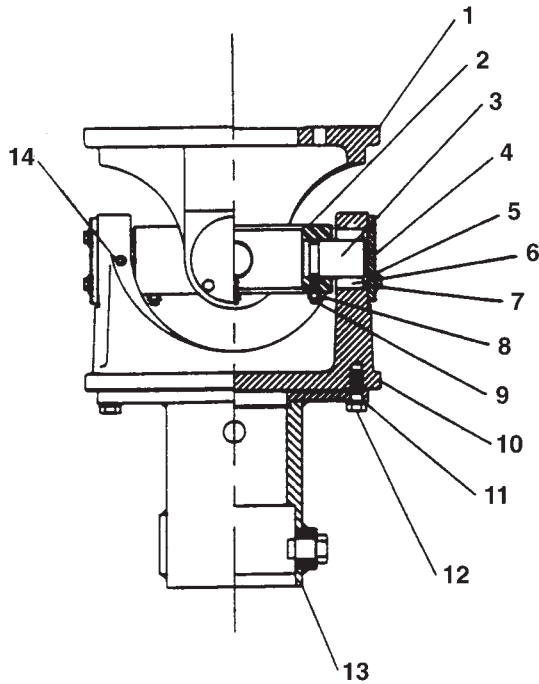
Ref	Description	Lb/Kg	Part No.
	Gimbal Coupling (includes items 1-16) .....	75 (34)	61012-01
1	Hex Bolt (8 req'd for B-47HD, B-53 & B-80) .....	*	3100-0067
1	Hex Bolt (8 req'd for B-57, B-59 & B-61HDX) .....	*	3100-0037
2	Hex Nut (8 req'd for B-47HD, B-53 & B-80) .....	*	3122-0008
3	Lock Washer (8 req'd) .....	*	3126-0008
4	Top Yoke .....	20 (9.1)	052644
5	Cross .....	16 (7.3)	140632
6	Retainer Cap (4 req'd).....	*	140630
7	Lock Washer (8 req'd) .....	*	3126-0005
8	Hex Bolt (8 req'd) .....	*	3100-0008
9	Pin (4 req'd).....	1 (.5)	140633
10	Bearing (4 req'd) .....	1 (.5)	140634
11	Hex Jam Nut (4 req'd).....	*	3204-0005
12	Set Screw (4 req'd).....	*	3142-0081
13	Bottom Yoke .....	22 (10)	140631
14	Grease Fitting (4 req'd).....	*	3129-0001
15	Lock Washer (10 req'd) .....	*	3126-0005
16	Hex Bolt (10 req'd) .....	*	3100-0008



## HEAVY DUTY GIMBAL COUPLING

Mobile's Heavy Duty Gimbal Coupling is a heavy duty, open center auger coupling that can be used with Mobile's exclusive in-hole sampling hammer. The coupling connects hollow stem augers to drill rigs with open spindles and permits continuous access through the spindle and augers to the bottom of the hole. Available for all MOBILE drill models.

Auger sizes are identified by auger I.D.



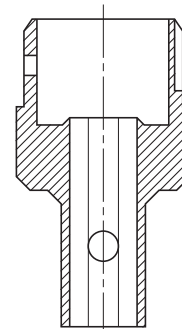
### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
	Gimbal Coupling (includes items 1-14).....†		61041-01
1	Yoke, Top .....	†	217792-01
2	Cross.....†		217793
3	Pin.....†		217794
4	Cap, Retainer.....†		217795
5	Lockwasher, 5/16".....†		3126-0005
6	Bearing.....†		217796
7	Bolt, Hex 5/16-18 UNC x 3/4" Lg.....†		3100-0008
8	Nut, Hex Jam 5/16-18 UNC.....†		3204-0005
9	Setscrew, Hex Socket Head.....†		3142-0091
10	Yoke, Bottom.....†		217792-02
11	Lockwasher, 1/2".....†		3126-0008
12	Bolt, Hex 1/2-13 UNC x 1-1/2" Lg.....†		3100-0037
13	Auger Connector (4-1/4 HSA).....†		217797
	Auger Connector (6-5/8 HSA).....†		217798
	Auger Connector (8-1/4 HSA).....†		217799
	Auger Connector (10-1/4 HSA).....†		217800
	Auger Connector (12-1/4 HSA).....†		217801
14	Fitting, Grease.....†		3129-0001

Other Adapters available on request.

## GIMBAL TO HEX ADAPTER

Gimbal to hex adapters allow using a gimbal coupling set up for threaded augers to be used to turn tools with hex drives. It consists of an auger pin up and a hex socket down. **Sizes are identified by hollow stem auger I.D. and hex size.**



TRI-LOK™ Shown

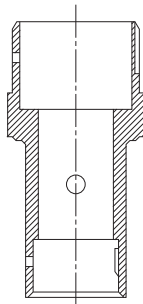
### HEX ADAPTER - THREADED AUGER

Description	Lb/Kg	Part No.
3-3/8" (86mm) Pin to 1-5/8" (41mm) Hex Box.....	14 (6.4)	006828
3-3/8" (86mm) Pin to 2" (51mm) Hex Box.....	15 (6.8)	150159-01
4" (102mm) Pin to 1-5/8" (41mm) Hex Box.....	15 (6.8)	150160-01
4" (102mm) Pin to 2" (51mm) Hex Box....	16 (7.3)	150160-02

### HEX ADAPTER: TRI-LOK AUGER

Description	Lb/Kg	Part No.
3-1/4" (83mm) Pin to 1-5/8" Hex Box.....	11 (5)	150344-02
3-1/4" (83mm) Pin to 2" (51mm) Hex Box.....	12 (5.4)	150344-01
4-1/4" (108mm) Pin to 1-5/8" (41mm) Hex Box.....	15 (6.8)	150496-01
4-1/4" (108mm) Pin to 2" (51mm) Hex Box.....	16 (7.3)	150496-02
6-5/8" (168mm) Pin to 1-5/8" (41mm) Hex Box.....	18 (8.2)	150456-01
6-5/8" (168mm) Pin to 2" (51mm) Hex Box.....	18 (8.2)	150456-02

## ADAPTER: HOLLOW STEM AUGER PIN UP TO HOLLOW STEM AUGER BOX DOWN



TRI-LOK™ To TRI-LOK™ Shown

Size adapters allow the driller to quickly change auger size without having to reconfigure the gimbal coupling. It consists of a pin coupling up and various sizes of TRI-LOK or 2-key threaded auger box couplings down. **Sizes are identified by hollow stem auger I.D.**

### SIZE ADAPTER: THREADED TO THREADED

Description	Lb/Kg	Part No.
4" (102mm) Pin to 3-3/8" (86mm) Box	30 (13.6)	150160-03

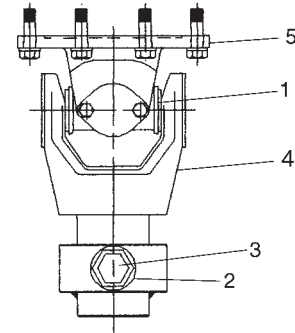
### SIZE ADAPTER: THREADED TO TRI-LOK

Description	Lb/Kg	Part No.
3-3/8" (86mm) Pin to 6-5/8" (168mm) Box	30 (13.6)	150159-03

### SIZE ADAPTER: TRI-LOK TO TRI-LOK

Description	Lb/Kg	Part No.
4-1/4" (108mm) Pin to 6-5/8" (168mm) Box	45 (20.4)	150547-02
6-5/8" (168mm) Pin to 3-1/4" (83mm) Box	24 (10.9)	150456-03
6-5/8" (168mm) Pin to 4-1/4" (108mm) Box	30 (13.6)	150456-05
6-5/8" (168mm) Pin to 8-1/4" (210mm) Box	40 (18.1)	150456-07
6-5/8" (168mm) Pin to 10-1/4" (260mm) Box	68 (30.8)	150645-04
8-1/4" (210mm) Pin to 4-1/4" (108mm) Box	38 (17.2)	150539-04
8-1/4" (210mm) Pin to 6-5/8" (168mm) Box	40 (18.1)	150539-05

## AUGER COUPLING ASSEMBLIES



flange. A universal joint is connected to the hex socket to lessen bearing wear on mis-aligned holes. A rubber sheath completely covers the countersunk connecting bolts to provide a smooth surface and enhance operator safety.

Description	Part No.
1-1/8" (29mm) Hex w/fabricated collar (B-24, B-31)	71109-15
1-5/8" (41mm) Hex w/fabricated collar (B-24, B-31)	71109-14
1-5/8" (41mm) Hex Heavy Duty w/safety collar (B-47HD, B-53, B-57, B-59, B-61HDX)	71109-11
2" (51mm) Hex Heavy Duty w/safety collar (B-47HD, B-53, B-57, B-59, B-61HDX)	71109-10

### COMPONENT PARTS

Ref	Description	Part No.
1	Journal & bearing kit (B-24, B-31)	210146-06
1	Journal & bearing kit (B-47HD, B-53, B-57, B-59, B-61HDX)	214541
2	Threaded bushing	150308
3	Lockbolt (for 1-1/8" (29mm) Hex)	216808-10
3	Lockbolt	216808-02
4	Lower yoke for 1-1/8" (29mm) Hex for 71109-15	†
4	Lower yoke for Light Duty 1-5/8" (41mm) Hex for 71109-14	†
4	Lower yoke for Heavy Duty 1-5/8" (41mm) Hex for 71109-11	217279-02
4	Lower yoke 2" 51mm) Hex for 71109-10	217279-01
*	Neoprene boot (Use with P/Ns 71109-14, -15)	217299
*	Neoprene boot (Use with P/Ns 71109-10, -11)	217298
5	Flanged yoke (Use with P/Ns 71109-14, -15)	217714
5	Flanged yoke (Use with P/Ns 71109-10, -11)	214542

\*Not shown

## QUICK CHANGE ADAPTER WITH QUILL ROD & BUSHING

### B-57

#### Center Rod

Assembly No.	Quick Change Size	Upper Connection	Lower Connection	Upper Adapter	Lower Adapter	Spindle Bushing
23176-21	3-1/4" HSA Pin Down	NW Rod Box (L.H.)	NWML Rod Box	216451	216455	180455-13
23182-01	3-1/4" HSA Box Down	1-1/4" NPT L.H. Box	NW Rod Pin	216523	216524	180455-13
23182-02	3-1/4" HSA Box Down	NW Rod Box (L.H.)	NWML Rod Pin	216537	216524	180455-13
23182-03	4-1/4" HSA Box Down	NW Rod Box (L.H.)	NWML Rod Pin	216555	216556	180455-13
23182-04	Replaced by 23182-01					
23182-05	3-1/4" HSA Box Down	NW Rod Box (L.H.)	NW Rod Pin	216721	216524	180455-13
23182-06	4-1/4" HSA Box Down	No Center Rod		217074	216556	

### B-5700/B-58/B-59/B-5900/B-61HDX

#### Center Rod

Assembly No.	Quick Change Size	Upper Connection	Lower Connection	Upper Adapter	Lower Adapter	Spindle Bushing
23182-06	4-1/4" HSA Box Down	No Center Rod		217074	216556	
23182-07	Replaced by 23182-08					
23182-08	4-1/4" HSA Box Down	NWML Rod Box	NWML Rod Pin	217443	216556	051308
23182-09	4-1/4" HSAHD Box Down	NW Rod Box(L.H.)	NWML Rod Pin	217555	217554	051308
23182-10	4-1/4" HSA Box Down	NW Rod Box (L.H.)	NWML Rod Pin	217567	216556	051308
23182-11	4-1/4" HSA Box Down	2" NPT L.H. Box	2-3/8" Mayhew Junior	217700	216556	052901

### B-31/B-47

#### Center Rod

Assembly No.	Quick Change Size	Upper Connection	Lower Connection	Upper Adapter	Lower Adapter	Spindle Bushing
23176-01	3-1/4" HSA Pin Down	NW Rod Box (L.H.)	NWML Rod Box	217376	217377	216354
23176-11	3-1/4" HSA Box Down	NW Rod Box	NWML Rod Pin	216537	217190	216354
23176-12	3-1/4" HSA Pin Down	NW Rod Box (L.H.)	NWML Rod Pin	217376	217377	216354
23176-21	3-1/4" HSA Pin Down	NW Rod Box (L.H.)	NWML Rod Box	216451	216455	180455-13

### B-47HD/B-53/B-80

#### Center Rod

Assembly No.	Quick Change Size	Upper Connection	Lower Connection	Upper Adapter	Lower Adapter	Spindle Bushing
23182-06	4-1/4" HSA Box Down	No Center Rod		217074	216556	
23176-50	4-1/4" HSA Box Down	NW Rod Box (L.H.)	NWML Rod Pin	217639	216556	140489

### B-90/B-4300/B-4500

#### Center Rod

Assembly No.	Quick Change Size	Upper Connection	Lower Connection	Upper Adapter	Lower Adapter	Lower Adapter	Spindle Bushing
23195-01	6-5/8" HSA Pin Down	2" NPT L.H. Internal	3-1/2" API Reg Pin	217529	217530	217745	180455-21
23195-02	6-5/8" HSA Pin Down	2" NPT Internal	3-1/2" API Reg Pin	217529	217530	217746	180455-21
		2-1/2" NPT External					
23195-03	6-5/8" HSA Pin Down	NW L.H. Internal	3-1/2" API Reg Pin	217529	217530	217788	180455-21
23195-04	6-5/8" HSA Pin Down	NW L.H. Internal	3-1/2" API Reg Pin	217894	217530	N/A	180455-21
23195-05	6-5/8" HSA Pin Down	NW L.H. Internal	3-1/2" API Reg Box	217529	217530	218555	180455-21
23195-06	6-5/8" HSA Pin Down	NW L.H. Internal	3-1/2" API Reg Pin	219053	217530	217788	180455-21
23195-07	6-5/8" HSA Pin Down	2-1/2" NPT L.H. Internal	4-1/2" I J	219053	217530	219053	180455-23
23195-08	6-5/8" HSA Pin Down	NW L.H. Internal	3-1/2" API Reg Pin	219103	219105	219102	180455-21

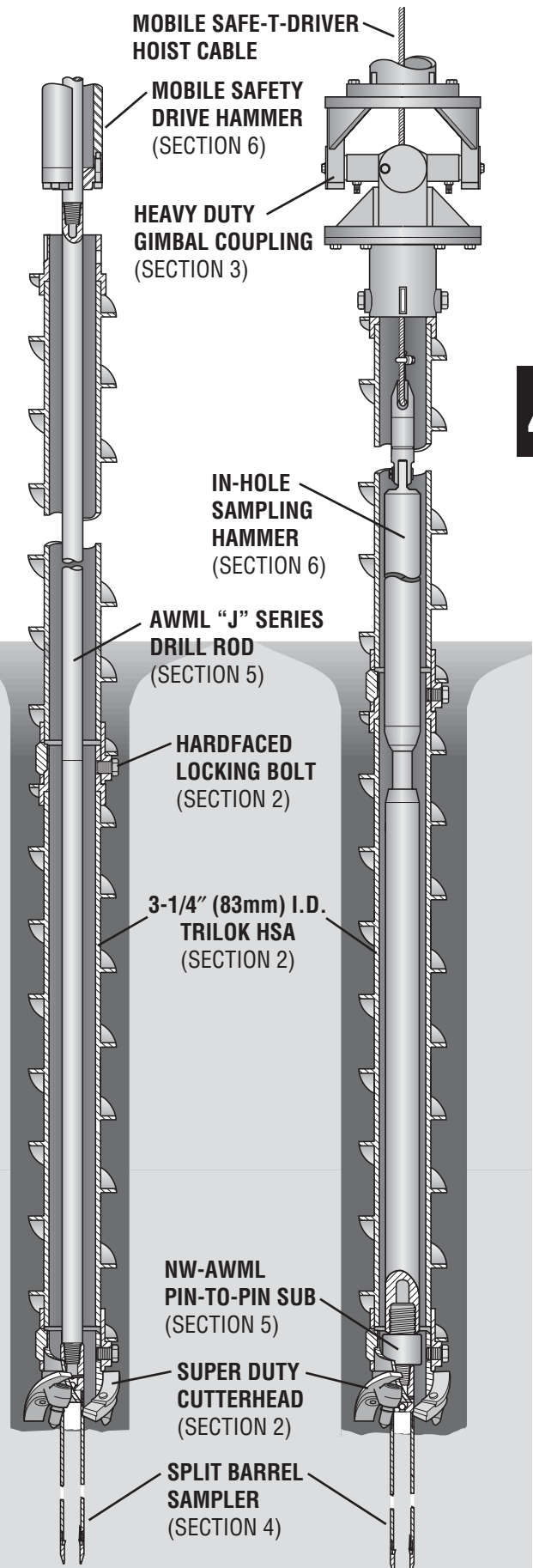
Mobile designs and manufactures the most widely used sampling tools and accessories on the market today. Used in conjunction with our complete line of hollow stem augers, they meet both the industry's geotechnical and environmental sampling demands.

Sampling tools to recover representative samples are available in two distinct types: those to recover disturbed samples and those to recover relatively undisturbed samples.

The first type recovers samples that contain all constituents in their proper portions but not necessarily in their natural or insitu form and are generally used for environmental applications. Examples are the ADO or LYNAC Standard Penetration Samplers. The second type, such as the thin wall or "Shelby" Tube Sampler, are generally used for geo-technical and environmental applications to recover high quality samples suitable for detailed laboratory analysis.

Environmental exploration requires sampler liners that are chemically compatible with the subject formation for custodial care of potentially dangerous samples. Conditions may also require frequent health examinations, possible use of protective clothing with respirators, extensive training and special permits.

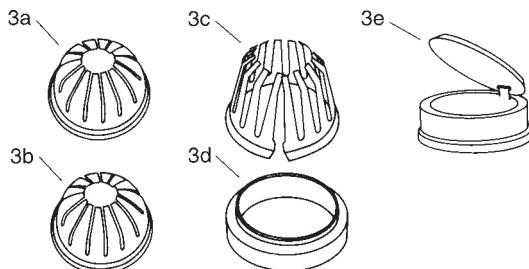
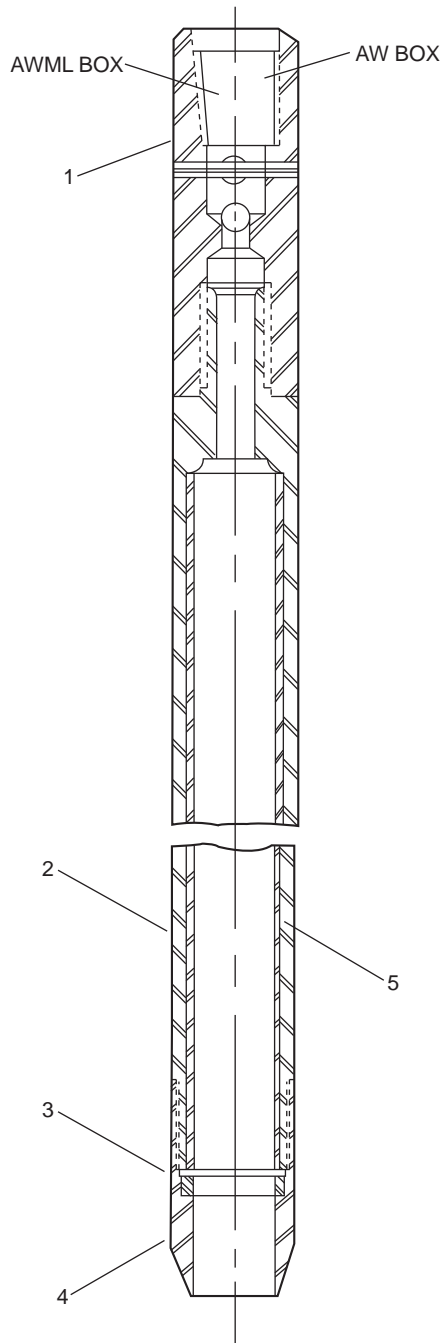
To help meet this challenge, a series of new techniques and tools have been developed by MOBILE DRILL® such as the MOSS (Mobile Open Spindle Sampling System), which includes both a basic and an overshot series for 3-1/4" (83mm) through 6-5/8" (168mm) I.D. hollow stem augers. This new equipment provides at least a two-fold increase in productivity without a reduction in quality. This equipment also facilitates the rapid and accurate completion of the environmental inventories mandated by federal, state and local regulations.



## Mobile's LYNAC® Split Barrel Sampler (Fast Thread Version)

Mobile's LYNAC® Sampler is an improved version of the industry standard split barrel sampler. It includes a shoe, barrel and head with "fast threads" to speed assembly and disassembly. Optional **MOBILOK™**, tapered threads (AWML) expedite attaching the sampler to driving tools. Normally driven by a 140 lb. Safety Hammer, an In-Hole Sampling Hammer or **Mobile's SPT Automatic Hammer**. The sampler barrel has a stepped-joint design to facilitate reassembly of the barrel and a heat-treated shoe to better withstand severe driving conditions. In addition, a ball check valve prevents wash-out during removal from the hole and the shoe design accommodates a Flap Valve or Spring Retainer. Recommended for all Standard Penetration Test procedures. Furnished with a spacer, order sample retainers separately. **Sizes are identified by sampler O.D.**

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### SAMPLER ASSEMBLY: TERZAGHI (BLUNT) SHOE

Description	Lb/Kg	Part No.
1'6" (457mm), AW	14 (6.4)	67039-12
2'0" (610mm), AW	17 (7.7)	67039-17
1'6" (457mm), AWML	14 (6.4)	67039-02
2'0" (610mm), AWML	17 (7.7)	67039-07

### SAMPLER ASSEMBLY: ASTM (SHARP) SHOE

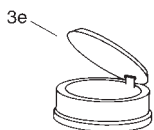
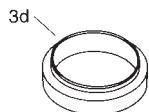
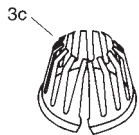
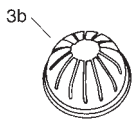
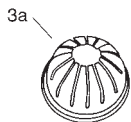
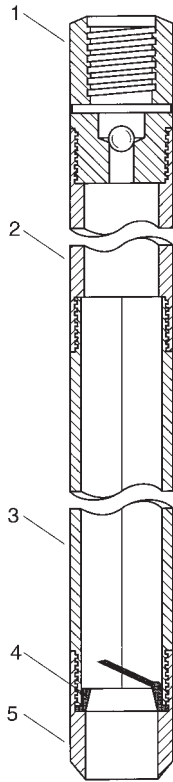
Description	Lb/Kg	Part No.
1'6" (457mm), AW	14 (6.4)	67039-11
2'0" (610mm), AW	17 (7.7)	67039-16
1'6" (457mm), AWML	14 (6.4)	67039-01
2'0" (610mm), AWML	17 (7.7)	67039-06

### COMPONENT PARTS

Ref	Description	Lb/Kg	Part No.
1	Head Assembly, AW Box	4 (1.8)	67024-06
1	Head Assembly, AWML Box	4 (1.8)	67024-05
2	Split Barrel: 1'6" (457mm), Set of 2	9 (4.1)	67025-16
2	Split Barrel: 2'0" (610mm), Set of 2	10 (4.5)	67025-17
3	Spacer (for use w/o retainer or flap valve)	*	190006-01
3a	Basket Retainer, Heavy Duty, Steel	*	002417
3b	Basket Retainer, Light Duty, Plastic	*	190176
3c	Spring Retainer, Light Duty, Steel (006746 req'd)	*	005420
3d	Adapter Ring (for use with 005420)	*	006746
3e	Flap Valve, Heavy Duty, Steel	*	002421
4	Blunt Shoe	1 (.5)	190071-05
4	Sharp Shoe	1 (.5)	190071-06
5	Plastic Liner, 1'6" (457mm)	*	190138-04
5	Plastic Liner, 2'0" (610mm)	*	190138-05

## SPLIT BARREL SAMPLERS

All-purpose sampler used for visual classification, contamination content and moisture determination. The split barrel permits removal of sample as it is taken from the ground. Generally driven by a 140 lb (63.5kg) safety hammer, an in-hole sampling hammer or **Mobile's SPT Automatic Hammer**, falling 2'6" (762mm). The number of blows required to penetrate each half foot is often recorded as the relative density of material. In noncohesive soils, the sampler is used with a flap valve, light duty or heavy duty basket trap. 2' (51mm) samplers are available with both standard and **MOBILOK™** (AWML) thread design. **Sizes are identified by sampler O.D.** Furnished with spacer, order sample retainers separately. Other sizes than shown are available. Please consult factory.



### 4Threads Per Inch Split Barrel Sampler

Sampler OD	Sampler ID	Shoe ID	Length Barrel	Rod Conn.	Shoe Type		Weight	
					Terzaghi (Blunt)	ASTM (Sharp)	lb	kg
2" (50.8mm)	1.5" (38.1mm)	1.375" (34.9mm)	18" (457.2mm)	AW	67006-13	67006-14	13.6	6.2
				AWML	67006-15	67006-16	13.6	6.2
			24" (609.6mm)	AW	67006-17	67006-18	16.0	7.3
				AWML	67006-19	67006-20	16.0	7.3
2.5" (63.5mm)	2" (50.8mm)	1.875" (47.6mm)	18" (457.2mm)	AW	67007-01	67007-02	18.9	8.6
				AWML	67007-05	67007-06	18.9	8.6
			24" (609.6mm)	AW	67007-03	67007-04	22.4	10.2
				AWML	67007-07	67007-08	22.4	10.2
3" (76.2mm)	2.5" (63.5mm)	2.375" (60.3mm)	18" (457.2mm)	NW	67008-13	67008-14	26.3	11.9
				NW	67008-15	67008-16	28.0	12.7
			24" (609.6mm)	NWML	67008-17	67008-18	26.3	11.9
				NWML	67008-19	67008-20	28.0	12.7

### 8Threads Per Inch Split Barrel Sampler

Sampler OD	Sampler ID	Shoe ID	Length Barrel	Rod Conn.	Shoe Type		Weight	
					Terzaghi (Blunt)	ASTM (Sharp)	lb	kg
2" (50.8mm)	1.5" (38.1mm)	1.375" (34.9mm)	18" (457.2mm)	AW	67006-10	67006-09	13.6	6.2
				AWML	67006-04	67006-03	13.6	6.2
			24" (609.6mm)	AW	67006-12	67006-11	16.0	7.3
				AWML	67006-06	67006-05	16.0	7.3
2.5 (63.5mm)	2 (50.8mm)	1.875 (47.6mm)	18" (457.2mm)	AW	007104	006434	18.9	8.6
				AWML	67007-09	67007-10	18.9	8.6
			24" (609.6mm)	AW	007105	007100	22.4	10.2
				AWML	67007-11	67007-12	22.4	10.2
3" (76.2mm)	2.5" (63.5mm)	2.375" (60.3mm)	18" (457.2mm)	NW	007109	006437	26.3	11.9
				NW	007111	007110	28.0	12.7
			24" (609.6mm)	NWML	67008-04	67008-03	26.3	11.9
				NWML	67008-06	67008-05	28.0	12.7

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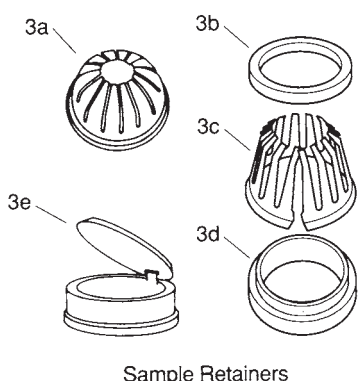
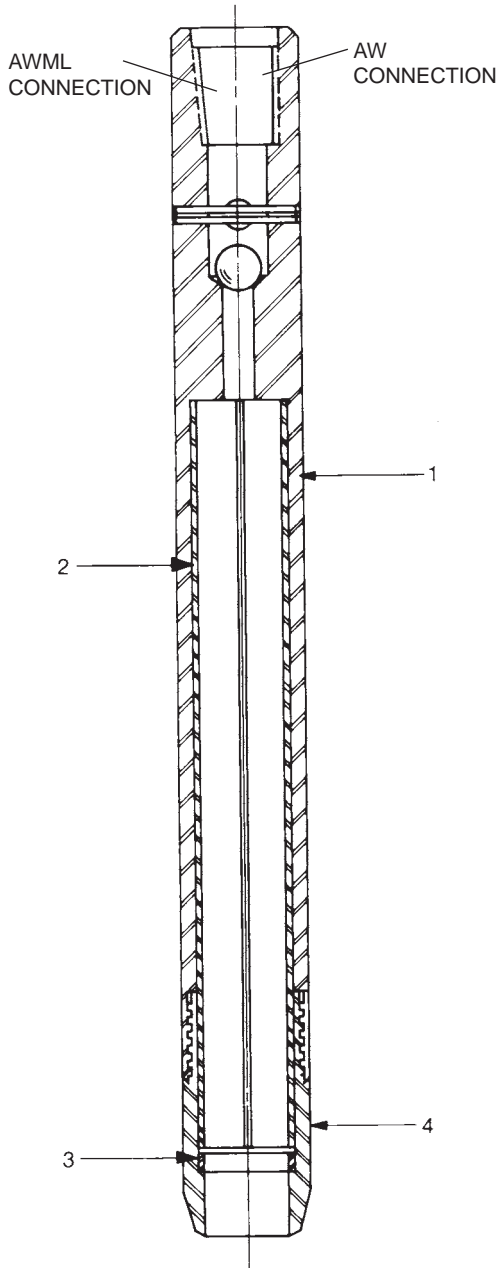
## 4 Threads Per Inch Split Barrel Sampler – Component Parts

Ref. No.	Description	2" OD (50.8mm)			2.5" OD (63.5mm)			3.0" OD (76.2mm)		
		Part No.	Weight lbs kg		Part No.	Weight lbs kg		Part No.	Weight lbs kg	
1	Head Assy, w/ AW Box Connection	67021-14	2.3	1.0	67021-15	4.0	1.8	67021-22	†	†
1	Head Assy, w/ AWML Box Connection	67021-16	2.3	1.0	67021-21	†	†	67021-23	†	†
1	Head Assy, w/ NW Box Connection	N/A	—	—	N/A	—	—	67021-17	—	—
1	Head Assy, w/ NWML Box Connection	N/A	—	—	N/A	—	—	67021-19	—	—
2	Waste Barrel	006069	†	†	006070	†	†	006071	†	†
3	18" (457.2mm) Split Barrel	67022-17	6.6	3.0	67022-18	8.3	3.8	67022-19	11.0	5.0
3	24" (609.6mm) Split Barrel	67022-21	8.8	4.0	67022-22	11.0	5.0	67022-23	13.0	5.9
4	Spacer	190006-01	*	*	190006-02	*	*	190006-03	*	*
5	Shoe, Terzaghi (blunt)	190071-40	1.0	.5	190071-41	1.6	.7	190071-42	2.0	.9
5	Shoe, ASTM (sharp)	190071-44	1.0	.5	190071-45	1.6	.7	190071-46	2.0	.9
	<b>Optional Accessories</b>									
	18" (457.2mm) Plastic Liner	190077-02	*	*	†	†	†	†	†	†
	24" (609.6mm) Plastic Liner	190077-03	*	*	†	†	†	†	†	†
	Spring Retainer (light duty steel)	005420	*	*	†	†	†	†	†	†
	Adaptor Ring (for light duty steel)	006746	*	*	†	†	†	†	†	†
	Basket Retainer (heavy duty)	190033	*	*	002418	*	*	002419	*	*
	Basket Retainer (plastic)	190165	*	*	190165-05	*	*	190177	*	*
	Flap Valve	002421	*	*	002422	*	*	002423	*	*

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## 8 Threads Per Inch Split Barrel Sampler – Component Parts

Ref. No.	Description	2" OD (50.8mm)			2.5" OD (63.5mm)			3.0" OD (76.2mm)		
		Part No.	Weight lbs kg		Part No.	Weight lbs kg		Part No.	Weight lbs kg	
1	Head Assy, w/ AW Box Connection	67021-02	2.3	1.0	006340	4.0	1.8	67021-25	†	†
1	Head Assy, w/ AWML Box Connection	67021-01	2.3	1.0	67021-24	†	†	67021-26	†	†
1	Head Assy, w/ NW Box Connection	N/A	—	—	N/A	—	—	006341	—	—
1	Head Assy, w/ NWML Box Connection	N/A	—	—	N/A	—	—	67021-03	—	—
2	Waste Barrel	006069	†	†	006070	†	†	006071	†	†
3	18" (457.2mm) Split Barrel	67022-02	6.6	3.0	006078	8.3	3.8	67021-05	11.0	5.0
3	24" (609.6mm) Split Barrel	67022-03	8.8	4.0	006082	11.0	5.0	001113	13.0	5.9
4	Spacer	190006-01	*	*	190006-02	*	*	190006-03	*	*
5	Shoe, Terzaghi (blunt)	190071-01	1.0	.5	007102	1.6	.7	007112	2.0	.9
5	Shoe, ASTM (sharp)	190071-02	1.0	.5	002414	1.6	.7	002415	2.0	.9
	<b>Optional Accessories</b>									
	18" (457.2mm) Plastic Liner	190077-02	*	*	†	†	†	†	†	†
	24" (609.6mm) Plastic Liner	190077-03	*	*	†	†	†	†	†	†
	Spring Retainer (light duty steel)	005420	*	*	†	†	†	†	†	†
	Adaptor Ring (for light duty steel)	006746	*	*	†	†	†	†	†	†
	Basket Retainer (heavy duty)	190033	*	*	002418	*	*	002419	*	*
	Basket Retainer (plastic)	190176	*	*	190165-05	*	*	190177	*	*
	Flap Valve	002421	*	*	002422	*	*	002423	*	*



## ADO STANDARD PENETRATION SAMPLER

Used for the same purpose as the Split Barrel Sampler. Recovers samples for visual inspection in the field and for general classification testing in the laboratory. Specifically designed by Mobile to provide the maximum strength possible under ASTM-1566. The tool consists of two 2'0" (610mm) long split steel halves enclosed within a solid outer tube which is welded to the head section. The sample and split liners are removed by unscrewing the shoe, a process which does not require disconnection of the sampler from the drill rod. Can be furnished with Terzaghi or ASTM type shoe. For use in noncohesive soils, basket retainers and flap valve are available as separate items. Furnished with spacer, order sample retainer separately. **Sizes are identified by sampler O.D.** Includes ball and roll pin.

Sampler O.D.	Liner I.D.
2" (51mm)	1-3/8" (35mm)
3-1/8" (79mm)	2-1/2" (64mm)

### SAMPLER ASSEMBLY: TERZAGHI (BLUNT) SHOE

Description	Lb/Kg	Part No.
2" (51mm) x 2'0" (610mm), AW Box	15 (6.8)	005416
2" (51mm) x 2'0" (610mm), AWML Box	15 (6.8)	67000-01
3-1/8" (79mm) x 2'0" (610mm), NW Box	30 (13.6)	006356
3-1/8" (79mm) x 2'0" (610mm), NWML Box	30 (13.6)	67001-01

### SAMPLER ASSEMBLY: ASTM (SHARP) SHOE

Description	Lb/Kg	Part No.
2" (51mm) x 2'0" (610mm), AW Box	15 (6.8)	67000-03
2" (51mm) x 2'0" (610mm), AWML Box	15 (6.8)	67000-02
3-1/8" (79mm) x 2'0" (610mm), NW Box	30 (13.6)	67001-03
3-1/8" (79mm) x 2'0" (610mm), NWML Box	30 (13.6)	67001-02

### COMPONENT PARTS: 2" (51mm) O.D.

Ref	Description	Lb/Kg	Part No.
1	Tube, Solid: AW Rod Box	15 (6.8)	005422
1	Tube, Solid: AWML Rod Box	15 (6.8)	150217
2	Liner, Split: Steel, (Set of 2)	4 (1.8)	005418
3	Spacer: (For Use w/o Retainer or Flap Valve) ...*		005421
3a	Retainer, Basket: Heavy Duty, Steel	*	003843
3b	Collar, Retainer (For Use w/005420)	*	006067
3c	Retainer, Spring: Lt. Duty, Steel (006067 & 006068 Req'd)	*	005420
3d	Ring, Retainer (For Use w/005420)	*	006068
3e	Valve, Flap Heavy Duty, Steel	*	003890
4	Shoe, Blunt	1(.5)	005419
4	Shoe, Sharp	1(.5)	003940

### COMPONENT PARTS: 3-1/8" (79mm) O.D.

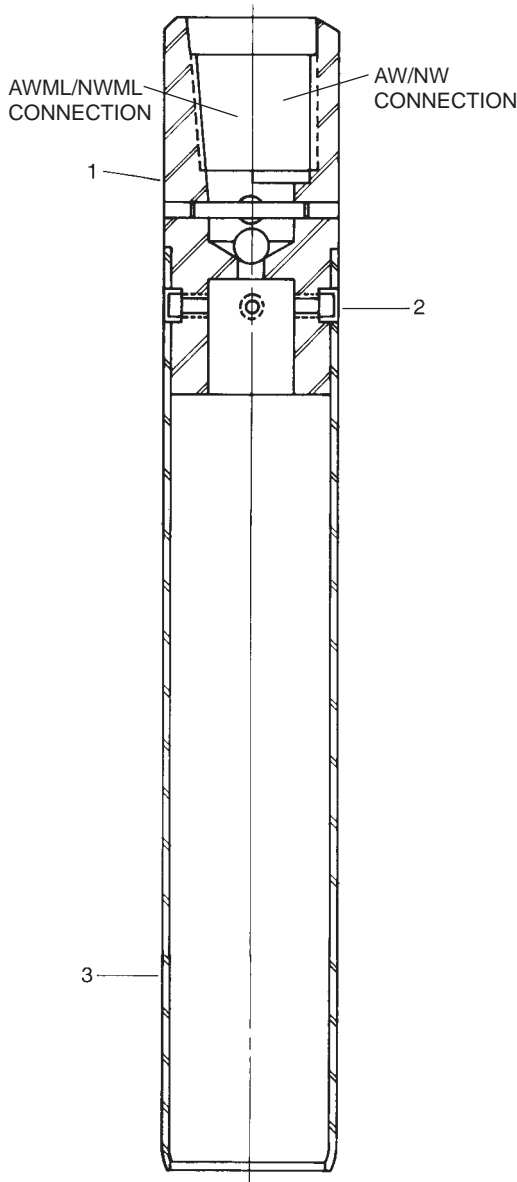
Ref	Description	Lb/Kg	Part No.
1	Tube, Solid: NW Rod Box	20 (9.1)	006358
1	Tube, Solid: NWML Rod Box	20 (9.1)	150342
2	Liner, Split: Steel, (Set)	4 (1.8)	006361
3	Spacer: (For Use w/o Retainer or Flap Valve) ...*		006369
3a	Retainer, Basket: Heavy Duty, Steel	*	006367
3e	Valve, Flap Heavy Duty, Steel	*	006368
4	Shoe, Blunt	2(.9)	005419
4	Shoe, Sharp	2(.9)	006359



## “SHELBY” TUBE SAMPLER

This sampler is the simplest and probably most widely used of the “insitu” quality samplers. It consists of a head section which contains a check valve and drill rod box connector and a thin wall sample tube. The tube is loosely attached to the head by means of four socket head capscrews which are turned “in”, or clockwise, to remove the tube. During the sampling operation, the tube moves slightly upward to bear against a shoulder which is machined into the head section thus assuring absolutely uniform force application to the tube. “Shelby” samplers are furnished complete with ball valve for positive vacuum control. Sampler should be forced down under steady pressure. Standard tube length is 2’6” (762 mm). Heads are available with both standard and **MOBILOK™** (AWML & NWML) thread designs. **Sizes are identified by sampler O.D.**

**4**



### SAMPLER ASSEMBLY

Description	Lb/Kg	Part No.
2" (51mm) x 2'6" (762mm), AW Box	9 (4.1)	67010-07
2" (51mm) x 3'0" (914mm), AW Box	10 (4.5)	67010-08
2" (51mm) x 2'6" (762mm), AWML Box	9 (4.1)	67010-01
2" (51mm) x 3'0" (914mm), AWML Box	10 (4.5)	67010-02
3" (76mm) x 2'6" (762mm), AW Box	11 (5)	67013-07
3" (76mm) x 3'0" (914mm), AW Box	13 (5.9)	67013-08
3" (76mm) x 2'6" (762mm), AWML Box	11 (5)	67013-01
3" (76mm) x 3'0" (914mm), AWML Box	13 (5.9)	67013-02
3" (76mm) x 2'6" (762mm), NW Box	17 (7.7)	67013-19
3" (76mm) x 3'0" (914mm), NW Box	18 (8.2)	67013-20
3" (76mm) x 2'6" (762mm), NWML Box	17 (7.7)	67013-13
3" (76mm) x 3'0" (914mm), NWML Box	18 (8.2)	67013-14

### COMPONENT PARTS: 2" (51mm) O.D.

Ref	Description	Lb/Kg	Part No.
1	Head, AW Box (with Ball & Roll Pin)	6 (2.7)	67026-06
1	Head: AWML Box (with Ball & Roll Pin)	6 (2.7)	67026-05
2	Screw (4 required)	*	006404
3	Tube: 2'6" (762mm), Steel	3 (1.4)	190044-01
3	Tube: 3'0" (914mm), Steel	4 (1.8)	190044-02
4	Cap, Plastic	*	006425

### COMPONENT PARTS: 3" (76mm) O.D.

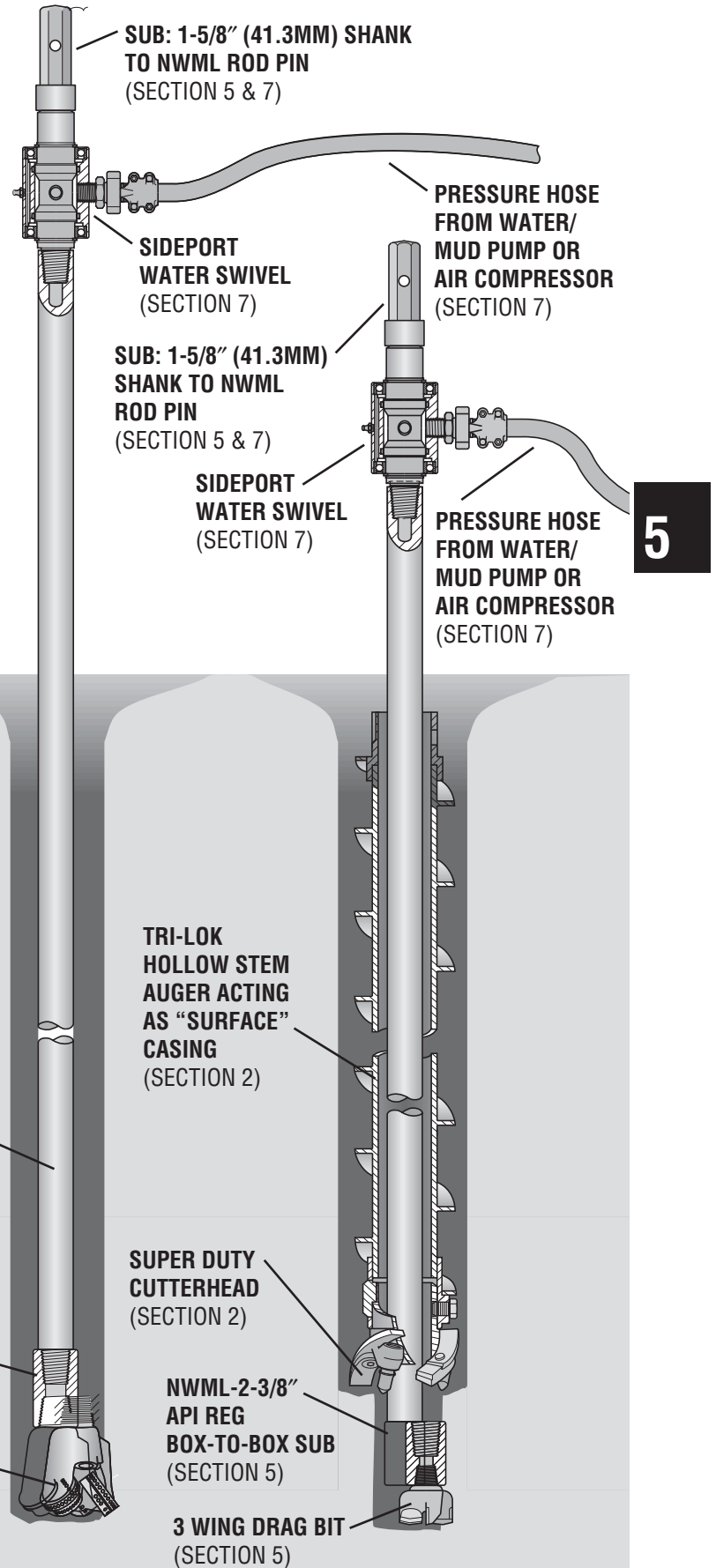
Ref	Description	Lb/Kg	Part No.
1	Head, AW Box (with Ball & Roll Pin)(Requires 4 screws)	9 (4.1)	67026-02
1	Head, AWML Box (with Ball & Roll Pin)(Requires 4 screws)	9 (4.1)	67026-01
1	Head, NW Box (with Ball & Roll Pin)(Requires 4 screws)	12 (5.4)	67026-04
1	Head, NWML Box (with Ball & Roll Pin)(Requires 4 screws)	12 (5.4)	67026-03
2	Screw (4 required)	*	006405
3	Tube, 2'6" (762mm), Steel†	5 (2.3)	190047-01
3	Tube, 3'0" (914mm), Steel†	6 (2.7)	190047-02
4	Cap, Plastic 3" (76mm)	*	005227

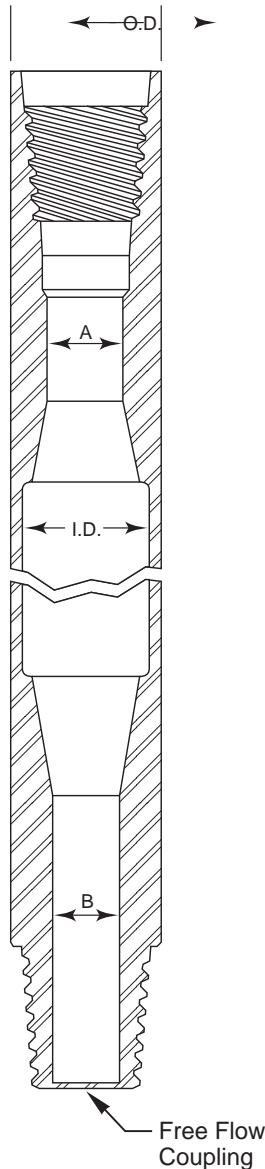
\* Galvanized tubes available.

To round out the tool line, Mobile offers an exhaustive selection of the highest quality drill rod, subs and accessories.

Continuing their tradition of innovation, Mobile first introduced drill rod with tapered couplings to the geotechnical and environmental industries. **MOBILOK™**s tapered threads resist damage and save valuable time when “making or breaking” drill rod joints. The efficiency of Mobile’s **MOBILOK™** rod has proven so popular with drillers that D.C.D.M.A. has adopted Mobile’s design as AWJ and NWJ rod designations. **Original MOBILOK™ drill rod however, is made to higher standards than those of D.C.D.M.A. (J Series) to ensure trouble free drilling.**

In order to make supplying your needs a one-stop operation, Mobile offers a full range of subs to facilitate crossover between different thread standards used for drill rod, samplers and cutter heads.





## MOBILOK™ DRILL ROD & WIPER

**MOBILOK™** drill rod (adopted by D.C.D.M.A.<sup>1</sup> as AWJ & NWJ) is a MOBILE DRILL® innovation designed to withstand the most rigorous drilling operations including deep hole rotary drilling, coring and drive sampling. Exceeding D.C.D.M.A. standards, it has a flush outside diameter for use with any standard chuck and the rod wall and coupling are designed to maintain a high degree of concentricity throughout the drill string. The internal diameters are turned smoothly, without corners to ensure the free flow of air and water. **MOBILOK™** tapered threads resist damage and save valuable time when **“making or breaking” joints – 1-1/2 turns** make and break a joint. Constructed of **AISI 4140 steel**, they are heat treated for durability and inertia-welded to the rod to provide an extremely strong, high quality joint. **The rod is manufactured from AISI 1040 steel with a 100,000 psi yield point.** Available in AW and NW sizes.

<sup>1</sup>Diamond Core Drill Manufacturer's Association

Drill Rod	O.D.	Bore "A"	Bore "B"	Thds/In
AWML	1-3/8" (35mm)	5/8" (16mm)	5/8" (16mm)	5
NWML	2-5/8" (67mm)	1-3/8" (35mm)	1-1/8" (29mm)	5

### AWML ROD: 1-3/8" (45mm) O.D.

Description	Lb/Kg	Part No.
1'0" (305mm)	3 (1.4)	006280
2'0" (610mm)	6 (2.7)	007086
2'6" (762mm)	10 (4.5)	150416
3'0" (914mm)	11 (5.0)	006863
5'0" (1.5m)	20 (9.1)	006276
10'0" (3.1m)	32 (14.5)	006277

### NWML ROD: 2-5/8" (67mm) O.D.

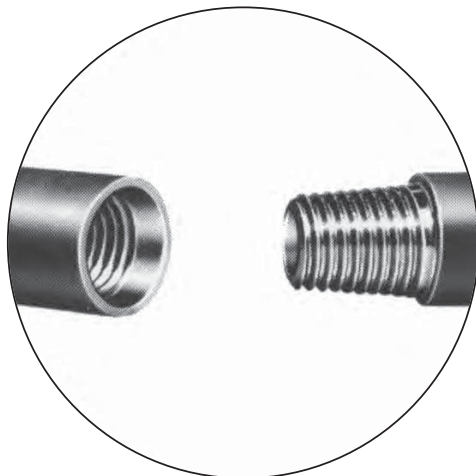
Description	Lb/Kg	Part No.
1'0" (305mm)	7 (3.2)	006281
2'0" (610mm)	15 (6.8)	007087
2'6" (762mm)	13 (5.9)	180386-13
3'0" (914mm)	18 (8.2)	006734
5'0" (1.5m)	30 (13.6)	006278
10'0" (3.1m)	60 (27.2)	006279

## DRILL ROD WIPER

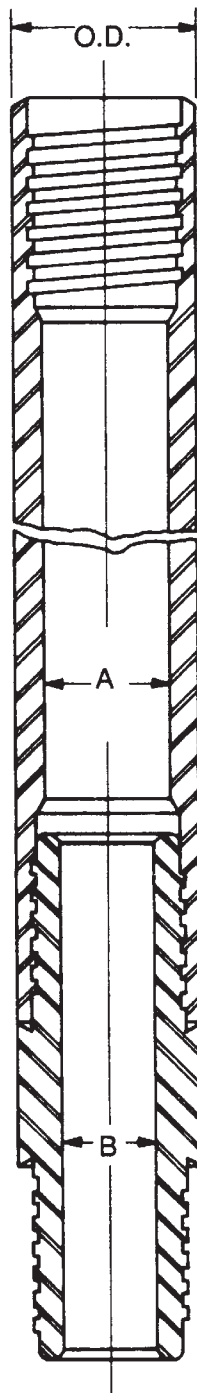
Rubber drill rod wiper is used as a circular squeegee to remove soil, mud or water from drill rods. They may also be used to deflect grit when air drilling or located above the automatic chuck to protect the jaws from mud loading. The most common position is at the hole collar allowing all rods to be drawn through the wiper when roundtripping the bit or sampler.

### FLAT DRILL ROD WIPER: 9" (229mm) O.D.

Description	Lb/Kg	Part No.
1-5/8" (41mm)	4 (1.8)	3523-0001
1-3/4" (44.5mm)	4 (1.8)	3523-0002
1-7/8" (48mm)	4 (1.8)	3523-0003
2-1/8" (54mm)	3 (1.4)	3523-0004
2-3/8" (60mm)	3 (1.4)	3523-0005
2-5/8" (67mm)	3 (1.4)	3523-0006
2-7/8" (73mm)	3 (1.4)	3523-0007
3-1/2" (89mm)	3 (1.4)	3523-0008
4" (102mm)	3 (1.4)	3523-0009
4-1/2" (114mm)	3 (1.4)	3523-0010



## D.C.D.M.A.<sup>1</sup> DRILL ROD



Manufactured to D.C.D.M.A. standards. Drill rod sizes are identified by rod size letter designations.

<sup>1</sup>Diamond Core Drill Manufacturer's Association

Drill Rod	O.D.	Bore "A"	Bore "B"	Thds/In
AW	1-3/4" (44.5mm)	1-3/8" (35mm)	5/8" (16mm)	3
EW	1-3/8" (35mm)	15/16" (24mm)	7/16" (11mm)	3
NW	2-5/8" (67mm)	2-1/4" (57mm)	1-3/8" (35mm)	3

### AW ROD: 1-3/4" (44mm) O.D.

Description	Lb/Kg	Part No.
1'0" (305mm)	4 (1.8)	001597
2'0" (610mm)	9 (4.1)	001601
3'0" (914mm)	12 (5.4)	005195
5'0" (1.5m)	22 (10)	001605
10'0" (3.1m)	38 (17.2)	001610


### EW ROD: 1-3/8" (35mm) O.D.

Description	Lb/Kg	Part No.
1'0" (305mm)	4 (1.8)	001596
2'0" (610mm)	7 (3.2)	001600
3'0" (914mm)	11 (5)	005193
5'0" (1.5m)	15 (6.8)	001604
10'0" (3.1m)	31 (14.1)	001609

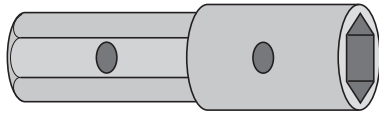
### NW ROD: 2-5/8" (67mm) O.D.

Description	Lb/Kg	Part No.
1'0" (305mm)	11 (5)	005199
2'0" (610mm)	15 (6.8)	001603
3'0" (914mm)	22 (10)	007083
5'0" (1.5m)	32 (14.5)	001608
10'0" (3.1m)	55 (24.9)	001613

Note: Pin to pin coupling included with all drill rod.


 Threaded  
 Pin to Pin  
 Coupling  
 (reverse when  
 exposed threads  
 are worn.)

## ADAPTER – HEX SHANK TO HEX BOX

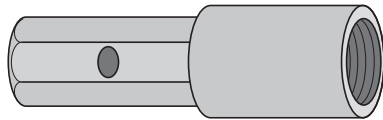


Adapters allow interchange of various augers on any machine. Additional subs and adapters can be furnished on special order.

### ADAPTER: HEX SHANK TO HEX BOX

Description	Lb/Kg	Part No.
1 <sup>3</sup> / <sub>16</sub> " (21mm) Hex to 1- <sup>1</sup> / <sub>8</sub> " (29mm) Box	2 (.9)	001550
1 <sup>3</sup> / <sub>16</sub> " (21mm) Hex to 1- <sup>5</sup> / <sub>8</sub> " (41mm) Box	4 (1.8)	004655
1- <sup>1</sup> / <sub>8</sub> " (29mm) Hex to 1 <sup>3</sup> / <sub>16</sub> " (21mm) Box	3 (1.4)	150131-01
1- <sup>1</sup> / <sub>8</sub> " (29mm) Hex to 1- <sup>5</sup> / <sub>8</sub> " (41mm) Box	6 (2.7)	001551
1- <sup>1</sup> / <sub>8</sub> " (29mm) Hex to 2" (51mm) Box	9 (4.1)	004641
1- <sup>5</sup> / <sub>8</sub> " (41mm) Hex to 1 <sup>3</sup> / <sub>16</sub> " (21mm) Box	4 (1.8)	150132-01
1- <sup>5</sup> / <sub>8</sub> " (41mm) Hex to 1- <sup>1</sup> / <sub>8</sub> " (29mm) Box	5 (2.3)	001552
1- <sup>5</sup> / <sub>8</sub> " (41mm) Hex to 1- <sup>5</sup> / <sub>8</sub> " (41mm) Box	9 (4.1)	150729
1- <sup>5</sup> / <sub>8</sub> " (41mm) Hex to 2" (51mm) Box	11 (5)	004643
2" (51mm) Hex to 1- <sup>1</sup> / <sub>8</sub> " (29mm) Box	11 (5)	004644
2" (51mm) Hex to 1- <sup>5</sup> / <sub>8</sub> " (41mm) Box	10 (4.5)	004645

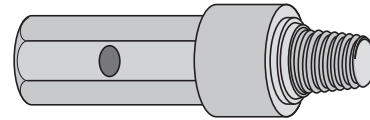
### ADAPTER: HEX SHANK TO ROD BOX



Description	Lb/Kg	Part No.
1 <sup>3</sup> / <sub>16</sub> " (21mm) Hex to A Box	2 (.9)	001562
1 <sup>3</sup> / <sub>16</sub> " (21mm) Hex to AW Box	2 (.9)	001563
1 <sup>3</sup> / <sub>16</sub> " (21mm) Hex to AWML Box	2 (.9)	180011-08
1 <sup>3</sup> / <sub>16</sub> " (21mm) Hex to EW Box	2 (.9)	001557
1- <sup>1</sup> / <sub>8</sub> " (29mm) Hex to AW Box	3 (1.4)	001565
1- <sup>1</sup> / <sub>8</sub> " (29mm) Hex to AWML Box	3 (1.4)	180011-09
1- <sup>1</sup> / <sub>8</sub> " (29mm) Hex to NW Box	3 (1.4)	001577
1- <sup>1</sup> / <sub>8</sub> " (29mm) Hex to NWML Box	3 (1.4)	180012-11
1- <sup>5</sup> / <sub>8</sub> " (41mm) Hex to AW Box	4 (1.8)	001567
1- <sup>5</sup> / <sub>8</sub> " (41mm) Hex to AWML Box	4 (1.8)	180011-10
1- <sup>5</sup> / <sub>8</sub> " (41mm) Hex to NW Box	5 (2.3)	180007-01
1- <sup>5</sup> / <sub>8</sub> " (41mm) Hex to NWML Box	5 (2.3)	006925
2" (51mm) Hex to AW Box	7 (3.2)	004649
2" (51mm) Hex to AWML Box	7 (3.2)	180011-11
2" (51mm) Hex to NW Box	5 (2.3)	004653
2" (51mm) Hex to NWML Box	6 (2.7)	180012-12

Other sizes available upon request.

## ADAPTER: HEX SHANK TO ROD PIN FOR SIDEPORT WATER SWIVELS



Description	Lb/Kg	Part No.
1- <sup>1</sup> / <sub>8</sub> " (29mm) Hex to AW Pin	4 (1.8)	004874
1- <sup>1</sup> / <sub>8</sub> " (29mm) Hex to AWML Pin	4 (1.8)	180078-01
1- <sup>1</sup> / <sub>8</sub> " (29mm) Hex to EW Pin	3 (1.4)	004872
1- <sup>1</sup> / <sub>8</sub> " (29mm) Hex to NW Pin	4 (1.8)	004878
1- <sup>1</sup> / <sub>8</sub> " (29mm) Hex to NWML Pin	4 (1.8)	180078-02
1- <sup>3</sup> / <sub>8</sub> " (41mm) Hex to A Pin	8 (3.6)	180080-03
1- <sup>3</sup> / <sub>8</sub> " (41mm) Hex to AW Pin	8 (3.6)	180080-02
1- <sup>3</sup> / <sub>8</sub> " (41mm) Hex to AWML Pin	8 (3.6)	180080-01
1- <sup>3</sup> / <sub>8</sub> " (41mm) Hex to BW Pin	9 (4.1)	180080-05
1- <sup>3</sup> / <sub>8</sub> " (41mm) Hex to EW Pin	8 (3.6)	180080-01
1- <sup>3</sup> / <sub>8</sub> " (41mm) Hex to NW Pin	10 (4.5)	004468
1- <sup>3</sup> / <sub>8</sub> " (41mm) Hex to NWML Pin	10 (4.5)	180080-05
2" (51mm) Hex to AW Pin	10 (4.5)	004906
2" (51mm) Hex to AWML Pin	10 (4.5)	180081-01
2" (51mm) Hex to NW Pin	12 (5.4)	004910
2" (51mm) Hex to NWML Pin	12 (5.4)	180081-02

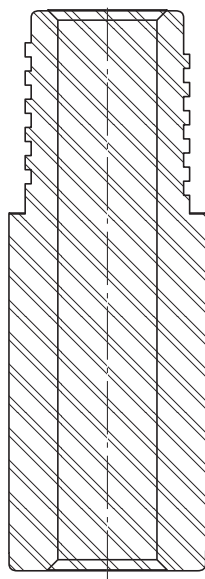
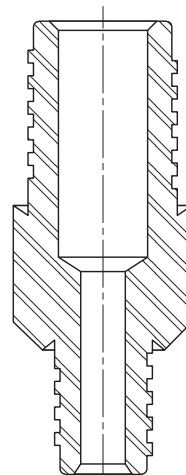
Other sizes available upon request.

## D.C.D.M.A. COUPLING

Manufactured to D.C.D.M.A. standards. Coupling sizes are identified by drill rod size letter designations.

### D.C.D.M.A. COUPLING

Description	Lb/Kg	Part No.
A Rod .....	2 (.9)	001616
AW Rod .....	2 (.9)	001617
B Rod .....	3 (1.4)	001618
BW Rod .....	4 (1.8)	001619
E Rod .....	1 (.5)	001614
EW Rod .....	1 (.5)	001615
N Rod .....	4 (1.8)	001620
NW Rod .....	6 (2.7)	001621



### SUB: BLANK

Description	Lb/Kg	Part No.
AW Pin to Blank .....	2 (.9)	180045-00
NW Pin to Blank .....	4 (1.8)	180049-00
AW Box to Blank .....	2 (.9)	180087-00
NW Box to Blank .....	4 (1.8)	180091-00
AWML Pin to Blank .....	2 (.9)	180053-00
NWML Pin to Blank .....	4 (1.8)	180054-00
AWML Box to Blank .....	2 (.9)	180095-00
NWML Box to Blank .....	4 (1.8)	180096-00

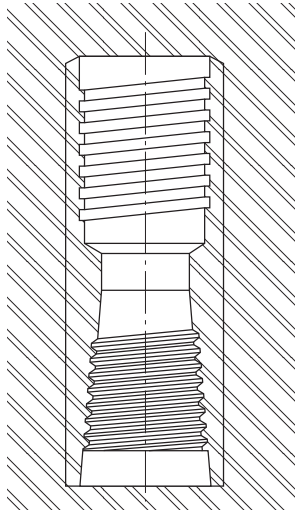
### SUB: ROD PIN TO ROD PIN

Description	Lb/Kg	Part No.
A Pin to NW Pin .....	6 (2.7)	001835
AW Pin to BW Pin .....	4 (1.8)	001842
AW Pin to E Pin .....	2 (.9)	001830
AW Pin to N Pin .....	5 (2.3)	180048-01
AW Pin to NW Pin .....	6 (2.7)	001843
AWML Pin to AW Pin .....	2 (.9)	006282
AWML Pin to NW Pin .....	6 (2.7)	180049-01
AWML Pin to AWML Pin .....	2 (.9)	180053-03
BW Pin to NW Pin .....	6 (2.7)	001844
N Pin to NW Pin .....	6 (2.7)	001838
NWML Pin to AW Pin .....	3 (1.4)	180054-07
NWML Pin to N Pin .....	6 (2.7)	180054-01
NWML Pin to NW Pin .....	6 (2.7)	006286
NWML Pin to NWML Pin .....	6 (2.7)	180054-05

Other sizes available upon request.

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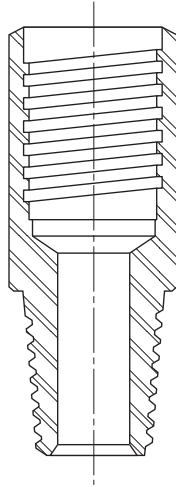
### SUB: ROD BOX TO ROD BOX

Description	Lb/Kg	Part No.
A Box to A Box.....	1 (.5)	001678
A Box to AW Box.....	2 (.9)	001698A
Box to N Box.....	5 (2.3)	001680
A Box to NW Box.....	5 (2.3)	001700
AW Box to AW Box.....	2 (.9)	001688
AW Box to BW Box.....	3 (1.4)	001689
AW Box to E Box.....	2 (.9)	001695
AW Box to NW Box.....	5 (2.3)	001690
AWML Box to 2-3/8" (60mm)		
API Reg Box.....	13 (5.9)	006930
AWML Box to 2-7/8" (73mm)		
API Reg Box.....	15 (6.8)	006932
AWML Box to 3-1/2" (89mm)		
API Reg Box.....	15 (6.8)	180011-01
AWML Box to A Box.....	2 (.9)	180095-01
AWML Box to AW Box.....	2 (.9)	180087-02
AWML Box to AWML Box.....	2 (.9)	180095-02
AWML Box to B Box.....	3 (1.4)	180088-01
SUB, AWML Box to N4THD Box.....	5 (2.3)	180090-01
AWML Box to NW Box.....	5 (2.3)	180091-01
AWML Box to NWML Box.....	5 (2.3)	180011-06
B Box to N Box.....	4 (1.8)	001682
BW Box to BW Box.....	3 (1.4)	001691
BW Box to NW Box.....	5 (2.3)	001692
E Box to E Box.....	2 (.9)	001674
E Box to EW Box.....	2 (.9)	001694
EW Box to EW Box.....	3 (1.4)	001684
EW Box to NW Box.....	5 (2.3)	001687
N Box to 2-3/8" (60mm)		
API Reg Box.....	11 (5)	001666
N Box to 3-1/2" (89mm)		
API Reg Box.....	19 (8.6)	001668
N Box to 4-1/2" (114mm)		
API Reg Box.....	31 (14.1)	001669
N Box to N Box.....	4 (1.8)	001683
N Box to NW Box.....	5 (2.3)	001703
NW Box to 2-3/8" (60mm)		
API Reg Box.....	11 (5)	001670

Description	Lb/Kg	Part No.
NW Box to 2-7/8" (73mm)		
API Reg Box.....	17 (7.7)	180109-01
NW Box to 3-1/2" (89mm)		
API Reg Box.....	18 (8.2)	001672
NW Box to NW Box.....	4 (1.8)	001693
NWML Box to 2-3/8" (60mm)		
API Reg Box.....	11 (5)	006934
NWML Box to 2-7/8" (73mm)		
API Reg Box.....	17 (7.7)	006936
NWML Box to 3-1/2" (89mm)		
API Reg Box.....	18 (8.2)	180110-02
NWML Box to A Box.....	5 (2.3)	180096-02
NWML Box to AW Box.....	5 (2.3)	180096-03
NWML Box to BW Box.....	5 (2.3)	180096-05
NWML Box to N Box.....	4 (1.8)	180096-01
NWML Box to NW Box.....	4 (1.8)	180096-06
NWML Box to NWML Box.....	4 (1.8)	180096-08
Other sizes available upon request.		

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### SUB:ROD BOX TO ROD PIN

Description	Lb/Kg	Part No.
2-3/8" (60mm) API Reg Box		
To AWML Pin .....	8 (3.6)	006931
2-3/8" (60mm) API Reg Box		
To NWML Pin .....	9 (4.1)	180024-01
2-7/8" (73mm) API Reg		
Box To NWML Pin .....	14 (6.4)	006937
A Box To AW Pin .....	2 (.9)	001774
A Box To AWML Pin .....	3 (1.4)	180002-02
A Box To E Pin .....	3 (1.4)	001760
A Box To EW Pin .....	2 (.9)	001773
A Box To N Pin .....	4 (1.8)	001762
A Box To NW Pin .....	6 (2.7)	001776
AW Box To A Pin .....	2 (.9)	001801
AW Box To AWML Pin .....	3 (1.4)	180003-01
AW Box To B Pin .....	2 (.9)	001802
AW Box To Boyles NXWL		
(Christensen) Pin .....	7 (3.2)	180003-03
AW Box To BW Pin .....	3 (1.4)	001789
AW Box To EW Pin .....	2 (.9)	001788
AW Box To N Pin .....	4 (1.8)	180003-02
AW Box To NW Pin .....	5 (2.3)	001790
AW Box To NWML Pin .....	5 (2.3)	180003-08
AWML Box To A Pin .....	2 (.9)	180011-01
AWML Box To AW Pin .....	2 (.9)	180011-02
AWML Box To AWML Pin .....	3 (1.4)	180011-21
AWML Box To Boyles AXWL		
(Christensen) Pin .....	2 (.9)	180011-13
AWML Box To BW Pin .....	3 (1.4)	180011-03
AWML Box To N Pin .....	4 (1.8)	180011-04
AWML Box To NW Pin .....	5 (2.3)	180011-05
AWML Box To NWML Pin .....	5 (2.3)	180011-06
AWML Box To NXWL		
(Christensen) Pin .....	7 (3.2)	179996
B Box To N Pin .....	4 (1.8)	001765
BW Box To AW Pin .....	2 (.9)	001792
BW Box To B Pin .....	3 (1.4)	001804
BW Box To N Pin .....	4 (1.8)	001805

Description	Lb/Kg	Part No.
BW Box To NW Pin .....	5 (2.3)	001793
E Box To EW Pin .....	1 (.5)	001769
E Box To NW Pin .....	6 (2.7)	001772
EW Box To A Pin .....	2 (.9)	001798
EW Box To AW Pin .....	2 (.9)	001785
EW Box To AWML Pin .....	2 (.9)	180001-03
EW Box To E Pin .....	1 (.5)	001797
EW Box To NW Pin .....	6 (2.7)	001787
N Box To 2-3/8" (60mm)		
API REG Pin .....	1 (.5)	001704



### DRILL ROD RECOVERY TAPS

Recovery taps aid in the recovery of broken or lost **MOBILOK™** (D.C.D.M.A. "J Series") and standard drill rod. Outside type taps thread onto the outside diameter of the rod while the inside type engage the inside diameter. Note: AW/AWML bell tap can only be used to recover AW or AWML drill rod in BX (65mm) or larger holes.

#### DRILL ROD TAP: OUTSIDE



Description	Lb/Kg	Part No.
AW Box (AW & AWML Rod) .....	4(1.8) .....	180202-02
NW Box (NW & NWML Rod) .....	9(4.1) .....	002248

#### DRILL ROD TAP: INSIDE



Description	Lb/Kg	Part No.
AW Box (AW & AWML Rod) .....	3(1.4) .....	002224
NW Box (NW & NWML Rod) .....	6(2.7) .....	002226

**5**

#### SUB: ROD BOX TO ROD PIN & RECOVERY TAP

Description	Lb/Kg	Part No.
N Box To AW Pin .....	3(1.4) .....	001782
N Box To NWL Pin .....	6 (2.7) .....	80006-02
N Box To NW Pin .....	5 (2.3) .....	001784
N Box To NWML Pin .....	10(4.8) .....	180006-04
NW Box To 2- <sup>3</sup> / <sub>8</sub> " (60mm) API Reg Pin .....	9 (4.1) .....	001708
NW Box To 2- <sup>7</sup> / <sub>8</sub> " (73mm) API Reg Pin .....	14 (6.4) .....	001709
NW Box To 3- <sup>1</sup> / <sub>2</sub> " (89mm) API Reg Pin .....	20 (9.1) .....	001710
NW Box To AW Pin .....	4 (1.8) .....	001795
NW Box To AWML Pin .....	3 (1.4) .....	007007
NW Box To BW Pin .....	4 (1.8) .....	001796
NW Box To N Pin .....	4 (1.8) .....	179992
NW Box To NWL Pin .....	4 (1.8) .....	180007-04
NW Box To NWML Pin .....	9 (4.1) .....	006288
NW Box To NXWL (Christensen) Pin .....	8 (3.6) .....	180007-05
NWML Box To A Pin .....	4 (1.8) .....	180012-01
NWML Box To AW Pin .....	4 (1.8) .....	180012-02
NWML Box To AWML Pin .....	4 (1.8) .....	180012-06
NWML Box To Boyles NXWL (Christensen) Pin .....	5 (2.3) .....	180012-17
NWML Box To BW Pin .....	4 (1.8) .....	180012-03
NWML Box To N Pin .....	5 (2.3) .....	180012-04
NWML Box To NWL Pin .....	5 (2.3) .....	180012-08
NWML Box To NW Pin .....	5 (2.3) .....	180012-05
NWML Box To NWML Pin .....	5 (2.3) .....	180012-14

Other sizes available upon request.

## DRAG BIT



**4-Wing**



**3-Wing**

Three and four-wing drag bits are used when rotary drilling through hollow stem auger or with standard mud/air rotary functions in formations not requiring hard rock bits. A rod box to rod box sub is required for pin down tool strings, see subs, in this section. Sizes are identified by the hole diameter they drill. Larger sizes available on special order.

Description	Lb/Kg	Part No.
2" (51mm), AW Pin	2 (.9)	005725
2-1/4" (57mm), AW Pin	2 (.9)	005726
2-1/2" (64mm), AW Pin	3 (1.4)	005727
2-3/4" (70mm), AW Pin	4 (1.8)	005728
3" (76mm), NW Pin	4 (1.8)	006720
3-1/4" (83mm), NW Pin	5(2.3)	006721
3-1/2" (89mm), NW Pin	6 (2.7)	006722
3-3/4" (95mm), NW Pin	6 (2.7)	006723
4" (102mm), 2-3/8" (60mm) API Reg Pin	7 (3.2)	005733
4-1/4" (108mm), 2-3/8" (60mm) API Reg Pin	7 (3.2)	005734
4-1/2" (114mm), 2-3/8" (60mm) API Reg Pin	8 (3.6)	005735
4-3/4" (121mm), 2-3/8" (60mm) API Reg Pin	9 (4.1)	006650
5" (127mm), 2-3/8" (60mm) API Reg Pin	14 (6.4)	006651
5-1/4" (133mm), 3-1/2" (89mm) API Reg Pin	16 (7.3)	006652
5-1/2" (140mm) API Reg Pin	17 (7.7)	006653
5-5/8" (143mm), 3-1/2" (89mm) API Reg Pin	18 (8.2)	006654
6" (152mm), 3-1/2" (89mm) API Reg Pin	19 (8.6)	006655
2" (51mm), AW Pin	2 (.9)	005708
2-1/4" (57mm), AW Pin	2 (.9)	005709
2-1/2" (64mm), AW Pin	3 (1.4)	005710
2-3/4" (70mm), AW Pin	4 (1.8)	005711
3" (76mm), NW Pin	5 (2.3)	006724
3-1/4" (83mm), NW Pin	6 (2.7)	006725
3-1/2" (89mm), NW Pin	6 (2.7)	006726
3-3/4" (95mm), NW Pin	7 (3.2)	006727
4" (102mm), 2-3/8" (60 mm) API Reg Pin	8 (3.6)	005716
4-1/4" (108mm), 2-3/8" (60mm) API Reg Pin	9 (4.1)	005717

Description	Lb/Kg	Part No.
4-1/2" (114mm), 2-3/8" (60 mm) API Reg Pin	10 (4.5)	005718
4-3/4" (121mm), 2-3/8" (60mm) API Reg Pin	11 (5)	006661
5" (127mm), 2-3/8" (60mm) API Reg Pin	17 (7.7)	006662
5-1/4" (133mm), 3-1/2" (89mm) API Reg Pin	19 (8.6)	006663
5-1/2" (140mm), 3-1/2" (89mm) API Reg Pin	19 (8.6)	006664
5-5/8" (143mm), 3-1/2" (89mm) API Reg Pin	20 (9.1)	006665
6" (152mm), 3-1/2" (89mm) API Reg Pin	21 (9.5)	006666

## 3-CONE ROLLER ROCK CHISEL BIT



**Important:** When ordering, be sure to specify A or D type formations to be drilled:

- A=** soft formations of shale, anhydrites, gypsum, talc, chalk-fast cutting.
- D=** hard formations such as limestone, cherty limestone, dolomite and abrasive sandstone.

For water drilling specify "Fluid Type" or for air drilling specify "Air Flush." A Rod Box To Rod Box Sub is required for pin down tool strings, see Subs in this section. Sizes are identified by the hole diameter they drill. Other sizes and formation types available upon request.

Description	Lb/Kg	Part No.
2-7/8" (73mm), NW Pin.....	3 (1.4)	006728
2-15/16" (75mm), NW Pin.....	3 (1.4)	006729
3-1/8" (79mm), NW Pin.....	4 (1.8)	006730
3-1/4" (83mm), NW Pin.....	5 (2.3)	006731
3-1/2" (89mm), 2-3/8" (60mm) API Reg Pin .....	4 (1.8)	005746
3-3/4" (95mm), 2-3/8" (60mm) API Reg Pin .....	6 (2.7)	001525
3-7/8" (98mm), 2-3/8" (60mm) API Reg Pin .....	3 (1.4)	005747
4-1/4" (108mm), 2-3/8" (60mm) API Reg Pin .....	9 (4.1)	001526
4-1/2" (89mm), 2-3/8" (60mm) API Reg Pin .....	10 (4.5)	005750
4-3/4" (121mm), 2-7/8" (73mm) API Reg Pin .....	14 (6.4)	001527
5-5/8" (143mm), 3-1/2" (89mm) API Reg Pin .....	21 (9.5)	001528
6-1/4" (89mm), 2-3/8" (60mm) API Reg Pin .....	26 (11.8)	001529

## 3-CONE TUNGSTEN CARBIDE ROLLER BIT



Tough roller cone rock bits with carbide inserts set in a heat-treated body. Available with chisel buttons (shown) and dome buttons. For water drilling specify "Fluid Type" or for air drilling specify "Air Flush." Rod Box To Rod Box Adapters are required for pin down tool strings, see Adapters in this section. Sizes are identified by the hole diameter they drill.

### Fluid Flush Type

Description	Lb/Kg	Part No.
2-15/16" (75mm), Chisel, NW Pin.....	3 (1.4)	180379-01
3" (76mm), Chisel, NW Pin .....	3 (1.4)	180379-02
3-1/8" (79mm), Chisel, NW Pin .....	4 (1.8)	180379-03
3-1/4" (83mm), Chisel, NW Pin .....	3 (1.4)	180379-04
2-15/16" (75mm), Small Dome, NW Pin .....	3 (1.4)	180381-01
3" (76mm), Small Dome, NW Pin.....	3 (1.4)	180381-02
3-1/8" (79mm), Small Dome, NW Pin ...	4 (1.8)	180381-03
3-1/4" (83mm), Small Dome, NW Pin ...	3 (1.4)	180381-04
2-15/16" (75mm), Medium Dome, NW Pin .....	3 (1.4)	180380-01
3" (76mm), Medium Dome, NW Pin ...	3 (1.4)	180380-02
3-1/8" (79mm), Medium Dome, NW Pin .....	4 (1.8)	180380-03
3-1/4" (83mm), Medium Dome, NW Pin .....	3 (1.4)	180380-04
3-1/2" (89mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	4 (1.8)	180379-05
3-3/4" (95mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	6 (2.7)	180379-06
3-7/8" (98mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	6 (2.7)	180379-07
4" (102mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	8 (3.6)	180379-08
4-1/8" (105mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	8 (3.6)	180379-09
4-1/4" (108mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	9 (4.1)	180379-10
4-1/2" (114mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	9 (4.1)	180379-11
3-1/2" (89mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	4 (1.8)	180381-05
3-3/4" (95mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	6 (2.7)	180381-06
3-7/8" (98mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	6 (2.7)	180381-07

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Description	Lb/Kg	Part No.
4" (102mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	8 (3.6)	180381-08
4-1/8" (105mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	8 (3.6)	180381-09
4-1/4" (108mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	9 (4.1)	180381-10
4-1/2" (114mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	9 (4.1)	180381-11
3-1/2" (89mm), Medium Dome, 2-3/8" (60mm) API Reg Pin.....	4 (1.8)	180380-05
3-3/4" (95mm), Medium Dome, 2-3/8" (60mm) API Reg Pin.....	6 (2.7)	180380-06
3-7/8" (98mm), Medium Dome, 2-3/8" (60mm) API Reg Pin.....	6 (2.7)	180380-07
4" (102mm), Medium Dome, 2-3/8" (60mm) API Reg Pin.....	8 (3.6)	180380-08
4-1/8" (105mm), Medium Dome, 2-3/8" (60mm) API Reg Pin.....	8 (3.6)	180380-09
4-1/4" (108mm), Medium Dome, 2-3/8" (60mm) API Reg Pin.....	9 (4.1)	180380-10
4-1/2" (114mm), Medium Dome, 2-3/8" (60mm) API Reg Pin.....	9 (4.1)	180380-11
4-3/4" (121mm), Chisel, 2-7/8" (73mm) API Reg Pin.....	11 (5)	180379-12
4-7/8" (124mm), Chisel, 2-7/8" (73mm) API Reg Pin.....	14 (6.4)	180379-13
5" (127mm), Chisel, 2-7/8" (73mm) API Reg Pin.....	19 (8.6)	180379-14
5-1/8" (130mm), Chisel, 2-7/8" (73mm) API Reg Pin.....	21 (9.5)	180379-15
4-3/4" (121mm), Small Dome, 2-7/8" (73mm) API Reg Pin.....	11 (5)	180381-12
4-7/8" (124mm), Small Dome, 2-7/8" (73mm) API Reg Pin.....	14 (6.4)	180381-13
5" (127mm), Small Dome, 2-7/8" (73mm) API Reg Pin.....	19 (8.6)	180381-14
5-1/8" (130mm), Small Dome, 2-7/8" (73mm) API Reg Pin.....	21 (9.5)	180381-15
4-3/4" (121mm), Medium Dome, 2-7/8" (73mm) API Reg Pin.....	11 (5)	180380-12
4-7/8" (124mm), Medium Dome, 2-7/8" (73mm) API Reg Pin.....	14 (6.4)	180380-13
5" (127mm), Medium Dome, 2-7/8" (73mm) API Reg Pin.....	19 (8.6)	180380-14
5-1/8" (130mm), Medium Dome, 2-7/8" (73mm) API Reg Pin.....	21 (9.5)	180380-15
5-5/8" (143mm), Chisel, 3-1/2" (89mm) API Reg Pin.....	22 (10)	180379-16
6" (152mm), Chisel, 3-1/2" (89mm) API Reg Pin.....	23 (10.4)	180379-17
6-1/8" (156mm), Chisel, 3-1/2" (89mm) API Reg Pin.....	24 (10.9)	180379-18
6-1/4" (159mm), Chisel, 3-1/2" (89mm) API Reg Pin.....	26 (11.8)	180379-19
5-5/8" (143mm), Small Dome, 3-1/2" (89mm) API Reg Pin.....	22 (10)	180381-16
6" (152mm), Small Dome, 3-1/2" (89mm) API Reg Pin.....	23 (10.4)	180381-17

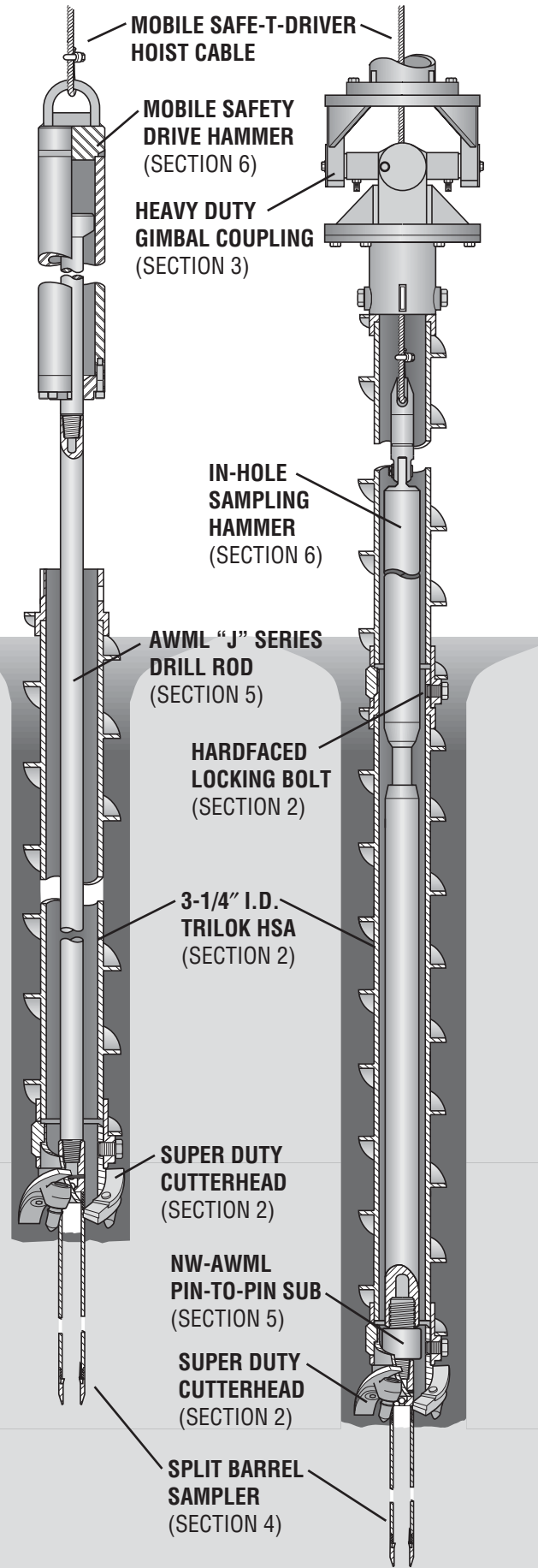
Description	Lb/Kg	Part No.
6-1/8" (156mm), Small Dome, 3-1/2" (89mm) API Reg Pin.....	24 (10.9)	180381-18
6-1/4" (159mm), Small Dome, 3-1/2" (89mm) API Reg Pin.....	26 (11.8)	180381-19
5-5/8" (143mm), Medium Dome, 3-1/2" (89mm) API Reg Pin.....	22 (10)	180380-16
6" (152mm), Medium Dome, 3-1/2" (89mm) API Reg Pin.....	23 (10.4)	180380-17
6-1/8" (156mm), Medium Dome, 3-1/2" (89mm) API Reg Pin.....	24 (10.9)	180380-18
6-1/4" (159mm), Medium Dome, 3-1/2" (89mm) API Reg Pin.....	26 (11.8)	180380-19

### Air Flush Type

Description	Lb/Kg	Part No.
2-15/16" (75mm), Chisel, NW Pin.....	3 (1.4)	180382-01
3" (76mm), Chisel, NW Pin.....	3 (1.4)	180382-02
3-1/8" (79mm), Chisel, NW Pin.....	4 (1.8)	180382-03
3-1/4" (83mm), Chisel, NW Pin.....	3 (1.4)	180382-04
2-15/16" (75mm), Small Dome, NW Pin.....	3 (1.4)	180384-01
3" (76mm), Small Dome, NW Pin.....	3 (1.4)	180384-02
3-1/8" (79mm), Small Dome, NW Pin.....	4 (1.8)	180384-03
3-1/4" (83mm), Small Dome, NW Pin.....	3 (1.4)	180384-04
2-15/16" (75mm), Medium Dome, NW Pin.....	3 (1.4)	180383-01
3" (76mm), Medium Dome, NW Pin.....	3 (1.4)	180383-02
3-1/8" (79mm), Medium Dome, NW Pin.....	4 (1.8)	180383-03
3-1/4" (83mm), Medium Dome, NW Pin.....	3 (1.4)	180383-04
3-1/2" (89mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	4 (1.8)	180382-05
3-3/4" (95mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	6 (2.7)	180382-06
3-7/8" (98mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	6 (2.7)	180382-07
4" (102mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	8 (3.6)	180382-08
4-1/8" (105mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	8 (3.6)	180382-09
4-1/4" (108mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	9 (4.1)	180382-10
4-1/2" (114mm), Chisel, 2-3/8" (60mm) API Reg Pin.....	9 (4.1)	180382-11
3-1/2" (89mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	4 (1.8)	180384-05
3-3/4" (95mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	6 (2.7)	180384-06
3-7/8" (98mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	6 (2.7)	180384-07
4" (102mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	8 (3.6)	180384-08
4-1/8" (105mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	8 (3.6)	180384-09
4-1/4" (108mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	9 (4.1)	180384-10
4-1/2" (114mm), Small Dome, 2-3/8" (60mm) API Reg Pin.....	9 (4.1)	180384-11

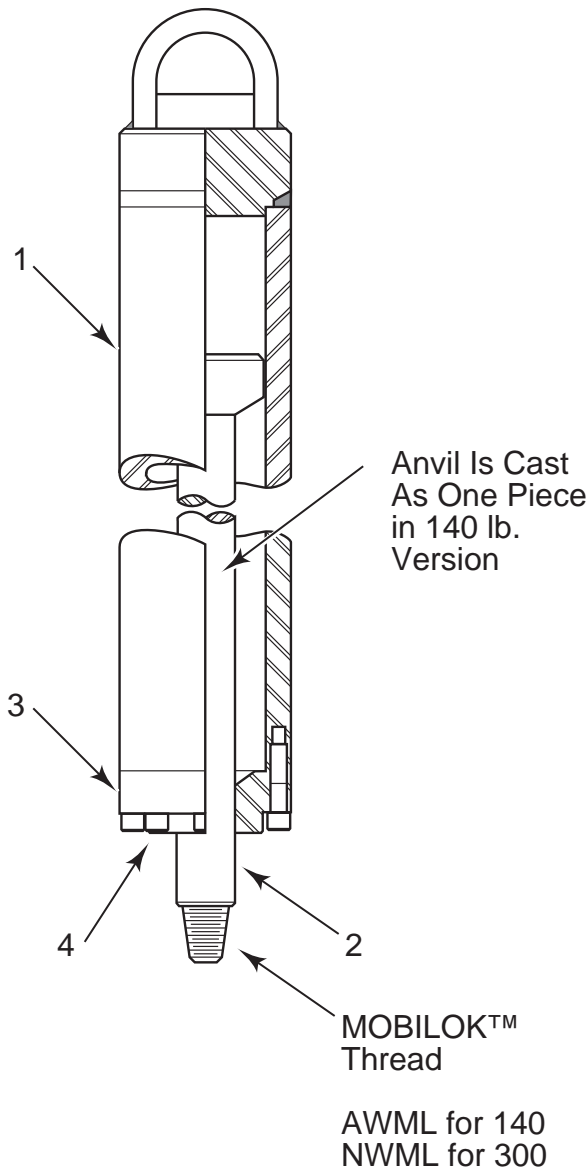
Description	Lb/Kg	Part No.
3-1/2" (89mm), Medium Dome, 2-3/8" (60mm) API Reg Pin	4 (1.8)	180383-05
3-3/4" (95mm), Medium Dome, 2-3/8" (60mm) API Reg Pin	6 (2.7)	180383-06
3-7/8" (98mm), Medium Dome, 2-3/8" (60mm) API Reg Pin	6 (2.7)	180383-07
4" (102mm), Medium Dome, 2-3/8" (60mm) API Reg Pin	8 (3.6)	180383-08
4-1/8" (105mm), Medium Dome, 2-3/8" (60mm) API Reg Pin	8 (3.6)	180383-09
4-1/4" (108mm), Medium Dome, 2-3/8" (60mm) API Reg Pin	9 (4.1)	180383-10
4-1/2" (114mm), Medium Dome, 2-3/8" (60mm) API Reg Pin	9 (4.1)	180383-11
4-3/4" (121mm), Chisel, 2-7/8" (73mm) API Reg Pin	11 (5)	180382-12
4-7/8" (124mm), Chisel, 2-7/8" (73mm) API Reg Pin	14 (6.4)	180382-13
5" (127mm), Chisel, 2-7/8" (73mm) API Reg Pin	19 (8.6)	180382-14
5-1/8" (130mm), Chisel, 2-7/8" (73mm) API Reg Pin	21 (9.5)	180382-15
4-3/4" (121mm), Small Dome, 2-7/8" (73mm) API Reg Pin	11 (5)	180384-12
4-7/8" (124mm), Small Dome, 2-7/8" (73mm) API Reg Pin	14 (6.4)	180384-13
5" (127mm), Small Dome, 2-7/8" (73mm) API Reg Pin	19 (8.6)	180384-14
5-1/8" (130mm), Small Dome, 2-7/8" (73mm) API Reg Pin	21 (9.5)	180384-15
4-3/4" (121mm), Medium Dome, 2-7/8" (73mm) API Reg Pin	11 (5)	180383-12
4-7/8" (124mm), Medium Dome, 2-7/8" (73mm) API Reg Pin	14 (6.4)	180383-13
5" (127mm), Medium Dome, 2-7/8" (73mm) API Reg Pin	19 (8.6)	180383-14
5-1/8" (130mm), Medium Dome, 2-7/8" (73mm) API Reg Pin	21 (9.5)	180383-15
5-5/8" (143mm), Chisel, 3-1/2" (89mm) API Reg Pin	22 (10)	180382-16
6" (152mm), Chisel, 3-1/2" (89mm) API Reg Pin	23 (10.4)	180382-17
6-1/8" (156mm), Chisel, 3-1/2" (89mm) API Reg Pin	24 (10.9)	180382-18
6-1/4" (159mm), Chisel, 3-1/2" (89mm) API Reg Pin	26 (11.8)	180382-19
5-5/8" (143mm), Small Dome, 3-1/2" (89mm) API Reg Pin	22 (10)	180384-16
6" (152mm), Small Dome, 3-1/2" (89mm) API Reg Pin	23 (10.4)	180384-17
6-1/8" (156mm), Small Dome, 3-1/2" (89mm) API Reg Pin	24 (10.9)	180384-18
6-1/4" (159mm), Small Dome, 3-1/2" (89mm) API Reg Pin	26 (11.8)	180384-19
5-5/8" (143mm), Medium Dome, 3-1/2" (89mm) API Reg Pin	22 (10)	180383-16
6" (152mm), Medium Dome, 3-1/2" (89mm) API Reg Pin	23 (10.4)	180383-17
6-1/8" (156mm), Medium Dome, 3-1/2" (89mm) API Reg Pin	24 (10.9)	180383-18
6-1/4" (159mm), Medium Dome, 3-1/2" (89mm) API Reg Pin	26 (11.8)	180383-19

Mobile's complete line of hoisting and driving equipment includes the industry's most advanced **In-Hole** Sampling Hammer. Used in conjunction with the patented gimbal coupling as a part of the MOSS™ (Mobile Open Spindle Sampling) System it provides a very fast and efficient method of driving soil samples. The combination of the In-Hole Hammer and MOSS eliminates center rod handling, probably the most time consuming aspect of performing standard penetration testing.



## MOBILE SAFETY DRIVE HAMMER

Mobile's drive hammer design results in a safe, accurate, one-piece hammer that requires no jar length, jar or bump block. The center rod and impact block are cast as one piece to provide maximum durability during the driving process. Hammer action is totally enclosed for safety. Maximum impact block travel allows for a 2'6" (762mm) free-fall. The machined, heavy-duty rod connection is AWML (1-3/4" (44mm) O.D. **MOBILOK™**) for the 140 lb (63.5kg) hammer or NWML (2-5/8" (67mm) O.D. **MOBILOK™**) for the 300 lb (136.1kg) hammer. Subs are required for connecting to other than **MOBILOK™**.



### SAFETY DRIVE HAMMER ASSEMBLY

Description	Lb/Kg	Part No.
Hammer Assy, Safety:		
140 lb (63.5kg), AWML Pin .....	190 (86.2)	67028-01
Hammer Assy, Safety: 300 lb (136.1kg), NWML Pin .....	351 (159.2)	67028-02

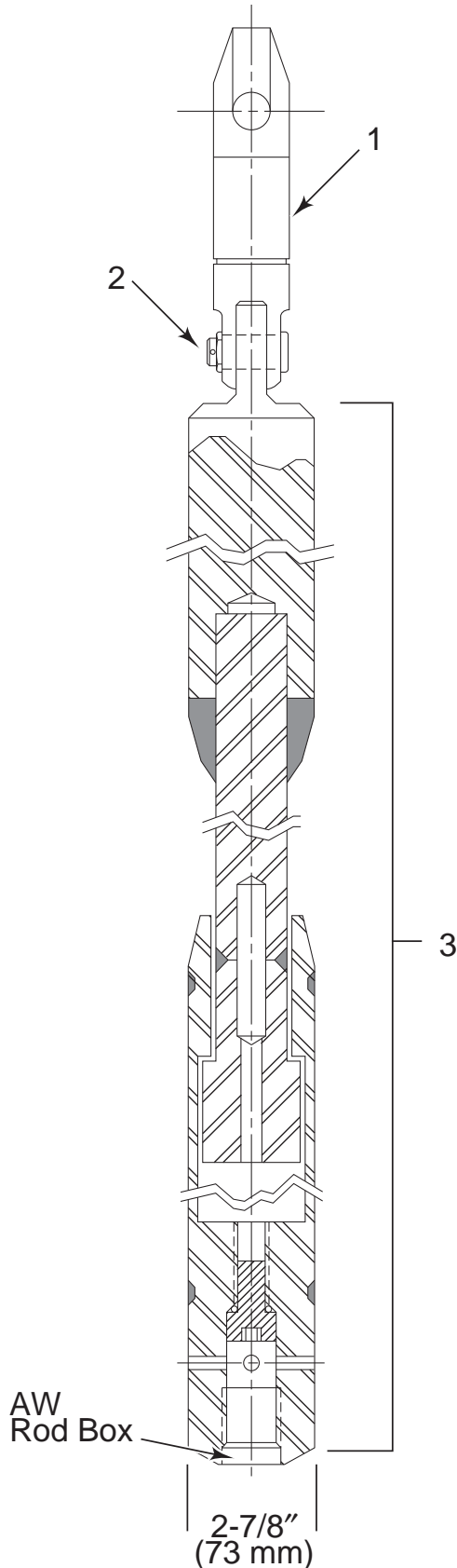
### COMPONENT PARTS: 140 LB (63.5Kg) FOR SPT WORK

Ref.	Description	Lb/Kg	Part No.
1	Weldment, Sleeve.....	127 (57.6)	190086
2	Center Rod .....	28 (12.7)	190066
3	Cap, Guide .....	14 (6.4)	190084
4	Capscrew, Hex Socket Head (8 Required).....*		3137-0079
	AWML Box To A Pin .....	2 (.9)	180011-01
	AWML Box To AW Pin .....	3 (1.4)	180011-02
	AWML Box To BW Pin .....	4 (1.8)	180011-03
	AWML Box To N Pin .....	6 (2.7)	180011-04
	AWML Box To NW Pin .....	6 (2.7)	180011-05
	AWML Box To NWML Pin .....	6 (2.7)	180011-06

### COMPONENT PARTS: 300 LB (136.1Kg) FOR DRIVING CASING

Ref.	Description	Lb/Kg	Part No.
1	Weldment, Sleeve.....	295 (133.8)	190090
2	Center Rod .....	39 (17.7)	006990
3	Cap, Guide .....	17 (7.7)	190091
4	Capscrew, Hex Socket Head (8 Required).....*		3134-0090
	NWML Box To A Pin .....	5 (2.3)	180012-01
	NWML Box To AW Pin .....	5 (2.3)	180012-02
	NWML Box To AWML Pin .....	6 (2.7)	180012-06
	NWML Box To BW Pin.....	5 (2.3)	180012-03
	NWML Box To N Pin.....	5 (2.3)	180012-04
	NWML Box To NW Pin .....	5 (2.3)	180012-05

**6**



## IN-HOLE SAMPLING HAMMER

Mobile's exclusive In-Hole Sampling Hammer is a 140 lb. (63.5kg) free-fall drive weight incorporating an enclosed "jars" assembly with a 3'6" (914mm) maximum stroke length. It is supplied with a D.C.D.M.A. rod box thread at the bottom end for direct attachment of a chopping bit, sampler or drill rod using an appropriate pin-to-pin adapter. The top connection is a 3 ton (2.7t) capacity ball bearing swivel with a bullet nosed thimble cap which will accept wire rope to 1/2" (13mm) diameter. Operation can be by SAFE-DRIVER or free-spooling sandline and other actuating means that would normally be acceptable for use with a conventional or safety type drive hammer. Through the spindle sampling, available only with Mobile equipment, is possible utilizing a Gimbal Coupling (Section 3) and the hammer connected directly to the sampler in its "in-hole" mode. Direct connection of the sampler to hammer also eliminates the loss of hammer energy to the sampler which is common in deep holes and provides considerable operational economy through the elimination of drill rod handling. The In-Hole Hammer can be used with drill rods between the sampler and hammer and is recommended in wet bore holes to keep the hammer above the water level.

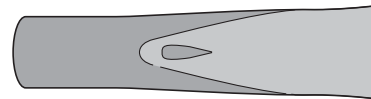
### IN-HOLE SAMPLING HAMMER 2-7/8" (73mm) O.D.

Description	Lb/Kg	Part No.
Hammer Assy: 10'1" (3.07m)		
Closed, 140 lb (63.5kg), AW box .....	180 (81.6).....	006297-01

#### COMPONENT PARTS

Ref.	Description	Lb/Kg	Part No.
1	Swivel, Ball Bearing With Bolt and Nut.....	5 (2.3) .....	006305
2	Bolt and Nut .....	* .....	006748
3	Hammer Without Swivel ..	168 (76.2) .....	006297-10

### STRAIGHT CHOPPING BIT WITH ROD BOX CONNECTION



Description	Lb/Kg	Part No.
1-13/16" (46mm), A Rod Box .....	3 (1.4) .....	002096
2-3/4" (70mm), A Rod Box .....	5 (2.3) .....	002097
2-1/4" (57mm), AW Rod Box .....	3 (1.4) .....	006870
2-3/4" (70mm), AW Rod Box.....	7 (3.2) .....	007163
3-1/4" (83mm), N Rod Box.....	8 (3.6) .....	002099

### CROSS CHOPPING BIT

Description	Lb/Kg	Part No.
1-13/16" (46mm), A Rod Box .....	3 (1.4) .....	002104
1-3/8" (35mm), EW Rod Box .....	3 (1.4) .....	006815
2-3/8" (60mm), N Rod Box.....	5 (2.3) .....	002106

### COUPLING AND SUBS

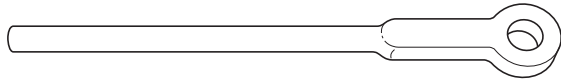
Description	Lb/Kg	Part No.
Coupling: AW Pin To AW Pin .....	2 (.9) .....	001617
Sub AW Pin To A Pin .....	2 (.9) .....	001833
Sub AW Pin To N Pin .....	5 (2.3) .....	180048-01
Sub AW Pin To EW Pin .....	2 (.9) .....	001839
Sub AW Pin To NW Pin .....	6 (2.7) .....	001843
Sub AW Pin To AWML Pin .....	2 (.9) .....	006282

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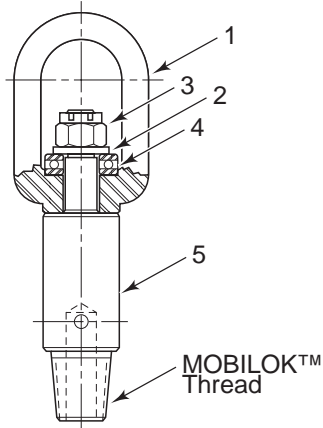
## HOISTING TOOLS

### ROD LIFTER



Description	Lb/Kg	Part No.
Closed Eye (EW)	13 (5.9)	002640
Closed Eye (AW, AWML)	13 (5.9)	002641
Closed Eye (BW)	14 (6.4)	002642
Closed Eye (NW & NWML)	16 (7.3)	002643
Open Eye (AW & AWML)	12 (5.4)	005674
Open Eye (NW & NWML)	16 (7.3)	005673
Open Eye (EW)	11 (5)	005676

### BALL BEARING HOISTING PLUG

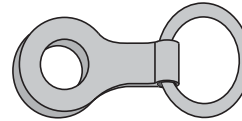


Description	Lb/Kg	Part No.
A Pin	12 (5.4)	64135-06
AW Pin	11 (5)	64135-05
AWML Pin	11 (5)	64135-02
NW Pin	16 (7.3)	64135-03
NWML Pin	16 (7.3)	64135-01

### COMPONENT PARTS

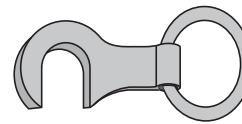
Ref.	Description	Lb/Kg	Part No.
1	Bail	†	180233-01
2	Spacer	†	210032-08
3	Nut	†	3504-0020
4	Bearing	†	3535-0001
5	Stem A	†	180240
	AW	†	180238
	AWJ	†	180235
	N	†	180237
	NW	†	180236
	NWJ	†	180234

### ROD RING



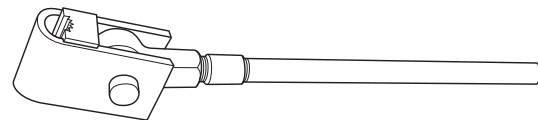
Description	Lb/Kg	Part No.
A Rod	7 (3.2)	002621
AW & AWML Rod	7 (3.2)	002625
B Rod	12 (5.4)	002622
BW Rod	10 (4.5)	002626
E Rod	6 (2.7)	002620
EW Rod	12 (5.4)	002624
N Rod	13 (5.9)	002623
NW & NWML Rod	10 (4.5)	002627

### ROD HOOK



Description	Lb/Kg	Part No.
A Rod	7 (3.2)	002629
AW & AWML Rod	7 (3.2)	002633
B Rod	11 (5)	002630
BW Rod	10 (4.5)	002634
E Rod	6 (2.7)	002628
EW Rod	6 (2.7)	002632
N Rod	13 (5.9)	002631
NW & NWML Rod	9 (4.1)	002635

### LOWERING IRON WITH JAW



Description	Lb/Kg	Part No.
AW, AWML	24 (10.9)	002748
BW	21 (9.5)	002749
EW	17 (7.7)	002747
NW, NWML	23 (10.4)	002750

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## HOISTING HOOK

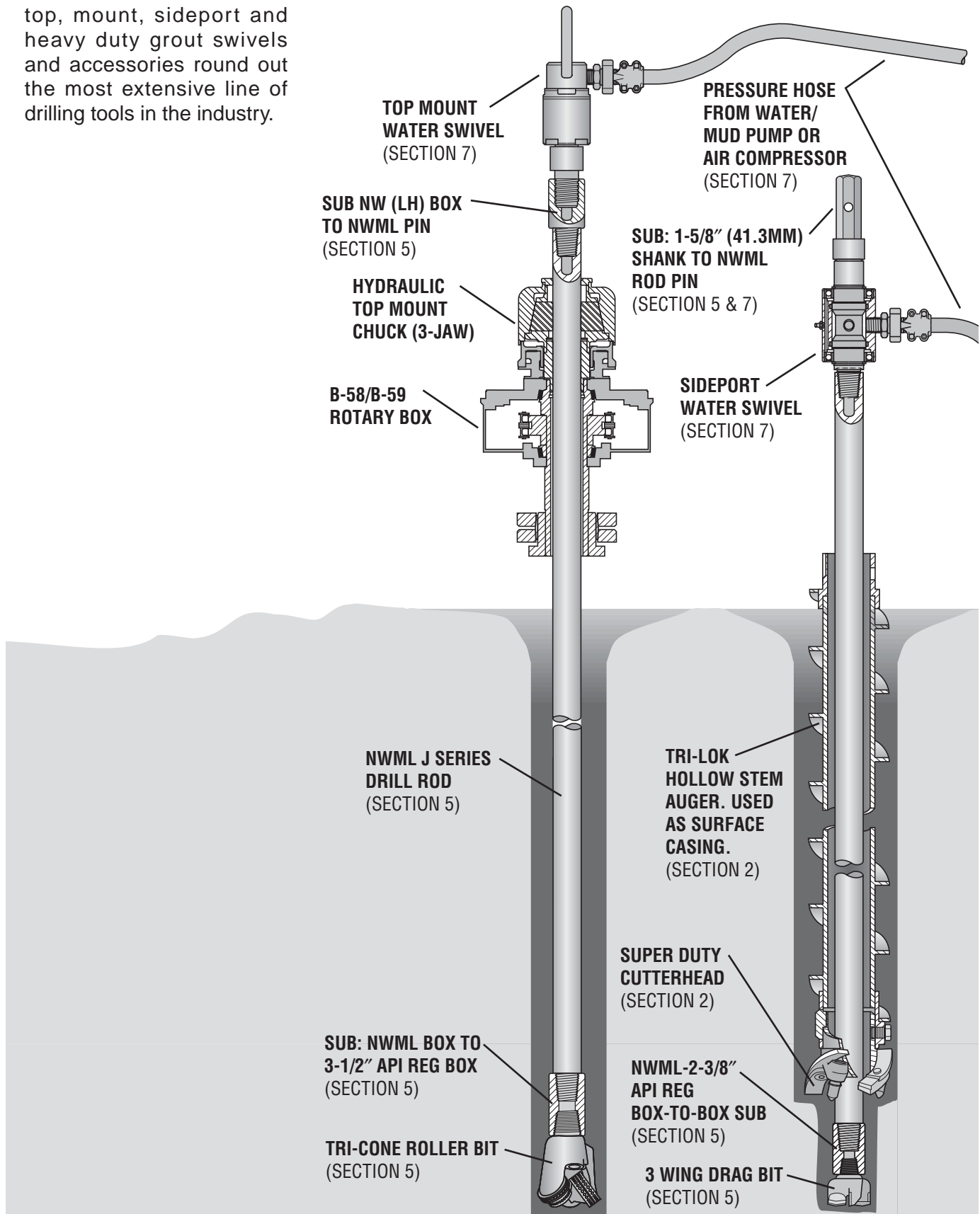


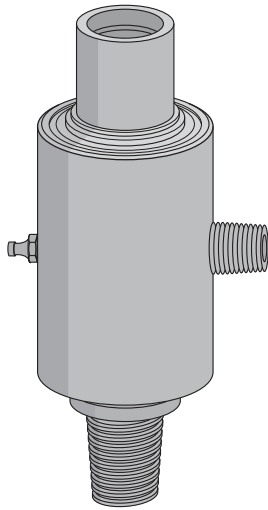
Description	Lb/Kg	Part No.
3 Ton Hook Gunnebo .....	4.3 (2.0) .....	3840-0003
Latch Kit .....	* .....	218071-03
4 Ton Hook Gunnebo .....	8.4 (3.8) .....	3840-0004
Latch Kit .....	* .....	218071-04
7 Ton Hook Gunnebo .....	15 (6.8) .....	3840-0005
Latch Kit .....	* .....	218071-05



Description	Lb/Kg	Part No.
1 Ton Hook .....	2 (.9) .....	3061-0002
3 Ton Hook .....	3 (1.4) .....	3061-0004
Latch Kit .....	* .....	3062-0004
4-½ Ton Hook .....	6 (2.7) .....	3061-0005
Latch Kit .....	* .....	3062-0005
7 Ton Hook .....	9 (4.1) .....	3061-0006

Mobile's full line of top, mount, sideport and heavy duty grout swivels and accessories round out the most extensive line of drilling tools in the industry.





## SIDEPORT WATER SWIVEL

Sideport swivels are designed to inject fluid into the drill rod string on drill rigs with a solid spindle (where the use of a top mount swivel is not possible) for mud/air rotary applications. They are also useful when working below the spindle on hollow spindle rigs as when washing down through hollow stem augers when it is not desirable or feasible to remove the universal auger coupling. Swivels are run rod box up, rod pin down. Order hex adapter separately.

### SIDEPORT WATER SWIVEL ASSEMBLY

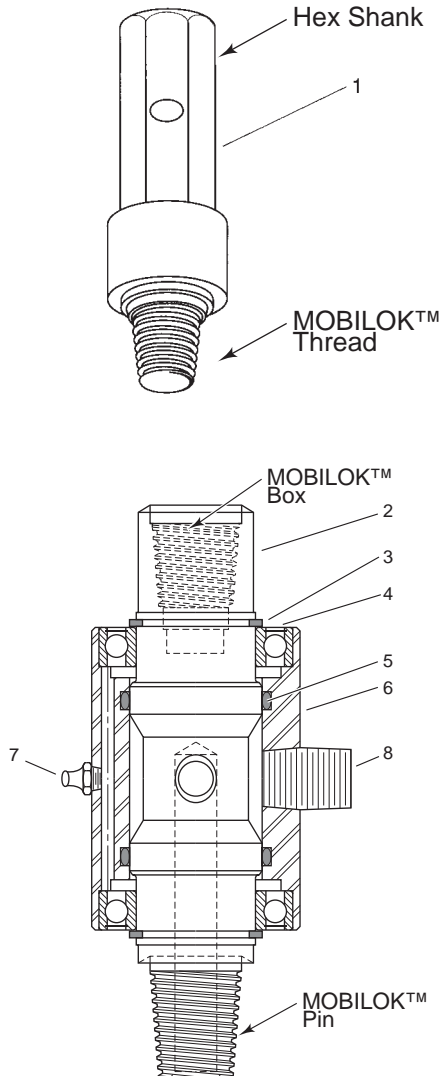
Description	Lb/Kg	Part No.
3/4" (19mm) NPT, A Rod	10 (4.5)	003408
3/4" (19mm) NPT, AW Rod	10 (4.5)	004607
3/4" (19mm) NPT, AWML Rod <sup>1</sup>	10 (4.5)	005466
3/4" (19mm) NPT, EW Rod	10 (4.5)	004810
1-1/4" (32mm) NPT, BW Rod	17 (7.7)	004862
1-1/4" (32mm) NPT, NW Rod	32 (14.5)	004864
1-1/4" (32mm) NPT, NWML Rod <sup>1</sup>	31 (14.1)	005468

<sup>1</sup>MOBILOK Drill Rod Connection With Tapered Treads

### COMPONENT PARTS: 3/4" (19mm)

Ref.	Description	Lb/Kg	Part No.
1	Adapter 1-1/8" (29mm) Hex Shank To AWML Rod Pin	2 (.9)	180078-01
1	Adapter 1-1/8" (29mm) Hex To Shank EW Rod Pin	1 (1.4)	004872
1	Adapter 1-1/8" (29mm) Hex To NWML Pin	4 (1.8)	180078-02
1	Adapter 1-5/8" (41mm) Hex To Shank A Rod Pin	8 (3.6)	180080-03
1	Adapter 1-5/8" (41mm) Hex To Shank AW Rod Pin	8 (3.6)	180080-02
1	Adapter 1-5/8" (41mm) Hex To Shank AWML Rod Pin	8 (3.6)	180080-01
1	Adapter 1-5/8" (41mm) Hex To Shank EW Rod Pin	8 (3.6)	004879
1	Adapter 1-5/8" (41mm) Hex To NWML Pin	10 (4.5)	180080-05
1	Adapter 2" (51mm) Hex To Shank AW Rod Pin	10 (4.5)	004906
1	Adapter 2" (51mm) Hex To Shank AWML Rod Pin	8 (3.6)	180081-01
1	Adapter 2" (51mm) Hex To Shank EW Rod Pin	10 (4.5)	004904
1	Adapter 2" (51mm) Hex To NWML Pin	12 (5.4)	180081-02
2	AW Rod Shaft	5 (2.3)	004966
2	AWML Rod Shaft	5 (2.3)	005467
2	EW Rod Shaft	5 (2.3)	004986
3	Ring, Retaining (2 Req'd)	*	3222-0177
4	Bearing, Ball (2 Req'd)	*	3656-0109
5	O-Ring (2 Req'd)	*	3538-0329
6	Housing	*	003409
7	Fitting, Grease	*	3129-0001
8	Nipple, Pipe	*	3033-0019

*Continued on next page*



## COMPONENT PARTS: 1-1/4" (32mm)

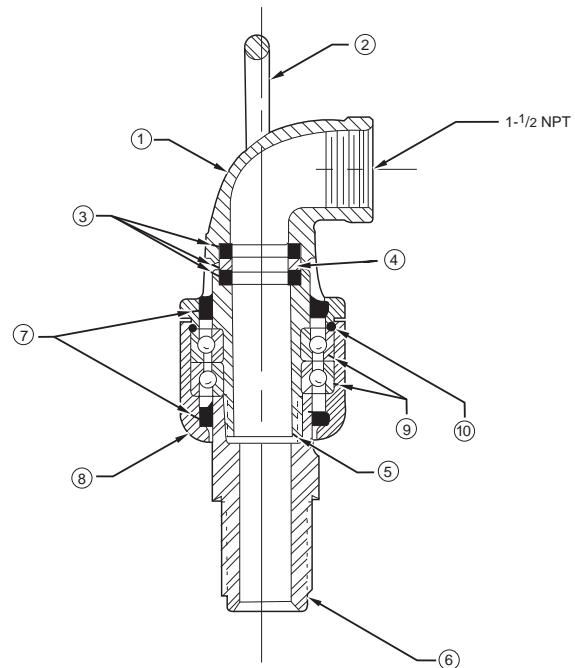
Ref.	Description	Lb/Kg	Part No.
1	1-1/8" (29mm) Hex Shank To BW Rod Pin.....	4 (1.8)	.....004876
1	1-1/8" (29mm) Hex Shank To NW Rod Pin.....	4 (1.8)	.....004878
1	1-1/8" (29mm) Hex Shank To NWML Rod Pin.....	4 (1.8)	.....180078-02
1	1-5/8" (41mm) Hex Shank To BW Rod Pin.....	9(4.1)	.....180080-04
1	1-5/8" (41mm) Hex Shank To NW Rod Pin.....	10(4.5)	.....004468
1	1-5/8" (41mm) Hex Shank To NWML Rod Pin.....	10(4.5)	.....180080-05
1	2" (51mm) Hex Shank To BW Rod Pin.....	11(5)	.....004908
1	2" (51mm) Hex Shank To NW Rod Pin.....	12(5.4)	.....004910
1	2" (51mm) Hex Shank To NWML Rod Pin.....	12 (5.4)	.....180081-02
2	BW Rod Shaft.....	7 (3.2)	.....005454
2	NW Rod Shaft.....	8 (3.6)	.....005465
2	NWML Rod Shaft.....	8 (3.6)	.....005469
3	Ring, Retaining.....*		.....3222-0275
4	Bearing, Ball.....*		.....005450
5	O-Ring.....*		.....3538-0336
6	Housing.....*		.....005452
7	Fitting, Grease.....*		.....3129-0006
8	Nipple, Pipe.....*		.....3033-0032

## 1-1/2" (38 mm) TOP MOUNT WATER SWIVEL

Heavy-duty bail type swivel with a 1-1/2" (38mm) water/mud or air course for use on hollow spindle drill rigs in conjunction with a drill rod chuck when performing water/mud or air rotary operations. Available with either water/mud or air packing. Static hoisting capacity is 5,000 lbs (2,268kg) maximum. Rotating speed is 600 rpm (62.8 rad/s) maximum.

### 1-1/2" (38mm) TOP MOUNT WATER SWIVEL

Description	Lb/Kg	Part No.
AW Rod Pin.....	22 (10)	.....002582
AWML Rod Pin.....	16 (7.3)	.....64042-15
BW Rod Pin.....	22 (10)	.....002583
NW Rod Pin.....	22 (10)	.....64042-03
LH Thread, NW Rod Pin LH Thread.....	22 (10)	.....64042-01
NWML Rod Pin.....	16 (7.3)	.....64042-13



### COMPONENT PARTS

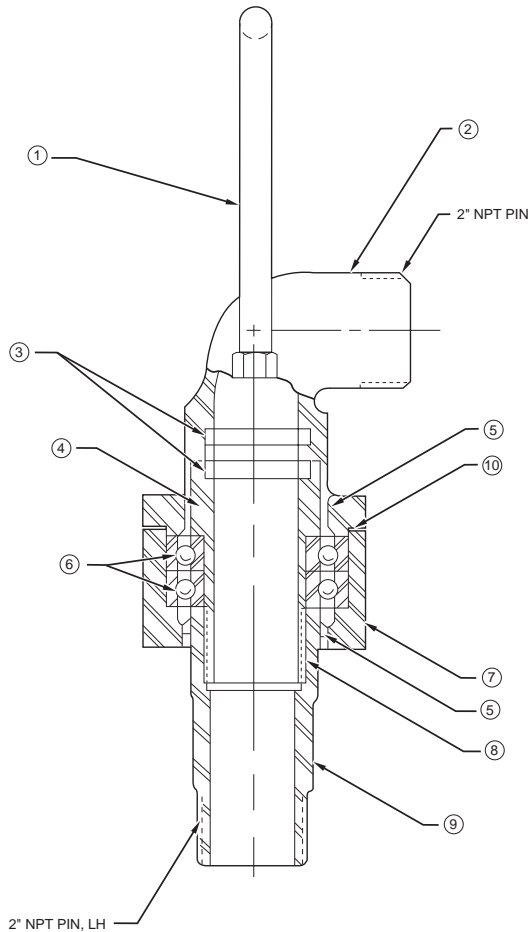
Ref.	Description	Lb/Kg	Part No.
1	Gooseneck.....	6 (2.7)	.....005570
2	Bail.....	2 (.9)	.....005572
3	Packing Set: Water (Includes Wear Bushing).....*		.....180162-01
4	Bushing, Wear.....*		.....005576
5	Spindle, Bearing.....	2 (.9)	.....005578
6	AW Rod Adapter.....	4 (1.8)	.....005765
6	AWML Rod Adapter.....	4 (1.8)	.....180359
6	BW Rod Adapter.....	4 (1.8)	.....005766
6	NW Rod Adapter.....	4 (1.8)	.....005767
6	NW Rod LH Thread Adapter.....	4 (1.8)	.....180164
6	NWML Rod Adapter.....	4 (1.8)	.....180355
7	Seal, Housing (Set of 2).....*		.....005582
8	Bearing Housing.....	6 (2.7)	.....005584
9	Bearing (Set of 2).....	3 (1.4)	.....005586
10	Bearing Retainer.....*		.....005761

## 2" (51 mm) TOP MOUNT & HIGH SPEED WATER SWIVEL

Heavy-duty bail type swivel with a 2" (51mm) water, mud or air course for use on hollow spindle drill rigs in conjunction with a drill rod chuck when performing water, mud or air rotary operations. Dynamic hoisting capacity is 10,000 lbs (4,536 kg) maximum, rotating speed is 300 rpm (31.4 rad/s) maximum.

### SWIVEL ASSEMBLY: WATER/MUD

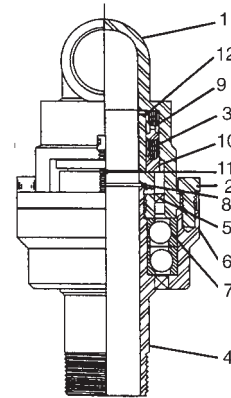
Description	Lb/Kg	Part No.
LH Thread 2" (51mm) NPT	39 (17.7)	64042-23



### COMPONENT PARTS

Ref.	Description	Lb/Kg	Part No.
1	Bail	*	180514
2	Gooseneck	10 (4.5)	180513
3	Packing Set w/Wear Ring	*	180162-03
3	VITON Packing (For Air)	*	180162-05
4	Spindle	5 (2.3)	180212
5	Seal, Housing (2 Req'd)	*	180214
5	Seal, VITON (For Air) (2 Req'd)	*	180214-01
6	Bearing (2 Req'd)	1 (.5)	180216
7	Housing, Bearing	15 (6.8)	180215
8	Seal, Spindle Thread	*	180218
9	Connection, Lower 2" NPT LH	5 (2.3)	180213
10	Retaining Wire	*	180217

## 2-1/2" (64 mm) TOP MOUNT WATER SWIVEL



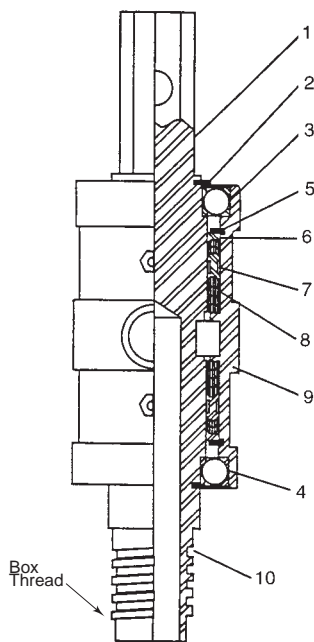
### Specifications

<b>Length</b>	13" (330.2mm) without bail
<b>Weight</b>	50 lbs. (22.7kg)
<b>Top Connection</b>	2-1/2" (63.5mm) NPT Female
<b>Lower Connection</b>	2-1/2" (63.5mm) NPT Male
<b>Water Course</b>	2-1/4" (57.2mm) Max.
<b>Working Pressure</b>	1500 psi

### COMPONENT PARTS

Ref.	Description	Lb/Kg	Part No.
1	Gooseneck	26 (11.8)	180531-01
2	Stud w/Nuts	*	180531-02
3	Packing	1 (.5)	180531-03
4	Spindle Bearing (optional)	7 (3.2)	180531-04
5	Housing Seal	*	180531-05
6	Bearing Housing	10 (4.5)	180531-06
7	Bearings	7.5 (3.4)	180531-07
8	Thread Seal	*	180531-08
9	Lantern Ring	*	180531-09
10	Pkg. Adj. Gland	2 (.9)	180531-10
11	Gland Bolt w/Nut	*	180531-11
12	Wash Pipe	5 (2.3)	180531-12
	Setscrew, Wash Pipe	*	180531-13

## HEAVY DUTY GROUT SWIVEL



### Specifications

<b>Part No.</b> 64042-28	<b>Part No.</b> 64042-27
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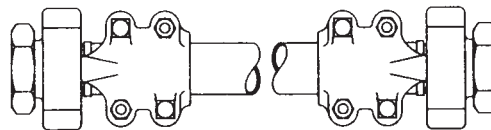
<b>Upper Connection</b> ...1-5/8" (41.3mm) Hex	2" (50.8mm) Hex
<b>Hose Connection</b> ...2" (50.8mm)	2" (50.8mm)
<b>Lower Connection</b> ...2-7/8" (73.0mm) API	2-7/8" (73.0mm) API
<b>Water Course</b> .....2" (50.8mm)	2" (50.8mm)
<b>Weight</b> .....75 lbs. (34kg)	75 lbs. (34kg)
<b>Length</b> .....21" (533.4mm)	21" (533.4mm)

Auger Adapters	Part No.
3-1/4" (82.6mm) TRI-LOK	150736
3-1/4" (82.6mm) Two-Key	150735
4-1/4" (108mm) TRI-LOK	150738
4-1/4" (108mm) Two-Key HD	150737
6-1/4" (158.8mm) Two-Key HD	150739
6-3/8" (168.3mm) TRI-LOK	150740
8-1/4" (209.6mm) TRI-LOK	150741

### COMPONENT PARTS

Ref.	Description	Lb/Kg	Part No.
1	Shaft 1-5/8" (41.3mm) Hex	32 (14.5)	180530-01
1a	Shaft 2" (50.8mm) Hex	33 (15.0)	180530-12
2	Retainer, Bearing	*	180530-02
3	Bearing, Upper	3 (1.4)	180530-03
4	Bearing, Lower	3 (1.4)	180530-04
5	Retainer Packing	*	180530-05
6	Seat Ring Packing	*	180530-06
7	Lantern Ring	*	180530-07
8	Packing Set	*	180530-08
8a	Packing Set (low pressure)	*	180530-09
9	Packoff Box	28 (2.7)	180530-10
10	Drive Cap Adapter	8 (3.6)	180530-11

## WATER PUMP PRESSURE HOSE



Quality construction insures a high degree of resistance to abrasion and weather. Tightly twisted braided cords provide ample strength for general use on drilling rigs. Furnished with HAMMER-LOK™ type box couplings on each end. Maximum rated working pressure is 750 psi (53 kg/cm²).

### PRESSURE HOSE

Description	Lb/Kg	Part No.
1" (25mm) ID X 15'0" (4.6m)	11 (5.0)	64006-15
1" (25mm) ID X 20'0" (6.1m)	20 (9.0)	64006-20
1" (25mm) ID X 25'0" (7.6m)	25 (11.3)	64006-25
1" (25mm) ID X 30'0" (9.1m)	30 (13.6)	64006-30
1-1/4" (32mm) ID X 15'0" (4.6m)	20 (9.0)	64007-15
1-1/4" (32mm) ID X 20'0" (6.1m)	26 (11.8)	64007-20
1-1/4" (32mm) ID X 25'0" (7.6m)	32 (14.5)	64007-25
1-1/4" (32mm) ID X 30'0" (9.1m)	37 (16.8)	64007-30
1-1/2" (38mm) ID X 25'0" (7.6m)	39 (17.7)	64008-25
2" (51mm) ID X 20'0" (6.1m)	38 (17.2)	64009-20
2" (51mm) ID X 25'0" (7.6m)	47 (21.3)	64009-25
2" (51mm) ID X 30'0" (9.1m)	56 (25.4)	64009-30

## WATER PUMP PRESSURE HOSE ASSEMBLIES

Quality construction ensures a high degree of resistance to abrasion and weather. Tightly twisted braided cords provide ample strength for general use on drilling rigs. Furnished with KAMLOK™ type couplings on each end. Maximum rated working pressure is 250 psi (17.2 Bar).

Description	Lb/Kg	Part No
1" (25mm) ID x 6' (1.8m)	+	64176-06
1" (25mm) ID x 8' (2.4m)	+	64176-08
1" (25mm) ID x 10' (3.0m)	+	64176-10
1" (25mm) ID x 15' (4.6m)	+	64176-15
1" (25mm) ID x 20' (6.1m)	+	64176-20
1" (25mm) ID x 25' (7.6m)	+	64176-25
1" (25mm) ID x 30' (9.1m)	+	64176-30
1-1/4" (32mm) ID x 6' (1.8m)	+	64177-06
1-1/4" (32mm) ID x 8' (2.4m)	+	64177-08
1-1/4" (32mm) ID x 10' (3.0m)	+	64177-10
1-1/4" (32mm) ID x 15' (4.6m)	+	64177-15
1-1/4" (32mm) ID x 20' (6.1m)	+	64177-20
1-1/4" (32mm) ID x 25' (7.6m)	+	64177-25
1-1/4" (32mm) ID x 30' (9.1m)	+	64177-30
1-1/2" (38mm) ID x 6' (1.8m)	+	64178-06
1-1/2" (38mm) ID x 8' (2.4m)	+	64178-08
1-1/2" (38mm) ID x 10' (3.0m)	+	64178-10
1-1/2" (38mm) ID x 15' (4.6m)	+	64178-15

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Description	Lb/Kg	Part No
1-1/2" (38mm) ID x 20' (6.1m) .....	†	64178-20
1-1/2" (38mm) ID x 25' (7.6m) .....	†	64178-25
1-1/2" (38mm) ID x 30' (9.1m) .....	†	64178-30
2" (51mm) ID x 6' (1.8m) .....	†	64173-06
2" (51mm) ID x 8' (2.4m) .....	†	64173-08
2" (51mm) ID x 10' (3.0m) .....	†	64173-10
2" (51mm) ID x 15' (4.6m) .....	†	64173-15
2" (51mm) ID x 20' (6.1m) .....	†	64173-20
2" (51mm) ID x 25' (7.6m) .....	†	64173-25
2" (51mm) ID x 30' (9.1m) .....	†	64173-30

### COMPONENT PARTS

Description	Lb/Kg	Part No
Hose, Pressure 1" (25mm) ID x 6' (1.8m) .....	†	3001-0600
Hose, Pressure 1" (25mm) ID x 8' (2.4m) .....	†	3001-0800
Hose, Pressure 1" (25mm) ID x 10' (3.0m) .....	†	3001-1000
Hose, Pressure 1" (25mm) ID x 15' (4.6m) .....	†	3001-1500
Hose, Pressure 1" (25mm) ID x 20' (6.1m) .....	†	3001-2000
Hose, Pressure 1" (25mm) ID x 25' (7.6m) .....	†	3001-2500
Hose, Pressure 1" (25mm) ID x 30' (9.1m) .....	†	3001-3000
Hose, Pressure 1-1/4" (32mm) ID x 6' (1.8m) .....	†	3002-0600
Hose, Pressure 1-1/4" (32mm) ID x 8' (2.4m) .....	†	3002-0800
Hose, Pressure 1-1/4" (32mm) ID x 10' (3.0m) .....	†	3002-1000
Hose, Pressure 1-1/4" (32mm) ID x 15' (4.6m) .....	†	3002-1500
Hose, Pressure 1-1/4" (32mm) ID x 20' (6.1 m) .....	†	3002-2000
Hose, Pressure 1-1/4" (32mm) ID x 25' (7.6m) .....	†	3002-2500
Hose, Pressure 1-1/4" (32mm) ID x 30' (9.1m) .....	†	3002-3000
Hose, Pressure 1-1/2" (38mm) ID x 6' (1.8m) .....	†	3003-0600
Hose, Pressure 1-1/2" (38mm) ID x 8' (2.4m) .....	†	3003-0800
Hose, Pressure 1-1/2" (38mm) ID x 10' (3.0m) .....	†	3003-1 000
Hose, Pressure 1-1/2" (38mm) ID x 15' (4.6m) .....	†	3003-1 500
Hose, Pressure 1-1/2" (38mm) ID x 20' (6.1m) .....	†	3003-2000
Hose, Pressure 1-1/2" (38mm) ID x 25' (7.6m) .....	†	3003-2500
Hose, Pressure 1-1/2" (38mm) ID x 30' (9.1m) .....	†	3003-3000
Hose, Pressure 2" (51mm) ID x 6' (1.8m).....	†	3004-0600
Hose, Pressure 2" (51mm) ID x 8' (2.4m).....	†	3004-0800
Hose, Pressure 2" (51mm) ID x 10' (3.0m) .....	†	3004-1 000
Hose, Pressure 2" (51mm) ID x 15' (4.6m) .....	†	3004-1 500
Hose, Pressure 2" (51mm) ID x 20' (6.1m) .....	†	3004-2000
Hose, Pressure 2" (51mm) ID x 25' (7.6m) .....	†	3004-2500
Hose, Pressure 2" (51mm) ID x 30' (9.1m) .....	†	3004-3000
Adapter, KAMLOK 1" (25mm) female .....	†	3516-0016
Adapter, KAMLOK 1-1/4" (32mm) female .....	†	3416-0020
Adapter, KAMLOK 1-1/2" (38mm) female .....	†	3516-0024
Adapter, KAMLOK 2" (51mm) female .....	†	3516-0032
Coupler, KAMLOK 1" (25mm) .....	†	3515-0016
Coupler, KAMLOK 1-1/4" (32mm) .....	†	3515-0020
Coupler, KAMLOK 1-1/2" (38mm) .....	†	3515-0024
Coupler, KAMLOK 2" (51mm) .....	†	3515-0032
Clamp, Hose (set of 2) - For 1" (25mm) hose.....	†	3012-1625
Clamp, Hose (set of 2) - For 1-1/4" (32mm) hose.....	†	3012-2030
Clamp, Hose (set of 2) - For 1-1/2" (38mm) hose.....	†	3012-2434
Clamp, Hose (set of 2) - For 2" (51mm) hose.....	†	3012-3240
Spud, Male (set of 2) - For 1" (25mm) hose .....	†	3869-0016
Spud, Male (set of 2) - For 1-1/4" (32mm) hose .....	†	3869-2030
Spud, Male (set of 2) - For 1-1/2" (38mm) hose .....	†	3869-0024
Spud, Male (set of 2) - For 2" (51mm) hose .....	†	3869-0032

## WATER PUMP SUCTION HOSE

Suction hose will withstand any general field usage common to rotary drill operation and give dependable service under severe working conditions. Hose has a suction rating of 100% full vacuum.



SUCTION HOSE

Description	Lb/Kg	Part No.
1-1/2" (38mm) ID X 15'0" (4.6m) .....	20 (9.1)	64000-15
1-1/2" (38mm) ID X, 20'0" (6.1m) .....	27 (12.2)	64000-20
1-1/2" (38mm) ID X, 25'0" (7.6m).....	33 (15)	64000-25
2" (51mm) ID X 15'0" (4.6m).....	28 (12.7)	64001-15
2" (51mm) ID X, 20'0" (6.1m).....	37 (16.8)	64001-20
2" (51mm) ID X 25'0" (7.6m).....	46 (20.9)	64001-25
2-1/2" (64mm) ID X 15'0" (4.6m) .....	36 (16.3)	64002-15
2-1/2" (64mm) ID X 20'0" (6.1m) .....	48 (21.8)	64002-20
2-1/2" (64mm) ID X 25'0" (7.6m) .....	60 (27.2)	64002-25
3" (76mm) ID X 15'0" (4.6m) .....	48 (21.8)	64003-15
3" (76mm) ID X 20'0" (6.1m) .....	64 (29)	64003-20
3" (76mm) ID X 25'0" (7.6m).....	80 (36.3)	64003-25
4" (102mm) ID X 20'0" (6.1m).....	100 (45.3)	64004-20
4" (102mm) ID X 25'0" (7.6m).....	120 (54.3)	64004-25



### COMBINATION FOOT VALVE & STRAINER

Description	Lb (Kg)	Part No.
1-1/4" (32mm).....	3 (1.4)	3013-0020
1-1/2" (38mm).....	4 (1.8)	3013-0024
2" (51mm) .....	6 (2.7)	3013-0032
2-1/2" (64mm).....	10 (4.5)	3013-0040
3" (76mm) .....	16 (7.3)	3013-0048
4" (102mm) .....	21 (9.5)	3013-0064



## CONCRETE/ASPHALT DIAMOND CORE BIT



Thinline “throwaway” bits are effective for recovering pavement cores or for passing through structural concrete to allow continued use of hollow stem augers. They are recommended where there is a possibility of total bit destruction. Because thinline “throwaway” bits are non-returnable, they should be used until no longer efficient or productive. All sizes require an expansion adapter and require a sub for drill rod connection. Core length of all bits is 12” (305mm). **Sizes are identified by nominal O.D.**

### THINLINE THROWAWAY CORE BIT

Description	Lb/Kg	Part No.
2” (51mm) .....	3 (1.4) .....	110135
3” (76mm) .....	4 (1.8) .....	110139
3-½” (89mm).....	4 (1.8) .....	110141
4” (102mm) .....	5 (2.3) .....	110142
4-¼” (108mm).....	5 (2.3) .....	110143
4-½” (114mm).....	6 (2.7) .....	110144
5” (127mm) .....	6 (2.7) .....	110145
5-½” (140mm).....	7 (3.2) .....	110147
6” (152mm) .....	7 (3.2) .....	110148
8” (203mm) .....	11 (5.0) .....	110384
10” (254mm) .....	15 (6.8) .....	110387

### EXPANSION ADAPTER

Description	Lb/Kg	Part No.
2” (51mm) .....	2 (.9) .....	110156
3” (76mm) .....	2 (.9) .....	110160
3-½” (89mm).....	3 (1.4) .....	110162
4” (102mm) .....	5 (2.3) .....	110163
4-¼” (108mm).....	5 (2.3) .....	110164
4-½” (114mm).....	6 (2.7) .....	110165
5” (127mm) .....	7 (3.2) .....	110166
5-½” (140mm).....	8 (3.6) .....	110168
6” (152mm) .....	9 (4.1) .....	110169
8” (203mm) .....	13 (5.9) .....	110395
10” (254mm) .....	17 (7.7) .....	110398

### SUBS

Description	Lb/Kg	Part No.
A Box to 1-¼” (32mm)-7 UNC Pin .....	2 (.9) .....	003242
AW Box to 1-¼” (32mm)-7 UNC Pin .....	2 (.9) .....	006770
AWML Box to 1-¼” (32mm)-7 UNC Pin ...	2 (.9) .....	180011-14
EW Box to 1-¼” (32mm)-7 UNC Pin.....	2 (.9) .....	006816
NW Box to 1-¼” (32mm)-7 UNC Pin .....	4 (1.8) .....	180007-08

For over 20 years, Mobile's OVER-SHOT WIRELINE CONTINUOUS SAMPLING SYSTEM has been recognized as the leading method for obtaining continuous samples while drilling in cohesive soils - fast, effective, hollow stem auger drilling and sample retrieval with the Overshot Retriever Assembly.

Whether it is used for identifying subsurface geological stratifications, environmental sampling, water well monitoring or retrieving high quality samples of unsaturated sand and gravel, this innovative system operates much more efficiently and faster than basic samplers where the rods must be tripped in and out for sample barrel retrieval.

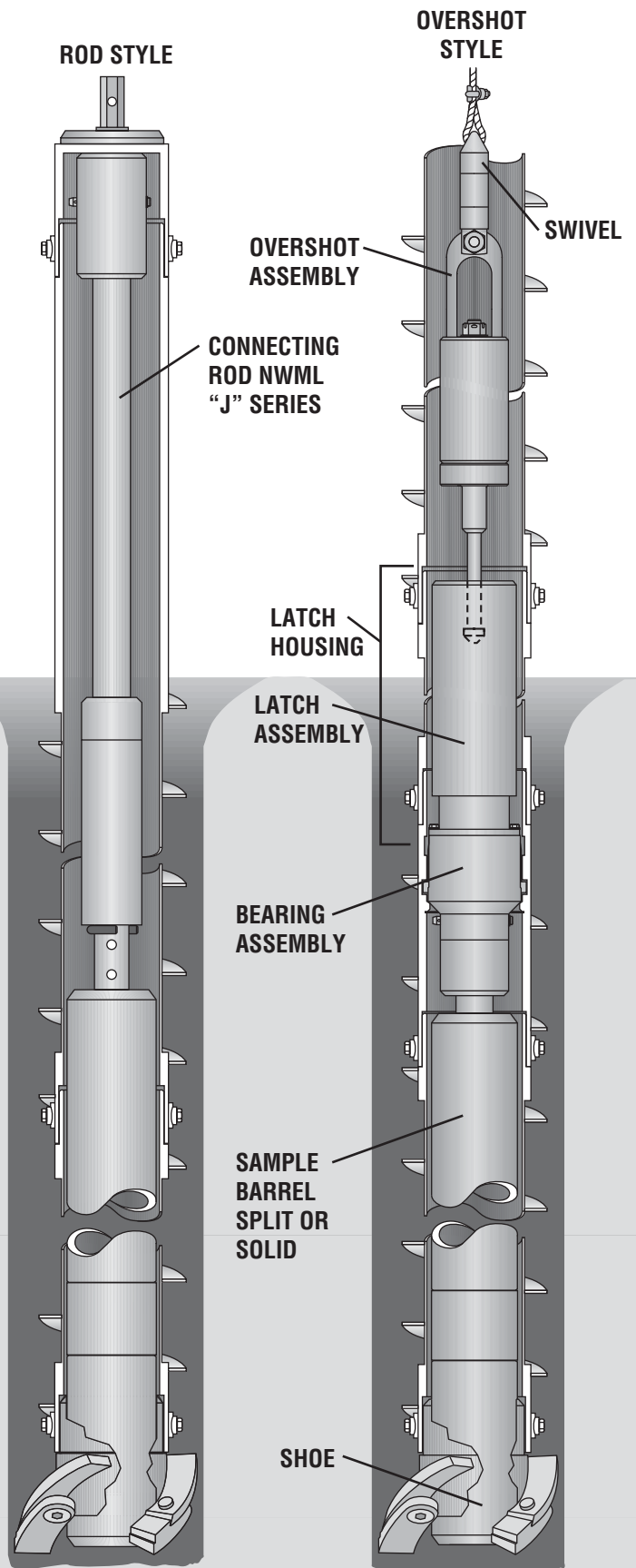
The Overshot Wireline Sampling System is available in four sizes:

- 3-1/4" (83mm)
- 4-1/4" (108mm)
- 3-3/8" (86mm)
- 6-5/8" (168mm)

The 4-1/4" and 6-5/8" systems use identical retriever assemblies and can be purchased with or without this component.

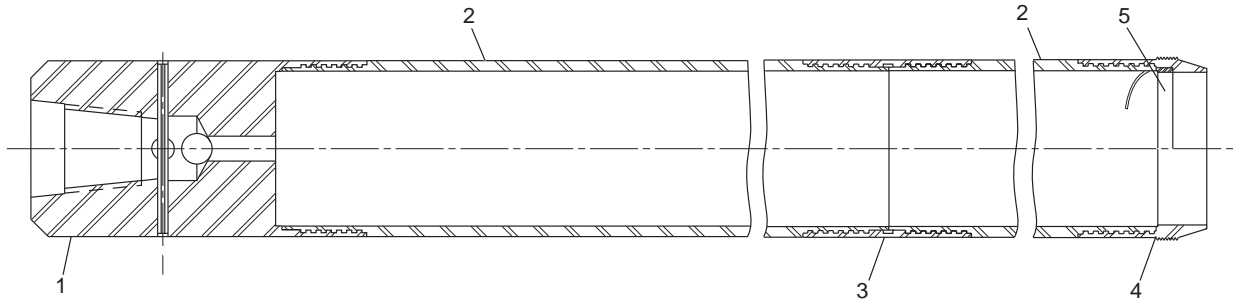
A split barrel sampler can be used with the Overshot Wireline System. If no samples are required, the pilot bit extension assembly can be installed on the latching assembly replacing the bearing assembly and sampler, allowing for quick removal of the center pilot bit assembly while straight auger drilling.

In applications such as deep, underwater drilling, it may be necessary to substitute the Overshot Wireline System for the Drill Rod System. The hollow stem augers are drilled in the normal way with the sample barrel being held in place by drill rods attached to a bearing in the drive cap. Samples are then retrieved by tripping the drill rods out of the hole.



## SPLIT BARREL SAMPLER ASSEMBLIES

### Continuous Sampler Split Barrel Assemblies



Continuous sample barrels are split into two 30" (762mm) sections joined by a center coupling for added strength. The complete assembly includes a head assembly, two 30" (762mm) barrel sections, a coupler, and a penetrating shoe. The shoe is hardened by a special heat treating process for longer life. Shoes are also provided to allow for sample retainers or for the use of clear plastic liners that help protect field crews operating in hazardous environments.

Sampler O.D.	Sampler I.D.	Sampler Length	Rod Connection	Assembly Part No.
3" (76.2mm)	2-1/2" (63.5mm)	30" (762mm)	NW	67034-16
3" (76.2mm)	2-1/2" (63.5mm)	60" (1.5m)	NW	67034-15
4" (102mm)	3-1/2" (89mm)	30" (762mm)	NWML	67040-01
4" (102mm)	3-1/2" (89mm)	60" (1.5m)	NWML	67040-02
6-1/4" (159mm)	5-3/4" (146mm)	30" (762mm)	NWML	67041-01
6-1/4" (159mm)	5-3/4" (146mm)	60" (1.5m)	NWML	67041-02

Ref. No.	Description	SAMPLERS								
		3" OD (76.2mm)			4" OD (102mm)			6-1/4" OD (159mm)		
		Part No.	Weight		Part No.	Weight		Part No.	Weight	
	lbs	kg		lbs	kg		lbs	kg		
1	Head Assy, w/ NW	67021-08	6	2.7	N/A	—	—	N/A	—	—
1	Head Assy, w/ NWML	N/A	—	—	67021-11	18	8.2	67021-05	24	10.9
2	30" (762mm) Split Barrel	67022-11	18	8.2	67022-12	23	10.4	67022-13	36	16.3
3	Coupler for 60" (1.5m) Lg. Barrel	190140	*	*	190179	2	.9	190180	3	1.4
4	Sampler Shoe	190071-08	2	.9	190071-25	2	.9	190071-18	4	1.8
5	Spacer (in place of basket trap)	190006-05	*	*	190006-06	*	*	190006-05	*	*
	<b>Optional Accessories</b>									
	Plastic Liner 30" (762mm) Lg.	190138-01	*	*	190138-03	2	.9	190138-02	3	1.4
	Basket Trap (Steel)	002419	*	*	190165-02	*	*	N/A	—	—
	Basket Trap (Plastic)	190177	*	*	190165-03	*	*			
	Flap Valve	002423	*	*	N/A	—	—	N/A	—	—
	Shoe (For Use with Plastic Liners)	190071-21	2	.9	190071-29	2	.9	190071-32	4	1.8

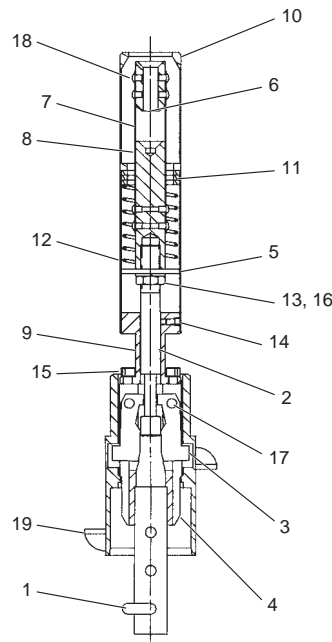
# CONTINUOUS SAMPLING



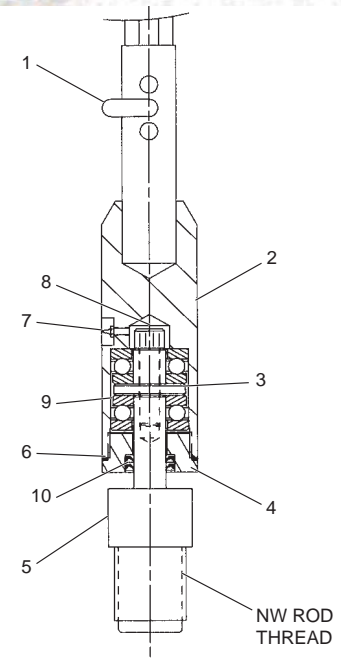
## 3-1/4" (83mm) TRI-LOK and 3-3/8" (86mm) THREADED OVERSHOT WIRELINE SYSTEM

Used for continuous vertical profiling of the formation being drilled with our 3-1/4", 3-3/8" and 4" hollow stem auger sections. Short subs are added to vary the sample barrel lead setting to allow good recovery of samples throughout a broad range of formation types. The center plug can be locked in place to allow augering without adding center rods. The system can be easily converted to run **MOBILOK™** drill rod in lieu of a wireline if the formation requires.

**NOTE:** 4" Threaded System available. Consult Factory.

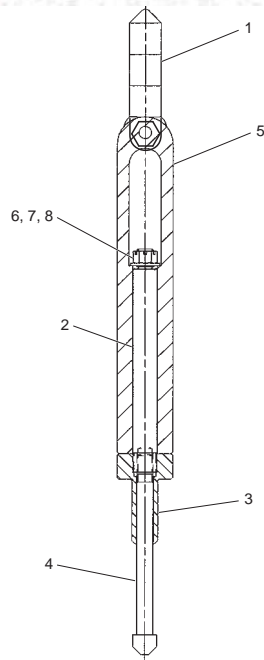


**Latch Assembly**

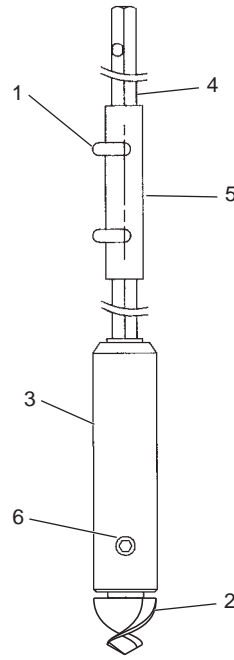


**Bearing Assembly**

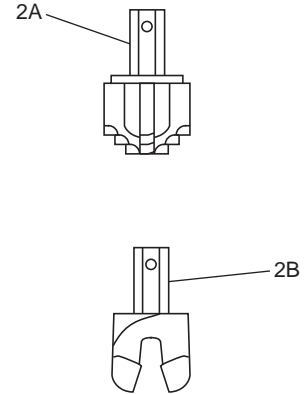
Ref	Description	3-1/4" (83mm) System				3-3/8" (86mm) System			
		Req.	Part No	Weight		Req.	Part No	Weight	
				Lb.	Kg.			Lb.	Kg.
	<b>COMPLETE SYSTEM</b> (Includes latch, bearing and pilot bit assemblies, overshot retriever and accessories.)	1	<b>67029-07</b>	207	93.9	1	<b>67029-08</b>	216	98.0
	<b>Latch Assembly</b>	1	<b>67020-09</b>	51	23.1	1	<b>67020-09</b>	53	24.0
1	U-Pin (1500 series)	1	001306	1	0.5	1	001306	1	0.5
2	Latch Plunger	1	190008	2	0.9	1	190008	2	0.9
3	Latch	2	190009-02	1	0.5	2	190009-02	1	0.5
4	Latch Body	1	190011	14	6.4	1	190011	14	6.4
5	Washer	2	190053	1	0.5	2	190053	1	0.5
6	Latch Blank (set)	1	190057	1	0.5	1	190057	1	0.5
7	Spring	4	190058	1	0.5	4	190058	1	0.5
8	Overshot Bar	1	190059	4	1.8	1	190059	4	1.8
9	Guide	1	190060	4	1.8	1	190060	4	1.8
10	Spring Housing	1	190061	3	1.4	1	190061	3	1.4
11	Spacer	3	210032-28	1	0.5	3	210032-28	1	0.5
12	Compression Spring	1	212160-03	1	0.5	1	212160-03	1	0.5
13	Lockwasher	1	3126-0016	*	*	1	3126-0016	*	*
14	Hex Socket Head Capscrew	8	3130-0012	*	*	8	3130-0012	*	*
15	Hex Socket Head Capscrew	4	3130-0071	*	*	4	3130-0071	*	*
16	Hex Jam Nut	1	3204-0016	*	*	1	3204-0016	*	*
17	Dowel Pin	2	3229-0057	1	0.5	2	3229-0057	1	0.5
18	Button Head Capscrew	16	3559-0002	1	0.5	16	3559-0002	1	0.5
19	Latch Housing	1	190023	15	6.8	1	190010	17	7.7
	<b>Bearing Assembly</b>	1	<b>67020-11</b>	23	10.4	1	<b>67020-11</b>	23	10.4
1	U-Pin (1500 series)	1	001306	*	*	1	001306	*	*
2	Bearing Housing	1	190013	12	5.4	1	190013	12	5.4
3	Bearing Spacer	1	190015	1	0.5	1	190015	1	0.5
4	Housing Seal	1	190016	2	0.9	1	190016	2	0.9
5	Sampler Hanger	1	190080	6	2.7	1	190080	6	2.7
6	Shim	3	210091-12	*	*	3	210091-12	*	*
7	Grease Fitting	1	3129-0001	*	*	1	3129-0001	*	*
8	Hex Socket Head Capscrew	1	3137-0099	*	*	1	3137-0099	*	*
9	Ball Bearing	2	3535-0002	2	0.9	2	3535-0002	2	0.9
10	Oil Seal (Single Lip)	2	3560-0011	*	*	2	3560-0011	*	*



**Overshot Retriever Assembly**



**Pilot Bit Assembly**

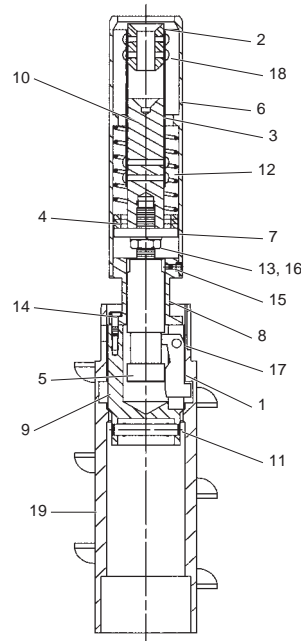


**Pilot Bits**

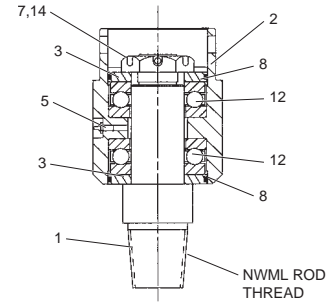
Ref	Description	3-1/4" (83mm) System			3-3/8" (86mm) System		
		Part No	Weight		Part No	Weight	
			Lb.	Kg.		Lb.	Kg.
	<b>Overshot Retriever Assembly</b>	<b>67020-10</b>	39	17.7	<b>67020-11</b>	39	17.7
1	Ball Bearing Swivel	006305	7	3.2	006305	7	3.2
2	Lift Rod	190054	5	2.3	190054	5	2.3
3	Latch Key	190055	4	1.8	190055	4	1.8
4	Spear	190056	3	1.4	190056	3	1.4
5	Latch Weight	190063	27	12.2	190063	27	12.2
6	Cotter Pin	3194-0038	*	*	3194-0038	*	*
7	Flatwasher	3198-0012	*	*	3198-0012	*	*
8	Hex Slotted Nut	3208-0012	*	*	3208-0012	*	*
	<b>Pilot Bit Assembly</b>	<b>67020-12</b>	39	17.7	<b>67020-12</b>	39	17.7
1	U-Pin (1500 series)	001306	*	*	001306	*	*
2	Pilot Bit 2-3/8" (60mm) x 1-1/8" (29mm) Hex Shank	005503	2	0.9	005503	2	0.9
3	Pilot Bit Plug	190019	33	15	190019	33	15
4	Hex Bar Extension 1-1/8" (29mm) x 3 ft (.9m)	190015	1	.5	190015	1	0.5
5	Hex Sleeve	190116	3	1.4	190116	3	1.4
6	Hex Socket Head Capscrew	3130-0080	*	*	3130-0080	*	*
	<b>Accessories</b>						
	Hex Bar 1 ft 3 in (381mm) long	190095	2	0.9	190095	2	0.9
	3 ft (.91m) Auger	150288-02	47	21.3	150363-02	58	26.3
	Brass Cutterhead Bushing	210021-08	2	0.9	210031-04	2	0.9
	<b>Optional Equipment</b>						
2a	Pilot Bit - Step Type 3" (76.2mm) x 1-1/8" (29mm) Hex Shank	150574-01	2	0.9	150574-01	2	0.9
2b	Pilot Bit - 2 Prong 3" (76.2mm) x 1-1/8" (29mm) Hex Shank	200024	2	0.9	200024	2	0.9

## 4-1/4" (108mm) TRI-LOK & 6-5/8" (168mm) TRI-LOK OVERSHOT WIRELINE SYSTEM

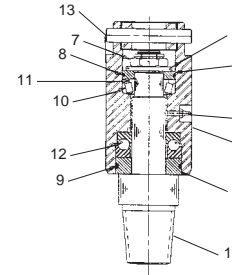
Used for continuous vertical profiling of the formation being drilled with our 4-1/4" (108 mm) and 6-5/8" (168 mm) hollow stem auger sections. Short subs are added to vary the sample barrel lead setting to allow good recovery of samples throughout a broad range of formation types. The center plug can be locked in place to allow augering without adding center rods. The system can be easily converted to run **MOBILOK** drill rod in lieu of a wireline if the formation requires.



Latch Assembly

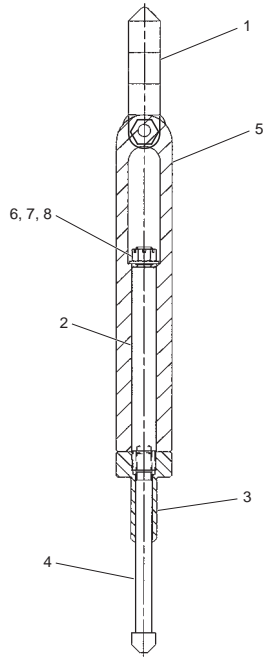


6-5/8" Bearing Assembly

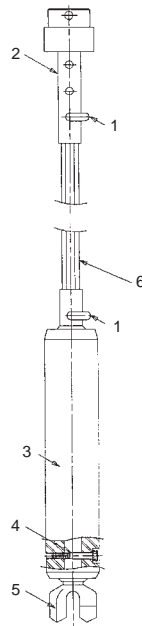


4-1/4" Bearing Assembly

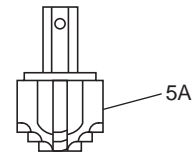
Ref.	Description	4-1/4" (108mm) TRI-LOK				6-5/8" (168.3mm) TRI-LOK			
		Req.	Part No	Weight		Req.	Part No	Weight	
				Lb.	Kg.			Lb.	Kg.
	<b>COMPLETE SYSTEM</b> (Includes latch, bearing and pilot bit assemblies, overshot retriever and accessories.)		<b>67029-09</b>	237	107.5		<b>67029-10</b>	352	159.7
	<b>Latch Assembly</b>		<b>67020-05</b>	95	43.1		<b>67020-08</b>	166	75.3
1	Latch	2	190009-02	1	0.5	1	190009-02	1	0.5
2	Latch Spear	4	190118-01	1	0.5	1	190118-01	1	0.5
3	Overshot Bar	1	190125	7	3.2	1	190125	7	3.2
4	Spring	4	190128	1	0.5	4	190128	1	0.5
5	Latch Plunger	1	190152	7	3.2	1	190182	15	6.8
6	Spring Housing	1	190154	10	4.5	1	190154	10	4.5
7	Washer	1	190157	1	0.5	1	190157	1	0.5
8	Guide	1	190158	4	1.8	1	190181	17	7.7
9	Latch Body	1	190184	12	5.4	1	190110	23	10.4
10	Spacer	3	210032-61	1	0.5	3	210032-61	1	0.5
11	Detent Ball Pin	1	210033-91	1	0.5	1	210033-54	1	0.5
12	Compression Spring	1	212160-05	2	0.9	1	212160-05	1	0.5
13	Lockwasher	1	3126-0016	*	*	1	3126-0016	*	*
14	Hex Socket Head Capscrew	1	3130-0062	*	*	4	3130-0063	*	*
15	Hex Socket Head Capscrew	6	3133-0007	1	0.5	6	3133-0007	1	1
16	Hex Jam Nut	1	3204-0016	*	*	1	3204-0016	*	*
17	Dowel Pin	2	3229-0057	1	0.5	3	3068-0244	*	*
18	Button Head Capscrew	16	3559-0003	1	0.5	16	3559-0003	1	1
19	Latch Housing	1	190146	44	20.0	1	190108	86	39.0
	<b>Bearing Assembly</b>		<b>67020-15</b>	27	12.2		<b>67020-04</b>	24	10.9
1	Bearing Shaft w/ NWML thread	1	190189	7	3.2	1	190111	12	5.4
2	Bearing Carrier	1	190194-10	12	5.4	1	190114	8	3.6
3	Washer	1	190191	1	0.5	2	190121	1	1
4	Washer	1	190192	1	0.5		N/A	—	—
5	Grease Fitting	1	3129-0001	*	*	1	3129-0001	*	*
6	Flat Washer	1	3198-0016	*	*		N/A	—	—
7	Hex Nut	1	3230-0003	1	0.5	1	3230-0009	1	1
8	O-Ring	1	3538-0138	1	0.5	2	3538-0238	*	*
9	O-Ring	1	3538-0231	1	0.5		N/A	—	—
10	Cone, Taper Roller Bearing	1	3231-0040	1	0.5		N/A	—	—
11	Cup, Taper Roller Bearing	1	3232-0040	1	0.5		N/A	—	—
12	Thrust Ball Bearing	1	3535-0004	1	0.5	2	3535-0003	1	0.5
13	Detent Ball Pin	1	210033-91	1	0.5	1	210333-54	1	0.5
14	Cotter Pin					1	3194-0086	*	*



**Overshot Retriever Assembly**



**Pilot Bit Assembly**

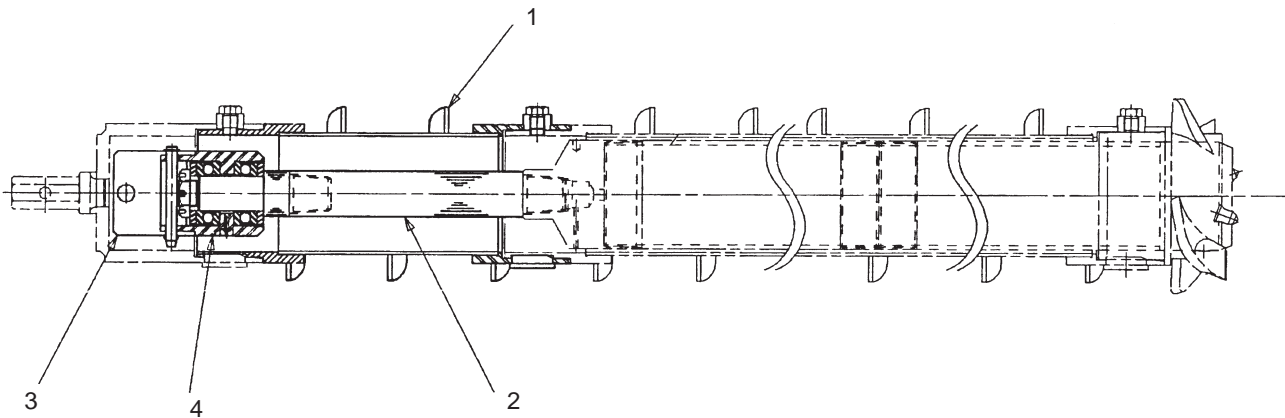


**Pilot Bit**

Ref.	Description	4-1/4" (108mm) TRI-LOK				6-5/8" (168.3mm) TRI-LOK			
		Req.	Part No	Weight		Req.	Part No	Weight	
				Lb.	Kg.			Lb.	Kg.
	<b>Overshot Retriever Assembly</b>		<b>67020-06</b>	50	22.7		<b>67020-06</b>	45	20.4
1	Ball Bearing Swivel	1	006305	7	3.2	1	006305	7	3.2
2	Lift Rod	1	190129	6	2.7	1	190129	6	2.7
3	Spear	1	190131	3	1.4	1	190131	3	1.4
4	Latch Weight	1	190159	29	13.2	1	190159	29	13.2
5	Latch Key	1	190161	5	2.3	1	190161	5	2.3
6	Cotter Pin	1	3194-0086	*	*	1	3194-0086	*	*
7	Flatwasher	1	3198-0016	*	*	1	3198-0016	*	*
8	Hex Slotted Nut	1	3208-0016	*	*	1	3208-0016	*	*
	<b>Pilot Bit Assembly</b>		<b>67020-13</b>	52	23.6		<b>67020-14</b>	104	47.2
1	U-Pin (1500 series)	2	001306	1	0.5	1	001307	1	0.5
2	Latch Body To Hex Adapter	1	190188	9	4.1	1	190134	15	6.8
3	Pilot Bit Plug	1	190143-01	39	17.7	1	190132	80	36.3
4	Hex Socket Head Capscrew	1	3130-0118	1	0.5	1	3130-0170	1	0.5
5	Pilot Bit	1	004304	2	0.9	1	004950	7	3.2
6	Shank Extension — 1-1/8" (41mm)	1	190144-01	7	3.2				
6	Shank Extension — 1-5/8" (51mm)					1	190133-01	10	4.5
	<b>Accessories</b>								
	4 3/4" (121mm) Ig NWML Extension		180012-14	6	2.7		180012-14	6	2.7
	3" (76mm) Ig NWML Extension		180012-27	3	1.4		180012-27	3	1.4
	Brass Cutterhead Bushing		210031-12	4	1.8		210031-10	4	1.8
	<b>Optional Equipment</b>								
5A	3-Step Carbide Insert Step Pilot Bit		150574-02	4	1.8		150574-03	4	1.8
	Cutterhead Assembly To Accept Brass Bushing		61032-02	21	9.5		61032-03	33	15.0
	16" (406mm) Ig Hollow Stem Auger Extension		150329-08	15	6.8		150329-07	44	20
	30" (762mm) Ig NWML Drill Rod		180386-13	13	5.9		180386-13	13	5.9

## Drill Rod Continuous Sampling Systems

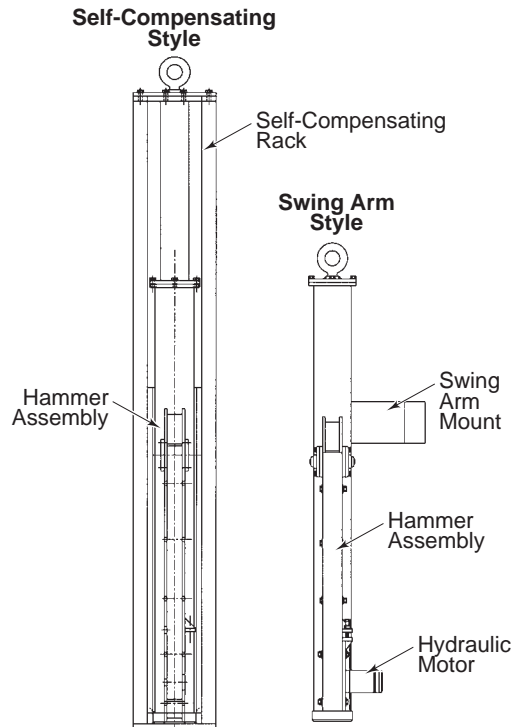
The rod system continuous sampling method incorporates many of the same components as the wireline system, but allows you to be more efficient in situations where you encounter heaving sands. The two systems are interchangeable and provide the operator with maximum versatility. The Mobile system does not require special hex rods. It utilizes standard "J" series or the premier **MOBILOK** NWML line.



Ref	Description	4-1/4" (108mm) System			6-5/8" (168mm) System		
		Part No	Weight		Part No	Weight	
			Lb.	Kg.		Lb.	Kg.
	<b>Overshot Retriever Assembly</b> Includes all parts listed below	<b>67042-25</b>	125	56.7	<b>67042-27</b>	175	79.4
1	Auger, HS x 2 ft (61mm) long	150329-17	46	21	150329-18	88	40
2	NWML Box to NWML Pin X 8-1/2" (216mm) long	180012-38	3	1.4			
2	NWML Box to NWML Pin x 13-11/16" (348mm) long				180012-39	5	2.3
3	Rod to cap Adapter	217247	7	3.2	217248	15	6.8
4	Bearing Assembly	67020-15	20	9.1	67020-04	27	12.2
	Adapter, NWML Box to NWML Pin x 4-3/4" (121mm) long	180012-14	5	2.3	180012-14	5	2.3
	Adapter, NWML Box to NWML Pin x 3" (76mm) long	180012-27	3	1.4	180012-27	3	1.4
	<b>Conversion Parts – Wireline System to Rod System</b>						
	<b>Complete Assembly to Convert Wireline System to Rod System</b>	<b>67042-28</b>	105	47.6	<b>67042-29</b>	145	65.8
	Auger, HS x 2 ft (61mm) long	150329-17	46	21	150329-18	88	40
	Sub, NWML Box to NWML Pin x 8-1/2" (216mm) long	180012-38	3	1.4			
	Sub, NWML Box to NWML Pin x 13-11/16" (348mm) long				180012-39	5	2.3
	Rod to Cap Adapter	217247	7	3.2	217248	15	6.8



## NEW SPT AUTOMATIC HAMMER



The hydraulically driven, fully automatic SPT hammer provides a consistent 30" (762mm) drop of the enclosed slug at a variable blow count range from 0-53 blows per minute. Both the standard duty and heavy-duty hammers are available in two types – self-compensating hammer or swing-arm style. The Mobile SPT hammers are easily adapted to any drill with a twin feed cylinder design. Other rigs can also be upgraded with assistance from Mobile.

When ordering, please be sure to order one each of the hammer assembly and the interchangeable slugs. Specify rig make, model and year when ordering.

**Meets ASTM-D-1586-84 standard and spec in every state.**

### SPT AUTO HAMMER FIELD KITS

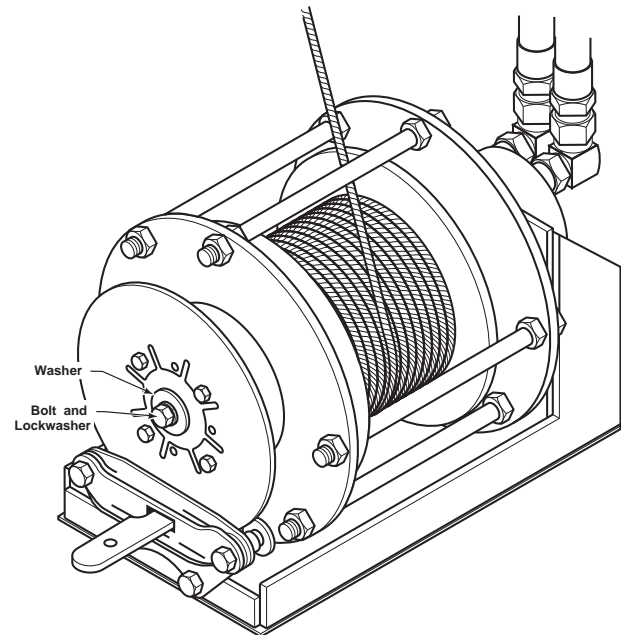
Description	Part No.
B-59 (140# self-compensating - std duty) .....	21034-02
B-59 (140# swing arm - std duty) .....	21034-03
B-59 (300# self-compensating - heavy duty).....	21034-04
B-59 (300# swing arm - heavy duty).....	21034-05
B-57/B-58/B-61 (140# self-compensating - std duty)...	21034-06
B-57/B-58 (140# swing arm - standard duty) .....	21034-07
B-61 (140# swing arm - standard duty).....	21034-08
B-57/B-58/B-61 (300# self-compensating - hvy duty)...	21034-09
B-57/B-58 (300# swing arm - heavy duty) .....	21034-10
B-61 (300# swing arm - heavy duty).....	21034-11

### HAMMER SLUGS

#219022 (140 lb) and #219023 (170 lb) to be used with field kits 21034-02, 21034-03, 21034-06, 21034-07, and 21034-08.

#219044 (300 lb), #219045 (340 lb) and #219046 (140 lb) to be used with field kits 21034-04, 21034-05, 21034-09, 21034-10, and 21034-11.

## SAFE-T-DRIVER HOIST



The SAFE-T-DRIVER® hoist is a hydraulic hoist which is designed to replace the cathead for SPT sampling operations. Unlike the cathead, SAFE-T-DRIVER hoist offers full safety of operation and requires very little physical exertion to operate.

The SAFE-T-DRIVER hoist is operated by a valve lever which is used to **control the lift** and free fall the hammer for each blow. The hoist can be used to "bump out" the loaded sampler at the end of a run.

The SAFE-T-DRIVER hoist is equipped with a hand brake and can be used to handle light loads. Consult factory for field installation on Mobile Drills and other selected drill models.

### Specifications

<b>Maximum Rated Capacity</b>	1140 lbs. (517.1Kg)
<b>Maximum Speed Up</b>	1132 rpm
<b>Maximum Cable Capacity</b>	350' (107m) of 1/4" (6.4mm)
<b>Required operating capacity or hydraulic system</b>	25 gpm@ 2500 psi

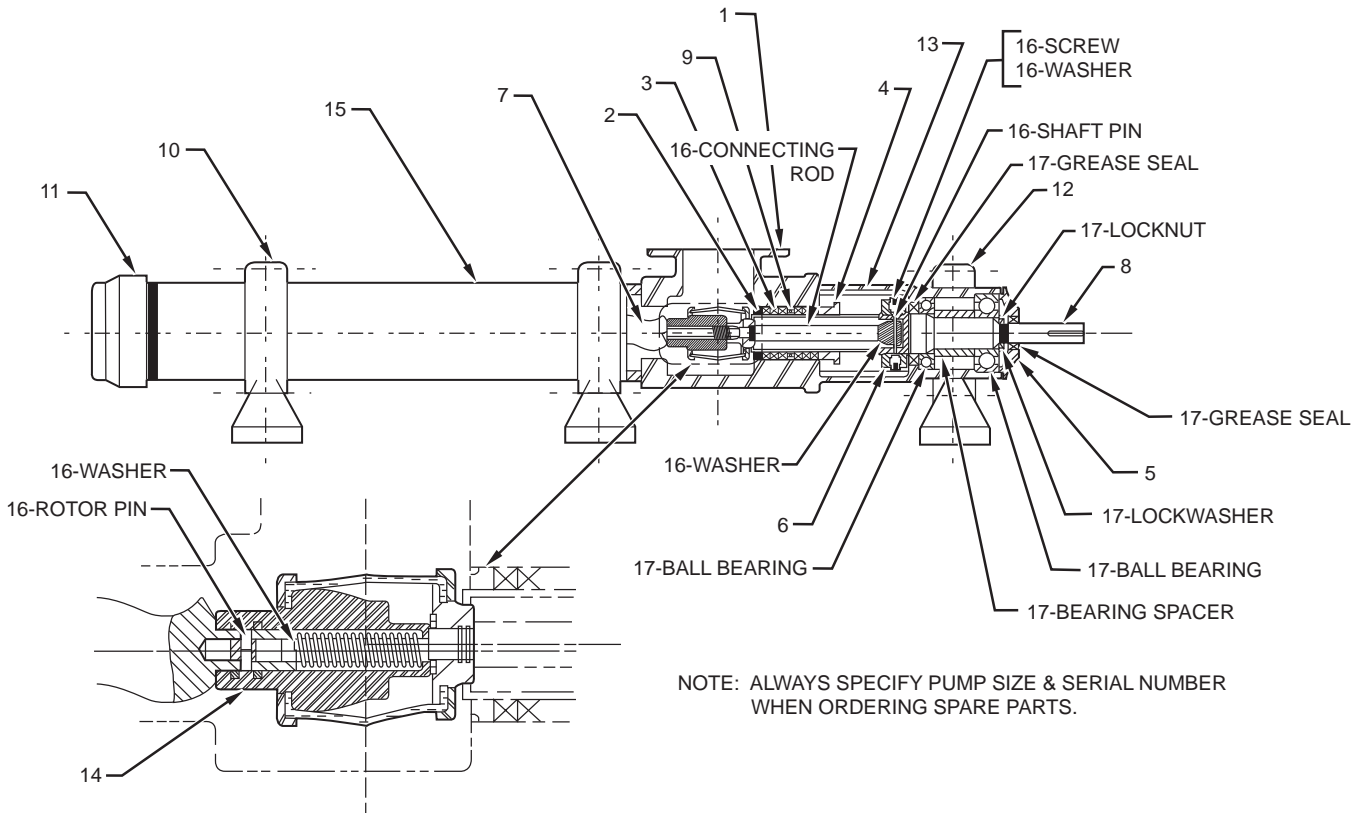
Description	Lb/Kg	Part No.
Safe-T-Driver Hoist.....	125 (56.7) .....	21012-25

**9**

## MOYNO PROGRESSIVE CAVITY PUMPS

Moyno pumps, with their unique quality construction, are the industry standard for grouting applications in the environmental market and are preferred for most rotary drilling and shallow diamond coring geotechnical applications. Specify pump size and serial number when ordering spare parts.

Ref.	Description	3L4	3L6	3L8
	Water Pump Assembly .....	71037-02	71037-03	71037-10
1	Suction Housing .....	003300	003328	003356
2	Packing Washer .....	003302	003330	003358
3	Packing .....	003303	003331	003359
4	Packing Gland .....	003304	003332	003360
5	Bearing Cover Plate .....	003305	003333	003361
6	Shaft Collar .....	003308	003336	003364
7	Rotor .....	003314	003342	003370
8	Drive Shaft .....	003315	003343	003372
9	Lantern Ring .....	003318	003346	003375
10	Stator Support .....	003325	003353	003382
11	Reducer .....	003326	003354	N/A
12	Pump Support .....	003327	003355	003384
13	Bearing Housing .....	212602	006007	006008
14	Boot Seal .....	004085	006817	212601
15	Stator Frame .....	212599	212597	212600
16	Connecting Rod Kit .....	212603-02	212603-01	212603-03
17	Bearing Kit .....	212604-02	212604-01	212604-03





# Mobile Drill Intl

HELPING YOU BUILD OUR WORLD SINCE 1947

## Announcing Mobile Drill Rentals!

Mobile Drill International is pleased to introduce its new rental program featuring the B57 mechanical drill rig. This program features 2014/2015 rigs direct from the OEM and offers flexible monthly and rent-to-own options. The B57 is available in truck-mounted (Ford F-750) or track-mounted (CAT 307 or 312) carriers and comes with a variety of features, including: a 14" heavy duty double disc clutch, 6-speed Eaton transmission, autohammer, rod clamp breakout, 125 HP John Deere Engine, and EZ Shift Technology. Mobile Drill sales representatives can be contacted to place a rental order or arrange a demonstration visit.



### B-57 HIGH TORQUE

- 11,420 ft-lbs of Torque
- 672 RPM
- Truck-Mounted (Ford F-750)
- Track-Mounted (CAT 307 or 312)
- 3 Hoists
- John Deere Engine
- Moyno 3L6
- EZ Shift Technology
- Autohammer
- Retract Force: 30,000 lbs [13,608 kg]
- Pulldown Force: 20,000 lbs [9,072 kg]
- 14" Double Disc Clutch
- Heavy Duty, Single Speed Right Angle Drive
- 6-Speed Manual Transmission
- 6' Feed Stroke [1.83 m]

### Mobile Drill Parts & Tooling

Core Tooling • Augers • Basket Traps • Cutterheads  
 Split Spoons • Shelby Tubes • Drill Rods • Drive Caps

**Call our sales team to place an order!**

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